

STANDARD STRAIN POLES (SP) & (SPL)

Allowable Span Wire Dead Load Tension, Lbs. (Horizontal) ①②③														Foundation Requirements				
No Luminaire				Strain Poles with Luminaire Extensions										Bolt Circle Diameter	Anchor Rod Diameter	3" Diameter Depth	Alt. 4" sq. for top 1/3 of fig. depth	Vertical Fig. Bars
				40' max. Mounting Height					40' to 50' Mounting Height									
POLE	AH-28'	AH-30'	AH-32'	AH-34'	POLE	AH-28'	AH-30'	AH-32'	AH-34'	AH-28'	AH-30'	AH-32'	AH-34'					
SP1	1000	932	873	821	SPL1	665	620	580	546	460	429	402	378	1'-6"	2"	7'-6"	6'-3"	8 - #7
SP2	1500	1398	1310	1231	SPL2	1165	1086	1017	956	960	895	838	788	1'-6"	2 1/4"	9'-0"	7'-9"	12 - #7
SP3	2000	1864	1746	1642	SPL3	1665	1552	1454	1367	1460	1361	1275	1199	1'-9"	2 1/4"	10'-6"	9'-0"	12 - #7
SP4	2500	2330	2183	2052	SPL4	2165	2018	1890	1777	1960	1827	1711	1610	1'-9"	2 1/2"	12'-0"	10'-0"	16 - #7
SP5	3000	2797	2619	2463	SPL5	2665	2484	2327	2188	2460	2293	2148	2019	1'-10 1/2"	2 3/4"	13'-3"	11'-3"	20 - #7
SP6	3500	3263	3056	2873	SPL6	3165	2950	2763	2598	2960	2759	2584	2430	2'-0"	2 3/4"	14'-6"	12'-6"	20 - #7

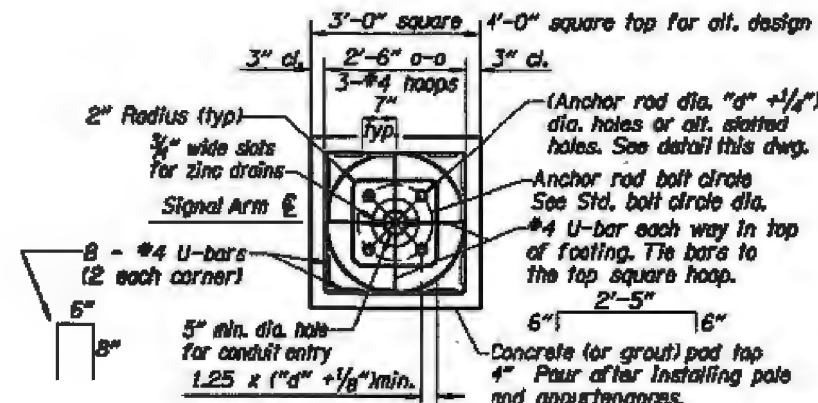
- ① AH = Pole length from base to 6" above messenger cable attachment.
- ② Dead load and wind load span wire design tension shall be 2.5 times the allowable span wire dead load tension.
- ③ Resultant allowable dead load tension for poles with 2 or more span wires.

STANDARD MAST ARM POLES (MP) & (MPL)

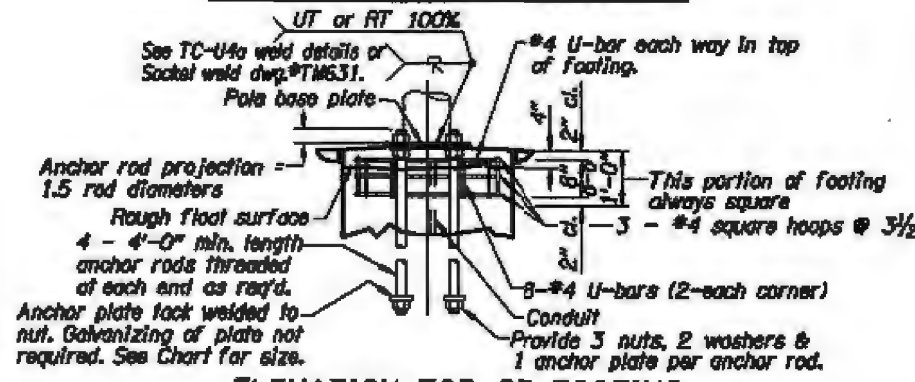
No Luminaire										Luminaire with 50' max. mounting height "H"				
POLE	Signal Arm Lengths	Bolt Circle Diameter	Anchor Rod Diameter "d"	Footing Depth	Vertical Fig. Bars	POLE	Signal Arm Lengths	Bolt Circle Diameter	Anchor Rod Diameter "d"	Footing Depth	Vertical Fig. Bars			
MP1	15'thru30'	1'-6"	2"	7'-0"	8 - #7	MPL1	15'thru30'	1'-6"	2 1/4"	8'-0"	8 - #7			
MP2	35'thru40'	1'-8"	2 1/4"	7'-6"	8 - #7	MPL2	35'thru40'	1'-8"	2 1/2"	8'-6"	8 - #7			
MP3	45'	1'-10"	2 1/2"	8'-0"	8 - #7	MPL3	45'	1'-10"	2 3/4"	9'-0"	8 - #7			
MP4	50'	1'-10"	2 3/4"	8'-6"	8 - #7	MPL4	50'	1'-10"	2 3/4"	9'-6"	12 - #7			

ANCHOR PLATE

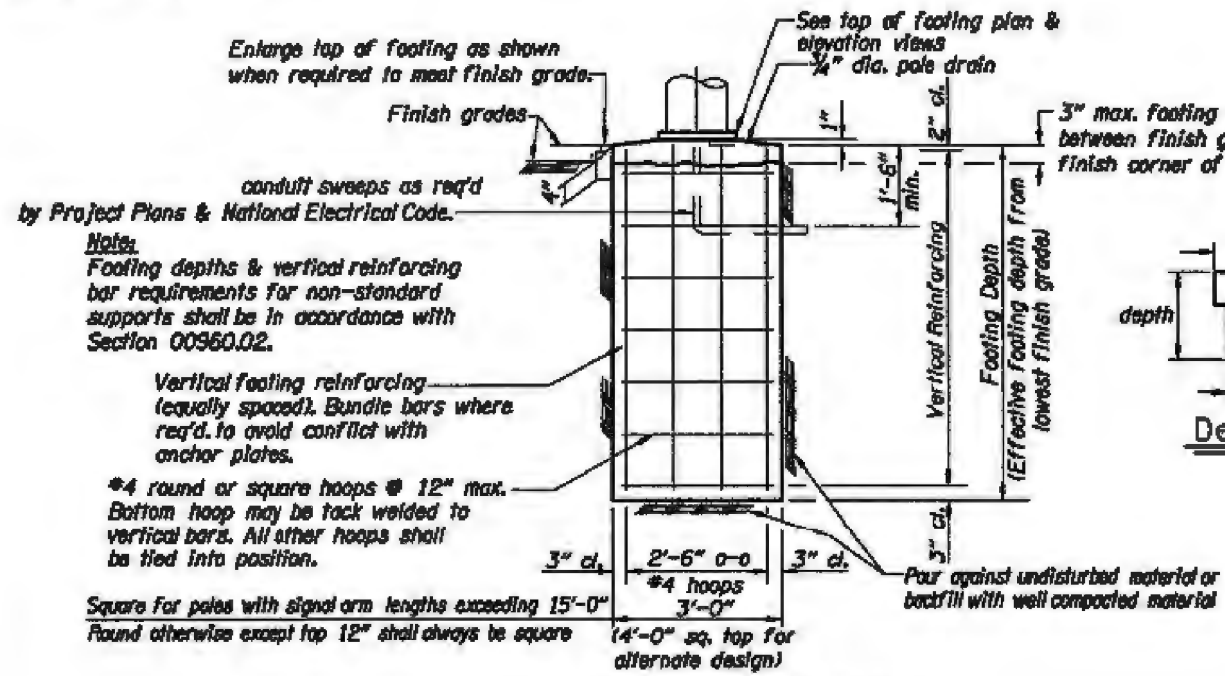
Rod Dia.	Plate Size
1 3/4"	4 1/2" sq. x 3/8"
2"	5 1/2" sq. x 7/8"
2 1/4"	5 3/4" sq. x 1"
2 1/2"	6 3/4" sq. x 1"
2 3/4"	7" sq. x 1 1/8"
3"	7 1/4" sq. x 1 1/4"



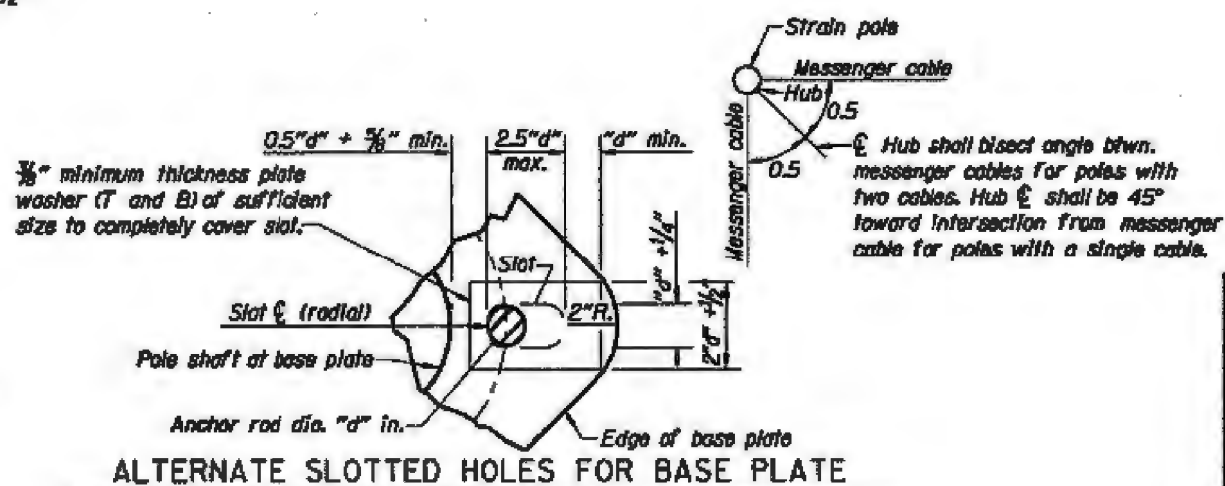
PLAN - TOP OF FOOTING



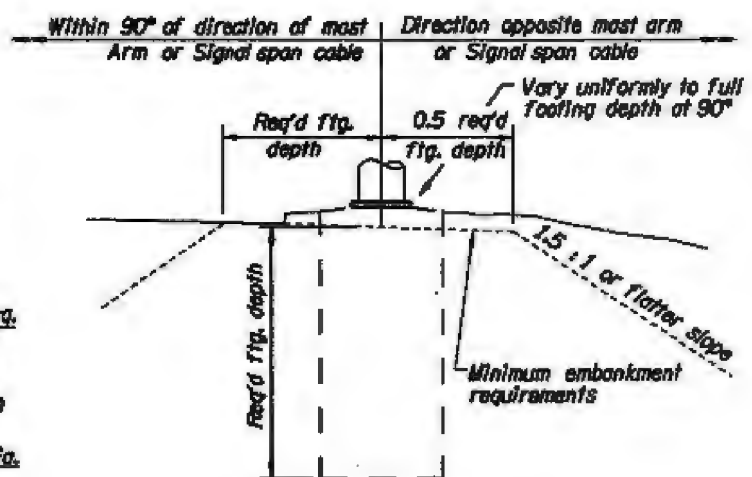
ELEVATION-TOP OF FOOTING



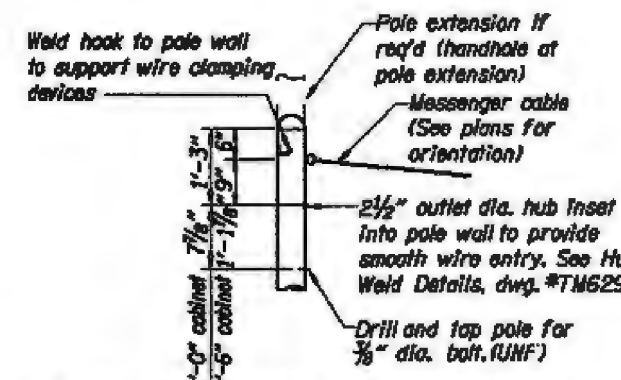
TYPICAL FOOTING ELEVATION



ALTERNATE SLOTTED HOLES FOR BASE PLATE



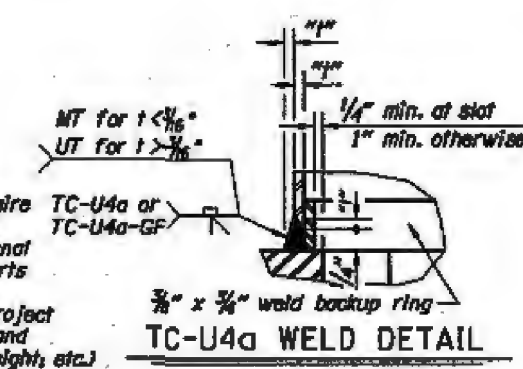
MINIMUM EMBANKMENT REQUIREMENTS



TERMINAL CABINET MOUNTING PROVISIONS FOR STRAIN POLES

GENERAL NOTES:

The General Notes and design details of dwg. #TM631 shall apply unless noted otherwise herein. Supports shall be designed to support the loadings shown on dwg. #TM631. For design, luminaire arms shall be assumed to extend in the same direction as the signal arm or signal span cable. Supports furnished shall conform to the configuration required by the Project Plans (Arm lengths, signal sign and luminaire placement, mounting height, etc.)



TC-U4a WELD DETAIL

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 consulting a Registered Professional Engineer.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

STANDARD TRAFFIC SIGNAL SUPPORTS
STANDARD SUPPORT REQUIREMENTS

REVISIONS	
DATE	DESCRIPTION
11/89	Reformatted drawing and revised conduit size (formerly 2x2x2)
1/95	Changed section reference on "Typical Footing Elevation" to 00960.02 and added weld inspection note to "TC-U4a Weld Detail"
2078	APPROVED BY DWGS. TM631