2012 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, 2012 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

225.05 Method of Obtaining Superelevation - Divided Highways

225.09 Guide for Shoulder and Ditch Transition at Grade Separations

240.01 Guide for Berm Ditch Construction

DIVISION 3 - PIPE CULVERTS

300.01 Method of Pipe Installation

310.02 Parallel Pipe End Section - Precast Concrete Section for 15" to 24" Pipe

310.10 Driveway Pipe Construction

DIVISION 4 - MAJOR STRUCTURES 422.10 Reinforced Bridge Approach Fills

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

(Sheet 2 of 3 is no longer applicable)

DIVISION 6 - ASPHALT BASES AND PAVEMENTS 610.03 Guide for Paving Shoulders Under Bridges - Method III

DIVISION 8 - INCIDENTALS 815.02 Subsurface Drain 838.01 Concrete Endwall

Pavement Repairs

654.01

838.01 Concrete Endwall for Single and Double Pipe Culverts – 15" thru 48" Pipe 90 Skew 838.11 Brick Endwall for Single and Double Pipe Culverts – 15" thru 48" Pipe 90 Skew

Reinforced Concrete Endwall - for Single 60" Pipe 90 Skew
Reinforced Concrete Endwall - for Single 66" Pipe 90 Skew
Notes for Reinforced Concrete Endwall
Reinforced Brick Endwall - for Single 60" Pipe 90 Skew
Reinforced Brick Endwall - for Single 66" Pipe 90 Skew

Notes for Reinforced Brick Endwall – Std. Dwg 838.51 thru 838.70
Precast Endwalls – 12" thru 72" Pipe 90 Skew
Concrete Base Pad for Drainage Structures
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 840.14 Concrete Drop Inlet - 12" thru 30" Pipe

840.15 Brick Drop Inlet - 12" thru 30" Pipe 840.16 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

840.18 Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe 840.19 Concrete Grated Drop Inlet Type 'D' - 12" thru 36" Pipe

840.20 Frames and Wide Slot Flat Grates
840.22 Frames and Wide Slot Sag Grates
840.24 Frames and Narrow Slot Sag Grates

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

840.31 Concrete Junction Box - 12" thru 66" Pipe 840.32 Brick Junction Box - 12" thru 66" Pipe 840.34 Traffic Bearing Junction Box - 42" and Under Pipe 840.35 Traffic Bearing Grated Drop Inlet

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 846.01 Concrete Curb, Gutter and Curb & Gutter

846.02 Drop Inlet Installation in Expressway Gutter 846.04 Drop Inlet Installation in Shoulder Berm Gutter 850.01 Concrete Paved Ditches

850.10 Guide for Berm Drainage Outlet - 15" and 18" Pipe 850.11 Guide for Berm Drainage Outlet - 24" and 30" Pipe

852.01 Concrete Islands 852.04 Method for Placement of Drop Inlets in Grassed Median - Using 1'-6" Curb and Gutter 852.06 Method for Placement of Drop Inlets in Concrete Islands

852.10 Median Construction with Curb and Gutter 854.02 Double Faced Concrete Barrier - Types 'T', 'T1' and 'T2'

854.05 Concrete Median Transition Barrier 857.01 Precast Reinforced Concrete Barrier - 41" Single Faced 862.01 Guardrail Placement

862.02 Guardrail Installation 862.04 Anchoring End of Guardra

862.04 Anchoring End of Guardrail - B-77 and B-83 Anchor Units 866.02 Woven Wire Fence - with Wood Post

866.03 Woven Wire Fence - with Steel Post 866.04 Barbed Wire Fence with Wood Posts (2 - 7 Strands)

876.01 Rip Rap in Channels 876.02 Guide for Rip Rap at Pipe Outlets 876.04 Drainage Ditches with Class 'B' Rip Rap GENERAL NOTES:

2012 SPECIFICATIONS
EFFECTIVE: 01-17-2012
REVISED: 07-30-2012

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 and STD. NO. 225.05

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. 560.01 AND STD. 560.02

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.

BERM DITCHES:

BERM DITCHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 240.01

AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

SUBSURFACE DRAINS:

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

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".

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

BLUE RIDGE ELECTRIC MEMBERSHIP CORP., AT&T,

SKYLINE MEMBERSHIP CORP., AND FRONTIER NATURAL GAS.

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 OTHERS.

ROCK:

ROCK IS ANTICIPATED BETWEEN 24+50, 32+00 TO 34+00, 58+00 TO 60+00, 96+00 TO 98+50, 113+00 TO 114+50, AND 135+00 TO 151+50. BLASTING MAY BE REQUIRED FOR EXCAVATION ON THE PROJECT. SEE SECTION 220 OF THE STANDARD SPECIFICATIONS AND IF APPLICABLE, ROCK BLASTING PROVISION.

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SHEET NO.

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ROADWAY DESIGN ENGINEER

PROJECT REFERENCE NO.

R-2915A

TITLE SHEET INDEX OF SHEETS, GENERAL NOTES, AND L STANDARD DRAWINGS CONVENTIONAL PLAN SHEET SYMBOLS 1C-1 thru 1C-5 SURVEY CONTROL SHEETS 2A-1 thru 2A-3 PAVEMENT SCHEDULE, TYPICAL SECTIONS, WEDGING DETAILS 2B-1 thru 2B-2 INTERSECTION DETAILS 2'-9" CONCRETE CURB & GUTTER 2C-1 DETAIL OF 2'-9" TO FRAME AND GRATE 2C-2 2C-3 DETAIL OF SHOULDER BERM GUTTER TO 2'-6" C&G TRANSITION SECTION 2C-4 STRUCTURE ANCHOR UNIT TYPE B-77 EXTRA DEPTH JUNCTION BOX 48" RCP-III 2C-5 MEDIAN HAZARD PROTECTION AND BARRIER TRANSITION 2C-6 CONCRETE MEDIAN DROP INLET TYPE 'A' EXTRA DEPTH 2C-7 OVER 12' TO 21' COAL COMBUSTION PRODUCT DETAIL 2C-8 2D-1 thru 2D-3 DRAINAGE DETAILS 2G-1 STANDARD TEMPORARY SHORING DETAIL 2G-2 thru 2G-4 STANDARD TEMPORARY WALL DETAILS DETAIL OF TEMPORARY CONTAINMENT OF CONTAMINATED SOIL 2H-1 GUARDRAIL SUMMARY 3B-2 PAVEMENT REMOVAL SUMMARY, SHOULDER BERM GUTTER SUMMARY, EXPRESSWAY GUTTER SUMMARY, WOVEN WIRE FABRIC AND BARBED WIRE FENCE SUMMARIES SUMMARY OF EARTHWORK 3D-1 thru 3D-11 LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER) LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 54 INCHES & OVER) 3D-12 3G-1 SUMMARY OF SUBSURFACE DRAINAGE, SUMMARY OF GEOTEXTILE FOR PAVEMENT STABILIZATION, AND SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION PARCEL INDEX SHEET 4 thru 18 PLAN SHEETS 19 thru 43 PROFILE SHEETS TMP-1 thru TMP-92 TRAFFIC MANAGEMENT PLANS PMP-1 thru PMP-17 PAVEMENT MARKING PLANS EC-1 thru EC-33 EROSION CONTROL PLANS REFORESTATION PLANS SIGN-1 thru SIGN-20 SIGNING PLANS SIG-1 thru SIG-5.3 SIGNAL PLANS UC-1 thru UC-23 UTILITY CONSTRUCTION PLANS UO-1 thru UO-14 UTILITIES BY OTHERS PLANS CROSS-SECTION SUMMARY SHEET X-1A thru X-1D X-1 thru X-277 CROSS SECTIONS W-1 thru W-WALL PLANS CULVERT PLANS C-1 thru C-20 S-1 thru S-31 STRUCTURE PLANS

SHEET NUMBER

SHEET