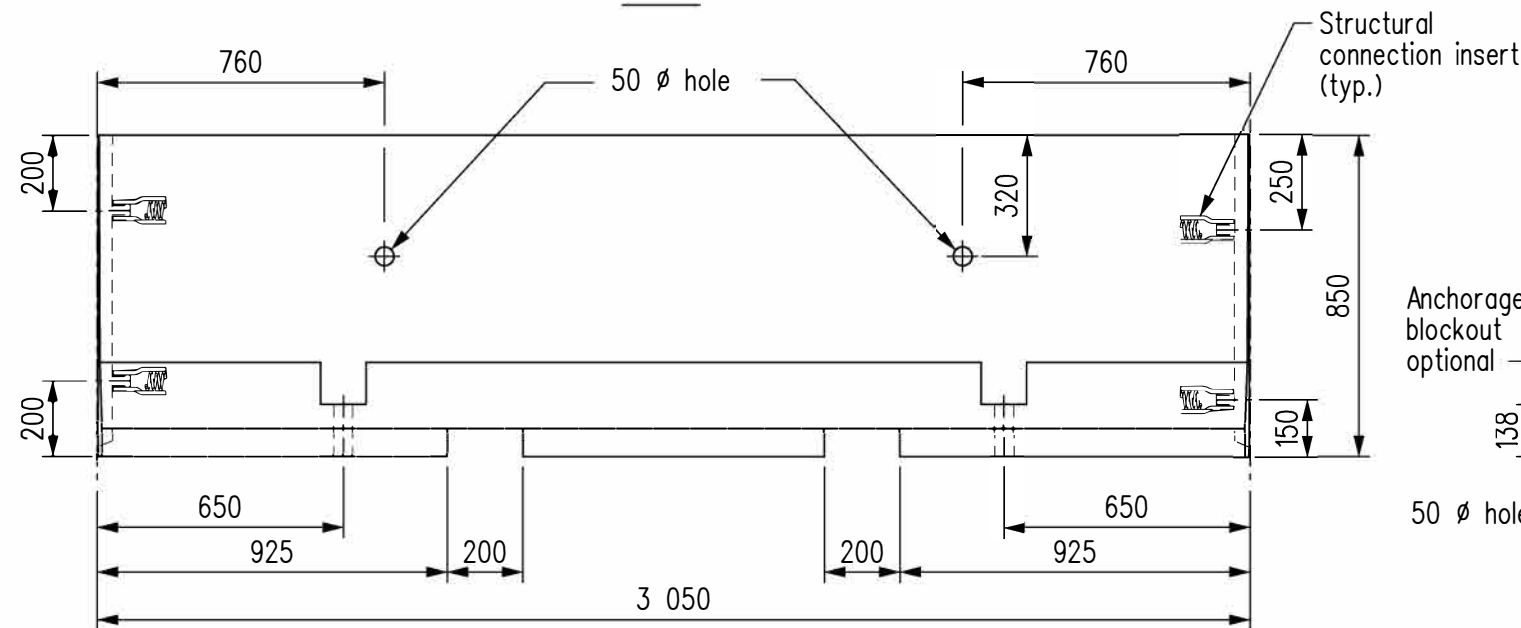


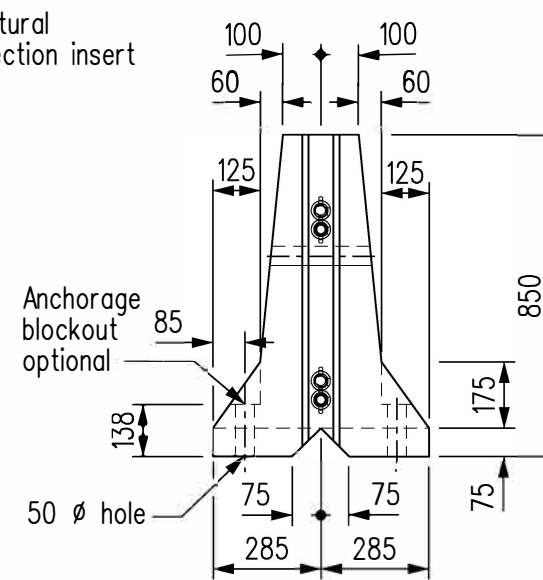
PLAN



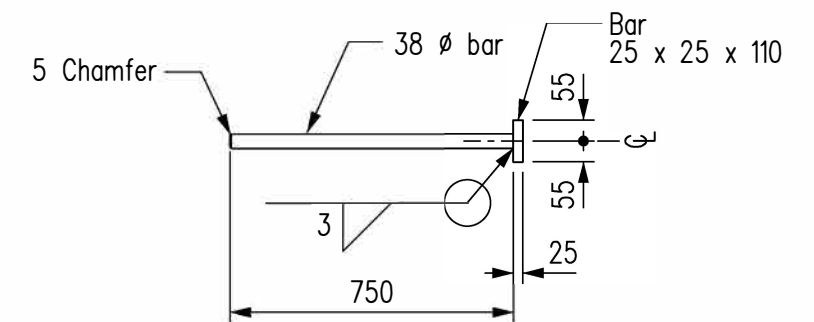
ELEVATION

# CONCRETE TRAFFIC BARRIER

Scale 1:20

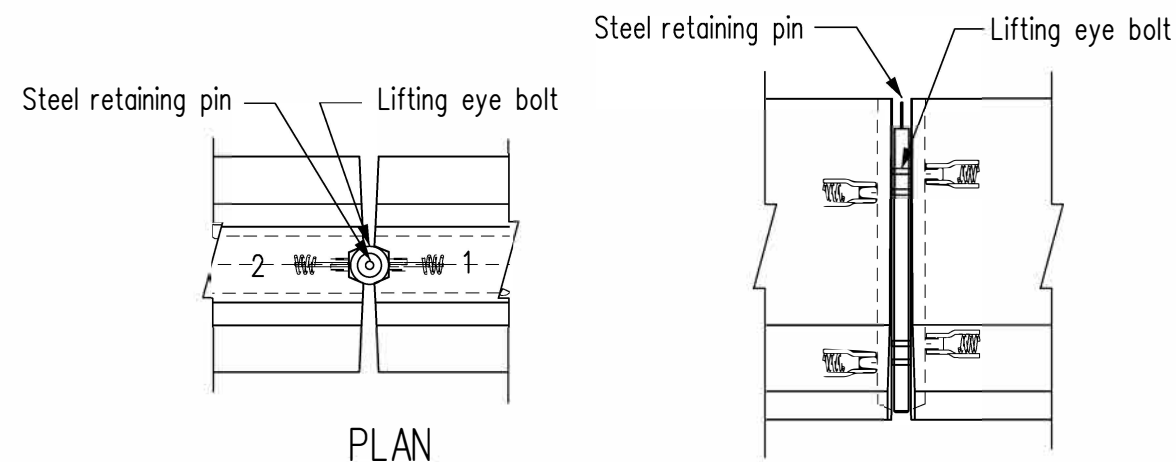


END VIEW



STEEL RETAINING PIN

Scale 1:20



PLAN

ELEVATION

## CONNECTION DETAILS

Scale 1:20

BILL OF MISCELLANEOUS METAL							FOR ONE CONCRETE TRAFFIC BARRIER UNIT			Site No.
PART No.	No.	DESCRIPTION	CORROS ON PROTECTION	SIZE	LENGTH	REMARKS	COMPONENT MASS	MASS PER UNIT	TOTAL MASS	
	4	Structural connection inserts		25 dia.		for 25 dia. Lifting eye bolt	0.521		2.08	
	4	Lifting eye bolts		25 dia.	75	c/w 2 plate washers				
	1	Steel retaining pin		38 dia.	750	As detailed	7.204		7.20	
							TOTAL MASS (kg) =			

NOTES:

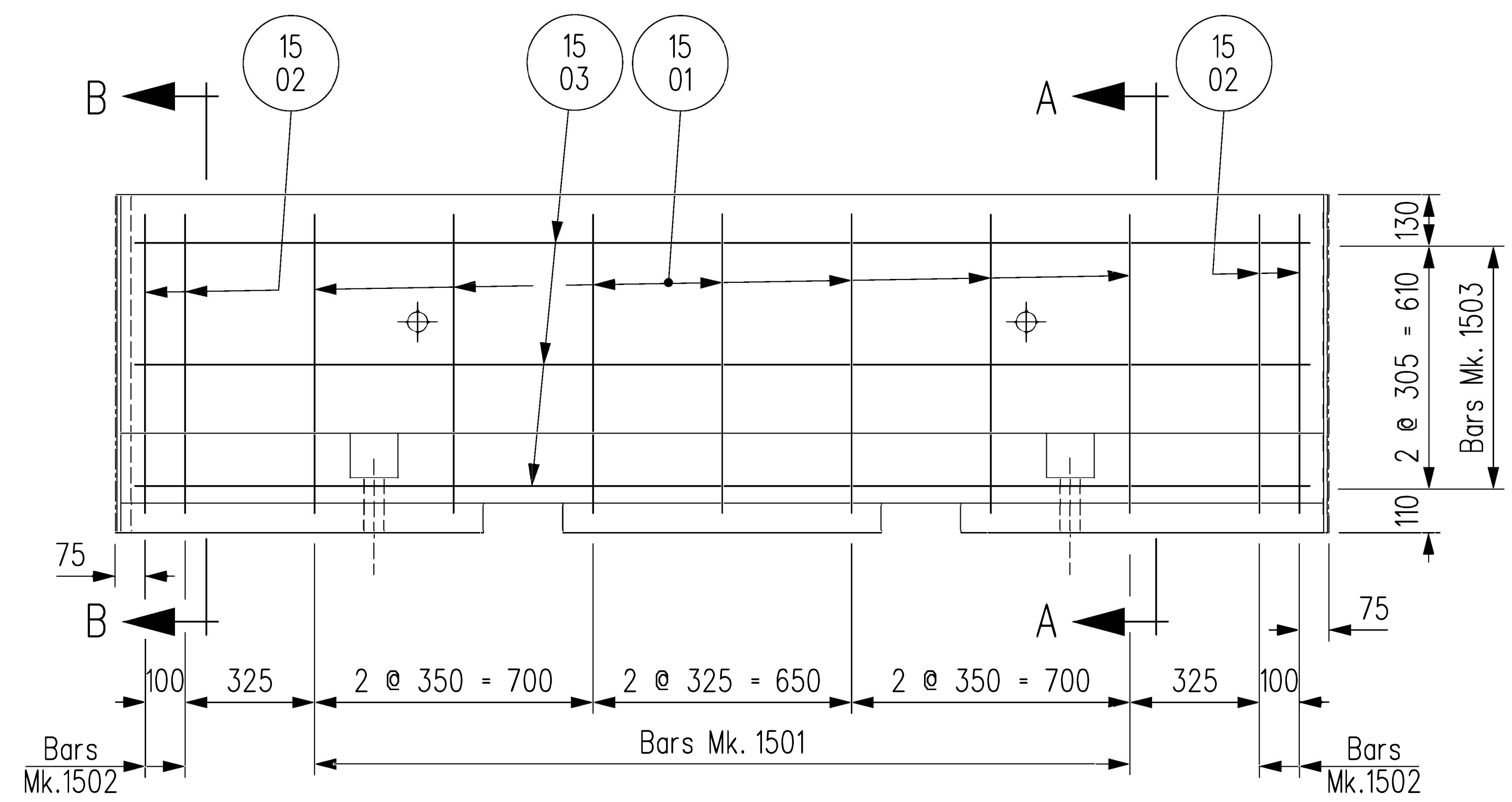
- All material noted in the above Bill shall be hot dip galvanized after fabrication in accordance with CSA G164 for a minimum net retention of 610 g/m<sup>2</sup> unless otherwise stated in the specified material ASTM standards. The fabricator and galvanizer shall safeguard against embrittlement using recommended practices from applicable standards.
- Seal all welds prior to galvanizing.
- Apply Galvaloy to all field welds and areas where galvanizing has been damaged.

Structural connection inserts	Total required	<input type="text"/>
Lifting eye bolts	Total required	<input type="text"/>
Steel retaining pin	Total required	<input type="text"/>

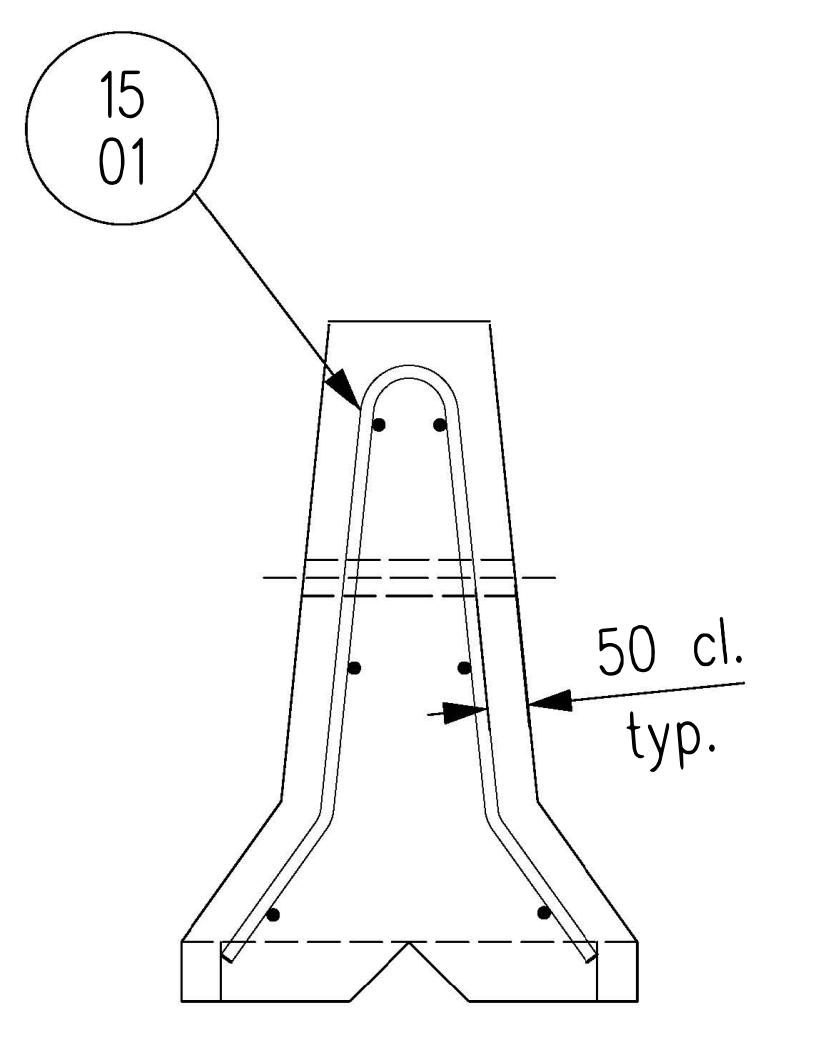
Notes :

- Maximum size of aggregate is 20 mm.
- Minimum 28 day concrete compressive strength = 40 MPa
- Steel form finish.
- Normal Portland Cement to be used.
- Concrete mix design shall conform to CAN/CSA-A23.1 Exposure Class C-1.
- Units to be connected by having ends "One" and "Two" adjacent.
- Minimum chamfer on all edges to be 13 mm.
- Non ferrous material (if utilized) to form voids/holes must be removed prior to shipping. Handling holes must be smooth concrete finish or as approved by Engineer.

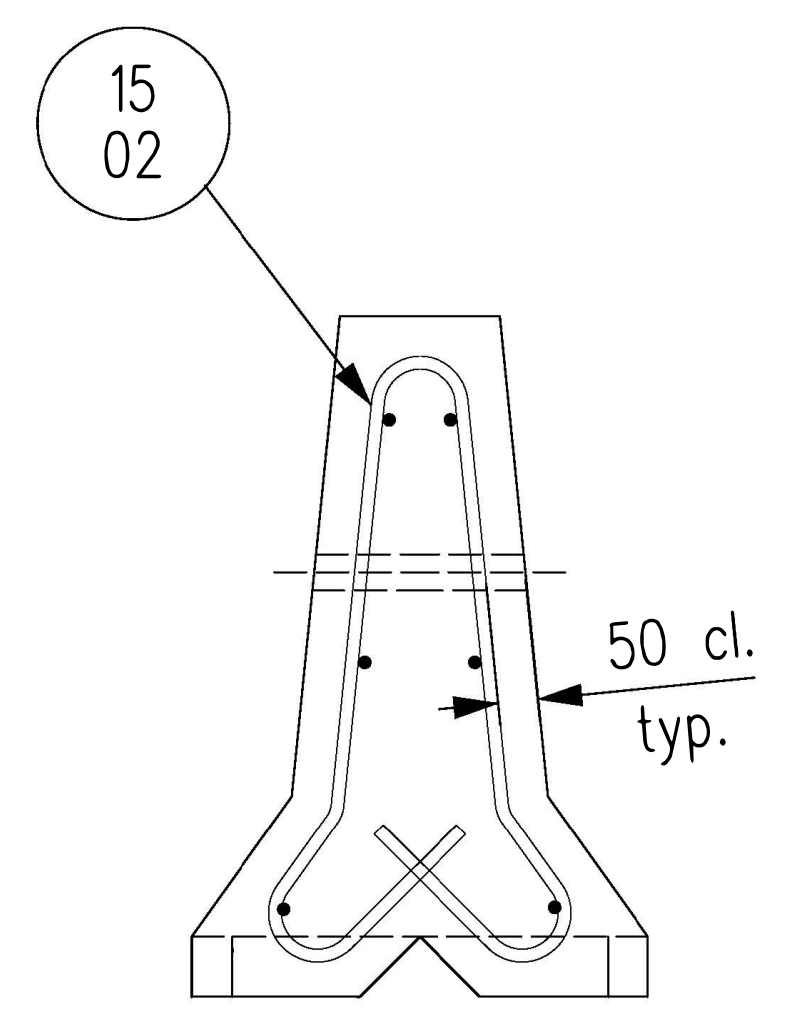
2015/05/26 A.H.P. REVISION A		REVISIONS		PORTABLE PRECAST CONCRETE TRAFFIC BARRIER	
DATE	BY	DESCRIPTION	DATE	APPROVED BY:	DATE
DATE: <u>October 16, 2014</u> DRAWN: <u>N.J.</u> CHECKED: <u>A.H.P.</u>				DIRECTOR OF STRUCTURES SHEET No.: <u>1 of 2</u> STANDARD DETAIL No.: <u>PP_TB_1</u>	



**ELEVATION**  
Scale 1:20



**SECTION A-A**  
Scale 1:20



**SECTION B-B**  
Scale 1:20

BILL OF REINFORCING						Site No.
MARK	TYPE	PIN DIAMETER	LENGTH	No.	MASS	BENDING DIAGRAM
1501	BENT	65	1640	7	18.02	
1502	BENT	65	2 180	4	13.69	
1503	STR		2 950	6	27.79	
Total mass of reinforcing steel						59.50 kg
Total volume of structural concrete						0.83 m <sup>3</sup>
<b>NOTES:</b>						
1. All dimensions given in bending diagram are out to out, except radii and extensions on 90°, 135° & 180° hooks. Extensions on 90°, 135° & 180° hooks are the "A" or "G" dimensions for the standard 90°, 135° & 180° hooks referenced from the RSIC "Manual of Standard Practice". Radii are inside dimensions. All reinforcing steel bends and hooks shall conform to Clause 6.6.2 of C.S.A. A23.1-04, unless noted otherwise in the BILL OF REINFORCING STEEL.						
2. All reinforcing steel shall be deformed steel, unless noted otherwise in the BILL OF REINFORCING STEEL.						
3. All reinforcing steel shall conform to CSA G30.18-M92 "Billet Steel Bars for Concrete Reinforcement" Grade 400W, unless noted otherwise in the BILL OF REINFORCING STEEL.						
4. Like bars shall be bundled, securely tied and identified as to Mark and Site No. by appropriate means. All other items to be identified in a similar fashion.						
5. Bars marked with the suffix "P" shall be plain undeformed bars in accordance with CAN/CSA G40.21-M92 Grade 300W.						
6. All bars shall be bent in accordance with the following detail:						

DATE	BY	DESCRIPTION
2015/05/26	A.H.P.	REVISION A
REVISIONS		

**PORTABLE PRECAST  
CONCRETE TRAFFIC BARRIER  
REINFORCING DETAILS**

DATE: <u>October 16, 2014</u>	APPROVED BY: _____
DRAWN: <u>N.J.</u>	DATE: _____
CHECKED: <u>A.H.P.</u>	DIRECTOR OF STRUCTURES
SHEET No.: <u>2 of 2</u>	
STANDARD DETAIL No.: _____	

**Manitoba** Infrastructure and Transportation

**PP\_TB\_2**