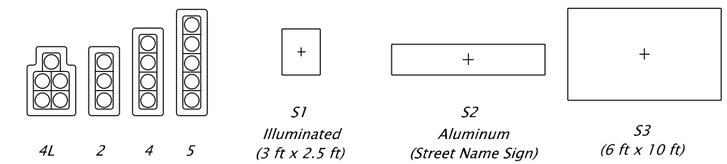
STANDARD SIGNAL ARM LOADS									DEFLECTIONS
Signal Pole Type	Signal Arm Length	Signals			Sign			DS Max. for S2 *	Estimated "defl" End of Arm
		4L Qty.	2 Qty.	5 * Qty.	S1 Qty.	S2 * Qty.	Horz. Blank		
SM6L	60', 65'	1	2	1	4	1	58'-0"	21'-1"	2'-9"
SM7L	70', 75'	1	2	1	4	1	68'-0"	21'-1"	3'-9"

* - 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. Modifications to the loading shown require analysis to verify the structural adequacy of the pole.
4. Physical fit of the loading must be verified.
5. 60' and 70' mast arm lengths use the same design as the longer 65' and 75' lengths with the end 5' removed.

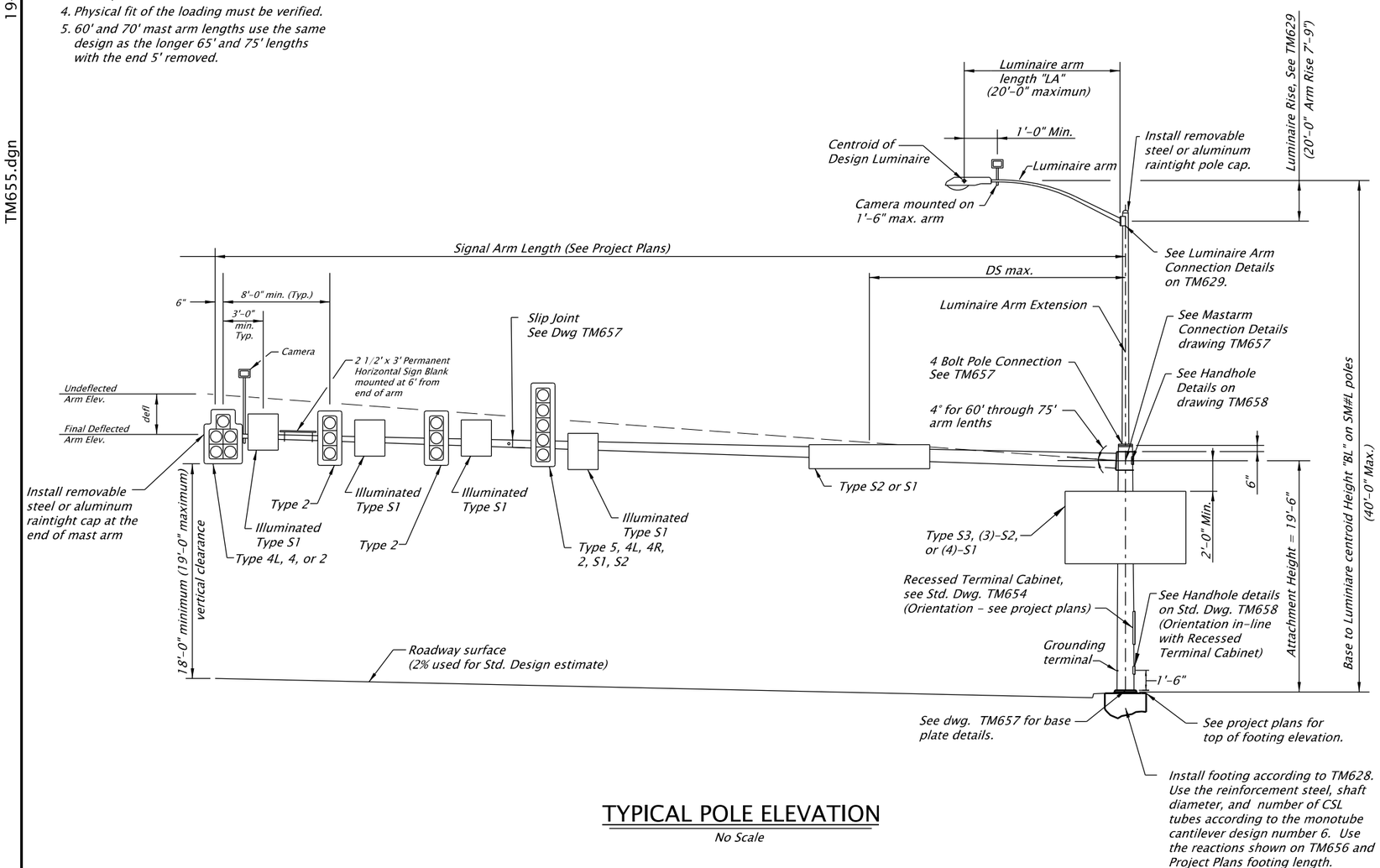
VERTICAL POST LOADS								
Description	Maximum Centerline Elevation	Height (Each)	Width (Each)	Depth (Each)	Area Front (sq. ft)	Area Side (sq. ft)	Area Bottom (sq. ft)	Weight 0" Ice (lbs)
2-Ped. Push Buttons	3'-6"	7 3/4"	5"	3 3/8"	0.27	0.18	0.12	3.0
Controller Cabinet	5'-9"	46"	24"	22"	7.67	7.03	3.67	300
2-Pedestrian Signals	8'-3 1/2"	18 3/4"	19"	19"	2.47	2.47	2.51	25.0
Terminal Cabinet	10'-9"	18 1/8"	6 3/4"	8 3/8"	0.85	1.05	0.39	25.0
Guide Sign (S3)	15'-0"	72"	120"	8 3/8"	60.0	1.00	1.67	395
Photoelectric Cell	38'-4"	2 1/4"	3 1/4"	3 1/4"	0.05	0.05	0.07	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
Horz. Blank	1.72	2.38	7.50	45.0
Signal Camera	1.64	2.55	0	60
Lum. Camera	0.65	1.42	0	25



TYPICAL POLE ELEVATION

No Scale

Accompanied by dwgs. TM654, TM656, TM657, TM658, TM628

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 60' THROUGH 75' MAST ARM SUPPORTS GENERAL DETAILS & DESIGN CRITERIA

2024

DATE	REVISION DESCRIPTION
07-2022	ADDED DRAWING TM656 BASE REACTIONS AND CLARIFIED
	DRAWING TM628 TABLE DETAIL REQUIREMENTS
01-2024	ADDED ORIENTATION TO RECESSED TERMINAL CABINET AND HANDHOLE
	ORIENTATION WAS BY SIGNAL DESIGNER

CALC. BOOK NO. 7088 SDR DATE 19-JAN-2024 **TM655**

TM655.dgn 19-JAN-2024

Effective Date: June 1, 2026 - November 30, 2026