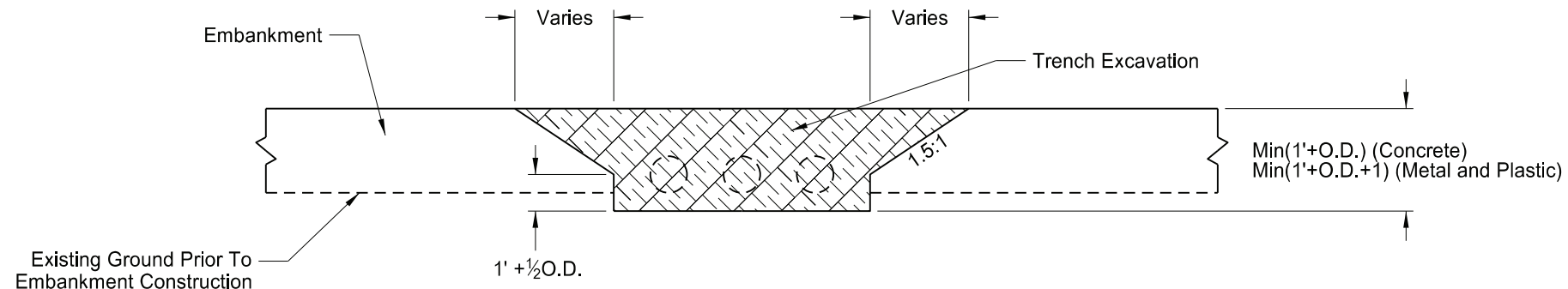
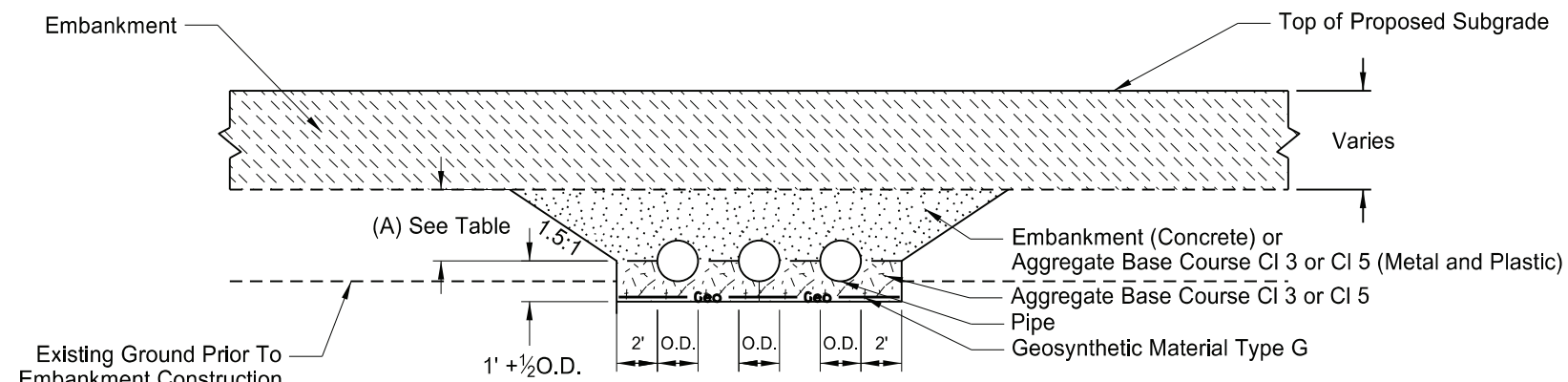


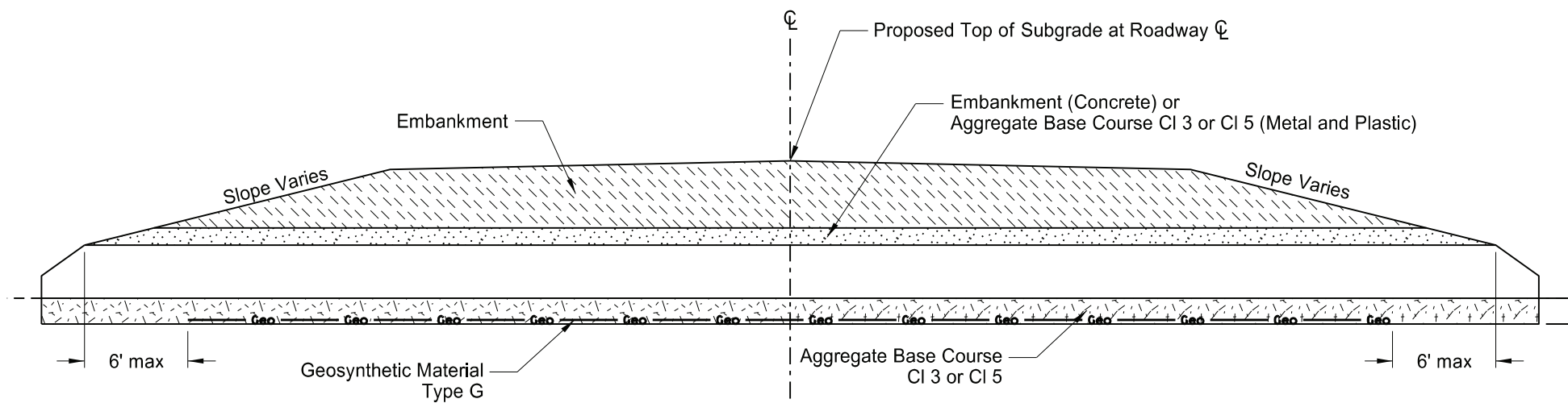
TRANSVERSE MAINLINE PIPE INSTALLATION DETAIL FOR MULTIPLE PIPES INSTALLED IN NEW EMBANKMENT AREAS



EXCAVATION DETAIL



INSTALLATION DETAIL



CROSS SECTION

Pay Items

- 1) Pipe\*
- 2) Geosynthetic Material Type G

\*Included in Pipe Pay Item

- 1) Pipe
- 2) Trench excavation
- 3) Aggregate base course CI 3 or CI 5
- 4) Embankment

NOTES:

- 1) This drawing applies to new/extended mainline and paved intersection roadway pipes only (including ramps). It does not include pipes in approaches
- 2) The exact location of the pipes will be shown in the plans.
- 3) Embankment may be either Borrow Excavation or Common Excavation - Type A

Backfill Dimensions	
Pipe Materials	Dimension (A)
Concrete	0.5 O.D.
Metal and Plastic	0.5 O.D. + 1 Foot

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
2-4-14	
REVISIONS	
DATE	CHANGE
1-21-15	Nomenclature
12-10-15	Added Plastic Pipe
5-27-20	Replaced R1 Fabric with Geogrid Changed bedding depth

