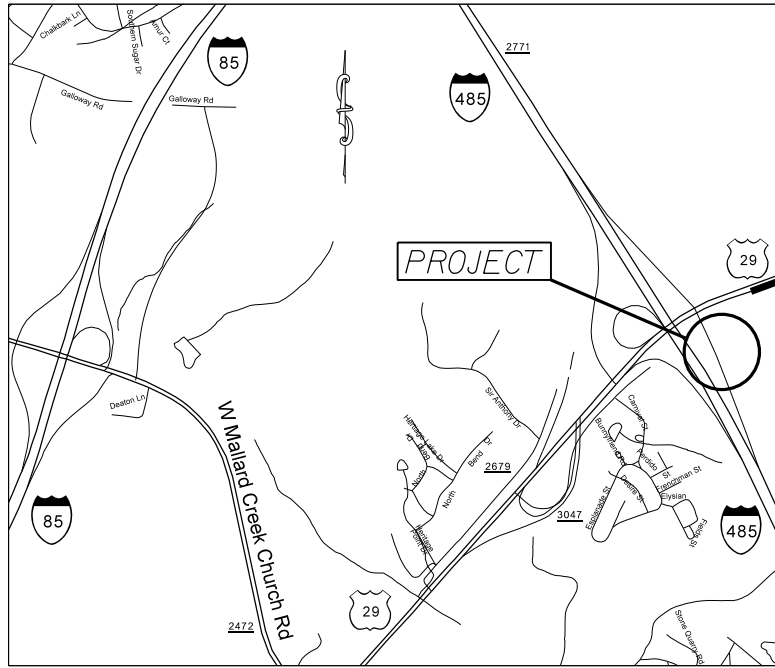


**PROJECT: 50138.3.63 TIP:W-5601BJ**



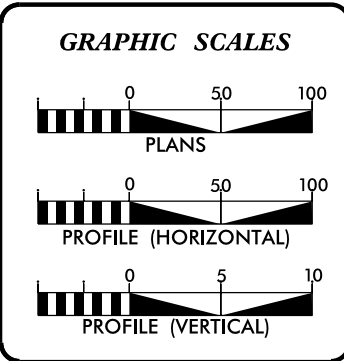
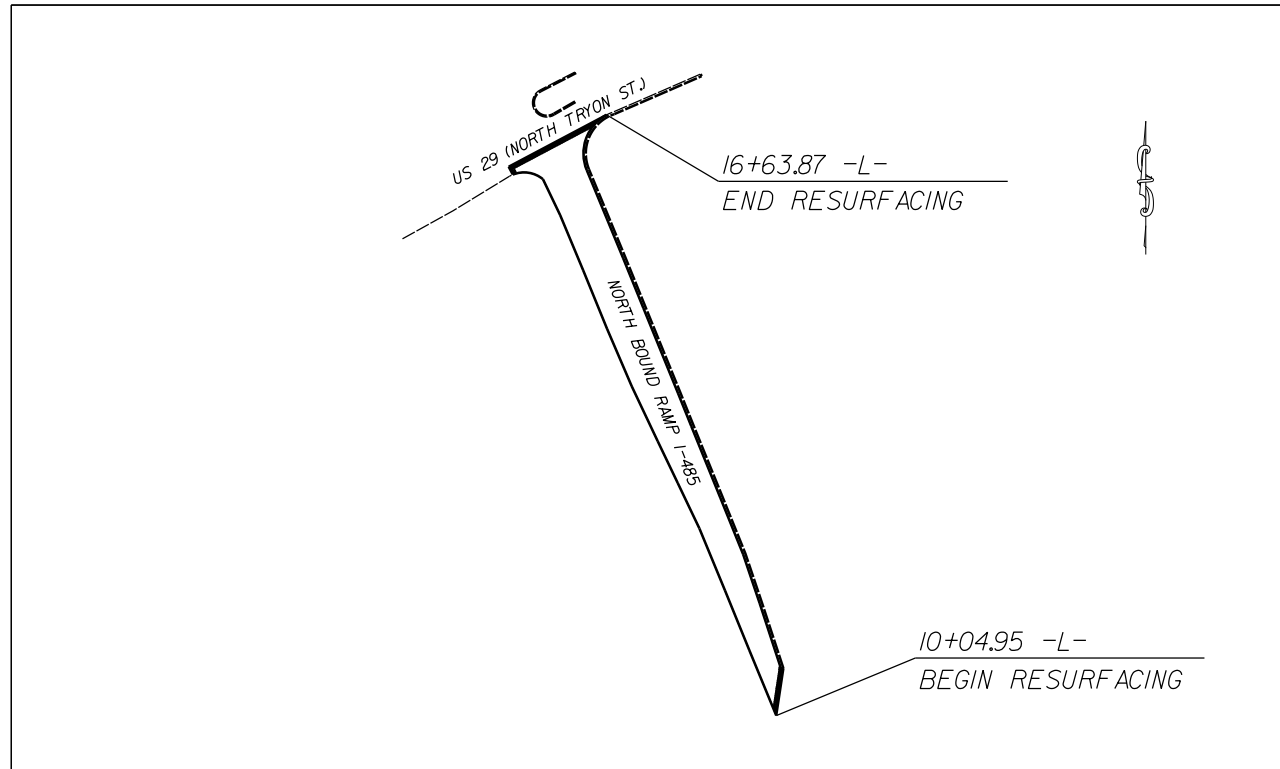
VICINITY MAP NOT TO SCALE

STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS  
**MECKLENBURG**

**LOCATION:** I-485 NORTH BOUND RAMP AT US 29, 0.26 MILES WEST OF PAVILION BLVD.

**TYPE OF WORK:** RESURFACING, RECONFIGURING SIGNALS, AND THERMOPLASTIC PAVEMENT MARKINGS.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	50138.3.63	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
50138.1.63	HSIP-0485(039)	P.E.	
50138.2.63	HSIP-0485(039)	RW	
50138.3.63	HSIP-0485(039)	CONST.	



**DESIGN DATA**

ADT	=	
ADT	=	
DHV	=	%
D	=	%
T	=	%
V	=	MPH

**PROJECT LENGTH**

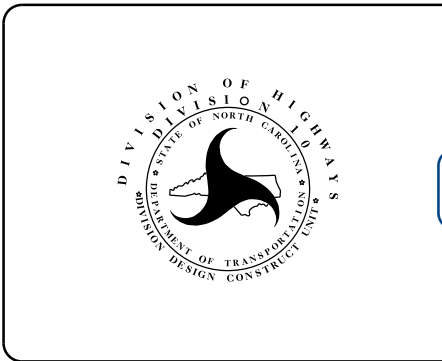
LENGTH OF ROADWAY PROJECT : 50138.3.63	=	0.12	MILES
TOTAL LENGTH OF STATE PROJECT : 50138.3.63	=	0.12	MILES

Prepared in the Office of:  
**DIVISION OF HIGHWAYS**  
 DIVISION TEN  
 DIVISION DESIGN / CONSTRUCT UNIT

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2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: N/A	RANDY BOWERS PROJECT ENGINEER
LETTING DATE: July 27, 2016	DONALD HARWARD PROJECT DESIGN ENGINEER

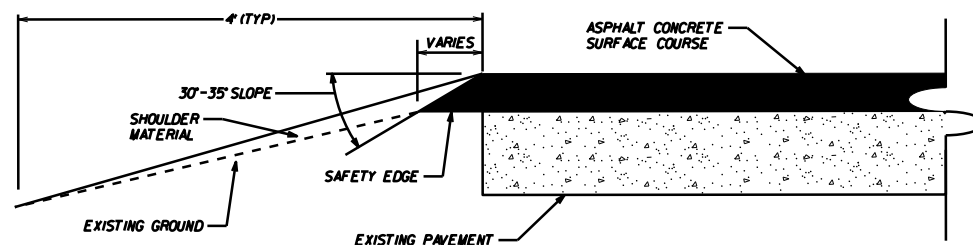


DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

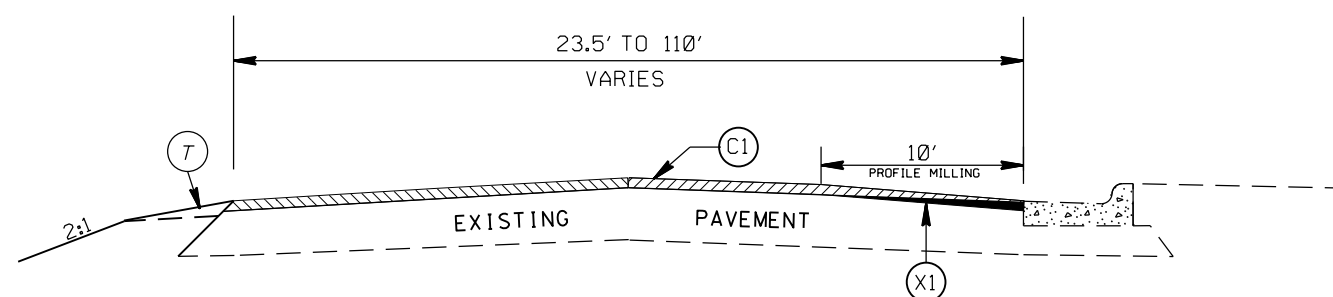
DocuSigned by:  
 Randy Bowers  
 52A4A66079864B2...  
 APPROVED BY  
 DDC ENGINEER

7/6/2016  
DATE

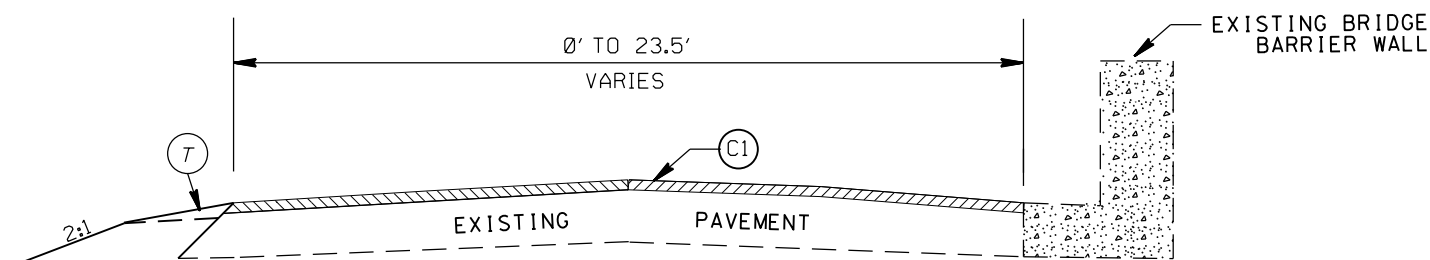
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	50/38.3.63	2	
F.A. PROJECT NO. HSP-0485(039)			



**SAFETY EDGE DETAIL**



**TYPICAL SECTION NO. 2**  
STA. 10+49.13 TO 16+63.87 -L-



**TYPICAL SECTION NO. 1**  
STA. 10+04.95 TO 10+49.13 -L-

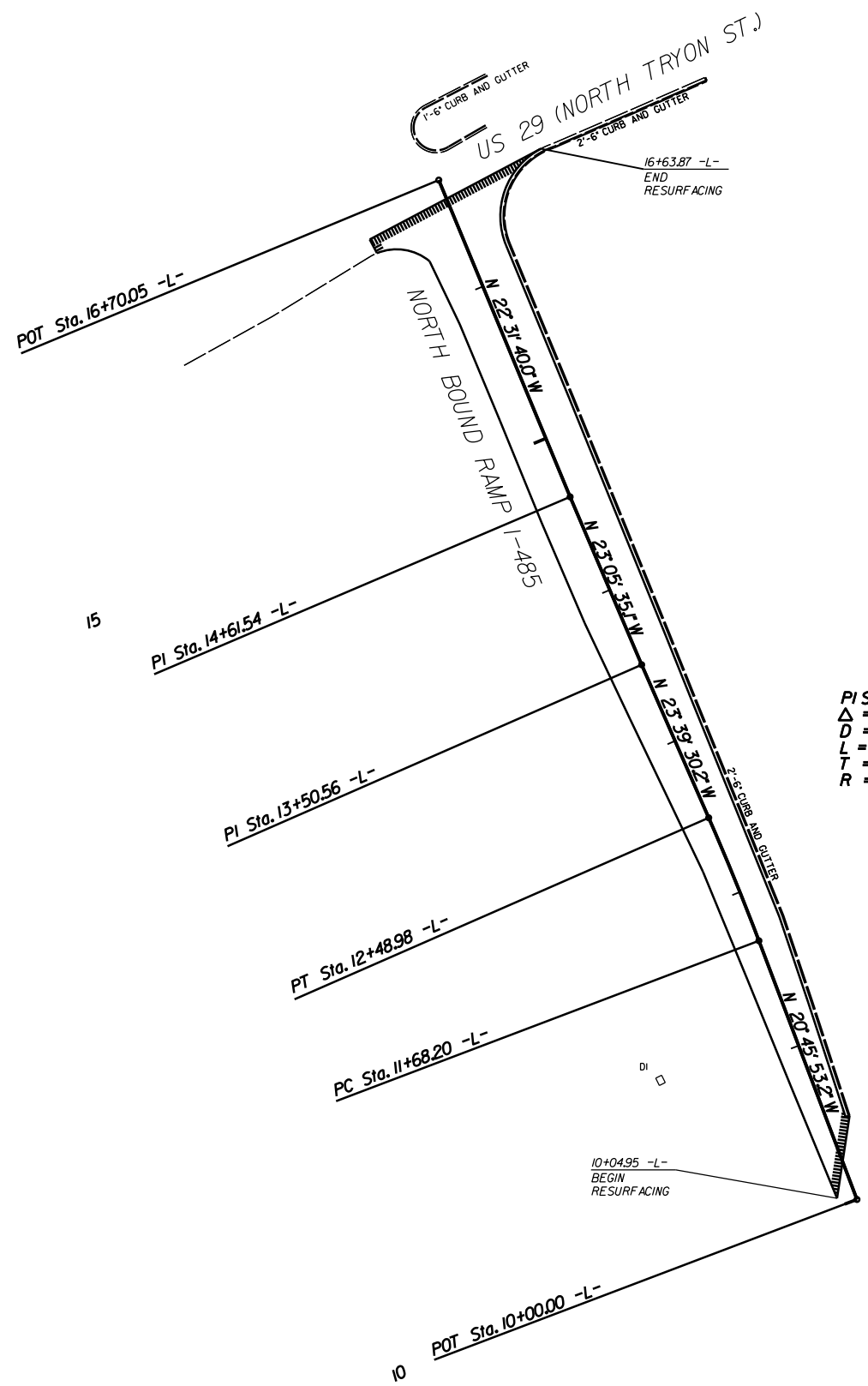
**PAVEMENT SCHEDULE**

(C1)	PROP. APPROX. 1½" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(T)	EARTH MATERIAL
(X1)	PROFILE MILLING (0" TO 1.5")

I-485 NB RAMP AT US 29

SCALE	N/A		REVISIONS
DATE	5/16		
DWG. BY	DLB		
DESIGN BY	JDH		
APPROVED	RWB		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	50138.3.63	3	
F.A. PROJECT NO. HSIP-0485(039)			



PI Sta 12+08.60 -L-  
 $\Delta = 2^\circ 53' 36.9''$  (LT)  
 $D = 3^\circ 34' 55.3''$   
 $L = 80.78'$   
 $T = 40.40'$   
 $R = 1,599.53'$



NOTE: INCIDENTAL MILL APPROX. 25' AT EACH TIE IN TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING ASPHALT PAVEMENT.

I-485 NB RAMP AT US 29			REVISIONS	
SCALE	1"=50'			
DATE	4/16			
DWG. BY	DLS			
DESIGN BY	JDH			
APPROVED	RWB			

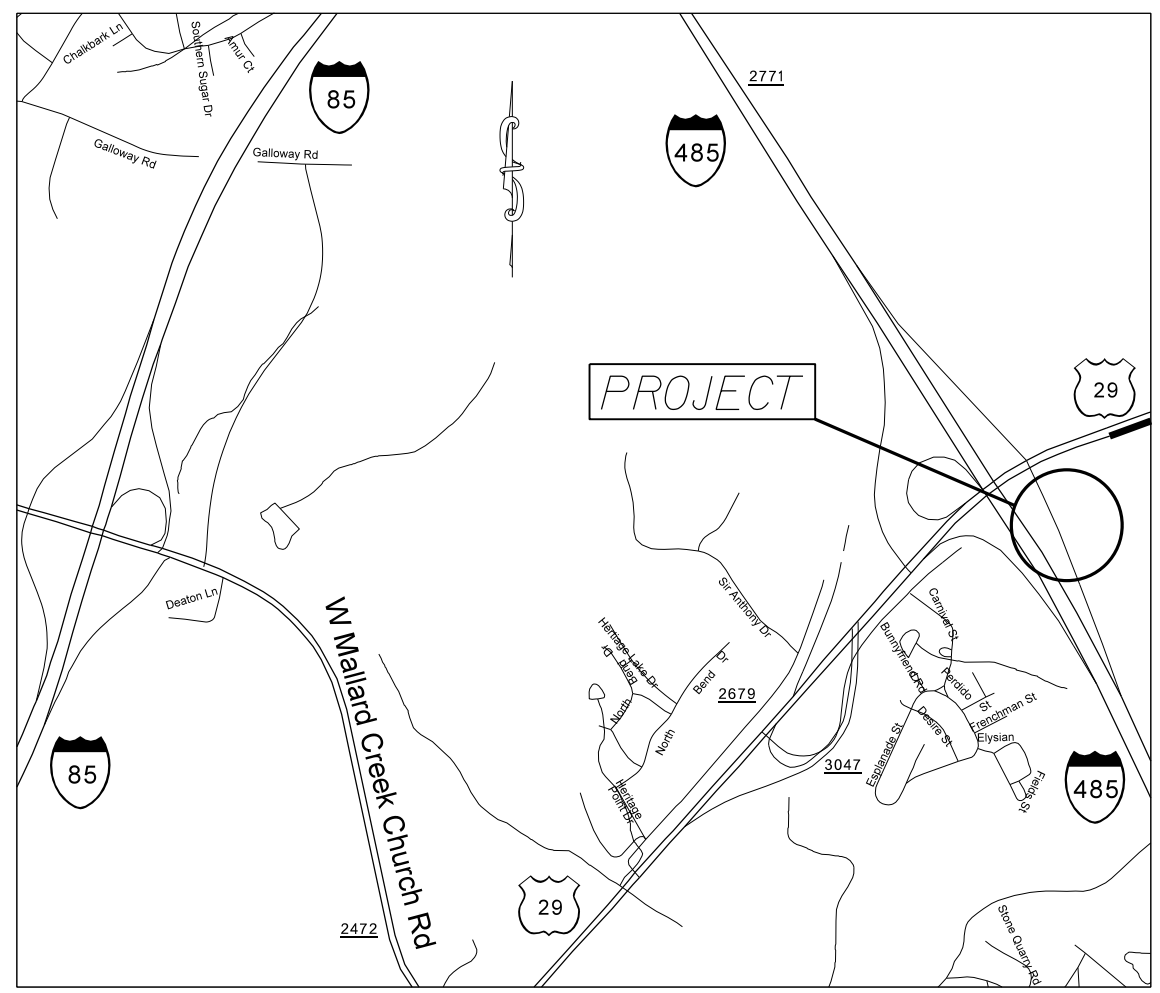
**PROJECT: 50138.3.63 TIP: W-5601BJ**

STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS  
 PLAN FOR PROPOSED  
 HIGHWAY EROSION CONTROL

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	50138.3.63	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

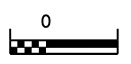
**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	△△△△△△△△
1622.01	Temporary Berms and Slope Drains	TSD
1630.02	Silt Basin Type B	□
1633.01	Temporary Rock Silt Check Type-A	□
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	□
1633.02	Temporary Rock Silt Check Type-B	▶
	Wattle / Coir Fiber Wattle	○
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	○
1634.01	Temporary Rock Sediment Dam Type-A	□
1634.02	Temporary Rock Sediment Dam Type-B	□
1635.01	Rock Pipe Inlet Sediment Trap Type-A	C
1635.02	Rock Pipe Inlet Sediment Trap Type-B	C
1630.04	Stilling Basin	□
1630.06	Special Stilling Basin	□
	Rock Inlet Sediment Trap:	
1632.01	Type A	A □
1632.02	Type B	B □
1632.03	Type C	C □
	Skimmer Basin	□
	Tiered Skimmer Basin	□
	Infiltration Basin	□

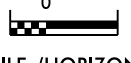


VICINITY MAP NOT TO SCALE

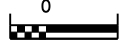
**GRAPHIC SCALE**



PLANS



PROFILE (HORIZONTAL)



PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT  
 DIVISION OF HIGHWAYS  
 STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

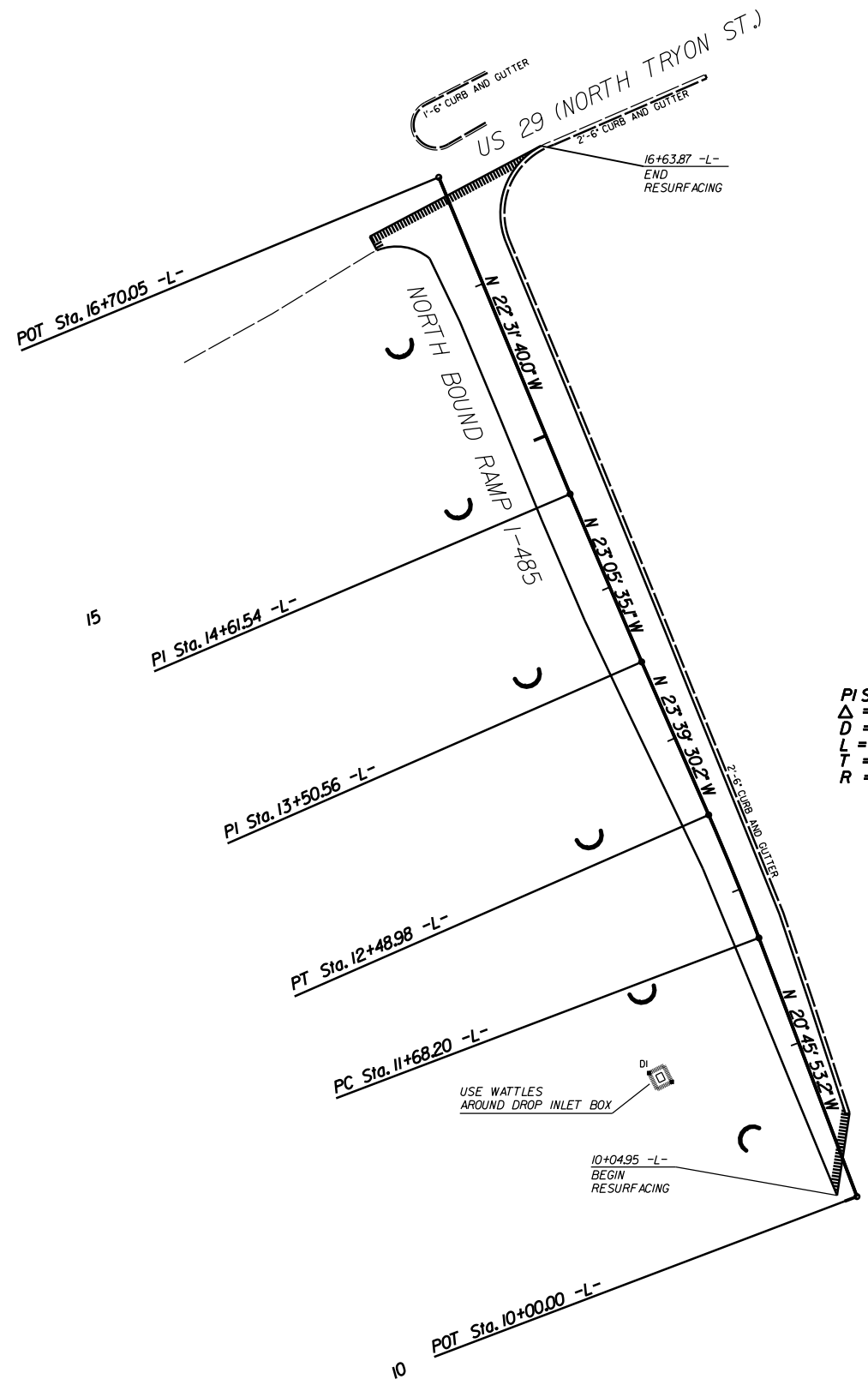
Prepared in the Office of:  
**DDC UNIT DIVISION 10**  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**2012 STANDARD SPECIFICATIONS**  
 DONALD HARWARD 3028  
 EROSION CONTROL DESIGNER LEVEL III-A CERTIFICATION #

Roadway Standard Drawings

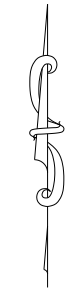
The following roadway english standards as appear in "Roadway Standard Drawings" - Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type A
1622.01	Temporary Berms and Slope Drains	1633.02	Temporary Rock Silt Check Type B
1630.01	Riser Basin	1634.01	Temporary Rock Sediment Dam Type A
1630.02	Silt Basin Type B	1634.02	Temporary Rock Sediment Dam Type B
1630.03	Temporary Silt Ditch	1635.01	Rock Pipe Inlet Sediment Trap Type A
1630.04	Stilling Basin	1635.02	Rock Pipe Inlet Sediment Trap Type B
1630.05	Temporary Diversion	1640.01	Coir Fiber Baffle
1630.06	Special Stilling Basin	1645.01	Temporary Stream Crossing
1631.01	Matting Installation		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	50138.3.63	EC-2	
F.A. PROJECT NO. HSIP-0485(039)			




PI Sta 12+08.60 -L-  
 $\Delta = 2^\circ 53' 36.9\" (LT)$   
 $D = 3^\circ 34' 55.3\"$   
 $L = 80.78'$   
 $T = 40.40'$   
 $R = 1599.53'$

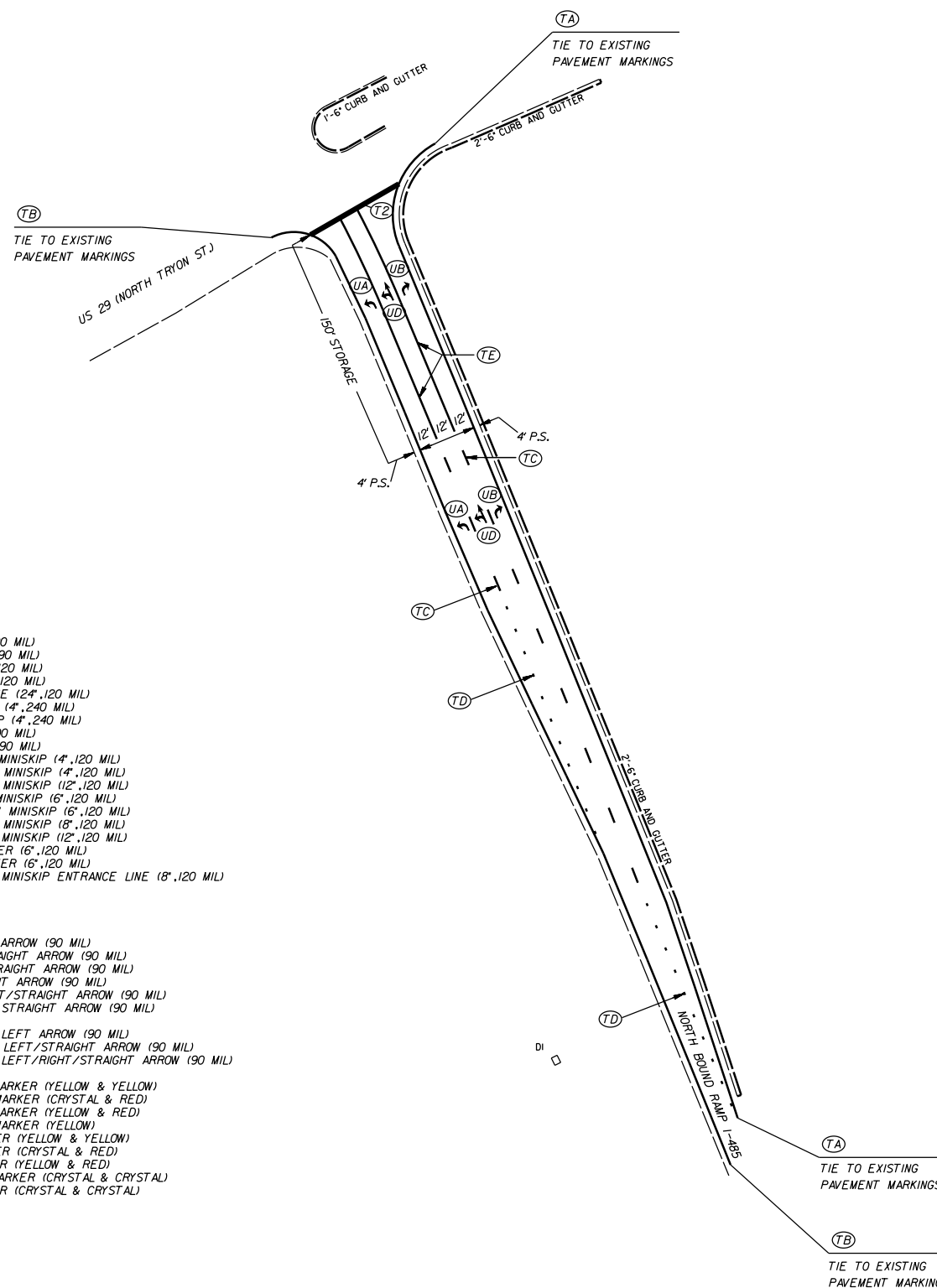


EROSION CONTROL MEASURES MAY BE CHANGED, IN FIELD AS DIRECTED BY THE ENGINEER.

I-485 NB RAMP AT US 29

SCALE	1"=50'		REVISIONS
DATE	4/16		
DWG. BY	DLS		
DESIGN BY	JDH		
APPROVED	RWB		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	50138.3.63	PMP-1	
F.A. PROJECT NO. HSIP-0485(039)			



PAVEMENT MARKING SCHEDULE

PAVEMENT MARKING LINES

- |  |   |
|--|---|
| TA - WHITE EDGE LINE (4', 90 MIL)              | TU - WHITE DIAGONAL (12', 90 MIL)                             |
| TB - YELLOW EDGE LINE (4', 90 MIL)             | TV - YELLOW DIAGONAL (12', 90 MIL)                            |
| TC - 10FT. WHITE SKIP (4', 120 MIL)            | T1 - WHITE LINE, RR X (16', 120 MIL)                          |
| TD - 3FT.-9FT./SP WHITE MINISKIP (4', 120 MIL) | T2 - WHITE STOPBAR (24', 120 MIL)                             |
| TE - WHITE SOLID LANE LINE (4', 120 MIL)       | T3 - WHITE CROSSWALK LINE (24', 120 MIL)                      |
| TF - 10FT. YELLOW SKIP (4', 120 MIL)           | T4 - WHITE RUMBLE STRIP (4', 240 MIL)                         |
| TH - YELLOW SINGLE CENTER (4', 120 MIL)        | T5 - YELLOW RUMBLE STRIP (4', 240 MIL)                        |
| TI - YELLOW DOUBLE CENTER (4', 120 MIL)        | T6 - WHITE EDGE LINE (6', 90 MIL)                             |
| TJ - 10FT. WHITE SKIP (6', 120 MIL)            | T7 - YELLOW EDGE LINE (6', 90 MIL)                            |
| TK - 3FT.-9FT./SP WHITE MINISKIP (6', 120 MIL) | T8 - 2FT.-6FT./SP WHITE MINISKIP (4', 120 MIL)                |
| TL - WHITE SOLID LANE LINE (6', 120 MIL)       | T9 - 2FT.-6FT./SP YELLOW MINISKIP (4', 120 MIL)               |
| TM - 10FT. YELLOW SKIP (6', 120 MIL)           | T10 - 3FT.-3FT./SP WHITE MINISKIP (12', 120 MIL)              |
| TN - WHITE GORELINE (8', 90 MIL)               | T11 - 2FT.-6FT./SP WHITE MINISKIP (6', 120 MIL)               |
| TO - WHITE DIAGONAL (8', 90 MIL)               | T12 - 2FT.-6FT./SP YELLOW MINISKIP (6', 120 MIL)              |
| TP - YELLOW DIAGONAL (8', 90 MIL)              | T13 - 3FT.-9FT./SP WHITE MINISKIP (8', 120 MIL)               |
| TQ - WHITE CROSSWALK LINE (8', 120 MIL)        | T14 - 3FT.-9FT./SP WHITE MINISKIP (12', 120 MIL)              |
| TR - WHITE SOLID LANE LINE (8', 120 MIL)       | T15 - YELLOW SINGLE CENTER (6', 120 MIL)                      |
| TS - WHITE GORELINE (12', 90 MIL)              | T16 - YELLOW DOUBLE CENTER (6', 120 MIL)                      |
| TT - WHITE SOLID LANE LINE (12', 120 MIL)      | T17 - 3FT.-3FT./SP WHITE MINISKIP ENTRANCE LINE (8', 120 MIL) |

PAVEMENT MARKING SYMBOLS

- |  |  |
|--|--|
| UA - LEFT TURN ARROW (90 MIL)                  | UU - FISH-HOOK STRAIGHT ARROW (90 MIL)                     |
| UB - RIGHT TURN ARROW (90 MIL)                 | UV - FISH-HOOK LEFT/STRAIGHT ARROW (90 MIL)                |
| UC - STRAIGHT ARROW (90 MIL)                   | UW - FISH-HOOK RIGHT/STRAIGHT ARROW (90 MIL)               |
| UD - COMBO. LEFT/STRAIGHT ARROW (90 MIL)       | UX - FISH-HOOK LEFT/RIGHT ARROW (90 MIL)                   |
| UE - COMBO. RIGHT/STRAIGHT ARROW (90 MIL)      | UY - FISH-HOOK LEFT/RIGHT/STRAIGHT ARROW (90 MIL)          |
| UF - COMBO. LEFT/RIGHT ARROW (90 MIL)          | UZ - FISH-HOOK W/CIRCLE STRAIGHT ARROW (90 MIL)            |
| UG - COMBO. LEFT/RIGHT/STRAIGHT ARROW (90 MIL) |  |
| UH - HANDICAP PARKING (90 MIL)                 | WA - FISH-HOOK W/CIRCLE LEFT ARROW (90 MIL)                |
| UI - ALPHANUMERIC CHAR. (120 MIL)              | WB - FISH-HOOK W/CIRCLE LEFT/STRAIGHT ARROW (90 MIL)       |
| UJ - BICYCLE SYMBOL (90 MIL)                   | WC - FISH-HOOK W/CIRCLE LEFT/RIGHT/STRAIGHT ARROW (90 MIL) |
| UK - BICYCLE STRAIGHT ARROW (90 MIL)           |  |
| UL - BICYCLE CHAR. (120 MIL)                   | MA - PERMANENT RAISED MARKER (YELLOW & YELLOW)             |
| UM - 12" YIELD LINE TRIANGLE (90 MIL)          | MB - PERMANENT RAISED MARKER (CRYSTAL & RED)               |
| UN - 24" YIELD LINE TRIANGLE (90 MIL)          | MC - PERMANENT RAISED MARKER (YELLOW & RED)                |
| UO - BICYCLE LEFT ARROW (90 MIL)               | MD - PERMANENT RAISED MARKER (YELLOW)                      |
| UP - MERGE ARROW (90 MIL)                      | ME - SNOWPLOWABLE MARKER (YELLOW & YELLOW)                 |
| UQ - RAMP ARROW SYMBOL (90 MIL)                | MF - SNOWPLOWABLE MARKER (CRYSTAL & RED)                   |
| UR - SHARROW (90 MIL)                          | MG - SNOWPLOWABLE MARKER (YELLOW & RED)                    |
| US - BICYCLE LOOP DETECTOR (90 MIL)            | ML - PERMANENT RAISED MARKER (CRYSTAL & CRYSTAL)           |
| UT - U-TURN ARROW (90 MIL)                     | MO - SNOWPLOWABLE MARKER (CRYSTAL & CRYSTAL)               |

I-485 NB RAMP AT US 29

SCALE	1"=50'		REVISIONS
DATE	4/16		
DWG. BY	DLS		
DESIGN BY	JDH		
APPROVED	RWB		