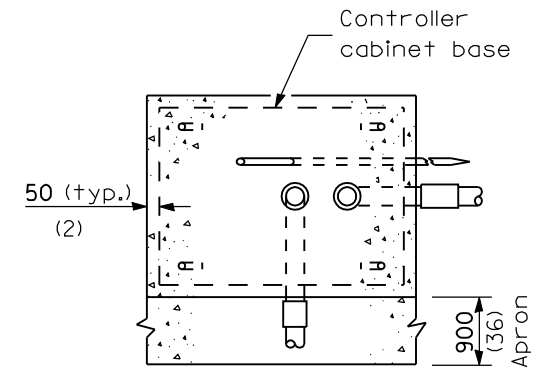
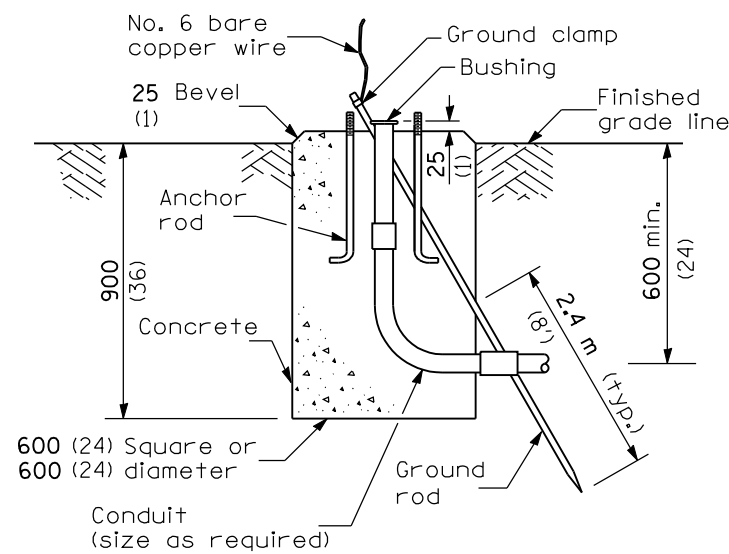


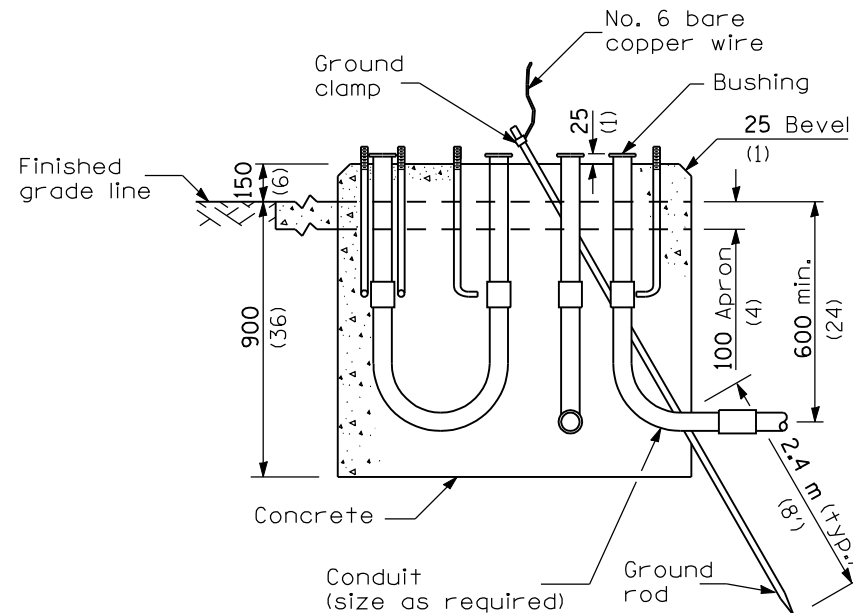
TOP VIEW



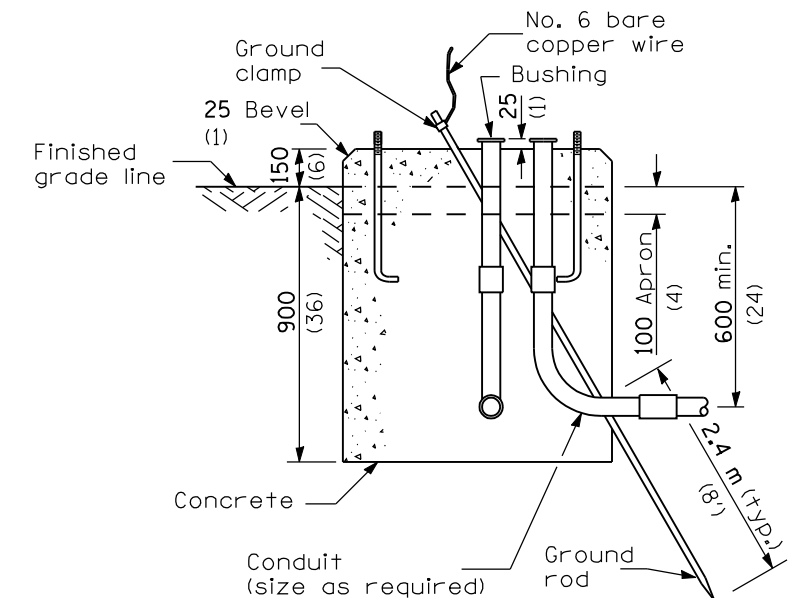
TOP VIEW



TYPE A



**TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET**

All dimensions are in millimeters (inches) unless otherwise shown.

DATE	REVISIONS
1-1-08	Rev. Type E foundation to support 22.9 m (75') mast arm lengths.
1-1-07	Moved pedestrian push button to new Standard 876001.

CONCRETE FOUNDATION DETAILS

(Sheet 1 of 2)

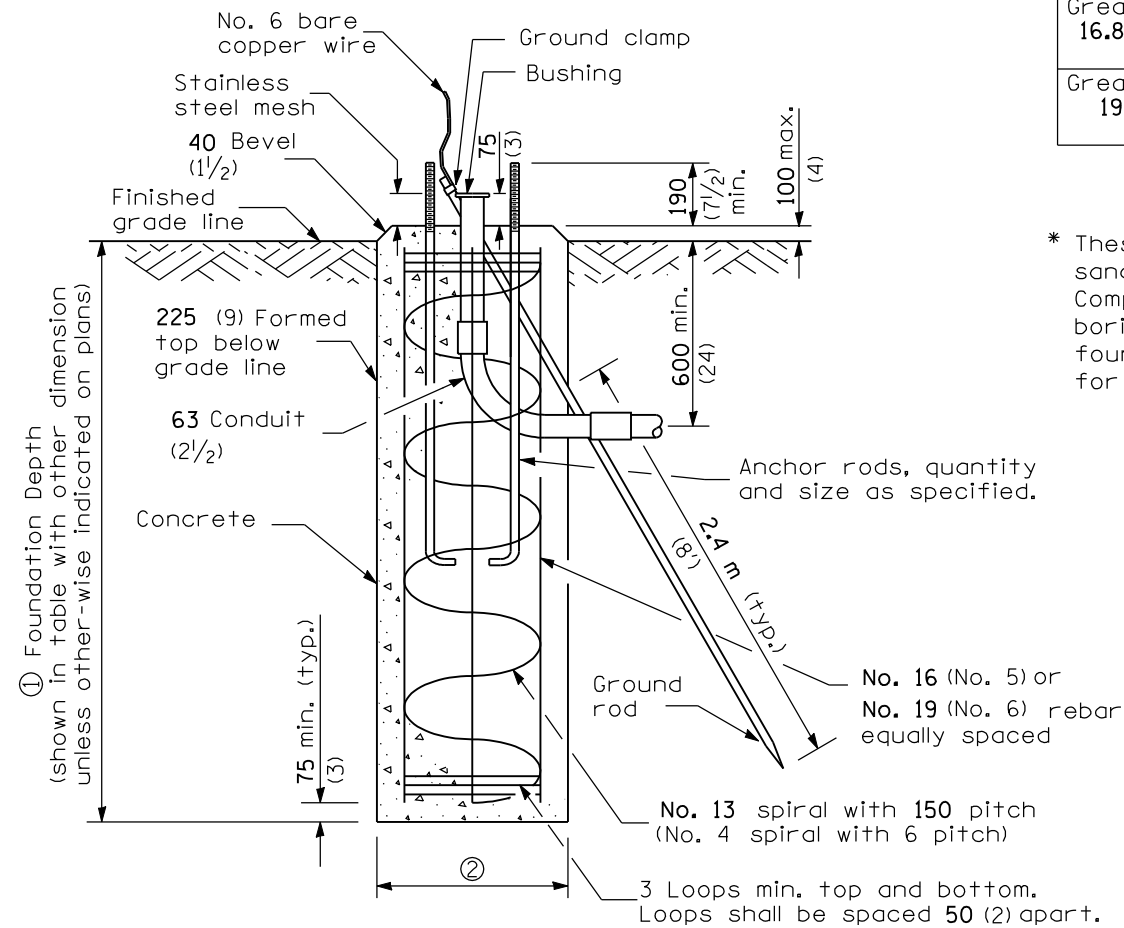
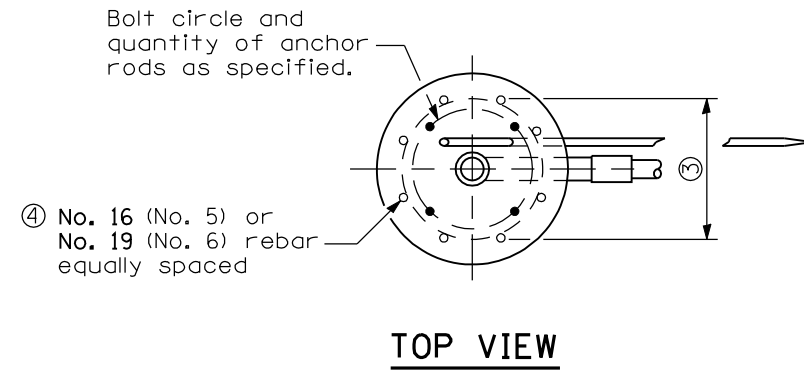
STANDARD 878001-06

Illinois Department of Transportation

APPROVED January 1, 2008
ENGINEER OF OPERATIONS

APPROVED January 1, 2008
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-02



For standard and combination mast arm assemblies. Mast arm assemblies with dual arms require a special foundation design.

Mast Arm Length	① Foundation Depth*	② Foundation Diameter	③ Spiral Diameter	④ Quantity of Rebars	Size of Rebars
Less than 9.1 m (30')	3.0 m (10'-0")	750 (30)	600 (24)	8	16 (5)
Greater than or equal to 9.1 m (30') and less than 12.2 m (40')	4.1 m (13'-6")	750 (30)	600 (24)	8	16 (5)
	3.4 m (11'-0")	900 (36)	750 (30)	12	16 (5)
Greater than or equal to 12.2 m (40') and less than 15.2 m (50')	4.0 m (13'-0")	900 (36)	750 (30)	12	16 (5)
Greater than or equal to 15.2 m (50') and up to 16.8 m (55')	4.6 m (15'-0")	900 (36)	750 (30)	12	19 (6)
Greater than or equal to 16.8 m (56') and less than 19.8 m (65')	6.4 m (21'-0")	1060 (42)	900 (36)	16	19 (6)
Greater than or equal to 19.8 m (65') and up to 22.9 m (75')	7.6 m (25'-0")	1060 (42)	900 (36)	16	19 (6)

* These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Q_u) > 100 kPa (1.0 tsf). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.

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CONCRETE
FOUNDATION DETAILS
(Sheet 2 of 2)

STANDARD 878001-06