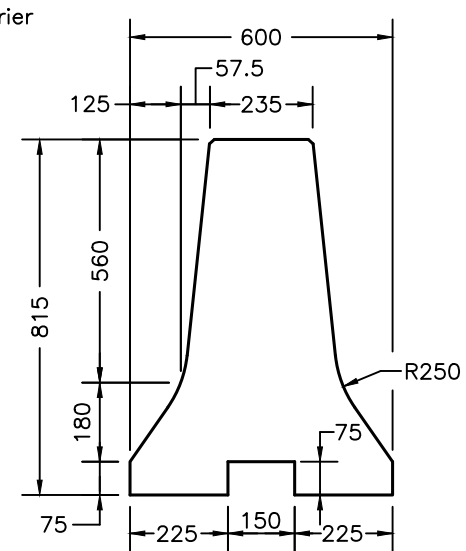
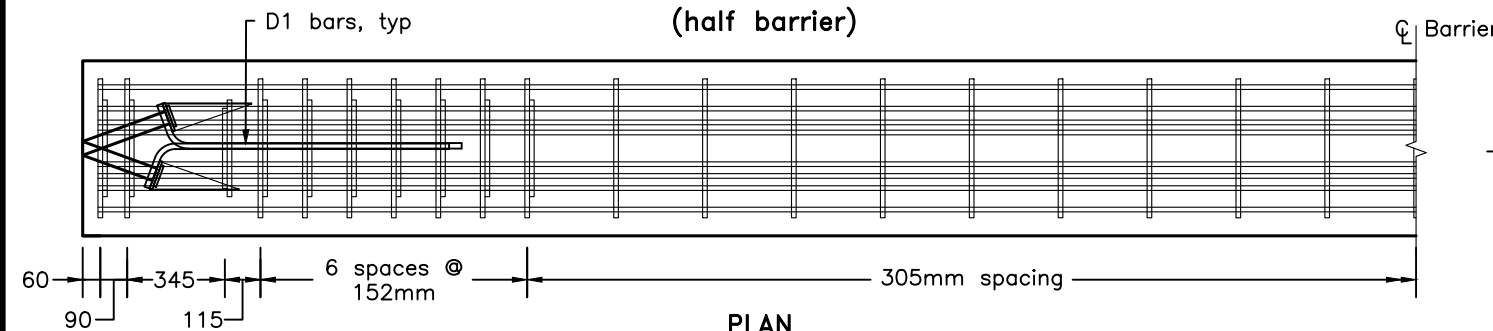


**ELEVATION  
(half barrier)**

**SECTION A-A**



**PLAN  
(half barrier)**

**BARRIER SHAPE**

**NOTES:**

- 1 Drainage opening.
- 2 Minimum 38 mm cover to longitudinal bars to be provided above the drainage openings.
- A This MTOD shall be read in conjunction with MTOD 911.191 and MTOD 911.192.
- B Minimum horizontal radius is 122m.
- C System configuration meets NCHRP Report 350, TL-3 and AASHTO MASH TL-3.
- D Welds shall be according to CSA W59 and CSA W186.
- E All concrete edges to have 15 x 45° chamfer.
- F Steel reinforcement shall be Grade 400W according to CAN/CAS G30.18 with a minimum yield strength of 420 MPa.
- G All dimensions are in millimetres unless otherwise shown.

MINISTRY OF TRANSPORTATION ONTARIO DRAWING

February 2018

Rev 1

**GUIDE RAIL SYSTEM, CONCRETE BARRIER  
TYPE X CONNECTION – 9.1m Length  
INSTALLATION – TEMPORARY**

**MTOD – 911.190**