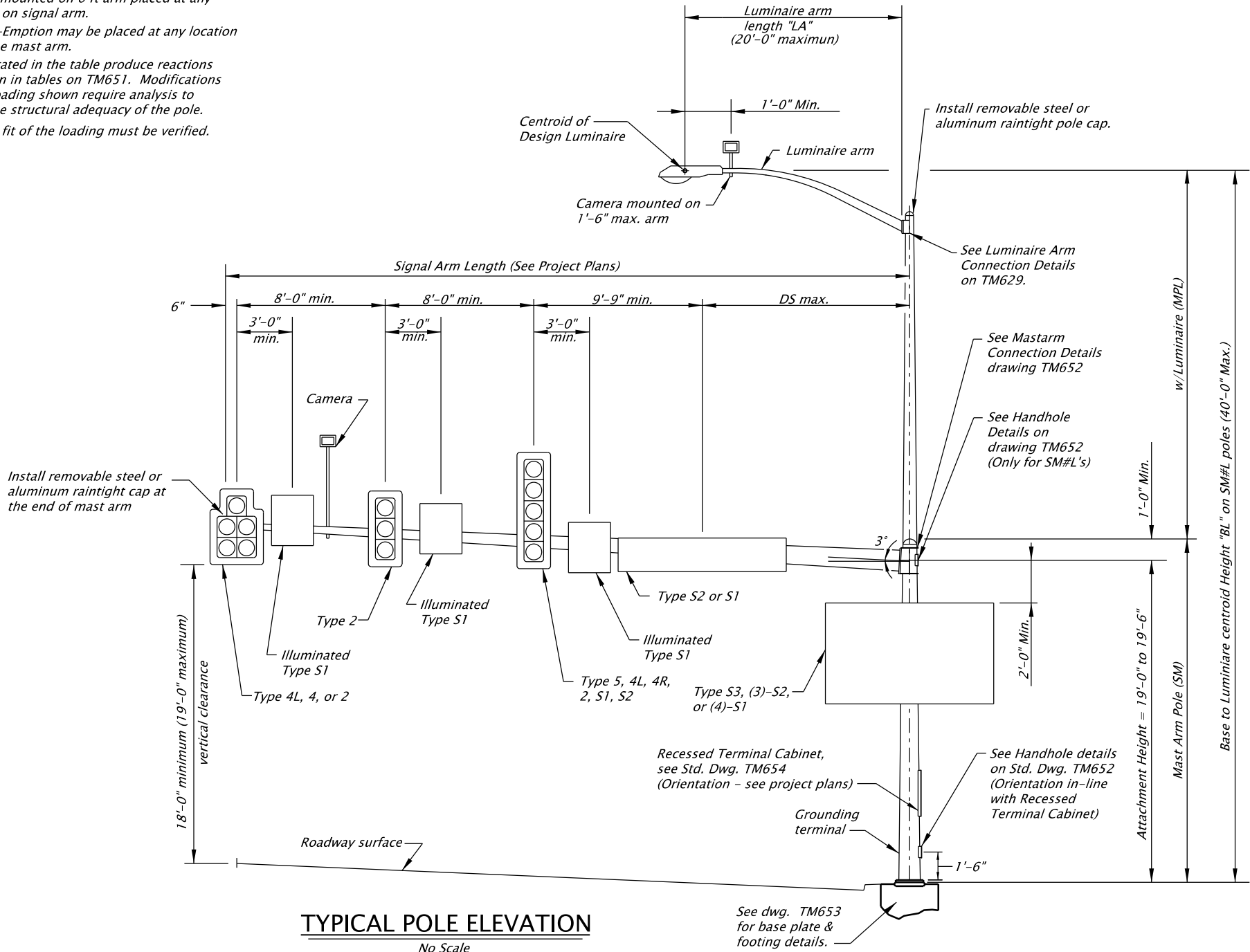


STANDARD SIGNAL ARM LOADS							
Signal Pole Type	Signal Arm Length	Signals			Sign		DS Max. for S2
		4L Qty.	2 Qty.	5 *	S1 Qty.	S2 *	
SM1 or SM1L	15'	1	0	1	2	0	N/A
SM2 or SM2L	20'	1	1	1	3	0	N/A
	25'	1	1	1	3	0	
SM3 or SM3L	30'	1	1	1	3	1	9'-1"
	35'	1	1	1	3	1	
SM4 or SM4L	40'	1	2	1	4	1	11'-1"
	45'	1	2	1	4	1	
SM5 or SM5L	50'	1	2	1	4	1	21'-1"
	55'	1	2	1	4	1	

SIGNAL ARMS DEFLECTION		
Signal Arm Length "SA"	Allowable Dead Load Deflection	Allowable Total Load Deflection
15' or less	0.01"SA	0.05"SA
20'	2½"	12"
25'	3½"	15"
30'	5"	21"
35'	7"	29"
40'	9½"	38"
45'	1'-½"	48"
50'	1'-4"	60"
55'	1'-8"	74"

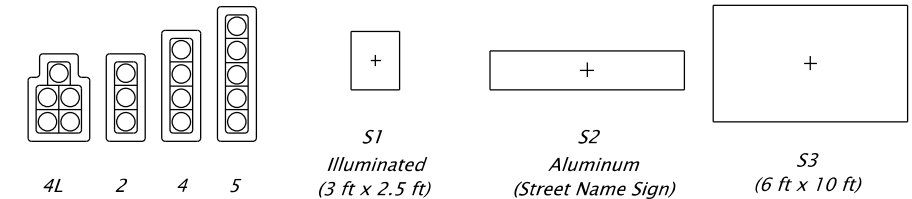
* - Load location is the closest sign or signal of that type to the vertical post.

1. Camera mounted on 6 ft arm placed at any location on signal arm.
2. Fire Pre-Emption may be placed at any location along the mast arm.
3. Loads stated in the table produce reactions as shown in tables on TM651. Modifications to the loading shown require analysis to verify the structural adequacy of the pole.
4. Physical fit of the loading must be verified.



VERTICAL POST LOADS							
Description	Maximum Centerline Elevation	Height (Each)	Width (Each)	Depth (Each)	Area Front (sq. ft)	Area Side (sq. ft)	Weight 0" Ice (lbs)
2-Ped. Push Buttons	3'-6"	7¾"	5"	3¾"	0.27	0.18	3.0
Controller Cabinet	5'-9"	46"	24"	22"	7.67	7.03	300
2-Pedestrian Signals	8'-3½"	18¾"	19"	19"	2.47	2.47	25.0
Terminal Cabinet	10'-9"	18½"	6¾"	8¾"	0.85	1.05	25.0
Guide Sign (S3)	15'-0"	72"	120"	8¾"	60.0	1.00	395
Photoelectric Cell	38'-4"	2¼"	3¼"	3¼"	0.05	0.05	5.0

1. Physical fit of the loading must be verified.



SIGNAL POLE APPURTENANCE TYPES

APPURTENANCE LOADS				
Type	Area Front (sq. ft)	Area Side (sq. ft)	Area Bottom (sq. ft)	Weight 0" Ice (lbs)
4L	12.4	6.61	3.64	145
2	8.67	6.61	1.95	85.0
4	11.0	8.49	1.95	97.0
5	13.3	10.36	1.95	142
S1	7.50	2.38	1.72	71.0
S2	21.0	0.00	1.67	105

Accompanied by dwgs. TM651, TM652, TM653, TM654, TM679

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

TRAFFIC SIGNAL SUPPORT

GENERAL DETAILS & DESIGN CRITERIA

2024

DATE	REVISION	DESCRIPTION
07-2020	REPLACED HUB WITH RECESSED TERMINAL CABINET AND ADDED	
	ACCOMPANIED BY DRAWING TM654	
01-2024	ADDED ORIENTATION TO RECESSED TERMINAL CABINET AND HANDHOLE	
	ORIENTATION WAS BY SIGNAL DESIGNER	

CALC. BOOK NO. -- 5301 --	SDR DATE-- 19-JAN-2024 --	TM650
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