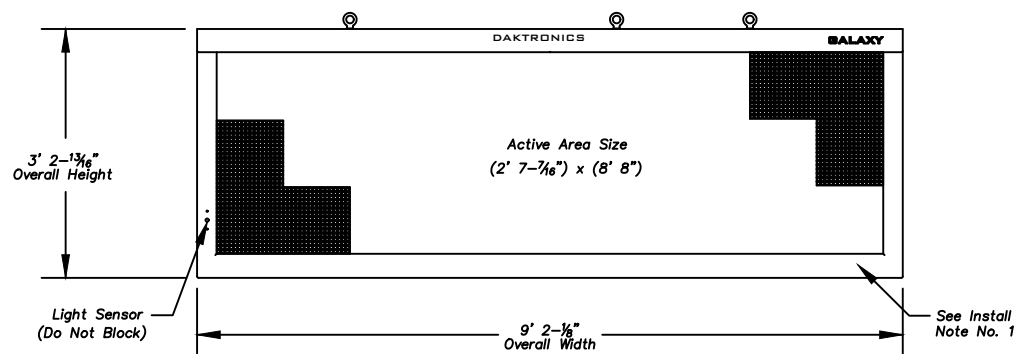
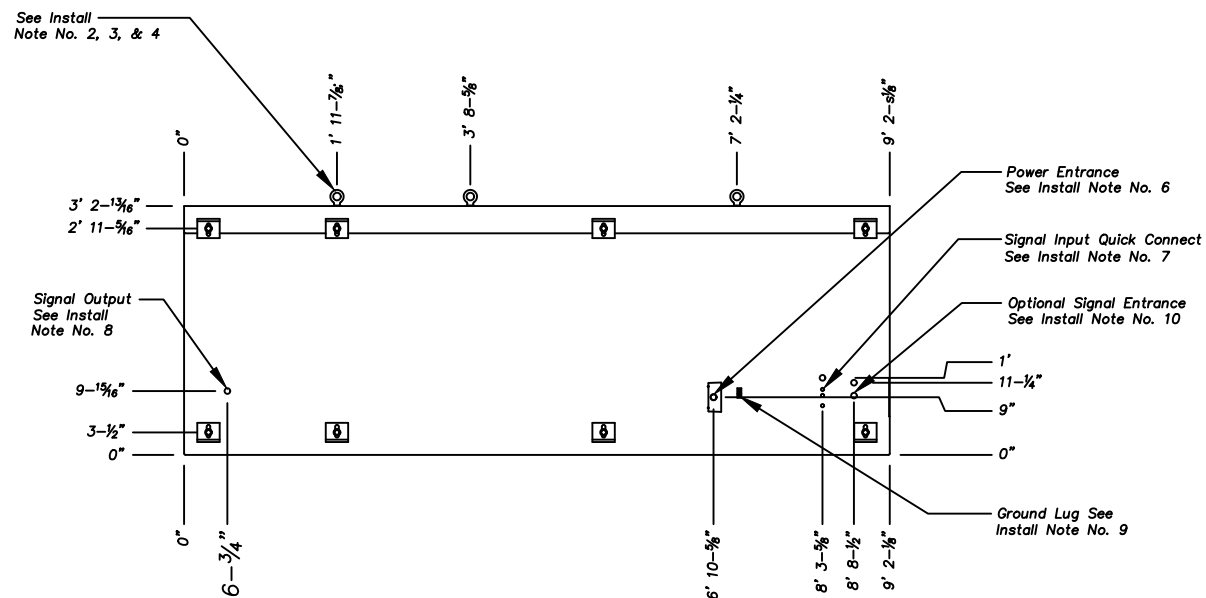


Top View

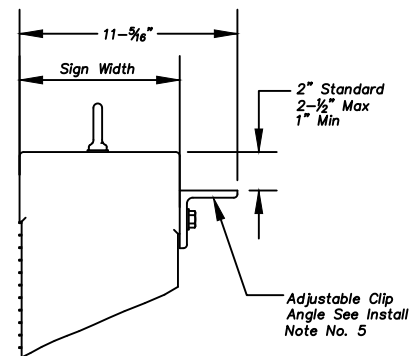


Front View

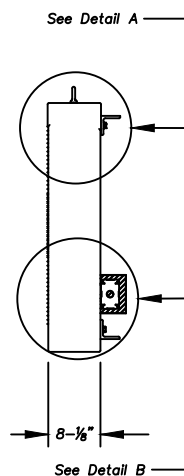


Rear View

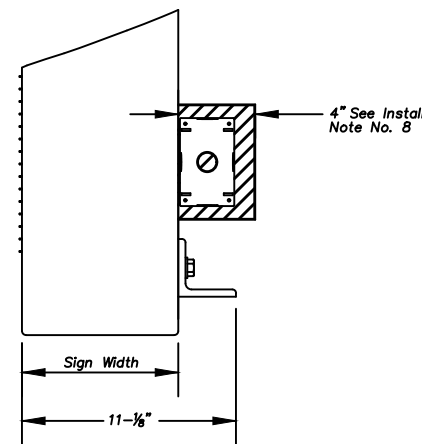
Note:
1. All dimensions are variable based on manufacturer.



Detail A



Right View



Detail B

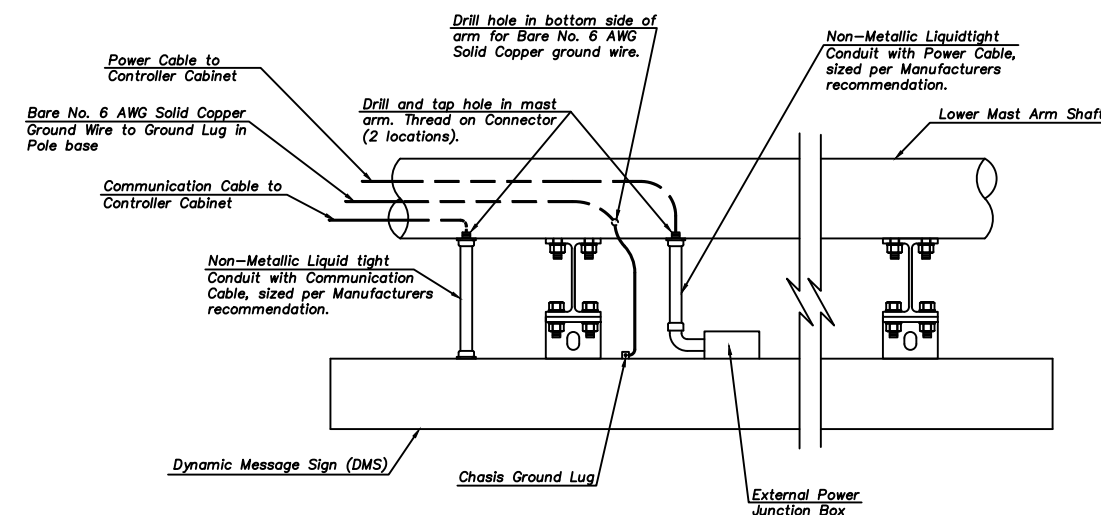
#	Detail	Description
1	Display	VL-3550-48 X 160-16MM
2	LED Color	RGB
3	Active Area	2' 7-7/16" X 8' 8"
4	Overall Size	3' 2-13/16" X 9' 2-1/8"
5	Cabinet	Aluminum, Painted Semi-Gloss Black
6	Ventilation	Intake & Exhaust at Bottom-Front
7	Access	Service from Front Only
8	Weight	250 lbs (Approx)

Structural Rating	
1	Design Wind Pressure "P" P<=110 PSF
2	Standard/Code IBC 2006

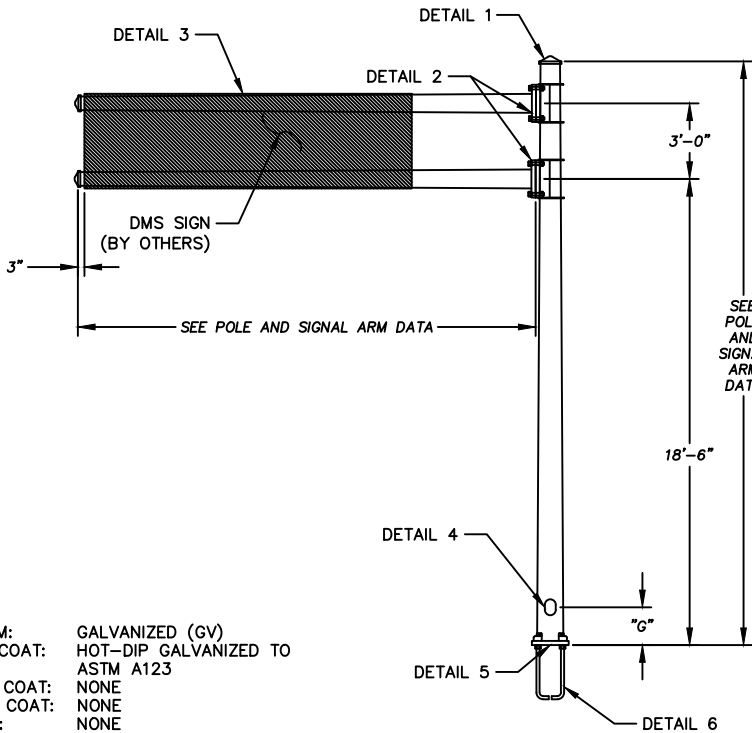
#	Color	Effective Date	WATTS	Domestic		International	
				120VAC,60Hz 2 Wire + GND	120/240VAC, 60Hz, 3 Wire + GND	240VAC,1PH 50Hz 2 Wire + GND	
				Line 1 (AMPS)	Line 2 (AMPS)	Line 1 (AMPS)	
1	RGB	After 4/26/12	1200	N/A	4.77	5.23	5.00
2	RGB	Prior to 4/25/12	1541	N/A	6.26	6.59	6.42

Install Notes

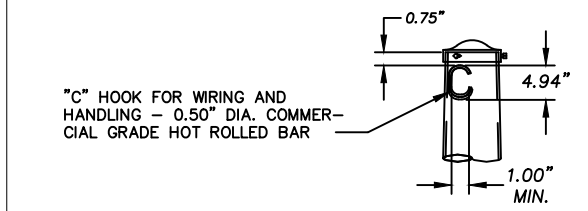
1. Display is front ventilated so no portion of the front face can be covered. Air intakes are filtered. Filters are located in drawers on face.
2. In order to maintain the structural integrity of the display cabinet, use spreader beam and maintain a 90° angle between the cabinet and the lifting method. All eyebolts must be used for lifting the cabinet.
3. 1/2" eyebolts to assist with display installation. Eyebolts may be removed after installation.
4. Eyebolts may not be used for permanent installation.
5. L3 x 3 x 3/8" x 3 Wide" ASTM A36 steel angle for mounting attached to the display with 1/2" bolt and nut insert. Clip angle can be adjusted vertically as needed during installation.
6. External junction box is provided for power termination. See power ratings above.
7. Signal input at quick connect. Primary/Single face display shown. See clearance dimension on detail View B.
8. Signal output quick connect for mirror face.
9. Ground lug for ground lug connection. Display needs to be grounded.
10. Two 1/2" conduit knockout locations for optional signal entrance.



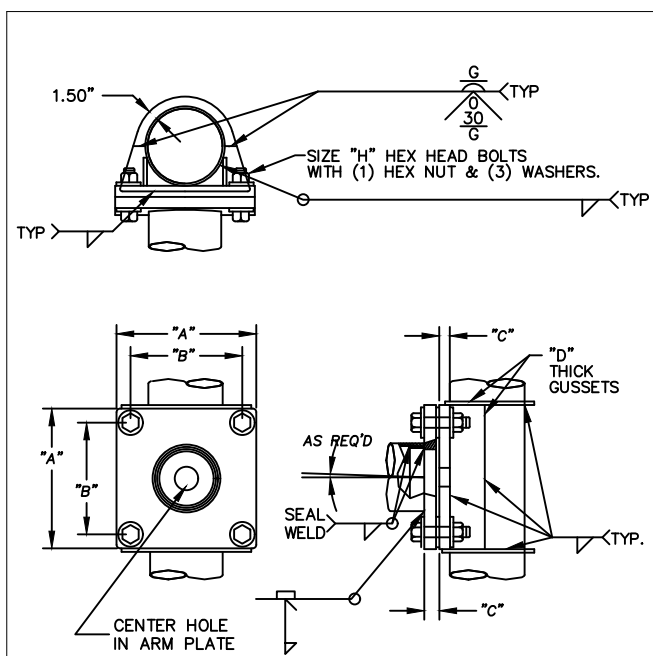
Top View



SYSTEM: GALVANIZED (GV)
 BASE COAT: HOT-DIP GALVANIZED TO ASTM A123
 PRIME COAT: NONE
 FINISH COAT: NONE
 COLOR: NONE
 SPEC: F-1



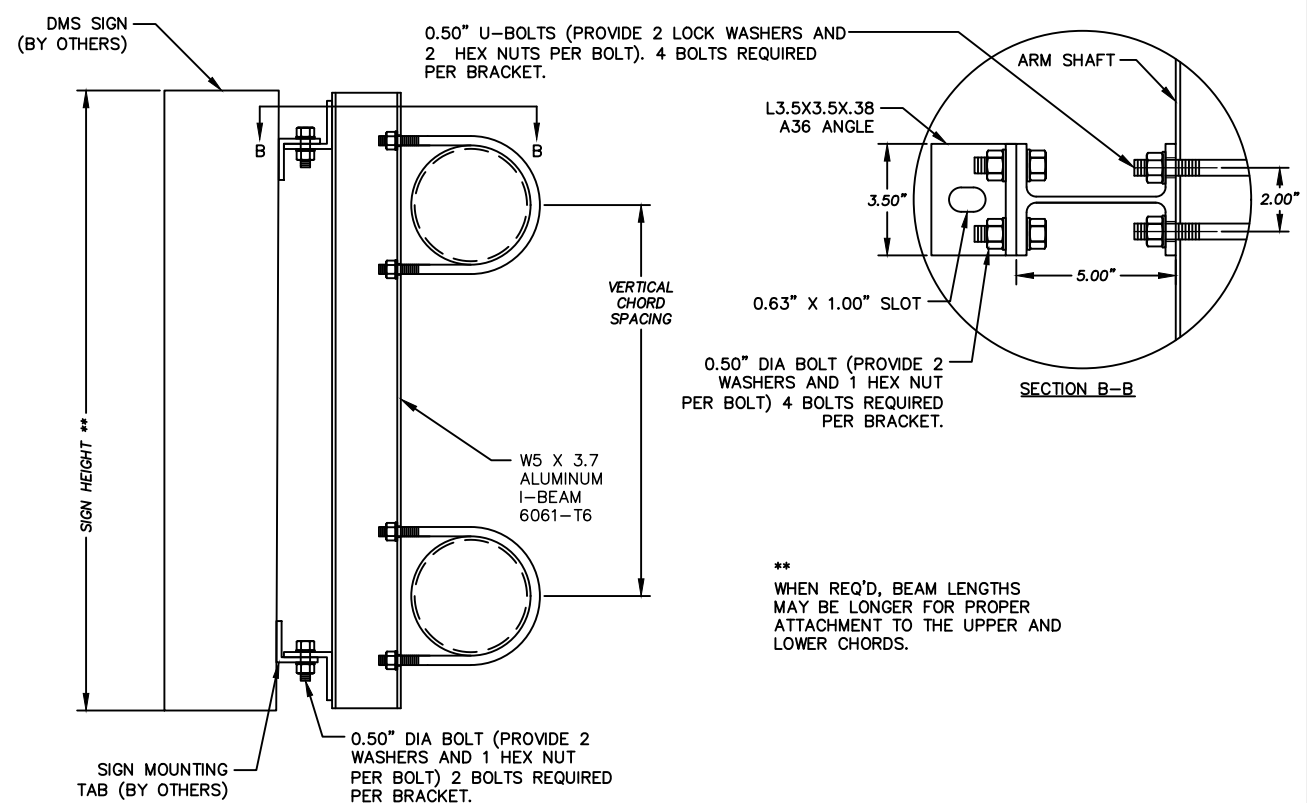
DETAIL 1 POLE TOP



SIGNAL ARM ATTACHMENT DATA

POLE BASE DIA. (IN)	"A" (IN)	"B" (IN)	"C" (IN)	"D" (IN)	CENTER HOLE DIA. (IN)	"H" (IN)
12.50	17.75	14.50	2.00	0.375	7.00	1.25 X 6.00

DETAIL 2 SIGNAL ARM ATTACHMENT

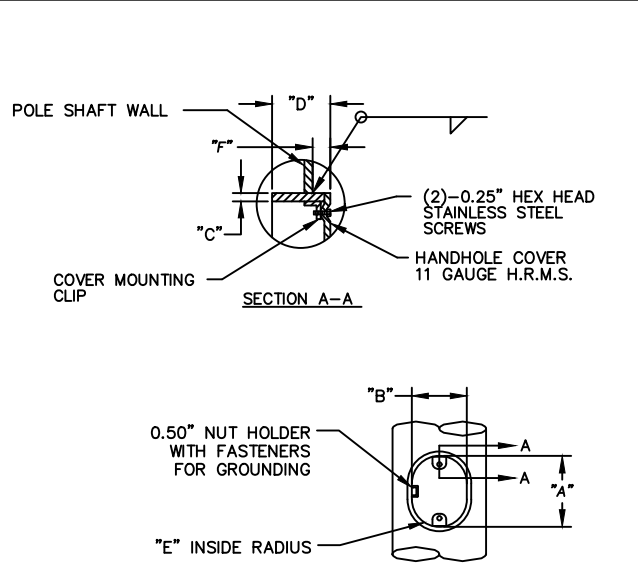


DETAIL 3 DMS SIGN ATTACHMENT

MATERIAL DATA

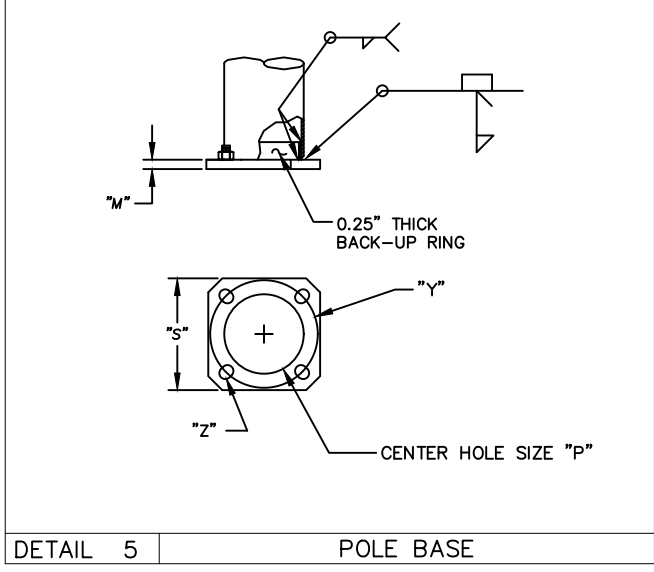
COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)	COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)
TAPERED TUBE	A595 GR.A OR A572	55	ANCHOR BOLTS	F1554 GR.55	55
POLE BASE	A572	50	GALVANIZING-HARDWARE	HOT DIP ZINC	--
ARM ATTACHMENT	A572	50			
ARM CONN. BOLTS	A325	--			

POLE SERIES	POLE TUBE				POLE BASE					ANCHOR BOLT				SIGNAL ARM TUBE			
	BASE DIA. (IN)	TOP DIA. (IN)	LENGTH (FT)	GAUGE OR THICK (IN)	SQUARE "S" (IN)	BOLT CIRCLE "Y" (IN)	THK. "M" (IN)	"Z" HOLE (IN)	CENTER HOLE "P"	DIA. "K" (IN)	LENGTH "J" (IN)	HOOK "H" (IN)	THREAD LENGTH "U" (IN)	FIXED END DIA. (IN)	FREE END DIA. (IN)	GAUGE OR THICK (IN)	SPAN (FT)
OP	12.50	9.28	23.00	5	17.50	16.50	2.00	1.75	11.00	1.50	54.00	6.00	8.00	9.00	6.48	7	18.00
														9.00	6.48	7	18.00

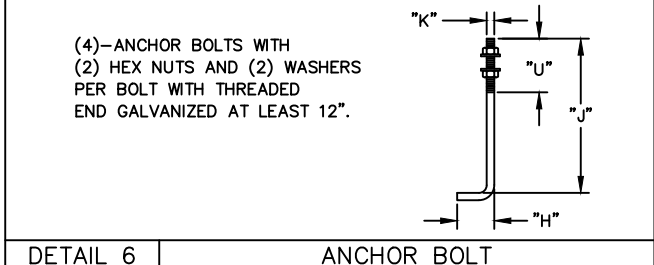


DETAIL 4 HANDHOLE

BASE DIA.	"A" I.D. (IN)	"B" I.D. (IN)	"C" THK (IN)	"D" DEPTH (IN)	"E" RADIUS (IN)	"F" PROJ (IN)	"G" MTG. HEIGHT (FT)
12.50"	4.50	6.56	0.50	2.50	2.25	0.50	1.50



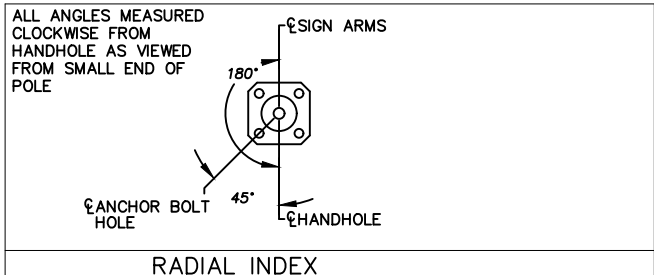
DETAIL 5 POLE BASE



DETAIL 6 ANCHOR BOLT

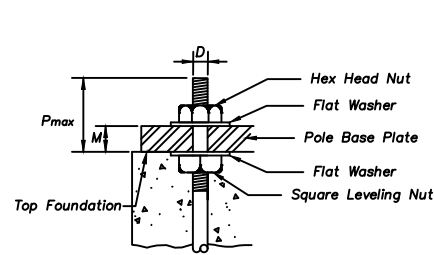
ALTHOUGH RARE, VIBRATIONS SEVERE ENOUGH TO CAUSE DAMAGE CAN OCCASIONALLY OCCUR IN STRUCTURES OF ALL TYPES. BECAUSE THEY ARE INFLUENCED BY MANY INTERACTING VARIABLES, VIBRATIONS ARE GENERALLY UNPREDICTABLE. THE USER'S MAINTENANCE PROGRAM SHOULD INCLUDE OBSERVATION FOR EXCESSIVE VIBRATION AND EXAMINATION FOR ANY STRUCTURAL DAMAGE OR BOLT LOOSENING. THE VALMONT WARRANTY SPECIFICALLY EXCLUDES FATIGUE FAILURE OR SIMILAR PHENOMENA RESULTING FROM INDUCED VIBRATION, HARMONIC OSCILLATION OR RESONANCE ASSOCIATED WITH MOVEMENT OF AIR CURRENTS AROUND THE PRODUCT.

VIBRATION DISCLAIMER



RADIAL INDEX

September 1, 2021 - 3:01 PM
 K:\Details_Special\Drawings\Traffic\SD In Progress\Current\MASTER SHEETS\2021 ITS Details - MASTER.dwg
 K:\Details_Special\Drawings\Traffic\SD In Progress\Current\MASTER SHEETS\2021 ITS Details - MASTER.dwg

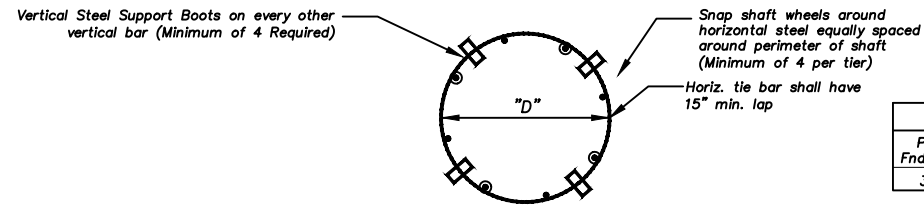


Anchor Bolt Detail

Bolt Diameter	Plate Thickness "M"	Bolt Projection "P"
1.50"	2.00"	6 1/4" ± 1/4"

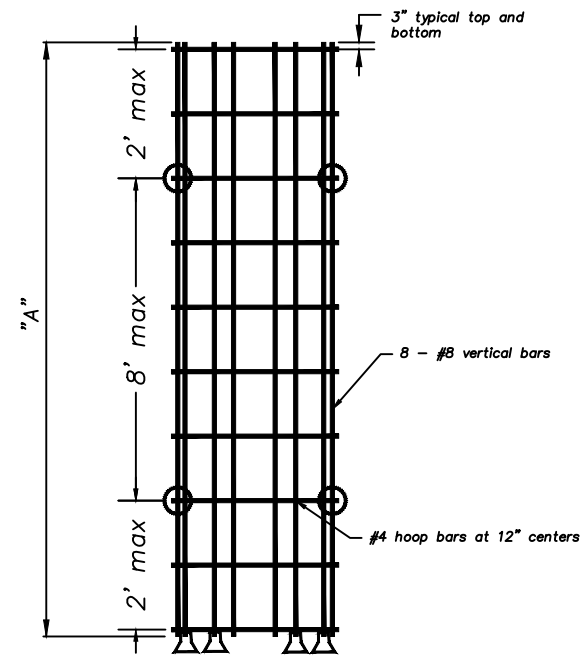
Pole Foundation Notes:

- Final pole, anchor bolt size, anchor bolt projection, and bolt circle shall be as per manufacturer's recommended practices (See Table 1). Rotate anchor bolt to maintain minimum clearance from edge of hole. All anchor bolt threads and nut surfaces shall be lubricated prior to tightening with stick wax or approved alternative.
- All conduits and anchor bolts for all the new pole bases shall be rigidly installed before concrete is placed. Anchor bolts shall be spaced by means of a factory certified template or drawing, the center of which shall coincide with the center of the base.
- All concrete used for pole foundations shall meet the requirements of the Overland Park Municipal Code and shall be KCMMB5K concrete ($f_c = 5,000$ psi with a 7" slump). Poles shall not be erected until concrete has reached 3,500 psi.
- Reinforcing steel shall have 60 ksi yield strength and meet ASTM A615 GR60.
- The drilled shaft foundation details presented herein are intended for installation into soil foundations. A special foundation investigation and design shall be conducted for residual soils with an "N" value of 4 or less or characterized as very soft to soft clay.
- These standard designs assume a minimum compactive effort of 90% of Standard or Modified Proctor for cohesive fill material.
- In the event excavation for the drilled shaft encounters sound limestone short of the required length shown in the table of dimensions, the shaft may be shortened to a minimum length of 8 feet with a minimum inclusive rock socket of 3 feet.
- Shale foundation material will be considered as a stiff clay. Drilled shafts in shale must satisfy the dimensions on Table 2.
- All concrete pole bases shall be consolidated by an internal type vibrator.
- Final 6" of concrete foundation (pole cap) shall be formed square. The cap shall be formed and poured after the mast arm is erected and the pole plumb. Final top elevation shall match finished grade.
- PVC conduit elbows in concrete foundations shall be connected to HDPE conduit with PVC pipe nipple and approved PVC to HDPE couplings. All PVC pipe nipples, elbows, and couplings shall be considered subsidiary to the traffic signal pole base.
- Bare No. 6 AWG solid copper ground conductor shall be connected from internal pole grounding nut, with a ring terminal, to the clamp on ground rod. Resistance to ground shall be 10 ohms or less, or additional ground rods shall be installed in an array. The contractor shall test ground resistance in the presence of the inspector.
- Contractor shall use drill shaft wheels and rebar support boots to maintain 3" clearance to shaft wall and shaft bottom, respectively.
- All concrete surfaces should be brushed and sealed with curing compound.
- Contractor shall insure the DMS factory representative shall be on site during installation and testing of the sign. No direct payment will be made for factory representative costs.

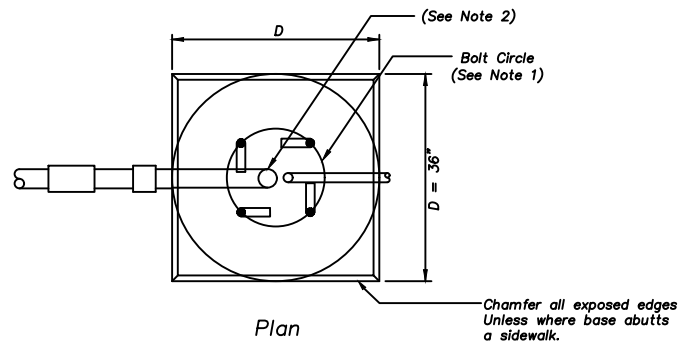


Pole Fnd. Dia.	Pole Fnd. Depth	Rebar Cir. "D"	Spacing
36"	12'	30"	12" MAX.

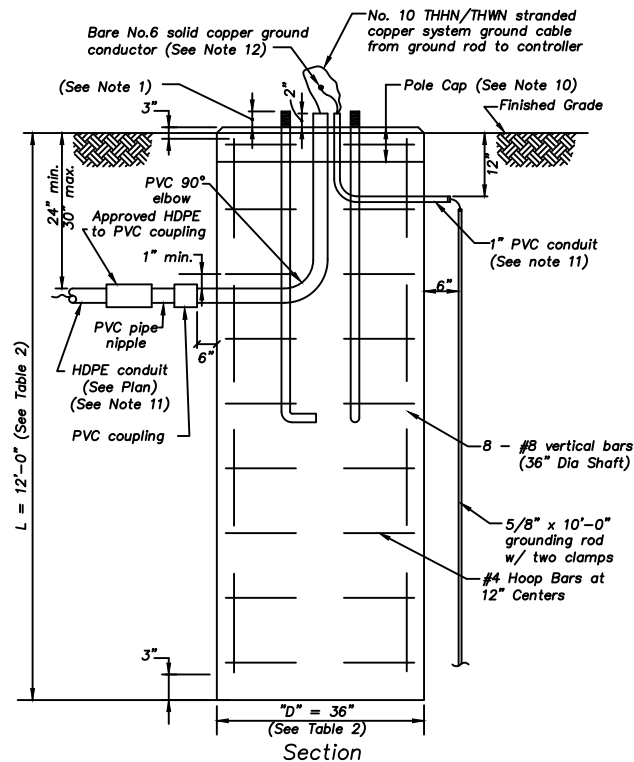
Pole Fnd. Depth	Length "A"	Number of Shaft Wheels
12'-0"	11'-6"	8



Rebar Cage Detail

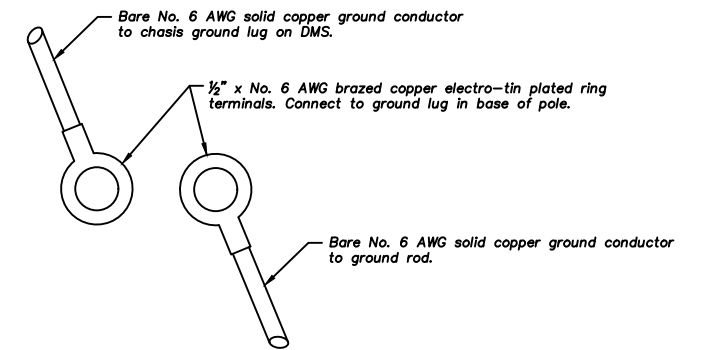


Plan



Traffic Signal Pole Foundation

Length of Mast Arm	"D" Diameter	"L" Length
18'	36"	12'



DMS Grounding Detail

NO.	DATE	REVISIONS	BY.
1	09/01/2021	2021 Standard Details	LJK
2			
3			