DocuSign Envelope ID: 074BF8E7-ABFF-4358-95CC-B58D1EAB496B

MATCH LINE
MATCH TO SHEET NO. 9

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

IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C, UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN AREAS WHERE WATER MAY POND ON ROAD OPEN TO LIVE TRAFFIC AND ON JUNCTION BOXES INSTALLED ON STEEP SLOPES.

SA SENSITIVE AREA

Polk County

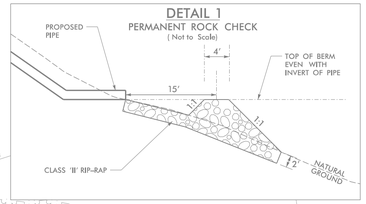
PROJECT REFERENCE NO.	SHEET NO.
15614.1075010	EC-11/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TGS ENGINEERS
706 HILLSBOROUGH ST
SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

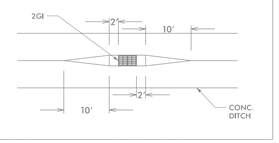
NOTES: 1.) 0511, 0512, 0513, & 0514 ARE FUTURE DRAINAGE STRUCTURES TO BE CONSTRUCTED DURING THE REPAIR OF HOWARD GAP RD (FUTURE PROJECT).

2.) ALL CSP GASKETS ARE TO BE SLEEVE GASKETS.

DETAIL 1
PERMANENT ROCK CHECK
(Not to Scale)



DETAIL 2
INSTALLATION OF 2GI IN CONCRETE DITCH



CONTRACTOR TO INSTALL CONCRETE BARRIER AROUND DUKE ENERGY TRANSMISSION STRUCTURES (NO CLOSER THAN 10') WHENEVER CONSTRUCTION EQUIPMENT IS WITHIN 25' OF STRUCTURE AND/OR TO THE LIMITS AS DIRECTED BY THE ENGINEER.

CONTRACTOR TO REMOVE AND REPLACE APPROX. 175 LF OF GUARDRAIL FOR DRAINAGE PIPE INSTALLATION AS DIRECTED BY THE ENGINEER.

CONTRACTOR TO REMOVE AND RESET APPROX. 50 LF OF CONTROL OF ACCESS FENCE AS DIRECTED BY THE ENGINEER.

CONTRACTOR TO INSTALL CONCRETE BARRIER AROUND DUKE ENERGY TRANSMISSION STRUCTURES (NO CLOSER THAN 10') WHENEVER CONSTRUCTION EQUIPMENT IS WITHIN 25' OF STRUCTURE AND/OR TO THE LIMITS AS DIRECTED BY THE ENGINEER.

CONSERVATION EASEMENT TO PACOLET AREA CONSERVANCY, INC. IN DB 216 PG 178

ELIZABETH F. HORNE
DAVID W. FOSTER

BOARD OF TRANSPORTATION

-HGR- PT 32+20.99
-HGR- PC 32+95.50
-HGR- PT 34+13.35
-HGR- PC 35+89.52
-HGR- PT 36+84.19
-HGR- PC 41+73.29
-HGR- PT 43+90.32
-HGR- PC 45+24.76
-I26- CS 454+20.88
-I26- ST 458+20.88

PERMANENT ROCK CHECK SEE DETAIL 1 CLASS "II" RIP-RAP EST 80 TONS

SEE DETAIL SHEET 2D-32 FOR PIPE PROFILE

18" CSP (14 GAGE) ROD & LUG W/GASKETS S=2.0%

30" CSP (10 GAGE) ROD & LUG W/GASKETS S=13.0%

36" CSP (10 GAGE) ROD & LUG W/ GASKETS S=13.8%

REINSTALL CONC. DITCH AFTER PIPE INSTALLATION L=200'

REMOVE 10 LF EX. PIPE, PLUG, & ABANDON

REMOVE 10 LF & PLUG

ENERGY DISSIPATOR JB

SPC DSN JB W/MH

TBJB W/ MH

SPLITTER BOX

24" CSP (12 GAGE) ROD & LUG W/GASKETS S=19.4%

24" CSP (12 GAGE) ROD & LUG W/GASKETS S=2.6%

24" CSP (12 GAGE) ROD & LUG W/GASKETS S=5.3%

36" CSP (10 GAGE) ROD & LUG W/GASKETS S=19.5%

36" CSP (10 GAGE) ROD & LUG W/GASKETS S=5.9%

24" CSP (12 GAGE) ROD & LUG W/GASKETS S=14.3%

18" CSP (14 GAGE) ROD & LUG W/GASKETS S=12.7%

OTCB-4

REMOVE HW

PLUG & ABANDON

ABANDON

FLOWABLE FILL

REMOVE

RETAIN & LINE W/18" WSP (0.500" THICK)

RETAIN & LINE W/CIPP

RETAIN

SEE DETAIL SHEET 2D-35 FOR PIPE PROFILE

SENSITIVE AREA DO NOT DISTURB

SEE DETAIL SHEET 2D-34 FOR PIPE PROFILE

SEE DETAIL SHEET 2D-31 FOR PIPE PROFILE

SEE DETAIL SHEET 2D-33 FOR PIPE PROFILE

50' TAPER TO EXIST. +00

+00 BEGIN SBG

+50 TIE TO EXIST. GUARDRAIL BEGIN FDPS (2' MIN. SAWCUT)

+90 BEGIN 12' CONC. DITCH BEGIN 14' FDPS

50' TAPER TO EXIST. +90

+40 BEGIN MILLED RUMBLE STRIPS

PROP. GUARDRAIL (EXTRA DEPTH)

REMOVE 10' EX. PIPE, PLUG, & ABANDON

PROP. SBG

PROP. FDPS (2' MIN. SAWCUT)

PROP. 12' CONC. DITCH

PROP. 14' FDPS

42" RCP-IV

30" CSP (10 GAGE) ROD & LUG W/ GASKETS & ELBOW S=17.6%

36" CSP (10 GAGE) ROD & LUG W/ GASKETS & ELBOW S=17.6%

PROP. FOREBAY ACCESS

FOREBAY #1 SEE DETAIL SHEET 2D-17 EST. 202 SY CONC. EST. 180 CY DDE

FOREBAY #2 SEE DETAIL SHEET 2D-19 EST. 273 SY CONC. EST. 300 CY DDE

RETAIN CONC. DITCH

RETAIN CONC. DITCH (CLEAR 15' EASEMENT NORTH SIDE)

BEGIN CONSTRUCTION
-I26- STA 450+40.00

-I26- CURVE DATA

PI Sta 449+08.00	PIs Sta 455+54.26
Δ = 18° 06' 10.4" (RT)	Θs = 3° 30' 00.0"
D = 1° 45' 00.0"	Ls = 400.00'
L = 1,034.45'	LT = 266.72'
T = 521.57'	ST = 133.38'
R = 3,274.05'	

-HGR- CURVE DATA

PI Sta 31+76.32	PI Sta 33+54.86	PI Sta 36+36.86	PI Sta 42+86.80	PI Sta 45+86.42
Δ = 11° 24' 40.2" (LT)	Δ = 16° 52' 52.1" (RT)	Δ = 2° 21' 29.9" (RT)	Δ = 41° 26' 57.4" (RT)	Δ = 24° 00' 28.0" (LT)
D = 12° 43' 56.6"	D = 14° 19' 26.2"	D = 2° 29' 28.0"	D = 19° 05' 54.9"	D = 19° 45' 25.8"
L = 89.62'	L = 117.85'	L = 94.67'	L = 217.03'	L = 121.51'
T = 44.96'	T = 59.36'	T = 47.34'	T = 113.51'	T = 61.66'
R = 450.00'	R = 400.00'	R = 2,300.00'	R = 300.00'	R = 290.00'

MATCH LINE STA. -HGR- 46+00
MATCH TO SHEET NO. 6

MATCH LINE STA. -I26- 462+00
MATCH TO SHEET NO. 6

NAD 83/2011