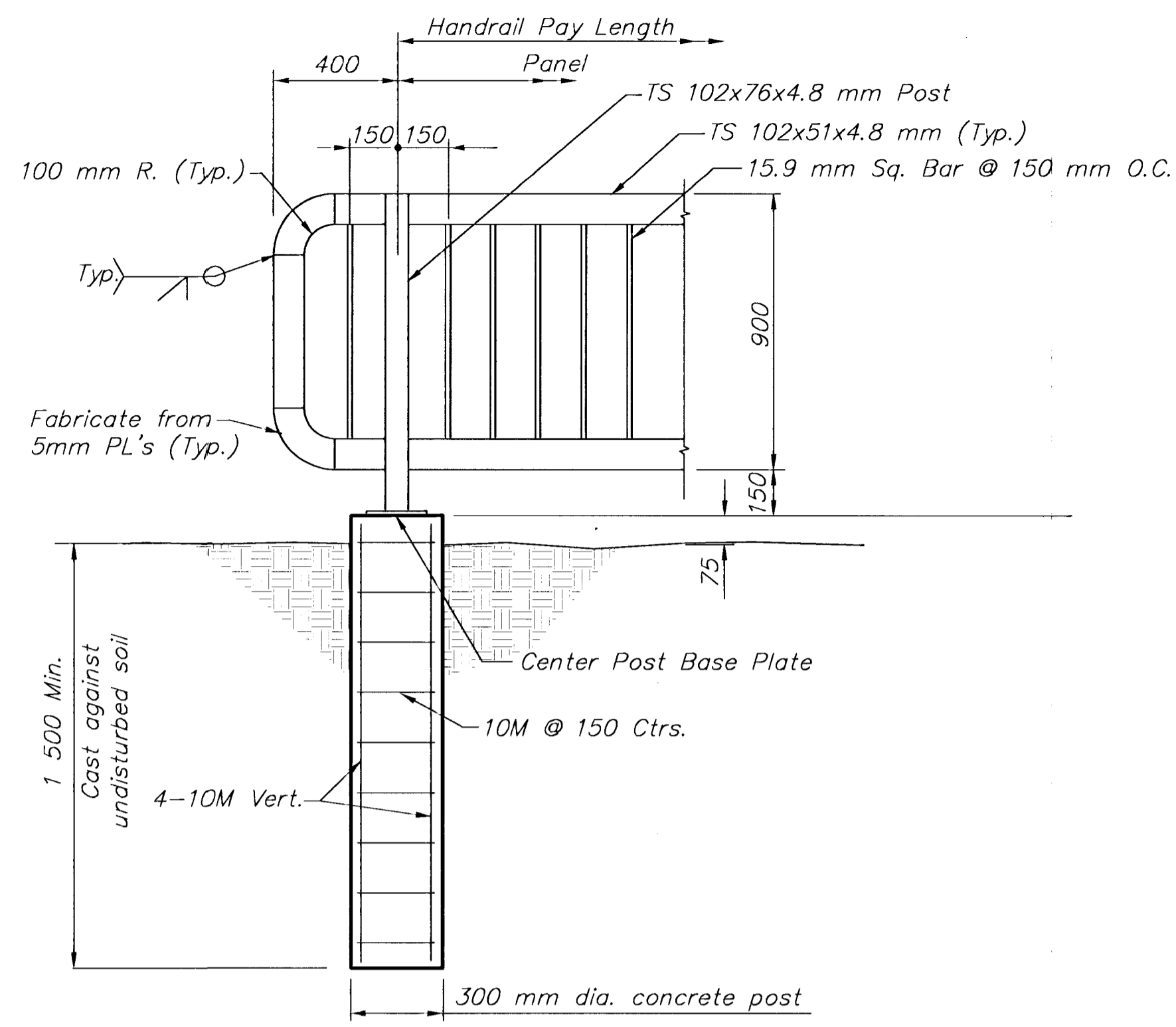


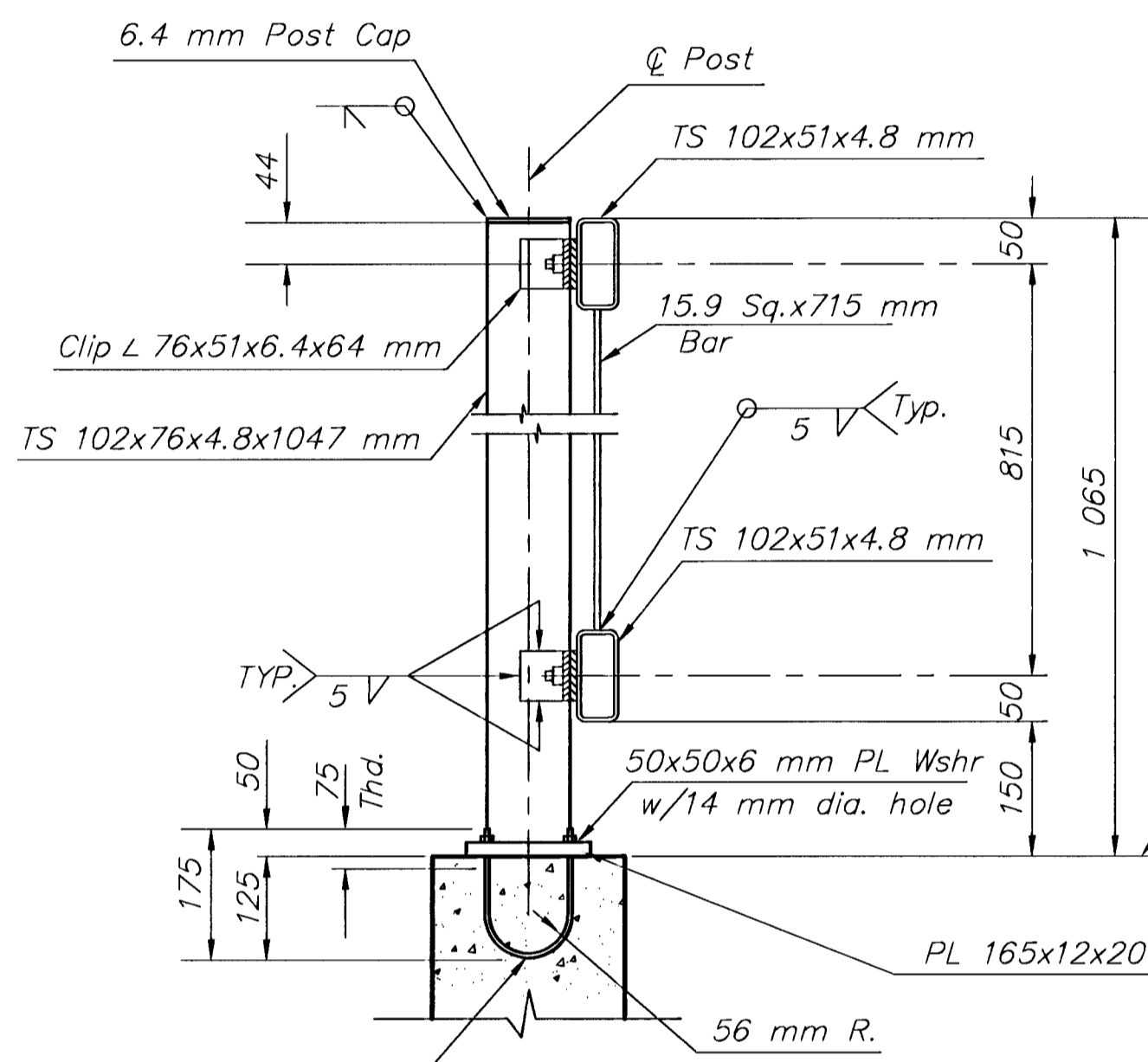
HANDRAIL NOTES

- The rail members shall conform to ASTM A36M or equivalent.
- Rail shall be fabricated in lengths to include a minimum of two and a maximum of three panels. Posts shall be set vertical. Shims may be used between concrete and base plates of posts.
- All parts of Handrail shall be painted. The primer coat shall conform to the inorganic Zinc System. Surface preparation shall be in accordance with that for structural steel. The finish coat shall be in accordance with water-borne acrylic finish coat. All materials, equipment and labor necessary for the installation of the Handrail shall be subsidiary to the bid item.
- The Contractor shall submit color chart for approval by the City.

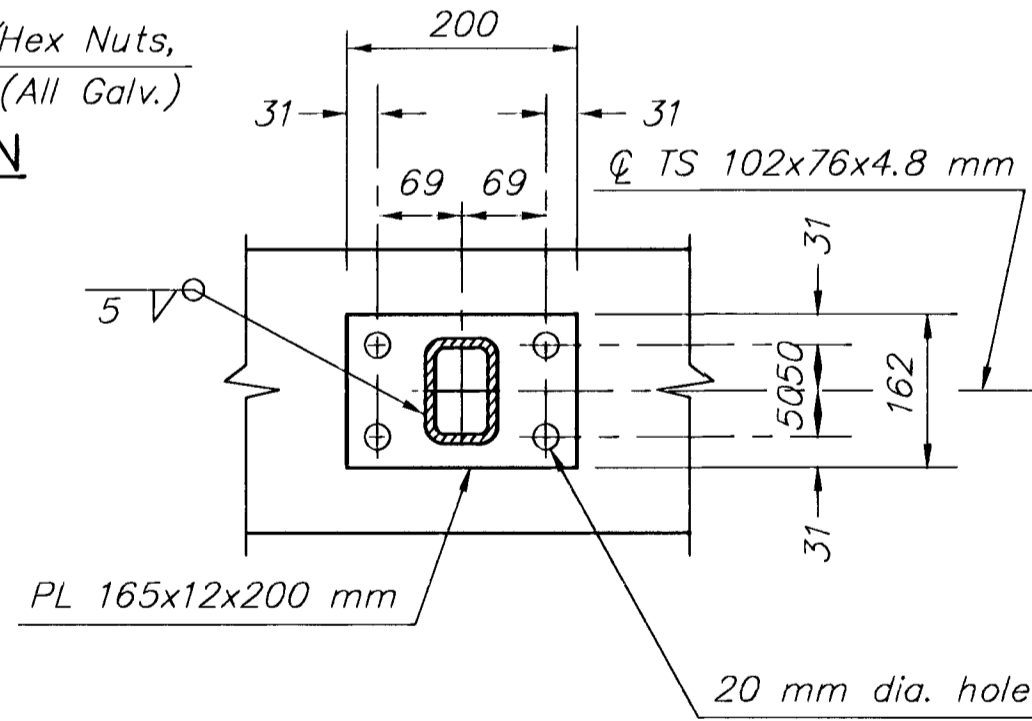


Concrete Post shall be subsidiary to "Handrail (Steel)".
Locate concrete post where specified on plans

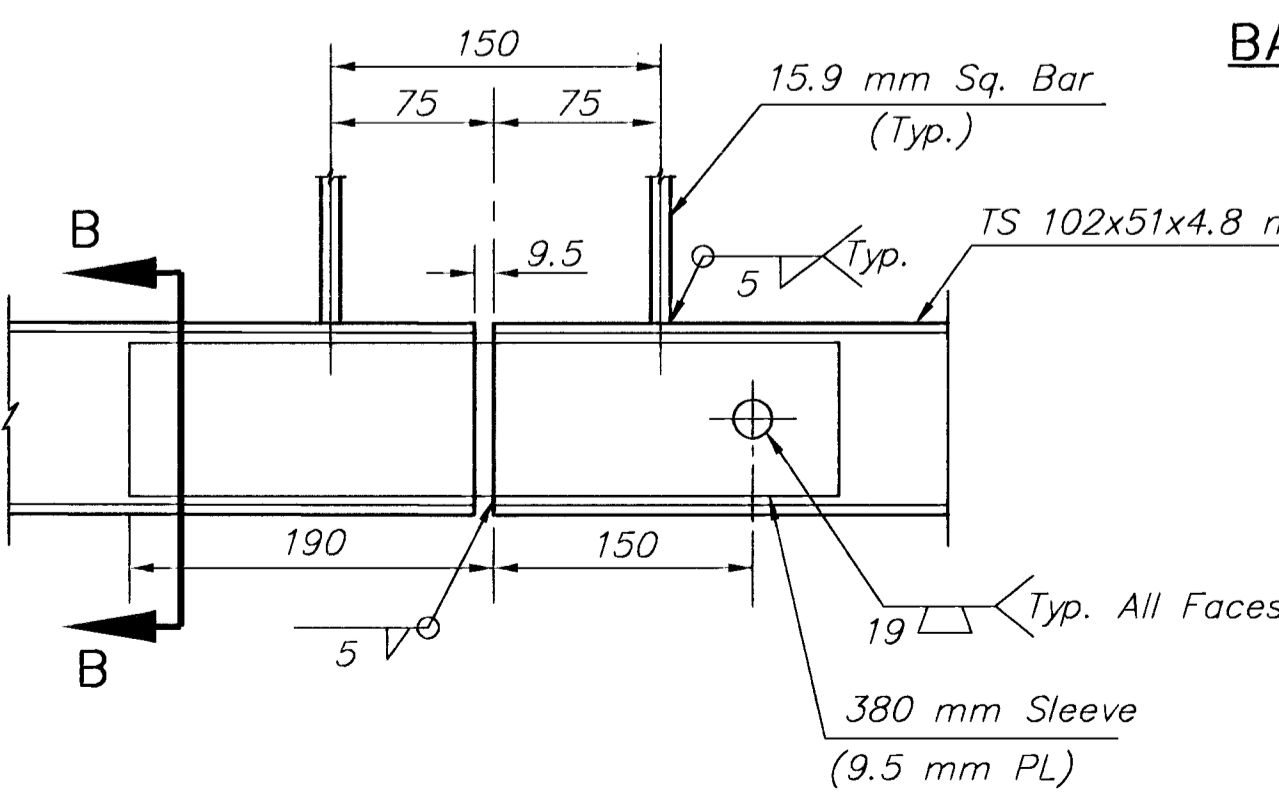
CONCRETE POST DETAIL



TYPICAL RAIL SECTION

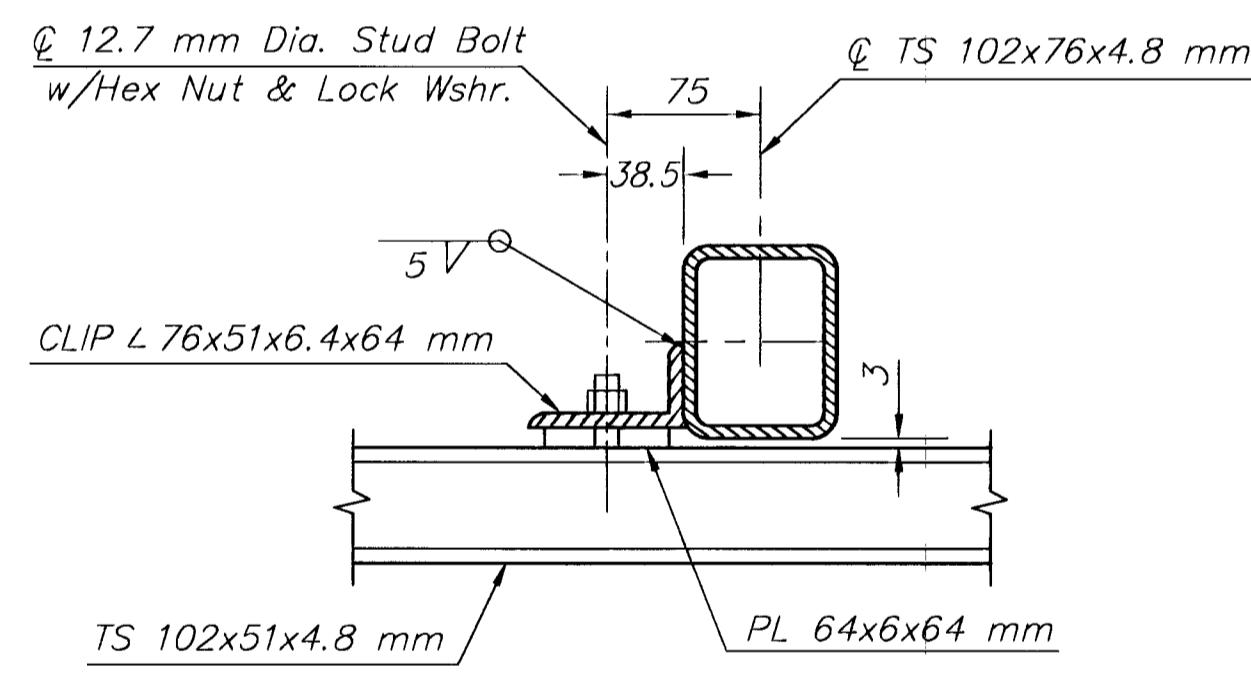


BASE PLATE DETAIL

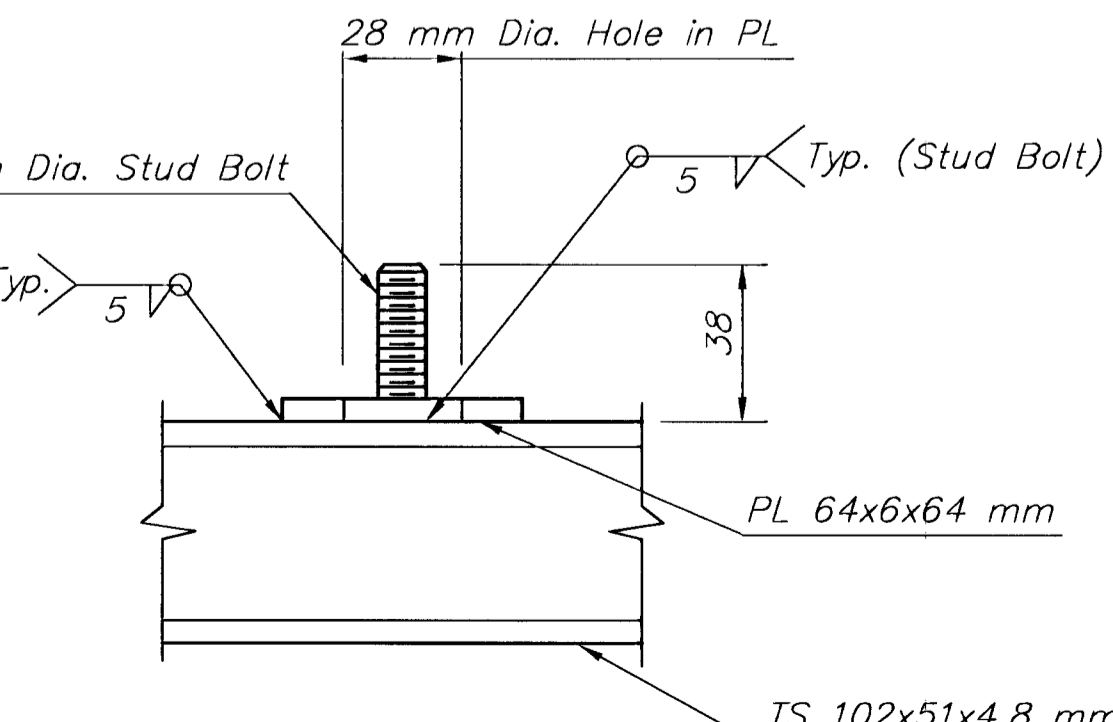


SLEEVE DETAIL

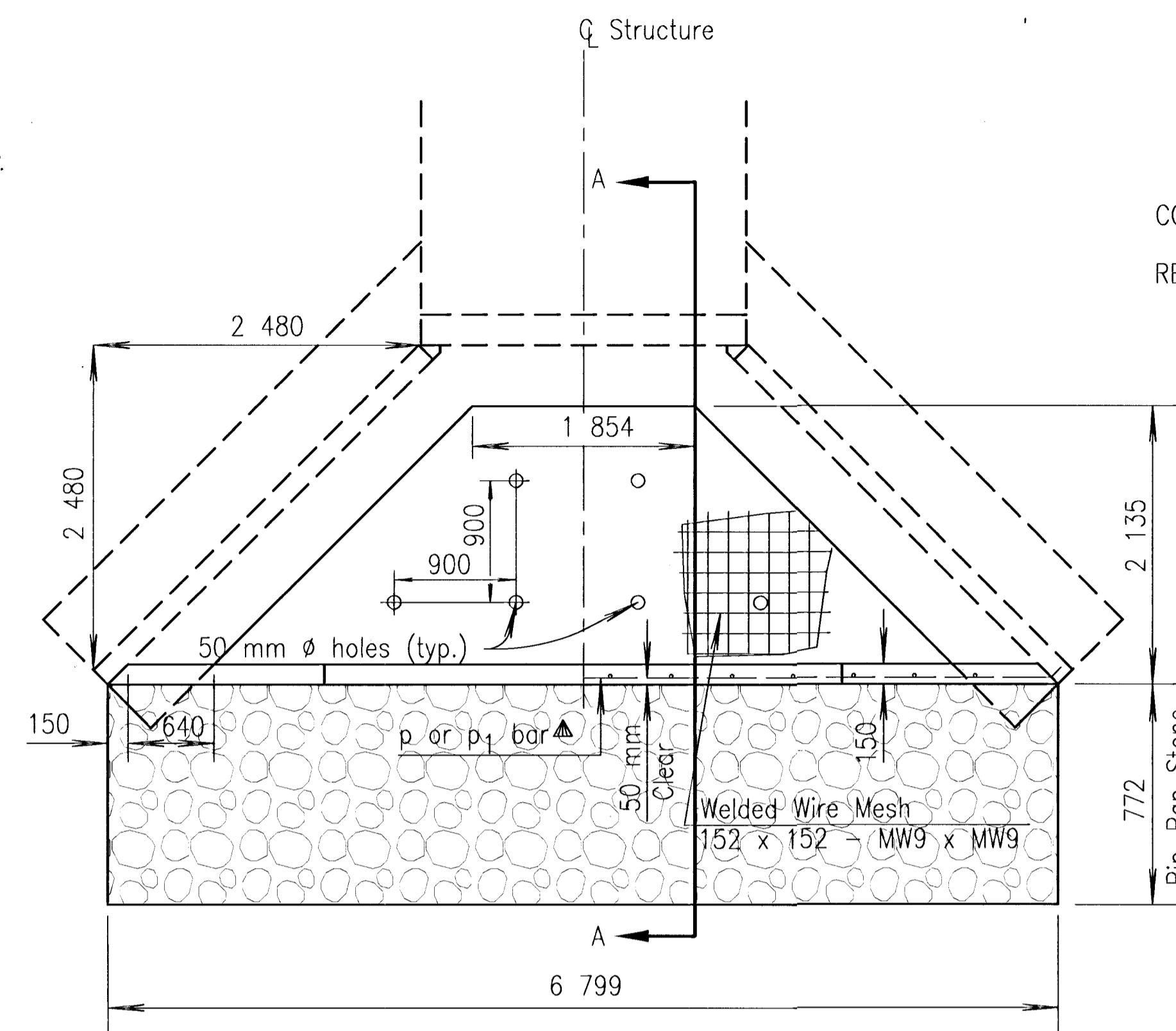
(Bottom Rail Shown, Top Rail Similar)



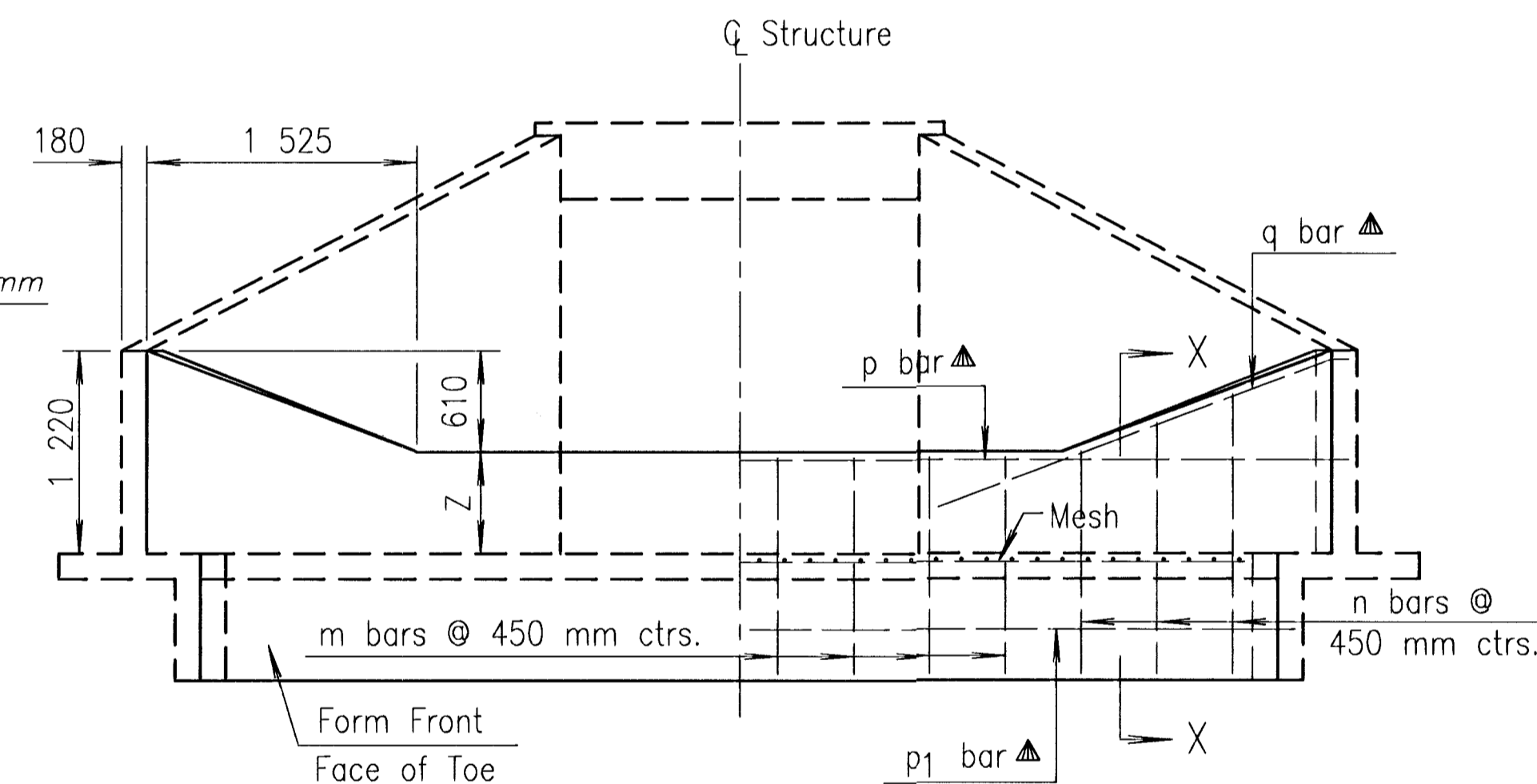
RAIL CONNECTION DETAIL



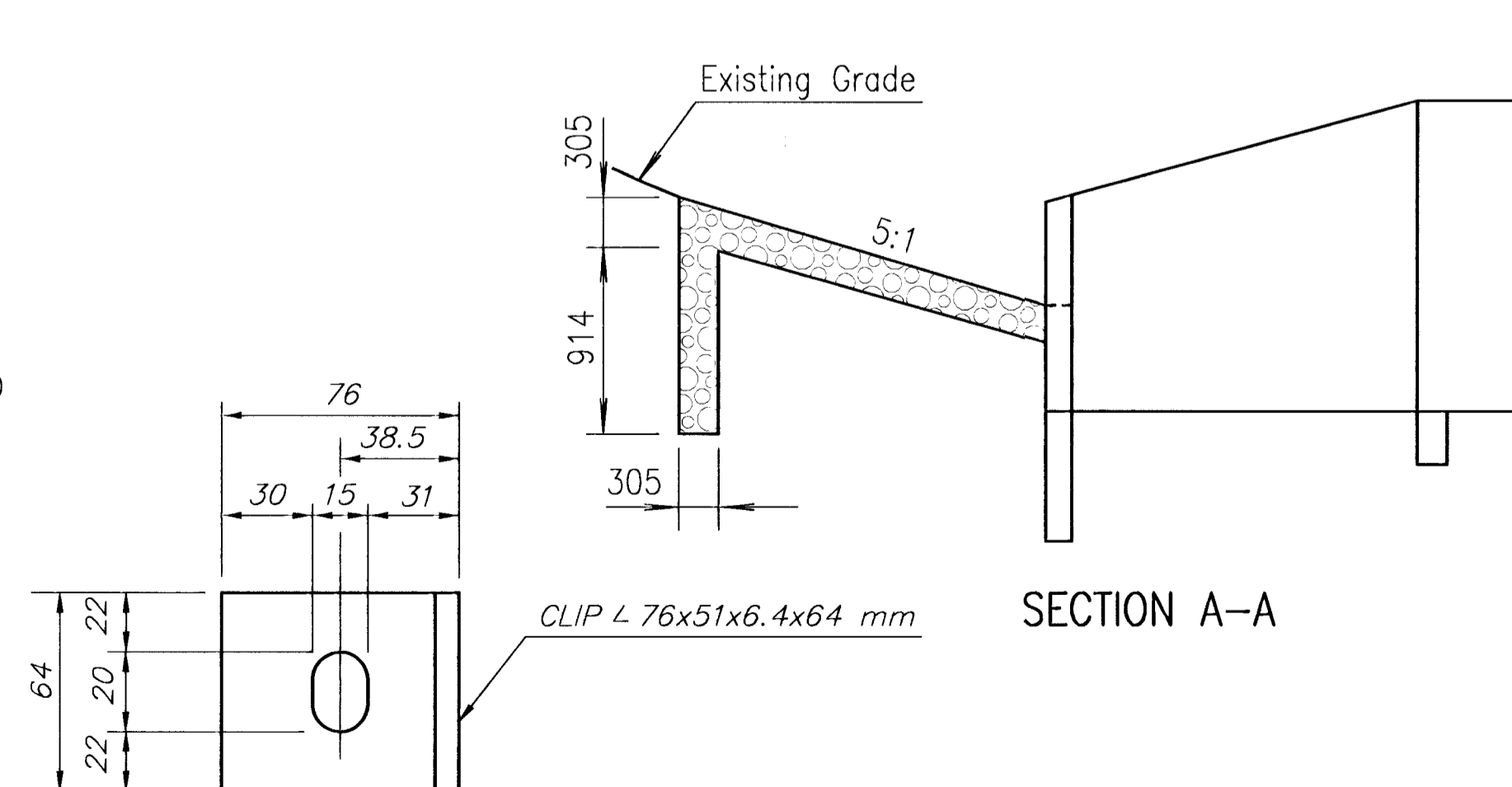
STUD BOLT DETAIL



PLAN



ELEVATION AND SECTION



SECTION A-A

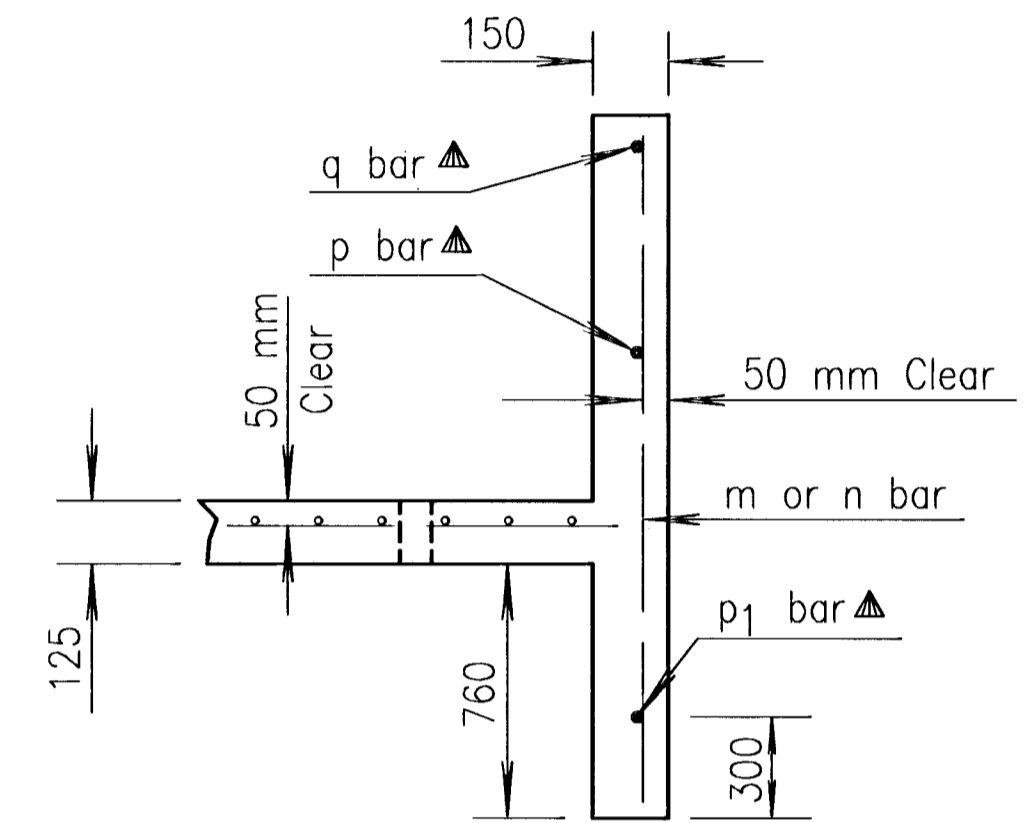
▲ Drill and grout p and q bars into wingwalls and p₁ bar into wing footings.

* n bars are variable, increase by increments of 175 mm. Cut 2 each length.

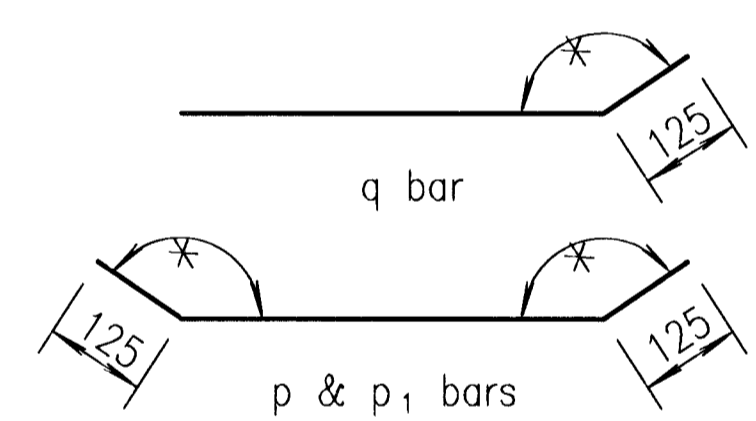
FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	STP-N012(901)	1999	63	131

GENERAL NOTE

CONCRETE: Class AAA Concrete shall be used throughout. All exposed edges shall be finished with an edging tool.
REINFORCING: All dimensions are to ϕ of bar except where noted. All reinforcing bars are #13. Reinforcing bars shall be Grade 420 billet steel. Minimum clearance on all reinforcement shall be 50 mm. Mass of welded wire mesh is approximately 1 kg/m². Mesh shall be paid as kg of reinforcing steel.
When holes in the apron are warranted by drainage conditions they shall be constructed as directed by the Engineer.



SECTION X-X



BENDING DIAGRAMS

* Angle varies according to skew of RCB. Bars shall be field bent.

SUMMARY OF SOIL SAVERS

Station	Culvert Size	Side	Z	Skew
4+615	2.440x1.525	RT.	610 mm	0

2	1-27-97	Revised Rebar Designation & Grade	R.J.S.	J.O.B.
NO.	DATE	REVISIONS	BY	APP'D
KANSAS DEPARTMENT OF TRANSPORTATION				
SOIL SAVER FOR R.C. CULVERTS				
RD520 SI				
DESIGNED	2-18-97	APP'D. James O. Brewer	QUANTITIES	TRACED
DESIGN CK.	1	DETAIL CK.	QUAN. CK.	83 OF 131