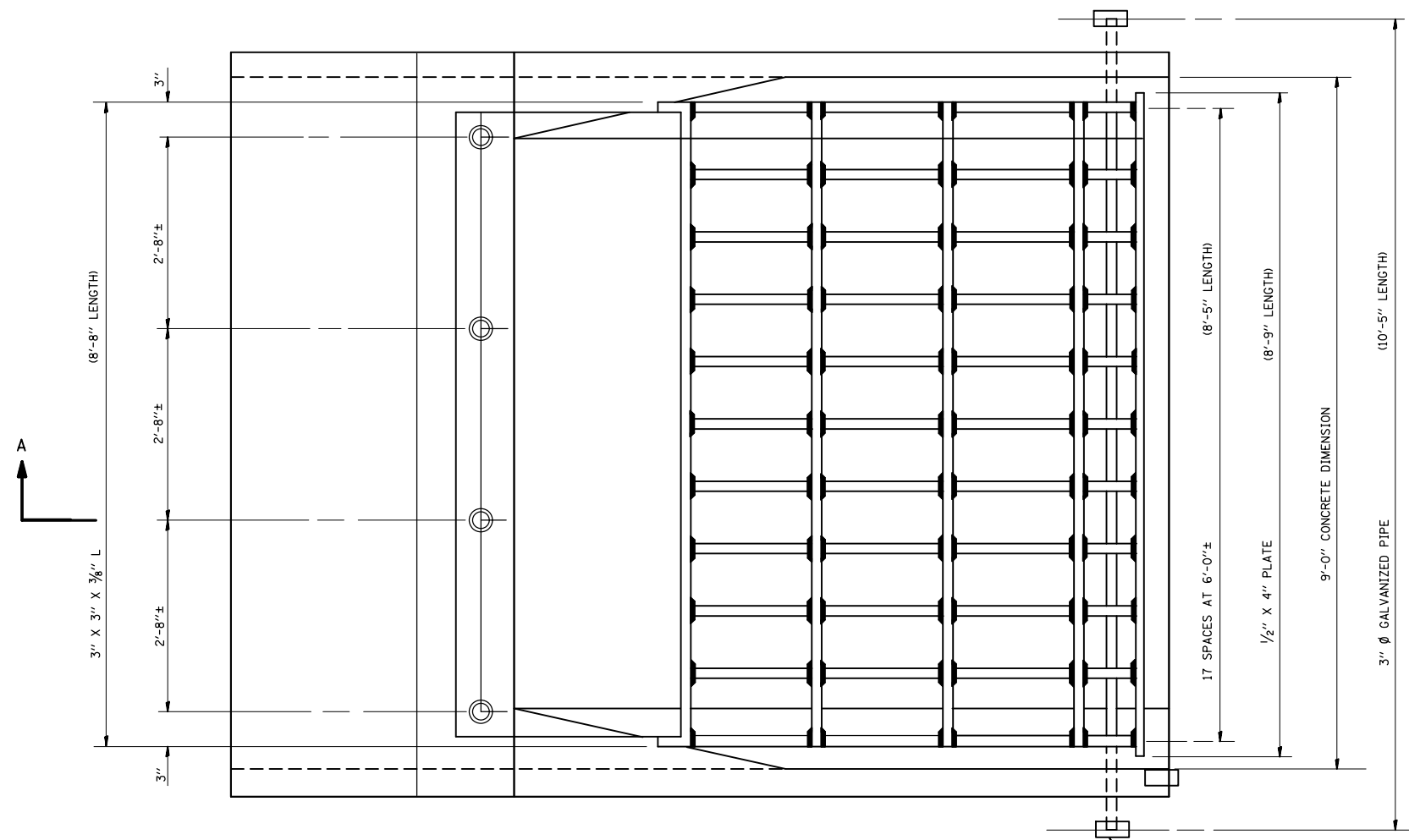


GRATING FOR PRECAST CONCRETE BOX CULVERT END SECTION 9' X 4'

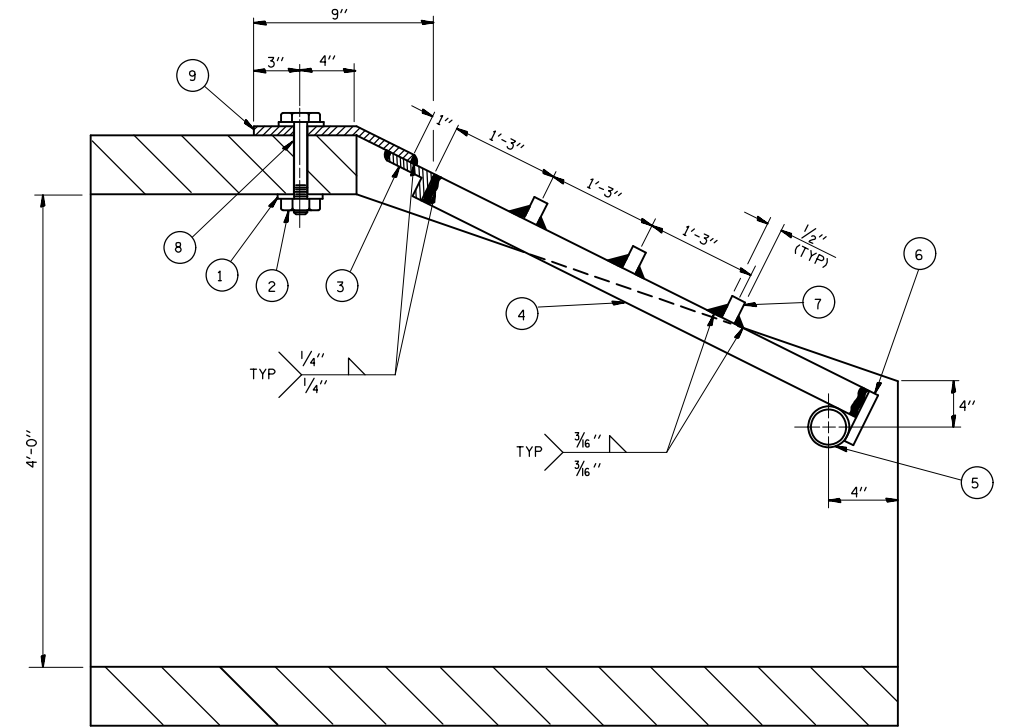


PLAN
(NOT TO SCALE)

3" Ø GALV STD
PIPE CAP TYP

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 TRAVERSABLE PIPE GRATE SHALL INCLUDE FABRICATION AND INSTALLATION OF THE GRATING AS DETAILED HEREON, INCLUDING FABRICATION OF NECESSARY MOUNTING HOLES IN THE SECTION.



SECTION A - A
(NOT TO SCALE)

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 = mlcsmr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXAMPLE GRATING FOR PRECAST CONCRETETE BOX CULVERT END SECTION	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\dot\mlcsmr\d0345201\d87661-sht-pln.dgn		DRAWN -	REVISED -			•	(109,110)RS-1, 31-2RS	WASHINGTON	40	39
		CHECKED -	REVISED -			•FAP 690/FAS 819/FAP 322		CONTRACT NO. 76G61		
		DATE -	REVISED -			FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
					SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	