

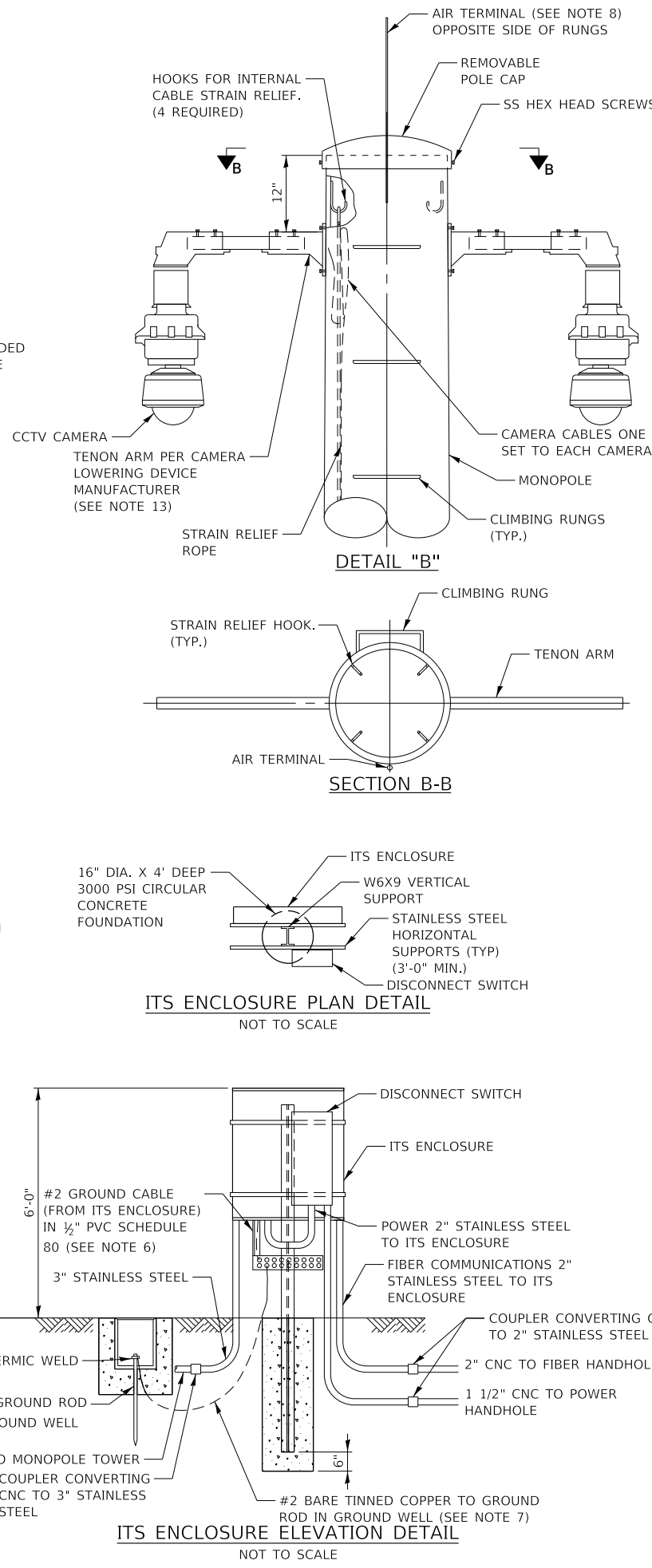
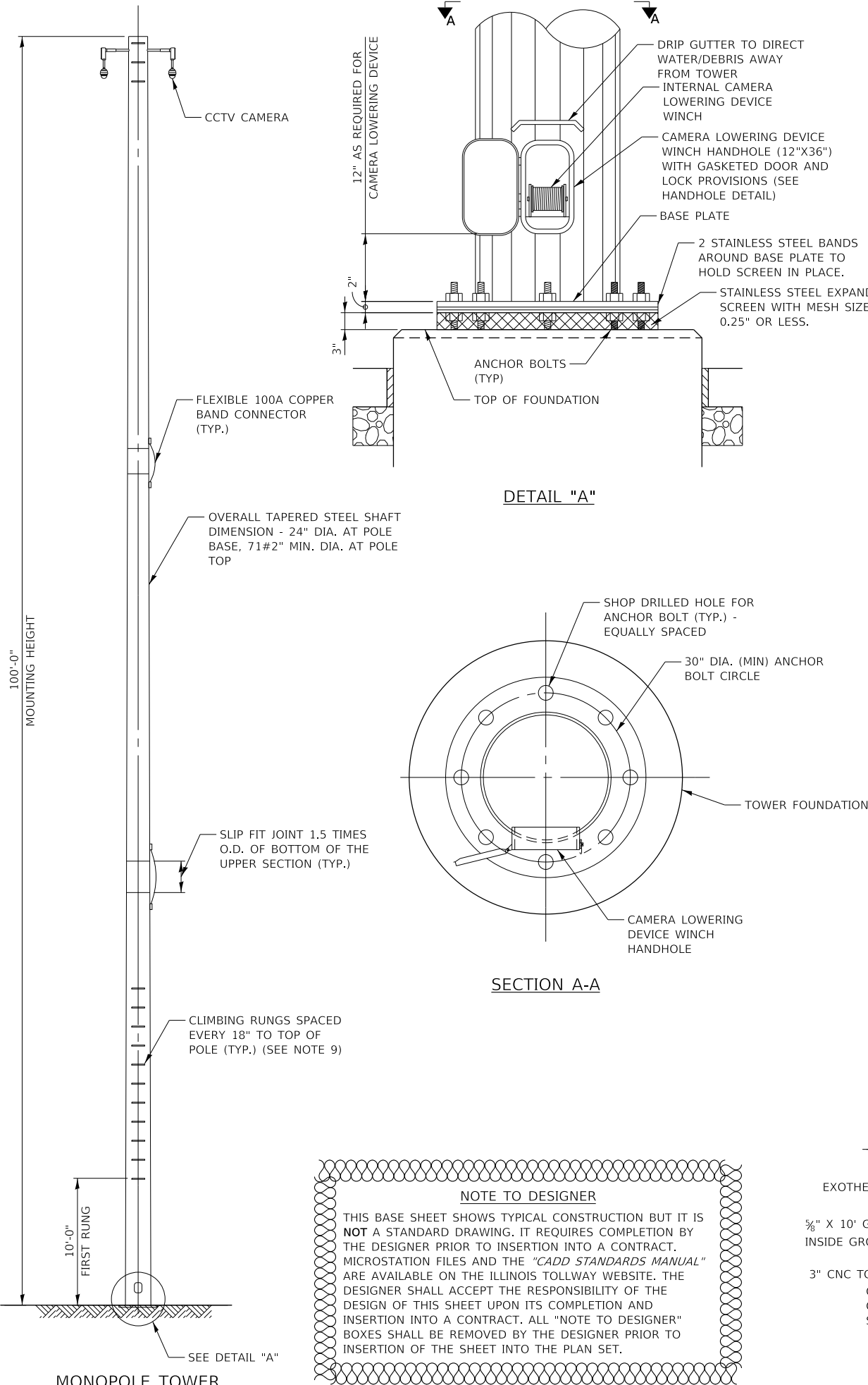
Illinois Tollway Base Sheet Revisions
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Section M	Base Sheet Drawings		
	Drawing	Modification Summary	Effective: 03-01-2023
	100 FT. Monopole (ITS)-Series 2000		
		NO CHANGES	

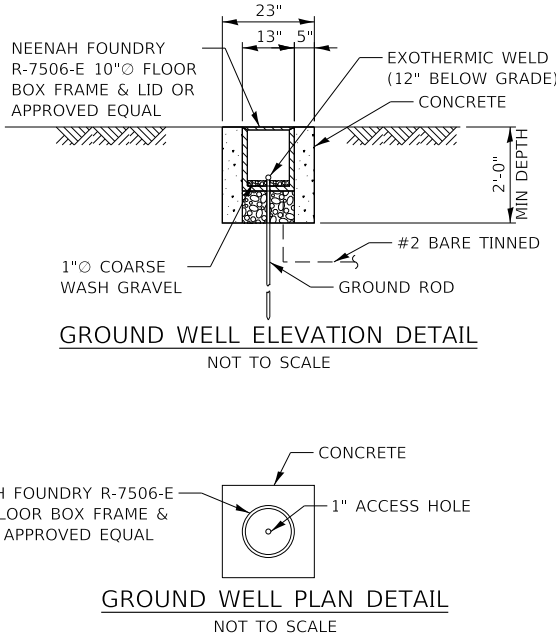
 New Sheet

 Retired Standard

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PLOT BY: bhoda  
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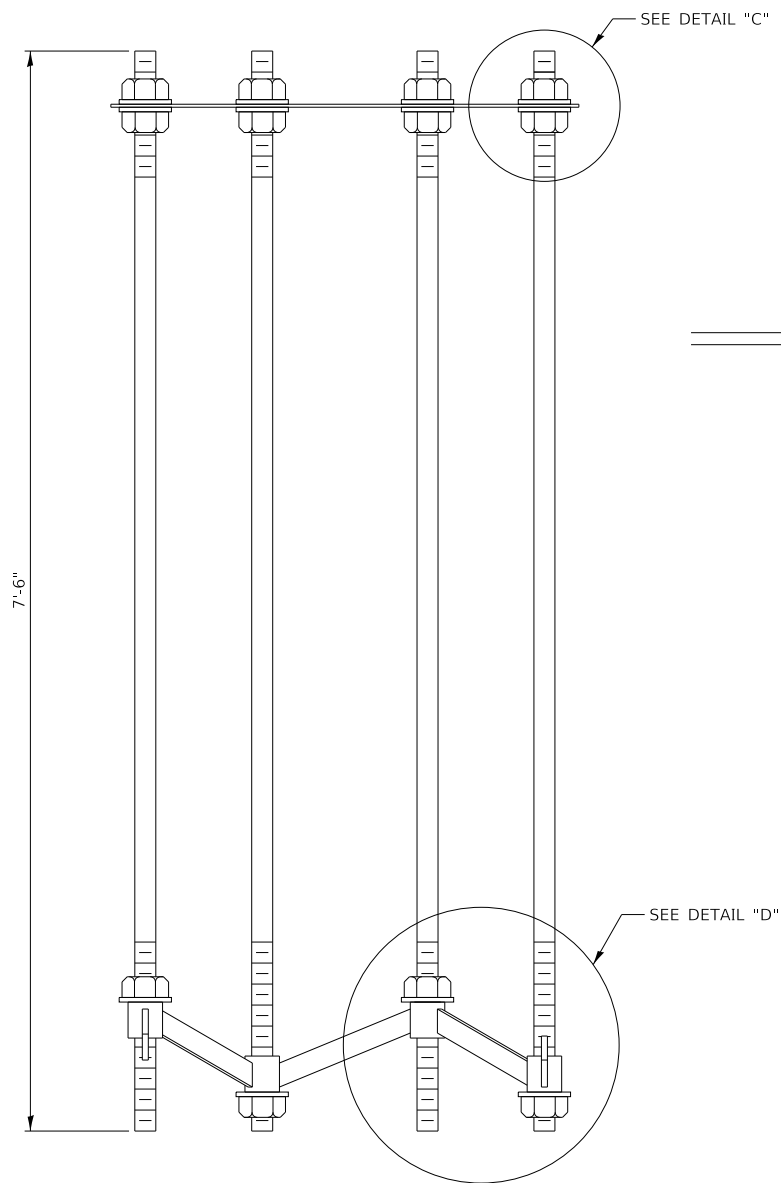


- NOTES:**
- THE MONOPOLE TOWER SHALL MEET CURRENT AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS".
  - CAMERA WIRES SHALL EXTEND 24 INCHES LONGER THAN THEIR RESPECTIVE TENON ARM AND SHALL BE TRAINED BACK INTO THE ARM/POLE WHICH SHALL THEN BE CLOSED WITH A CAP AS SPECIFIED. ALL WIRES SHALL BE CAPPED WITH HEAT SHRINK INSULATING BOOTS. CRIMP CAPS ARE UNACCEPTABLE. ALL WIRES SHALL BE TAGGED WITH WIRE MARKERS AT BOTH ENDS. THE TENON ARMS SHALL BE TAGGED CORRESPONDING TO THE WIRING CONTAINED WITHIN.
  - ALL MULTI-CONDUCTOR CABLES SHALL BE FITTED WITH A HEAT-SHRINK MULTI-LEG BOOT. THE BOOT SHALL MEET MILITARY SPECIFICATION MIL-I-81765/1.
  - TENON ARM SHALL BE AS REQUIRED BY CAMERA LOWERING DEVICE MANUFACTURER.
  - CAMERA MOUNTING HARDWARE SHALL BE WATERTIGHT.
  - USE METAL BUSHING WHEN CONNECTING PVC TO CABINET. USE GROMMETS AT BOTH ENDS OF CONDUIT TO SEAL CONDUIT BUT ALLOW GROUND CABLE TO RUN THROUGH BOTH ENDS.
  - GROUND ROD SHALL BE PLACED A MINIMUM OF 10' FROM THE FOUNDATION. A GROUND WELL SHALL BE INCLUDED TO PERMIT ACCESS TO THE GROUND ROD CONNECTION. CONNECTION TO THE GROUND BUS BAR AND THE GROUND ROD SHALL BE EXOTHERMIC WELD.
  - AIR TERMINAL SHALL EXTEND A MINIMUM OF 3 FEET ABOVE TOP OF TOWER. AIR TERMINAL SHALL CONNECT TO TOWER USING STRAPS OR CLAMPS APPROVED BY THE ENGINEER. AIR TERMINAL SHALL BE EXOTHERMIC WELDED TO A #2/0 GROUNDING CONDUCTOR. GROUNDING CONDUCTOR SHALL BE STRAPPED TO MONOPOLE TOWER EVERY 10 FEET. GROUNDING CONDUCTOR SHALL EXTEND TO AND BE EXOTHERMIC WELDED TO THE NEAREST TOWER GROUND ROD.
  - CLIMBING RUNGS SHALL BE ORIENTED 90° FROM TENON ARMS AND ON THE SIDE OF POLE FACING AWAY FROM TRAFFIC. THE ORIENTATION OF CRANK HANDHOLE RELATIVE TO CAMERAS SO CAMERAS ARE NOT DIRECTLY ABOVE THE MAINTENANCE PERSONNEL.
  - FOUNDATION AND SERVICE PAD SHALL BE IN ACCORDANCE WITH SECTION 837 OF THE STANDARD SPECIFICATIONS AND PAID FOR AS LIGHT TOWER FOUNDATION, 48" DIAMETER (83700300).
  - MONOPOLE, LOWERING DEVICE, AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISION "MONOPOLE CCTV CAMERA TOWER ASSEMBLY".
  - THE MONOPOLE TOWER, ITS ENCLOSURE, AND FENCE GROUNDING SHALL BE IN ACCORDANCE WITH ILLINOIS TOLLWAY SPECIAL PROVISION "ITS ELEMENT SITE GROUNDING".
  - TENON ARMS MAY OPTIONALLY BE "TOP-MOUNTED".

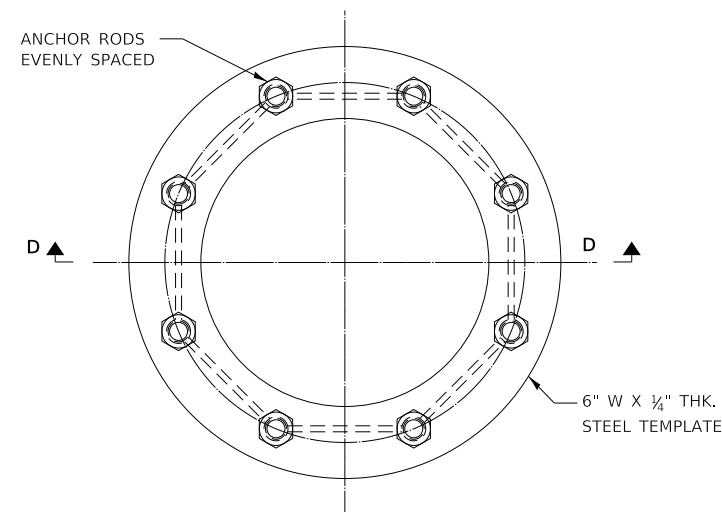




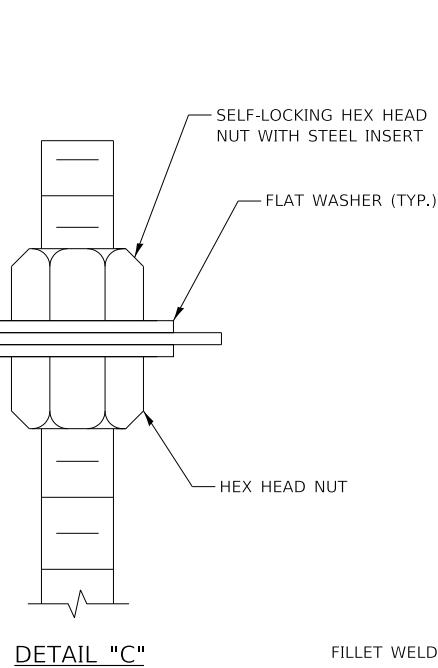
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SECTION D-D



ANCHOR ROD CAGE (PLAN)



DETAIL "C"

FILLET WELD SIZE  $\frac{5}{16}$ " MIN. IF THE WALL THICKNESS IS GREATER THAN  $\frac{5}{16}$ ", WELD SIZE TO BE EQUAL TO WALL THICKNESS OF POLE.

POLE/TUBE (TYP.)

(4) -  $\frac{3}{8}$ " DIA. TAMPER PROOF S.S. BOLT WITH S.S. HEX NUT

ONE PIECE CONTINUOUS PIANO STYLE S.S. PLAIN SURFACE HINGE W/WELDED PIN (FULL HEIGHT)

(4) - #10-32 (NF) X  $1\frac{1}{2}$ " LONG TAMPER PROOF S.S. BOLTS WITH S.S. FLAT WASHERS AND S.S. HEX NUTS

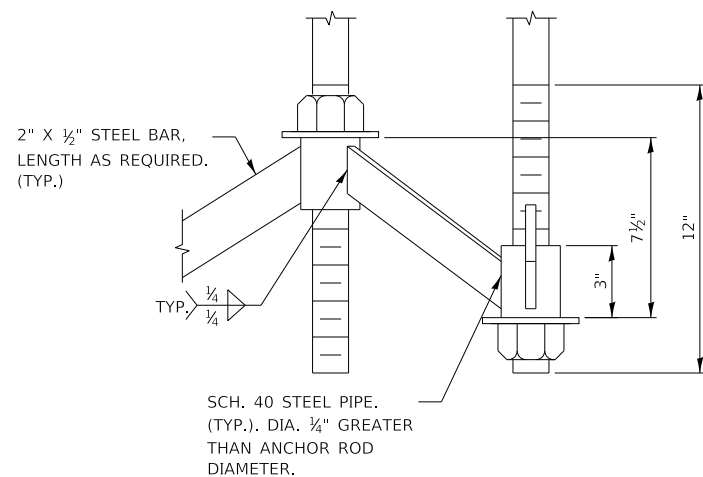
12" X 36" HANDHOLE FRAME (4" W X  $\frac{1}{2}$ " THK.) MIN. THK. BAR

GALVANIZED DOOR WITH NEOPRENE GASKET

ALL BRASS LOCK KEYED ALIKE FOR KEY #2, PROVIDED WITH DUST CAP.

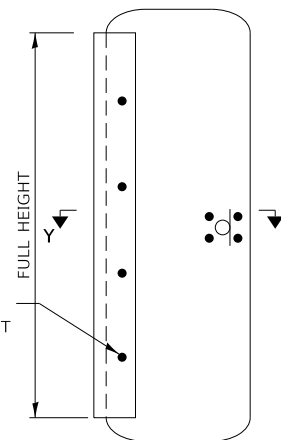
SECTION Y-Y

**NOTE TO DESIGNER**  
THIS BASE SHEET SHOWS TYPICAL CONSTRUCTION BUT IT IS **NOT** A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DESIGNER PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES AND THE "CADD STANDARDS MANUAL" ARE AVAILABLE ON THE ILLINOIS TOLLWAY WEBSITE. THE DESIGNER SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION AND INSERTION INTO A CONTRACT. ALL "NOTE TO DESIGNER" BOXES SHALL BE REMOVED BY THE DESIGNER PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.



DETAIL "D"

(4) -  $\frac{3}{8}$ " DIA. TAMPER PROOF S.S. BOLT WITH S.S. HEX NUT (TYP.)



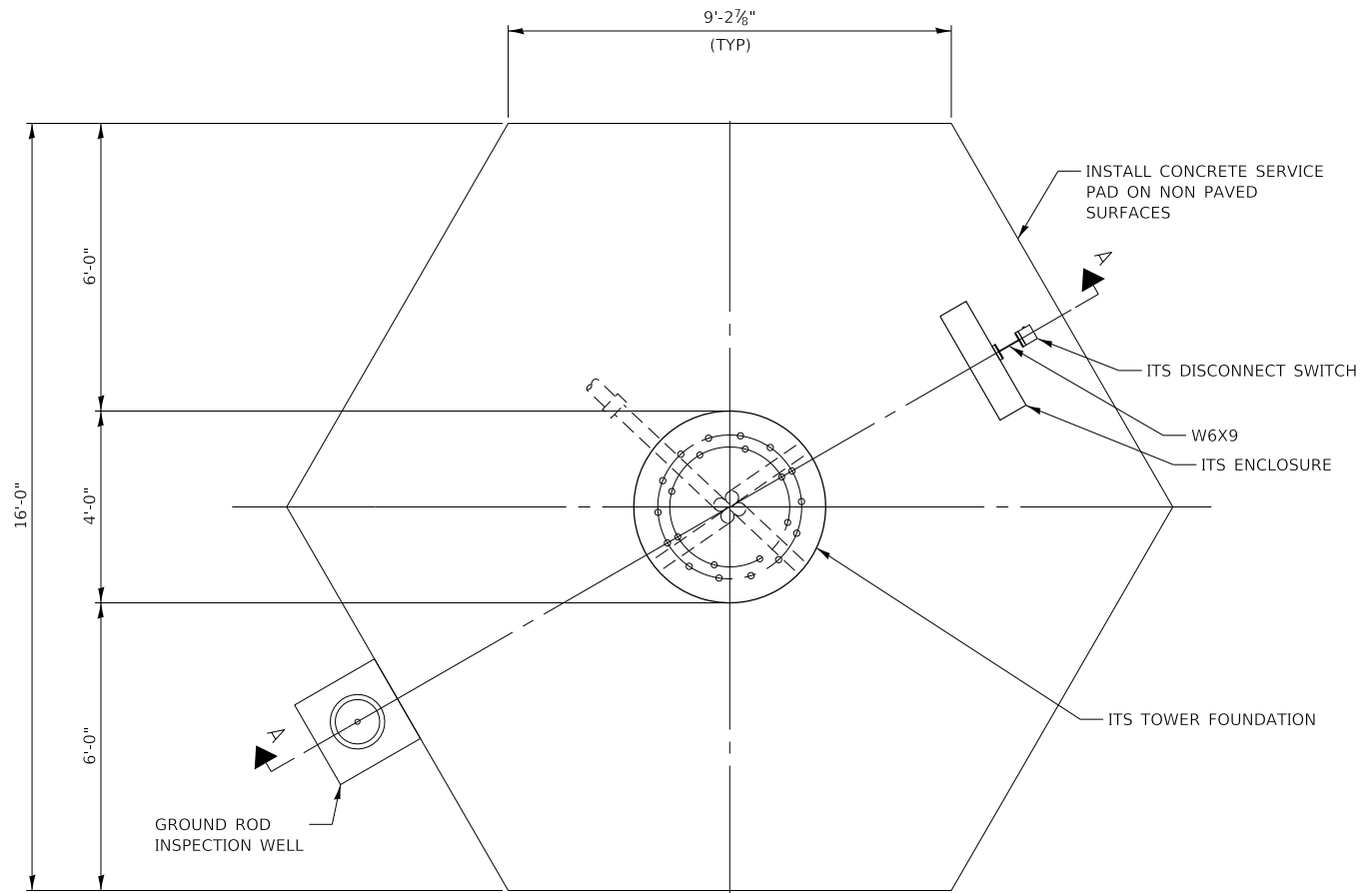
HANDHOLE DETAIL  
(FACTORY ASSEMBLED)



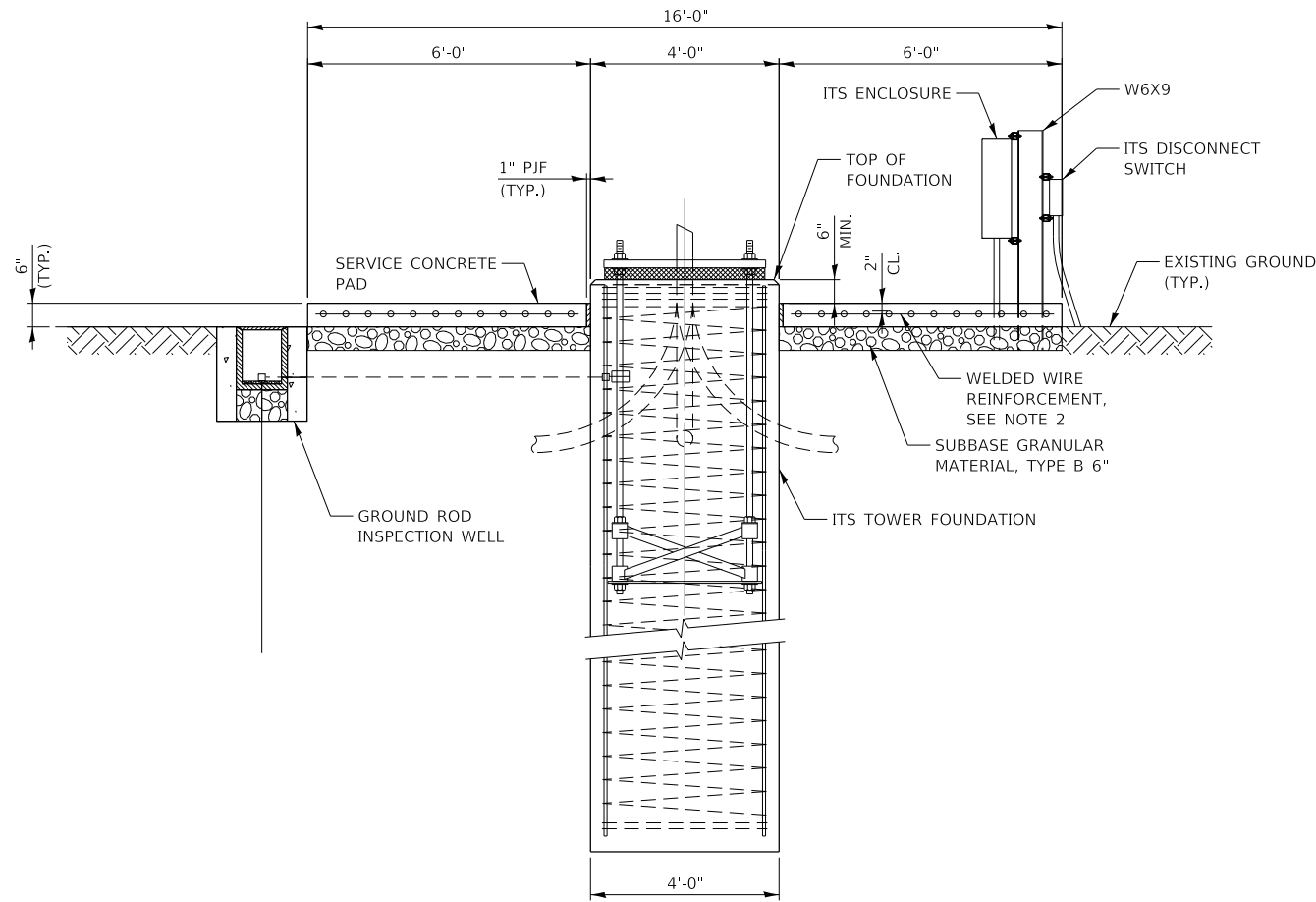
**100 FT. MONOPOLE CLOSED CIRCUIT TELEVISION (CCTV) CAMERA TOWER**

VERSION: 2022-03	STANDARD: M-ITS-2000	SHEET: 3 OF 4
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PLOT BY: bhodo  
PLOT NAME: p1c6g  
PLOT SCALE: 0.20000000''/ft.  
PLOT SIZE: 17x11 (in.)



PLAN



SECTION A-A

NOTE TO DESIGNER

THIS BASE SHEET SHOWS TYPICAL CONSTRUCTION BUT IT IS **NOT** A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DESIGNER PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES AND THE "CADD STANDARDS MANUAL" ARE AVAILABLE ON THE ILLINOIS TOLLWAY WEBSITE. THE DESIGNER SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION AND INSERTION INTO A CONTRACT. ALL "NOTE TO DESIGNER" BOXES SHALL BE REMOVED BY THE DESIGNER PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

NOTES:

1. THE CONCRETE COMPRESSIVE STRENGTH SHALL BE F'C = 3,500 PSI. THE WELDED WIRE FABRIC GRADE SHALL BE FY = 65,000 PSI.
2. WELDED WIRE REINFORCEMENT SHALL HAVE A MINIMUM AREA OF 0.31 INCH IN EACH DIRECTION.
3. MIN. 3,000 PSF SOIL BEARING CAPACITY IS REQUIRED BELOW THE SERVICE PAD.
4. THE CABINET ASSEMBLY MUST BE ERECTED IN SUCH A WAY THAT THE CENTERLINE AXIS OF THE W-BEAM WEB IS LOCATED 90 DEGREES FROM THE CENTERLINE OF THE TENON ARM FOR THE CAMERAS.



100 FT. MONOPOLE CLOSED CIRCUIT TELEVISION (CCTV) CAMERA TOWER