

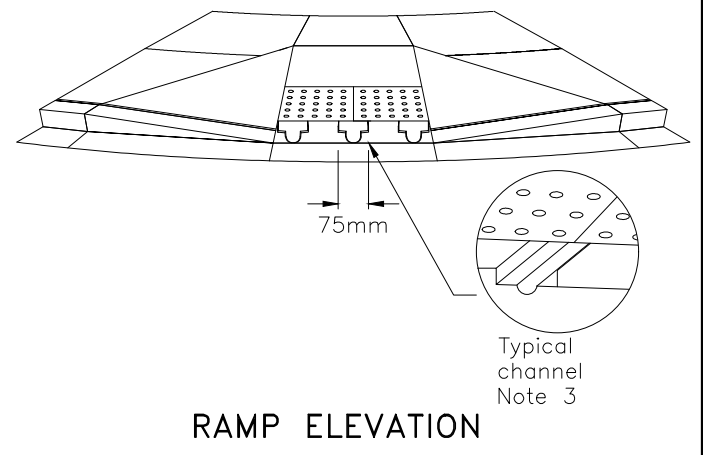
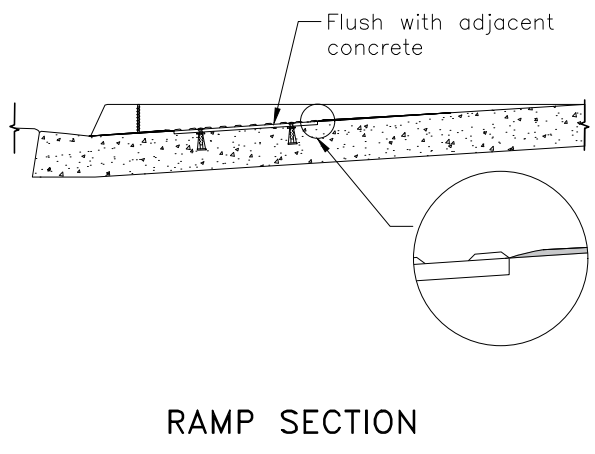
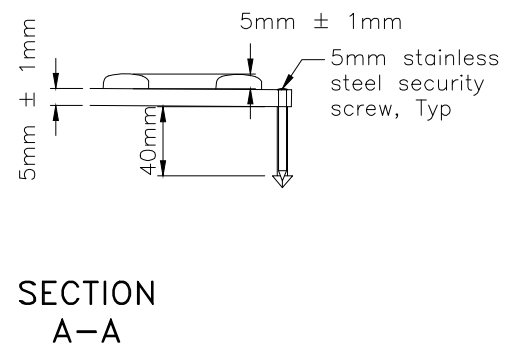
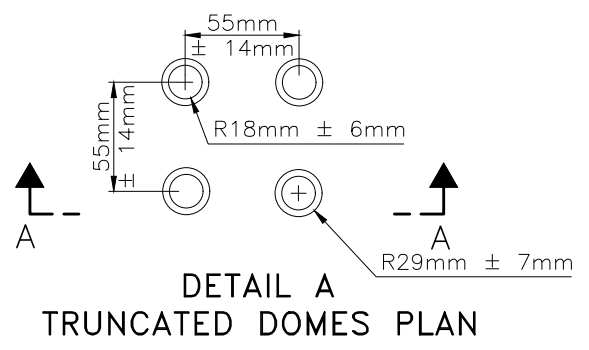
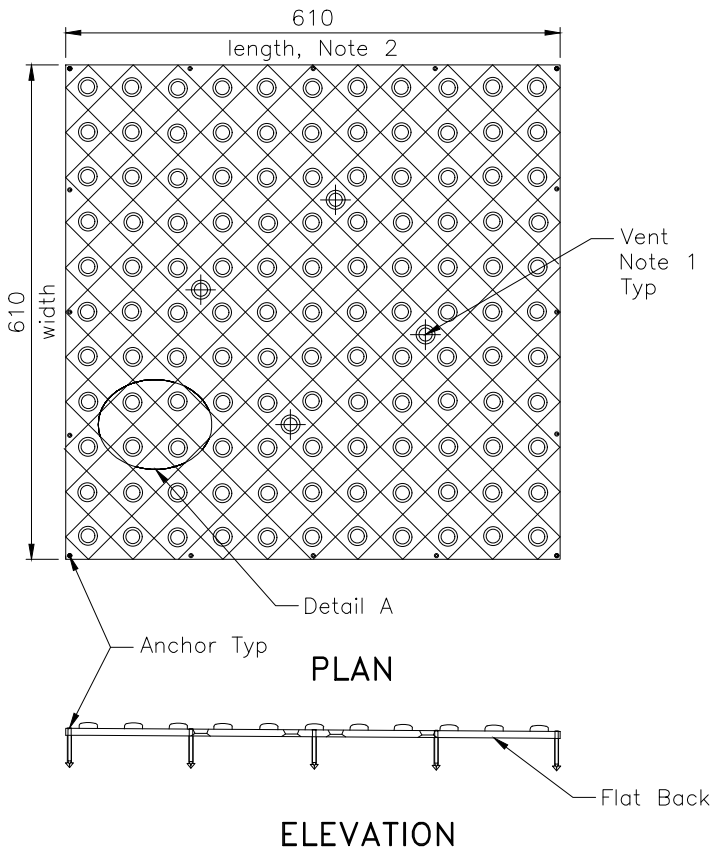
MTO DRAWINGS (MTOD) MANUAL

REVISION NO. 6

February 21, 2019

Details of recent changes to individual MTODs are noted in the table below and the associated documents are available for viewing and download, free of charge, from the MTO Technical Publications website at www.raqs.mto.gov.on.ca/techpubs/cded.nsf

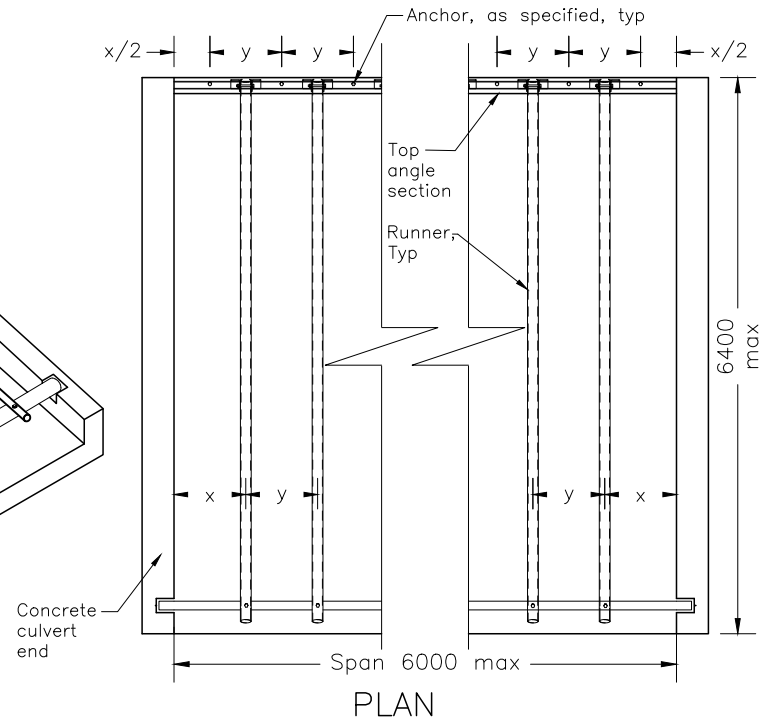
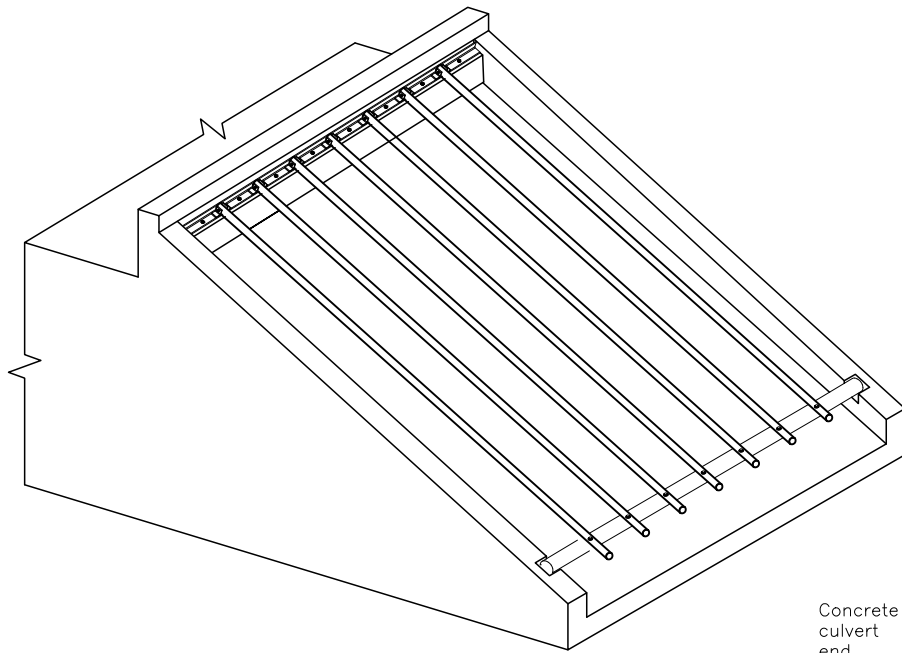
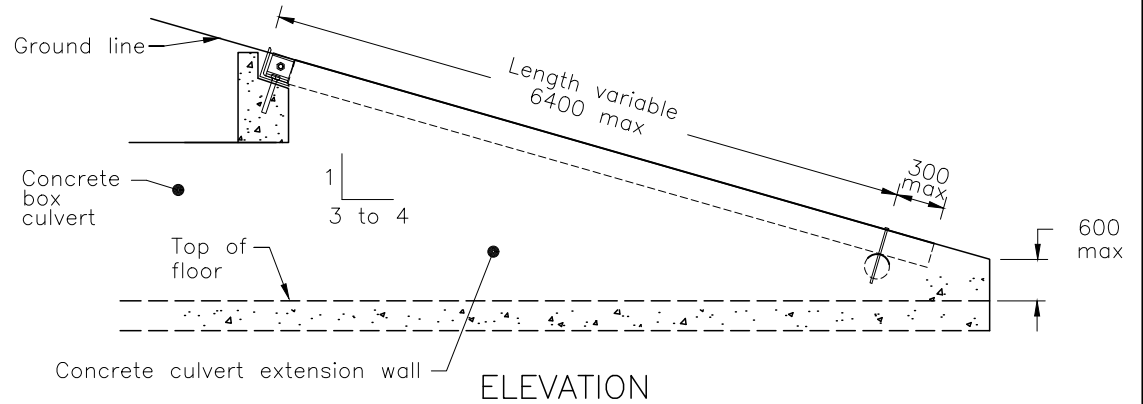
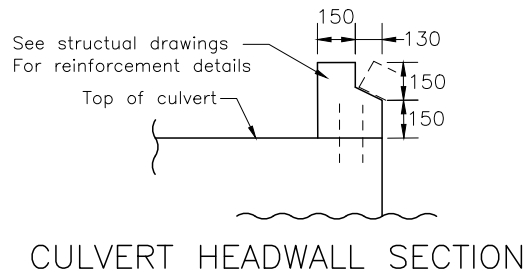
Reference Code	Existing Version	New Version	Implementation Date In CPS	New (New), Revised (Rev), Cancelled (Can), Reissued (Rei)
0310.0400	N/A	December 2018 (Rev.0)	February 21, 2019	New: Concrete Sidewalk Ramps Removable Walking Surface Indicators Component MTOD is implemented.
0926.1000	N/A	December 2018 (Rev.0)	February 21, 2019	New: Concrete Box Culvert Traversable End Treatment - Installation Detail MTOD is implemented.
0926.1010	N/A	December 2018 (Rev.0)	February 21, 2019	New: Concrete Box Culvert Traversable End Treatment - Component and Assembly Detail MTOD is implemented.



NOTES:

- 1 Vents shall be specified by the manufacturer.
- 2 Length of plate may be increased to suit the curb depression width.
- 3 Channels shall provide positive drainage from TWSI to gutter.
- A Adjacent cast iron plates shall be permanently connected using a locking mechanism and any hardware shall be hot dipped galvanized.
- B All dimensions are in millimetres unless otherwise shown.

MINISTRY OF TRANSPORTATION ONTARIO DRAWING	December 2018	Rev	0
CONCRETE SIDEWALK RAMPS REMOVABLE WALKING SURFACE INDICATORS COMPONENT	<hr style="border-top: 1px dashed black;"/> <hr style="border-top: 1px dashed black;"/>		
MTOD – 310.040			



SPAN	X	Y	Number of Runners Required
1350	675	NA	1
1500	750	NA	1
1800	600	600	2
2000	650	700	2
2400	600	600	3
2500	625	625	3
3000	750	750	3
3500	700	700	4
4000	650	675	5
4500	750	750	5
5000	625	750	6
5500	650	700	7
6000	750	750	7

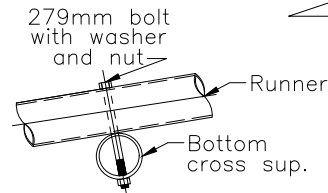
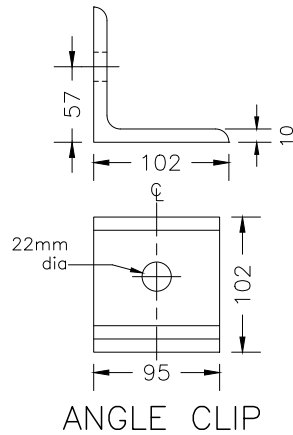
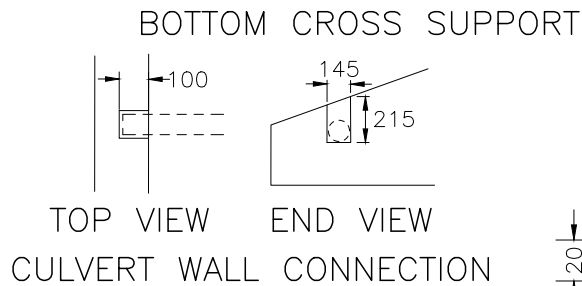
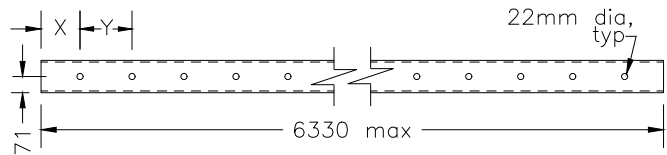
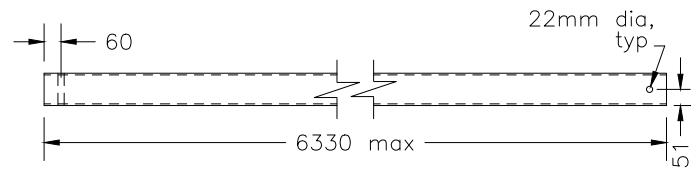
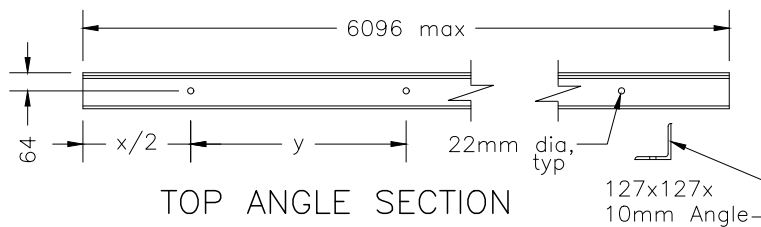
TABLE 1

NOTES:

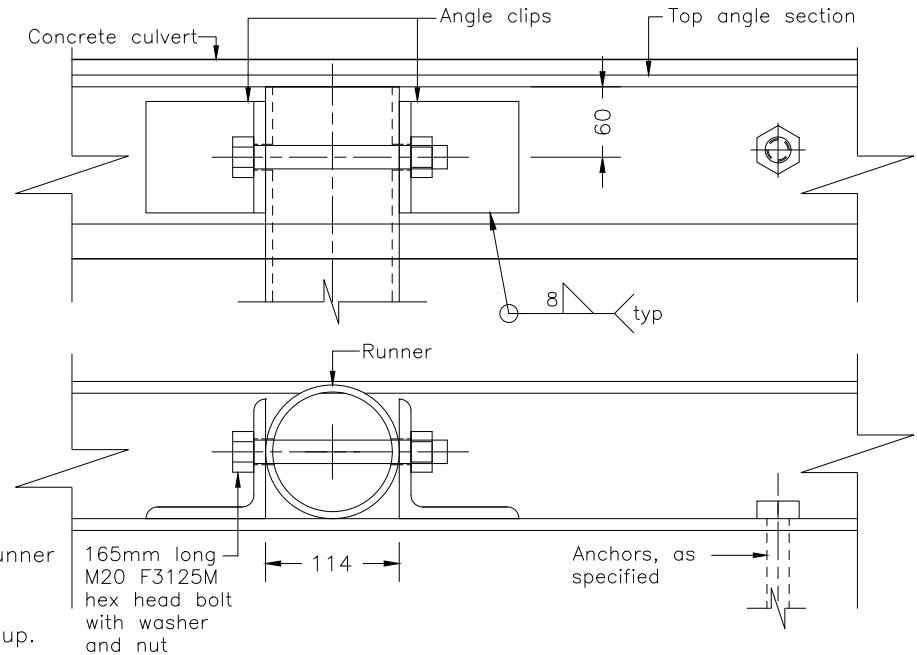
- System tested according to NCHRP Report 350 TL-3.
- All dimensions are in millimetres or metres unless otherwise shown.
- Drawing to be read in conjunction with MTOD 926.101.

MINISTRY OF TRANSPORTATION ONTARIO DRAWING		December 2018	Rev	0
CONCRETE BOX CULVERT TRAVERSABLE END TREATMENT INSTALLATION DETAIL		-----		

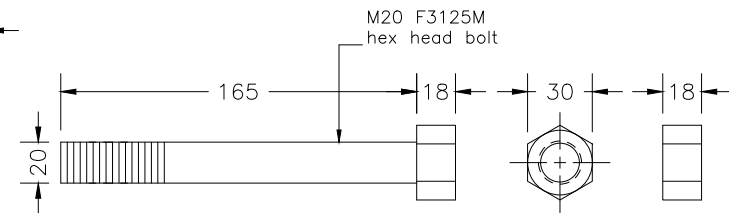
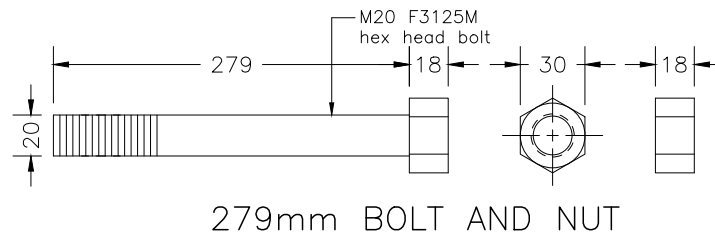
		MTOD 926.100		



CONNECTION DETAIL



RUNNER INSTALLATION DETAIL



NOTES:

1. HSS 101.6x5.33 runner and HSS 141.3x9.53 bottom cross support.
2. Length of bottom cross support to be 150mm more than the inside opening of culvert.
- A. Runners to be parallel to sides of culvert and flush with top of extension wall.
- B. Steel grating shall conform to CSA-G40.20-13/G40.21-13 Grade 350W.

- C. All steel components and hardware shall be hot dip galvanized according to CSA G-164M.
- D. All dimensions are in millimetres unless otherwise shown.

E. Drawing to be read in conjunction with MTOD 926.100

MINISTRY OF TRANSPORTATION ONTARIO DRAWING		December 2018	Rev	0
CONCRETE BOX CULVERT				
TRAVERSABLE END TREATMENT				
COMPONENT AND ASSEMBLY DETAIL				
MTOD 926.101				