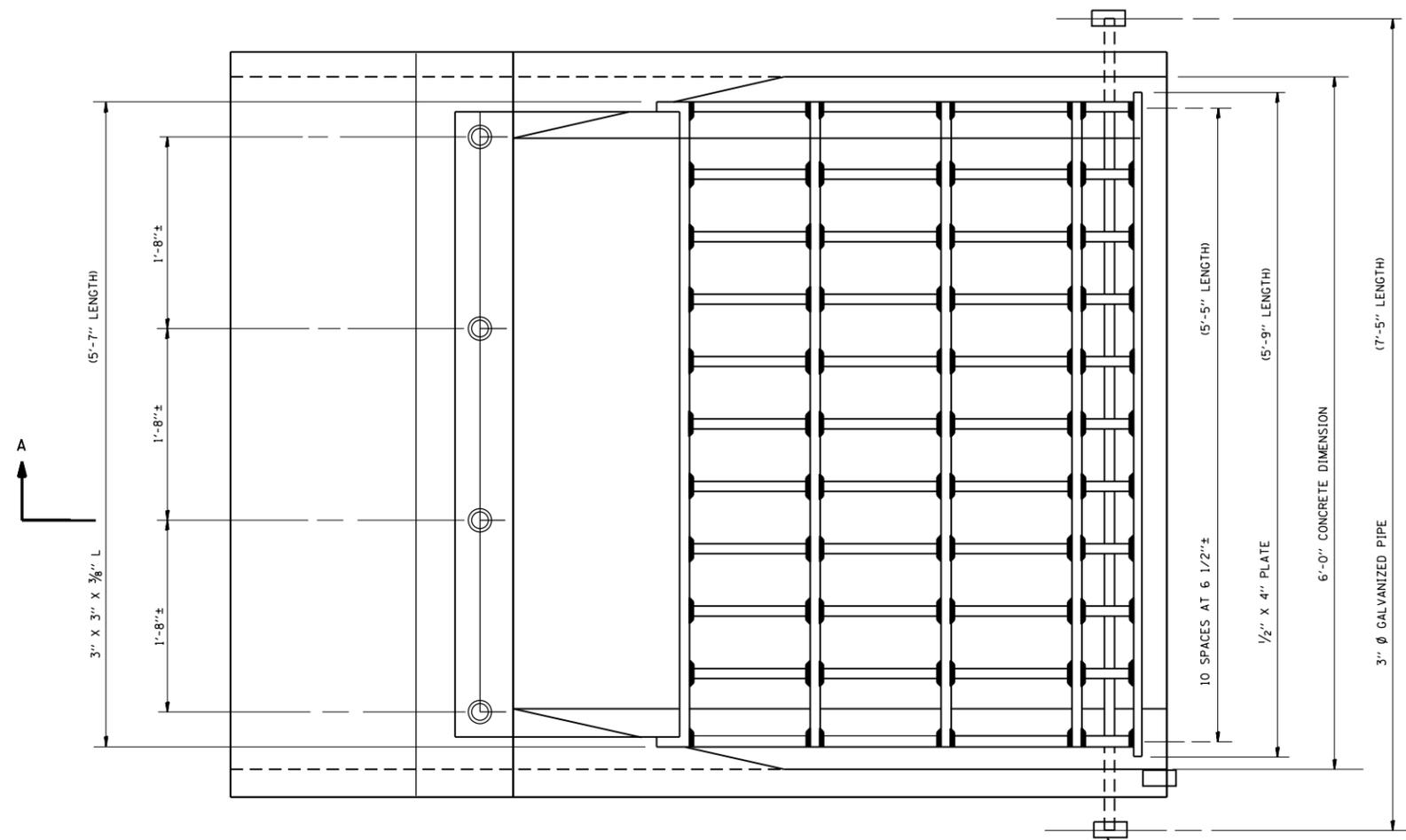
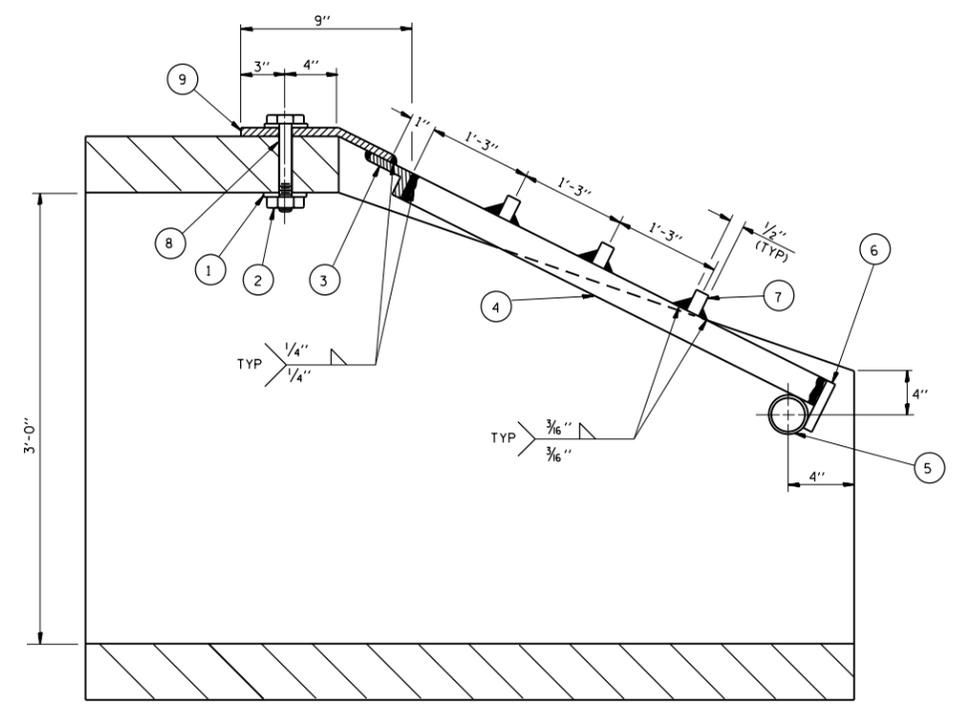


GRATING FOR PRECAST CONCRETE BOX CULVERT END SECTION 6' X 3'



PLAN
(NOT TO SCALE)



SECTION A - A
(NOT TO SCALE)

GENERAL NOTES

1. STRUCTURAL STEEL SHAPES AND PLATES SHALL BE IN ACCORDANCE WITH ARTICLE 706.04 OF THE STANDARD SPECIFICATIONS AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-111.
2. GALVANIZED STEEL PIPE SHALL BE IN ACCORDANCE WITH ARTICLE 706.27(B) OF THE STANDARD SPECIFICATIONS, AND SHALL MEET THE REQUIREMENTS OF ASTM A-53, GRADE B.
3. BOLTS, NUTS AND WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 706.27(F) OF THE STANDARD SPECIFICATIONS, AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-232
4. ALL FABRICATION SHALL BE COMPLETE AND READY FOR ASSEMBLY BEFORE GALVANIZING.
5. THE CORED HOLES IN THE CONCRETE END SECTIONS SHALL BE TO THE DIAMETERS NOTED. IF CONE-OUT ON THE OTHER END OF HOLE OCCURS, THE HOLE SHALL BE FILLED WITH GROUT TO CORRECT DIAMETER OF THE HOLE.
6. THE CONTRACT UNIT PRICE "EACH" FOR BOX CULVERT END SECTIONS, CULVERT NO. 1 SHALL INCLUDE FABRICATION AND INSTALLATION OF THE GRATING AS DETAILED HEREON, INCLUDING NECESSARY MOUNTING HOLES IN THE SECTION.

LEGEND

- ① 1/4" X 4" X 4" PLATE WASHER; 1/16" Ø HOLE
- ② 1" Ø BOLT WITH FLAT WASHER AND HEX NUT
- ③ L 3" X 3" X 3/8"
- ④ 1/2" X 3" BAR TYP
- ⑤ PROVIDE 3, 3/4" Ø HOLES THRU CONCRETE
- ⑥ 1/2" X 4" BAR
- ⑦ BARS 1/2" X 3/8" TYP
- ⑧ 1/8" Ø HOLE THUR 3/8" PLATE; 1/4" Ø HOLE THRU CONCRETE
- ⑨ 3/8" PLATE SHALL CONFORM TO SURFACE SHAPE OF CONCRETE END SECTION

FOR INFORMATION ONLY

FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXAMPLE GRATING FOR PRECAST CONCRETE END SECTION	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	ci:\pw\work\pwidot\sparksgw\10401583\0672843-sht-details.dgn	DRAWN -	REVISED -			8136	(4) RS-1,1,CR	MACOUPIN	92	30
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -			SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.		CONTRACT NO. 72B43		ILLINOIS FED. AID PROJECT
	PLOT DATE = Aug-22-2014 09:54:59AM	DATE -	REVISED -							