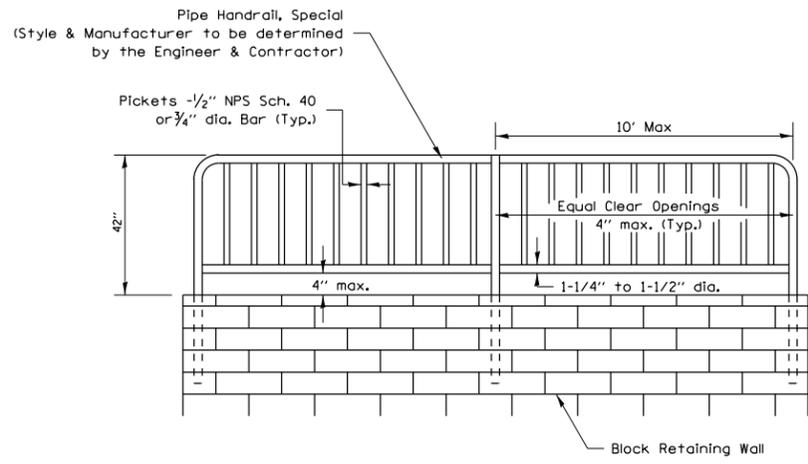
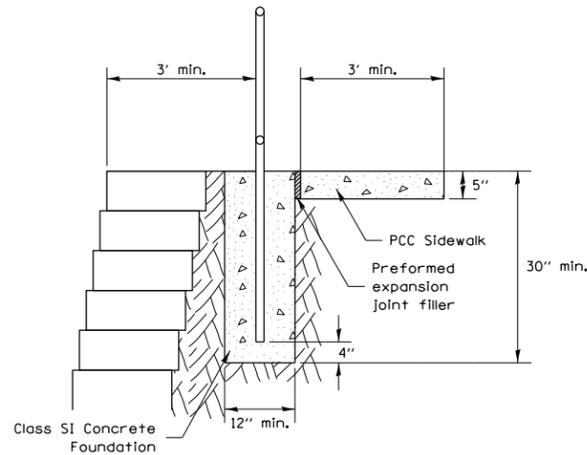


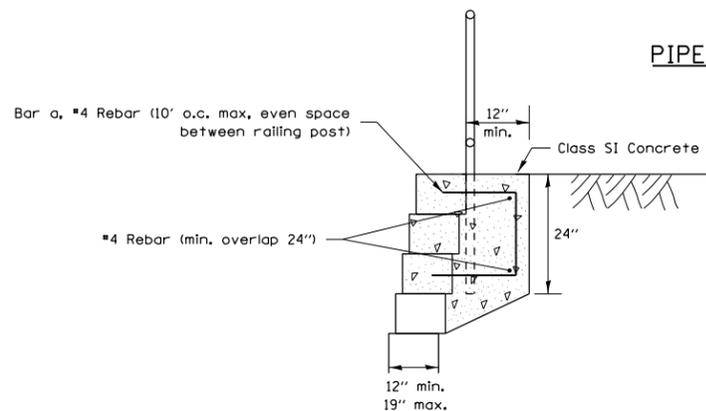
# PIPE HANDRAIL, SPECIAL – FOR RETAINING WALLS



**PIPE HANDRAIL, SPECIAL - FOR RETAINING WALL**  
(See details for installation options)



**PIPE HANDRAIL, SPECIAL - FOR RETAINING WALL**  
(Option 1)



**PIPE HANDRAIL, SPECIAL - FOR RETAINING WALL**  
(Option 3 - Block depth 12" to 19")

**Notes:**

Gripping surfaces shall be uninterrupted by construction elements, or obstructions.

Ends of handrail shall be rounded.

Handrail shall not rotate within their fittings.

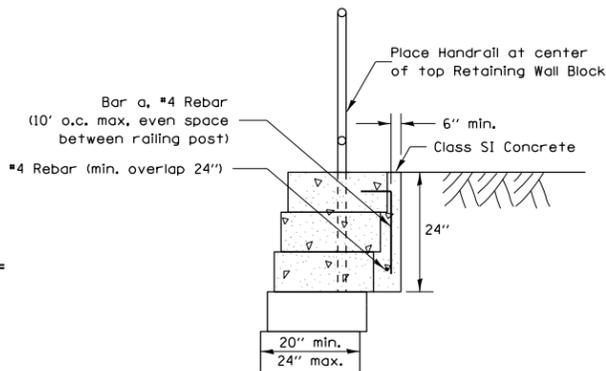
Handrail shall conform to Section 509 with the exception that all pipe and connections shall be welded galvanized or aluminum according to Article 1006.30, or 1006.34.

The diameter of the gripping surface of the handrail shall be 1-1/4" to 1-1/2"

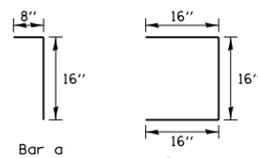
Handrail required when wall height difference is 4' or greater

Drilling of blocks will be necessary for reinforcement placement.

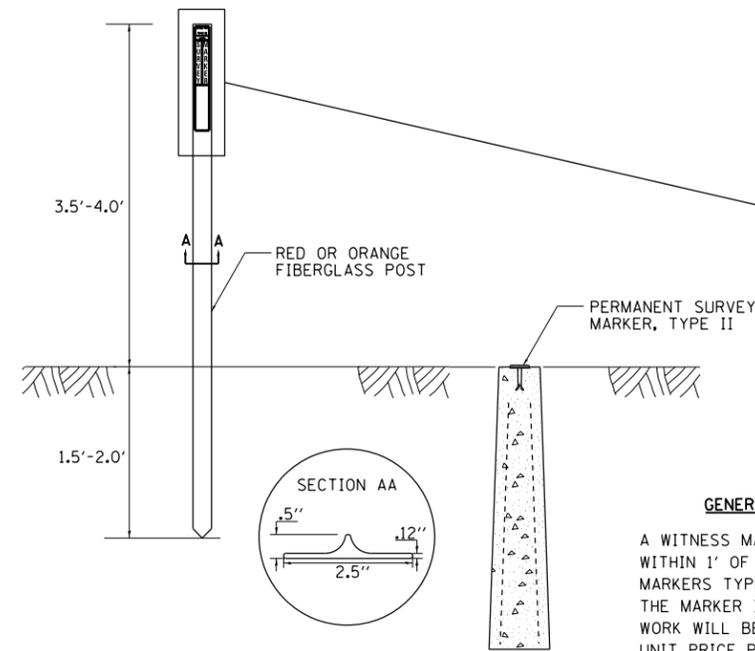
This work shall consist of furnishing and erecting Handrails as listed above and according to this detail. This work shall be paid for at the contract UNIT price per FOOT for PIPE HANDRAIL, SPECIAL.



**PIPE HANDRAIL, SPECIAL - FOR RETAINING WALL**  
(Option 2-Block depth greater than 20")

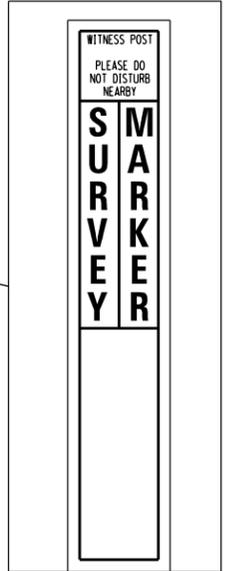


# WITNESS MARKER FOR PERMANENT SURVEY MARKERS, TYPE II

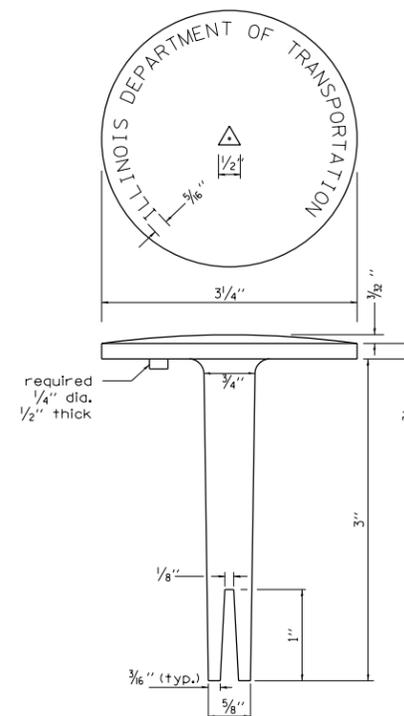


**GENERAL NOTES**

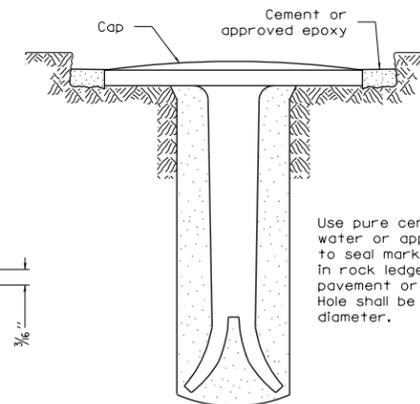
A WITNESS MARKER SHALL BE INSTALLED WITHIN 1' OF ALL PERMANENT SURVEY MARKERS TYPE II EXCEPT IN AREAS WHERE THE MARKER IS IN THE SIDEWALK. THIS WORK WILL BE INCLUDED TO THE CONTRACT UNIT PRICE PER EACH FOR PERMANENT SURVEY MARKERS, TYPE II.



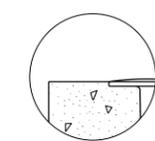
# PERMANENT SURVEY MARKERS, TYPE II



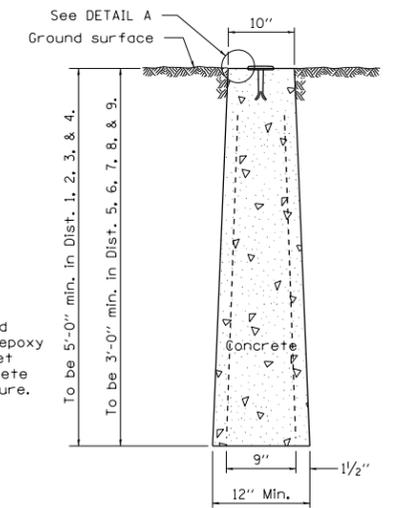
**BRASS OR ALUMINUM TABLET**



**TYPE II**



**DETAIL A**



**TYPE II**

**CAST-IN-PLACE MARKER**

No. 3 bars to be 30" for 36" min. & 3'-6" for 4'-0" min.

REVISED - 2-01-10

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-14-11	REGION 2 / DISTRICT 2 STANDARD		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -	SCALE: *SCALE*	SHEET NO. 8 OF 19 SHEETS	742	(32, 33) R-1	WINNEBAGO	705	572
REVISED -			CONTRACT NO. 64821				
REVISED -			FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			