



PEDESTRIAN RAILING

POST SUPPORT FOUNDATION

NOTES

RAILING SHALL BE ACCORDING TO SECTION 509 OF THE IDOT STANDARD SPECIFICATIONS, EXCEPT AS NOTED.

HOLLOW STRUCTURAL STEEL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A 500, GRADE B, STRUCTURAL STEEL TUBING.

ALL OTHER STEEL SHAPES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 270 GRADE 36.

ALL POSTS, RAILING, SPLICES, ANCHOR DEVICES AND PLATES SHALL BE CLEANED AND PAINTED AFTER SHOP FABRICATION IN ACCORDANCE WITH SECTION 506 OF THE STANDARD SPECIFICATIONS. COLOR OF PAINT SHALL BE BLACK.

FOR LOCATION OF PEDESTRIAN RAILING, SEE SCHEDULE. SPACING OF POSTS TO SPAN OVER EXISTING CULVERT.

THE PEDESTRIAN RAILING SHALL CONSIST OF 3 HORIZONTAL RAIL PANEL SYSTEM AS SHOWN ON PLANS. THE TOP RAIL OF THE PANEL SHALL HAVE 0.125" DIAMETER GALVANIZED INTERNAL RETAINING ROD TO ADJOIN THE PICKET TO THE RAIL. NO PICKETS SHALL EXTEND ABOVE THE TOP RAIL AND THE POSTS SHALL BE CAPPED. THE RAILS, POSTS AND PICKETS SHALL ALL HAVE THE FOUR COATINGS DESCRIBED AS FOLLOWS:

THE BOTTOM COATING SHALL BE HOT-DIP GALVANIZED STEEL. A ZINC-PHOSPHATE LAYER SHALL BE PLACED ATOP THE GALVANIZATION WITH AN EPOXY POWDER COAT ON TOP OF THE ZINC-PHOSPHATE. THE TOP LAYER SHALL CONSIST OF THE POLYESTER COLOR COAT. ALL RAILINGS AND HARDWARE COMPONENTS SHALL BE BLACK. COLOR SAMPLES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. THE PEDESTRIAN RAILING AND COMPONENTS SHALL HAVE A MINIMUM 10 YEAR WARRANTY.

THE TOP CHANNEL RAIL SHALL HAVE THE FOLLOWING MINIMUM REQUIREMENTS:

EFFECTIVE WALL THICKNESS	0.160	IN
SECTION MODULUS (VERTICAL)	0.1624	CU IN
SECTION MODULUS (HORIZONTAL)	0.367	CU IN
RAIL WEIGHT	2.55	LBS./FT.
YIELD STRENGTH (FY)	50,000	PSI
ULTIMATE VERTICAL LOAD (8' SPAN)	506	LBS.
ULTIMATE HORIZONTAL LOAD (8' SPAN)	765	LBS.

STEEL MATERIAL FOR PEDESTRIAN RAILING FRAMEWORK SHALL CONFORM TO REQUIREMENTS OF ASTM A924/A924M WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI. THE STEEL SHALL BE HOT-DIP GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A653/A653M WITH A MINIMUM ZINC COATING WEIGHT OF 0.90 OZ/FT, COATING DESIGNATION G-90.

THE HARDWARE REQUIRED TO COMPLETE THE CONSTRUCTION OF THE PEDESTRIAN RAILING SHALL MEET THE REQUIREMENTS OF THE RAILING PANEL MANUFACTURER AND AS APPROVED BY THE ENGINEER.

COMPLETED PANELS SHALL BE CAPABLE OF SUPPORTING A 600 LB. LOAD (APPLIED AT MIDSPAN) WITHOUT PERMANENT DEFORMATION. THE PANELS, POSTS AND ASSEMBLY SHALL BE CAPABLE OF MEETING THE REQUIREMENTS FOR HANDRAILS IN THE 2003 IBC.

CONSTRUCTION, PRIOR TO ORDERING MATERIAL OR BEGINNING FABRICATION, THE CONTRACTOR SHALL SUBMIT TWO SETS OF SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL. THE PEDESTRIAN RAILING AND POST SUPPORT FOUNDATIONS SHALL BE HANDLED AND INSTALLED ACCORDING TO THE MANUFACTURER RECOMMENDATIONS AND AS SHOWN ON THE PLANS.

PEDESTRIAN RAILING DETAIL

MODEL: DRAWN: FILE NAME: H:\P1725\CADD\Microstation\CADD_Drawing\0817125-Stc-deta1.dgn



USER NAME = ryan.gueldener	DESIGNED -	REVISED - A 6/7/2019
PLOT SCALE = 40.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 6/4/2019	CHECKED -	REVISED -
	DATE -	REVISED -

CITY OF TROY

CONSTRUCTION DETAILS

SCALE: 1" = 20' SHEET 2 OF 3 SHEETS STA. N/A TO STA. N/A

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1070	15-00031-00-PV	MADISON	29	24
CONTRACT NO. 97691				
ILLINOIS FED. AID PROJECT				