**GENERAL NOTES:** 

2024 SPECIFICATIONS

**EFFECTIVE**: 01–16–24

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 CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

#### **CLEARING:**

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

## 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 SECTIONS.

#### SHOULDER CONSTRUCTION:

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

#### 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 INVOLVED.

### **SUBSURFACE DRAINS:**

SUBSURFACE DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.02 AT LOCATIONS DIRECTED BY THE ENGINEER.

## **DRIVEWAYS:**

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 3 FOOT RADII OR RADII AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

# STREET TURNOUT:

STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADII NOTED 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.

# TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC NOT SHOWN ON THE PLANS 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 AT&T, DUKE ENERGY, CHARTER, PNG, WINDSTREAM COMMUNICATION AND WINSTON SALEM/FORSYTH COUNTY UTILITIES COMMISSION (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.

# LIST OF ROADWAY STANDARD DRAWINGS

EFF. 01-16-2024

2024 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch – 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:

TITLE STD.NO.

DIVISION 2 – EARTHWORK

Method of Clearing – Method III 200.03

Guide for Grading Subgrade - Secondary and Local Method of Obtaining Superelevation – Two Lane Pavement

225.06 Method of Grading Sight Distance at Intersections

275.01 Rock Plating

DIVISION 3 – PIPE CULVERTS

**Driveway Pipe Construction** 

DIVISION 4 – SUBGRADE, BASES AND SHOULDERS

Bridge Approach Fills – Type 2 Approach Fill for Bridge Abutment with MSE Wall Bridge Approach Fills – Type 2A Approach Fill for Intergral Bridge Abutment with MSE Wall

DIVISION 5 – SUBGRADE, BASES AND SHOULDERS

Method of Shoulder Construction – High Side of Superelevated Curve – Method I

DIVISION 6 – ASPHALT BASES AND PAVEMENTS

Guide for Paving Shoulders Under Bridges – Method IV 610.04

654.01 Pavement Repairs

DIVISION 8 – INCIDENTALS

Concrete Right-of-Way Marker

Granite Right-of-Way Marker 806.02

Subsurface Drain 815.02

Concrete Endwall for Single and Double Pipe Culverts – 15" thru 48" Pipe 90 Skew

Brick Endwall for Single and Double Pipe Culverts – 15" thru 48" Pipe 90 Skew

Concrete Base Pad for Drainage Structures 840.00 Brick Catch Basin - 12" thru 54" Pipe 840.01

Concrete Catch Basin – 12" thru 54" Pipe 840.02

840.03 Frame, Grates and Hood – for Use on Standard Catch Basin

Concrete Drop Inlet – 12" thru 30" Pipe 840.14

840.15 Brick Drop Inlet – 12" thru 30" Pipe

Drop Inlet Frame and Grates – for use with Std. Dwg 840.14 and 840.15

840.17 Concrete Grated Drop Inlet Type 'A' – 12" thru 72" Pipe

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

Frames and Narrow Slot Sag Grates 840.24

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

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

Concrete Junction Box – 12" thru 66" Pipe 840.31

Brick Junction Box – 12" thru 66" Pipe

Traffic Bearing Junction Box – for Use with Pipes 42" and Under

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

840.37 Steel Grate and Frame

840.45 **Precast Drainage Structure** 

840.46 Traffic Bearing Precast Drainage Structure

Manhole Frame and Cover

840.66 **Drainage Structure Steps** 

840.71 Concrete and Brick Pipe Plug

846.01 Concrete Curb, Gutter and Curb & Gutter

846.04 Drop Inlet Installation in Shoulder Berm Gutter

848.02 Driveway Turnout – Radius Type

Street Turnout 848.04

852.01 Concrete Islands

852.06 Method for Placement of Drop Inlets in Concrete Islands

Median Construction – with Curb and Gutter

Precast Reinforced Concrete Barrier – 41" Single Faced 857.01 **Guardrail Placement** 862.01

862.02 Guardrail Installation

862.03 Structure Anchor Units

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

Rip Rap in Channels and Ditches

876.02 Guide for Rip Rap at Pipe Outlets 876.04

Drainage Ditches with Class 'B' Rip Rap

U-5899	/A
ROADWAY DESIGN ENGINEER	
SEAL Signed by: 21102  James Monthly Location  O2-Apr MOTHY  MOTH MACDONALD 18 E, LLC LICENSE NO. F-0669	
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PROJECT REFERENCE NO.

	INDEX OF SHEETS	
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1A	INDEX OF SHEETS, GENERAL NOTES AND LIST OF STANDARD DRAWINGS	
1B	CONVENTIONAL SYMBOLS	
2A-1 THRU 2A-3	PAVEMENT SCHEDULE AND TYPICAL SECTIONS	
2B-1 THRU 2B-2	INTERSECTION DETAILS	
2B-3	DRIVEWAY ALIGNMENT DETAIL	
2B-4	SHEARPOINT DIAGRAM	
2B-5	STRUCTURE /RETAINING WALL DETAIL	
2C-1 THRU 2C-2	METHOD OF PIPE INSTALLATION DETAILS	
2C-3	MEDIAN CURB FOR TBDI (FOR USE WITH 2'-9" CURB & GUTTER)	
2C-4 THRU 2C-6	GUARDRAIL PLACEMENT DETAILS	
2C-7	DETAIL OF SHOULDER BERM GUTTER TO 2'-6" CURB GUTTER TRANSITION SECTION	
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2C-9	DETAIL OF TEMPORAY STEEL PLATE COVERS FOR MASONRY DRAINAGE STRUCTURES	
2D-1	DRAINAGE DETAILS	
3B–1	EARTHWORK, GUARDRAIL, SHOULDER BERM GUTTER AND PAVEMENT REMOVAL & BREAKING SUMMARIES	
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UTILITIES BY OTHERS PLANS

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CROSS SECTION INDEX

**CROSS-SECTIONS** 

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STRUCTURE NOTES

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X-1A

SN