

Transmission & Distribution
Material & Installation Specification

Expanding Anchors

I. Quantity

The base bid shall include the indicated number of screw anchors of this type furnished and installed as hereinafter specified.

II. Material

- A. The material shall be equal in quality, design, performance, and appearance to the items specified on drawing TDMIS-115.
- B. All steel hardware to be hot dipped galvanized.
- C. Expanding anchors shall be AB Chance or Engineer approved equal as follows:

Catalog Number	Anchor Hole Size In (mm)	Area Sq. In. (sq cm)	Rod Size (Order Separately) In (mm)	8-Way Anchor Holding Capacity - (lbs.(kN)) vs Soil Class				
				Class 3	Class 4	Class 5	Class 6	Class 7
88135*	8 (203)	135 (871)	5/8 (15.8) or 3/4 (19.1)	26500 (117.9)†	22000 (97.9)†	18000 (80.1)†	15000 (66.7)	10000 (44.5)
1082	10 (254)	200 (1290)	1 (25.4)	31000 (137.9)	26500 (117.9)	21000 (93.4)	16500 (73.4)	12000 (53.4)

III. Installation

- A. The installation shall be as shown on drawing TDMIS-115.
- B. The anchor must penetrate into soil stiff enough for the required holding strength. Additional anchor extensions may be necessary to reach sufficiently stiff soils.
- C. The digger operator shall use the appropriate size auger as per the chart above.
- D. Anchors and extensions shall be installed in line with guy wire. The difference between the angle that the anchor is installed and the guy angle should not exceed +/-5 degrees.
- E. Anchors must be installed a minimum of 6 feet as measured along the anchor extension.
- F. Anchor extension rods should be installed so that the anchor eye is 6 to 12 inches above grade.
- G. Multiple anchor installations should be separated by a minimum of 5 feet.
- H. The anchor shall be installed approximately 25 feet from the pole or as indicated on the drawings. When an anchor must be moved due to an obstruction, every effort should be made to move it further from the pole than specified.

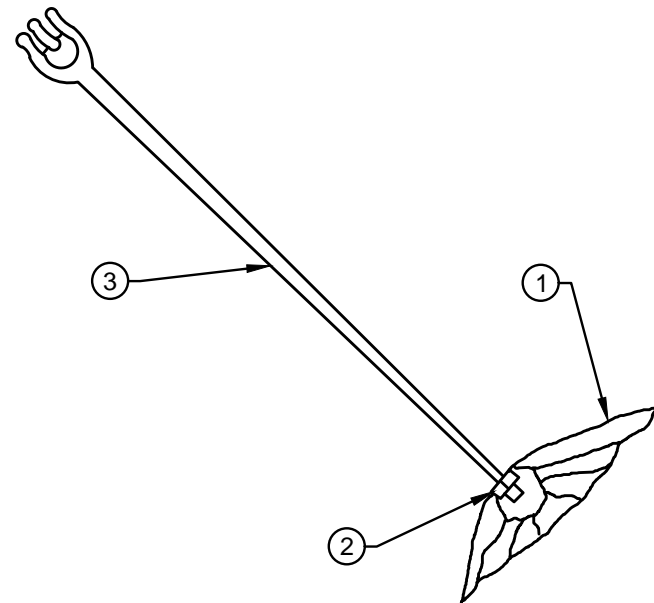
IV. Method of measurement

Shall be per each anchor including rods, extensions, eyelets, tools excavation, backfill, labor, equipment and all misc. required for a complete and functional module.

V. Basis of payment

Items	Unit	Description
TDMIS-115	Each	Expanding anchors module

CITY OF COLUMBUS DEPT. OF PUBLIC UTILITIES – DIVISION OF POWER EXPANDING ANCHORS		
DRAWN BY: AEC	DATE: 01/01/2018	TDMIS-115
APPROVED: <i>[Signature]</i>		
	SHEET 1 of 3	



DETAIL 1
SMALL EXPANDING ANCHOR

SCHEDULE				
ITEM #	SUFFIX NO.	LENGTH	SIZE	PART#
3	1	SINGLE	5/8"X8'	19239
2	1	-----	5/8X11UNC	XXXXX
3	2	TWIN	3/4"X9'	19242
2	2	-----	3/4"-10UNC	XXXXX

ITEM LIST				
ITEM #	DESCRIPTION	PART #	QTY.	
①	ANCHOR, EXPANDING-135 SQUARE IN., 8-WAY	19211	1	
②	NUT, SQUARE, GALVANIZED (INCLUDED WITH ANCHOR ROD)	XXXXX	1	
③	ROD, ANCHOR GALVANIZED	SEE SCH	1	

CITY OF COLUMBUS, OHIO
DEPT. OF PUBLIC UTILITIES - DIVISION OF POWER

SMALL EXPANDING ANCHOR

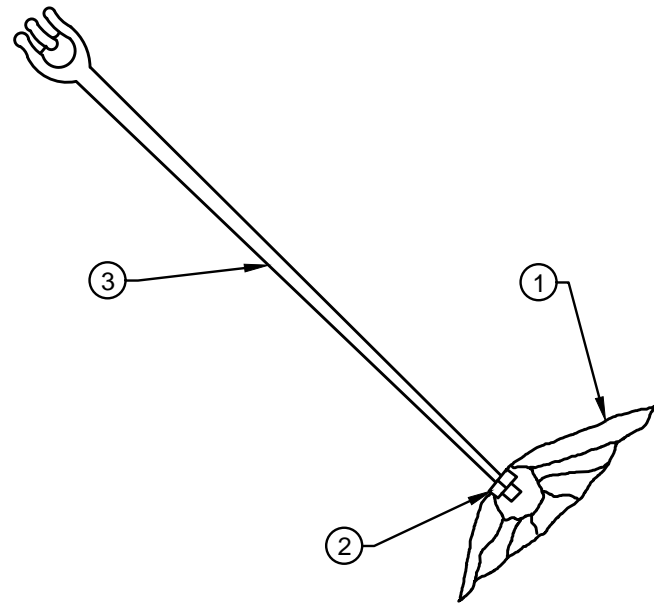
MP10EA

DRAWN BY: AEC DATE: 01/01/2018

APPROVED: *[Signature]*

SCALE: NTS SHEET: 2 OF 3

TDMIS-115



DETAIL 2
LARGE EXPANDING ANCHOR

SCHEDULE				
ITEM #	SUFFIX NO.	LENGTH	SIZE	PART#
3	1	SINGLE	1"X10'	19241
3	2	DOUBLE	1"X10'	19245
3	3	TRIPLE	1"X10'	19247

ITEM LIST				
ITEM #	DESCRIPTION	PART #	QTY.	
①	ANCHOR, EXPANDING-200 SQUARE IN., 8-WAY	19210	1	
②	NUT, SQUARE 1"-8UNC GALVANIZED (INCLUDED WITH ANCHOR ROD)	XXXXX	1	
③	ROD, ANCHOR GALVANIZED	SEE SCH.	1	

CITY OF COLUMBUS, OHIO
DEPT. OF PUBLIC UTILITIES - DIVISION OF POWER

LARGE EXPANDING ANCHOR

MP20EA

DRAWN BY: AEC	DATE: 01/01/2018	TDMIS-115
APPROVED: <i>[Signature]</i>		
SCALE: NTS	SHEET: 3 OF 3	