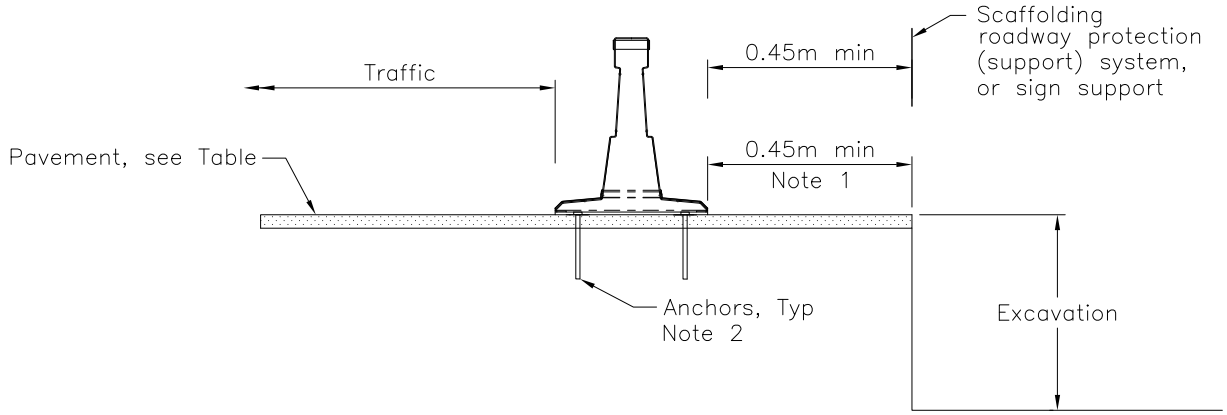
| Surface | Surface Thickness Requirements | Anchors | Minimum Embedment |
|---|---|---|---|
| Asphalt over compacted granular | 75 mm min | 32 mm x 510 mm ASTM A1018 Round Bar | 460 mm |
| Concrete | 150 mm min | 32 mm x 305 mm ASTM A1018 Round Bar | 200 mm |
| Concrete bridge deck | 150 mm min – 200 mm | 22 mm threaded anchor or Keli bolt | 100 mm |
| Concrete bridge deck | 200 mm min | 22 mm threaded anchor or Keli bolt | 150 mm |




END VIEW

NOTES:

1 When the level area between the back of the barrier and the upper edge of an excavation is less than one metre, use of this standard requires the Owner to have a signed and sealed memorandum from an Engineer for each installation used during construction according to Ontario Regulation 213/91.

2 This installation method shall not be used on bridge superstructures that contain post tensioned tendons within the concrete deck or bridge superstructures with longitudinally prestressed, transversally post tensioned, solid or voided concrete slab units.

3 Anchors shall be according to the manufacturer's specifications and installed to a minimum embedment in Table.

A MTOD shall be read in conjunction with MTOD 911.550.

B System configuration meets MTO deflection categories I, II, III and IV.

C All dimensions are in millimetres unless otherwise shown.

| MINISTRY OF TRANSPORTATION ONTARIO DRAWING | May 2019 | Rev | 0 |
|---|---|---|---|
| GUIDE RAIL SYSTEM, STEEL BARRIER ZONEGUARD, MINIMUM DEFLECTION INSTALLATION | | | |
| | MTOD – 911.551 | | |