STANDARD DRAWINGS, DETAILS & CELLS LIST

(For 2024 Standard Specifications - Revised 1/13/2025)

When recommending the *Geotechnical Standard Details* listed below for Preconstruction managed projects (not Division managed projects), do not include these standard details with the geotechnical recommendations. Instead, use the Page Numbers & Standards Requests Database to request the recommended *Geotechnical Standard Details* and do not store electronic copies of the standard details with the project files. *Roadway Standard Drawings and Details* that were developed by the Geotechnical Engineering Unit are also listed below for reference.

Geotechnical Standard Details and Cells are available from the cell library, "Geotechnical_Design_24StdSpecs_English.cel" accessible through the geotechnical workspace. PDFs of current standard details and cells are also available from the Geotechnical website at connect.ncdot.gov/resources/Geological/Pages/Geotech_Forms_Details.aspx or the S drive under Shared\NCDOT Standards\Provisions, Notes, Details & Cells (2024 Std Specs)\.

Geotechnical Standard Details

Detail No.	Effective Let Date	Detail Title	# of Sheets
453.01	2/18/25	Standard CIP Gravity Retaining Wall	1
454.01	2/18/25	Standard Segmental Gravity Retaining Wall	1
454.02	2/18/25	Standard Segmental Gravity Retaining Wall with Freeze-Thaw Durable SRW Units	1
817.01	2/18/25	Standard Horizontal Drain	1
1801.01	2/18/25	Standard Temporary Shoring	1
1801.02	2/18/25	Standard Temporary Wall	3
1802.01	2/18/25	Standard Reinforced Soil Slope (RSS) with High Groundwater	2
1802.02	2/18/25	Standard Reinforced Soil Slope (RSS) with Low Groundwater	2

Geotechnical Standard Cells

Effective Let Date	Cell Name	Cell Description
N/A	Border_PEFBox	Private Engineering Firm box for geotechnical detail
N/A	Border_PESeal	PE Seal for geotechnical detail
N/A	Border_Rdwy_DgnDetail	Roadway border for geotechnical design detail
N/A	Border_Rdwy_StdDetail	Roadway border for geotechnical standard detail
N/A	Border_StdCell	Border for geotechnical standard cell
N/A	Border_Strc_DgnDetail	Structure border for geotechnical design detail
N/A	Border_Strc_StdDetail	Structure border for geotechnical standard detail
2/18/25	Roadway_HorizDrain_Std	Standard Horizontal Drain Detail (No. 817.01)

STANDARD DRAWINGS, DETAILS & CELLS LIST

Geotechnical Standard Cells (continued)

Effective Let Date	Cell Name	Cell Description
2/18/25	Roadway_RSS_HighGW_Std	Standard RSS with high groundwater detail (No. 1802.01)
2/18/25	Roadway_RSS_LowGW_Std	Standard RSS with low groundwater detail (No. 1802.02)
2/18/25	Roadway_TempShoring_Std	Standard temporary shoring detail (No. 1801.01)
2/18/25	Roadway_TempWall_Std	Standard temporary wall detail (No. 1801.02)
2/18/25	Wall_Anchored_Typical	Anchored wall with or without back slope – typical
2/18/25	Wall_Anchored_Notes_ReinforcedWeb	Anchored wall – notes & reinforced web details
2/18/25	Wall_Barrier_MomentSlab	Concrete barrier rail with moment slab for precast panels, concrete facing and SRW units
2/18/25	Wall_CIPGravity_Std	Standard CIP gravity wall detail (No. 453.01)
2/18/25	Wall_Ditch_Slope	Concrete ditch behind wall with back slope for concrete facing and coping
2/18/25	Wall_Ditch_SlopeProtection	Concrete ditch behind wall with concrete slope protection for concrete facing and coping
2/18/25	Wall_MSE_Notes_Panels_LevelingPad	MSE wall – notes & precast panels leveling pad step detail
2/18/25	Wall_MSE_Panels_Abutment_HPiles	MSE abutment wall with panels and H-piles – typical & coping details
2/18/25	Wall_MSE_Panels_Abutment_HPiles_Sleeves	MSE abutment wall with panels, H-piles and pile sleeves – typical & coping details
2/18/25	Wall_MSE_Panels_Barrier	MSE wall with panels and barrier – typical
2/18/25	Wall_MSE_Panels_Guardrail	MSE wall with panels and guardrail – typical & coping details
2/18/25	Wall_MSE_Panels_Slope	MSE wall with panels and back slope – typical & coping details
2/18/25	Wall_MSE_SRWUnits_Abutment_HPiles	MSE abutment wall with SRW units and H-piles – typical, coping & cap connection details
2/18/25	Wall_MSE_SRWUnits_Abutment_HPiles_Sleeves	MSE abutment wall with SRW units, H-piles and pile sleeves – typical, coping & cap connection details
2/18/25	Wall_MSE_SRWUnits_Barrier	MSE wall with SRW units and barrier – typical
2/18/25	Wall_MSE_SRWUnits_Guardrail	MSE wall with SRW units and guardrail – typical & coping details
2/18/25	Wall_MSE_SRWUnits_LevelingPad_Obstructions	MSE wall with SRW units – leveling pad step & obstruction details
2/18/25	Wall_MSE_SRWUnits_Slope	MSE wall with SRW units and back slope – typical & coping details
2/18/25	Wall_PrecastGravity_noSlope	Precast gravity wall without back slope – typicals, notes & footing step detail
2/18/25	Wall_PrecastGravity_Slope	Precacst gravity wall with back slope – typical, notes & footing step detail

STANDARD DRAWINGS, DETAILS & CELLS LIST

Geotechnical Standard Cells (continued)

Effective Let Date	Cell Name	Cell Description
2/18/25	Wall_QtyTables	Estimated wall quantity tables with instructions
2/18/25	Wall_SegmentalGravity_Freeze-Thaw_Std	Standard segmental gravity wall with freeze-thaw durable SRW units detail (No. 454.02)
2/18/25	Wall_SegmentalGravity_noSlope	Segmental gravity wall without back slope – typicals & notes
2/18/25	Wall_SegmentalGravity_Slope	Segmental gravity wall with back slope – typicals & notes
2/18/25	Wall_SegmentalGravity_Std	Standard segmental gravity wall detail (No. 454.01)
2/18/25	Wall_SoilNail_Typical_Notes	Soil nail wall with or without back slope – typical & notes
2/18/25	Wall_SoldierPile_Typicals_Notes	Soldier pile wall with or without back slope – typicals & notes

Roadway Standard/Detail Drawings

Dwg/Dtl No.	Type	Dwg/Dtl Title	# of Sheets
235.01	Std Dwg	Embankment Monitoring	1
275.01	Std Dwg	Rock Plating	1
423.01	Std Dwg	Bridge Approach Fills Type I – Approach Fill for Bridge Abutment	2
423.02	Std Dwg	Bridge Approach Fills Type IA – Alternate Approach Fill for Integral Abutment	3
423.03	Std Dwg	Bridge Approach Fills Type II – Approach Fill for Bridge Abutment with MSE Wall	2
423.04	Std Dwg	Bridge Approach Fills Type IIA – Alternate Approach Fill for Integral Bridge Abutment with MSE Wall	3