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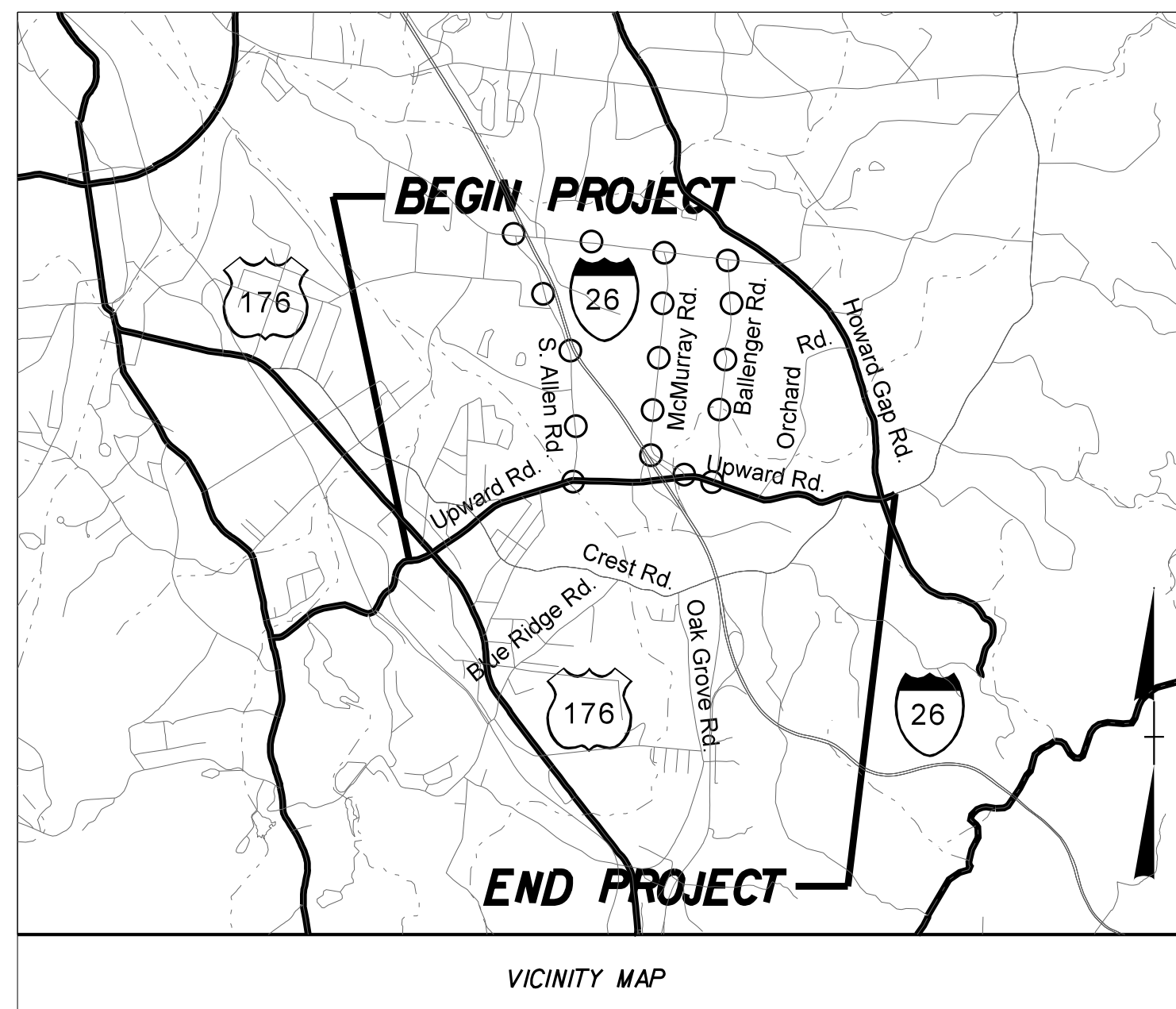
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**TIP PROJECT: R-4430**

**CONTRACT: DN00572**

SEE SHEET 1-A FOR INDEX OF SHEETS  
SEE SHEET 1-B FOR CONVENTIONAL PLAN SHEET SYMBOLS



# STATE OF NORTH CAROLINA

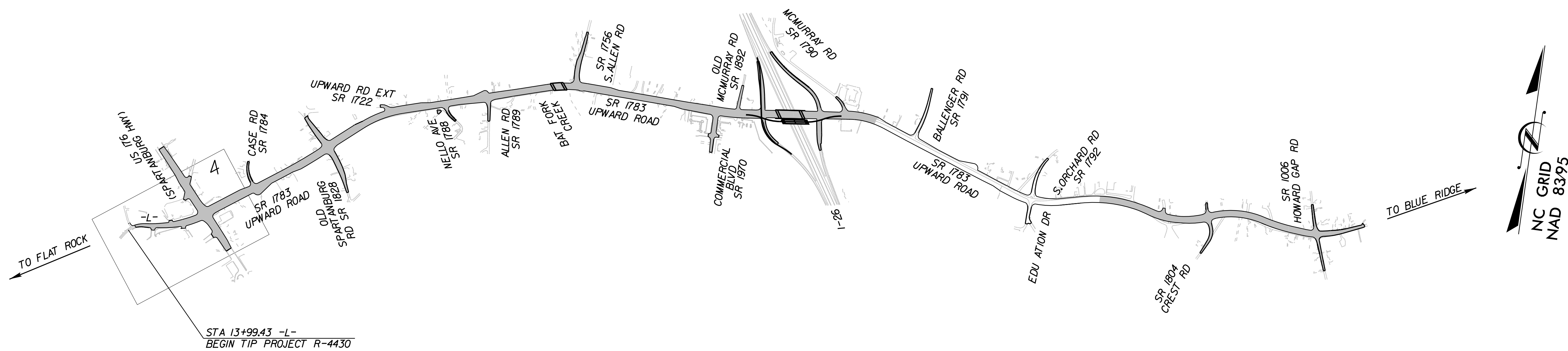
## DIVISION OF HIGHWAYS

### HENDERSON COUNTY

**LOCATION:** SR 1783 (N HIGHLAND LAKE RD) FROM US 176 (SPARTANBURG HWY) TO QUAIL COVE LN

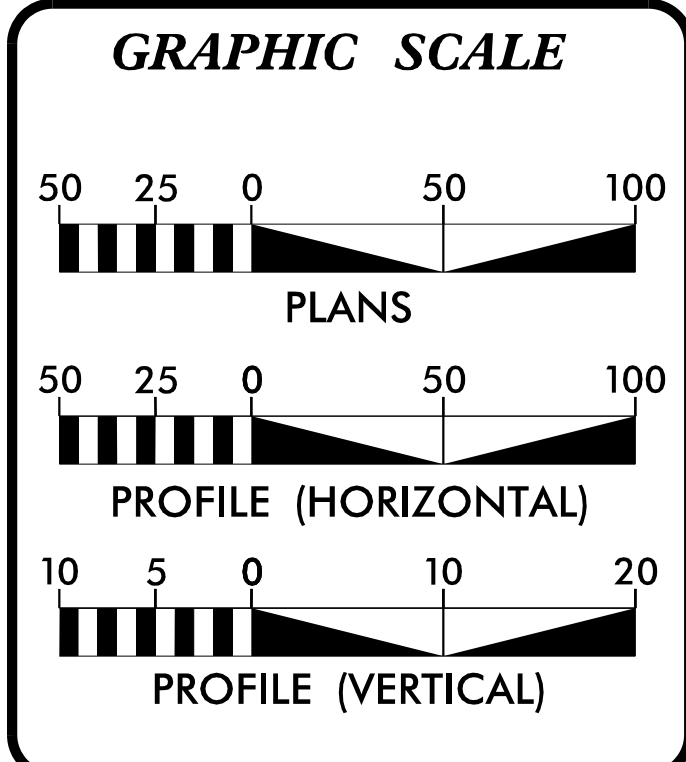
**TYPE OF WORK:** GRADE, DRAIN, PAVE, CURB & GUTTER, TRAFFIC CONTROL

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-4430	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34623.1.1	STP-1783 (1)	P.E.	
34623.3.1	STP-1783 (1)	R / W	
34623.3.1	STP-1783 (1)	UTILITIES	
34623.2.2	STP-1783 (3)	CONSTRUCTION	
34623.2.4		CONSTRUCTION	



NCDOT CONTACT: WANDA AUSTIN, P.E.  
DIVISION PROJECT MANAGER  
HIGHWAY DIVISION 14

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



**DESIGN DATA**

ADT 2009	=	21,400 VPD
ADT 2030	=	35,800 VPD
DHV	=	10%
D	=	55%
T	=	5% *
V	=	50 mph

VERTICAL CURVE DESIGN EXCEPTIONS

FUNCTIONAL CLASSIFICATION:  
URBAN ARTERIAL

\* (TTST 3% + DUAL 2%)

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT R-4430	=	2.732 MILES
LENGTH STRUCTURE TIP PROJECT R-4430	=	0.065 MILES
TOTAL LENGTH TIP PROJECT R-4430	=	2.797 MILES

**Kimley»Horn**

PLANS PREPARED FOR NCDOT BY:

2012 STANDARD SPECIFICATIONS

**RIGHT-OF-WAY DATE:**  
DECEMBER 29, 2006

**LETTING DATE:**  
MARCH 16, 2010

**JEFFREY W. MOORE, P.E.**  
PROJECT ENGINEER

**J. JASON PACE, P.E.**  
PROJECT DESIGN ENGINEER

**HYDRAULICS ENGINEER**

**JEFFREY W. MOORE, P.E.**  
3/1/2017  
P.E.

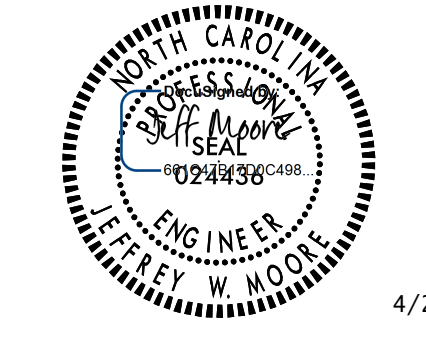
SIGNATURE:  
ROADWAY DESIGN ENGINEER

**J. JASON PACE, P.E.**  
3/1/2017  
P.E.

SIGNATURE:

**DIVISION OF HIGHWAYS**  
STATE OF NORTH CAROLINA

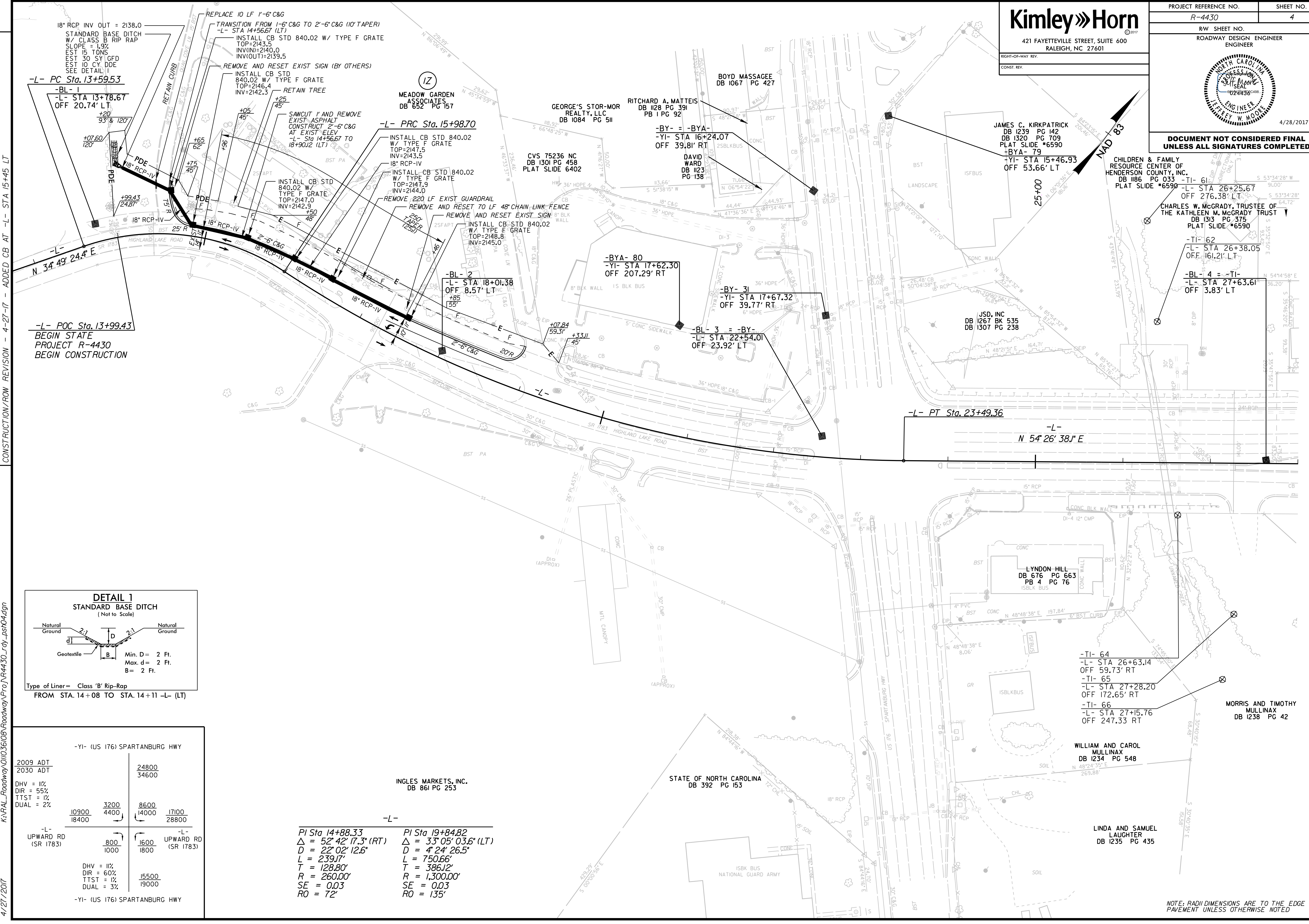
**STATE HIGHWAY DESIGN ENGINEER**



4/28/2017

**DOCUMENT NOT CONSIDERED FINAL  
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REVISIONS  
 CONSTRUCTION/RW REVISION - 3-1-17 - ADDED 2'-6" CURB & GUTTER, DRAINAGE SYSTEMS, PDE, AND TCE TO PARCEL  
 CONSTRUCTION/RW REVISION - 4-13-17 - REVISED PARCEL I TO IZ; UPDATED ROW AND SURVEY  
 CONSTRUCTION/RW REVISION - 4-27-17 - ADDED CB AT -L- STA 15+45 LT



18" RCP INV OUT = 2138.0  
STANDARD BASE DITCH  
W/ CLASS B RIP RAP  
SLOPE = 1.9%  
EST 15 TONS  
EST 30 CY GFD  
EST 10 CY DDE  
SEE DETAIL I

-L- PC Sta. 13+59.53  
-BL- 1  
-L- STA 13+78.67  
OFF 20.74' LT

REPLACE 10 LF 1'-6" C&G  
-L- STA 14+56.67 (LT)  
INSTALL CB STD 840.02 W/ TYPE F GRATE  
TOP=2143.5  
INVIN=2140.0  
INVIOUT=2139.5

REMOVE AND RESET EXIST SIGN (BY OTHERS)  
INSTALL CB STD 840.02 W/ TYPE F GRATE  
TOP=2146.4  
INV=2142.3

RETAIN TREE

SAWCUT 1' AND REMOVE EXIST ASPHALT  
CONSTRUCT 2'-6" C&G AT EXIST ELEV  
-L- STA 14+56.67 TO 18+90.12 (LT)

MEADOW GARDEN ASSOCIATES  
DB 852 PG 157

GEORGE'S STOR-MOR REALTY, LLC  
DB 1084 PG 511

RITCHARD A. MATTEIS  
DB 1128 PG 391  
PB 1 PG 92

CVS 75236 NC  
DB 1301 PG 458  
PLAT SLIDE 6402

BOYD MASSAGEE  
DB 1067 PG 427

JAMES C. KIRKPATRICK  
DB 1239 PG 142  
DB 1320 PG 709  
PLAT SLIDE #6590  
-BYA- 79

-YI- STA 15+46.93  
OFF 53.66' LT

CHILDREN & FAMILY RESOURCE CENTER OF HENDERSON COUNTY, INC.  
DB 186 PG 033  
PLAT SLIDE #6590

CHARLES W. McGRADY, TRUSTEE OF THE KATHLEEN M. McGRADY TRUST  
DB 1313 PG 375  
PLAT SLIDE #6590

-L- STA 26+25.67  
OFF 276.38' LT

-TI- 61  
-L- STA 26+38.05  
OFF 161.21' LT

-BL- 4 = -TI-  
-L- STA 27+63.61  
OFF 3.83' LT

JSD, INC  
DB 1267 BK 535  
DB 1307 PG 238

-L- PT Sta. 23+49.36  
N 54° 26' 38" E

LYNDON HILL  
DB 676 PG 663  
PB 4 PG 76

MORRIS AND TIMOTHY MULLINAX  
DB 1238 PG 42

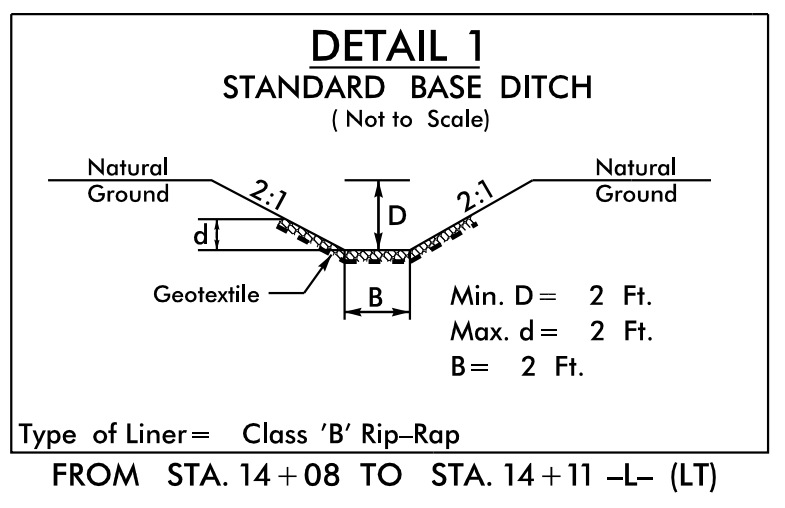
WILLIAM AND CAROL MULLINAX  
DB 1234 PG 548

LINDA AND SAMUEL LAUGHTER  
DB 1235 PG 435

INGLES MARKETS, INC.  
DB 861 PG 253

STATE OF NORTH CAROLINA  
DB 392 PG 153

ISBLK BUS  
NATIONAL GUARD ARMY



-YI- (US 176) SPARTANBURG HWY	
2009 ADT	24800
2030 ADT	34600
DHV = 11% DIR = 5% TTST = 1% DUAL = 2%	
10900	3200
18400	4400
8600	17100
14000	28800
-L- UPWARD RD (SR 1783)	
800	1600
1000	1800
DHV = 11% DIR = 60% TTST = 1% DUAL = 3%	
15500	19000
-YI- (US 176) SPARTANBURG HWY	

-L-  
 PI Sta 14+88.33  
 $\Delta = 52' 42" 17.3" (RT)$   
 $D = 22' 02" 12.6"$   
 $L = 239.17'$   
 $T = 128.80'$   
 $R = 260.00'$   
 $SE = 0.03$   
 $RO = 72'$

-L-  
 PI Sta 19+84.82  
 $\Delta = 33' 05" 03.6" (LT)$   
 $D = 4' 24' 26.5"$   
 $L = 750.66'$   
 $T = 386.12'$   
 $R = 1,300.00'$   
 $SE = 0.03$   
 $RO = 135'$

NOTE: RADI DIMENSIONS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED

K:\RAL\_Roadway\01036108-Roadway\Pro\NR4430\_rdy\_psf04.dgn  
 4/27/2017