# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

ENGINEERS & CONSULTANTS
PO BOX 33127
RALEIGH, N.C. 27636
(919) 851-1912
(919) 851-1918 (FAX)
WWW.MULKEYING.COM

SUNGATE DESIGN GROUP

METRIC

PROJECT REFERENCE NO. SHEET NO.

B-2583 | I-A

HIGHWAY DESIGN
ENGINEER ENGINEER

# INDEX OF SHEETS, GENERAL NOTES, & LIST OF STANDARDS

Description Sheet # Title Sheet Index of Sheets, General Notes, List of Standards 1-A Conventional Symbols 1-B Survey Control Sheet 1-C thru 1-D Pavement Schedule, Wedging Detail, & Typical Section Typical Section Rienforced Bridge Approach Fills 2-B thru 2-C Driveway Turnout – Drop Curb Type Wheelchair Ramp 2-E thru 2-F Guardrail Installation 2-G thru 2-J Guardrail Anchor Unit Type III, Shop Curved 2-K Guardrail Anchor Unit Type III, Shop Curved Pipe Grout Detail Detail for Concrete Bridge Approach Drop Inlet Sidewalk and Wheelchair Access Across Railroad Detail Temporary Guardrail 'Nested' on Bridgerail Summary of Quantities R/W Data Sheet List of Pipe, Endwalls, Etc. (For Pipe 1200mm & Under), and Guardrail Summary Summary of Earthwork in Cubic Yards Plan and Profile Sheet 4 thru 5 Traffic Control Plans TCP-1 thru TCP-9 Pavement Marking Plans PM-1 thru PM- 2 Erosion Control Plans EC-1 thru EC-4 Signal Plans SIG-1 thru SIG-11 UC-1 thru UC- 2 Utility Construction Plans Utilities By Others Plans EW-VOLUME-1 Cross Section Summary Sheet X-1 thru X-14 Cross-Sections S-1 thru S-112 Structure Plans

**GENERAL NOTES**:

2002 SPECIFICATIONS EFFECTIVE: 01-15-02

# 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  $\underline{\mathbf{II}}$ .

#### 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:

SHOULDER CONSTRUCTION ON HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH  ${\bf STD.\ NO.\ 560.01}$ .

#### 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

#### **UNDERDRAINS:**

UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.03 AT LOCATIONS DIRECTED BY THE ENGINEER.

# **DRIVEWAYS:**

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

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" OR "TEMPORARY SHORING-BARRIER SUPPORTED" DEPENDING UPON THE LOCATION OF THE SHORING.

# SUBSURFACE PLANS:

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

# 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:

Town of Marshall - water line

French Broad EMC - Power US Sprint - Telephone

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.

# WHEELCHAIR RAMPS:

WHEELCHAIR RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. THE CONSTRUCTION OF ALL WHEELCHAIR RAMPS SHALL BE IN ACCORDANCE WITH DETAILS IN PLANS.

#### EFF. 01-15-02

#### ROADWAY METRIC 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 15, 2002 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE	
		<b>DIVISION 2 - EARTHWORK</b>

200.02 Method of Clearing - Method II

225.02 Guide for Grading Subgrade - Secondary and Local

225.04 Method of Obtaining Superelevation - Two Lane Pavement

225.06 Method of Grading Sight Distance at Intersections

**DIVISION 3 - PIPE CULVERTS** 

300.01 Method of Pipe Installation - Method 'A'

DIVISION 5 - SUBGRADE, BASES AND SHOULDERS

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

DIVISION 6 - ASPHALT BASES AND PAVEMENTS

610.04 Asphalt Wearing Surface on Approach Slab

654.01 Pavement Repairs

#### **DIVISION 8 - INCIDENTALS**

806.01 Concrete Right-of-Way Marker

806.02 Granite Right-of-Way Marker815.03 Pipe Underdrain and Blind Drain

816.04 Markers for Drainage Structure and Concrete Pad

840.00 Concrete Base Pad for Drainage Structures

840.01 Brick Catch Basin - 300mm thru 1350mm Pipe

840.02 Concrete Catch Basin - 300mm thru 1350mm Pipe

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

840.14 Concrete Drop Inlet - 300mm thru 750mm Pipe

840.15 Brick Drop Inlet - 300mm thru 750mm Pipe

840.29 Frames and Narrow Slot Flat Grates

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

842.01 Concrete and Brick Retaining Walls - with No Surcharge

842.02 Concrete and Brick Retaining Walls - with Sloping Surcharge

846.01 Concrete Curb, Gutter and Curb & Gutter

848.01 Concrete Sidewalk

850.01 Concrete Paved Ditches

862.01 Guardrail Placement

876.01 Rip Rap in Channels

876.02 Guide for Rip Rap at Pipe Outlets

876.04 Drainage Ditches with Class 'B' Rip Rap

NOD"HO! - I DY-2007BY TO LAY (DANDDOY): L. MIL LILLING