SHEET NUMBER	SHEET
1	TITLE SHEET
1 A 1 B	INDEX OF SHEETS, GENERAL NOTES AND LIST OF STANDARDS CONVENTIONAL SYMBOLS
PART 1 R-2707D	
1	TITLE SHEET
2A-1 THRU 2A-11	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B-1	DETOUR SHEET
2B-2 2B-3	SHEAR POINT DIAGRAM INTERSECTION DETAIL
2C-1	DETAIL OF TEMPORARY STEEL COVER OVER DRAINAGE STRUCTURE
2C-2	DETAIL OF CONVERT EXISTING DI, CB, OTCB OR GI TO JUNCTION BOX
2C-3	DETAIL OF GUARDRAIL IMPACT ATTENUATOR
2C-4	DETAIL OF W BEAM RAIL SECTION
2C-5	DETAIL OF TEMPORARY ANCHOR UNIT CONNECTING TUBULAR BEAM GUARDRAIL TO POP
2C-6	CONCRETE BARRIER
20-1 THRU 20-7	DETAIL OF CONCRETE GRATED DROP INLET TYPE 'A' MINIMUM DEPTH DRAINAGE DETAILS
2G-1 THRU 2G-4	GEOTECHNICAL DETAILS TEMPORARY SHORING
2G-5 THRU 2G-8	GEOTECHNICAL DETAILS STANDARD REINFORCED SOIL SLOPE
2N-1 THRU 2N-4	NOISE WALL ENVELOPE
3B-1 THRU 3B-4	ROADWAY SUMMARIES
3D-1 THRU 3D-15	
3G-1	GEOTECHNICAL SUMMARIES
3P-1 4 Thru 26	PARCEL INDEX SHEET PLAN SHEETS
27 THRU 54	PROFILE SHEETS
RW-01 THRU RW-26	SURVEY CONTROL, EXISTING CENTERLINES AND RIGHT OF WAY SHEETS
TMP-1 THRU TMP-51	TRANSPORTATION MANAGEMENT PLANS
PMP-1 THRU PMP -37	
EC-1 THRU EC-60	EROSION CONTROL PLANS
NS-1 THRU NS-31	
RF-1 THRU RF-6 SIGN-1 THRU SIGN-54	REFORESTATION PLANS SIGNING PLANS
UC-1 THRU UC-5	
UO-1 THRU UO-17	
Х-А	CROSS SECTION INDEX OF SHEETS
X-1A THRU X-1D	CROSS SECTION SUMMARY
X-1 THRU X-511	CROSS SECTIONS
S1-01 THRU S1-32	STRUCTURE PLANS SR 2067 ($-Y1-$) OVER US 74 ($-L-$)
S2-01 THRU S2-35 S3-01 THRU S3-36	STRUCTURE PLANS SR 2052 (-Y2-) OVER US 74 (-L-) STRUCTURE PLANS SR 2047 (-Y3-) OVER US 74 (-L-)
S3-01 THRU S3-36 S4-01 THRU S4-43	STRUCTURE PLANS SR 2047 ($-Y3-$) over US 74 ($-L-$) STRUCTURE PLANS RAMP A OVER US 74 ($-L-$)
S5-01 THRU S5-55	STRUCTURE PLANS US 74 WB (-L-) OVER BUFFALO CREEK
S6-01 THRU S6-55	STRUCTURE PLANS US 74 EB (-L-) OVER BUFFALO CREEK
S8-01 THRU S8-30	STRUCTURE PLANS US 74 WB (-L-) OVER SR 2128 (-SRVRD_5-)
S9-01 THRU S9-30	STRUCTURE PLANS US 74 EB (-L-) OVER SR 2128 (-SRVRD_5-)
C1-01 THRU C1-05	CULVERT PLANS US 74 $(-L-)$ STA. 717+13.00
C2-01 THRU C2-05 C3-01 THRU C3-05	CULVERT PLANS US 74 (-L-) STA. 743+18.00 CULVERT PLANS US 74 (-L-) STA. 796+86.00
W-1 THRU W-7	WALL PLANS US 74 (-L-) STA. 796+86.00
SW3A-1 THRU SW3A-4	
PART 2 R-2707E	
1	TITLE SHEET
2A-1 THRU 2A-7	
2B-1	SHEAR POINT DIAGRAM
2B-2 2C-1	INTERSECTION DETAILS DETAIL OF TEMPORARY 1" STEEL COVER OVER DRAINAGE STRUCTURE
20-2	DETAIL OF TEMPORARY I STEEL COVER OVER DRAINAGE STRUCTORE DETAIL OF CONCRETE GRATED DROP INLET TYPE 'A' MINIMUM DEPTH
20-3	DETAIL OF CONVERT EXISTING DI, CB, OTCB OR GI TO JUNCTION BOX
2C-4	DETAIL OF W BEAM RAIL SECTION
2D-1 THRU 2D-3	DRAINAGE DETAILS
2G-1	GEOTECHNICAL DETAILS TEMPORARY SHORING
2G-2 THRU 2G-3	GEOTECHNICAL DETAILS STANDARD REINFORCED SOIL SLOPE
2N-1	NOISE WALL ENVELOPE
3B-1 THRU 3B-3 3D-1 THRU 3D-9	ROADWAY SUMMARIES DRAINAGE SUMMARIES
3G-1	GEOTECHNICAL SUMMARIES
3P-1	PARCEL INDEX SHEET
4 THRU 15	PLAN SHEETS
16 THRU 46	PROFILE SHEETS
RW-01 THRU RW-15	
TMP-1 THRU TMP-41	
	PAVEMENT MARKING PLANS EROSION CONTROL PLANS
PMP-1 THRU PMP -16 EC-1 THRU EC-35	
PMP-1 THRU PMP -16 EC-1 THRU EC-35 SIGN-1 THRU SIGN-23	SIGNING PLANS
EC-1 THRU EC-35	
EC-1 THRU EC-35 SIGN-1 THRU SIGN-23	UTILITY CONSTRUCTION PLANS
EC-1 THRU EC-35 SIGN-1 THRU SIGN-23 UC-1 THRU UC-5	UTILITY CONSTRUCTION PLANS
EC-1 THRU EC-35 SIGN-1 THRU SIGN-23 UC-1 THRU UC-5 UO-1 THRU UO-13 X-A X-1A THRU X-1E	UTILITY CONSTRUCTION PLANS UTILITY BY OTHERS PLANS CROSS SECTION INDEX OF SHEETS CROSS SECTION SUMMARY
EC-1 THRU EC-35 SIGN-1 THRU SIGN-23 UC-1 THRU UC-5 UO-1 THRU UO-13 X-A	UTILITY CONSTRUCTION PLANS UTILITY BY OTHERS PLANS CROSS SECTION INDEX OF SHEETS CROSS SECTION SUMMARY CROSS SECTIONS

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 & STD. NO. 225.05 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.

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.

UNDERDRAINS:

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

SHOULDER DRAINS:

SHOULDER DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 816.02 AND DETAILS IN PLANS AT LOCATIONS 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 WATER/SEWER - CITY OF SHELBY, CITY OF KINGS MOUNTAIN, AND CLEVELAND COUNTY

POWER – DUKE ENERGY

TELECOMMUNICATIONS - AT&T, RST GLOBAL, SEGRA, CONTERRA, SPECTRUM

GAS – SHELBY 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 -SR7- 29+40 - 31+00. BLASTING MAY BE REQUIRED FOR EXCAVATION ON THE PROJECT. SEE SECTION 220 OF THE STANDARD SPECIFICATIONS AND IF APPLICABLE, ROCK BLASTING PROVISION.

EFF. 01-16-2018		project reference no. $R - 2707D/R - 2707E$	SHEET NO.
REV. 2018 ROADWAY ENGLISH STANDARD DRAWINGS			OADWAY DESIGN
The following Roadway Standards as appear in "Roadway Standard Drawings" Hi N. C. Department of Transportation - Raleigh, N. C., Dated January, 2018 are and by reference hereby are considered a part of these plans:		picus Matte	TH CAROLING CFESSION Bui Standon SED2000454480
STD.NO. TITLE DIVISION 2 - EARTHWORK			NGINER ST
200.03 Method of Clearing - Method III 225.01 Guide for Grading Subgrade - Interstate and Freeway			B. FERMININ
225.01 Guide for Grading Subgrade - Interstate and Freeway 225.02 Guide for Grading Subgrade - Secondary and Local		5/	2/2023
225.03 Deceleration and Acceleration Lanes		DOCUMENT NOT CONSI	
 225.04 Method of Obtaining Superelevation - Two Lane Pavement 225.05 Method of Obtaining Superelevation - Divided Highways 		UNLESS ALL SIGNATURE	S COMPLETED
240.01 Guide for Berm Ditch Construction			
DIVISION 3 - PIPE CULVERTS			
300.01 Method of Pipe Installation310.10 Driveway Pipe Construction			
DIVISION 4 - MAJOR STRUCTURES			
422.01 Bridge Approach Fills - Type I Standard Approach Fill 422.02 Bridge Approach Fills - Type II Modiefied Approach Fill			
422.03 Reinforced Bridge Approach Fills - Type A Alternate Approach Fil	for Integral Abutment		
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS 560.01 Method of Shoulder Construction - High Side of Superelevated Curv	- Mathad I		
560.02 Method of Shoulder Construction - High Side of Superelevated Curv			
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 315.02 Subsurface Drain			
815.02 Subsurface brain 815.03 Pipe Underdrain and Blind Drain			
316.01 Concrete Pads - for Shoulder Drain Installation			
Aggregate Shoulder DrainMarkers for Drainage Structure and Concrete Pad			
338.01 Concrete Endwall for Single and Double Pipe Culverts - 15" thru 4			
338.11 Brick Endwall for Single and Double Pipe Culverts - 15" thru 48" I 338.21 Reinforced Concrete Endwall - for Single 54" Pipe 90 Skew	ipe 90 Skew		
Reinforced Concrete Endwall - for Single 66" Pipe 90 Skew			
338.51 Reinforced Brick Endwall - for Single 54" Pipe 90 Skew 338.63 Reinforced Brick Endwall - for Single 66" Pipe 90 Skew			
338.63 Reinforced Brick Endwall - for Single 66" Pipe 90 Skew 338.75 Notes for Reinforced Brick Endwall - Std. Dwg 838.51 thru 838.70			
338.80 Precast Endwalls - 12" thru 72" Pipe 90 Skew			
340.00 Concrete Base Pad for Drainage Structures 340.01 Brick Catch Basin - 12" thru 54" Pipe			
340.02 Concrete Catch Basin - 12" thru 54" Pipe			
 B40.03 Frame, Grates and Hood - for Use on Standard Catch Basin B40.04 Concrete Open Throat Catch Basin - 12" thru 48" Pipe 			
340.05 Brick Open Throat Catch Basin - 12" thru 48" Pipe			
340.14 Concrete Drop Inlet - 12" thru 30" Pipe			
B40.15 Brick Drop Inlet - 12" thru 30" Pipe B40.16 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			
340.18 Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe 340.19 Concrete Grated Drop Inlet Type 'D' - 12" thru 36" Pipe			
840.20 Frames and Wide Slot Flat Grates			
340.22 Frames and Wide Slot Sag Grates340.24 Frames and Narrow Slot Sag Grates			
340.25 Anchorage for Frames - Brick or Concrete or Precast			
B40.26 Brick Grated Drop Inlet Type 'A' - 12" thru 72" Pipe B40.27 Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe			
340.28 Brick Grated Drop Inlet Type 'D' - 12" thru 36" Pipe			
340.29 Frames and Narrow Slot Flat Grates			
340.31 Concrete Junction Box - 12" thru 66" Pipe 340.32 Brick Junction Box - 12" thru 66" Pipe			
Traffic Bearing Junction Box - for Use with Pipes 42" and Under			
340.35 Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and 340.41 Spring Box - Concrete or Brick	I UT		
340.45 Precast Drainage Structure			
340.51 Brick Manhole – 12" thru 36" Pipe 340.52 Precast Manhole – 4', 5' and 6' Diameter			
340.53 Precast Manhole with Masonry Base - 12" thru 42" Pipe			
340.54 Manhole Frame and Cover 340.66 Drainage Structure Steps			
340.66 Drainage structure steps 340.71 Concrete and Brick Pipe Plug			
340.72 Pipe Collar			
346.01 Concrete Curb, Gutter and Curb & Gutter 346.02 Drop Inlet Installation in Expressway Gutter			
346.04 Drop Inlet Installation in Shoulder Berm Gutter			
350.10 Guide for Berm Drainage Outlet - 15" and 18" Pipe 350.11 Guide for Berm Drainage Outlet - 24" and 30" Pipe			
352.01 Concrete Islands			
Concrete Mountable Median - for Use with Rigid or Flexible Pavemer Method for Placement of Drop Inlets in Concrete Islands	+		
352.06 Method for Placement of brop inters in concrete Islands 354.02 Double Faced Concrete Barrier - Types 'T', 'T1' and 'T2'			
B57.01 Precast Reinforced Concrete Barrier - 41" Single Faced			
362.01 Guardrail Placement 362.02 Guardrail Installation			
862.03 Structure Anchor Units			
862.04 Anchoring End of Guardrail - B-77 and B-83 Anchor Units 865.01 Cable Guiderail			
866.02 Woven Wire Fence - with Wood Post			
876.01 Rip Rap in Channels 876.02 Guide for Rip Rap at Pipe Outlets			
876.02 Guide for kip kap at ripe outlets 876.04 Drainage Ditches with Class 'B' Rip Rap			