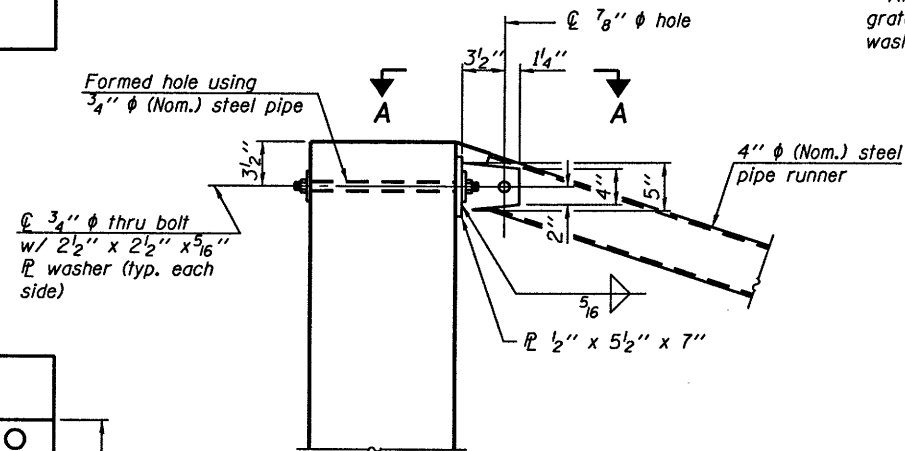
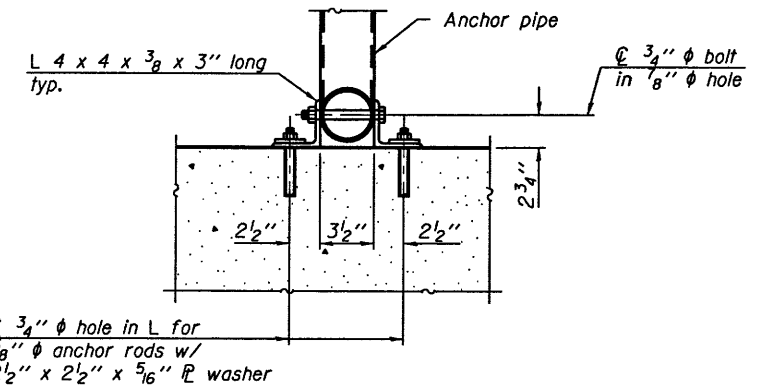


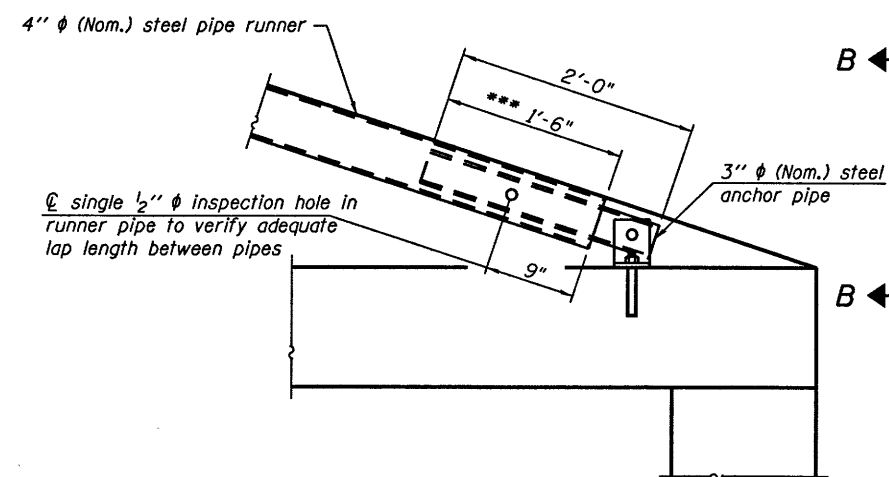
VIEW A-A



DETAIL A



SECTION B-B



DETAIL B

\*\*\* The lap length between pipes may be adjusted in the field to accommodate construction tolerances but shall not be less than 9\"/>

(Sheet 3 of 3)

**GENERAL NOTES**

Length and number of steel pipes shall be determined by the Contractor except as shown. All steel pipe shall be standard weight (Sch. 40) unless otherwise noted.

All components of the Steel Pipe Grate System shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable.

Fabrication of the Steel Pipe Grate System shall conform to the requirements in Section 505 of the Standard Specifications unless noted otherwise.

Structural steel shapes and plates shall conform to the requirements of Article 1006.04 of the Standard Specifications. Steel pipes shall conform to the requirements of ASTM A 53 (Type E or S), Grade B.

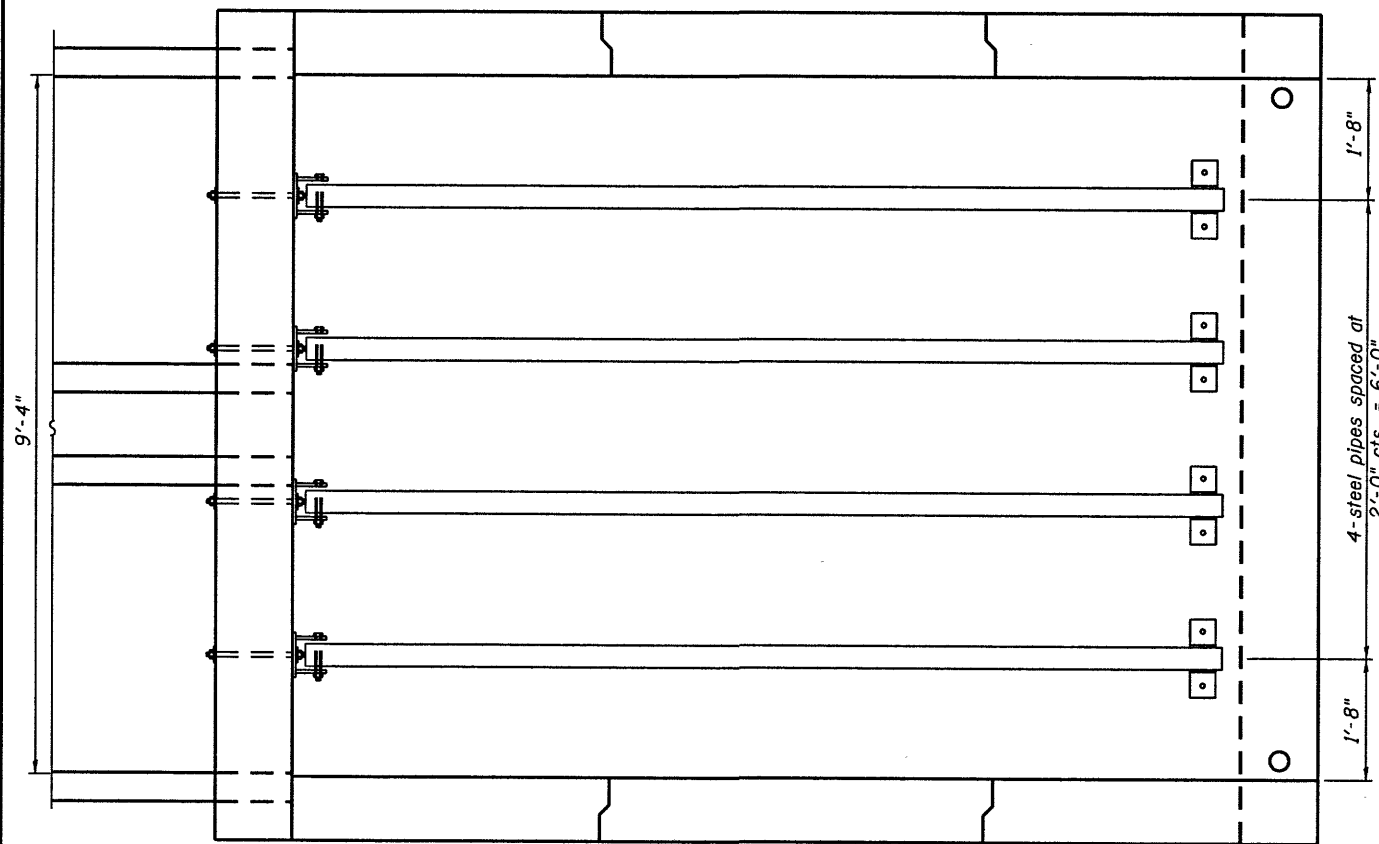
Anchor rods shall conform to the requirements of ASTM F1554, Grade 105. Anchor rods shall be drilled and epoxy grouted according to the requirements of Section 584 of the Standard Specifications. The chemical adhesive system shall be capable of achieving a minimum proof load of 5000 pounds and an ultimate shear capacity of 8000 pounds per anchor.

Bolts and thru bolts shall conform to the requirements of Article 1006.08 of the Standard Specifications except threaded rods conforming to the requirements of ASTM F1554, Grade 105 may be used for the thru bolts.

The minimum edge distance from the center of a hole to the free edge of a structural shape or plate shall be 1/2\"/>

Bolts and anchor rods shall be snug tightened by a few impacts of an impact wrench or the full force of a worker using an ordinary spud wrench.

All costs associated with fabricating, furnishing, and installing the steel pipe grate system, including the steel pipes, angles, plates, bolts, anchors, nuts, and washers shall be included in the contract unit price for Traversable Pipe Grate.



PLAN VIEW

COMPANY NAME: HR GREEN, INC.  
 PROJECT CONTACT: KEVIN J BREW  
 CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DATE PLOTTED: 10/21/2013 4:08:03 PM  
 FILE NAME: EndSection-64F19.dwg  
 PLOT DRIVER: poplot  
 PEN TABLE: Struct 11x17.tbl



USER NAME =	DESIGNED - MGH	REVISED -
	CHECKED - KJB	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE =	CHECKED - MGH	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

STEEL PIPE GRATE SYSTEM

SHEET NO. SC-3 OF SC-3 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	15BR-1	WHITESIDE	146	92
CONTRACT NO.			64F19	
ILLINOIS FED. AID PROJECT				