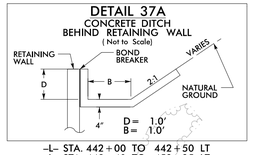
PROJECT REFERENCE NO.	SHEET NO.
A-0009CC	EC-16/CONST.37
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TGS ENGINEERS
201 W. MARION ST–STE 200
SHELBY, NC 28150
PH (704) 476–0003
CORP. LICENSE NO.: C–0275

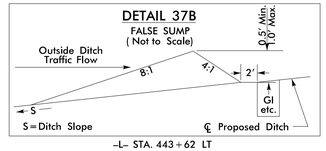
–L– CURVE DATA
PI Sta 456+91.51
Δ = 49° 15' 00.2" (RT)
D = 9° 32' 57.5"
L = 515.75'
T = 275.02'
R = 600.00'
SE = 0.08
DS = 45 MPH

DETAIL 37A
CONCRETE DITCH BEHIND RETAINING WALL
(Not to Scale)



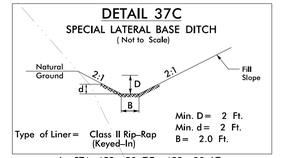
–L– STA. 442+00 TO 442+50 LT
–L– STA. 448+40 TO 452+25 LT
–L– STA. 453+25 TO 456+00 LT
(SEE WALL ENVELOPES FOR DITCH GRADE)

DETAIL 37B
FALSE SUMP
(Not to Scale)



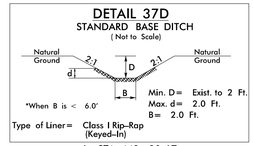
–L– STA. 443+62 LT
–L– STA. 444+63 LT
–L– STA. 446+64 LT

DETAIL 37C
SPECIAL LATERAL BASE DITCH
(Not to Scale)



–L– STA. 452+50 TO 453+00 LT

DETAIL 37D
STANDARD BASE DITCH
(Not to Scale)



–L– STA. 448+20 LT

DETAIL 37E
SPECIAL CUT DITCH
(Not to Scale)

–L– STA. 442+50 TO 443+50 LT
(SEE XSCs FOR TYPICAL DITCH GRADE)

NAD 83/2011

445 | 122 U.S. FOREST SERVICE | 450 | 124 U.S. FOREST SERVICE | 455

PROP. RETAINING WALL #22
W/CONCRETE DITCH
BEGIN –L– STA. 438+96.22
END –L– STA. 442+58.42

PROP. RETAINING WALL #23
W/CONCRETE DITCH
BEGIN –L– STA. 448+40.00
END –L– STA. 452+25.00

PROP. RETAINING WALL #24
W/CONCRETE DITCH
BEGIN –L– STA. 453+25.00
END –L– STA. 456+25.00

52 x 13 x 3
ID 37.1F

PROP. SINGLE FACED CONCRETE BARRIER

PROP. SINGLE FACED CONCRETE BARRIER

MATCH LINE STA –L– 442+00.00
MATCH TO SHEET NO. 36

MATCH LINE STA –L– 456+00.00
MATCH TO SHEET NO. 38

CONC. DITCH BEHIND RETAINING WALL SEE DETAIL 37A

SPECIAL CUT DITCH SEE DETAIL 37E CLASS II RIPRAP (KEYED–IN) 50 TONS, NO GEO

MIN DEPTH 2GI–A SPEC DSN

FALSE SUMP SEE DETAIL 37B

TIE 8" INTO 2GI (3703).

REMOVE HW

CLASS I RIPRAP (KEYED–IN) 12 TONS, NO GEO

STANDARD BASE DITCH SEE DETAIL 37D CL 'I' RIP–RAP 16 TONS, NO GEO

CLASS I RIPRAP (KEYED–IN) 16 TONS, NO GEO

SPECIAL LATERAL BASE DITCH SEE DETAIL 37C CL 'II' RIP–RAP 80 TONS, NO GEO

REMOVE 25 LF

REMOVE HW

2GI (Top Wall) 3701

OTCB–A 3702

18" RCP–III

24"

PLUG

REMOVE

30" RCP–III

3703

3704 TB 2GI

15" CSP

HW

3706 2GI

3707

3708

3712

18" RCP–IV

3713 TB 2GI

3714 TB 2GI

18" RCP–IV

3716 TB 2GI

3717

18" RCP IV

3719

SPEC DSN TB 2GI–A 3709

30" RCP–III

SPEC DSN TB 2GI–A 3710

10'–3" FDPS

36" RCP–IV

SPEC DSN TB 2GI–A 3722

SPEC DSN TB 2GI–A 3723

36" RCP–IV

36" CSP

3721

36" TYP

FILL WITH FLOWABLE FILL EST 6 CY

FILL WITH FLOWABLE FILL EST 25 CY

FILL WITH FLOWABLE FILL EST 15 CY

REMOVE 29 LF

SHOULDER BERM GUTTER –L– STA. 438+00 TO 448+97, RT

SHOULDER BERM GUTTER –L– STA. 451+86 TO 453+62, RT

CLASS II RIPRAP (KEYED–IN) 25 TONS, NO GEO

CLASS II RIPRAP (KEYED–IN) 30 TONS, NO GEO

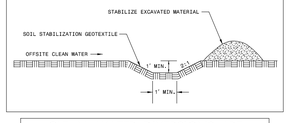
CLASS II RIPRAP (KEYED–IN) 30 TONS, NO GEO

125 ROBERT K. NORCROSS

126 PAMELA WACHACHA

–L– PC 454+16.49

CLEAN WATER DIVERSION
(Not to Scale)



CLEAN WATER DIVERSIONS ARE INDEPENDENT OF OTHER EC DITCH LINES AND TERMINATE INTO A SC–A.

MINIMIZE CLEARING AND GRUBBING
SAFETY FENCE

SEEDING AND PLANTING ON US FOREST SERVICE (USFS) PROPERTY WILL BE IMPLEMENTED AS DIRECTED BY THE ENGINEER ON NCDOT RIGHT OF WAY AND ADJOINING USFS PROPERTY. REFER TO THE EROSION CONTROL SPECIAL PROVISIONS.

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.

For Slopes Excavated Greater Than 10 feet Install Matting for Erosion Control on Entire Slope as Work Allows.