PROJECT REFERENCE NO.	SHEET NO.
R−5749	/-A

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ROADWAY DESIGN
ENGINEER

LINE H CARO

1/15/2018 SEAL

035683

Doctor House

David J. Clarky

CDM 5400 Glenwood Av Smith Raleigh, NC 27612 Raleigh, NC 27612

#### INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1 <b>-</b> A	INDEX OF SHEETS. GENERAL NOTES. AND STANDARD DRAWINGS
1 -B	CONVENTIONAL SYMBOLS
1C-1	SURVEY CONTROL SHEET
2A-1 THRU 2A-5	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B-1 THRU 2B-4	ROADWAY DETAILS
2D-1	DRAINAGE DETAILS
3B-1 THRU 3B-2	ROADWAY SUMMARIES
3D-1 THRU 3D-3	DRAINAGE SUMMARIES
3G-1	GEOTECHNICAL SUMMARIES
4 THRU 16	PLAN AND PROFILE SHEETS
TMP-1 THRU TMP-21	TRANSPORTATION MANAGEMENT PLANS
PMP-1 THRU PMP-8	PAVEMENT MARKING PLANS
EC-1 THRU EC-17	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-12	SIGNING PLANS
UO-1 THRU UO-3	UTILITY BY OTHERS
X-1 THRU X-85	CROSS SECTIONS
S-1 THRU S-26	BRIDGE PLANS
C-1	CULVERT MODIFICATION PLANS

GENERAL NOTES:

2018 SPECIFICATIONS

EFFECTIVE: 01-16-2018

REVISED:

### 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. 560.02

### 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 INVOLVED.

## SUBSURFACE DRAINS:

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

## UNDERDRAINS:

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

## 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 WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

# 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 BRUNSWICK EMC.
CENTURYLINK. CHARTER COMMUNICATIONS AND DUKE ENERGY PROGRESS.
ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

#### 2018 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, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

EFF. 01-16-2018

STD.NO. TITLE	
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	
DIVISION 3 - PIPE CULVERTS 300.01 Method of Pipe Installation	
310.10 Driveway Pipe Construction	
DIVISION 4 - MAJOR STRUCTURES	
422.03 Reinforced Bridge Approach Fills - Type A Alternate Approach Fill for Integral Abu	itment
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	
610.03 Guide for Paving Shoulders Under Bridges - Method III	
654.01 Pavement Repairs	
665.01 Asphalt Shoulders – Milled Rumble Strips	
DIVISION 8 - INCIDENTALS	
815.02 Subsurface Drain	
815.03 Pipe Underdrain and Blind Drain	
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	
838.21 Reinforced Concrete Endwall - for Single 54" Pipe 90 Skew	
838.22 Reinforced Concrete Endwall – for Double and Triple 54" Pipes 90 Skew	
838.27 Reinforced Concrete Endwall - for Single 60" Pipe 90 Skew	
838.39 Reinforced Concrete Endwall – for Single 72" Pipe 90 Skew 838.45 Notes for Reinforced Concrete Endwall – Std. Dwg 838.21 thru 838.40	
838.51 Reinforced Brick Endwall - for Single 54" Pipe 90 Skew	
838.52 Reinforced Brick Endwall - for Double and Triple 54" Pipes 90 Skew	
838.57 Reinforced Brick Endwall - for Single 60" Pipe 90 Skew	
838.69 Reinforced Brick Endwall - for Single 72" Pipe 90 Skew	
838.75 Notes for Reinforced Brick Endwall - Std. Dwg 838.51 thru 838.70	
838.80 Precast Endwalls - 12" thru 72" Pipe 90 Skew	
840.00 Concrete Base Pad for Drainage Structures	
840.18 Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe	
840.19 Concrete Grated Drop Inlet Type 'D' - 12" thru 36" Pipe	
840.22 Frames and Wide Slot Sag Grates	
840.27 Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe	
840.28 Brick Grated Drop Inlet Type 'D' - 12" thru 36" Pipe	
840.29 Frames and Narrow Slot Flat Grates	
840.35 Traffic Bearing Grated Drop Inlet – for Cast Iron Double Frame and Grates	
840.45 Precast Drainage Structure	
840.46 Traffic Bearing Precast Drainage Structure	
840.66 Drainage Structure Steps 840.72 Pipe Collar	
846.01 Concrete Curb, Gutter and Curb & Gutter	
846.04 Drop Inlet Installation in Shoulder Berm Gutter	
852.01 Concrete Islands	
862.01 Guardrail Placement	
862.02 Guardrail Installation	
862.03 Structure Anchor Units	
862.04 Anchoring End of Guardrail - B-77 and B-83 Anchor Units	
866.02 Woven Wire Fence - with Wood Post	
876.01 Rip Rap in Channels	
876.02 Guide for Rip Rap at Pipe Outlets	