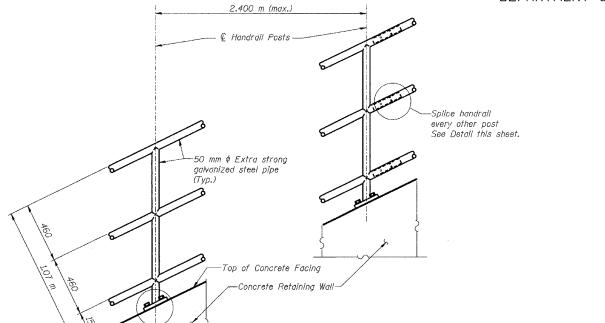


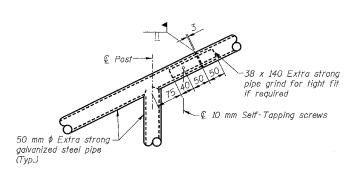
ROUTE NO.	SECTION	COUNTY		TOTAL SHEETS	SHEET NO.
FAP 337 (IL 22)	19R-1	LAKE		800	575
FED. ROAD DIST. NO.		ILLINOIS :	FED. AID PROJECT-		

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

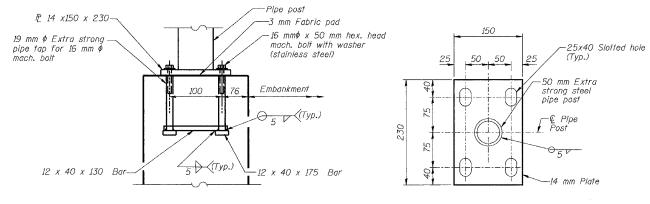


TYPICAL HANDRAIL PANEL

See Detail this sheet — for anchor bolt detail



PIPE HANDRAIL SPLICE DETAIL



ANCHOR BOLT DETAIL FOR HANDRAIL POST

BASE PLATE FOR HANDRAIL POST

NOTES:

- 1. All dimensions are in millimeters (mm) except as noted.
- 2. See Sheet 1 of 23 for Limits of Pipe Handrail, Special.
- 3. The Contractor shall coordinate with the Pipe Handrall fabricator for the as-built locations of the posts prior to fabricating Pipe Handrall. Post spacing shall be a maximum of 2.4 m and insure a 100 mm minimum clearance from anchor bolls to edge of concrete.
- 4. Railing, posts, base plates and bolts, nuts and washers for pipe handrall connections shall be galvanized (See Special Provisions).
- 5. All Pipe Handrail bends shall be made with an inside Radius of 150 mm.
- 6. Bent Railing should not be ordered until Field Verification of Final As-Built Wall Geometry.
- 7. The quantity shown for Pipe Handrail, Special on Sheet 2 of 23 includes one rail length per meter along the top of the wall. See Special Provisions.

PIPE HANDRAIL, SPECIAL DETAILS								
Date Revisions	Designed Drawn	TDN BKN	F.A.P. RTE. 337 (IL. RTE. 22) SECTION 19R-1	Sheet No.				
	Checked	KWB	WEST OF U.S. 12 TO EAST OF BEUSCHING ROAD LAKE COUNTY STATION 8+752.493 TO 8+883.521	16				
Approved	KWB	STRUCTURE NO. 049-W029	of 23					
				URS Job No. 21000001385.01				