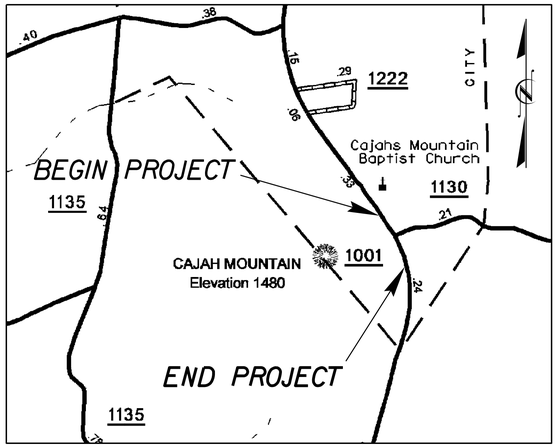
09/08/99

TIP PROJECT: R-5805

CONTRACT: DK00220

See Sheet 1-A For Index of Sheets



VICINITY MAP
(NOT TO SCALE)

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CALDWELL COUNTY

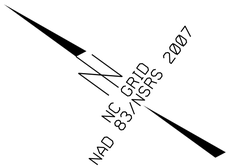
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5805	1	

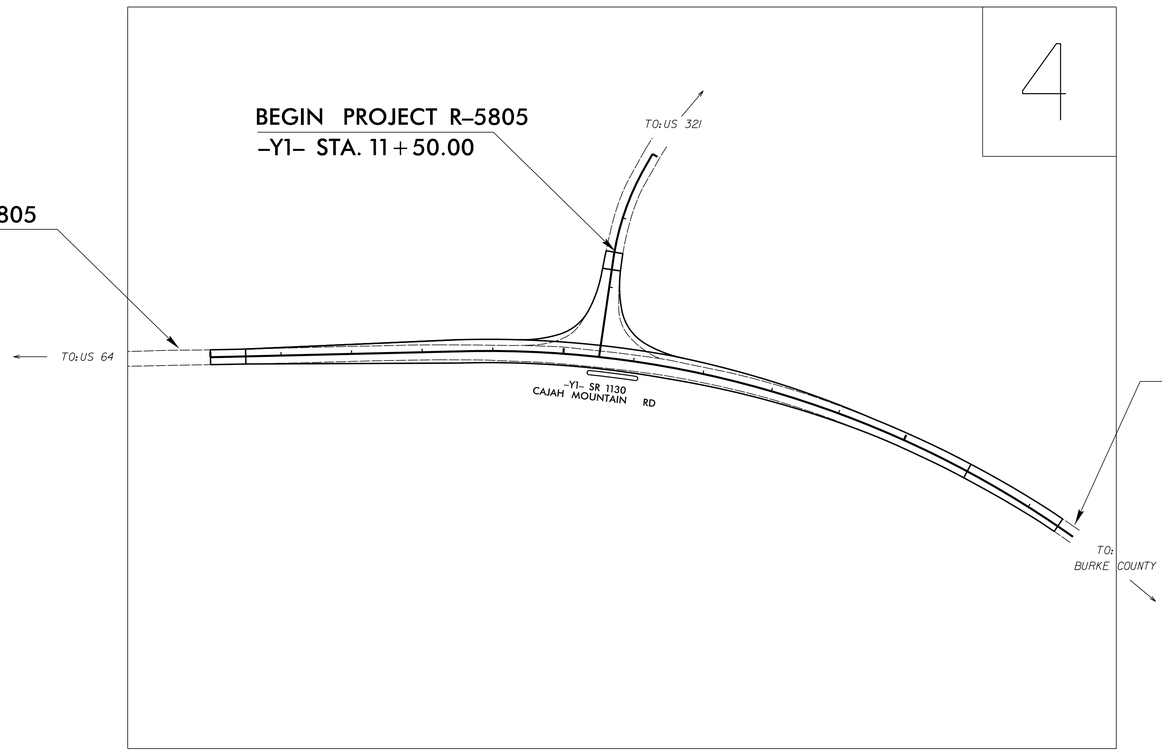
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
45967.1.1	STBGDA-1115(026)	P.E.
45967.2.1	STBGDA-1115(026)	RW/UTILITY
45967.2.1	STBGDA-1115(026)	CONST.

LOCATION: INTERSECTION OF SR 1001 (CONNELLY SPRINGS RD.) AND SR 1130 (CAJAH MTN. RD.)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND WIDENING

4





DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2015 = 11,000
ADT 2040 = 16,000
DHV = 9 %
D = 50 %
T = 3 % *
V = 50 MPH
* TTST = 1% DUAL 2%

REGIONAL TIER DESIGN FUNCTIONAL CLASSIFICATION: LOCAL

PROJECT LENGTH

TOTAL PROJECT R-5805 LENGTH = 0.242 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
801 Statesville Road, North Wilkesboro, NC 28659

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
September 30, 2013

LETTING DATE:
July 27, 2017

DIVISION ENGINEER
M.A. PETTYJOHN, PE

DocuSigned by: M.A. Pettyjohn DC4B00DC35D748C... *P.E.*
SIGNATURE

6/28/2017
DATE

HYDRAULICS ENGINEER
MARC T. SHOWN, PE

NORTH CAROLINA PROFESSIONAL SEAL 20870 ENGINEER MARC T. SHOWN

DocuSigned by: Marc T. Shown 4B024AEC0A0B4C2... *P.E.*
SIGNATURE:

6/28/2017
DATE

DIVISION PROJECT MANAGER
JOSEPH L. LAWS, PE

NORTH CAROLINA PROFESSIONAL SEAL 028951 ENGINEER JOSEPH L. LAWS

DocuSigned by: Joseph L. Laws 41135B5E8A334CA... *P.E.*
SIGNATURE:

6/28/2017
DATE

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R:\R-5805\Roadway\Proj\R-5805_DDC_tsh.dgn
$$$$USERNAME$$$$

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5805	1-A

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 028951 ENGINEER JOSEPH L LAWS

Joseph L. Laws 6/27/2017

DocuSigned by: 4113B85EBA334CA...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS
1-B	CONVENTIONAL SYMBOLS
2	PAVEMENT SCHEDULE, AND TYPICAL SECTIONS
3A THRU 3B	SUMMARY OF DRAINAGE QUANTITIES, AND EARTHWORK SUMMARY
4	PLAN SHEET
5 THRU 6	PROFILE SHEET
PM-1 THRU PM-2	PAVEMENT MARKING PLANS
EC-1 THRU EC-5	EROSION CONTROL PLANS
SIG-1 THRU SIG-3	SIGNAL PLANS
X	CROSS-SECTION INDEX
X-A	CROSS-SECTION SUMMARY
X-1 THRU X-14	CROSS-SECTIONS

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04/16/11

PROJECT REFERENCE NO.	SHEET NO.
R-5805	1B

Note: Not to Scale

S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — EIP
- Property Corner
- Property Monument — ECM
- Parcel/Sequence Number — 123
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB
- Known Soil Contamination: Area or Site
- Potential Soil Contamination: Area or Site

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign — S
- Well — W
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Buffer Zone 1 — BZ 1
- Buffer Zone 2 — BZ 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch — FLOW
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line — RW
- Proposed Right of Way Line with Iron Pin and Cap Marker — RW
- Proposed Right of Way Line with Concrete or Granite R/W Marker — RW
- Proposed Control of Access Line with Concrete C/A Marker — CA
- Existing Control of Access — CA
- Proposed Control of Access — CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage / Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H–Frame Pole
- Recorded U/G Power Line — P
- Designated U/G Power Line (S.U.E.*) — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Booth
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- Recorded U/G Telephone Cable — T
- Designated U/G Telephone Cable (S.U.E.*) — T
- Recorded U/G Telephone Conduit — TC
- Designated U/G Telephone Conduit (S.U.E.*) — TC
- Recorded U/G Fiber Optics Cable — T FO
- Designated U/G Fiber Optics Cable (S.U.E.*) — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line — W
- Designated U/G Water Line (S.U.E.*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Satellite Dish
- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- Recorded U/G TV Cable — TV
- Designated U/G TV Cable (S.U.E.*) — TV
- Recorded U/G Fiber Optic Cable — TV FO
- Designated U/G Fiber Optic Cable (S.U.E.*) — TV FO

GAS:

- Gas Valve
- Gas Meter
- Recorded U/G Gas Line — G
- Designated U/G Gas Line (S.U.E.*) — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- Recorded SS Forced Main Line — FSS
- Designated SS Forced Main Line (S.U.E.*) — FSS

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line — ?UTL
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

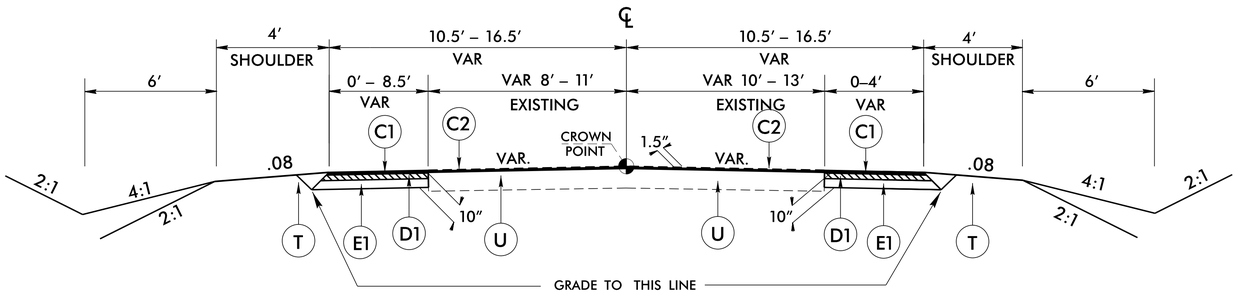
PROJECT REFERENCE NO.	SHEET NO.
R-5805	2

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 028951 ENGINEER JOSEPH L. LAWS

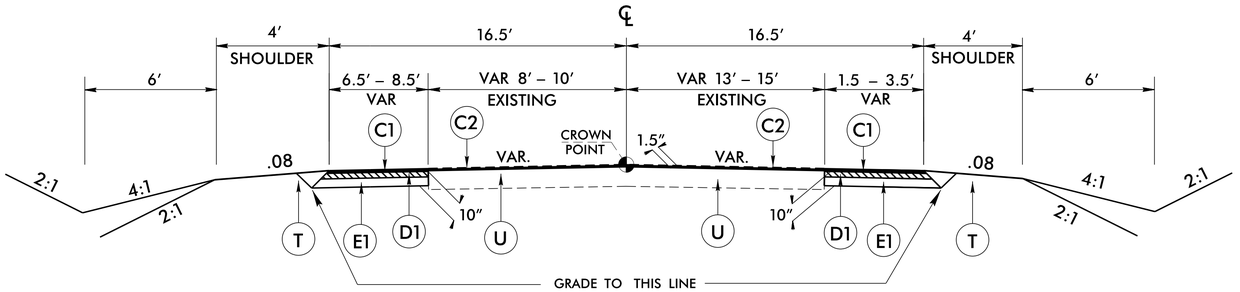
Joseph L. Laws 6/27/2017

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



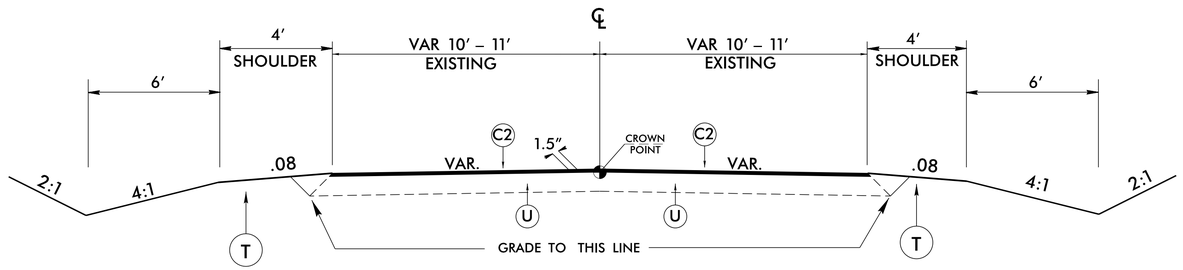
TYPICAL SECTION NO. 1

–L– STA. 10+50.00 TO –L– STA. 14+00.00
–L– STA. 16+50.00 TO –L– STA. 19+50.00



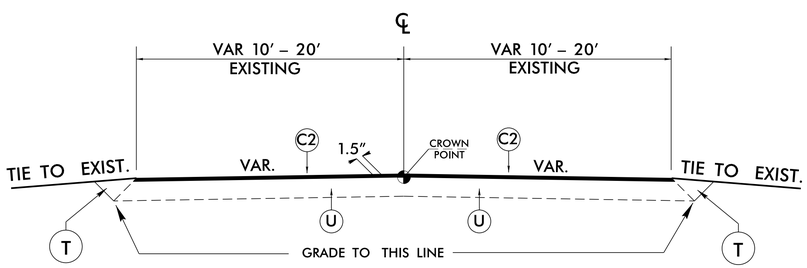
TYPICAL SECTION NO. 2

–L– STA. 14+00.00 TO –L– STA. 16+50.00



TYPICAL SECTION NO. 3

–L– STA. 19+50.00 TO –L– STA. 21+00.00



TYPICAL SECTION NO. 4

–L– STA. 10+00.00 TO –L– STA. 10+50.00 (RESURFACE)
–L– STA. 21+00.00 TO –L– STA. 22+50.00 (RESURFACE)
–Y1– STA. 11+50.00 TO –L– STA. 11+75.00 (RESURFACE)
–Y1– STA. 11+75.00 TO –L– STA. 12+83.00

PAVEMENT SCHEDULE

C1	PROP. APPROX. 3″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	PROP. APPROX. 1.5″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 3″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E1	PROP. APPROX. 4″ ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
T	EARTH MATERIAL
U	EXISTING PAVEMENT

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

D11CAD-274131

COMPUTED BY: DLH	DATE: 9/9/2013
CHECKED BY: DON	DATE: 9/18/2013

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-5805	3-A

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout.
See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

STATION	LOCATION (LT,RT,OR CL)	STRUCTURE NO.		TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP,CSP,CAAP,HDPE,orPVC)													C.S. PIPE								R.C. PIPE CLASS III								R.C. PIPE CLASS IV							
SIZE								12"	15"	18"	24"	30"	36"	42"	48"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	12"	15"	18"	24"	30"	36"	42"	48"	12"	15"	18"	24"	30"	36"	42"	48"	12"	15"	18"	24"	30"	36"	42"	48"
THICKNESS OR GAUGE		FROM	TO																		.064	.064	.064	.064	.079	.079	.109	.109																
10+90.00 -L-	LT	4-1							76										X	X																								
12+83.00 -L-	RT	4-2		1417.30	1413.55																																							
12+97.00 -L-	CL	4-2	4-3		1413.55	1405.00					84					X		X	X	X																								
21+64.00 -L-	LT	4-4			1403.50	1389.33					100							X	X	X																								
22+02.00 -L-	CL	4-5			1394.20	1389.33																																		44				
22+13.00 -L-	LT	4-6		1394.23	1389.33																																							
22+20.00 -L-	LT	4-6	4-7		1389.33	1389.96						24						X	X	X																								
22+26.00 -L-	LT	4-7		1394.23	1389.96																																							
PROJECT TOTALS									76		184	24																												44				

STATION	**"R.C. PIPE (CLASS V)	***"RC PIPE CULVERTS, CONTRACTOR DESIGN	***"RC PIPE CULVERTS, CONTRACTOR DESIGN	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE)		QUANTITIES FOR DRAINAGE STRUCTURES	*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A'+(1.3 X COL. 'B')		C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STANDARD 840.03			CONCRETE TRANSITIONAL SECTION		D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR 840.26	G.D.I. TYPE "B" STD. 840.18 OR 840.27	G.D.I. TYPE "D" STD. 840.19 OR 840.28	G.D.I. FRAME WITH GRATE STD. 840.20	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	T.B.G.D.I. STD. 840.36	J.B. STD. 840.31 OR 840.32	G.D.I. STEEL FRAME WITH TWO GRATES STD. 840.37	M.H. FRAME AND COVER STD. 840.54	DRAINAGE PIPE ELBOWS NO. & SIZE	DRAINAGE PIPE ELBOWS NO. & SIZE	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	CONC. COLLARS CL. "B" C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.	REMARKS
						CU. YARDS			LIN. FT. A	LIN. FT. B		TYPE OF GRATE																							
						R.C.P.	C.S.P.	PER EACH (0' THRU 5.0')	5.0' THRU 10.0'	10.0' AND ABOVE		E	F	G	DROP INLET	CATCH BASIN																			
10+90.00 -L-																																		82	REMOVE EXISTING DRIVE PIPE
12+83.00 -L-								1												1				1											REMOVE & REPLACE EXISTING DI
12+97.00 -L-																																			REMOVE & REPLACE EXISTING PIPE
21+64.00 -L-																																0.045			PLUG AND ABANDON EXISTING PIPE
22+02.00 -L-																																			REMOVE & REPLACE EXISTING PIPE
22+13.00 -L-								1																			1		1						
22+20.00 -L-																																			REMOVE & REPLACE EXISTING PIPE
22+26.00 -L-								1												1				1											
PROJECT TOTALS								3												2				2			1		1			0.045		82	

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I.(N.S.)	(NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

COMPUTED BY: DLH DATE: 09/16/2013
CHECKED BY: DON DATE: 9/18/2013

PROJECT NO	SHEET NO.
R-5805	3-B

RD261649

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

Station	Station	Uncl. Excav.	Embank. +%	Borrow	Waste
-L- 15+00.00	15+50.00	220	78		142
-Y1- 11+50.00	12+50.00	10	9		1
-L- 15+50.00	21+00.00	34,351	51		34,300
SUBTOTALS:		34,581	138		34,443
PROJECT TOTALS:		34,581	138		34,443
LOSS DUE TO CLEARING & GRUBBING		-300			-300
GRAND TOTALS:		34,281	138		34,143
SAY:		**34,300**			
SHOULDER BORROW		50 CY			
DDE		30 CY			

Note: Earthwork quantities are calculated by the Division Design Construct Unit.

Note: Approximate quantities only. Fine Grading, Shoulder Borrow, and Clearing & Grubbing will be paid for at the contract lump sum for "Grading.

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5805	04
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 028951 ENGINEER JOSEPH L LEWIS
Docusigned by: Joseph L. Lewis 41135B5E8A334CA... 6/27/2017

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 20870 ENGINEER MARC T SHOWN
Docusigned by: Marc T. Shown 4B024AEC0A0B4C2... 6/27/2017

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

N NC GRID NAD 83/NSRS 2007

CAJAH MOUNTAIN BAPTIST CHURCH
DB 683 PG 1126
DB 332 PG 652
DB 1086 PG 574

SILVIO G. MARTINAT
DB 669 PG 232

BEGIN PROJECT R-5805
AND RESURFACING
PC Sta.11+50.00 -Y1-

BEGIN CONSTRUCTION
PC Sta.11+75.00 -Y1-

END CONSTRUCTION
Sta. 21+00.00

BEGIN CONSTRUCTION
Sta. 10+50.00

BEGIN PROJECT R-5805
AND RESURFACING
POT Sta. 10+00.00

END RESURFACING
Sta. 22+50.00

END PROJECT R-5805
PT Sta. 22+76.29

POT Sta.15+50.73 -L- =
POT Sta.13+00.00 -Y1-

PC Sta. 13+60.47

WALTER W. EBY
DB 1781PG 401

NORTH CATAWBA FIRE-RESCUE DEPT.
DB 1756 PG 1388

JAMES E. HOLMAN
DB 1070 PG 978
DB 954 PG 300

JOHN IRVIN MANN
DB 416 PG 367

TO US 64

TO US 321 (ALT MAIN ST HUDSON)

SR 1100 CONNELLY SPRINGS ROAD

EXISTING R/W

300' UNIFORM TAPER

100' STORAGE LENGTH

5 TONS CLASS 'B' RIP RAP WITH 14 S.Y. FILTER FABRIC

8 TONS CLASS 'B' RIP RAP WITH 21 S.Y. FILTER FABRIC

REMOVE S 35° 55' 59.0" E

REMOVE & REPLACE

RETAIN

LATERAL BASE DITCH
-L- STA.12+85 TO 13+50 RT
SEE DETAIL A

REMOVE DI AND REPLACE W/2GI

PDE

AUE

PUE

FS

PL 30.00

WOODS

BK CHURCH

GRASS

IS BK BUS

2S BK BUS

IS BK D

UNKNOWN BOX

SPRING HOUSE

FLAG POLES

TRAFFIC SIGNAL CABINET

SUPERELEVATION DIAGRAM

APPROX PIPE LOCATION

CONC CURB & GUTTER

ROCK WALL

BK WALL

CONC

BST

GR

-BL- 1

-BL- 2

-BL- 3

-BL- 4

-BY- 10

-BY- 9

-BL- 5

-BY- 11

-BY- 12

-BY- 13

-BY- 14

-BY- 15

-BY- 16

-BY- 17

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DETAIL B
SPECIAL CUT DITCH
(Not to Scale)

Natural Ground, 2:1, D, d, 4:1 or Flatter, Front Ditch Slope
Min. D=1.5 Ft.
Max. d=1.5 Ft.
Type of Liner= PSRM

STA. 10+50-L- TO STA. 12+50-L- RT.
STA. 10+50-L- TO STA. 11+50-L- LT.
STA. 16+00-L- TO STA. 21+00-L- LT.

DETAIL A
LATERAL BASE DITCH
(Not to Scale)

Natural Ground, 2:1, D, d, 2:1, b, 1'Ft., Fill Slope, B
Min. D=1.5 Ft.
Max. d=1.5 Ft.
B=2.0 Ft.
b=2.0 Ft.
Type of Liner= PSRM

STA. 12+85-L- TO STA. 13+50-L- RT.
EST. DDE = 20.97 CU. YD.

9" x 12" Concrete Curb & Gutter located from sta. -L- 15+36.00 RT to sta. -L- 16+10.00 RT

-L-

PI Sta 18+34.64
△ = 36° 37' 56.9" (RT)
D = 4° 00' 00.0"
L = 915.81'
T = 474.17'
R = 1,432.40'

-Y1-

POT Sta10+00.00
S 85° 09' 05.1" W
PC Sta10+21.60
PI Sta 10+91.57
△ = 21° 26' 04.4" (LT)
D = 15° 29' 55.5"
L = 138.30'
T = 69.97'
R = 369.68'
PT Sta11+59.90
S 63° 43' 00.7" W
POT Sta15+50.73 -L- =
POT Sta13+00.00 -Y1-

NOTE

FOR -L- PROFILE SEE SHEET 5
FOR -Y1- PROFILE SEE SHEET 6
ALL DRIVEWAY RADII ARE 15' UNLESS NOTED
TIE ALL PAVED SHOULDERS AT THE END OF THE RADIUS ON -Y- LINES

26-JUN-2017 14:14
R:\STIPSDATA\Roadway\Proj\R-5805_DDC_psh04.dgn
$$$$USERNAME$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
R-5805	5

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028951 JOSEPH L. LAWS

Joseph L. Laws 6/27/2017

41135B5E8A334CA...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

1409.06 BEGIN RESURFACING

1411.00 BEGIN CONSTRUCTION

1423.89

STA. 15 + 50.73 –L–

= STA. 13 + 00.00 –Y1–

STA. 10 + 50.00

STA. 10 + 00.00

1405.51 END CONSTRUCTION

STA. 21 + 00.00

1392.53 END RESURFACING

STA. 22 + 50.00

1500 1490 1480 1470 1460 1450 1440 1430 1420 1410 1400 1390 1380 1370 1360 1350 1340 1330 1320 1310 1300

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rstatler
Microstation

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
R-5805	6

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 028951 ENGINEER JOSEPH L. LAWS

Joseph L. Laws 6/27/2017

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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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Ø 1432.30 BEGIN RESURFACING

Ø 1429.98 BEGIN CONSTRUCTION

Ø 1423.89

STA. 11 + 50.00

STA 11 + 75.00

STA. 13 + 00.00 –Y1–
= STA. 15 + 50.73 –L–

10 + 00
11 + 00
12 + 00

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09/08/99

TIP PROJECT: R-5805

CONTRACT: DK00220

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CALDWELL COUNTY

TIP NO.	SHEET NO.
R-5805	PMP-1

APPROVED: _____

DATE: _____

SEAL

LOCATION: INTERSECTION OF SR 1001 (CONNELLY SPRINGS RD.) AND SR 1130 (CAJAH MTN. RD.)

TYPE OF WORK: PAVEMENT MARKING PLAN

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" – PROJECT SERVICES UNIT – 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:

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS – LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS – TWO-LANE AND MULTILANE ROADWAYS
1205.05	PAVEMENT MARKINGS – TURN LANES
1250.01	RAISED PAVEMENT MARKERS – INSTALLATION SPACING
1253.01	RAISED PAVEMENT MARKERS – SNOWPLOWABLE

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
SR 1001	THERMOPLASTIC	SNOWPLOWABLE
SR 1130	THERMOPLASTIC	SNOWPLOWABLE

B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.

D) PASSING ZONES WILL BE DETERMINED IN THE FIELD AND MUST BE APPROVED BY THE ENGINEER.

E) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BY USED IN LIEU OF EXTRUDED THERMOPLASTIC FOR STOP BARS, SYMBLS, CHARACTERS AND DIAGONALS. IF HEAT-IN-PLACE IS USED, IT SHALL BE PAID FOR USING THE EXTRUDED THERMOPLASTIC PAY ITEM.

PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	QUANTITY	UNIT
	FINAL PAVEMENT MARKINGS		
	THERMOPLASTIC (4", 90 MIL)		
TA	WHITE EDGE LINE	2767	LINEAR FOOT
	THERMOPLASTIC (4", 120 MIL)		
TB	WHITE 3 FT.– 9 FT./SP MINISKIP	150	LINEAR FOOT
TI	YELLOW DOUBLE CENTER LINE X 2	3834	LINEAR FOOT
	THERMOPLASTIC (12", 120 MIL)		
TC	WHITE STOP BAR	72	LINEAR FOOT
	THERMOPLASTIC (8", 90 MIL)		
TD	WHITE GORE LINE	68	LINEAR FOOT
TJ	YELLOW GORE LINE	118	LINEAR FOOT
	THERMOPLASTIC (90 MIL)		
↱	TURN ARROW SYMBOL	3	EACH
→	STRAIGHT ARROW SYMBOL	1	EACH
	MARKERS		
	SNOWPLOWABLE RAISED PAVEMENT MARKERS		
▫	CRYSTAL /RED	17	EACH
▪	YELLOW /YELLOW	48	EACH

IINDEX

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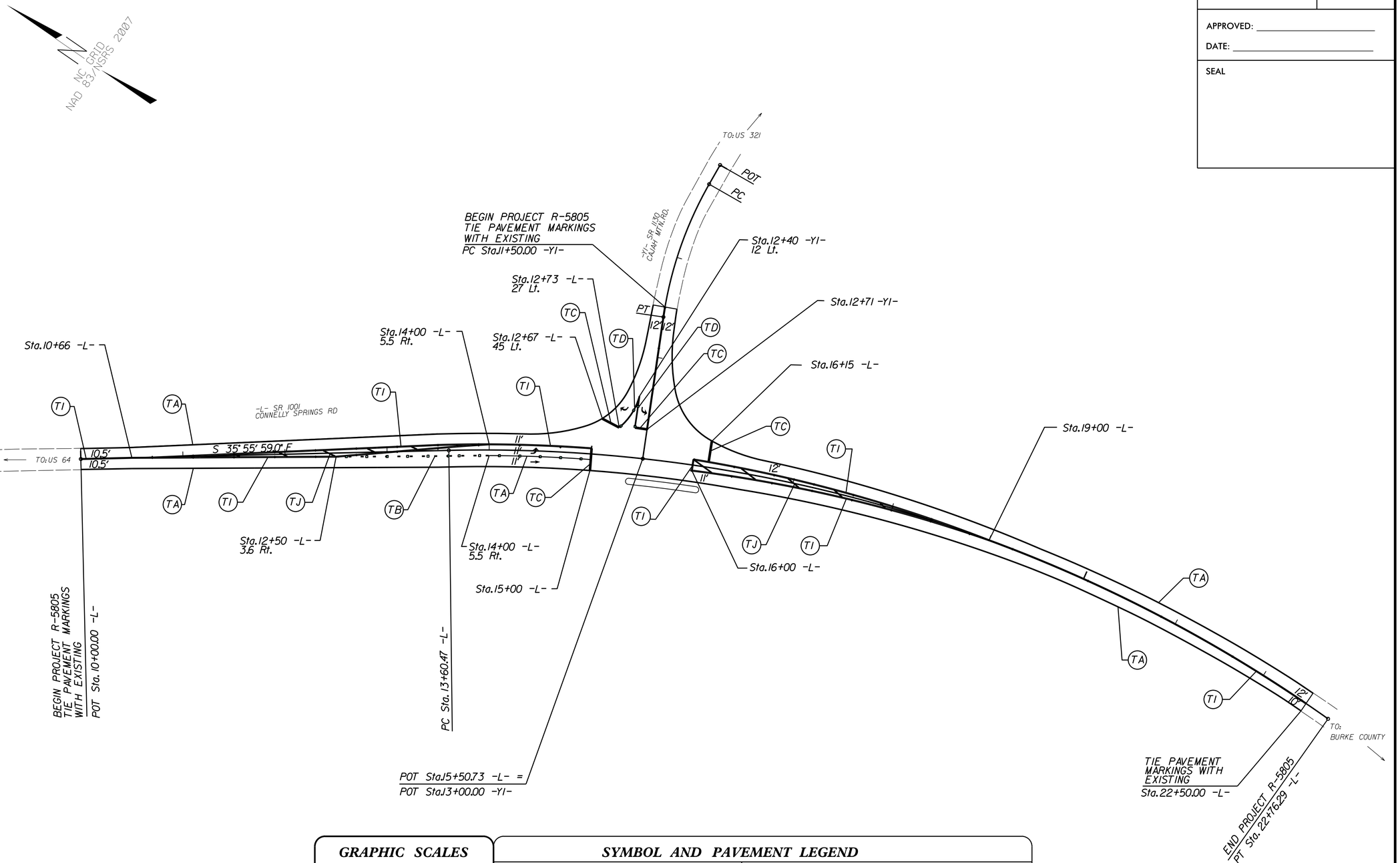
$$$$USERNAME$$$$

TIP NO.	SHEET NO.
R-5805	PMP-2

APPROVED: _____

DATE: _____

SEAL



GRAPHIC SCALES

50 25 0 50 100

PLANS

SYMBOL AND PAVEMENT LEGEND

THERMOPLASTIC:

- TURN ARROW (90 MIL)
- STRIGHT ARROW (90 MIL)
- CRYSTAL/RED SNOWPLOWABLE MARKER
- YELLOW/YELLOW SNOWPLOWABLE MARKER

THERMOPLASTIC:

- (TA) WHITE EDGELINE (4" 90 MIL)
- (TB) WHITE 3 FT.- 9FT./SP.MINISKIP (4" 120 MIL)
- (TC) WHITE STOP BAR (24" 120 MIL)
- (TD) WHITE GORE LINE (8" 90 MIL)
- (TI) YELLOW DOUBLE CENTER LINE (4" 120 MIL)
- (TJ) YELLOW GORE LINE (8" 90 MIL)

PAVEMENT MARKING DETAIL

TIP PROJECT: R-5805

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5805	EC-1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION

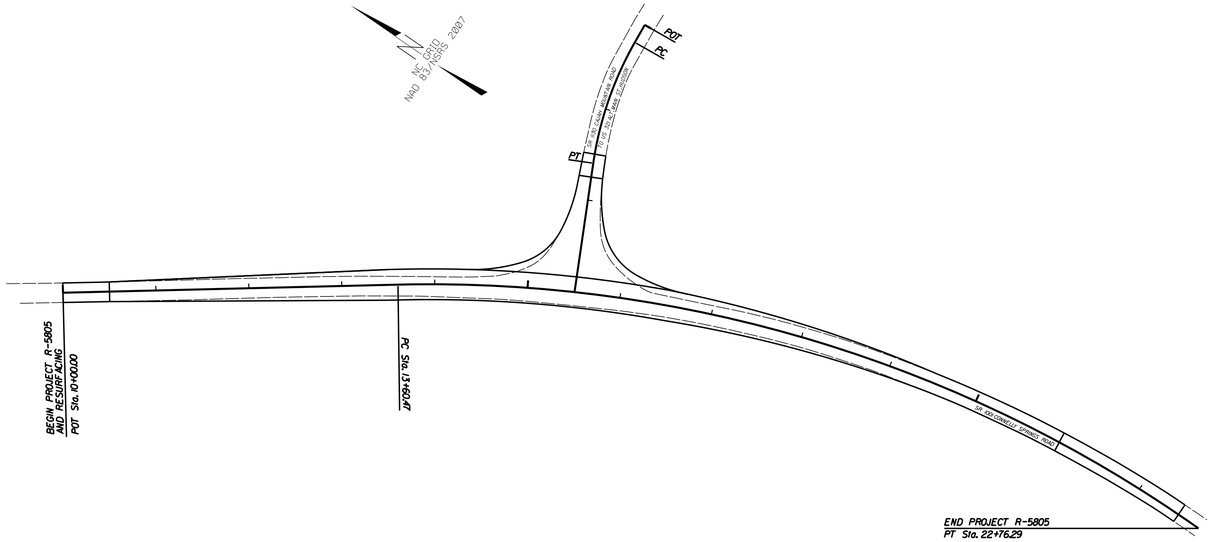
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

CALDWELL COUNTY

LOCATION: INTERSECTION OF SR 1130 (CAJAH MOUNTAIN ROAD) AND SR 1001 CONNELLY SPRINGS ROAD

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND RESURFACING



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
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	EW CFW
	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	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
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	

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

GRAPHIC SCALE

0
PLANS
0
PROFILE (HORIZONTAL)
0
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:

ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2012 STANDARD SPECIFICATIONS

Designed by:

Wes Chandler — *NAME*
3374 — *LEVEL III CERTIFICATION NO.*

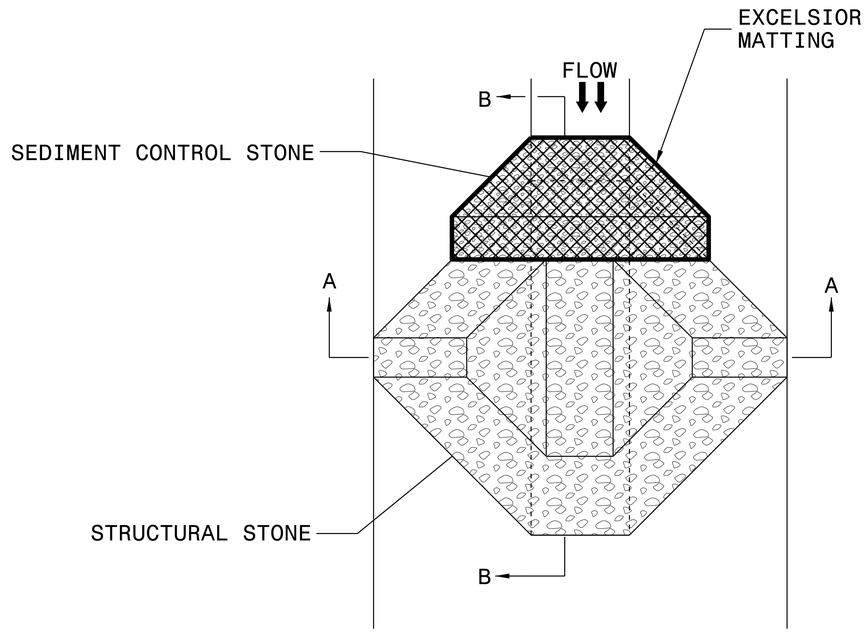
Roadway Standard Drawings

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 revison 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		

PROJECT REFERENCE NO.	SHEET NO.
R-5805	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)



PLAN

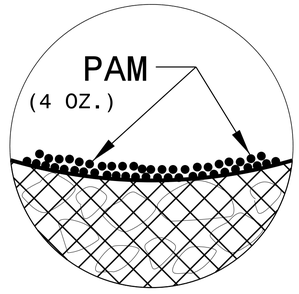
NOTES:

INSTALL TEMPORARY ROCK SILT CHECK TYPE A IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1633.01.

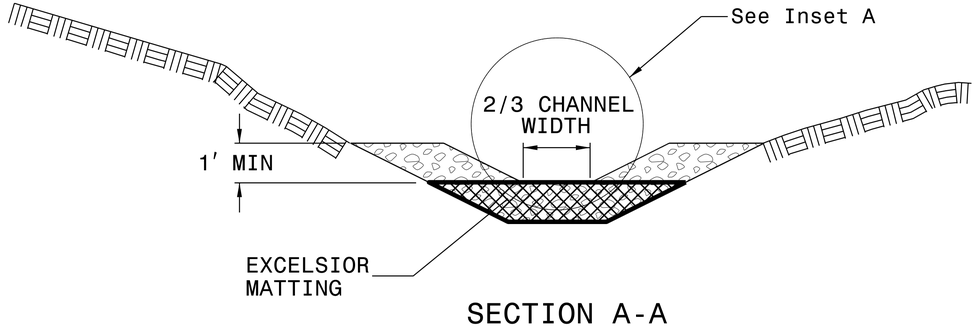
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH ROCK SILT CHECK.

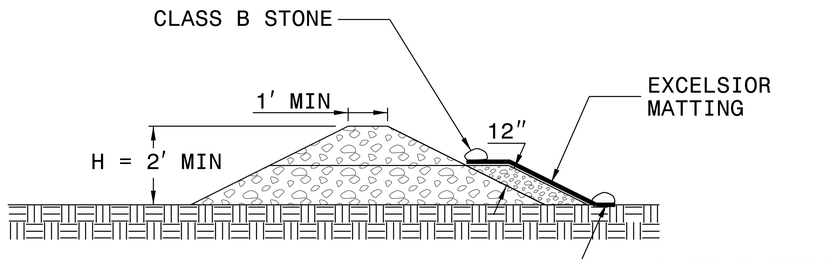
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION A-A

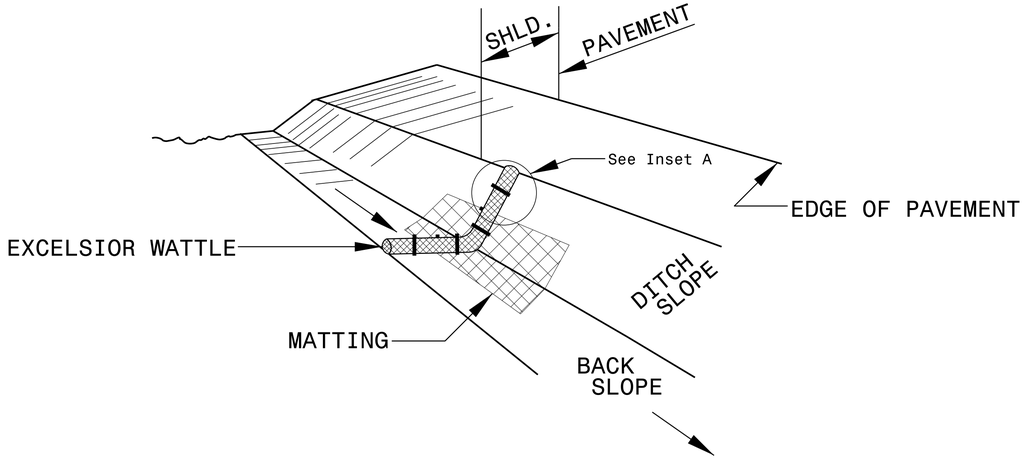


SECTION B-B

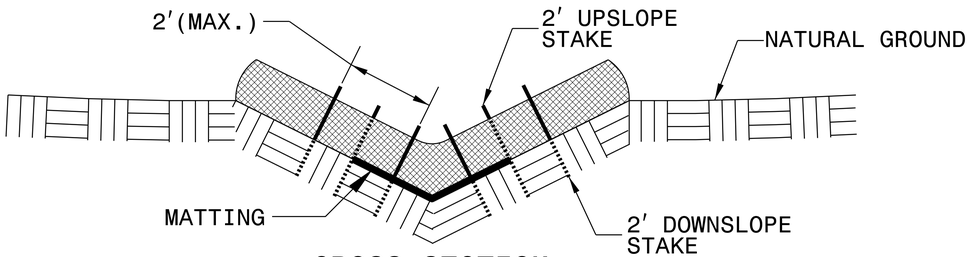
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
R-5805	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

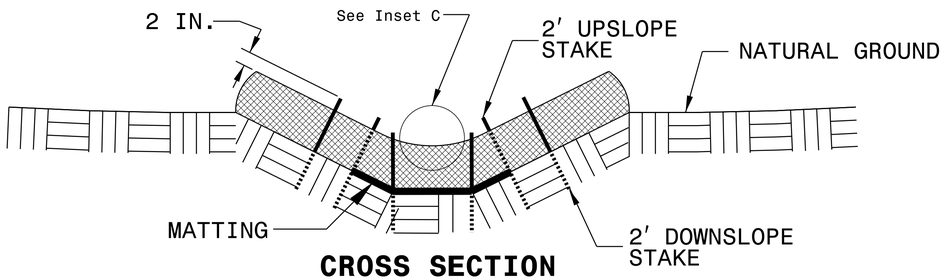
WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

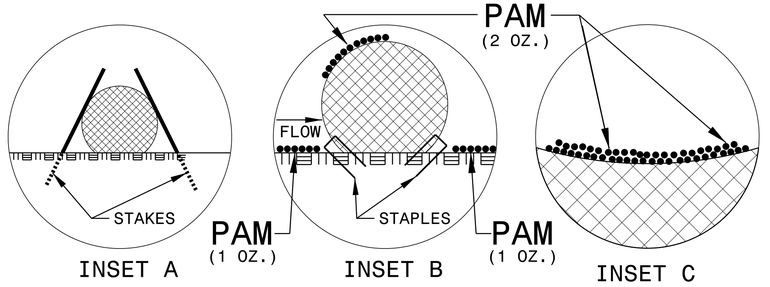
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

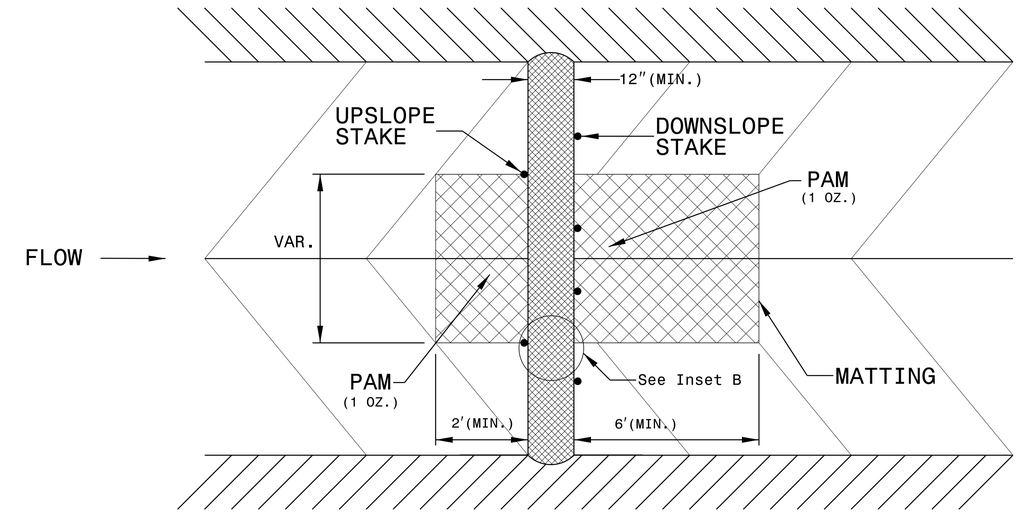
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.





TOP VIEW

PROJECT REFERENCE NO.	SHEET NO.
R-5805	EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING
EROSION CONTROL FOR CONSTRUCTION SHEET 4

PROJECT REFERENCE NO.	SHEET NO.
R-5805	EC-4/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NC GRID
NAD 83/NSRS 2007

CAJAH MOUNTAIN BAPTIST CHURCH
DB 683 PG 1126
DB 332 PG 652
DB 1086 PG 574

BEGIN PROJECT R-5805
AND RESURFACING
PC Sta.11+50.00 -Y1-

BEGIN CONSTRUCTION
PC Sta.11+75.00 -Y1-

SILVIO G. MARTINAT
DB 669 PG 232

5 TONS CLASS 'B' RIP RAP WITH 14 S.Y. FILTER FABRIC

S 54°03'45" W
581.20'

BK CHURCH

60" CHL

CONC

IS BK BUS

2S TANKS

WOODS

GRASS

ROCK WALL

CONC CURB

RETAIN

15" CMP

BST

N 35°55'59.0" E

REMOVE & REPLACE

N.C.D.O.T. TRAFFIC SIGNAL CABINET

APPROX PIPE LOCATION

GR

LATERAL BASE DITCH
-L- STA.12+85 TO 13+50 RT
SEE DETAIL A

REMOVE D AND REPLACE

IS BK D

PDE

PUE

AUE

FLAG POLES

BK WALL

2S BK BUS

SR 1780 CALAHAN MOUNTAIN ROAD

50' R/W

SR 1781 E. MAIN ST. HUDSON

POT

PC

EXISTING R/W

SILVIO G. MARTINAT
DB 669 PG 232

WALTER W. EBY
DB 1781 PG 401

NORTH CATAWBA FIRE-RESCUE DEPT.
DB 1756 PG 1388

SILVIO G. MARTINAT
DB 669 PG 232

N 55°19'22" W
216.53'

N 36°58'32" W
200.00'

S 55°21'52" W
205.67'

S 34°38'08" E
210.00'

S 55°21'03" W
79.99'

BEGIN PROJECT R-5805
AND RESURFACING
POT Sta. 10+00.00

BEGIN CONSTRUCTION
Sta.10+50.00

PC Sta.13+60.47

POT Sta.15+50.73 -L- =
POT Sta.13+00.00 -Y1-

END CONSTRUCTION
Sta. 21+00.00

SILVIO G. MARTINAT
DB 669 PG 232

N 37°16'56" E
305.51'

JAMES E. HOLMAN
DB 1070 PG 978
DB 354 PG 300

S 81°55'14" E
186.27'

JOHN IRVIN MANN
DB 416 PG 367

UNKNOWN BOX

SPRING HOUSE

FLOG AND ABANDON

IRON PIPE

IRON PIN

SF 1004 CONC

REMOVE & REPLACE

WELL

SPRINGS

N 42°27'29" W
682.00'

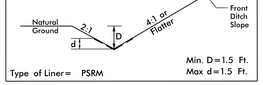
END RESURFACING
Sta.22+50.00

SILVIO G. MARTINAT
DB 669 PG 232

END PROJECT R-5805
PT Sta. 22+76.29

N 85°36'39" W
185.23'

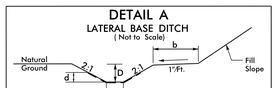
DETAIL B
SPECIAL CUT DITCH
(Not to Scale)



Min. D=1.5 Ft.
Max d=1.5 Ft.
Type of Liner= PSRM

STA. 10+50-L- TO STA. 12+50-L- RT.
STA. 10+50-L- TO STA. 11+50-L- LT.
STA. 16+00-L- TO STA. 21+00-L- LT.

DETAIL A
LATERAL BASE DITCH
(Not to Scale)



Min. D=1.5 Ft.
Max. d=1.5 Ft.
B=2.0 Ft.
b=2.0 Ft.
Type of Liner= PSRM

STA. 12+85-L- TO STA. 13+50-L- RT.
EST. DDE = 20.97 CU. YD.

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ecosnerr at FENTZ446

8/17/99

Place Matting for Erosion Control on Cut Slopes as Work Allows.

PROJECT REFERENCE NO.	SHEET NO.
R-5805	EC-5/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

NC GRID
NAD 83/NSRS 2007

CAJAH MOUNTAIN BAPTIST CHURCH
DB 683 PG 1126
DB 332 PG 652
DB 1086 PG 574

BEGIN PROJECT R-5805
AND RESURFACING
PC Sta.11+50.00 -Y1-

BEGIN CONSTRUCTION
PC Sta.11+75.00 -Y1-

SILVIO G. MARTINAT
DB 669 PG 232

5 TONS CLASS 'B'
RIP RAP WITH
14 S.Y. FILTER FABRIC

S 54°03'45" W
581.20'

BK CHURCH

IS BK BUS

UG TANKS

CONC CURB

ROCK WALL

GRASS

RETAIN

15" CMP

REMOVE S 35°55'59.0" E

WOODS

LATERAL BASE DITCH
-L- STA.12+85 TO 13+50 RT
SEE DETAIL A

APPROX PIPE LOCATION

REMOVE D AND REPLACE

IS BK D

N 55°19'22" E
216.53'

SILVIO G. MARTINAT
DB 669 PG 232

WALTER W. EBY
DB 1781 PG 401

BEGIN PROJECT R-5805
AND RESURFACING
POT Sta. 10+00.00

BEGIN CONSTRUCTION
Sta.10+50.00

PC Sta.13+60.47

N 36°58'32" W
200.00'

S 34°38'08" E
210.00'

NORTH CATAWBA
FIRE-RESCUE DEPT.
DB 1756 PG 1388

2S BK BUS

FLAG POLES

BK WALL

S 55°21'52" W
198.30'

S 55°52'52" W
209.67'

S 55°21'52" W
79.99'

SILVIO G. MARTINAT
DB 669 PG 232

WOODS

SR 1130 CAJAH MOUNTAIN ROAD
TO SR 331 ALT MAIN ST. HUDSON

POT

PC

NCDOT TRAFFIC

SILVIO G. MARTINAT
DB 669 PG 232

END CONSTRUCTION
Sta. 21+00.00

JAMES E. HOLMAN
DB 1070 PG 978
DB 354 PG 300

N 37°16'56" E
305.51'

S 82°55'14" E
1864.2'

UNKNOWN BOX

SPRING HOUSE

PLUG AND ABANDON

IS FD

JOHN IRVIN MANN
DB 416 PG 367

S 88°50'34" W
1860.0'

15" RCP

48" CMP

24" RCP

INT 1139.15'

SPRINGS

REMOVE & REPLACE

END RESURFACING
Sta.22+50.00

SILVIO G. MARTINAT
DB 669 PG 232

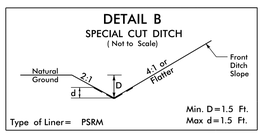
N 42°47'24" W
68.28'

END PROJECT R-5805
PT Sta. 22+76.29

N 85°36'39" W
185.23'

POT Sta.15+50.73 -L- =
POT Sta.13+00.00 -Y1-

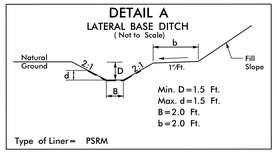
DETAIL B
SPECIAL CUT DITCH
(Not to Scale)



Min. D=1.5 Ft.
Max d=1.5 Ft.
Type of Liner= PSRM

STA. 10+50-L- TO STA. 12+50-L- RT.
STA. 10+50-L- TO STA. 11+50-L- LT.
STA. 16+00-L- TO STA. 21+00-L- LT.

DETAIL A
LATERAL BASE DITCH
(Not to Scale)



Min. D=1.5 Ft.
Max. d=1.5 Ft.
B=2.0 Ft.
b=2.0 Ft.
Type of Liner= PSRM

STA. 12+85-L- TO STA. 13+50-L- RT.
EST. DDE = 20.97 CU. YD.

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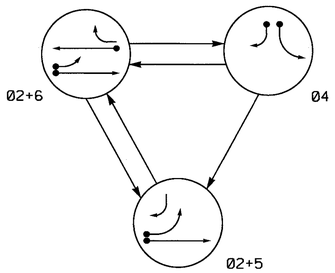
wchandler
Standard: AASHTO_2010

PROJECT REFERENCE NO.	SHEET NO.
R-5805	Sig. 1

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 02+5	PHASE 02+6	PHASE 04	FLASH
21,22	G	G	R	Y
41	R	R	G	R
42	R	R	G	R
51	←	←	←	←
61,62	R	G	R	Y

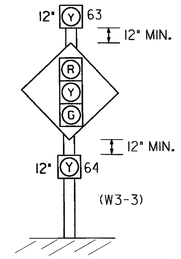
TABLE OF OPERATION

SIGNAL FACE	INTERVAL 1	INTERVAL 2
63	ON	OFF
64	OFF	ON

SIGNAL FACE I.D.

All Heads L.E.D.

Figure 1



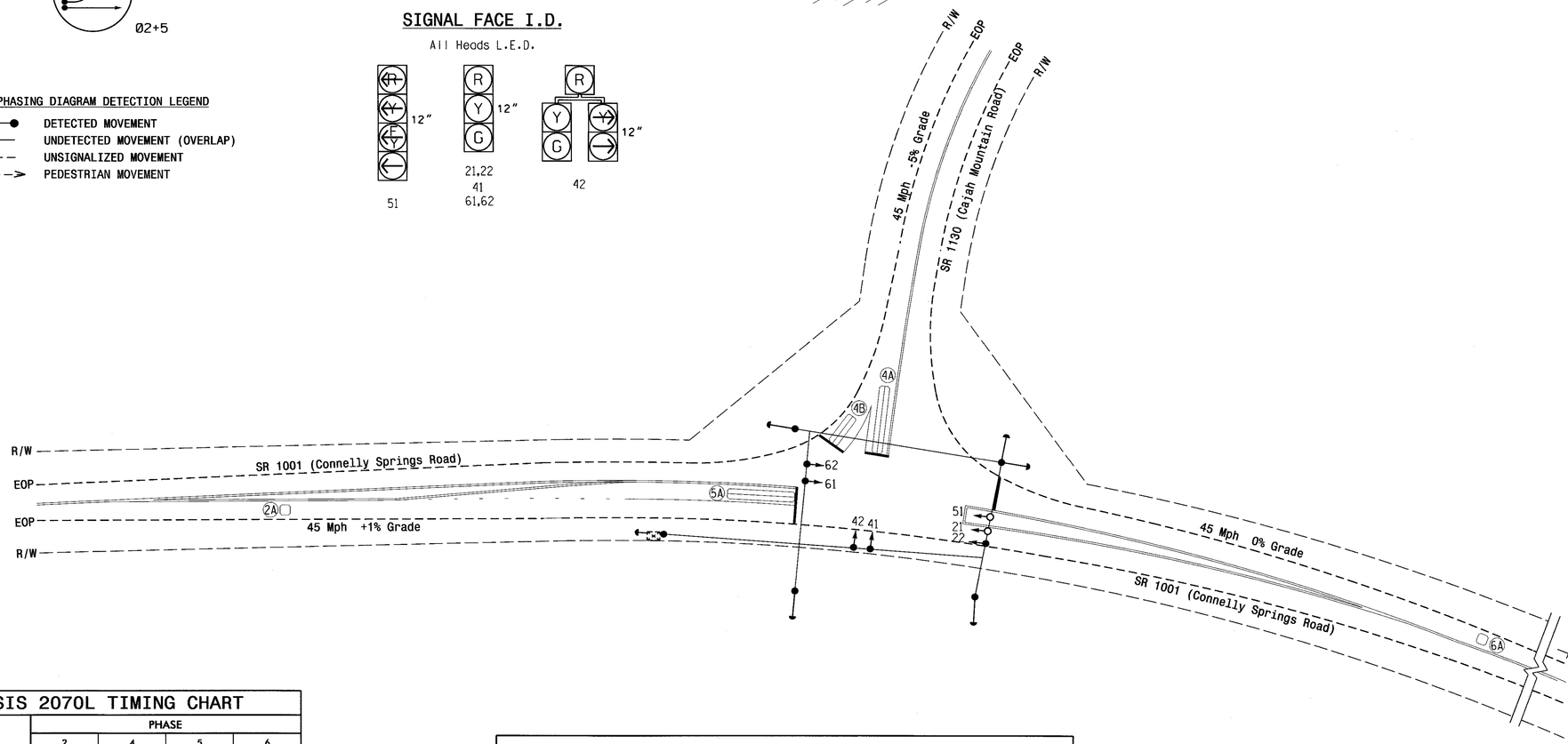
OASIS 2070L LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
2A	6X6	300	3	Y	2	Y	Y	-	-	-	-	-
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	5	-	-
4B	6X20	0	2-4-2	Y	4	Y	Y	-	-	15	-	-
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	15	-	-
					2	Y	Y	Y	-	3	-	-
6A	6X6	300	6	Y	6	Y	Y	-	-	-	-	-

3 Phase
Fully Actuated
(Isolated)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. Flash beacons on Sign A continuously.
5. Repostion existing signal head #22.



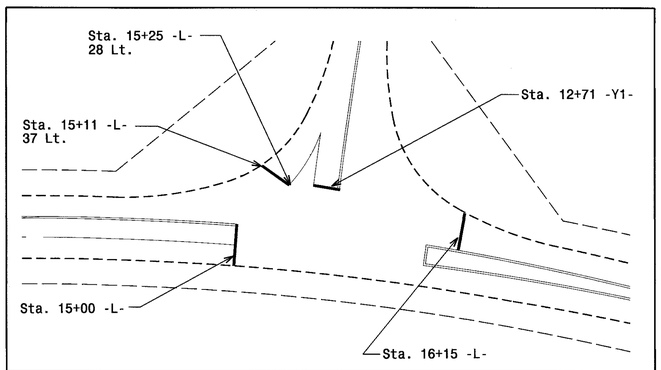
LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
A	Signal Ahead Sign (W3-3) (See Figure 1)	A

OASIS 2070L TIMING CHART

FEATURE	PHASE 2	PHASE 4	PHASE 5	PHASE 6
Min Green 1 *	12	7	7	12
Extension 1 *	6.0	2.0	2.0	6.0
Max Green 1 *	60	25	15	60
Yellow Clearance	4.5	3.1	3.0	4.5
Red Clearance	1.7	2.1	2.1	1.7
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	2.5	-	-	2.5
Max Variable Initial *	34	-	-	34
Time Before Reduction *	15	-	-	15
Time To Reduce *	30	-	-	30
Minimum Gap	3.0	-	-	3.0
Recall Mode	MIN RECALL	-	-	MIN RECALL
Vehicle Call Memory	YELLOW	-	-	YELLOW
Dual Entry	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.



PROPOSED STOPBAR LOCATIONS

Signal Upgrade Corr. File No. 11-11-201

Prepared in the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy.,Garner,NC 27529

SR 1001 (Connelly Springs Road)
at
SR 1130 (Cajah Mtn. Road)

Division 11 Caldwell County Cajah Mountain

PLAN DATE: October 2012 REVIEWED BY:

PREPARED BY: B.E. Wynn REVIEWED BY:

REVISIONS	INIT.	DATE

SCALE 0 40 1"=40'

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 30530 ENGINEER ZACHARY W. BEYLE
SIGNATURE 11/7/12 DATE

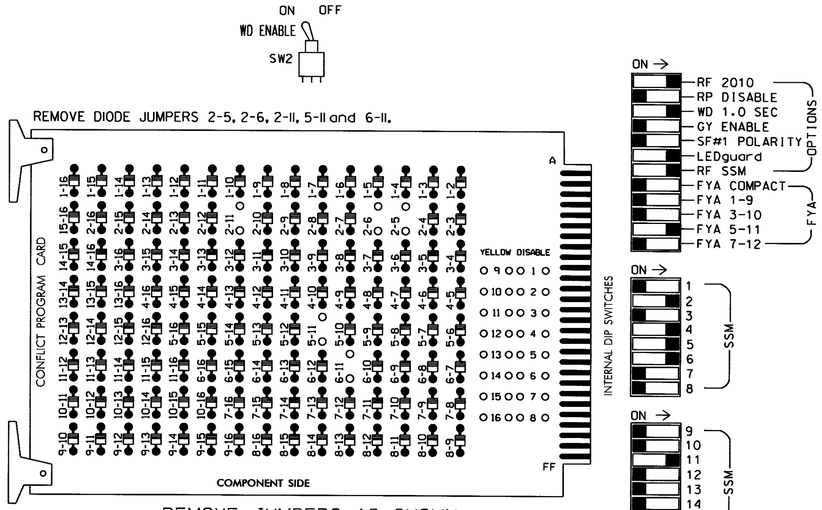
SIG. INVENTORY NO. 11-1086

DT_NOV-2012_08:38
R:\Traffic\Signals\Designs\51signals\111086_sig_dsn_2012xxxx.dgn
bwynn

PROJECT REFERENCE NO.	SHEET NO.
R-5805	Sig. 2

EDI MODEL 2010ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



REMOVE JUMPERS AS SHOWN

NOTES:

1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Make sure jumpers SEL2-SEL5 are present on the monitor board.

■ = DENOTES POSITION OF SWITCH

NOTES

1. To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the Signal Plans.
2. Ensure that Red Enable is active at all times during normal operation. To prevent Red Failures on unused monitor channels, tie unused red monitor inputs 1,3, 7,8,9,10,12,13,14,15 & 16 to load switch AC+ per the cabinet manufacturer's instructions.
3. Enable Simultaneous Gap-Out for all phases.
4. Program phases 2 and 6 for Variable Initial and Gap Reduction.
5. Program phases 2 and 6 for Start Up In Green.
6. Program phases 2 and 6 for Yellow Flash.

EQUIPMENT INFORMATION

CONTROLLER.....2070L
CABINET.....332 /W/ AUX
SOFTWARE.....ECONOLITE OASIS
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
LOAD SWITCHES USED.....S2,S4,S5,S6,S12
PHASES USED.....2,4,5,6
OVERLAP "A".....NOT USED
OVERLAP "B".....NOT USED
OVERLAP "C".....5+6
OVERLAP "D".....NOT USED

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S2P	S3	S4	S4P	S5		S6	S6P	S7	S8	S8P	S9	S10	S11	S12	S13	S14
PHASE	1	2	2 PED	3	4	4 PED	5		6	6 PED	7	8	8 PED	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	NU	21,22	NU	NU	41,42	NU	42	51★	61,62	NU	NU	NU	NU	NU	NU	NU	51★	NU	NU
RED		128			101		✱		134										
YELLOW		129			102				135										
GREEN		130			103				136										
RED ARROW																	A114		
YELLOW ARROW							132										A115		
FLASHING YELLOW ARROW																	A116		
GREEN ARROW							133	133											

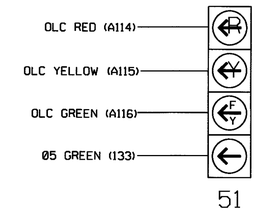
NU = Not Used

✱ Denotes install load resistor. See load resistor installation detail this sheet.

★ See pictorial of head wiring in detail below.

4 SECTION FYA PPLT SIGNAL WIRING DETAIL

(wire signal head as shown)



NOTE

1. The sequence display for this signal requires special logic programming. See sheet 2 of 2 for programming instructions.

INPUT FILE POSITION LAYOUT

(front view)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	SLOT EMPTY	ø2 2A	SLOT EMPTY	WIRED INPUT ⊗	SLOT EMPTY	ø4 4A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	FS DC ISOLATOR
	L		NOT USED				ø4 4B								ST DC ISOLATOR
FILE "J"	U	ø5 5A	ø6 6A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L	NOT USED	NOT USED												

EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME

⊗ Wired Input - Do not populate slot with detector card

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
2A	TB2-5,6	I2U	39	1	2	2	Y	Y			
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			5
4B	TB4-11,12	I6L	45	7	14	4	Y	Y			15
5A[1]	TB3-1,2	J1U	55	17	5	5	Y	Y			15
	-	I4U	47	9	22	2	Y	Y	Y		3
6A	TB3-5,6	J2U	40	2	6	6	Y	Y			

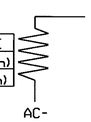
[1] Add jumper from J1-W to I4-W, on rear of input file.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown below)

ACCEPTABLE VALUES	
VALUE (ohms)	WATTAGE
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



NOTE: The purpose of this resistor is to load the channel red monitor input in order for the Signal Sequence Monitor to use the full signal sequence monitoring capability on channels that do not use the red display in the field.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 11-1086
DESIGNED: October 2012
SEALED: 11/07/12
REVISED: N/A

ELECTRICAL DETAIL SHEET 1 OF 2

ELECTRICAL AND PROGRAMMING DETAILS FOR:	SR 1001 (Connelly Springs Road) at SR 1130 (Cajah Mtn. Road)	SEAL
Prepared in the Offices of: Transportation Mobility and Safety Division, North Carolina Department of Transportation, Traffic Engineering Branch, Signal Management Section	Division 11 Caldwell County Cajah Mountain	NORTH CAROLINA PROFESSIONAL SEAL 022013 ENGINEER GEORGE C. BROWN
750 N.Greenfield Pkwy.,Garner,NC 27529	PLAN DATE: October 2012 REVIEWED BY: T. Jyle	SIGNATURE 11/9/12 DATE
	PREPARED BY: C. Strickland REVIEWED BY:	SIG. INVENTORY NO. 11-1086
	REVISIONS INIT. DATE	

07-NOV-2012 13:10
S:\TIS&SW\ITS Signals\Workgroups\Sig Mon\Strickland\11086_Simple_xxx.dgn
ceds1284.cdd

PROJECT REFERENCE NO.	SHEET NO.
R-5805	Sig. 3

LOGICAL I/O PROCESSOR PROGRAMMING DETAIL
TO PRODUCE SPECIAL FYA-PPLT SIGNAL SEQUENCE

(program controller as shown below)

1. FROM MAIN MENU PRESS '2' (PHASE CONTROL), THEN '1' (PHASE CONTROL FUNCTIONS). SCROLL TO THE BOTTOM OF THE MENU AND ENABLE ACT LOGIC COMMANDS 1, 2 AND 3.

2. FROM MAIN MENU PRESS '6' (OUTPUTS), THEN '3' (LOGICAL I/O PROCESSOR).

LOGICAL I/O COMMAND #1 (+/-COMMAND#)
IF ACTIVE PHASE #5 IS ON
AND RED CLEAR ON PHASE #5 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #42 ON
SET OUTPUT ASSIGNMENT #43 OFF

NOTE: LOGIC FOR PHASE 5 RED CLEAR WHEN TRANSITIONING FROM PHASE 5 TO PHASE 6 (HEAD 51).

PRESS '+'

LOGICAL I/O COMMAND #2 (+/-COMMAND#)
IF ACTIVE PHASE #5 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #44 OFF

NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 5 (HEAD 51).

PRESS '+'

LOGICAL I/O COMMAND #3 (+/-COMMAND#)
IF YELLOW ON PHASE #5 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #43 ON

NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 5 (HEAD 51).

LOGIC I/O PROCESSOR PROGRAMMING COMPLETE

OUTPUT REFERENCE SCHEDULE

OUTPUT 42 = Overlap C Red
OUTPUT 43 = Overlap C Yellow
OUTPUT 44 = Overlap C Green

OVERLAP PROGRAMMING DETAIL

(program controller as shown below)

FROM MAIN MENU PRESS '8' (OVERLAPS), THEN '1' (VEHICLE OVERLAP SETTINGS).

PRESS '+' TWICE

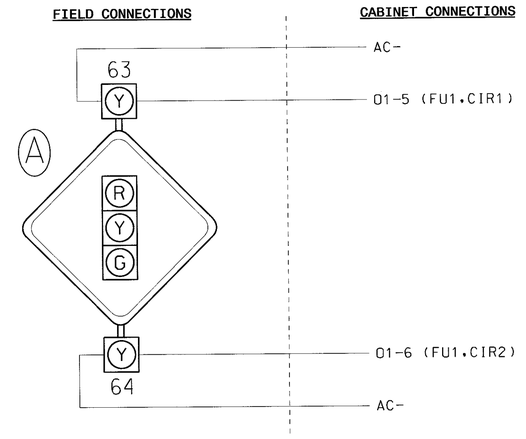
```
 PAGE 1: VEHICLE OVERLAP 'C' SETTINGS
 PHASE:          |12345678910111213141516
VEH OVL PARENTS: |    XX
VEH OVL NOT VEH: |
VEH OVL NOT PED: |
VEH OVL GRN EXT: |
STARTUP COLOR:  _ RED  _ YELLOW  _ GREEN
FLASH COLORS:   _ RED  _ YELLOW  X GREEN
SELECT VEHICLE OVERLAP OPTIONS:   (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...Y
GREEN EXTENSION (0-255 SEC).........0
YELLOW CLEAR (0=PARENT,3-25.5 SEC)..0.0
RED CLEAR (0=PARENT,0.1-25.5 SEC)...0.0
OUTPUT AS PHASE # (0=NONE, 1-16)....0
```

← NOTICE GREEN FLASH

OVERLAP PROGRAMMING COMPLETE

BEACON WIRING DETAIL

(wire flasher as shown below)



ELECTRICAL DETAIL SHEET 2 OF 2

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 11-1086
DESIGNED: October 2012
SEALED: 11/07/12
REVISED: N/A

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signals Management Section

750 N.Greenfield Pkwy.Garner,NC 27529

SR 1001 (Connelly Springs Road)
at
SR 1130 (Cajah Mtn. Road)

Division 11	Caldwell County	Cajah Mountain
PLAN DATE: October 2012	REVIEWED BY:	T. Vyas
PREPARED BY: C. Strickland	REVIEWED BY:	

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 022013 ENGINEER GEORGE C. BROWN

SIGNATURE DATE 11/9/12

SIG. INVENTORY NO. 11-1086

07-NOV-2012 13:12
S:\TSAS\TS Signals\Workgroups\Sig Mgmt\Strickland\11086_sht_e_xxx.dgn
dgn Strickland

SAFETYFirst
- PERSONAL ACCOUNTABILITY
- ACTIVE CARING
- HAZARD RECOGNITION

USP: Add Up Stream Protection, Facility ID, and Blocking Devise Type
USP: 39013054 - Station Regulator
USP:
USP:
USP:

CIRCLE FOR SAFETY — DUKE ENERGY

Safety Reminders / Adverse Conditions

?: Pole Removal Back Line on Hill
?: Ticks
?: Working in Blind Curve - Heavy traffic
?: Setting pole in Rock (maybe)

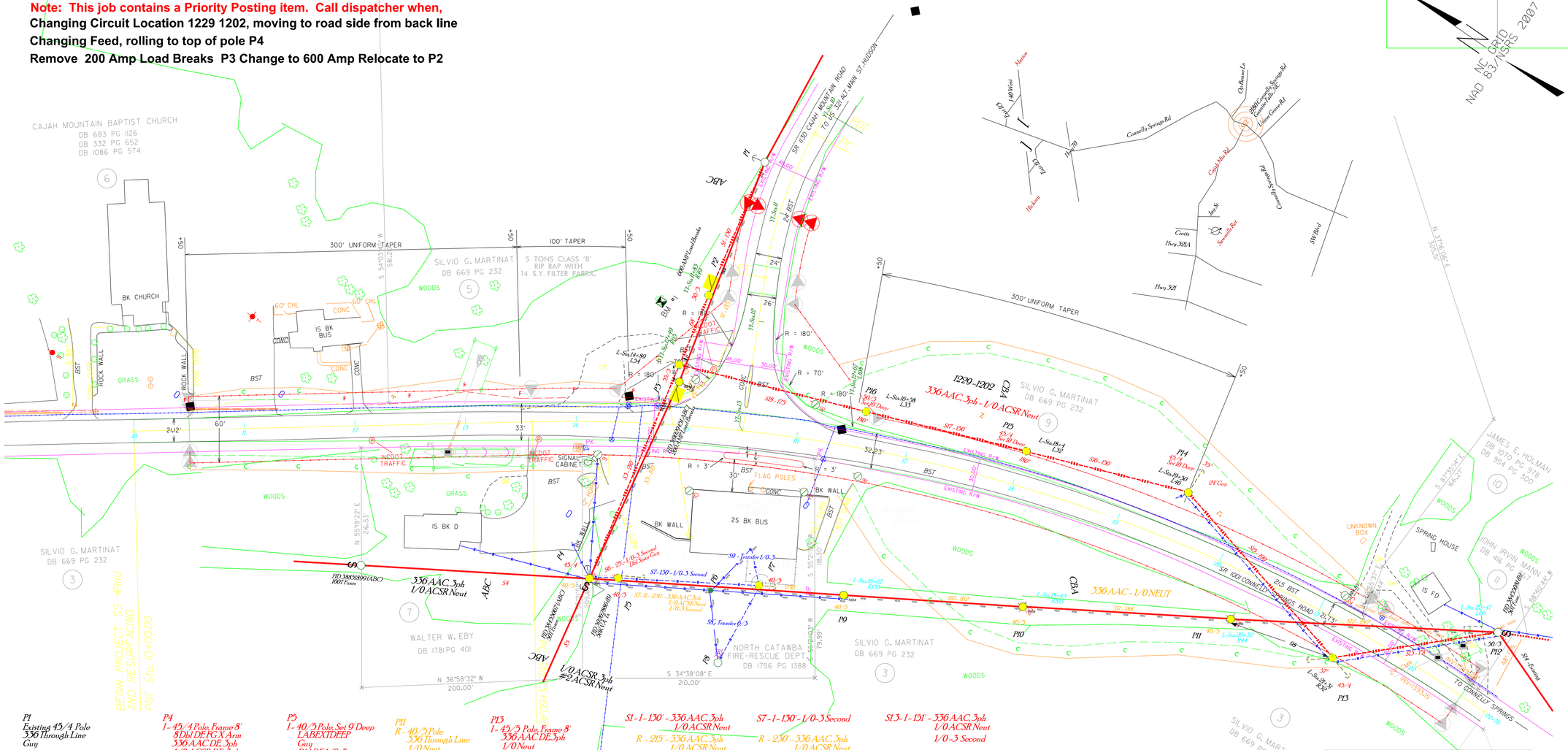
WZS: Remember "Your Circle of Safety"
WZS: Page 19 Lane Closure on a Two-Lane Rd
WZS: Page 25 Lane Closure in Advance of Intersection
WZS: Page 26 Lanr Closure Beyond an Intersection
WZS:

REMEMBER: Work zone area conditions may have changed for this job! Everyone is responsible for verifying the above safety information is correct prior to any work being performed each day.

PROJECT REFERENCE NO.	SHEET NO.
R-5805	04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NC GRID
NAD 83/NSRS 2007

Note: This job contains a Priority Posting item. Call dispatcher when,
Changing Circuit Location 1229 1202, moving to road side from back line
Changing Feed, rolling to top of pole P4
Remove 200 Amp Load Breaks P3 Change to 600 Amp Relocate to P2



P1
Existing 45/4 Pole
336 Through Line
Guy

P2
1 - 30/3 Pole, Frame 8', 180°
336 Dbl DE
1/0 ACSR Neut
8 Dbl DE FG X Arm
600 Amp Load Breaks(ABC)

P3
1 - 35/3 Pole, Frame 8', 180°
336 AAC Through Line
1/0 ACSR Neut
8' Wood X Arm
10' DE FG X Arm
Jumpers
Guy

R - 45/4 Pole
8 Dbl Wood X Arms
336 AAC Dbl DE
200 Amp Load Breake (ABC)
Guy

P4
1 - 45/4 Pole, Frame 8'
8 Dbl DE FG X Arm
336 AAC DE 3ph
1/0 ACSR DE 3ph
30T Fuse (ABC)
Fid 38435067
10' DE FG X Arm
336 AAC DE 3ph
Transfer 50 kVA Tx
Fid 392626886 (B)
Jumpers
LABLAYOUTS -6
LABTRFDE 2/0 - 556 -12
LABCUTOFFPOL
Guy
Guy
LABTRFDEPLEX2/0 - 3

R - 40/3 Pole
8 Dbl Wood X Arms
336 AAC DE 3ph
1/0 ACSR DE 3ph
30T Fuse (ABC)
Fid 38435067
8 Dbl Wood X Arms
336 AAC Through Line 3ph
Transfer 50 kVA Tx
Fid 392626886 (B)
Guy
Guy

P5
1 - 40/3 Pole, Set 9' Deep
LABEXTDEEP
Guy
Dbl DE 1/0 - 3

P6
R - Midspan Tap

P7
1 - 40/3 POLE
DE 1/0 - 3
Guy
Attach 6/3

P8
Lower Flood Light
Attach 6/3

P9
R - 40/3 Pole
336 Through Line
1/0 Neut
8' Wood X Arm
LABHS3PHADD

P10
R - 40/3 Pole
336 Through Line
1/0 Neut
8' Dbl Wood X Arm
8' Wood X Arm
LABHS3PHADD

P11
R - 40/3 Pole
336 Through Line
1/0 Neut
8' Wood X Arm
LABHS3PHADD

P12
Existing 45/4 Pole

1 - 8' DE FG X Arm
336 AAC DE 3ph
1/0 ACSR Neut
LABLAYOUTS
Jumpers
Guy

R - 336 DE 3ph
8 Dbl Wood X Arms
Guy

P13
1 - 45/3 Pole, Frame 8'
336 AAC DE 3ph
1/0 Neut
8' DE FG X Arm
336 AAC DE 3ph
1/0 Neut
10' DE FG X Arm
Jumpers
Guy
Guy
LABREMROCK

P14
1 - 45/3 Pole, Frame 8', Set 10' Deep
336 AAC Through Line, 3ph
1/0 ACSR Neut
LABREMROCK
LABEXTDEEP

P15
1 - 45/4 Pole, Frame 8', SET 10' Deep
336 AAC Through Line, 3ph
1/0 ACSR Neut
LABREMROCK
LABEXTDEEP

P16
1 - 50/3 Pole, Frame 8', Set 10' Deep
336 AAC Through Line, 3ph
1/0 ACSR Neut
LABREMROCK
LABEXTDEEP

S1 - 1 - 130' - 336 AAC, 3ph
1/0 ACSR Neut
R - 215' - 336 AAC, 3ph
1/0 ACSR Neut

S2 - 1 - 68' - 336 AAC, 3ph
1/0 ACSR Neut

S3 - 1 - 210' - 336 AAC, 3ph
1/0 ACSR Neut
R - 195' - 336 AAC, 3ph
1/0 ACSR Neut

S4 - Transfer - 336 AAC, 3ph
1/0 ACSR Neut

S5 - Transfer - 1/0 ACSR 3ph
#2 ACSR Neut

S6 - 1 - 25' - 1/0 - 3 Second
Dbl Span Guy

S7 - 1 - 130' - 1/0 - 3 Second
R - 230' - 336 AAC, 3ph
1/0 ACSR Neut
1/0 - 3 Second

S8 - Transfer 6/3

S9 - Transfer 1/0 - 3 SVC

S10 - R - 162' - 336 AAC, 3ph
1/0 ACSR Neut

S11 - R - 188' - 336 AAC, 3ph
1/0 ACSR Neut

S12 - R - 242' - 336 AAC, 3ph
1/0 ACSR Neut

S13 - 1 - 151' - 336 AAC, 3ph
1/0 ACSR Neut
1/0 - 3 Second

S14 - Existing 336 AAC, 3ph

S15 - 1 - 199' - 336 AAC, 3ph
1/0 ACSR Neut
1/0 - 3 Second

S16 - 150' - 336 AAC, 3ph
1/0 ACSR Neut

S17 - 150' - 336 AAC, 3ph
1/0 ACSR Neut

S18 - 185' - 336 AAC, 3ph
1/0 ACSR Neut

Substation Name(s)	Sawmills Ret
Circuit ID(s)	12291202
Facility ID(s)	38351901

Work Order Number	7626852
Customer/Contact	NCDOT - Susan Huffman
Contact Phone	336-667-9101
Job Site Address	2180 Connelly Springs Rd
City	Granite Falls
County	Caldwell
State, Zip	NC 28630
Designer	Fred Liles
Designer Phone	828-323-2773 - 828-850-2371

Crew -Charge Time: Install / Rem to SHR026852

DUKE ENERGY®

Sheet 1 of 1
Scale = N/A

REVISIONS
05/12/2014 PARCEL 3 AND 9 CONVERTED TCE TO RIGHT OF WAY
05/12/2014 REMOVED TCE ON PARCEL 10 AND 11

BEGIN PROJECT SS-49/U AND RESURFACING POT Sta. 10+00.00

$$$$USERNAME$$$$ $$$$SYSTIME$$$$ $$$$DGN$$$$

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X

R-5805

CROSS - SECTION INDEX

-L- STA. 10+00.00 TO STA. 22+50.00 X-1 - X-13

-Y1- STA. 11+50.00 TO STA. 12+50.00 X-14

PROJ. REFERENCE NO.	SHEET NO.
R-5805	X-A

Approximate quantities only. Fine grading, shoulder borrow, and clearing and grubbing will be paid for at the lump sum price for "Grading".

NOTE: EMBANKMENT COLUMN DOES NOT INCLUDE BACKFILL FOR UNDERCUT

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CROSS-SECTION SUMMARY

Station L	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
10+50.00	0	0
11+00.00	19	7
11+50.00	28	10
12+00.00	24	10
12+50.00	29	7
13+00.00	25	14
13+50.00	26	11
14+00.00	27	2
14+50.00	14	4
15+00.00	12	3
15+50.00	16	0
16+00.00	18	0
16+50.00	348	0
17+00.00	1673	0
17+50.00	3925	1
18+00.00	5871	3
18+50.00	6790	3
19+00.00	6414	4
19+50.00	4690	6
20+00.00	2670	8
20+50.00	1334	8
21+00.00	618	11

Station Y1	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
11+50.00	0	0
12+00.00	4	5
12+50.00	6	3

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-1

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

1425 1420 1415 1410 1405 1400

S.S. 1414.28

2:1 4:1

1412.84

0.013

1414.68

11+50.00

0.014

4:1 2:1

S.S. 1414.64

1412.83

S.S. 1413.29

2:1 4:1

1411.04

0.016

1412.89

11+00.00

0.006

4:1 2:1

S.S. 1412.48

1411.18

S.S. 1410.35

2:1

0.022

1411.00

10+50.00

0.008

4:1 2:1

S.S. 1410.22

1409.26

RESURFACE ONLY

1409.06

10+00.00

-L-

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-2

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

1425 1420 1415 1410 1405 1400 1395

S.S. 1418.92

2:1 0.000 1419.52 0.032 2:1

2' 2' 2:1 2:1

1418.80 1417.30

S.S. 1418.88

13+50.00

S.S. 1413.69

2:1 0.002 1418.43 0.037 2:1

2' 2' 2:1 2:1

1417.53 1416.07

S.S. 1417.70

13+00.00

S.S. 1416.63

2:1 0.000 1417.44 0.029 4:1 2:1

1415.32

S.S. 1418.38

12+50.00

DRIVE--TIE

var. 0.005 1416.25 0.024 4:1 2:1

1414.23

S.S. 1416.41

12+00.00

-4-

26-JUN-2017 14:5
C:\Projects\Proj\R-5805_Rdy_xpl.dgn
$$$$USERNAME

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-3

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

1435
1430
1425
1420
1415

INTERSECTION SHEAR LINE

0.030 — 1424.81 — 0.055 — var. DRIVE TIE — 1423.70

16+00.00

INTERSECTION SHEAR LINE

0.039 — 1423.87 — 0.058 — var. DRIVE-TIE — 1422.72

15+50.00

INTERSECTION SHEAR LINE

0.022 — 1422.86 — 0.064 — var. DRIVE-TIE — 1421.61

15+00.00

2:1 — 0.022 — 1421.77 — 0.059 — var. DRIVE-TIE — 1420.60

S.S. 1421.08

14+50.00

2:1 — 0.013 — 1420.60 — 0.038 — var. DRIVE-TIE — 1419.77

DRIVE-TIE

14+00.00

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-4

S.S. 1443.89

2:1

4:1

1424.46

0.043

1425.20

0.048

1424.21

var.

DRIVE-TIE

16+50.00

—L—

26-JUN-2017 14:15
$$$$USER$$$$
$$$$LOGIN$$$$
$$$$PROJECT$$$$
C:\Projects\Proj\R-5805_Rdy_xpl.dgn

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-5

MATCHLINE –L– 17+00.00 LT

S.S. 1455.99

2%

MATCHLINE –L– 17+00.00 RT

S.S. 1451.46

2%

MATCHLINE –L– 17+00.00 LT

2:1

4:1

1423.55

0.054

1425.05

0.056

17+00.00

4:1

1422.49

2:1

S.S

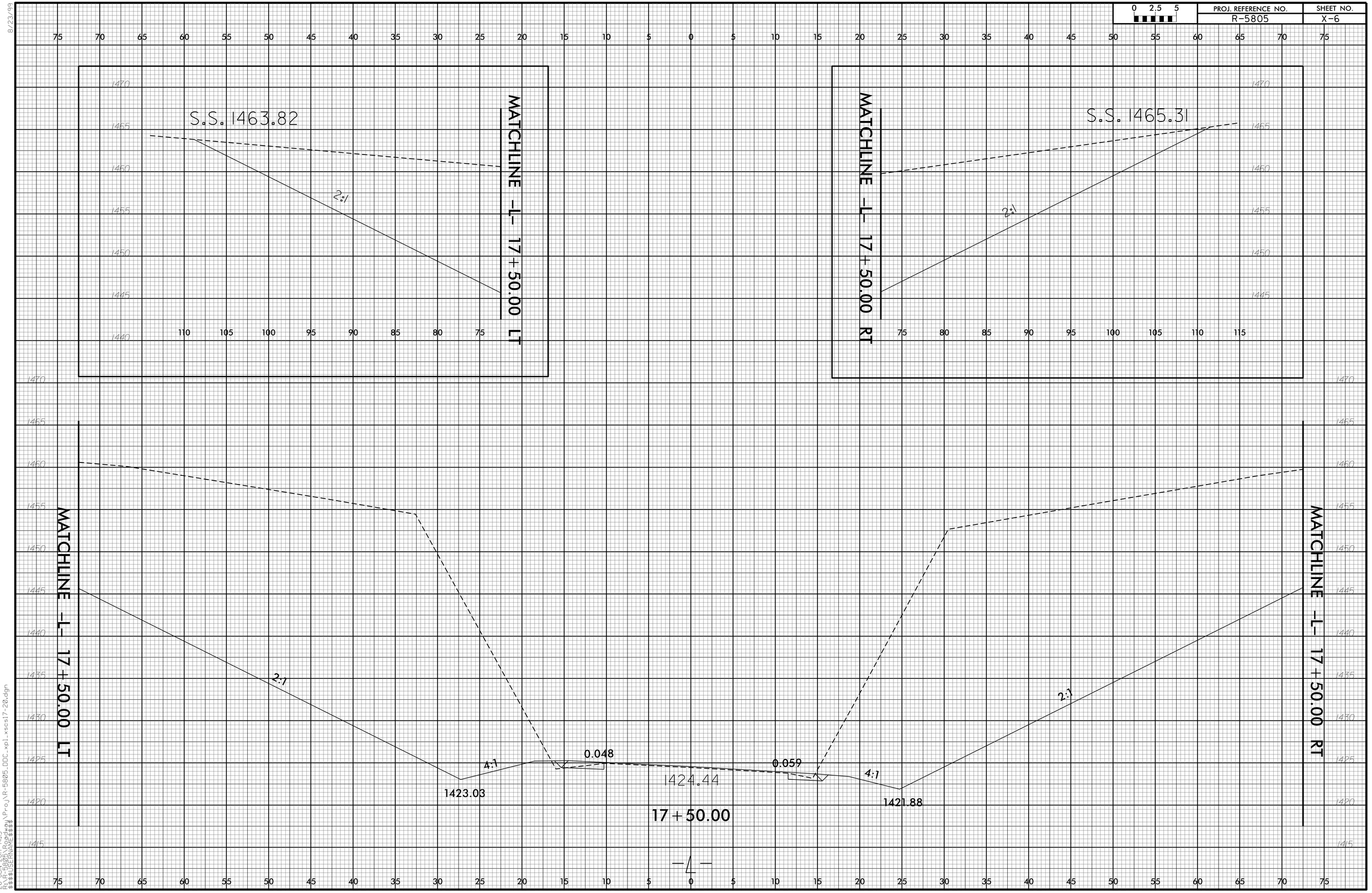
MATCHLINE –L– 17+00.00 RT

–4–

26-JUN-2017 14:15
$$$$USERNAME$$$$
$$$$USERNAME$$$$
C:\Projects\Proj\R-5805_DDC_xpl.xscs17-20.dgn

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-6



8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-7

S.S. 1466.27

2%

MATCHLINE –L– 18+00.00 LT

MATCHLINE –L– 18+00.00 RT

S.S. 1474.77

2%

MATCHLINE –L– 18+00.00 LT

2:1

4:1

0.048

1422.50

1423.27

0.052

4:1

1420.85

2:1

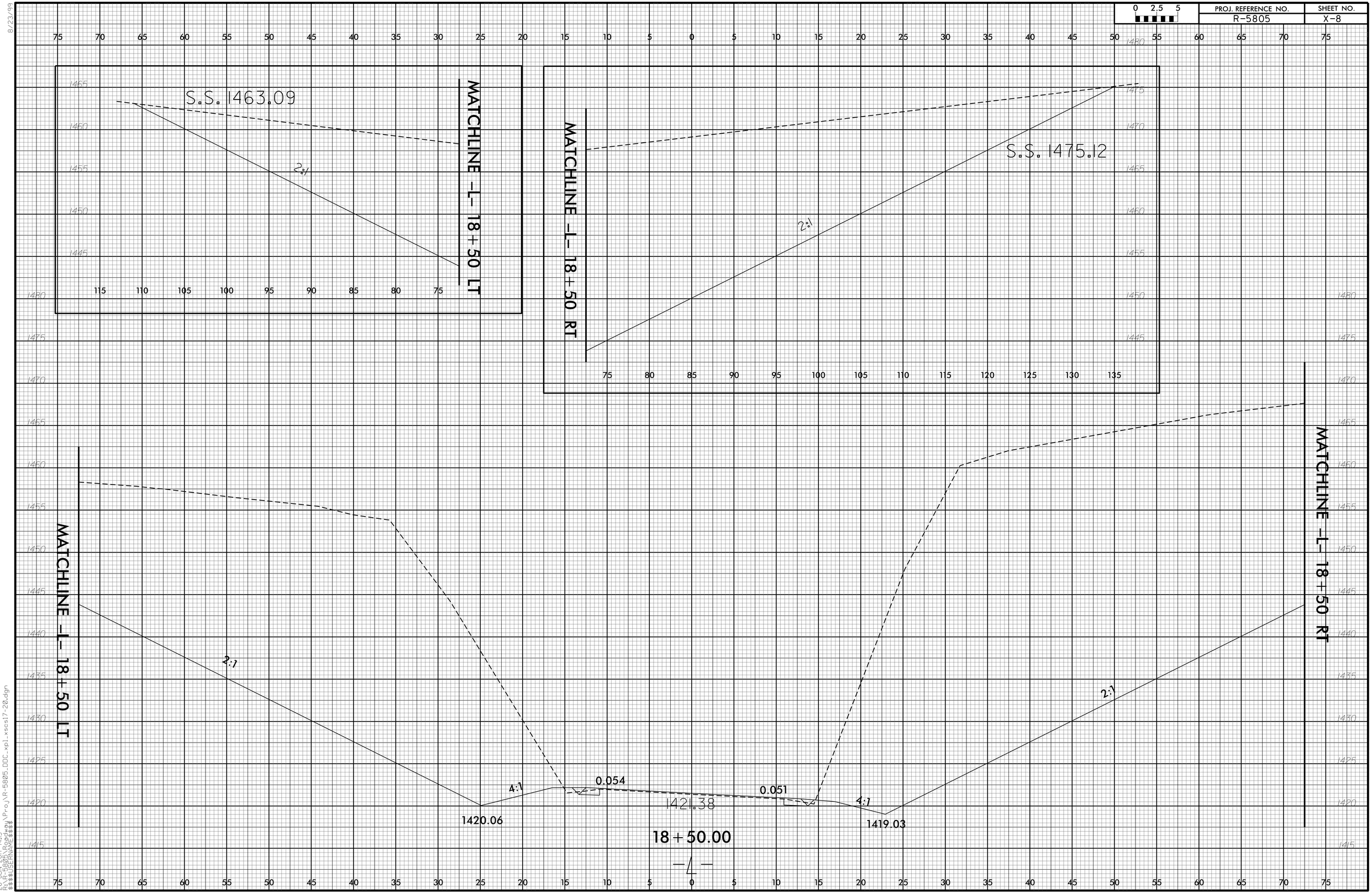
MATCHLINE –L– 18+00.00 RT

18+00.00

–L–

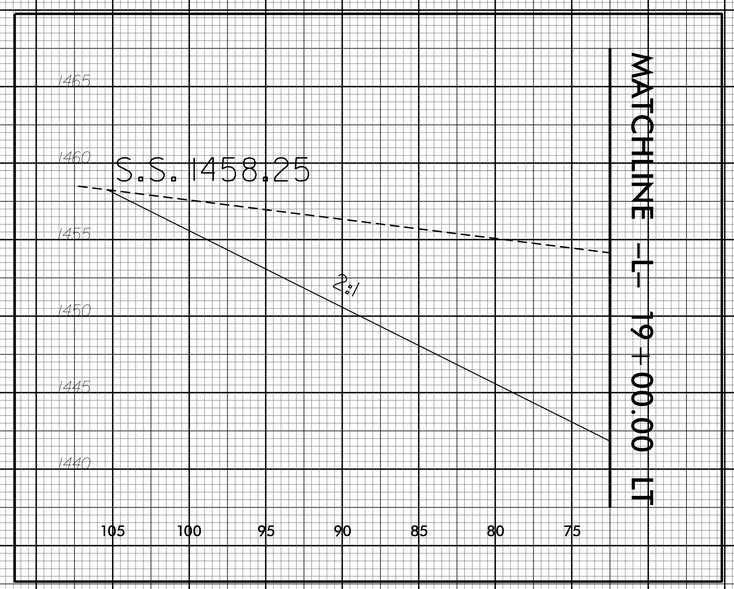
8/23/99

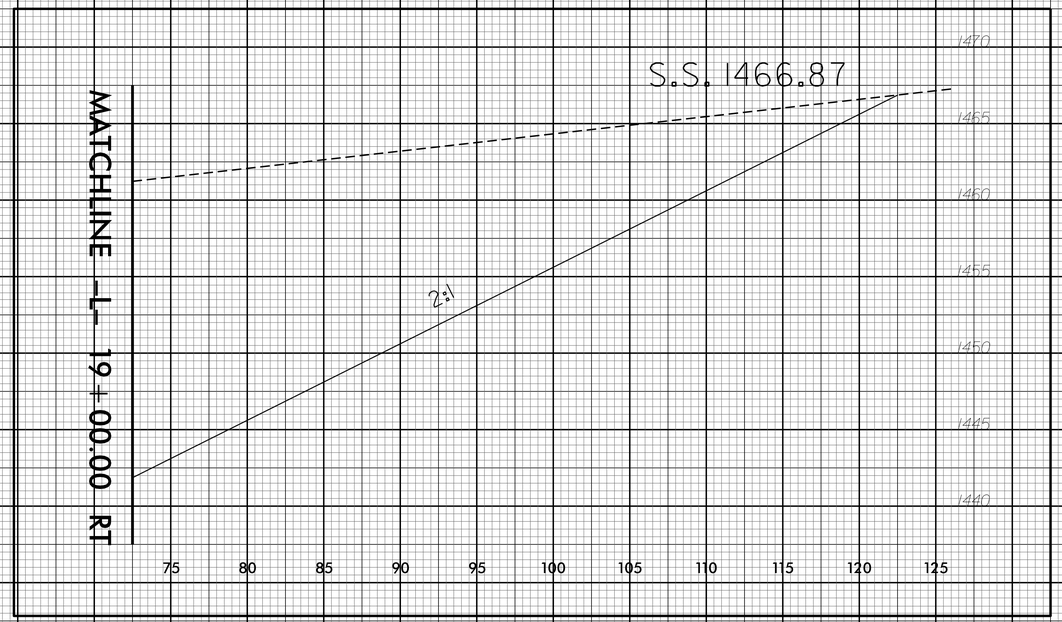
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-8

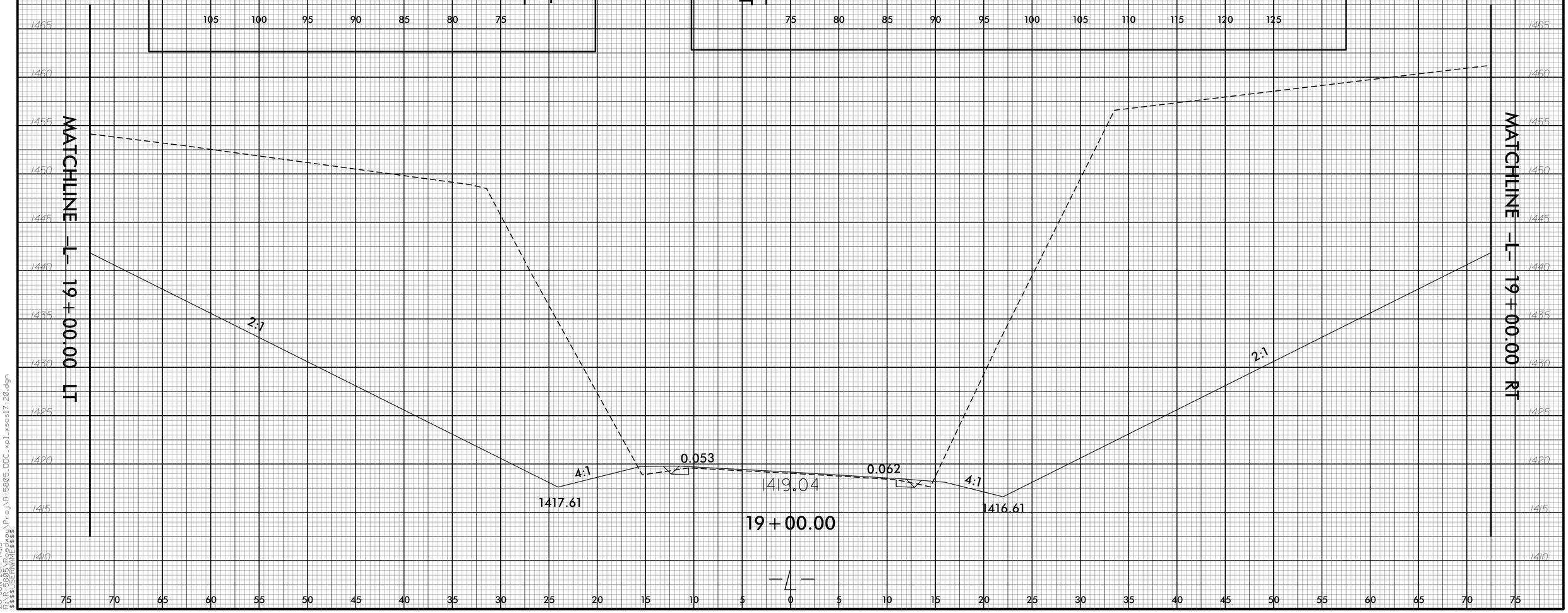


8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-9







26-JUN-2017 14:15
$$$$USER$$$$
$$$$DGN$$$$
C:\Projects\Proj\R-5805_DDC_xpl_xscs17-20.dgn

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-10

MATCHLINE –L– 19+50.00 LT

S.S. 1445.48

2:1

MATCHLINE –L– 19+50.00 RT

S.S. 1453.25

2:1

MATCHLINE –L– 19+50.00 LT

2:1

4:1

1415.12

0.066

1416.29

0.079

4:1

1413.72

19+50.00

–L–

MATCHLINE –L– 19+50.00 RT

2:1

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-11

MATCHLINE –L– 20+00.00 RT

S.S. 1440.39

2:1

S.S. 1432.37

2:1

4:1

0.076

0.090

4:1

1412.68

1413.14

1410.43

20+00.00

–L–

2:1

MATCHLINE –L– 20+00.00 RT

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-12

RESURFACE ONLY

1401.14

21+50.00

S.S. 1417.91

S.S. 1410.41

2:1

4:1

0.063

0.077

1404.86

1405.51

1403.43

21+00.00

2:1

S.S. 1427.61

S.S. 1418.47

2:1

4:1

0.078

0.086

1408.78

1409.56

1406.93

20+50.00

—4—

26-JUN-2017 14:15
$$$$USERNAME$$$$
C:\Users\$$$$USERNAME$$$$\Proj\R-5805_Rdy_xpl.dgn

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-13

RESURFACE ONLY

1392.53

22+50.00

RESURFACE ONLY

1396.77

22+00.00

—L—

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	R-5805	X-14

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

1435 1430 1425 1420

var.

0.001

TIE TO EXISTING

1425.56

12+50.00

0.046

var.

TIE TO EXISTING

1435 1430 1425 1420

1435 1430 1425 1420

var.

0.013

TIE TO EXISTING

1427.97

12+00.00

0.065

var.

TIE TO EXISTING

1440 1435 1430 1425 1420

RESURFACE ONLY

1432.30

11+50.00

-Y1-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

26-JUN-2017 14:15
$$$$USER$$$$
$$$$PROJECT$$$$
$$$$DGN$$$$
C:\Projects\Projects\Projects\R-5805_DOC_xpl_Y1.dgn