SHEET NUMBER

2A-1 THRU 2A-7

2B-1 THRU 2B-3

2B-4 THRU 2B-6

2C-1 THRU 2C-2

2C-4 THRU 2C-5

2C-6 THRU 2C-9

3D-1 THRU 3D-4

1 B

2C-3

2C-10

2C-11

2C-12

2D-1

2G-1

3B-1

3P-1

4A THRU 8

9 THRU 18

TMP-1 THRU TMP-24

PMP-1 THRU PMP-11

E-1 THRU E-3

EC-1 THRU EC-13

SGN-1 THRU SGN-26

SIG-1 THRU SIG-12

UC-1 THRU UC-15

UO-1 THRU UO-6

X-2 THRU X-58

S1-1 THRU S1-21

S2-1 THRU S2-72

X-1

X-1A

SHEET

CONVENTIONAL SYMBOLS

TYPICAL SECTION SHEETS

INTERSECTION DETAIL SHEETS

ROW CALLOUT DETAIL SHEETS

CONCRETE SIDEWALK DETAIL

GUARDRAIL PLACEMENT DETAILS

STRUCTURE ANCHOR UNITS DETAIL

GUARDRAIL INSTALLATION DETAIL

EARTHWORK & GUARDRAIL SUMMARY SHEET

TRANSPORTATION MANAGEMENT PLANS

CURB RAMP DETAILS

DRAINAGE DETAILS

DRAINAGE SUMMARIES

GEOTECHNICAL SUMMARY

PAVEMENT MARKING PLANS

EROSION CONTROL PLANS

UTILITY CONSTRUCTION PLANS

CROSS SECTION EARTHWORK VOLUME SHEET

UTILITY BY OTHERS PLANS

CROSS SECTION INDEX

CROSS SECTION SHEETS

STRUCTURES PLANS (BRIDGE 29)

STRUCTURES PLANS (BRIDGE 340)

PARCEL INDEX SHEET

PLAN SHEETS

PROFILE SHEETS

LIGHTING PLANS

SIGNING PLANS

SIGNAL PLANS

GEOTECHNICAL DETAILS

METHOD OF PIPE INSTALLATION DETAILS

TITLE SHEET

PROJECT REFERENCE NO. SHEET NO.

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED** 

1-5880

LIST OF STANDARDS

REV.

EFF. 01-16-2024

ENGINEER Signed I 046062 6/11/2025

ROADWAY DESIGN

2024 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Contracts Standards and Development Unit - N. C. Department of Transportation - Raleigh, N. C., Dated January 16, 2024 are applicable to this project and by reference hereby are considered a part of these plans:

DIVISION 2 - EARTHWORK

200.03 Method of Clearing - Method III 225.01 Guide for Grading Subgrade - Interstate and Freeway

225.02 Guide for Grading Subgrade - Secondary and Local

225.03 Deceleration and Acceleration Lanes

225.04 Method of Obtaining Superelevation - Two Lane Pavement

225.09 Guide for Shoulder and Ditch Transition at Grade Separations 275.01 Rock Plating

DIVISION 3 - PIPE CULVERTS

310.10 Driveway Pipe Construction

DIVISION 4 - MAJOR STRUCTURES

423.01 Bridge Approach Fills - Type I Approach Fill for Bridge Abutment

423.02 Bridge Approach Fills - Type IA Alternate Approach Fill for Integral Bridge Abutment

DIVISION 5 - SUBGRADE, BASES AND SHOULDERS

560.01 Method of Shoulder Construction - High Side of Superelevated Curve - Method I 560.02 Method of Shoulder Construction - High Side of Superelevated Curve - Method II

DIVISION 6 - ASPHALT BASES AND PAVEMENTS

654.01 Pavement Repairs

665.01 Asphalt Shoulders - Milled Rumble Strips

665.02 Limits for Asphalt Shoulders - Milled Rumble Strips

DIVISION 7 - CONCRETE PAVEMENTS AND SHOULDERS

700.01 Concrete Pavement Joints- Construction and Contraction Joints

700.02 Expansion Joint Layout- for Rigid Doweled Pavement at Bridges 700.03 DowelAssembly

700.04 Concrete Pavement Header Board

700.05 Tying Proposed Pavement to Existing Pavement

710.01 Concrete Pavement- Station Marking

720.01 Concrete Shoulder - Stamped or Rolled Rumble Strips, Milled Rumble Strips

720.02 Limits of Concrete Shoulder Rumble Strips

DIVISION 8 - INCIDENTALS

806.01 Concrete Right-of-Way Marker 806.02 Granite Right-of-Way Marker

815.02 Subsurface Drain

816.01 Concrete Pad for Shoulder Drain Installation

816.02 Aggregate Shoulder Drain

816.04 Markers for Drainage Structure and Concrete Pad

840.00 Concrete Base Pad for Drainage Structures

840.01 Brick Catch Basin- 12" Thru 54" Pipe

840.02 Concrete Catch Basin- 12" Thru 54" Pipe

840.03 Frame, Grates and Hood- For Use on Standard Catch Basin 840.04 Concrete Open Throat Catch Basin 12" Thru 48" Pipe

840.05 Brick Open Throat Catch Basin 12" Thru 48" Pipe 840.17 Concrete Grated Drop Inlet Type 'A' - 12" thru 72" Pipe

840.18 Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe

840.20 Frames and Wide Slot Flat Grates

840.22 Frames and Wide Slot Sag Grates

840.25 Anchorage for Frames - Brick or Concrete or Precast 840.26 Brick Grated Drop Inlet Type 'A' - 12" thru 72" Pipe

840.27 Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe

840.29 Frames and Narrow Slot Flat Grates

840.31 Concrete Junction Box- 12" Thru 66" Pipe

840.32 Brick Junction Box- 12" Thru 66" Pipe

840.34 Traffic Bearing Junction Box- For Use With Pipes 42" and Under

840.35 Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates

840.36 Traffic Bearing Grated Drop Inlet- For Steel(840.37) Double Frame and Grate 840.37 Steel Grate and Frame

840.45 Precast Drainage Structure

840.46 Traffic Bearing Precast Drainage Structure 840.54 Manhole Frame and Cover

840.66 Drainage Structure Steps

840.71 Concrete and Brick Pipe Plug

840.72 Pipe Collar 846.01 Concrete Curb, Gutter and Curb & Gutter

846.04 Drop Inlet Installation in Shoulder Berm Gutter

848.02 Driveway Turnout - Radius Type

848.04 Street Turnout

848.06 Curb Ramp (Use Details in Lieu of Standards for Sheets 9 and 10 of 13)

850.01 Concrete Paved Ditches

852.01 Concrete Islands 852.06 Method for Placement of Drop Inlet in Concrete Island

857.01 Precast Reinforced Concrete Barrier- 41" Single Faced

862.01 Guardrail Placement (Use Details in Lieu of Standards for Sheets 4, 6, 12, and 14 of 15)

862.02 GuardrailInstallation (Use Detailin Lieu of Standards for Sheet 5 of 9)

862.03 Structure Anchor Units (Use Details in Lieu of Standards for Sheet 8 of 9)

862.04 Anchoring End of Guardrail- for B-77 and B-83 Anchor Units

866.01 Chain Link Fence- 4', 5' and 6' High Fence 876.01 Riprap in Channels and Ditches

876.02 Guide for Riprap at Pipe Outlets

876.04 Drainage Ditches with Class B Riprap

INDEX OF SHEETS

INDEX OF SHEETS, GENERAL NOTES, STANDARD DRAWINGS

DETAIL TO CONVERT EXISTING DI, CB, OTCB OR GI TO JB

2024 SPECIFICATIONS EFFECTIVE: 01-16-2024

GENERAL NOTES

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTERLINE PROFILE OF SURVEY ON WHICH THE PROPOSED SURFACING WILL BE PLACED, GRADE LINES MAY BE ADJUSTED BY THE ENGINEER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL

SHOULDER CONSTRUCTION:

METHOD III.

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01 AND 560.02.

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS

SUBSURFACE DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD, NO. 815.02 AT LOCATIONS

SUBSURFACE DRAINS:

AS DIRECTED BY THE ENGINEER SHOULDER DRAINS:

SHOULDER DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD, NO, 816,02 AND DETAILS AS SHOWN IN PLANS AT LOCATIONS AS DIRECTED BY THE ENGINEER

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

STREET TURNOUT:

STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADII AS SHOWN ON PLANS.

GUARDRAIL:

THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC NOT SHOWN ON THE PLANS

TEMPORARY SHORING:

WILL BE PAID FOR AT THE CONTRACT PRICE FOR "TEMPORARY SHORING".

END BENTS:

THE ENGINEER SHALL CHECK THE STRUCTURE END BENT PLANS, DETAILS, AND CROSS-SECTION PRIOR TO SETTING OF THE SLOPE STAKES FOR THE EMBANKMENT OR EXCAVATION APPROACHING A BRIDGE.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE DUKE ENERGY (POWER), PIEDMONT NATURAL GAS (POWER), AT&T (TELEPHONE), SPECTRUM (CATV), AND THE CITY OF WINSTON—SALEM (WATER & SEWER) ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY CONTRACT.

CURB RAMPS

CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD 848.06.