


SHEET NUM.								PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
4	8	12	29	RW. 4	RW. 5			01/S50/21	EXT	TOTAL				
													ROADWAY	
			26					26	203	10000	26	CY	EXCAVATION	
			16					16	304	20000	16	CY	AGGREGATE BASE	
				5	2			7	623	40520	7	EACH	RIGHT-OF-WAY MONUMENT, TYPE B	
								LUMP	623	50000	LS		PRECONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	
								LUMP	623	51000	LS		POST CONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	
			11					11	659	00300	11	CY	TOPSOIL	
			64					64	659	10000	64	SY	SEEDING AND MULCHING	
			0.02					0.02	659	20000	0.02	TON	COMMERCIAL FERTILIZER	
			0.02					0.02	659	31000	0.02	ACRE	LIME	
			0.35					0.35	659	35000	0.35	MGAL	WATER	
													EROSION CONTROL	
								2,000	832	30000	2,000	EACH	EROSION CONTROL	
													DRAINAGE	
320								320	611	00400	320	FT	4" CONDUIT, TYPE E	4
													TRAFFIC SIGNALS	
		150						150	625	25400	150	FT	CONDUIT, 2", 725.04	
		170						170	625	25500	170	FT	CONDUIT, 3", 725.04	
		879						879	625	25902	879	FT	CONDUIT, JACKED OR DRILLED, 725.04, 3"	
		286						286	625	29000	286	FT	TRENCH	
		8						8	625	30700	8	EACH	PULL BOX, 725.08, 18"	
		8						8	625	30706	8	EACH	PULL BOX, 725.08, 24"	
		17						17	625	32000	17	EACH	GROUND ROD	
		286						286	625	36010	286	FT	UNDERGROUND WARNING/MARKING TAPE	
		4						4	625	76000	4	EACH	ARC FLASH CALCULATIONS AND LABEL , POWER SERVICE	4
		34						34	632	05007	34	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN (BLACK)	4
		2						2	632	05087	2	EACH	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN (BLACK)	4
		36						36	632	25000	36	EACH	COVERING OF VEHICULAR SIGNAL HEAD	
		3,397						3,397	632	40500	3,397	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	
		390						390	632	40700	390	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	
		13						13	632	64010	13	EACH	SIGNAL SUPPORT FOUNDATION	
		308						308	632	68300	308	FT	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	
		226						226	632	69800	226	FT	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG	
		4						4	632	70001	4	EACH	POWER SERVICE, AS PER PLAN	5
		4						4	632	70400	4	EACH	CONDUIT RISER, 2" DIAMETER	
		1						1	632	71364	1	EACH	SIGNAL SUPPORT, TYPE TC-12.31 DESIGN 10 POLE, WITH MAST ARMS TC-81.22 DESIGN 13 AND DESIGN 4	
		1						1	632	71388	1	EACH	SIGNAL SUPPORT, TYPE TC-12.31 DESIGN 10 POLE, WITH MAST ARMS TC-81.22 DESIGN 14 AND DESIGN 12	
		1						1	632	71492	1	EACH	SIGNAL SUPPORT, TYPE TC-12.31 DESIGN 12 POLE, WITH MAST ARMS TC-81.22 DESIGN 14 AND DESIGN 13	
		5						5	632	72110	5	EACH	SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 4	
		2						2	632	72130	2	EACH	SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 12	
		3						3	632	72140	3	EACH	SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 13	
		4						4	632	90100	4	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION	
		3						3	633	65511	3	EACH	CABINET, TYPE TS-2, AS PER PLAN (SIZE 6)	5
		1						1	633	65511	1	EACH	CABINET, TYPE TS-2, AS PER PLAN (SIZE 7)	5
		4						4	633	67100	4	EACH	CABINET FOUNDATION	
		4						4	633	67200	4	EACH	CONTROLLER WORK PAD	
		4						4	633	99000	4	EACH	CONTROLLER ITEM, MISC.: COMMUNICATIONS	6
		4						4	633	75000	4	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT	
		4						4	809	69001	4	EACH	ADVANCE RADAR DETECTION, AS PER PLAN	6
		16						16	809	69101	16	EACH	STOP LINE RADAR DETECTION, AS PER PLAN	7
		4						4	809	69123	4	EACH	ATC CONTROLLER, AS PER PLAN (PROGRAM & INSTALL ONLY)	7
		1						1	809	69200	1	EACH	EMERGENCY VEHICLE PREEMPTION	
		4						4	809	69210	4	EACH	PREEMPT RECEIVING UNIT	
		885						885	809	69220	885	FT	PREEMPT DETECTOR CABLE	
		1						1	809	69230	1	EACH	PREEMPT PHASE SELECTOR	
		4						4	809	69240	4	EACH	PREEMPT CONFIRMATION LIGHT	

GENERAL SUMMARY

DESIGN AGENCY
DISTRICT 3



ENGINEERING TEAM THREE

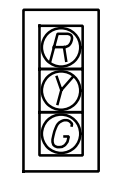
DESIGNER
MAE

REVIEWER
ACM 11/04/24

PROJECT ID
115001

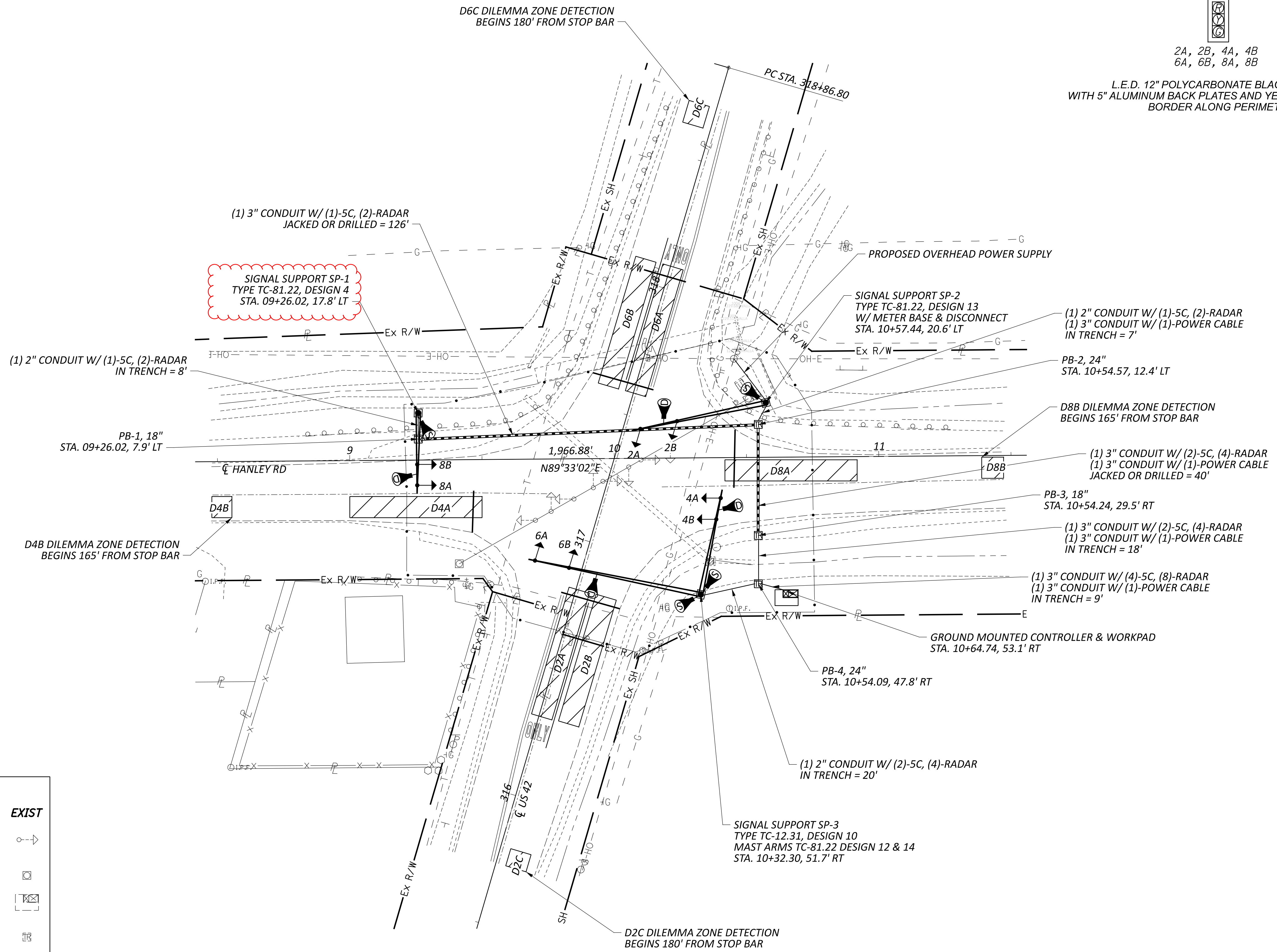
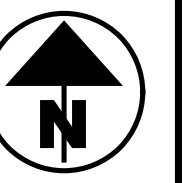
SHEET TOTAL
P.10 30

SIGNAL HEADS



2A, 2B, 4A, 4B
6A, 6B, 8A, 8B

L.E.D. 12" POLYCARBONATE BLACK BODIES
WITH 5" ALUMINUM BACK PLATES AND YELLOW REFLECTIVE
BORDER ALONG PERIMETER



LEGEND

	PROP	EXIST
TRAFFIC SIGNAL 3 UNIT HEAD, 12"		
SIGNAL SUPPORT POLE		
CONTROLLER CABINET AND WORK PAD (TS-2)		
TRAFFIC PULL BOX		
STOP BAR RADAR		
ADVANCED RADAR		
DETECTION ZONE		

**SIGNAL PLAN
RIC US 42 & HANLEY RD**

DESIGN AGENCY

DISTRICT 3



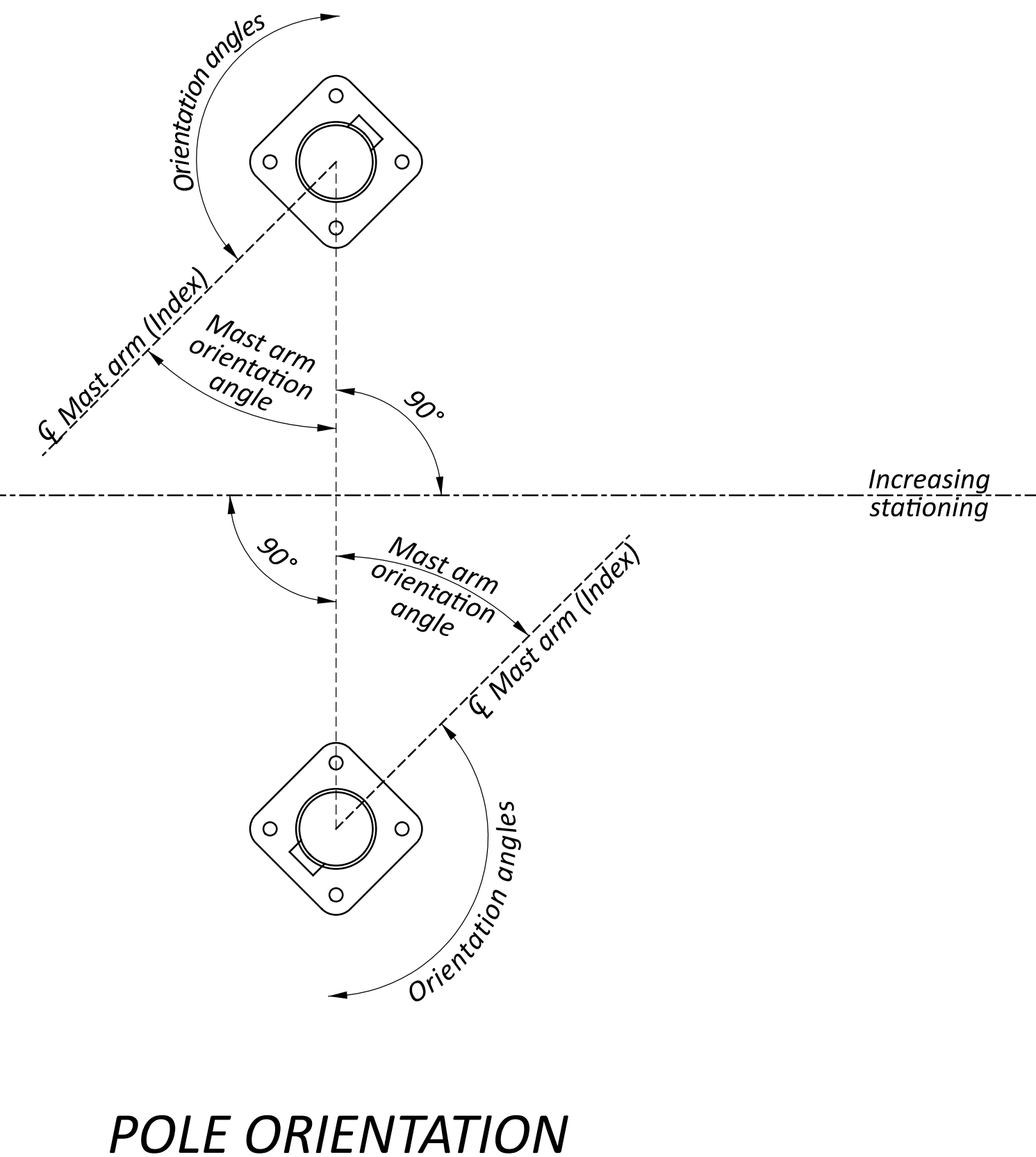
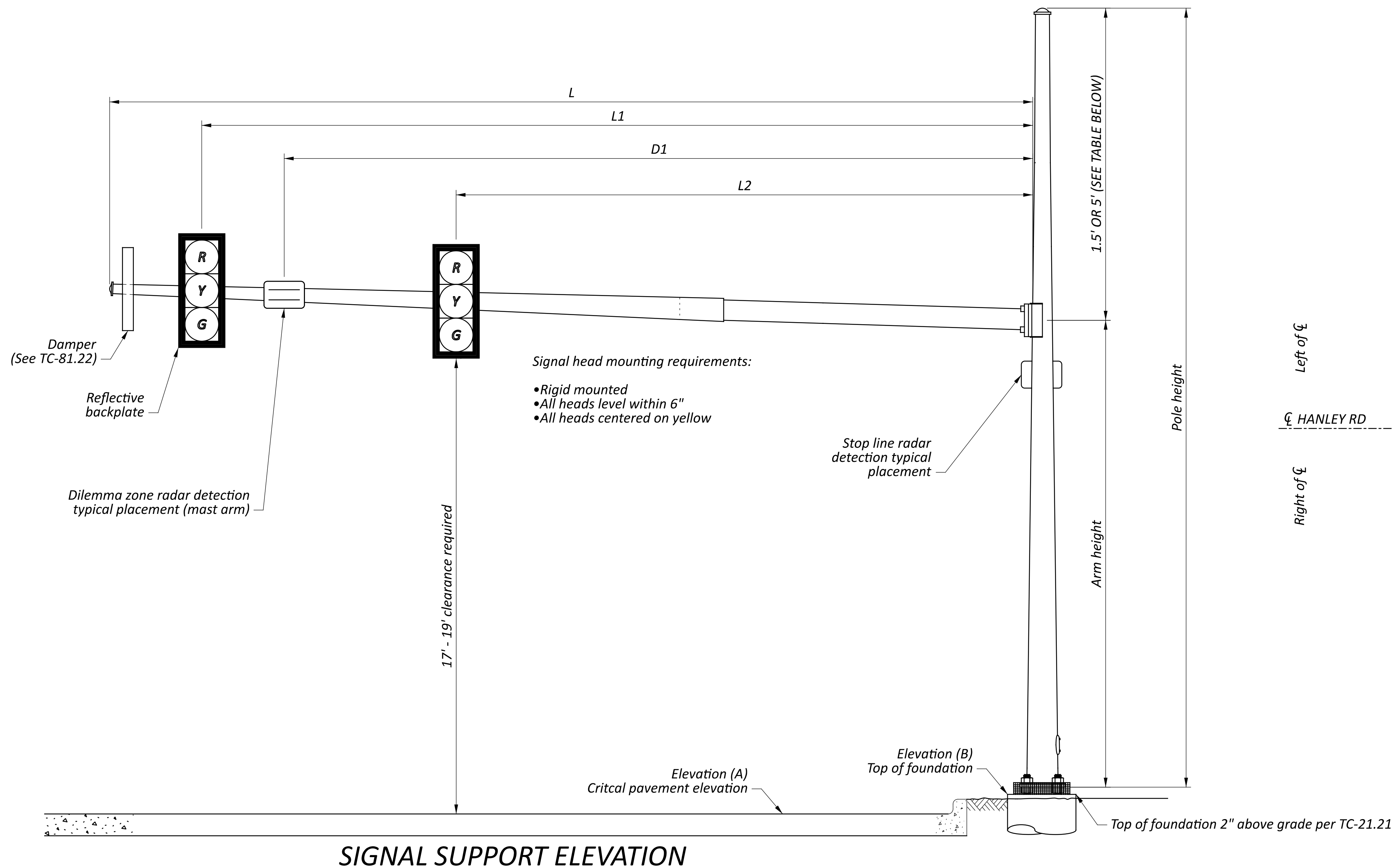
ENGINEERING
TEAM THREE

DESIGNER
MAE

REVIEWER
ACM 11/04/24

PROJECT ID
115001

SHEET TOTAL
P.13 30



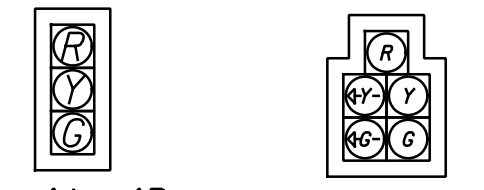
MAST ARM TABLE

SUPPORT NO.	STATION	OFFSET	ELEVATION		SIGNAL SUPPORT DETAILS								ORIENTATION ANGLES FROM MAST ARM A		
			A (Pavt. Elev.)	B (Top of Found.)	DESIGN TYPE	DESIGN NO.	POLE HEIGHT	ARM HEIGHT	L	L1	L2	D1	MAST ARM A ANGLE	MAST ARM B ANGLE	HANDHOLE
SP-1	9+26.02	17.8' LT	1231.58'	1229.61'	TC-81.22	4	24	22.5	29	26	18	22	0	-	180
SP-2	10+57.44	20.6' LT	1234.42'	1234.91'	TC-81.22	13	24.5	19.5	50	47	33	38	79	-	90
SP-3	10+32.30	51.7' RT	1234.70'	1234.51'	TC-12.31	10	21.5	20	39	36	28	31	12	-	90
			1234.01'					20	65	62	50	39	-	270	-

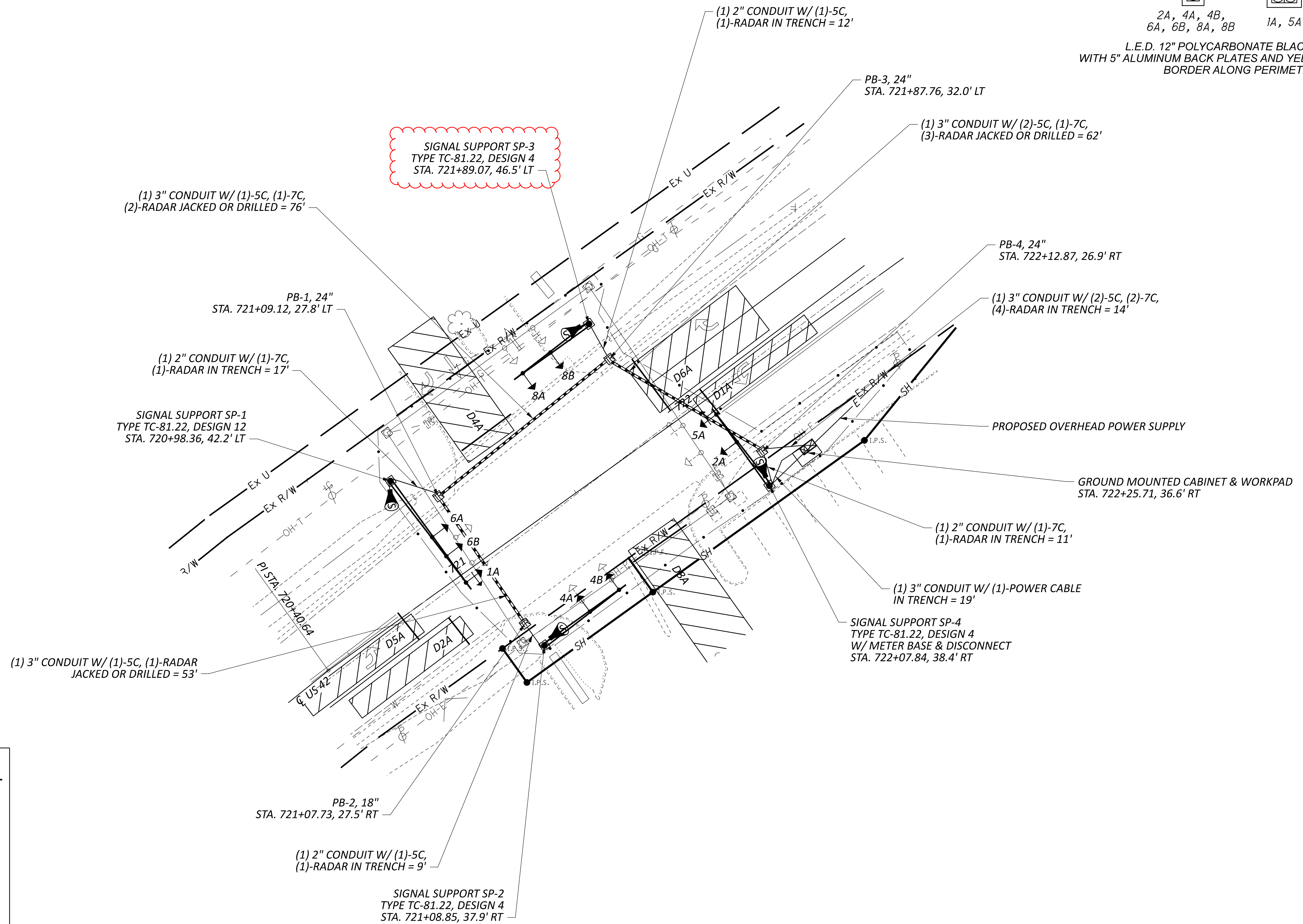
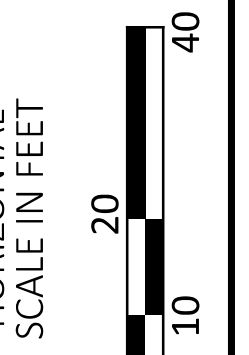
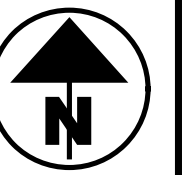
NOTES:

1. PROVIDE A VALMONT MITIGATOR MECHANICAL DAMPER FOR SUPPORT SP-3. THE DAMPERS SHALL BE INCLUDED IN THE SIGNAL SUPPORT PAY ITEMS.
2. PER TC-81.22, ONLY WELDED WIRE MESH VARMINT GUARDS SHALL BE INSTALLED. SOLID SHEETS IN NOT ALLOWED.

SIGNAL HEADS



2A, 4A, 4B, 6A, 6B, 8A, 8B 1A, 5A
 L.E.D. 12" POLYCARBONATE BLACK BODIES
 WITH 5" ALUMINUM BACK PLATES AND YELLOW REFLECTIVE
 BORDER ALONG PERIMETER



LEGEND

	PROP	EXIST
TRAFFIC SIGNAL 5 UNIT HEAD, 12"		
TRAFFIC SIGNAL 3 UNIT HEAD, 12"		
SIGNAL SUPPORT POLE		
CONTROLLER CABINET AND WORK PAD (TS-2)		
TRAFFIC PULL BOX		
STOP BAR RADAR		
ADVANCED RADAR		
DETECTION ZONE		

**SIGNAL PLAN
 RIC US 42 & KROGER**

DESIGN AGENCY
 DISTRICT 3



ENGINEERING
 TEAM THREE

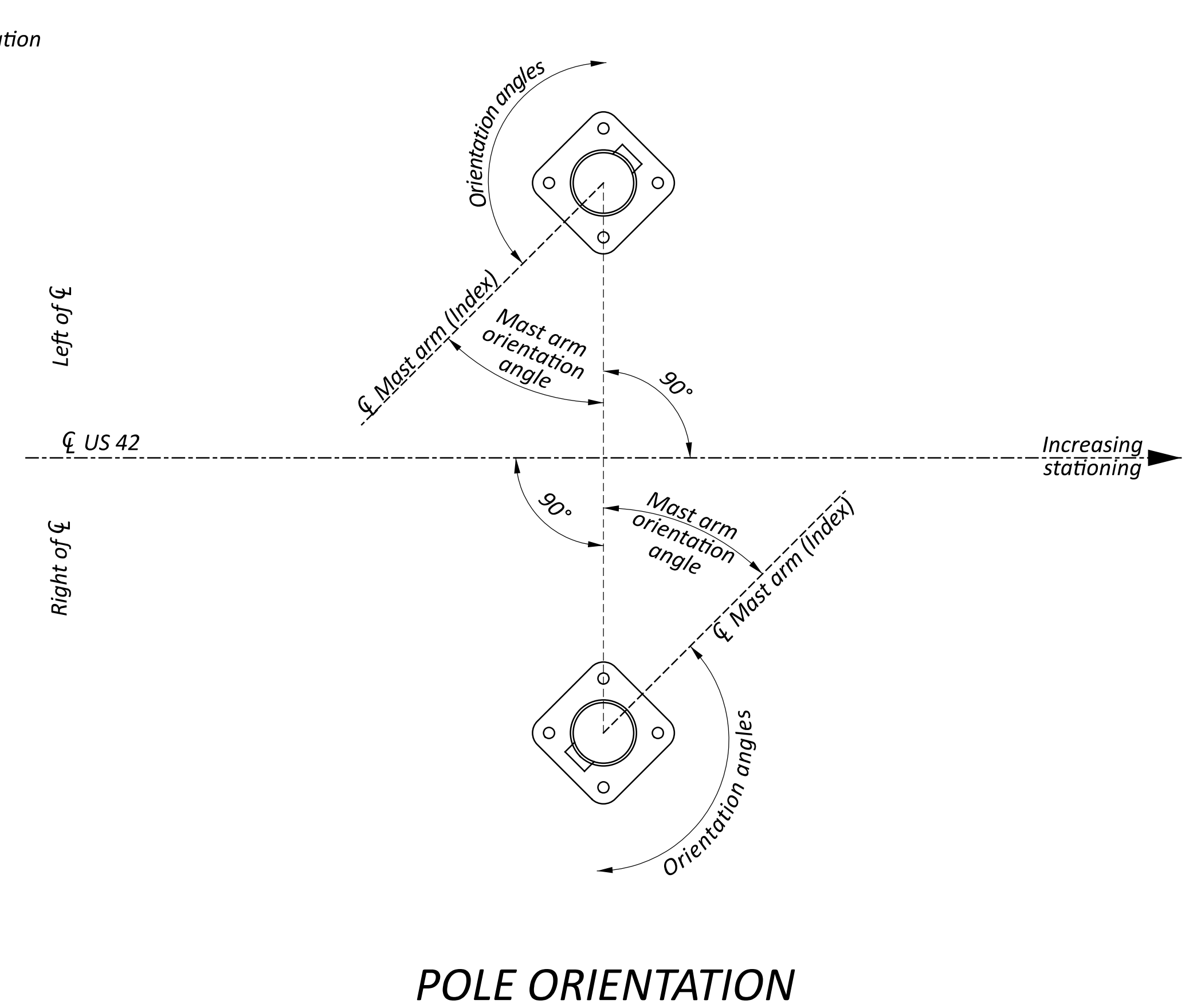
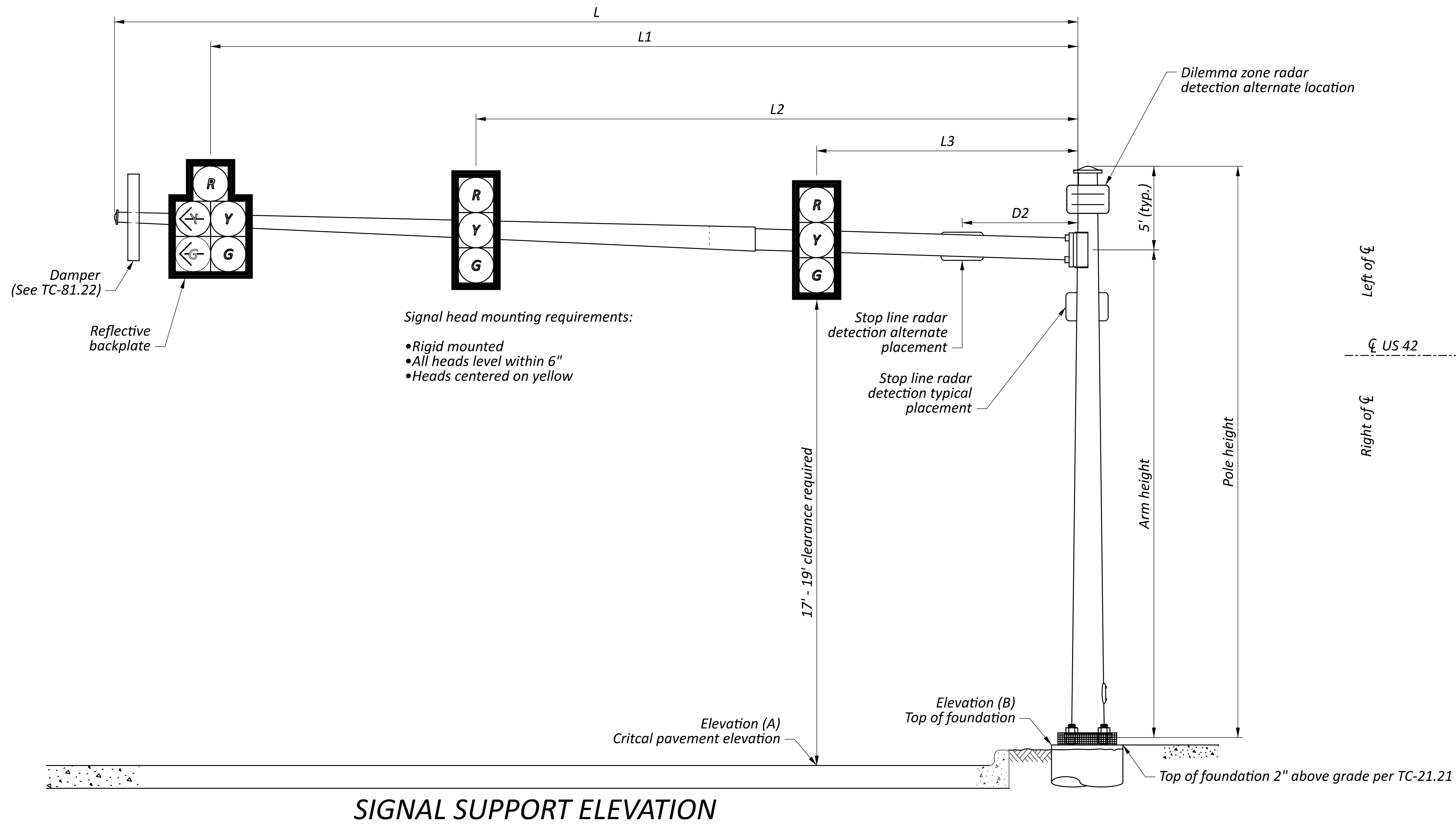
DESIGNER
 MAE

REVIEWER
 ACM

DATE
 11/04/24

PROJECT ID
 115001

SHEET TOTAL
 P.17 30



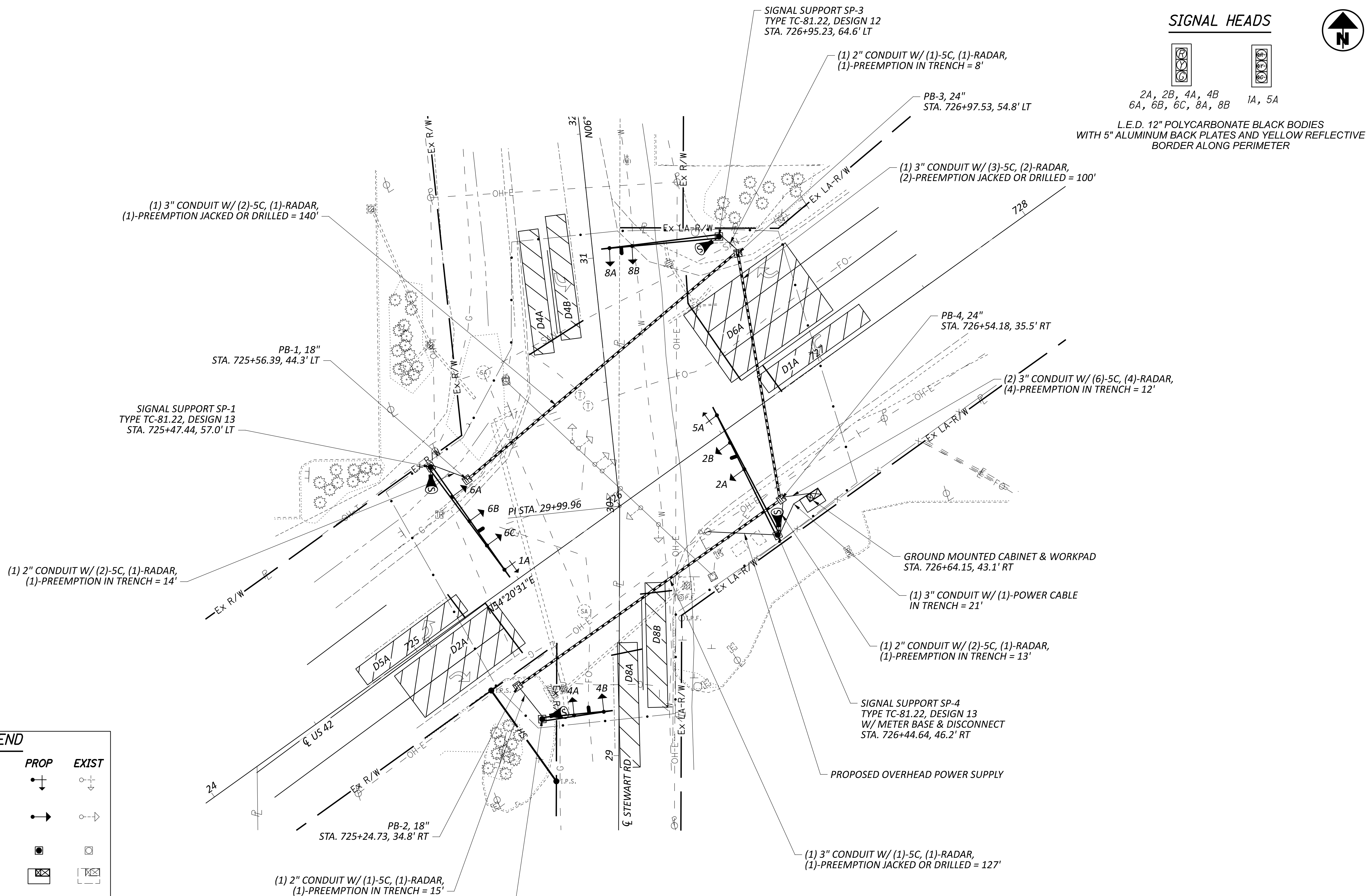
MAST ARM TABLE

SUPPORT NO.	STATION	OFFSET	ELEVATION		SIGNAL SUPPORT DETAILS								ORIENTATION ANGLES FROM MAST ARM A		
			A (Pavt. Elev.)	B (Top of Found.)	DESIGN TYPE	DESIGN NO.	POLE HEIGHT	ARM HEIGHT	L	L1	L2	L3	MAST ARM A ANGLE	HANDHOLE	
								FT	FT	FT	FT	FT	FT	DEG	DEG
SP-1	720+98.36	42.2' LT	1332.38'	1333.52'	TC-81.22	12	24	19	47	44	32	24	0	180	
SP-2	721+08.85	37.9' RT	1329.87'	1329.66'	TC-81.22	4	25	20	35	32	19	-	90	90	
SP-3	721+89.07	46.5' LT	1332.12'	1331.91'	TC-81.22	4	25	20	32	29	16	-	90	90	
SP-4	722+07.84	38.4' RT	1330.47'	1327.95'	TC-81.22	4	28	23	33	30	18	-	0	180	

NOTES:

1. PER TC-81.22, ONLY WELDED WIRE MESH VARMINT GUARDS SHALL BE INSTALLED. SOLID SHEETS IN NOT ALLOWED.

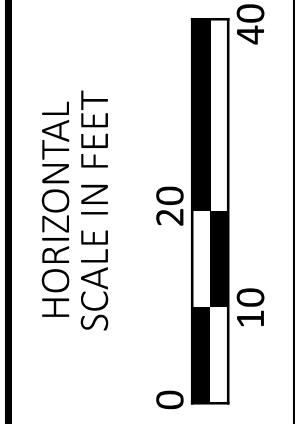
LEGEND		
	PROP	EXIST
TRAFFIC SIGNAL, 3 UNIT HEAD, 12" WITH ARROWS		
TRAFFIC SIGNAL 3 UNIT HEAD, 12"		
SIGNAL SUPPORT POLE		
CONTROLLER CABINET AND WORK PAD (TS-2)		
TRAFFIC PULL BOX		
STOP BAR RADAR		
DETECTION ZONE		
PREEMPTION		



SIGNAL HEADS

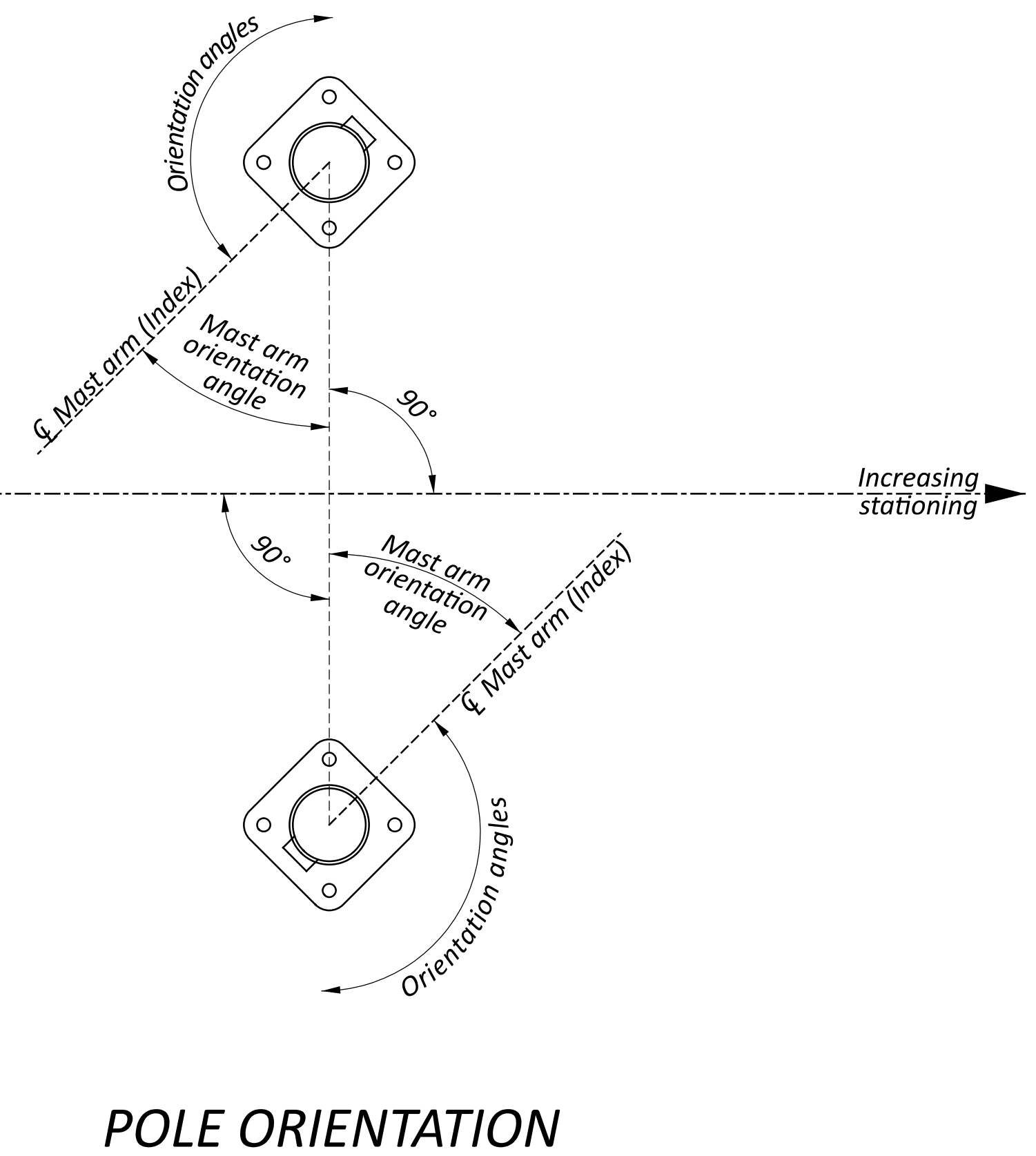
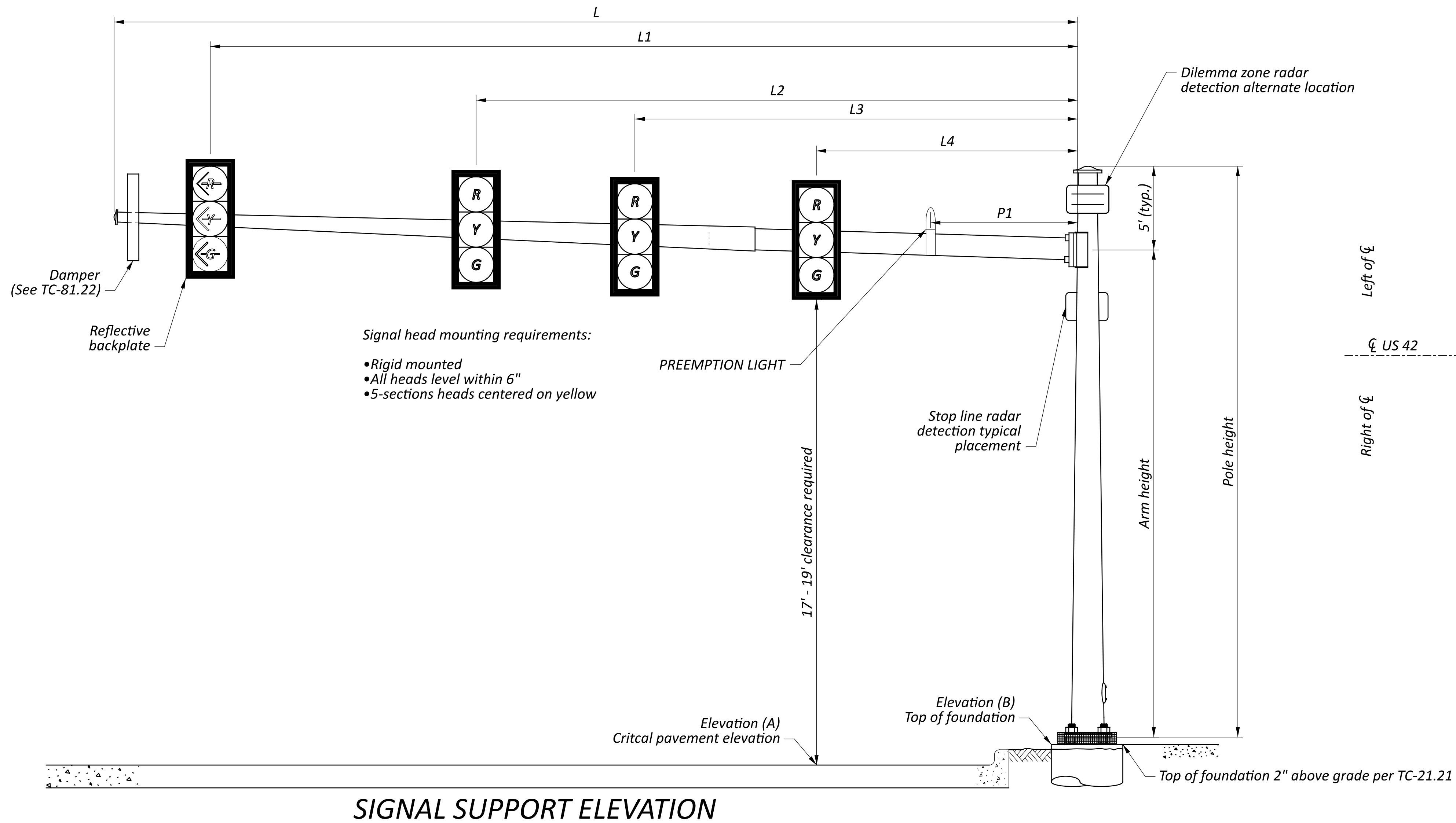


L.E.D. 12" POLYCARBONATE BLACK BODIES
 WITH 5" ALUMINUM BACK PLATES AND YELLOW REFLECTIVE
 BORDER ALONG PERIMETER



SIGNAL PLAN
RIC US 42 & STEWART RD

DESIGN AGENCY	DISTRICT 3
ENGINEERING TEAM THREE	
DESIGNER	MAE
REVIEWER	ACM 11/04/24
PROJECT ID	115001
SHEET TOTAL	P.21 30



SIGNAL SUPPORT ELEVATION

POLE ORIENTATION

MAST ARM TABLE

SUPPORT NO.	STATION	OFFSET	ELEVATION		SIGNAL SUPPORT DETAILS											ORIENTATION ANGLES FROM MAST ARM A	
			A (Pavt. Elev.)	B (Top of Found.)	DESIGN TYPE	DESIGN NO.	POLE HEIGHT	ARM HEIGHT	L	L1	L2	L3	L4	P1	MAST ARM A ANGLE	HANDHOLE	
																	FT
SP-1	725+47.44	57.0' LT	1330.85'	1329.56'	TC-81.22	13	26	21	53	50	37	26	14		31	0	180
SP-2	725+24.93	51.2' RT	1328.94'	1329.33'	TC-81.22	4	25	20	27	24	12	-	-		18	119	90
SP-3	726+95.23	64.6' LT	1330.62'	1333.16'	TC-81.22	12	23	18	46	43	34	-	-		38	120	90
SP-4	726+44.64	46.2' RT	1331.38'	1331.10'	TC-81.22	13	25	20	56	53	40	28	-		34	9	180

NOTES:

1. PER TC-81.22, ONLY WELDED WIRE MESH VARMINT GUARDS SHALL BE INSTALLED. SOLID SHEETS IN NOT ALLOWED.