

PROJECT INFORMATION

PROJECT/PID:	109972 Task 231473
INTERSECTION NAME:	WAR 71 & S.R. 741 SB Ramps
STUDY DATE:	9/18/2024

SUPPORT NO.	ARM	MIN CLEARANCE FROM PAVEMENT TO BOTTOM OF SIGNAL HEAD	MAX CLEARANCE FROM PAVEMENT TO BOTTOM OF SIGNAL HEAD	FOUNDATION ELEVATION AT GROUND LEVEL	DISTANCE FROM GROUND TO FOUNDATION	ELEVATION B TOP OF FOUNDATION	RISE ANGLE WITH HORIZONTAL ARM TIP	SIGNAL HEADS CENTERED ON WHICH COLOR?	SIGNAL NO.	SIGNAL HEAD TYPE (12 IN. SECTIONS WITH BACKPLATES)	DISTANCE FROM BOTTOM OF SIGNAL HEAD TO CENTER OF MAST ARM (TEM 497-6)	SIGNAL HEAD DISTANCE FROM SUPPORT POLE	ELEVATION A PAVEMENT ELEVATION UNDER SIGNAL HEAD OR SIGN	MINIMUM HEIGHT (FOUNDATION TO MAST ARM)	MAXIMUM HEIGHT (FOUNDATION TO MAST ARM)	MINIMUM ALLOWABLE HEIGHT (FOUNDATION TO MAST ARM)	MAXIMUM ALLOWABLE HEIGHT (FOUNDATION TO MAST ARM)	FINAL ATTACHMENT ARM HEIGHT (FOUNDATION TO MAST ARM)	DOES MAST ARM HAVE POLE EXTENSION? ^	HEIGHT FROM MAST ARM TO TOP OF POLE	SUGGESTED POLE HEIGHT	POLE HEIGHT WITH 10' EXTENSION
		FT	FT	FT	IN	FT	DEGREE				FT	FT	FT	FT	FT	FT	FT	FT		FT	FT	FT
SP-1	A	17	19	750.86	2	751.03	0	RED	4A	3 SECTIONS	3.4	26	751.76	21.13	23.13	21.1	21.7	21.5	NO	1.5	23	N/A
									4B	3 SECTIONS	3.4	40	751.74	21.11	23.11							
									4C	3 SECTIONS	3.4	56	750.84	20.21	22.21							
									4D	3 SECTIONS	3.4	68	750.30	19.67	21.67							
									-	-	-	-	-	-	-							
SP-1	B	17	19	750.86	2	751.03	0	RED	2A	3 SECTIONS	3.4	45	752.61	21.98	23.98	22.0	23.6	23	NO	1.5	24.5	N/A
									2B	3 SECTIONS	3.4	33	752.22	21.59	23.59							
									-	-	-	-	-	-	-							
									-	-	-	-	-	-	-							
SP-2	A	17	19	750.42	2	750.59	0	RED	1A	4 SECTIONS	4.6	51	751.73	22.74	24.74	22.7	23.4	23	NO	1.5	24.5	N/A
									6A	3 SECTIONS	3.4	39	751.59	21.40	23.40							
									6B	3 SECTIONS	3.4	30	751.73	21.54	23.54							
-	-	17	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

^ With typical extension, 5' is calculated, as per SCD TC-81.22.

Note: Final Pole Height will be noted in the plans on Mast Arm Design Table

Assume 1/2 degree rise due to length of mast arms

Mount on yellow. Is there a particular reason to mount on RED? This will affect support heights.

Add 5' extension to pole that will support the CCTV.

With mounting on yellow and adding a rise to the mast arm, the proposed arm attachments are too high.

MINIMUM ALLOWABLE HEIGHT (FOUNDATION TO MAST ARM)	MAXIMUM ALLOWABLE HEIGHT (FOUNDATION TO MAST ARM)	FINAL ATTACHMENT ARM HEIGHT (FOUNDATION TO MAST ARM)
FT	FT	FT
19.8	20.0	21.5
20.5	22.2	23
21.1	22.0	23

SUPPORT NO.	ARM	NUMBER OF LUMINAIRES OR BRACKET ARMS	LUMINAIRE/ BRACKET ARM LENGTH	SIGNAL OR SIGN?	SIGNAL/ SIGN NO.	ATTACHMENT DISTANCE FROM SUPPORT POLE		SIGNAL HEAD TYPE (12 IN. LENS)	SIGN SIZE		AREA SQ. FT.	ATTACHMENT LENGTH * AREA	L	DAMPER REQUIRED? (Incidental to Support item; CM&S 632 and SCD TC-81.22)	K	DESIGN NO.
			FT			NO.	FT		IN	FT			TOTAL MAST ARM LENGTH FT		AREA MOMENT DESIGN FACTOR	
SP-1	A	1	70	SIGNAL	4A	L1	26	3 SECTIONS	-	-	8.7	226.2	70	YES	1863	14
				SIGNAL	4B	L2	40	3 SECTIONS	-	-	8.7	348.0				
				SIGNAL	4C	L3	56	3 SECTIONS	-	-	8.7	487.2				
				SIGNAL	4D	L4	68	3 SECTIONS	-	-	8.7	591.6				
				-	-	L5	-	-	-	-	-	-				
				-	-	L6	-	-	-	-	-	-				
				-	-	L7	-	-	-	-	-	-				
				-	-	L8	-	-	-	-	-	-				
SP-1	B	1	56	SIGNAL	2A	L1	45	3 SECTIONS	-	-	8.7	391.5	56	NO	1251.6	13
				SIGNAL	2B	L2	33	3 SECTIONS	-	-	8.7	287.1				
				SIGN	-	L3	54	-	30	36	7.5	405.0				
				-	-	L4	-	-	-	-	-	-				
				-	-	L5	-	-	-	-	-	-				
				-	-	L6	-	-	-	-	-	-				
				-	-	L7	-	-	-	-	-	-				
				-	-	L8	-	-	-	-	-	-				
SP-2	A	1	53	SIGNAL	1A	L1	51	4 SECTIONS	-	-	11.0	561.0	53	NO	1680.3	13
				SIGNAL	6A	L2	39	3 SECTIONS	-	-	8.7	339.3				
				SIGNAL	6B	L3	30	3 SECTIONS	-	-	8.7	261.0				
				SIGN	-	L4	48	-	30	36	7.5	360.0				
				-	-	L5	-	-	-	-	-	-				
				-	-	L6	-	-	-	-	-	-				
				-	-	L7	-	-	-	-	-	-				
				-	-	L8	-	-	-	-	-	-				
-	-	-	-	-	-	L1	-	-	-	-	-	-	-	-	-	-
				-	-	L2	-	-	-	-	-	-				
				-	-	L3	-	-	-	-	-	-				
				-	-	L4	-	-	-	-	-	-				
				-	-	L5	-	-	-	-	-	-				
				-	-	L6	-	-	-	-	-	-				
				-	-	L7	-	-	-	-	-	-				
				-	-	L8	-	-	-	-	-	-				

FYI, this dimension is the bracket arm length, not the mast arm length.

There are no bracket arms on these supports

SUPPORT NO.	ARM	DESIGN NO.	POLE SIZE REQ.	POLE DESIGNATION
SP-1	A	14	E	TC-12.31 DES 12
	B	13		
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-