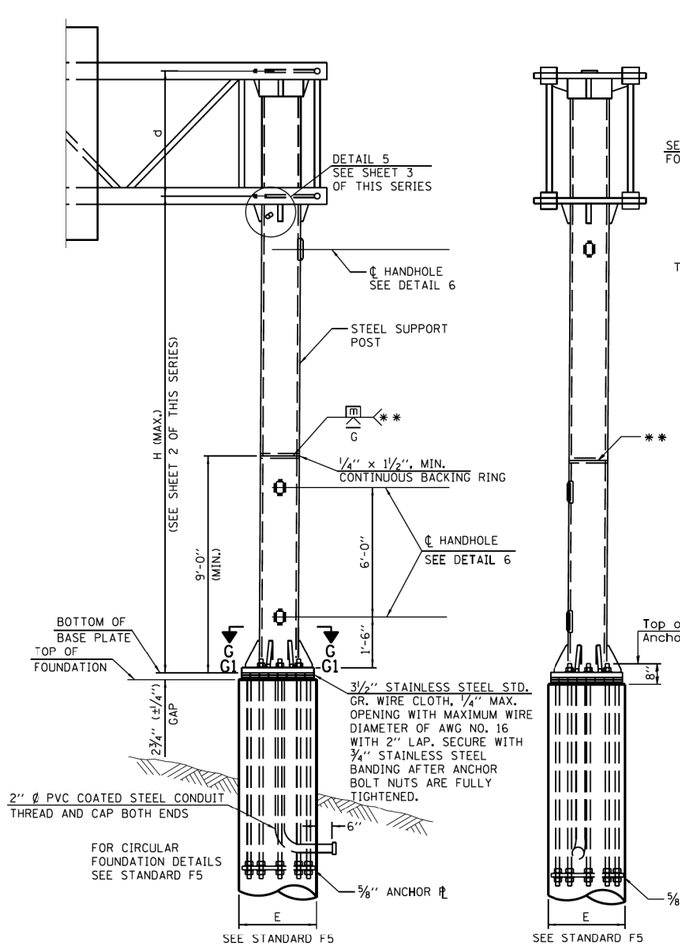


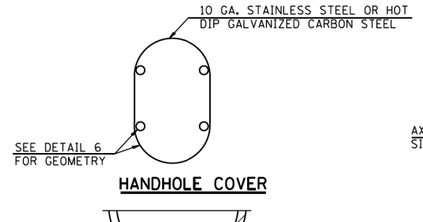

## FRONT ELEVATION

(BOLT CONFIGURATION FOR 15-D IS SHOWN IN ELEVATION)

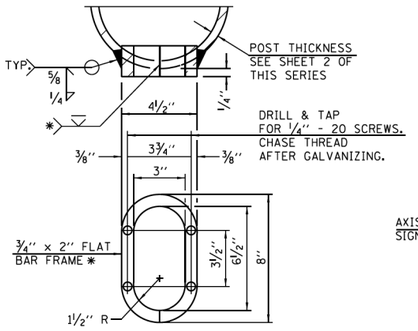



## SIDE ELEVATION

(BOLT CONFIGURATION FOR 15-D IS SHOWN IN ELEVATION)




## HANDHOLE COVER

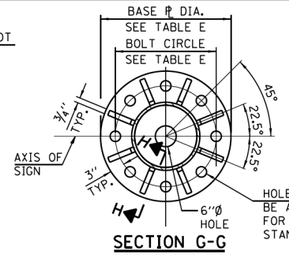



PROVIDE 8" x 4 1/2" COVER.
OUTSIDE CORNERS = 2 1/4" RADIUS.
PROVIDE 4-5/16" Ø HOLES IN COVER FOR
1/4" - 20 ROUND HEAD HOT DIP GALVANIZED
OR STAINLESS STEEL MACHINE SCREWS.
(SEE COVER DETAILS.)

## DETAIL 6

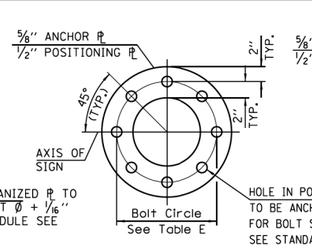
* BENT BARS MAY BE BUTT WELDED TOP AND BOTTOM OR BOTTOM ONLY. IN LIEU OF FABRICATED HANDHOLE FRAME AS SHOWN, MAY CUT FROM 2" PLATE (ROLLING DIRECTION VERTICAL). ALL CUT FACES TO BE GROUND TO ANSI ROUGHNESS OF 500 μIN OR LESS.

** BUTT WELDED JOINT IN POST IS ONLY ALLOWED FOR POST HEIGHTS (H) OVER 20 FT. IN LENGTH. IF USED, WELD PROCEDURE MUST BE PREAPPROVED BY ENGINEER AND JOINT SHALL RECEIVE 100% RT OR UT (TENSION CRITERIA) AT CONTRACTOR'S EXPENSE.




## SECTION G-G

(TRUSS 15-D, SEE TABLE E)

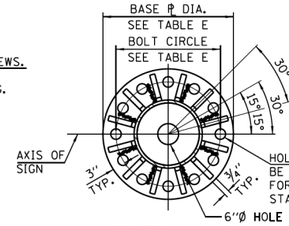



## POSITIONING ℄ / ANCHOR ℄

(Truss 15-D, See Table E)

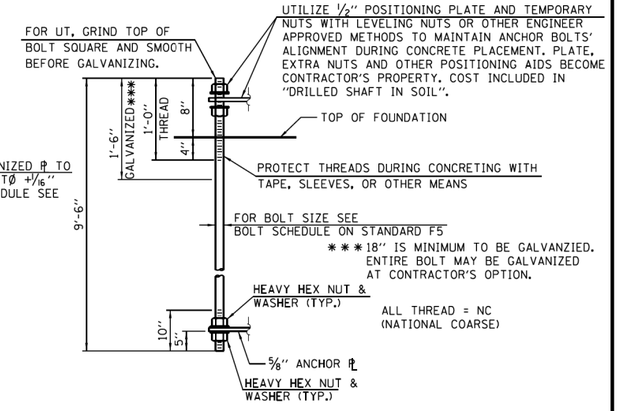
## POSITIONING ℄ / ANCHOR ℄

(TRUSS 20-D THRU 50-D, SEE TABLE E)

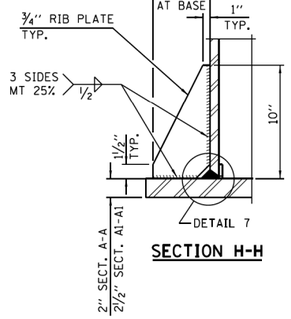



## SECTION G1-G1

(TRUSS 20-D THRU 50-D, SEE TABLE E)




## ANCHOR BOLT DETAIL



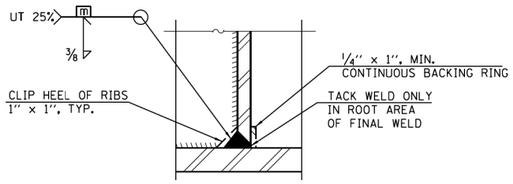

## SECTION H-H

## NOTE:

ANCHOR BOLTS SHALL CONFORM TO AASHTO M314 OR ASTM F 1554 AND MEET CHARPY V-NOTCH (CVN) ENERGY OF 15 LB.-FT. AT 10° F. BEFORE GALVANIZING. GALVANIZE THE UPPER 18" (MINIMUM ***) AND ASSOCIATED M291, GRADE A, C OR DH HEAVY HEX NUTS AND HARDENED WASHERS PER AASHTO M232. NO WELDING SHALL BE PERMITTED ON BOLTS. PROVIDE AN UNFINISHED NUT AT BOTTOM, A HEXAGON LOCKNUT AND WASHER ABOVE BASE PLATE AND A LEVELING NUT AND WASHER BELOW BASE PLATE. NUTS SHALL EACH BE TIGHTENED WITH 200 LB.-FT. MINIMUM TORQUE AGAINST BASE PLATE. BEFORE OR AFTER THREADING, BUT BEFORE GALVANIZING, EACH ANCHOR BOLT SHALL BE ULTRASONICALLY TESTED (UT) BY A LEVEL II OR III INSPECTOR, QUALIFIED IN ACCORDANCE WITH ANSI GUIDELINES, USING A STRAIGHT BEAM, 1/2" Ø 3.5 MHZ. TRANSDUCER, TO INSURE NO REJECTABLE FLAWS EXIST IN THE UPPER 18" (TENSION CRITERIA). COST OF TESTING INCLUDED IN DRILLED SHAFT IN SOIL.

## TABLE E: BASE PLATE DETAIL

| TRUSS TYPE | POST OUTSIDE DIAMETER | BASE PLATE | | BOLT CIRCLE |
|---|---|---|---|---|
| | | DIAMETER | SECTION | |
| 15-D | 16" | 28" | A-A | 22" |
| 20-D | 20" | 32" | A1-A1 | 26" |
| 25-D | 24" | 36" | A1-A1 | 30" |
| 30-D | 28" | 40" | A1-A1 | 34" |
| 35-D | 32" | 44" | A1-A1 | 38" |
| 40-D | 36" | 48" | A1-A1 | 42" |
| 45-D | 38" | 50" | A1-A1 | 44" |
| 50-D | 40" | 52" | A1-A1 | 46" |




## DETAIL 7

(TYPICAL RIB)

Paul Kovacs
APPROVED ..... DATE 2-7-2012
CHIEF ENGINEER

SHEET 4 OF 4

Illinois Tollway
Open Roads for a Faster Future

OVERHEAD SIGN STRUCTURE
CANTILEVER TYPE, STEEL

STANDARD F4-01

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

| | | | |
|---|---|---|---|
| FILE NAME = $FILES$ | USER NAME = default | DESIGNED - | REVISED - |
| | | DRAWN - | REVISED - |
| | PLOT SCALE = H:1"=10' V:1"=5' | CHECKED - RGR | REVISED - |
| | PLOT DATE = 6/18/2012 | DATE - 6/19/2012 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**TOLLWAY STANDARD DRAWING**

SCALE: | SHEET NO. N/A OF N/A SHEETS | STA. | TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 94 | 49-1-R-1 | LAKE | 677 | 662D |
| | | CONTRACT NO. 60L77 | | |
| | | ILLINOIS FED. AID PROJECT | | |

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