TIP PROJECT: R-2552C

CONTRACT:

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

JOHNSTON COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2552C	1	

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
34459.1.6	NHF-60-1(9)	P.E.
34459.2.7		R.W. & UTIL.

METRIC

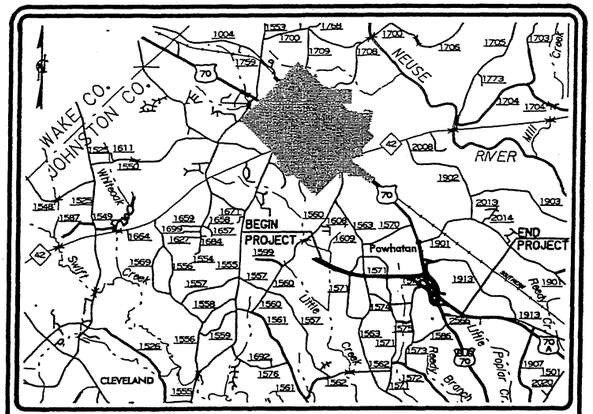
ALL DIMENSIONS IN THESE PLANS ARE IN METERS AND/OR MILLIMETERS UNLESS OTHERWISE SHOWN

Sht. 8/23

LOCATION: US 70 (CLAYTON BYPASS) FROM EAST OF SR 1560 TO US 70 EAST OF CLAYTON

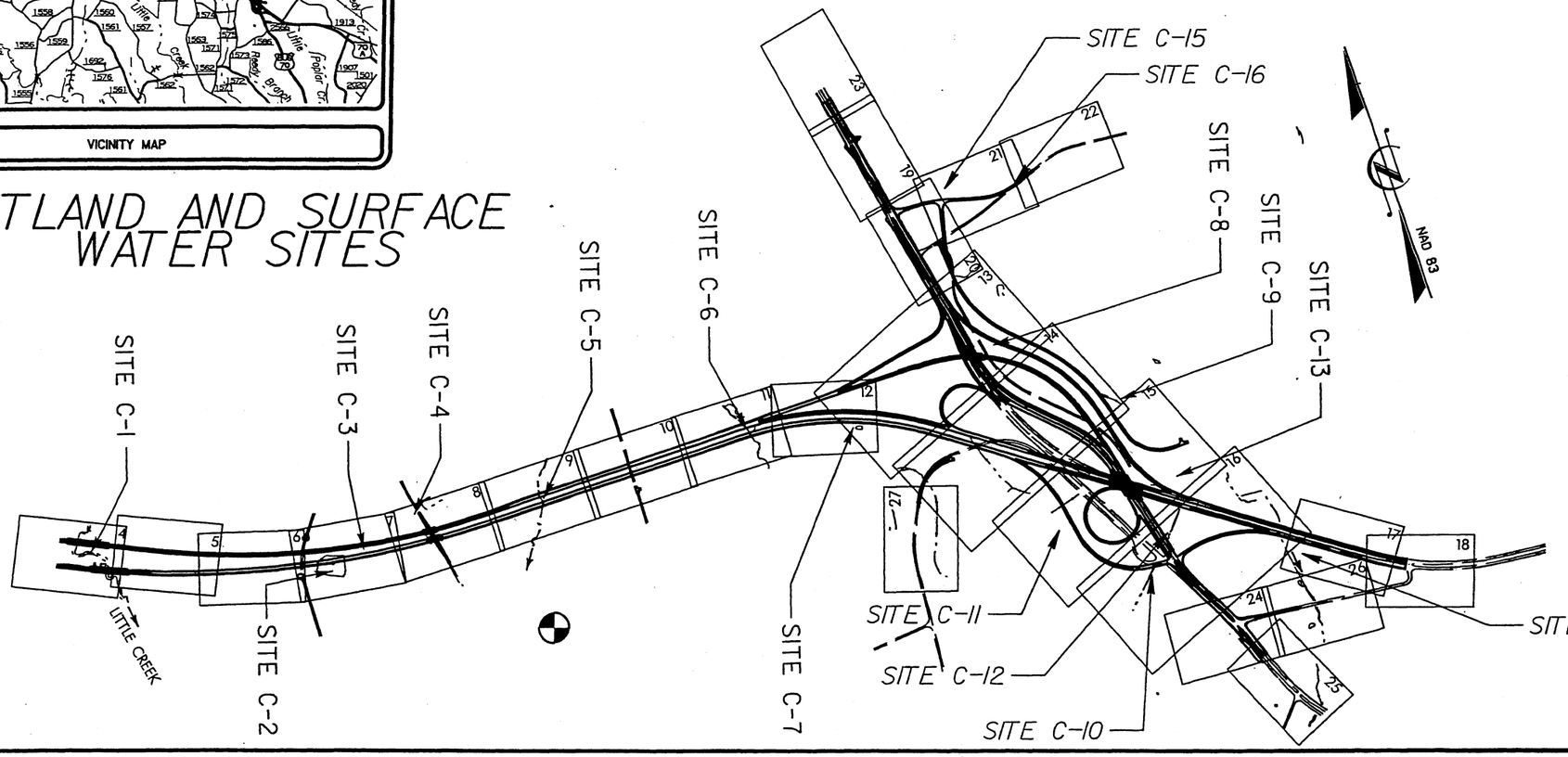
TYPE OF WORK: GRADING, DRAINAGE, PAVING, GUARDRAIL, SIGNALS, STRUCTURES AND CULVERTS

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols



VICINITY MAP

WETLAND AND SURFACE WATER SITES



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALE

5 m 0 10 m
PLANS

5 m 0 10 m
PROFILE (HORIZONTAL)

1 m 0 2 m
PROFILE (VERTICAL)

DESIGN DATA

ADT 2005 = 29,500
ADT 2025 = 55,800
DHV = 10 %
D = 65 %
T = 16 % *
V = 110 km/h

* TTST 10% + DUAL 6%

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-2552C	=	4.842 km
LENGTH STRUCTURE TIP PROJECT R-2552C	=	0.160 km
TOTAL LENGTH TIP PROJECT R-2552C	=	5.002 km

-L2-RT WAS USED TO DETERMINE STRUCTURE LENGTH

Prepared in the Office of:
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
FOR THE NORTH CAROLINA DIVISION OF HIGHWAYS

2002 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: May 16, 2003

LETTING DATE: May 17, 2005

Stephen C. Browde, P.E.
PROJECT ENGINEER

Thomas A. McCloskey, P.E.
PROJECT DESIGN ENGINEER

N.C.D.O.T. CONTACT:
Teresa Bruton, P.E.
PROJECT ENGINEER - DESIGN SERVICES

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

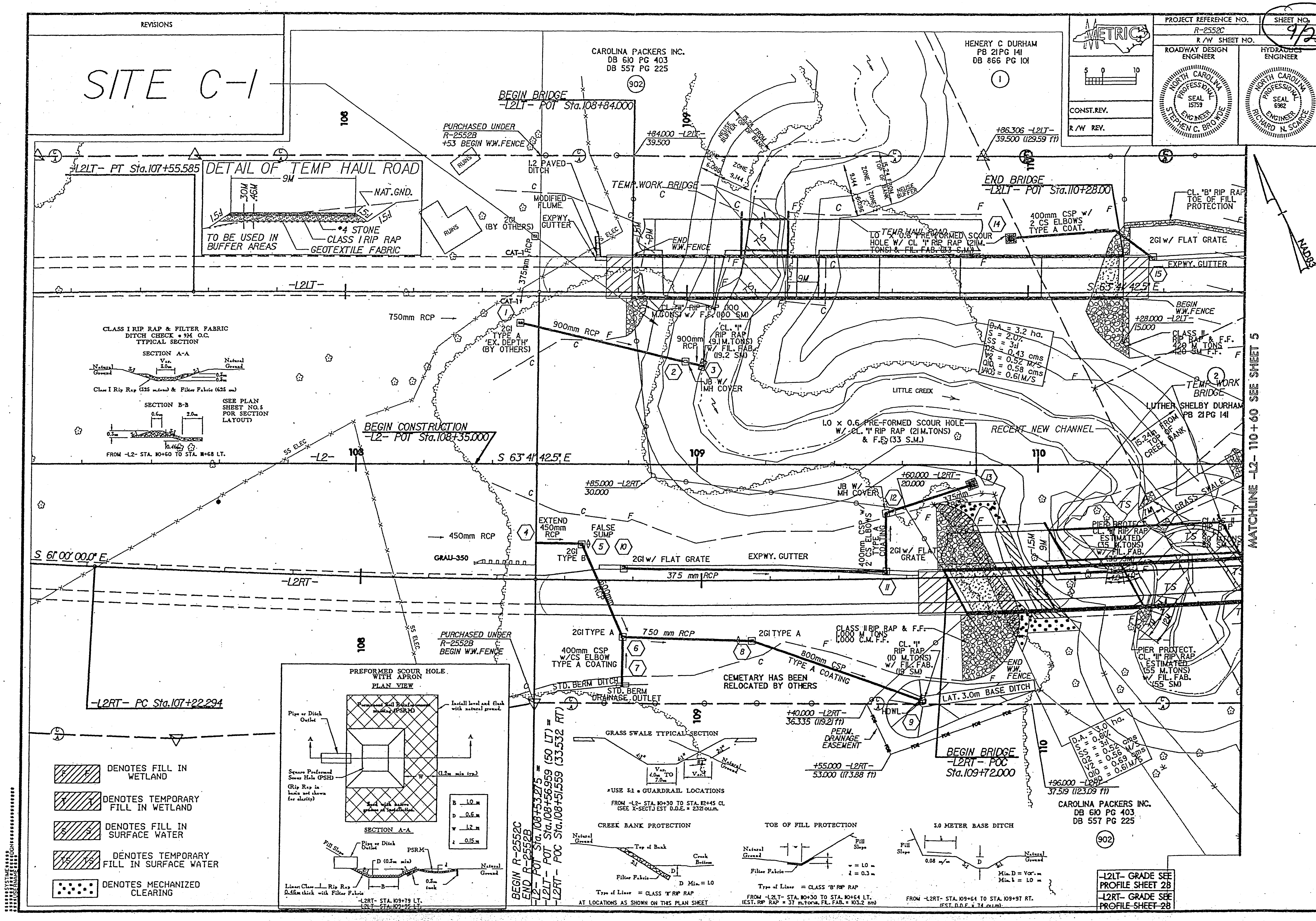
SIGNATURE: P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

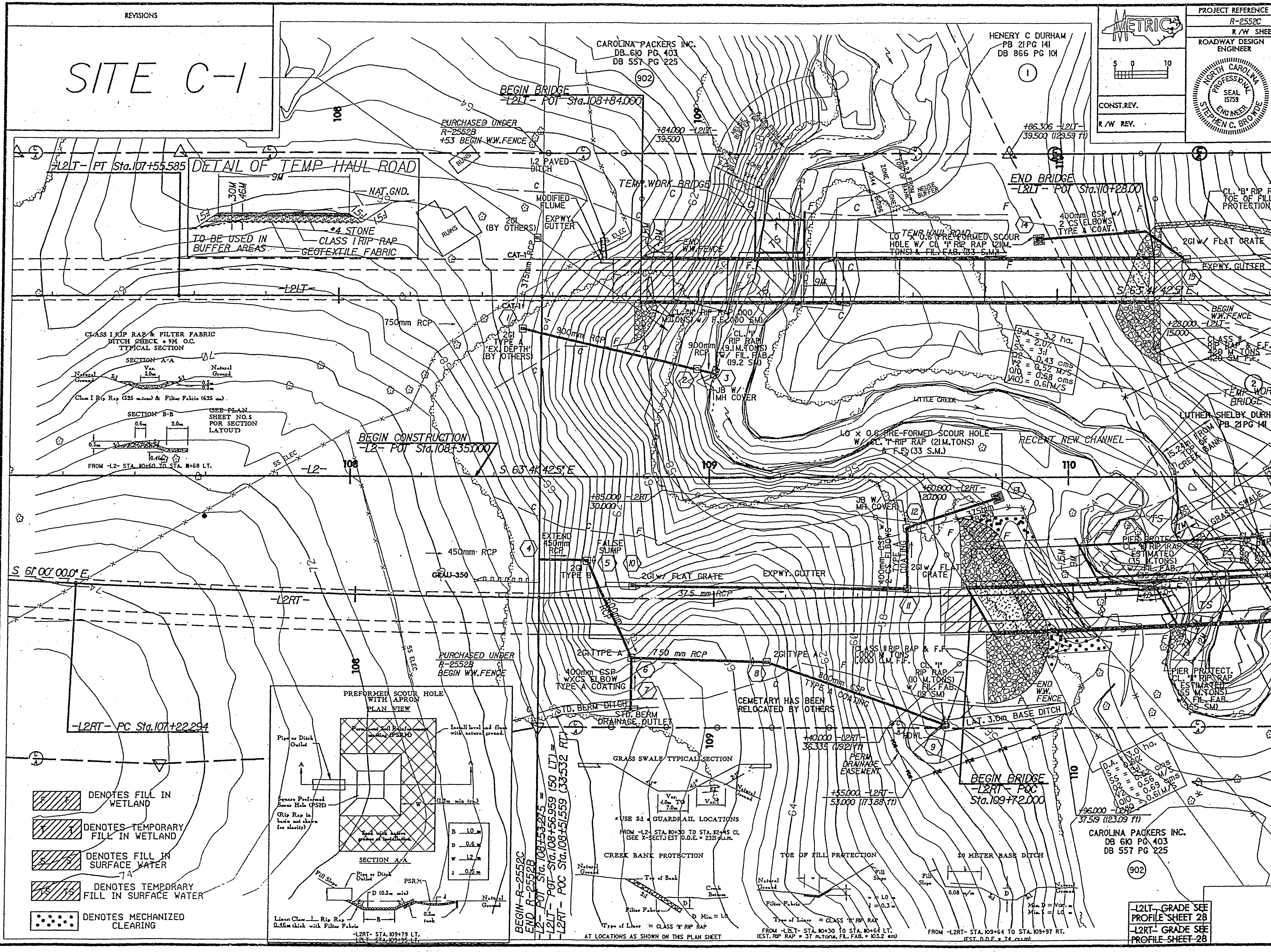
STATE DESIGN ENGINEER P.E.

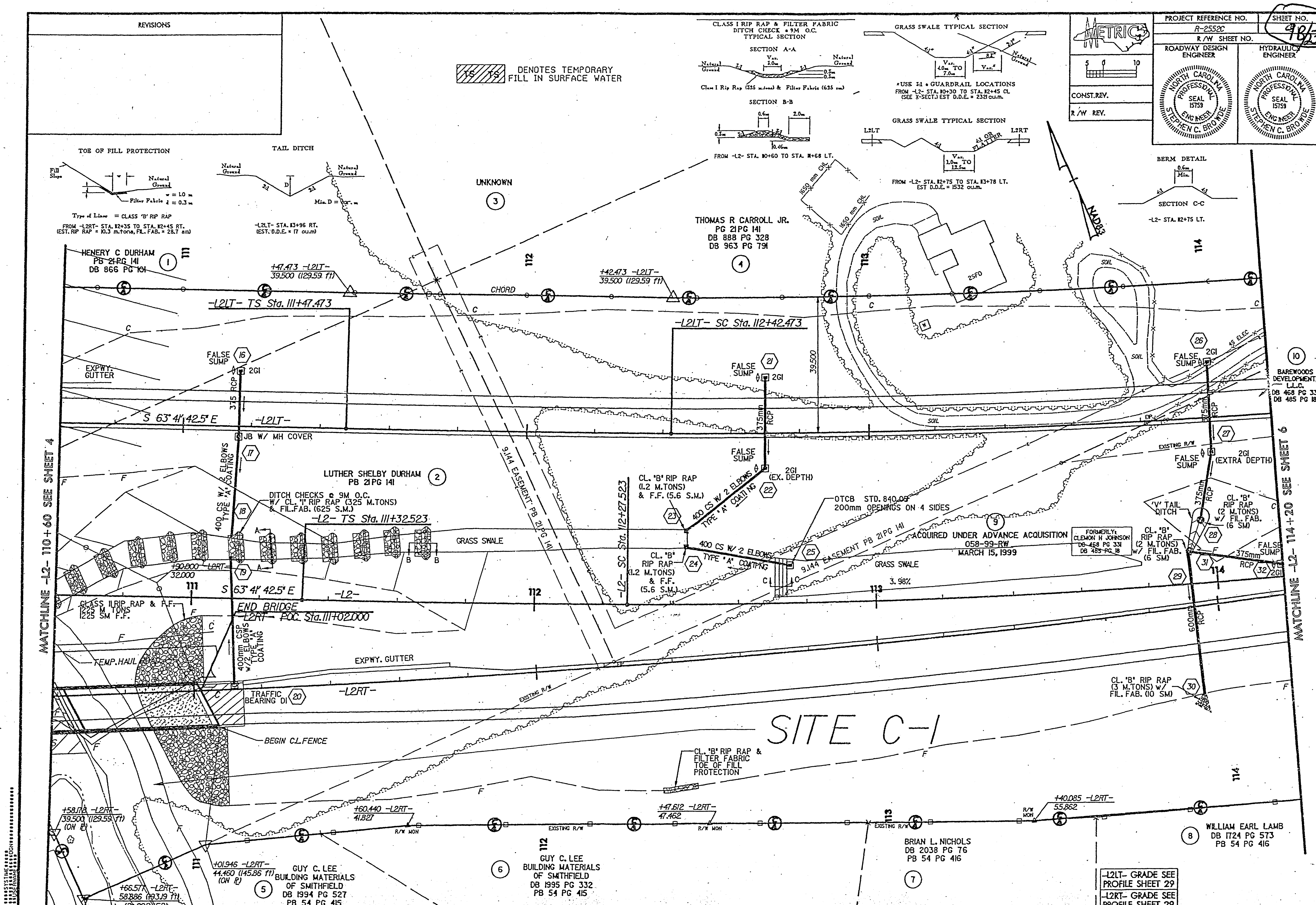
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

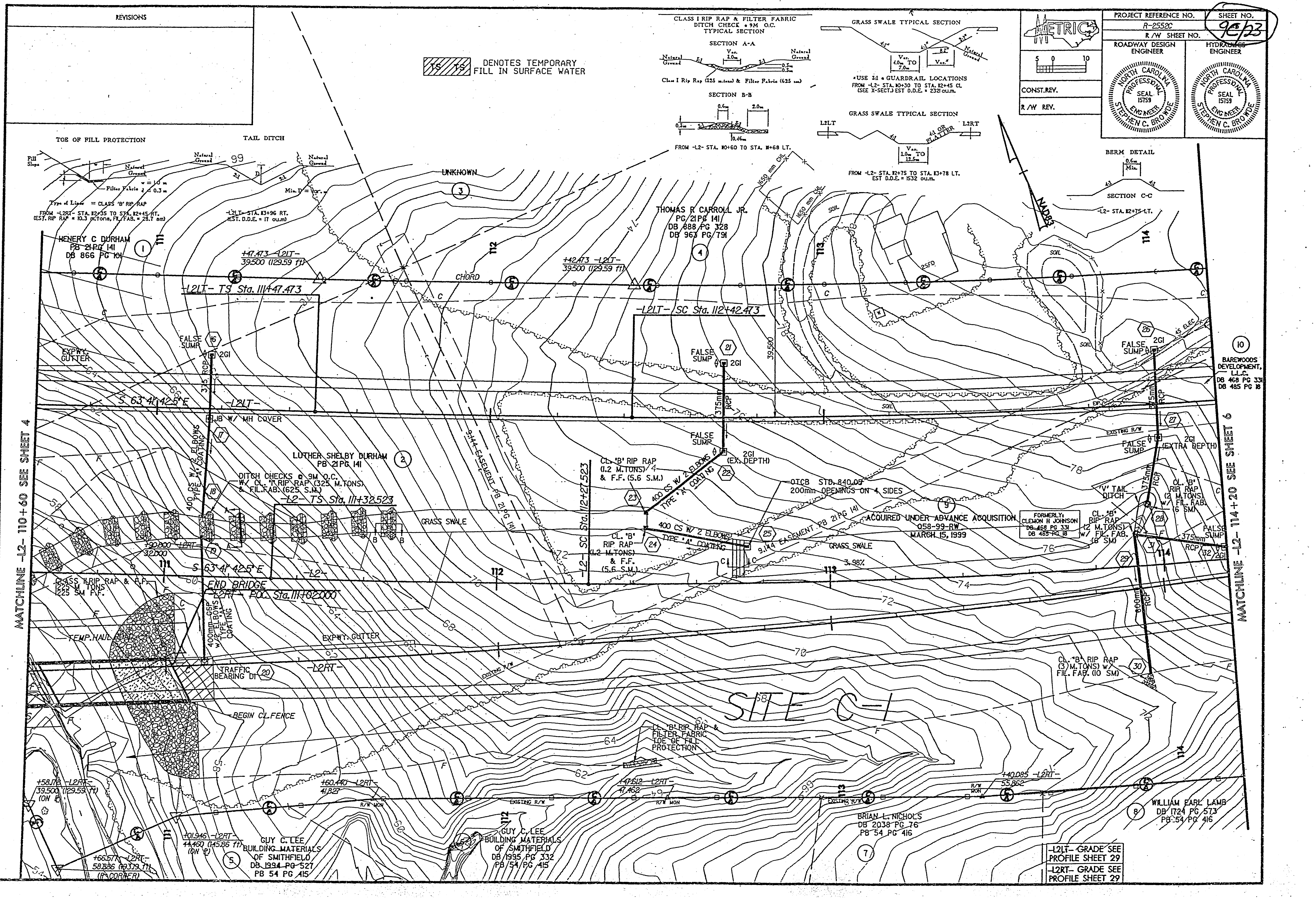
APPROVED
DIVISION ADMINISTRATOR DATE



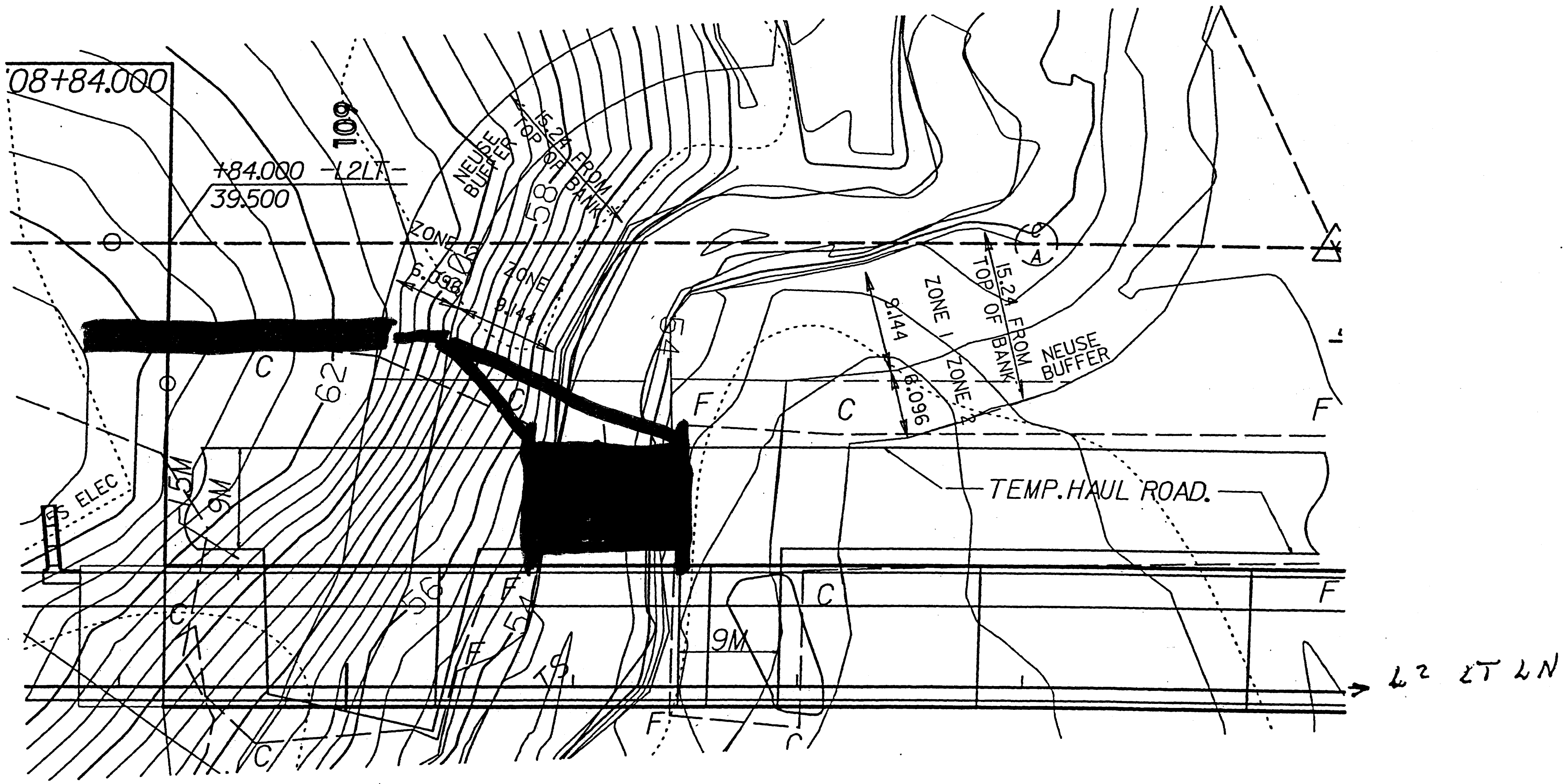
REVISIONS
SITE C-1
PROJECT REFERENCE NO. R-2552C
SHEET NO. 9/23
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
METRIC
CONST. REV.
R/W REV.
NORTH CAROLINA PROFESSIONAL SEAL 15759 ENGINEER STEPHEN C. BROWDE
NORTH CAROLINA PROFESSIONAL SEAL 6982 ENGINEER RICHARD N. SCARCE
CAROLINA PACKERS INC. DB 610 PG 403 DB 557 PG 225
HENERY C DURHAM PB 21PG 141 DB 866 PG 101
BEGIN BRIDGE -L2LT- POT Sta.108+84.000
END BRIDGE -L2LT- POT Sta.110+28.000
PURCHASED UNDER R-2552B +53 BEGIN W.W.FENCE
-L2LT- PT Sta.107+55.585
DETAIL OF TEMP HAUL ROAD
9M
NAT. GND.
#4 STONE
CLASS I RIP RAP
GEOTEXTILE FABRIC
TO BE USED IN BUFFER AREAS
RUINS
TEMP. WORK BRIDGE
TEMP. HAUL ROAD
LITTLE CREEK
RECENT NEW CHANNEL
BEGIN CONSTRUCTION -L2- POT Sta.108+35.000
S 63° 41' 42.5" E
S 61° 00' 00.0" E
CLASS I RIP RAP & FILTER FABRIC DITCH CHECK @ 9M O.C. TYPICAL SECTION
SECTION A-A
SECTION B-B
FROM -L2- STA. 10+60 TO STA. 11+68 LT.
750mm RCP
900mm RCP
450mm RCP
375 mm RCP
750 mm RCP
800mm CSP TYPE A COATING
400mm CSP w/ 2 CS ELBOWS TYPE A COAT.
CEMETARY HAS BEEN RELOCATED BY OTHERS
LUTHER SHELBY DURHAM PB 21 PG 141
MATCHLINE -L2- 110+60 SEE SHEET 5
PURCHASED UNDER R-2552B BEGIN W.W.FENCE
-L2RT- PC Sta.107+22.294
BEGIN R-2552C END R-2552B
-L2- POT Sta.108+53.275 = -L2LT- POT Sta.108+56.959 (50 LT) = -L2RT- POC Sta.108+51.559 (33.532 RT)
BEGIN BRIDGE -L2RT- POC Sta.109+72.000
PREFORMED SCOUR HOLE WITH APRON
PLAN VIEW
SECTION A-A
GRASS SWALE TYPICAL SECTION
CREEK BANK PROTECTION
TOE OF FILL PROTECTION
3.0 METER BASE DITCH
DENOTES FILL IN WETLAND
DENOTES TEMPORARY FILL IN WETLAND
DENOTES FILL IN SURFACE WATER
DENOTES TEMPORARY FILL IN SURFACE WATER
DENOTES MECHANIZED CLEARING
-L2LT- GRADE SEE PROFILE SHEET 28
-L2RT- GRADE SEE PROFILE SHEET 28


REVISIONS
SITE C-1
PROJECT REFERENCE NO.
R-2552C
SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 15759 ENGINEER STEPHEN C. BROWDE
NORTH CAROLINA PROFESSIONAL SEAL 6902 ENGINEER RICHARD N. SCARCE
METRIC
CONST. REV.
R/W REV.
CAROLINA PACKERS INC. DB 610 PG 403 DB 557 PG 225
HENERY C DURHAM PB 21 PG 141 DB 866 PG 101
BEGIN BRIDGE -L2LT- POT Sta.108+84.000
PURCHASED UNDER R-2552B +53 BEGIN WW.FENCE
-L2LT- PT Sta.107+55.585
DETAIL OF TEMP HAUL ROAD
NAT. GND.
#4 STONE
CLASS I RIP RAP
GEOTEXTILE FABRIC
TO BE USED IN BUFFER AREAS
TEMP. WORK BRIDGE
END BRIDGE -L2LT- POT Sta.110+28.000
CL. 'B' RIP RAP TOE OF FILL PROTECTION
2GI W/ FLAT GRATE
EXPWY. GUTTER
S 63° 41' 42.5" E
BEGIN W.W.FENCE
CLASS I RIP RAP & FILTER FABRIC DITCH CHECK @ 9M O.C. TYPICAL SECTION
LITTLE CREEK
RECENT NEW CHANNEL
LUTHER SHELBY DURHAM PB 21 PG 141
BEGIN CONSTRUCTION -L2- POT Sta.108+35.000
S 61° 00' 00.0" E
-L2RT- PC Sta.107+22.294
PURCHASED UNDER R-2552B BEGIN W.W.FENCE
CEMETARY HAS BEEN RELOCATED BY OTHERS
BEGIN BRIDGE -L2RT- POC Sta.109+72.000
MATCHLINE -L2- 110+60 SEE SHEET 5
PREFORMED SCOUR HOLE WITH APRON PLAN VIEW
SECTION A-A
GRASS SWALE TYPICAL SECTION
CREEK BANK PROTECTION
TOE OF FILL PROTECTION
3.0 METER BASE DITCH
DENOTES FILL IN WETLAND
DENOTES TEMPORARY FILL IN WETLAND
DENOTES FILL IN SURFACE WATER
DENOTES TEMPORARY FILL IN SURFACE WATER
DENOTES MECHANIZED CLEARING
BEGIN R-2552C END R-2552B -L2LT- POT Sta.108+53.275 = -L2- POT Sta.108+56.959 (50 LT) -L2RT- POC Sta.108+51.559 (33.532 RT)
-L2LT- GRADE SEE PROFILE SHEET 28
-L2RT- GRADE SEE PROFILE SHEET 28

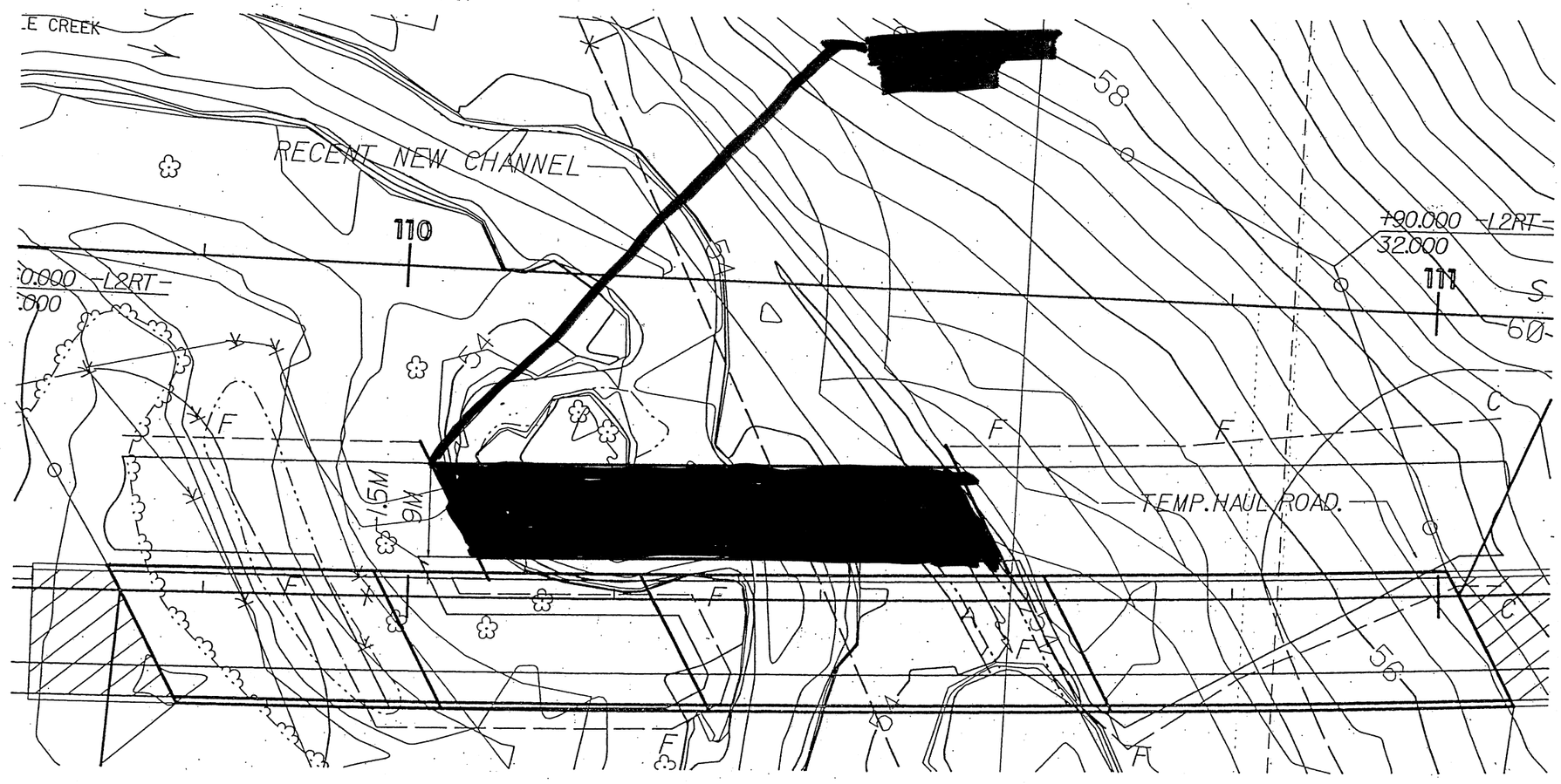

REVISIONS
PROJECT REFERENCE NO.
R-2552C
SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 15759 ENGINEER STEPHEN C. BROWDE
METRIC
CONST. REV.
R/W REV.
DENOTES TEMPORARY FILL IN SURFACE WATER
CLASS I RIP RAP & FILTER FABRIC DITCH CHECK @ 9M O.C. TYPICAL SECTION
SECTION A-A
SECTION B-B
FROM -L2- STA. 110+60 TO STA. 111+68 LT.
GRASS SWALE TYPICAL SECTION
*USE 3:1 @ GUARDRAIL LOCATIONS FROM -L2- STA. 110+30 TO STA. 112+45 CL (SEE X-SECT.) EST D.D.E. = 2321 cu.m.
GRASS SWALE TYPICAL SECTION
FROM -L2- STA. 112+75 TO STA. 113+78 LT. EST D.D.E. = 1532 cu.m.
BERM DETAIL
SECTION C-C
-L2- STA. 112+75 LT.
TOE OF FILL PROTECTION
Type of Liner = CLASS 'B' RIP RAP
FROM -L2RT- STA. 112+35 TO STA. 112+45 RT. (EST. RIP RAP = 10.3 m.tons, FIL. FAB. = 28.7 sm)
TAIL DITCH
-L2LT- STA. 113+96 RT. (EST. D.D.E. = 17 cu.m)
UNKNOWN
THOMAS R CARROLL JR. PG 21 PG 141 DB 888 PG 328 DB 963 PG 791
HENERY C DURHAM PB 21 PG 141 DB 866 PG 101
+47.473 -L2LT- 39.500 (129.59 ft)
+42.473 -L2LT- 39.500 (129.59 ft)
CHORD
-L2LT- TS Sta. 111+47.473
-L2LT- SC Sta. 112+42.473
FALSE SUMP 2GI
EXPWY. GUTTER
S 63° 41' 42.5" E
-L2LT-
JB W/ MH COVER
LUTHER SHELBY DURHAM PB 21 PG 141
DITCH CHECKS @ 9M O.C. W/ CL. 'I' RIP RAP (325 M.TONS) & FIL.FAB. (625 S.M.)
-L2- TS Sta. 111+32.523
GRASS SWALE
9.144 EASEMENT PB 21 PG 141
-L2- SC Sta. 112+27.523
CL. 'B' RIP RAP (1.2 M.TONS) & F.F. (5.6 S.M.)
400 CS W/ 2 ELBOWS TYPE 'A' COATING
OTCB STD. 840.05 200mm OPENINGS ON 4 SIDES
ACQUIRED UNDER ADVANCE ACQUISITION 058-99-RW MARCH 15, 1999
FORMERLY: CLEMON H JOHNSON DB 468 PG 331 DB 485 PG 18
BAREWOODS DEVELOPMENT, L.L.C. DB 468 PG 331 DB 485 PG 18
2GI (EXTRA DEPTH)
CL. 'B' RIP RAP (2 M.TONS) w/ FIL. FAB. (6 SM)
'V' TAIL DITCH
3.98%
+90.800 -L2RT- 32.000
CLASS II RIP RAP & F.F. 225 M TONS 225 SM F.F.
END BRIDGE
-L2RT- POC Sta. 111+02.000
400mm CSP W/2 ELBOWS TYPE 'A' COATING
TEMP. HAUL
EXPWY. GUTTER
TRAFFIC BEARING DI
-L2RT-
EXISTING R/W
BEGIN CL FENCE
SITE C-1
CL. 'B' RIP RAP & FILTER FABRIC TOE OF FILL PROTECTION
CL. 'B' RIP RAP (3 M.TONS) w/ FIL. FAB. (10 SM)
600mm RCP
MATCHLINE -L2- 110+60 SEE SHEET 4
MATCHLINE -L2- 114+20 SEE SHEET 6
+58.118 -L2RT- 39.500 (129.59 ft) (ON P)
+60.440 -L2RT- 41.827
+47.612 -L2RT- 47.462
+40.085 -L2RT- 55.862
R/W MON
+01.946 -L2RT- 44.460 (145.86 ft) (ON P)
+66.577 -L2RT- 58.886 (193.19 ft) (P CORNER)
GUY C. LEE BUILDING MATERIALS OF SMITHFIELD DB 1994 PG 527 PB 54 PG 415
GUY C. LEE BUILDING MATERIALS OF SMITHFIELD DB 1995 PG 332 PB 54 PG 415
BRIAN L. NICHOLS DB 2038 PG 76 PB 54 PG 416
WILLIAM EARL LAMB DB 1724 PG 573 PB 54 PG 416
-L2LT- GRADE SEE PROFILE SHEET 29
-L2RT- GRADE SEE PROFILE SHEET 29



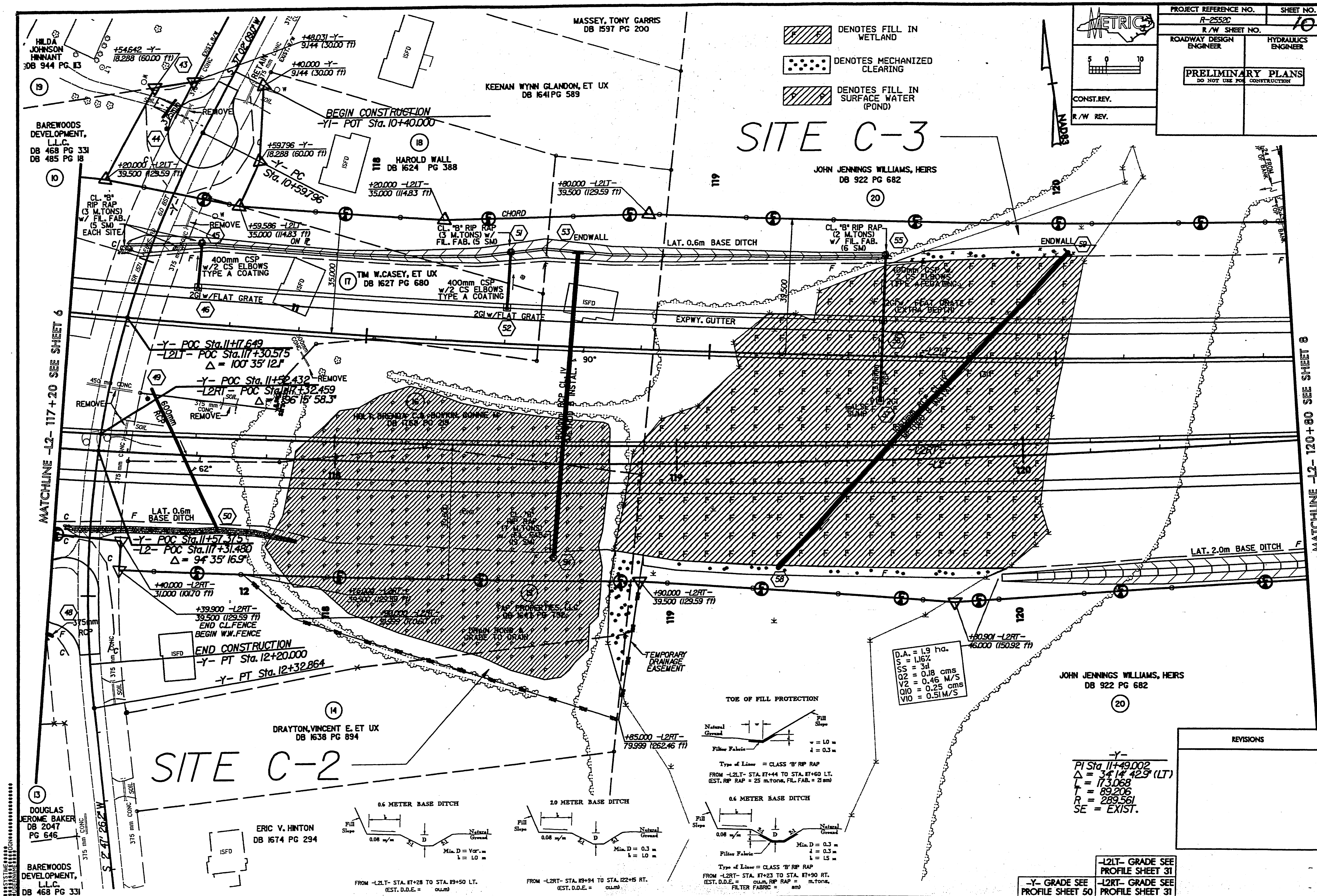
REVISIONS
DENOTES TEMPORARY FILL IN SURFACE WATER
CLASS I RIP RAP & FILTER FABRIC DITCH CHECK • 9M O.C. TYPICAL SECTION
SECTION A-A
SECTION B-B
FROM -L2- STA. 110+60 TO STA. 111+68 LT.
GRASS SWALE TYPICAL SECTION
*USE 3:1 • GUARDRAIL LOCATIONS
GRASS SWALE TYPICAL SECTION
BERM DETAIL
SECTION C-C
PROJECT REFERENCE NO.
R-2552C
SHEET NO.
9C/23
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
CONST.REV.
R/W REV.
METRIC
TOE OF FILL PROTECTION
TAIL DITCH
UNKNOWN
HENERY C DURHAM PB 21 PG 141 DB 866 PG 101
THOMAS R CARROLL JR. PG 21 PG 141 DB 888 PG 328 DB 963 PG 791
LUTHER SHELBY DURHAM PB 21 PG 141
-L2LT- TS Sta. 111+47.473
-L2LT- SC Sta. 112+42.473
-L2- TS Sta. 111+32.523
-L2- SC Sta. 112+27.523
S 63° 41' 42.5" E
END BRIDGE
-L2RT- POC Sta. 111+02.000
ACQUIRED UNDER ADVANCE ACQUISITION 058-99-RW MARCH 15, 1999
BAREWOODS DEVELOPMENT, L.L.C. DB 468 PG 331 DB 485 PG 18
FORMERLY: CLEMON H JOHNSON DB 468 PG 331 DB 485 PG 18
MATCHLINE -L2- 110+60 SEE SHEET 4
MATCHLINE -L2- 114+20 SEE SHEET 6
SITE C-1
GUY C. LEE BUILDING MATERIALS OF SMITHFIELD DB 1994 PG 527 PB 54 PG 415
GUY C. LEE BUILDING MATERIALS OF SMITHFIELD DB 1995 PG 332 PB 54 PG 415
BRIAN L. NICHOLS DB 2038 PG 76 PB 54 PG 416
WILLIAM EARL LAMB DB 1724 PG 573 PB 54 PG 416
-L2LT- GRADE SEE PROFILE SHEET 29
-L2RT- GRADE SEE PROFILE SHEET 29


08+84.000
+84.000 -L2LT-
39.500
109
NEUSE BUFFER
15.24 FROM TOP OF BANK
ZONE 2
ZONE 1
6.096
9.144
58
62
54
56
C
F
ELEC
5M
9M
TEMP. HAUL ROAD.
L2 LT LN

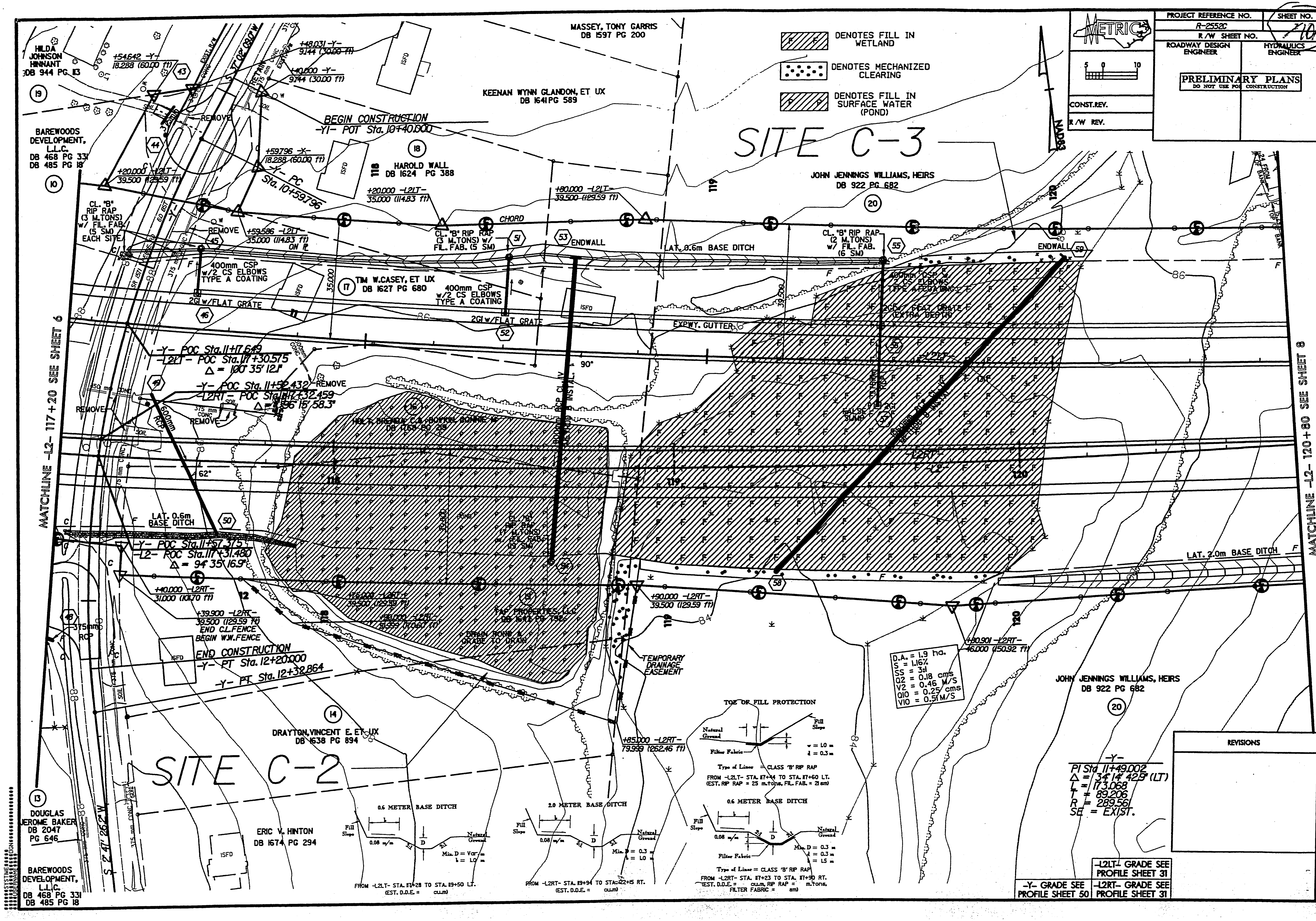
Sht 9B of 23



RECEIVED
JAN 10 2005
RALEIGH REGULATORY FIELD OFFICE



PROJECT REFERENCE NO.
R-2552C
SHEET NO.
10
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
METRIC
CONST.REV.
R/W REV.
NAD83
DENOTES FILL IN WETLAND
DENOTES MECHANIZED CLEARING
DENOTES FILL IN SURFACE WATER (POND)
SITE C-3
SITE C-2
MASSEY, TONY GARRIS
DB 1597 PG 200
KEENAN WYNN GLANDON, ET UX
DB 1641 PG 589
HILDA JOHNSON HINNANT
DB 944 PG 113
BAREWOODS DEVELOPMENT, L.L.C.
DB 468 PG 331
DB 485 PG 18
HAROLD WALL
DB 1624 PG 388
JOHN JENNINGS WILLIAMS, HEIRS
DB 922 PG 682
TIM W.CASEY, ET UX
DB 1627 PG 680
DRAYTON, VINCENT E. ET UX
DB 1638 PG 894
ERIC V. HINTON
DB 1674 PG 294
DOUGLAS JEROME BAKER
DB 2047
PG 646
BEGIN CONSTRUCTION
-Y1- POT Sta. 10+40.000
END CONSTRUCTION
-Y- PT Sta. 12+20.000
-Y- PT Sta. 12+32.864
-Y- PC Sta. 10+59.796
-Y- POC Sta. 11+17.649
-L2LT- POC Sta. 117+30.575
Δ = 100° 35' 12.1"
-Y- POC Sta. 11+52.432
-L2RT- POC Sta. 117+32.459
Δ = 96° 15' 58.3"
-Y- POC Sta. 11+57.375
-L2- POC Sta. 117+31.480
Δ = 94° 35' 16.9"
MATCHLINE -L2- 117+20 SEE SHEET 6
MATCHLINE -L2- 120+80 SEE SHEET 8
LAT. 0.6m BASE DITCH
LAT. 2.0m BASE DITCH
EXPWY. GUTTER
ENDWALL
TEMPORARY DRAINAGE EASEMENT
CL. "B" RIP RAP (3 M.TONS) w/ FIL. FAB. (5 SM)
CL. "B" RIP RAP (2 M.TONS) w/ FIL. FAB. (6 SM)
400mm CSP w/2 CS ELBOWS TYPE A COATING
2GI w/FLAT GRATE
END CL.FENCE
BEGIN W.W.FENCE
D.A. = 1.9 ha.
S = 1.16%
SS = 3:1
Q2 = 0.18 cms
V2 = 0.46 M/S
Q10 = 0.25 cms
V10 = 0.51 M/S
TOE OF FILL PROTECTION
Type of Liner = CLASS 'B' RIP RAP
FROM -L2LT- STA. 117+44 TO STA. 117+60 LT.
(EST. RIP RAP = 25 m.tons, FIL. FAB. = 21 sm)
0.6 METER BASE DITCH
FROM -L2LT- STA. 117+28 TO STA. 119+50 LT.
2.0 METER BASE DITCH
FROM -L2RT- STA. 119+94 TO STA. 122+15 RT.
0.6 METER BASE DITCH
Type of Liner = CLASS 'B' RIP RAP
FROM -L2RT- STA. 117+23 TO STA. 117+90 RT.
-Y-
PI Sta 11+49.002
Δ = 34° 14' 42.9" (LT)
L = 173.068
T = 89.206
R = 289.561
SE = EXIST.
REVISIONS
-L2LT- GRADE SEE PROFILE SHEET 31
-Y- GRADE SEE PROFILE SHEET 50
-L2RT- GRADE SEE PROFILE SHEET 31


PROJECT REFERENCE NO.
R-2552C
SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
METRIC
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
CONST. REV.
R/W REV.
NAD83
DENOTES FILL IN WETLAND
DENOTES MECHANIZED CLEARING
DENOTES FILL IN SURFACE WATER (POND)
SITE C-3
SITE C-2
MASSEY, TONY GARRIS
DB 1597 PG 200
KEENAN WYNN GLANDON, ET UX
DB 1641 PG 589
HILDA JOHNSON HINNANT
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BAREWOODS DEVELOPMENT, L.L.C.
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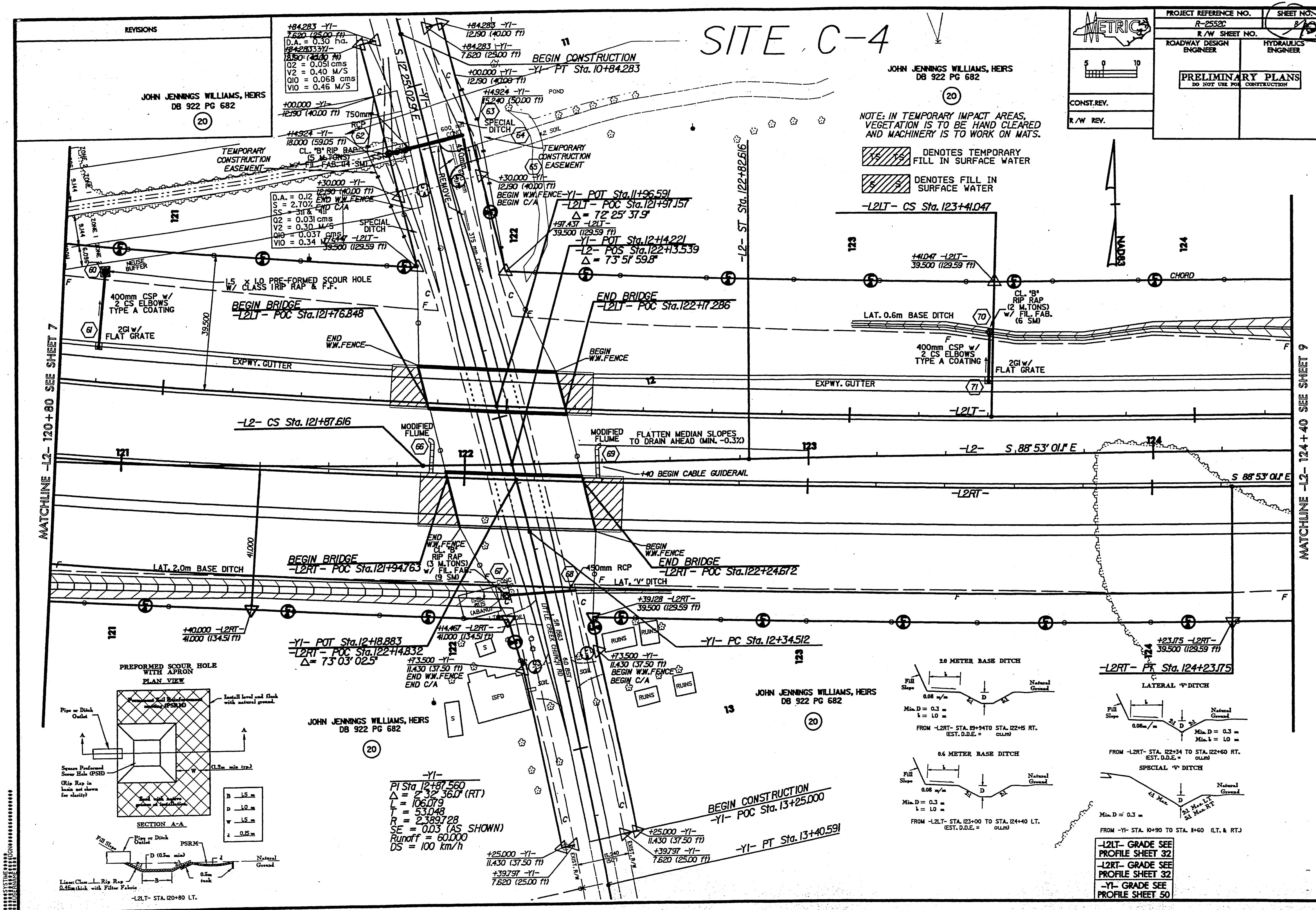
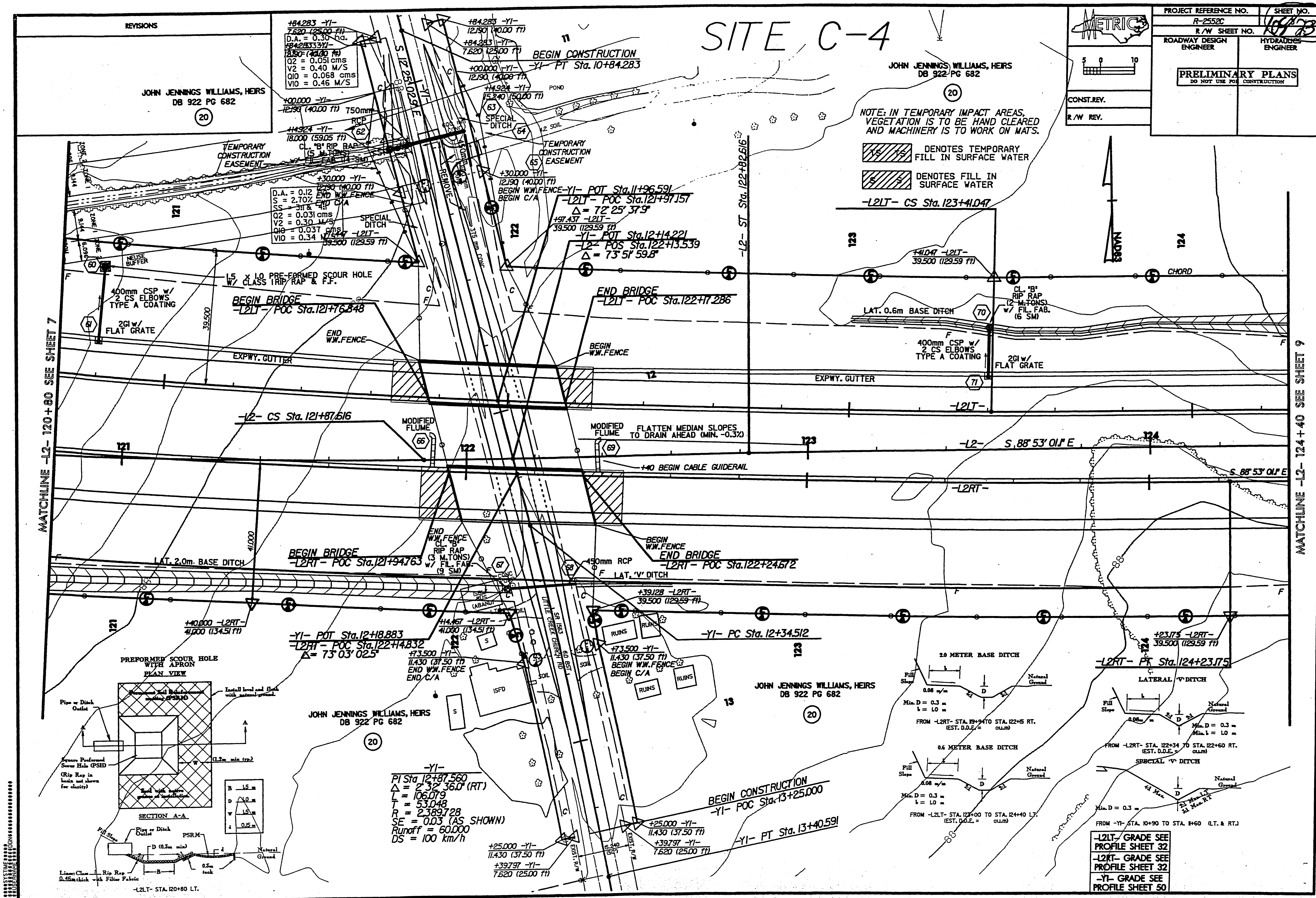
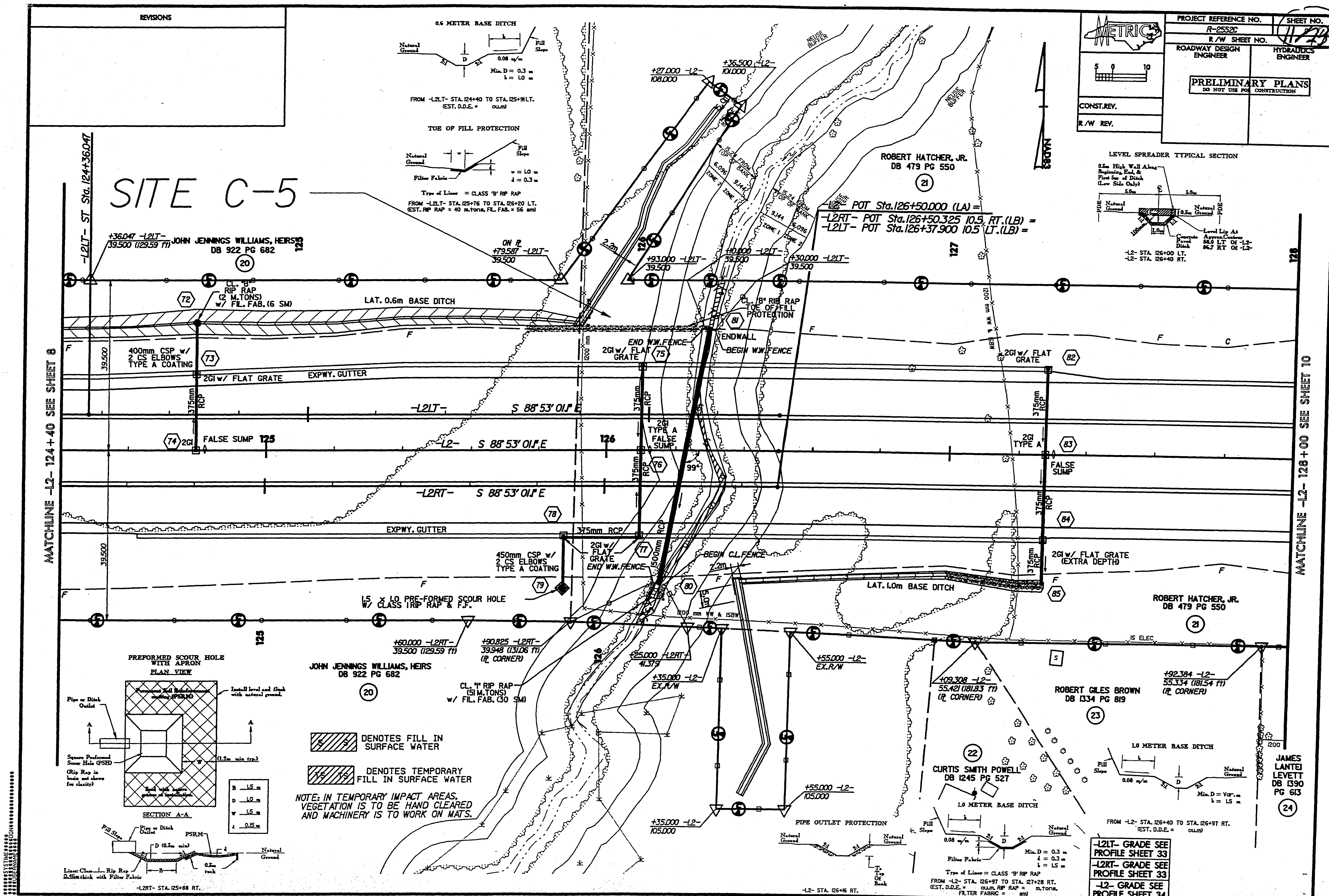
DB 1638 PG 894
DOUGLAS JEROME BAKER
DB 2047
PG 646
ERIC V. HINTON
DB 1674 PG 294
BEGIN CONSTRUCTION
-Y1- POT Sta. 10+40.000
END CONSTRUCTION
-Y- PT Sta. 12+20.000
-Y- PT Sta. 12+32.864
-Y- POC Sta. 11+17.649
-L2LT- POC Sta. 117+30.575
-Y- POC Sta. 11+52.432
-L2RT- POC Sta. 117+32.459
-Y- POC Sta. 11+57.375
-L2- POC Sta. 117+31.480
CL. "B" RIP RAP (3 M.TONS) w/ FIL. FAB. (5 SM) EACH SITE
400mm CSP w/2 CS ELBOWS TYPE A COATING
2GI w/FLAT GRATE
LAT. 0.6m BASE DITCH
LAT. 2.0m BASE DITCH
EXPWY. GUTTER
ENDWALL
TEMPORARY DRAINAGE EASEMENT
MATCHLINE -L2- 117+20 SEE SHEET 6
MATCHLINE -L2- 120+80 SEE SHEET 8
D.A. = 1.9 ha.
S = 1.16%
SS = 3:1
Q2 = 0.18 cms
V2 = 0.46 M/S
Q10 = 0.25 cms
V10 = 0.51 M/S
TOE OF FILL PROTECTION
Type of Liner = CLASS 'B' RIP RAP
0.6 METER BASE DITCH
2.0 METER BASE DITCH
REVISIONS
-Y-
PI Sta 11+49.002
Δ = 34° 14' 42.9" (LT)
L = 173.068
T = 89.206
R = 289.561
SE = EXIST.
-L2LT- GRADE SEE PROFILE SHEET 31
-Y- GRADE SEE PROFILE SHEET 50
-L2RT- GRADE SEE PROFILE SHEET 31



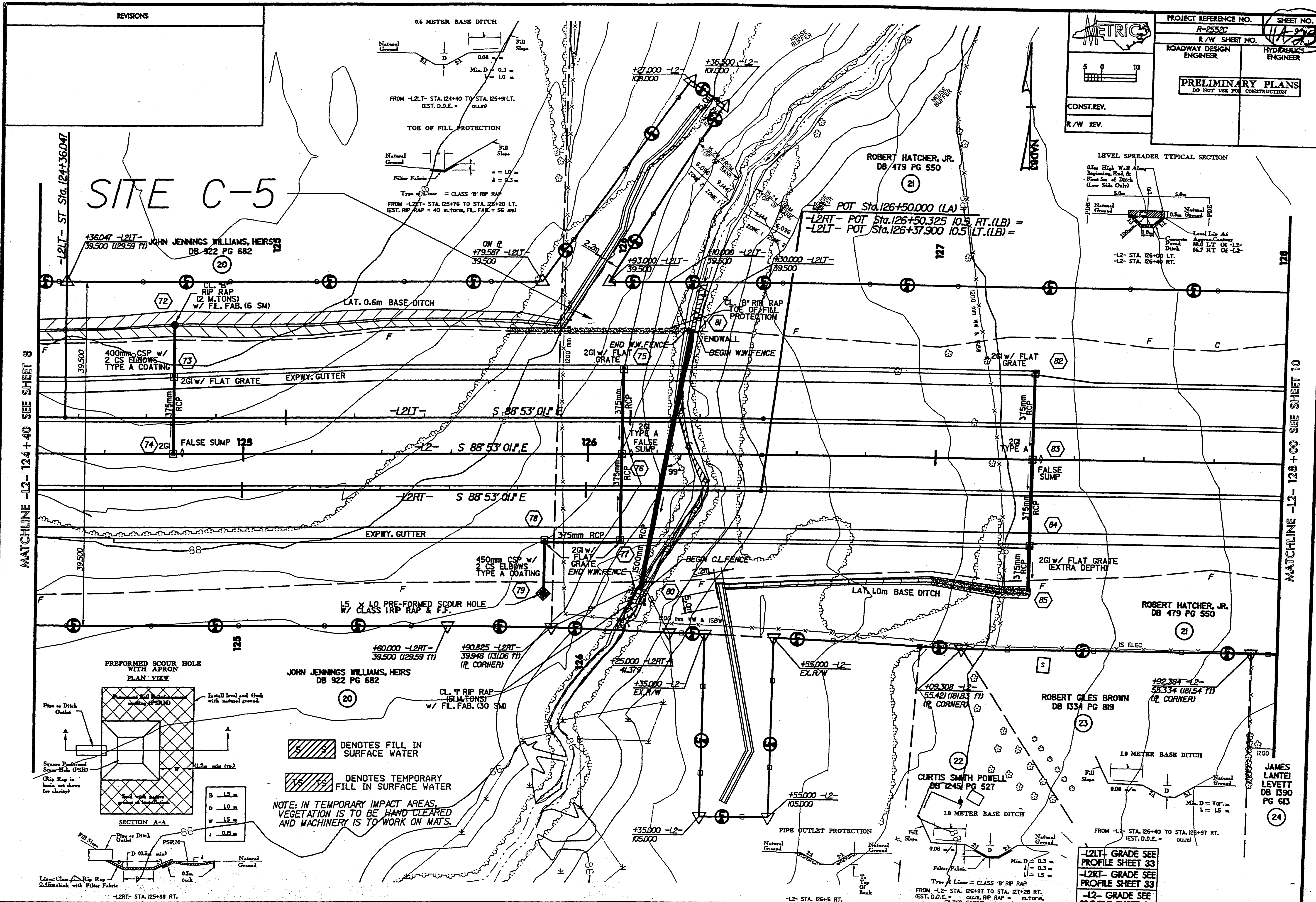
SITE C-4
PROJECT REFERENCE NO.
R-2552C
SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
METRIC
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
CONST. REV.
R/W REV.
REVISIONS
JOHN JENNINGS WILLIAMS, HEIRS
DB 922 PG 682
NOTE: IN TEMPORARY IMPACT AREAS, VEGETATION IS TO BE HAND CLEARED AND MACHINERY IS TO WORK ON MATS.
DENOTES TEMPORARY FILL IN SURFACE WATER
DENOTES FILL IN SURFACE WATER
NAD 83
BEGIN CONSTRUCTION -Y1- PT Sta. 10+84.283
D.A. = 0.30 ha.
Q2 = 0.051 cms
V2 = 0.40 M/S
Q10 = 0.068 cms
V10 = 0.46 M/S
D.A. = 0.12
S = 2.70%
Q2 = 0.031 cms
V2 = 0.30 M/S
Q10 = 0.037 cms
V10 = 0.34 M/S
TEMPORARY CONSTRUCTION EASEMENT
CL. "B" RIP RAP
SPECIAL DITCH
NEUSE BUFFER
L5 x L0 PRE-FORMED SCOUR HOLE W/ CLASS I RIP RAP & F.F.
400mm CSP w/ 2 CS ELBOWS TYPE A COATING
2GI w/ FLAT GRATE
BEGIN BRIDGE -L2LT- POC Sta. 121+76.848
END BRIDGE -L2LT- POC Sta. 122+17.286
-Y1- POT Sta. 11+96.591
-L2LT- POC Sta. 121+97.157
Δ = 72° 25' 37.9"
-Y1- POT Sta. 12+14.221
-L2- POS Sta. 122+13.539
Δ = 73° 51' 59.8"
-L2- ST Sta. 122+82.616
-L2LT- CS Sta. 123+41.047
LAT. 0.6m BASE DITCH
EXPWY. GUTTER
-L2- CS Sta. 121+87.616
MODIFIED FLUME
FLATTEN MEDIAN SLOPES TO DRAIN AHEAD (MIN. -0.3%)
-L2- S 88° 53' 01.1" E
+40 BEGIN CABLE GUIDERAIL
-L2RT-
BEGIN BRIDGE -L2RT- POC Sta. 121+94.763
END BRIDGE -L2RT- POC Sta. 122+24.672
LAT. 2.0m BASE DITCH
450mm RCP
LAT. 'V' DITCH
-Y1- POT Sta. 12+18.883
-L2RT- POC Sta. 122+14.832
Δ = 73° 03' 02.5"
-Y1- PC Sta. 12+34.512
-L2RT- PT Sta. 124+23.175
LITTLE CREEK CHURCH RD
SR 1553
RUINS
ISFD
MATCHLINE -L2- 120+80 SEE SHEET 7
MATCHLINE -L2- 124+40 SEE SHEET 9
PREFORMED SCOUR HOLE WITH APRON
PLAN VIEW
SECTION A-A
-L2LT- STA. 120+80 LT.
-Y1-
PI Sta 12+87.560
Δ = 2° 32' 36.0" (RT)
L = 106.079
T = 53.048
R = 2,389.728
SE = 0.03 (AS SHOWN)
Runoff = 60.000
DS = 100 km/h
BEGIN CONSTRUCTION -Y1- POC Sta. 13+25.000
-Y1- PT Sta. 13+40.591
2.0 METER BASE DITCH
0.6 METER BASE DITCH
LATERAL 'V' DITCH
SPECIAL 'V' DITCH
FROM -L2RT- STA. 119+94 TO STA. 122+15 RT.
FROM -L2LT- STA. 123+00 TO STA. 124+40 LT.
FROM -L2RT- STA. 122+34 TO STA. 122+60 RT.
FROM -Y1- STA. 10+90 TO STA. 11+60 (LT. & RT.)
-L2LT- GRADE SEE PROFILE SHEET 32
-L2RT- GRADE SEE PROFILE SHEET 32
-Y1- GRADE SEE PROFILE SHEET 50

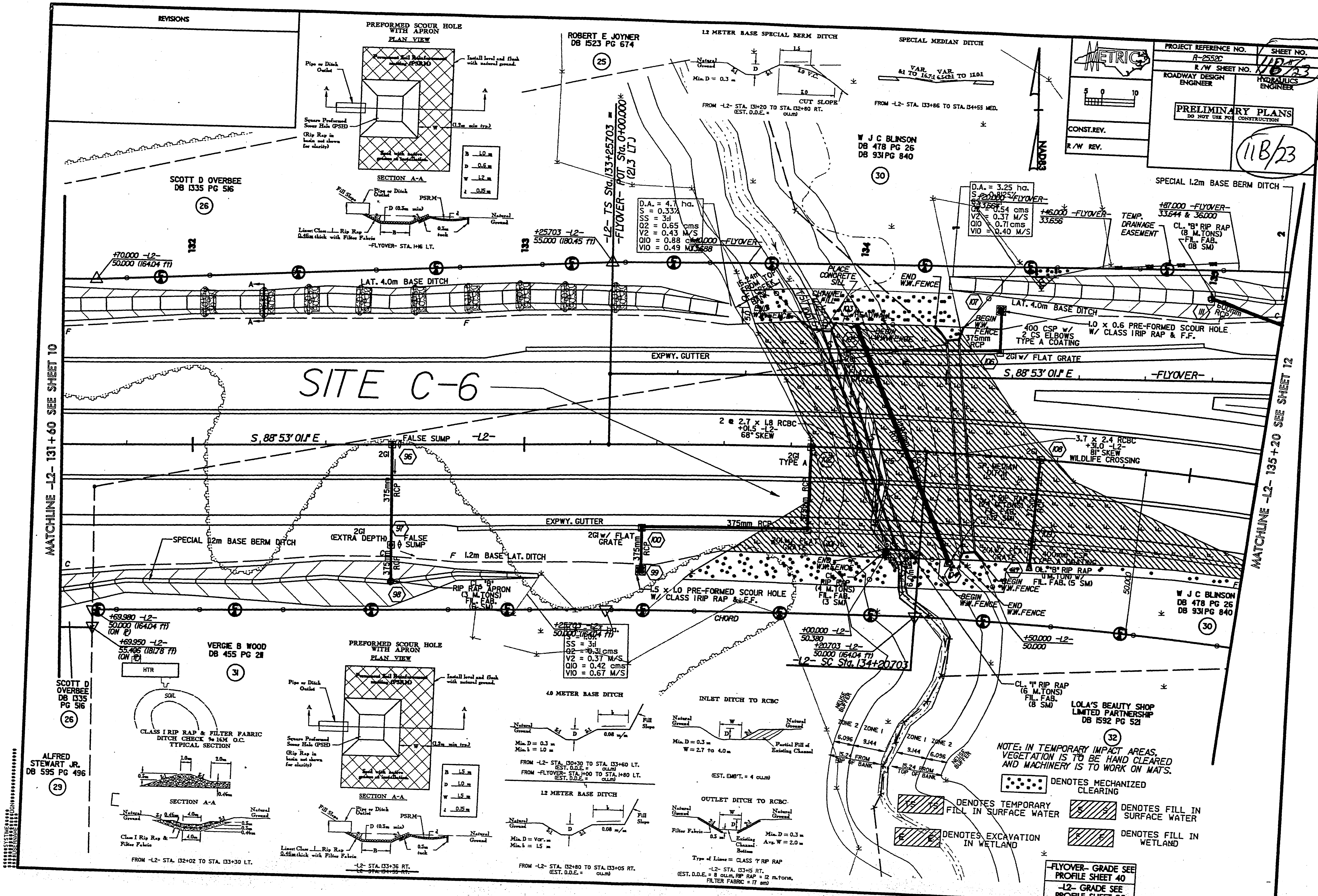


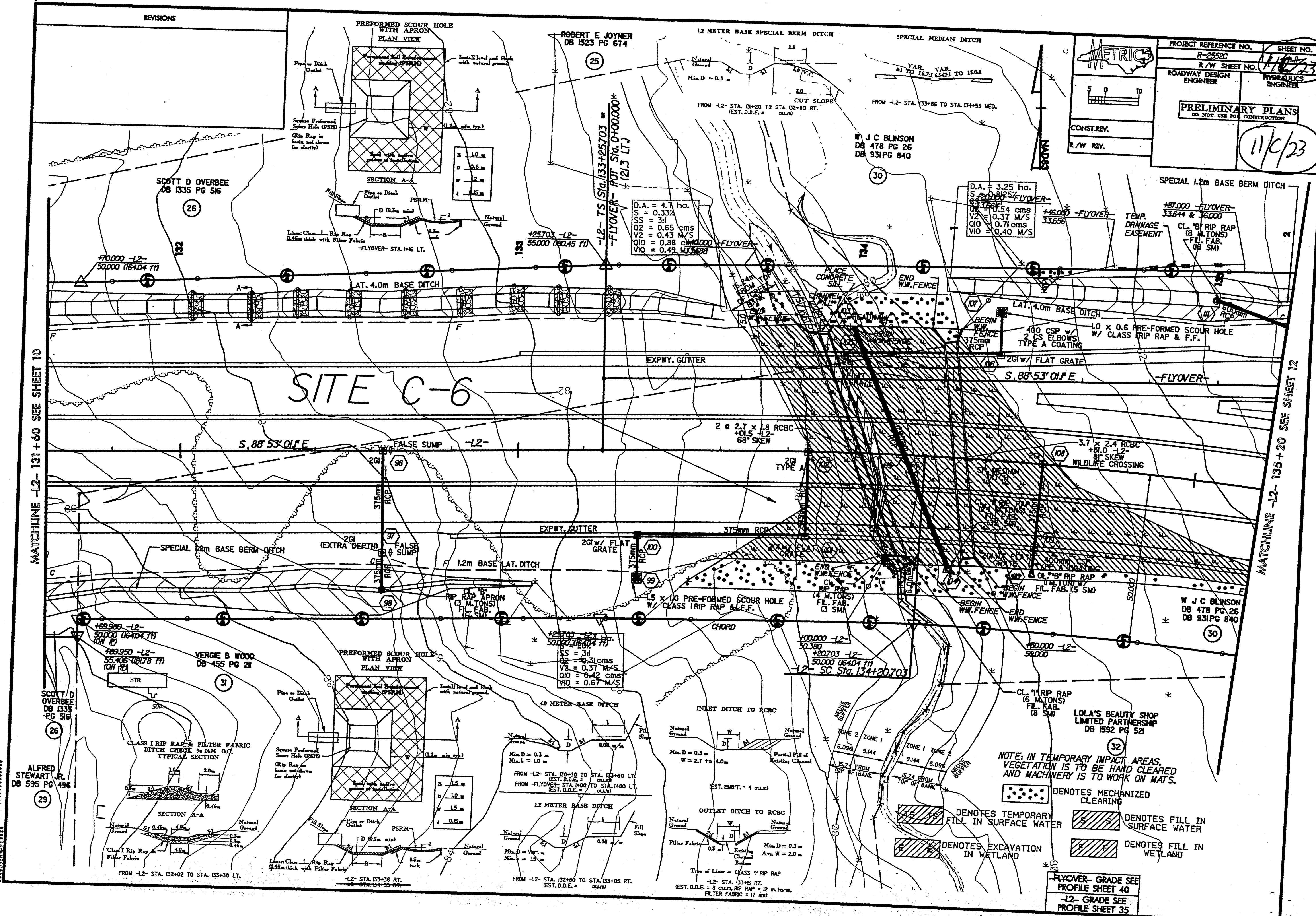
SITE C-4
PROJECT REFERENCE NO.
R-2552C
SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
METRIC
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
CONST.REV.
R/W REV.
REVISIONS
JOHN JENNINGS WILLIAMS, HEIRS
DB 922 PG 682
BEGIN CONSTRUCTION
-Y1- PT Sta. 10+84.283
NOTE: IN TEMPORARY IMPACT AREAS, VEGETATION IS TO BE HAND CLEARED AND MACHINERY IS TO WORK ON MATS.
DENOTES TEMPORARY FILL IN SURFACE WATER
DENOTES FILL IN SURFACE WATER
TEMPORARY CONSTRUCTION EASEMENT
D.A. = 0.30 ha.
Q2 = 0.051 cms
V2 = 0.40 M/S
Q10 = 0.068 cms
V10 = 0.46 M/S
D.A. = 0.12
S = 2.70%
Q2 = 0.031 cms
V2 = 0.30 M/S
Q10 = 0.037 cms
V10 = 0.34 M/S
750mm RCP
CL. "B" RIP RAP
SPECIAL DITCH
POND
-Y1- POT Sta. 11+96.591
-L2LT- POC Sta. 121+97.157
Δ = 72° 25' 37.9"
-Y1- POT Sta. 12+14.221
-L2- POS Sta. 122+13.539
Δ = 73° 51' 59.8"
-L2LT- CS Sta. 123+41.047
-L2- ST Sta. 122+82.616
NEUSE BUFFER
1.5 x 1.0 PRE-FORMED SCOUR HOLE W/ CLASS 1 RIP RAP & F.F.
400mm CSP w/ 2 CS ELBOWS TYPE A COATING
2GI w/ FLAT GRATE
BEGIN BRIDGE
-L2LT- POC Sta. 121+76.848
END BRIDGE
-L2LT- POC Sta. 122+17.286
END W.W. FENCE
BEGIN W.W. FENCE
EXPWY. GUTTER
CHORD
LAT. 0.6m BASE DITCH
CL. "B" RIP RAP (2 M.TONS) w/ FIL. FAB. (6 SM)
-L2- CS Sta. 121+87.616
MODIFIED FLUME
FLATTEN MEDIAN SLOPES TO DRAIN AHEAD (MIN. -0.3%)
-L2- S 88° 53' 01.1" E
+40 BEGIN CABLE GUIDERAIL
-L2RT-
-L2LT-
MATCHLINE -L2- 120+80 SEE SHEET 7
MATCHLINE -L2- 124+40 SEE SHEET 9
BEGIN BRIDGE
-L2RT- POC Sta. 121+94.763
END BRIDGE
-L2RT- POC Sta. 122+24.672
CL. "B" RIP RAP (3 M.TONS) w/ FIL. FAB. (9 SM)
450mm RCP
LAT. 2.0m BASE DITCH
LAT. 'V' DITCH
-Y1- POT Sta. 12+18.883
-L2RT- POC Sta. 122+14.832
Δ = 73° 03' 02.5"
-Y1- PC Sta. 12+34.512
-L2RT- PT Sta. 124+23.175
END W.W. FENCE
END C/A
BEGIN W.W. FENCE
BEGIN C/A
RUINS
ISFD
LITTLE CREEK CHURCH RD
SR 1563
PREFORMED SCOUR HOLE WITH APRON
PLAN VIEW
SECTION A-A
2.0 METER BASE DITCH
0.6 METER BASE DITCH
LATERAL 'V' DITCH
SPECIAL 'V' DITCH
FROM -L2RT- STA. 119+94 TO STA. 122+15 RT.
FROM -L2RT- STA. 122+34 TO STA. 122+60 RT.
FROM -L2LT- STA. 123+00 TO STA. 124+40 LT.
FROM -Y1- STA. 10+90 TO STA. 11+60 (LT. & RT.)
-Y1-
PI Sta 12+87.560
Δ = 2° 32' 36.0" (RT)
L = 106.079
T = 53.048
R = 2,389.728
SE = 0.03 (AS SHOWN)
Runoff = 60.000
DS = 100 km/h
BEGIN CONSTRUCTION
-Y1- POC Sta. 13+25.000
-Y1- PT Sta. 13+40.591
-L2LT- GRADE SEE PROFILE SHEET 32
-L2RT- GRADE SEE PROFILE SHEET 32
-Y1- GRADE SEE PROFILE SHEET 50
-L2LT- STA. 120+80 LT.



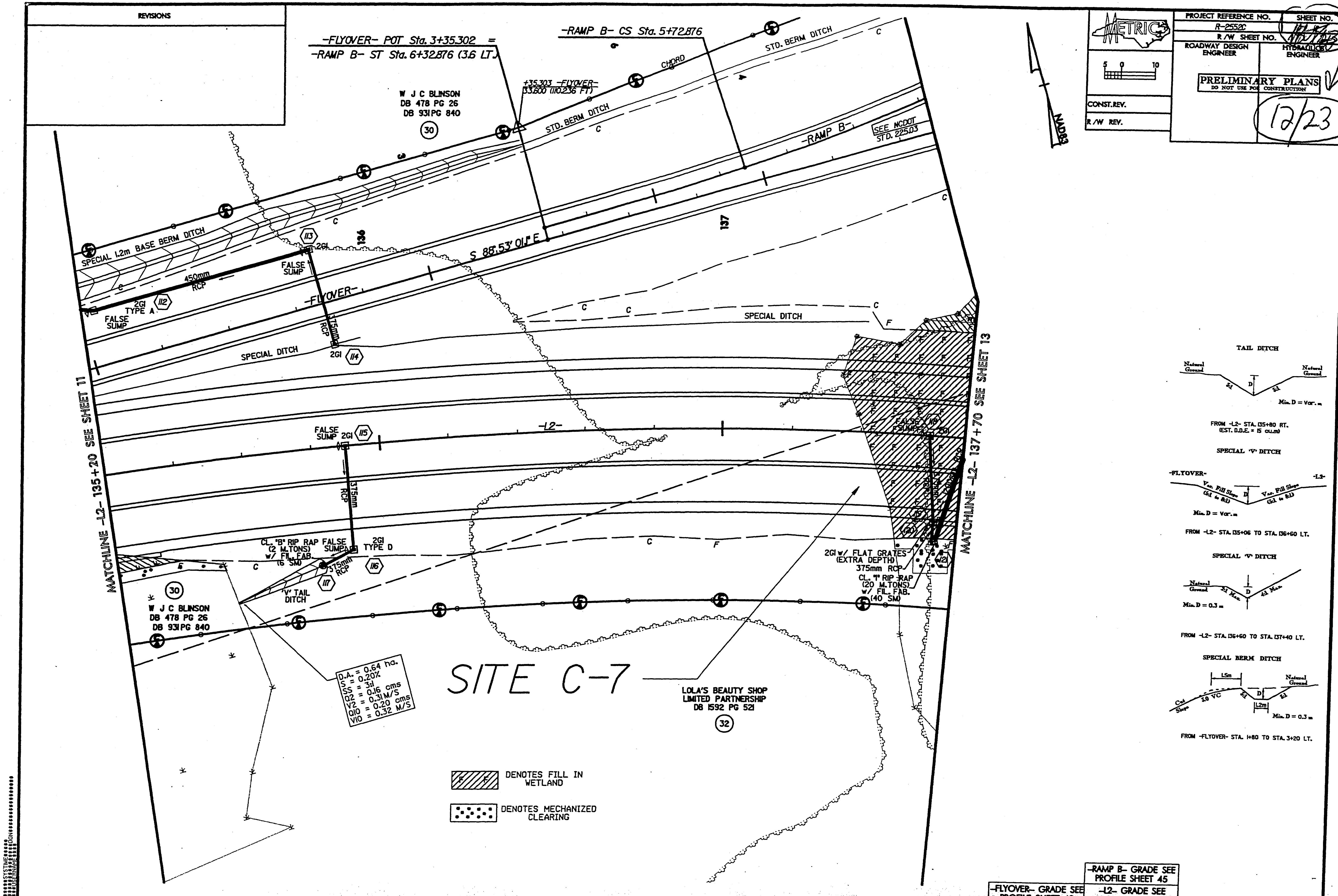
REVISIONS
PROJECT REFERENCE NO.
R-2552C
SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
CONST. REV.
R/W REV.
METRIC
NAD83
SITE C-5
0.6 METER BASE DITCH
Natural Ground
Fill Slope
0.08 m/m
Min. D = 0.3 m
b = 1.0 m
FROM -L2LT- STA. 124+40 TO STA. 125+91 LT.
TOE OF FILL PROTECTION
Filter Fabric
w = 1.0 m
d = 0.3 m
Type of Liner = CLASS 'B' RIP RAP
FROM -L2LT- STA. 125+76 TO STA. 126+20 LT.
(EST. RIP RAP = 40 m.tons, FIL. FAB. = 56 sm)
-L2LT- ST Sta. 124+36.047
+36.047 -L2LT-
39.500 (129.59 ft)
JOHN JENNINGS WILLIAMS, HEIRS
DB 922 PG 682
ON ℞
+79.587 -L2LT-
39.500
+27.000 -L2-
108.000
+36.500 -L2-
101.000
NEUSE BUFFER
ROBERT HATCHER, JR.
DB 479 PG 550
-L2- POT Sta. 126+50.000 (LA) =
-L2RT- POT Sta. 126+50.325 10.5 RT. (LB) =
-L2LT- POT Sta. 126+37.900 10.5 LT. (LB) =
+93.000 -L2LT-
39.500
+10.000 -L2LT-
39.500
+30.000 -L2LT-
39.500
LEVEL SPREADER TYPICAL SECTION
-L2- STA. 126+00 LT.
-L2- STA. 126+40 RT.
CL. "B" RIP RAP (2 M.TONS) w/ FIL. FAB. (6 SM)
LAT. 0.6m BASE DITCH
CL. "B" RIP RAP TOE OF FILL PROTECTION
ENDWALL
END W.W. FENCE
BEGIN W.W. FENCE
400mm CSP w/ 2 CS ELBOWS TYPE A COATING
2GI w/ FLAT GRATE
EXPWY. GUTTER
375mm RCP
-L2LT- S 88°53'01.1" E
-L2- S 88°53'01.1" E
-L2RT- S 88°53'01.1" E
2GI FALSE SUMP
2GI TYPE A FALSE SUMP
1200 mm WW & ISBW
450mm CSP w/ 2 CS ELBOWS TYPE A COATING
2GI w/ FLAT GRATE
END W.W. FENCE
1500mm RCP
BEGIN C.L. FENCE
1.5 x 1.0 PRE-FORMED SCOUR HOLE W/ CLASS I RIP RAP & F.F.
LAT. 1.0m BASE DITCH
2GI w/ FLAT GRATE (EXTRA DEPTH)
MATCHLINE -L2- 124+40 SEE SHEET 8
MATCHLINE -L2- 128+00 SEE SHEET 10
+60.000 -L2RT-
39.500 (129.59 ft)
+90.825 -L2RT-
39.948 (131.06 ft)
(℞ CORNER)
CL. "I" RIP RAP (51 M.TONS) w/ FIL. FAB. (30 SM)
+25.000 -L2RT-
41.379
+35.000 -L2-
EX. R/W
+55.000 -L2-
EX. R/W
+09.308 -L2-
55.421 (181.83 ft)
(℞ CORNER)
ROBERT GILES BROWN
DB 1334 PG 819
+92.384 -L2-
55.334 (181.54 ft)
(℞ CORNER)
CURTIS SMITH POWELL
DB 1245 PG 527
JAMES LANTEI LEVETT
DB 1390 PG 613
PREFORMED SCOUR HOLE WITH APRON
PLAN VIEW
SECTION A-A
DENOTES FILL IN SURFACE WATER
DENOTES TEMPORARY FILL IN SURFACE WATER
NOTE: IN TEMPORARY IMPACT AREAS, VEGETATION IS TO BE HAND CLEARED AND MACHINERY IS TO WORK ON MATS.
+55.000 -L2-
105.000
+35.000 -L2-
105.000
PIPE OUTLET PROTECTION
-L2- STA. 126+16 RT.
1.0 METER BASE DITCH
FROM -L2- STA. 126+97 TO STA. 127+28 RT.
FROM -L2- STA. 126+40 TO STA. 126+97 RT.
-L2RT- STA. 125+88 RT.
-L2LT- GRADE SEE PROFILE SHEET 33
-L2RT- GRADE SEE PROFILE SHEET 33
-L2- GRADE SEE PROFILE SHEET 34


REVISIONS
PROJECT REFERENCE NO. R-2552C
SHEET NO. 11A-23
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
METRIC
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
CONST.REV.
R/W REV.
NAD83
SITE C-5
-L2LT- ST Sta. 124+36.047
MATCHLINE -L2- 124+40 SEE SHEET 8
MATCHLINE -L2- 128+00 SEE SHEET 10
0.6 METER BASE DITCH
Natural Ground
Fill Slope
0.08 m/m
Min. D = 0.3 m
b = 1.0 m
FROM -L2LT- STA. 124+40 TO STA. 125+91 LT.
(EST. D.D.E. = cu.m)
TOE OF FILL PROTECTION
Filter Fabric
w = 1.0 m
d = 0.3 m
Type of Liner = CLASS 'B' RIP RAP
FROM -L2LT- STA. 125+76 TO STA. 126+20 LT.
(EST. RIP RAP = 40 m.tons, FIL. FAB. = 56 sm)
+36.047 -L2LT-
39.500 (129.59 ft)
JOHN JENNINGS WILLIAMS, HEIRS
DB 922 PG 682
20
ON ℄
+79.587 -L2LT-
39.500
+27.000 -L2-
108.000
+36.500 -L2-
101.000
NEUSE BUFFER
15.24 TOP OF BANK
ZONE 1
ZONE 2
6.096
9.144
ROBERT HATCHER, JR.
DB 479 PG 550
21
-L2- POT Sta. 126+50.000 (LA) =
-L2RT- POT Sta. 126+50.325 10.5 RT. (LB) =
-L2LT- POT Sta. 126+37.900 10.5 LT. (LB) =
+93.000 -L2LT-
39.500
+10.000 -L2LT-
39.500
+30.000 -L2LT-
39.500
2.2m
LEVEL SPREADER TYPICAL SECTION
0.3m High Wall Along Beginning, End, & First 5m of Ditch (Low Side Only)
5.0m
5.0m
PDE
Natural Ground
0.3m
1.0m
Concrete Paved Ditch
Level Lip At Approx. Contour 88.0 LT Of -L2- 86.7 RT Of -L2-
-L2- STA. 126+00 LT.
-L2- STA. 126+40 RT.
72
CL. "B" RIP RAP
(2 M.TONS)
w/ FIL. FAB. (6 SM)
LAT. 0.6m BASE DITCH
CL. "B" RIP RAP
TOE OF FILL PROTECTION
81
ENDWALL
END W.W. FENCE
BEGIN W.W. FENCE
400mm CSP w/
2 CS ELBOWS
TYPE A COATING
73
2GI w/ FLAT GRATE
EXPWY. GUTTER
2GI w/ FLAT GRATE
75
2GI w/ FLAT GRATE
82
375mm RCP
-L2LT- S 88°53'01.1" E
74
2GI
FALSE SUMP
125
-L2- S 88°53'01.1" E
126
2GI TYPE A FALSE SUMP
76
99
127
128
2GI TYPE A
83
FALSE SUMP
-L2RT- S 88°53'01.1" E
78
84
1200 mm
1200 mm WW & ISBW
EXPWY. GUTTER
375mm RCP
450mm CSP w/
2 CS ELBOWS
TYPE A COATING
79
2GI w/ FLAT GRATE
77
END W.W. FENCE
1500mm RCP
BEGIN C.L. FENCE
80
2GI w/ FLAT GRATE (EXTRA DEPTH)
85
LAT. 1.0m BASE DITCH
1.5 x 1.0 PRE-FORMED SCOUR HOLE
W/ CLASS I RIP RAP & F.F.
39.500
88
86
+60.000 -L2RT-
39.500 (129.59 ft)
+90.825 -L2RT-
39.948 (131.06 ft)
(℄ CORNER)
+25.000 -L2RT-
41.379
+35.000 -L2-
EX.R/W
+55.000 -L2-
EX.R/W
IS ELEC
+09.308 -L2-
55.421 (181.83 ft)
(℄ CORNER)
+92.384 -L2-
55.334 (181.54 ft)
(℄ CORNER)
ROBERT HATCHER, JR.
DB 479 PG 550
21
ROBERT GILES BROWN
DB 1334 PG 819
23
CURTIS SMITH POWELL
DB 1245 PG 527
22
JAMES LANTEI LEVETT
DB 1390 PG 613
24
JOHN JENNINGS WILLIAMS, HEIRS
DB 922 PG 682
20
CL. "I" RIP RAP
(51 M.TONS)
w/ FIL. FAB. (30 SM)
PREFORMED SCOUR HOLE WITH APRON
PLAN VIEW
Permanent Soil Reinforcement Matting (PSRM)
Install level and flush with natural ground.
Pipe or Ditch Outlet
Square Preformed Scour Hole (PSH)
(Rip Rap in basin not shown for clarity)
(1.2m min typ.)
Seed with native grasses at installation.
B 1.5 m
D 1.0 m
W 1.5 m
d 0.15 m
SECTION A-A
Fill Slope
Pipe or Ditch Outlet
D (0.3m min)
PSRM
Natural Ground
0.3m tuck
Liner: Class I Rip Rap 0.46m thick with Filter Fabric
-L2RT- STA. 125+88 RT.
DENOTES FILL IN SURFACE WATER
DENOTES TEMPORARY FILL IN SURFACE WATER
NOTE: IN TEMPORARY IMPACT AREAS, VEGETATION IS TO BE HAND CLEARED AND MACHINERY IS TO WORK ON MATS.
+35.000 -L2-
105.000
+55.000 -L2-
105.000
PIPE OUTLET PROTECTION
To Top Of Bank
-L2- STA. 126+16 RT.
1.0 METER BASE DITCH
Fill Slope
0.08 m/m
Filter Fabric
Min. D = 0.3 m
d = 0.3 m
b = 1.5 m
Type of Liner = CLASS 'B' RIP RAP
FROM -L2- STA. 126+97 TO STA. 127+28 RT.
(EST. D.D.E. = cu.m, RIP RAP = m.tons,
FILTER FABRIC = sm)
1.0 METER BASE DITCH
Min. D = Var. m
b = 1.5 m
FROM -L2- STA. 126+40 TO STA. 126+97 RT.
(EST. D.D.E. = cu.m)
1200
-L2LT- GRADE SEE PROFILE SHEET 33
-L2RT- GRADE SEE PROFILE SHEET 33
-L2- GRADE SEE PROFILE SHEET 34

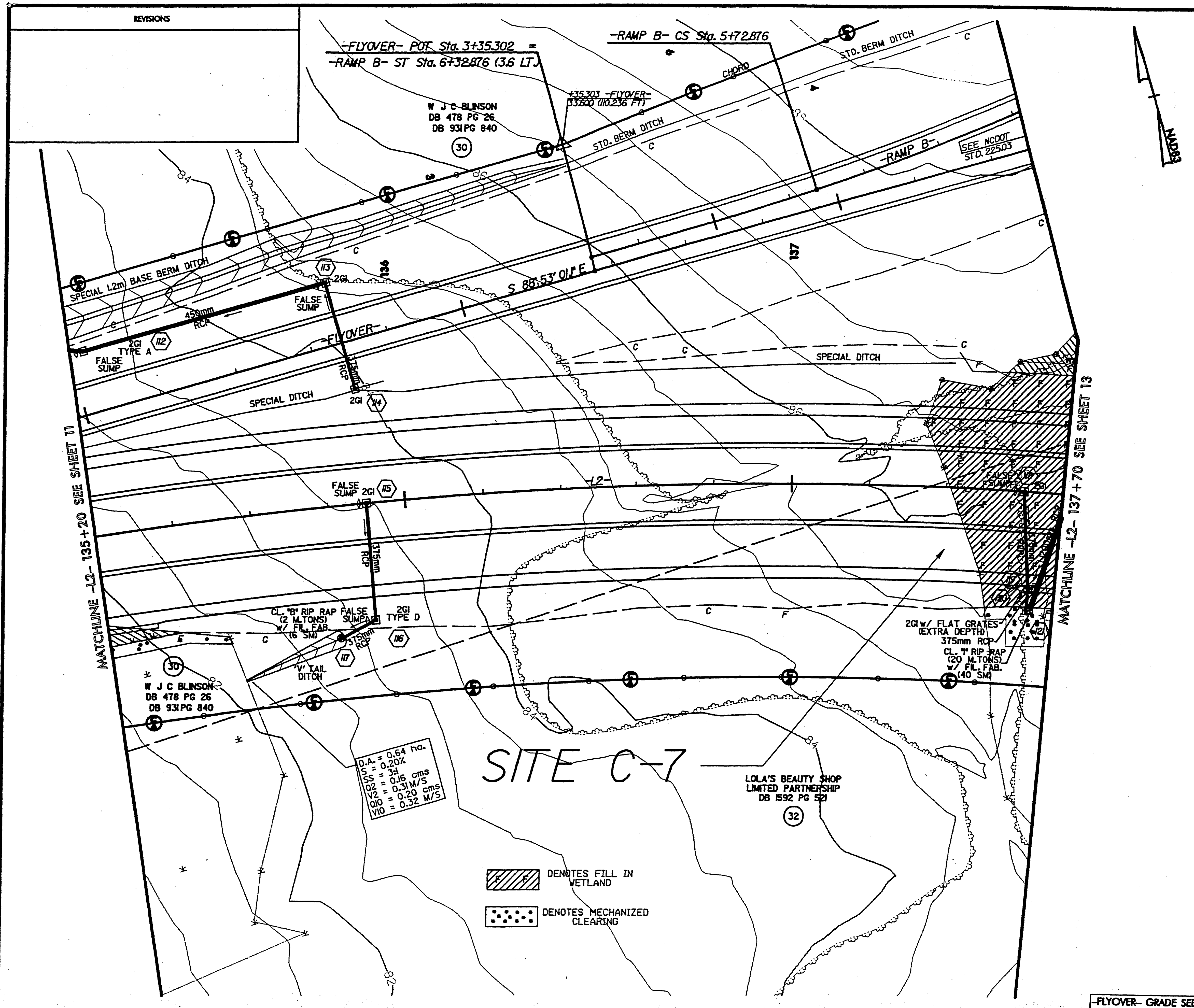

REVISIONS
PROJECT REFERENCE NO. R-2552C
SHEET NO.
R/W SHEET NO.
11B/23
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
CONST.REV.
R/W REV.
METRIC
NAD83
PREFORMED SCOUR HOLE WITH APRON
PLAN VIEW
SECTION A-A
L2 METER BASE SPECIAL BERM DITCH
FROM -L2- STA. 131+20 TO STA. 132+80 RT.
SPECIAL MEDIAN DITCH
FROM -L2- STA. 133+86 TO STA. 134+55 MED.
ROBERT E JOYNER
DB 1523 PG 674
SCOTT D OVERBEE
DB 1335 PG 516
W J C BLINSON
DB 478 PG 26
DB 931 PG 840
SPECIAL 1.2m BASE BERM DITCH
D.A. = 4.7 ha.
S = 0.33%
SS = 3:1
Q2 = 0.65 cms
V2 = 0.43 M/S
Q10 = 0.88 cms
V10 = 0.49 M/S
D.A. = 3.25 ha.
Q2 = 0.54 cms
V2 = 0.37 M/S
Q10 = 0.71 cms
V10 = 0.40 M/S
-L2- TS Sta. 133+25.703 = -FLYOVER- POT Sta. 0+00.000 (21.3 LT)
LAT. 4.0m BASE DITCH
EXPWY. GUTTER
SITE C-6
S 88°53'01.1" E
-FLYOVER-
-L2-
2 @ 2.7 x 1.8 RCBC +01.5 -L2- 68° SKEW
3.7 x 2.4 RCBC +31.0 -L2- 81° SKEW WILDLIFE CROSSING
400 CSP W/ 2 CS ELBOWS TYPE A COATING
1.0 x 0.6 PRE-FORMED SCOUR HOLE W/ CLASS I RIP RAP & F.F.
1.5 x 1.0 PRE-FORMED SCOUR HOLE W/ CLASS I RIP RAP & F.F.
TEMP. DRAINAGE EASEMENT
CL. "B" RIP RAP (8 M.TONS) FIL. FAB. (18 SM)
FALSE SUMP
2GI TYPE A
2GI (EXTRA DEPTH)
375mm RCP
SPECIAL 1.2m BASE BERM DITCH
1.2m BASE LAT. DITCH
RIP RAP APRON (3 M.TONS) FIL. FAB. (8 SM)
-L2- SC Sta. 134+20.703
MATCHLINE -L2- 131+60 SEE SHEET 10
MATCHLINE -L2- 135+20 SEE SHEET 12
VERGIE B WOOD
DB 455 PG 211
ALFRED STEWART JR.
DB 595 PG 496
LOLA'S BEAUTY SHOP LIMITED PARTNERSHIP
DB 1592 PG 521
CL. "I" RIP RAP (6 M.TONS) FIL. FAB. (8 SM)
CLASS I RIP RAP & FILTER FABRIC DITCH CHECK 9 @ 16M O.C. TYPICAL SECTION
4.0 METER BASE DITCH
FROM -L2- STA. 130+30 TO STA. 133+60 LT.
FROM -FLYOVER- STA. 1+00 TO STA. 1+80 LT.
1.2 METER BASE DITCH
FROM -L2- STA. 132+80 TO STA. 133+05 RT.
INLET DITCH TO RCBC
OUTLET DITCH TO RCBC
Type of Liner = CLASS "I" RIP RAP
-L2- STA. 133+15 RT.
NEUSE BUFFER
ZONE 1
ZONE 2
NOTE: IN TEMPORARY IMPACT AREAS, VEGETATION IS TO BE HAND CLEARED AND MACHINERY IS TO WORK ON MATS.
DENOTES MECHANIZED CLEARING
DENOTES TEMPORARY FILL IN SURFACE WATER
DENOTES FILL IN SURFACE WATER
DENOTES EXCAVATION IN WETLAND
DENOTES FILL IN WETLAND
-FLYOVER- GRADE SEE PROFILE SHEET 40
-L2- GRADE SEE PROFILE SHEET 35



REVISIONS
PROJECT REFERENCE NO.
R-2552C
SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
CONST.REV.
R/W REV.
METRIC
PREFORMED SCOUR HOLE WITH APRON
PLAN VIEW
SECTION A-A
ROBERT E JOYNER
DB 1523 PG 674
1.2 METER BASE SPECIAL BERM DITCH
SPECIAL MEDIAN DITCH
FROM -L2- STA. 131+20 TO STA. 132+80 RT.
FROM -L2- STA. 133+86 TO STA. 134+55 MED.
W J C BLINSON
DB 478 PG 26
DB 931PG 840
SCOTT D OVERBEE
DB 1335 PG 516
-L2- TS Sta. 133+25703
-FLYOVER- POT Sta. 0+00.000
D.A. = 4.7 ha.
S = 0.337
SS = 3:1
Q2 = 0.65 cms
V2 = 0.43 M/S
Q10 = 0.88 cms
V10 = 0.49 M/S
D.A. = 3.25 ha.
Q2 = 0.54 cms
V2 = 0.37 M/S
Q10 = 0.71 cms
V10 = 0.40 M/S
SPECIAL 1.2m BASE BERM DITCH
+87.000 -FLYOVER-
33.644 & 36.000
CL. "B" RIP RAP
(8 M.TONS)
FIL. FAB.
(8 SM)
TEMP. DRAINAGE EASEMENT
+70.000 -L2-
50.000 (164.04 ft)
+25703 -L2-
55.000 (180.45 ft)
+46.000 -FLYOVER-
33.656
LAT. 4.0m BASE DITCH
PLACE CONCRETE SILL
END WW.FENCE
BEGIN WW.FENCE
400 CSP w/ 2 CS ELBOWS TYPE A COATING
1.0 x 0.6 PRE-FORMED SCOUR HOLE W/ CLASS I RIP RAP & F.F.
375mm RCP
EXPWY. GUTTER
2GI w/ FLAT GRATE
S, 88°53'01"E
-FLYOVER-
SITE C-6
2 @ 2.7 x 1.8 RCBC
+01.5 -L2-
68° SKEW
3.7 x 2.4 RCBC
+31.0 -L2-
81° SKEW
WILDLIFE CROSSING
FALSE SUMP
-L2-
2GI TYPE A
MATCHLINE -L2- 131+60 SEE SHEET 10
MATCHLINE -L2- 135+20 SEE SHEET 12
SPECIAL 1.2m BASE BERM DITCH
2GI (EXTRA DEPTH)
1.2m BASE LAT. DITCH
CL "B" RIP RAP APRON (3 M.TONS) FIL. FAB. (5 SM)
1.5 x 1.0 PRE-FORMED SCOUR HOLE W/ CLASS I RIP RAP & F.F.
CL. "B" RIP RAP (4 M.TONS) FIL. FAB. (3 SM)
CHORD
+69.980 -L2-
50.000 (164.04 ft) (ON ℓ)
+69.950 -L2-
55.406 (181.78 ft) (ON ℓ)
VERGIE B WOOD
DB 455 PG 211
SS = 3:1
Q2 = 0.31 cms
V2 = 0.37 M/S
Q10 = 0.42 cms
V10 = 0.67 M/S
+00.000 -L2-
50.380
+20703 -L2-
50.000 (164.04 ft)
-L2- SC Sta. 134+20703
+50.000 -L2-
58.000
W J C BLINSON
DB 478 PG 26
DB 931PG 840
SCOTT D OVERBEE DB 1335 PG 516
ALFRED STEWART JR.
DB 595 PG 496
CLASS I RIP RAP & FILTER FABRIC DITCH CHECK 9 @ 14M O.C. TYPICAL SECTION
4.0 METER BASE DITCH
FROM -L2- STA. 130+30 TO STA. 133+60 LT.
FROM -FLYOVER- STA. 1+00 TO STA. 1+80 LT.
1.2 METER BASE DITCH
FROM -L2- STA. 132+80 TO STA. 133+05 RT.
INLET DITCH TO RCBC
OUTLET DITCH TO RCBC
Type of Liner = CLASS 'I' RIP RAP
-L2- STA. 133+15 RT.
FROM -L2- STA. 132+02 TO STA. 133+30 LT.
-L2- STA. 133+36 RT.
CL. "I" RIP RAP (6 M.TONS) FIL. FAB. (8 SM)
LOLA'S BEAUTY SHOP LIMITED PARTNERSHIP
DB 1592 PG 521
NEUSE BUFFER
ZONE 2 ZONE 1
ZONE 1 ZONE 2
15.24 FROM TOP OF BANK
NOTE: IN TEMPORARY IMPACT AREAS, VEGETATION IS TO BE HAND CLEARED AND MACHINERY IS TO WORK ON MATS.
DENOTES MECHANIZED CLEARING
DENOTES TEMPORARY FILL IN SURFACE WATER
DENOTES FILL IN SURFACE WATER
DENOTES EXCAVATION IN WETLAND
DENOTES FILL IN WETLAND
-FLYOVER- GRADE SEE PROFILE SHEET 40
-L2- GRADE SEE PROFILE SHEET 35



REVISIONS
-FLYOVER- POT Sta. 3+35.302 =
-RAMP B- ST Sta. 6+32.876 (3.6 LT.)
-RAMP B- CS Sta. 5+72.876
+35.303 -FLYOVER-
33.600 (110.236 FT)
W J C BLINSON
DB 478 PG 26
DB 931 PG 840
30
STD. BERM DITCH
CHORD
-RAMP B-
SEE NCDOT
STD. 225.03
SPECIAL L2m BASE BERM DITCH
450mm RCP
FALSE SUMP
2GI
113
112
2GI TYPE A
S 88°53'01.1" E
136
137
-FLYOVER-
375mm RCP
2GI
114
SPECIAL DITCH
FALSE SUMP
2GI
115
-L2-
375mm RCP
CL. "B" RIP RAP
(2 M.TONS)
w/ FIL. FAB.
(6 SM)
FALSE SUMP
2GI TYPE D
116
117
375mm RCP
'V' TAIL DITCH
MATCHLINE -L2- 135+20 SEE SHEET 11
MATCHLINE -L2- 137+70 SEE SHEET 13
2GI w/ FLAT GRATES
(EXTRA DEPTH)
375mm RCP
CL. "I" RIP RAP
(20 M.TONS)
w/ FIL. FAB.
(40 SM)
121
D.A. = 0.64 ha.
S = 0.20%
SS = 3:1
Q2 = 0.16 cms
V2 = 0.31 M/S
Q10 = 0.20 cms
V10 = 0.32 M/S
SITE C-7
LOLA'S BEAUTY SHOP
LIMITED PARTNERSHIP
DB 1592 PG 521
32
DENOTES FILL IN WETLAND
DENOTES MECHANIZED CLEARING
NAD83
METRIC
PROJECT REFERENCE NO.
R-2552C
SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
CONST. REV.
R/W REV.
12/23
TAIL DITCH
Natural Ground
Min. D = Var. m
FROM -L2- STA. 135+80 RT.
(EST. D.D.E. = 15 cu.m)
SPECIAL 'V' DITCH
-FLYOVER-
-L3-
Var. Fill Slope
Min. D = Var. m
FROM -L2- STA. 135+06 TO STA. 136+60 LT.
SPECIAL 'V' DITCH
Min. D = 0.3 m
FROM -L2- STA. 136+60 TO STA. 137+40 LT.
SPECIAL BERM DITCH
L5m
L2m
Min. D = 0.3 m
FROM -FLYOVER- STA. 1+80 TO STA. 3+20 LT.
-RAMP B- GRADE SEE PROFILE SHEET 45
-FLYOVER- GRADE SEE PROFILE SHEET 40
-L2- GRADE SEE PROFILE SHEET 35



PROJECT REFERENCE NO.	SHEET NO.
R-2552C	12A/23
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST. REV.
R/W REV.

12A/23

TAIL DITCH

FROM -L2- STA. 135+80 RT. (EST. D.D.E. = 15 cu.m)

SPECIAL 'V' DITCH

FROM -L2- STA. 135+06 TO STA. 136+60 LT.

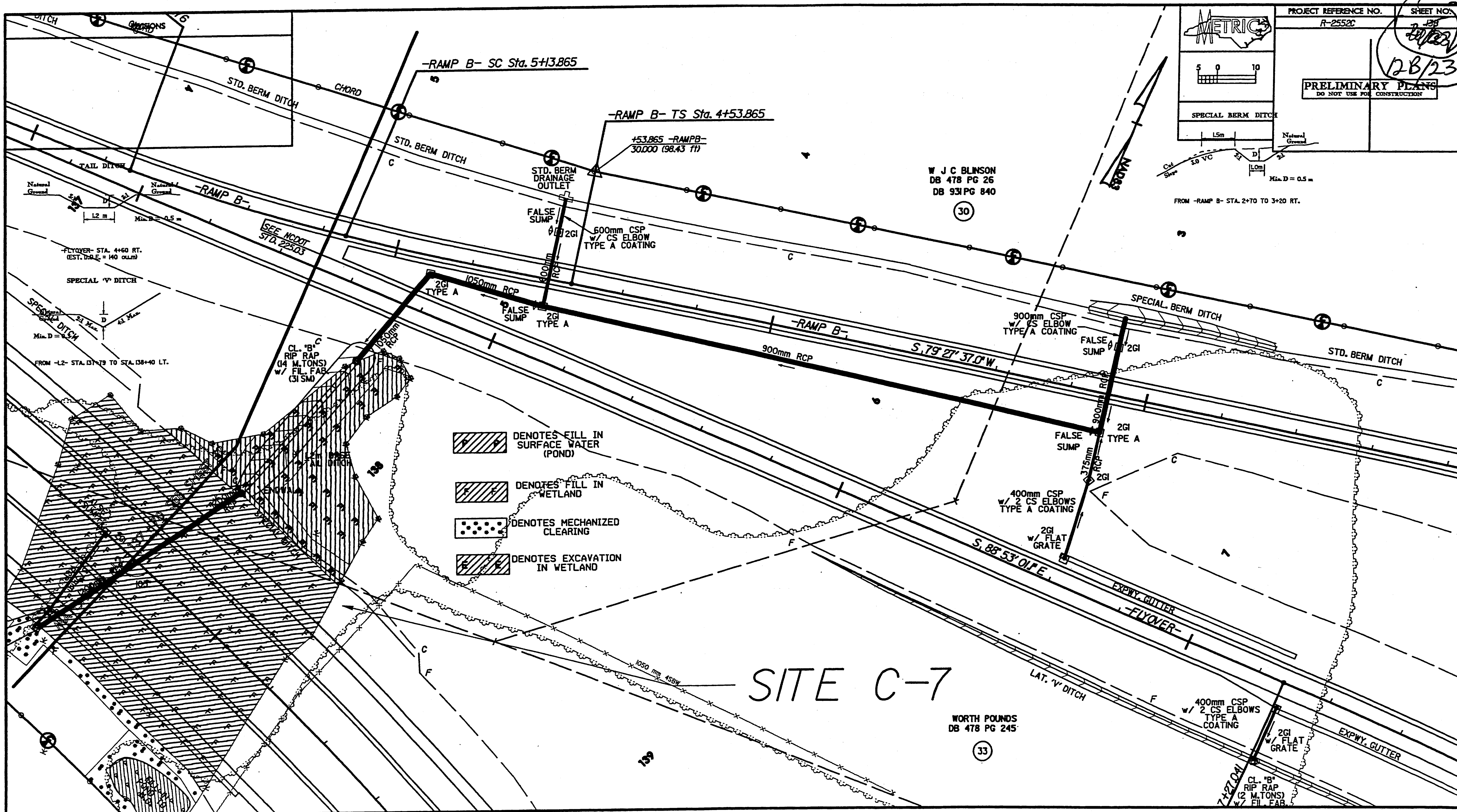
SPECIAL 'V' DITCH

FROM -L2- STA. 136+60 TO STA. 137+40 LT.

SPECIAL BERM DITCH

FROM -FLYOVER- STA. 1+80 TO STA. 3+20 LT.

-RAMP B- GRADE SEE PROFILE SHEET 45
-FLYOVER- GRADE SEE PROFILE SHEET 40
-L2- GRADE SEE PROFILE SHEET 35



MATCH LINE 13 A-B

MATCH LINE 13 B-C

PROJECT REFERENCE NO. R-2552C

SHEET NO. 13 12/6/23

METRIC 5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-RAMP B- SC Sta. 5+13.865

-RAMP B- TS Sta. 4+53.865

+53.865 -RAMP B- 30.000 (98.43 ft)

STD. BERM DITCH

STD. BERM DRAINAGE OUTLET

FALSE SUMP

2GI

600mm CSP w/ CS ELBOW TYPE A COATING

SEE NCDOT STD. 225.03

-FLYOVER- STA. 4+60 RT. (EST. D=0.6 = 140 cu.m)

SPECIAL 'V' DITCH

FROM -L2- STA. 137+79 TO STA. 138+40 LT.

1050mm RCP

900mm RCP

CL. "B" RIP RAP (14 M.TONS) w/ FIL. FAB. (31 SM)

DENOTES FILL IN SURFACE WATER (POND)

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

DENOTES EXCAVATION IN WETLAND

W J C BLINSON
DB 478 PG 26
DB 931 PG 840

30

SPECIAL BERM DITCH

FROM -RAMP B- STA. 2+70 TO 3+20 RT.

S. 79° 21' 37.0" W.

900mm CSP w/ CS ELBOW TYPE A COATING

375mm RCP

400mm CSP w/ 2 CS ELBOWS TYPE A COATING

2GI w/ FLAT GRATE

S. 88° 53' 04" E.

EXPWY. GUTTER

-FLYOVER-

LAT. 'V' DITCH

WORTH POUNDS
DB 478 PG 245

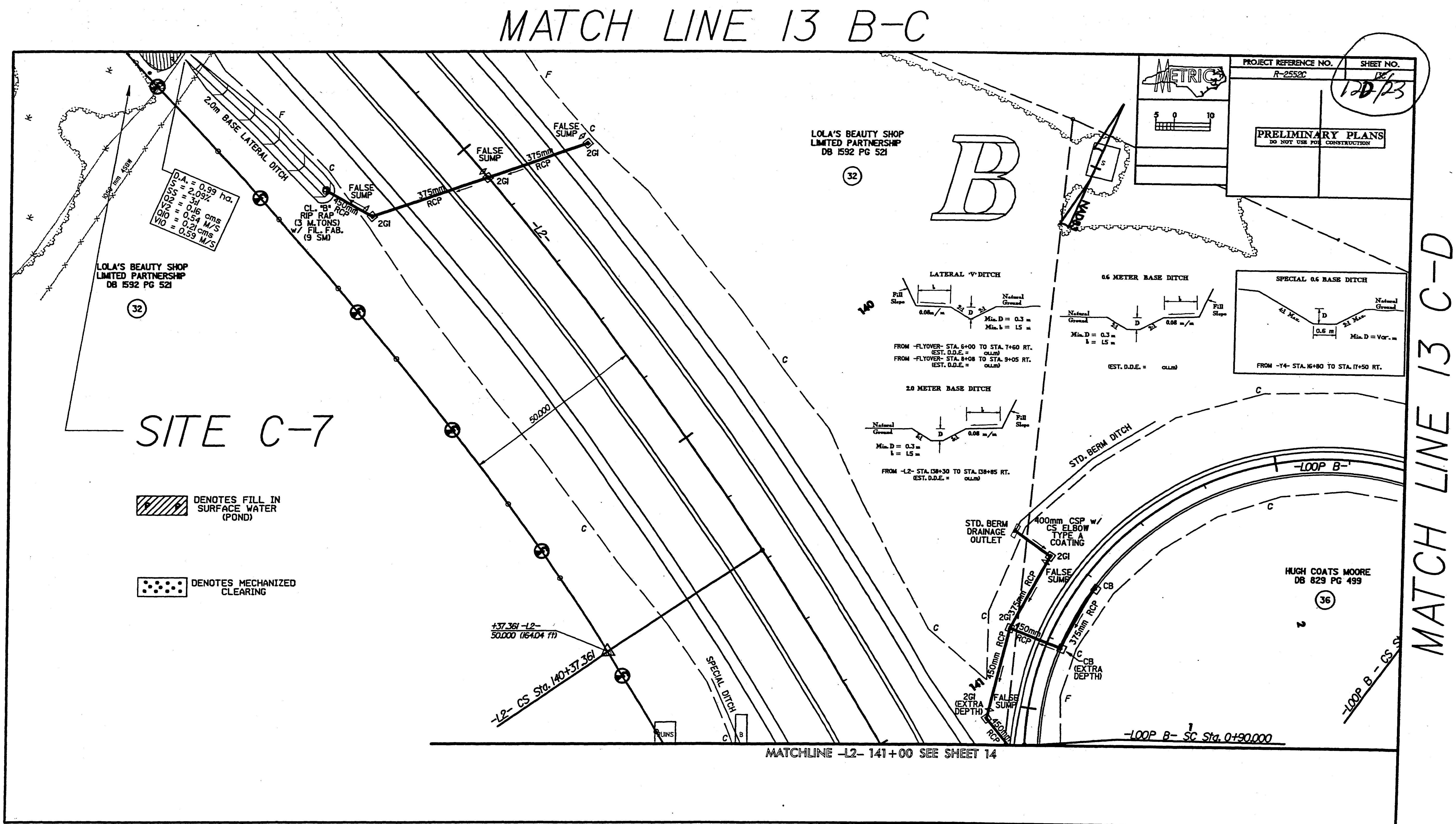
33

CL. "B" RIP RAP (2 M.TONS) w/ FIL. FAB.

SITE C-7

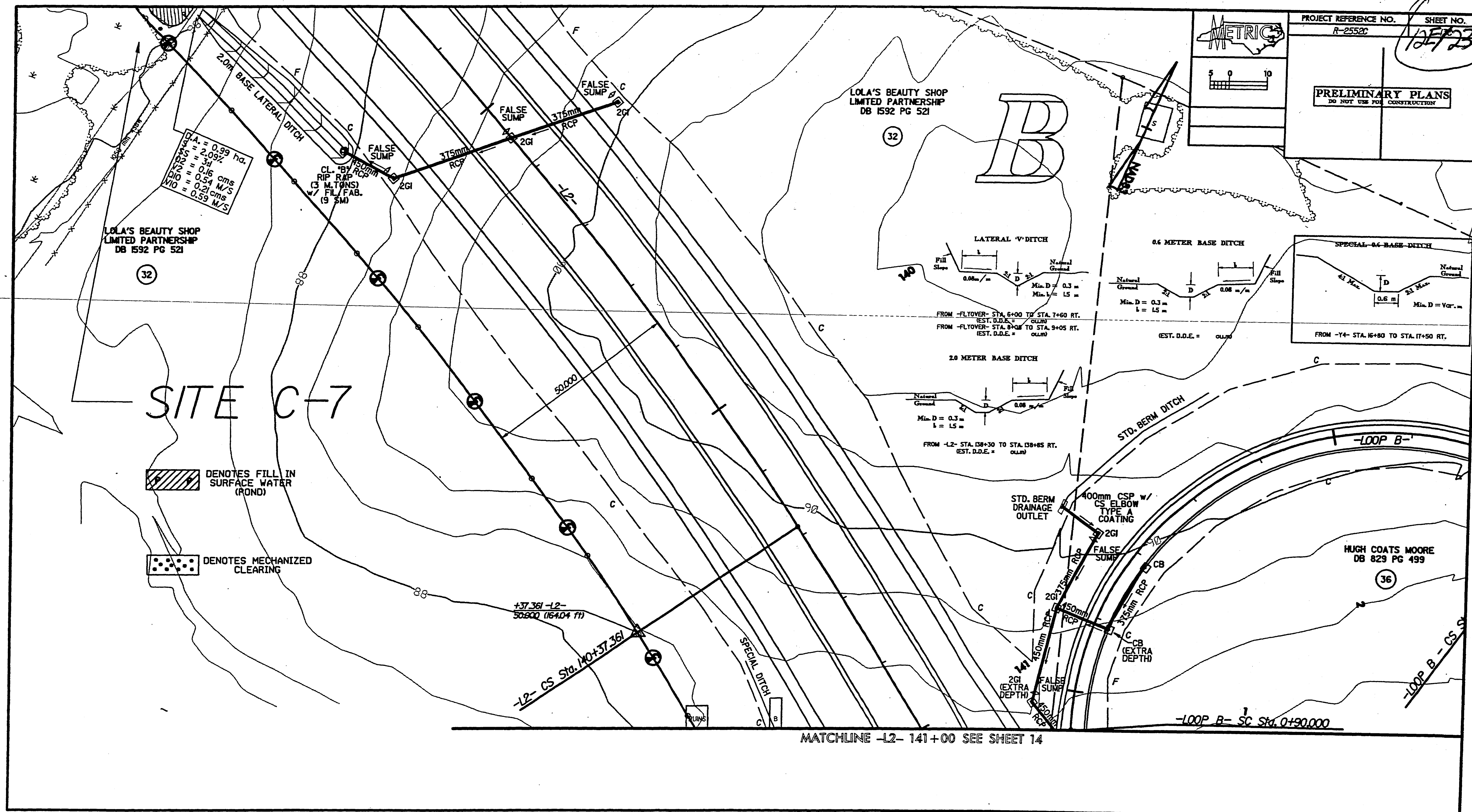
MATCH LINE 13 A-B

MATCH LINE 13 B-C



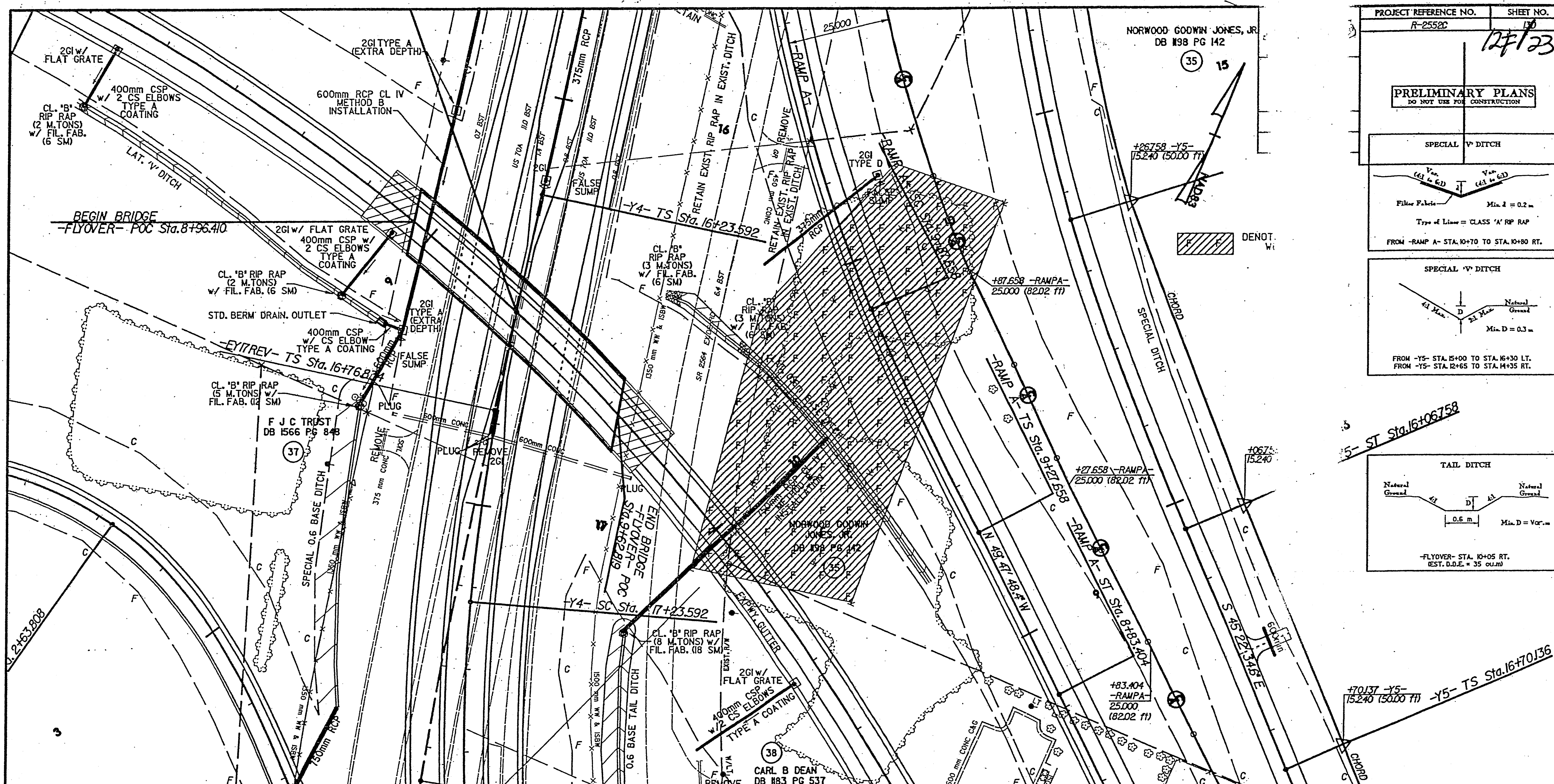
MATCH LINE 13 B-C
MATCH LINE 13 C-D
PROJECT REFERENCE NO.
R-2552C
SHEET NO.
METRIC
5 0 10
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
2.0m BASE LATERAL DITCH
D.A. = 0.99 ha.
S = 2.09%
SS = 3:1
Q2 = 0.16 cms
V2 = 0.54 M/S
Q10 = 0.21 cms
V10 = 0.59 M/S
1050 mm 45BW
FALSE SUMP
450mm RCP
CL. "B" RIP RAP (3 M.TONS) w/ FIL. FAB. (9 SM)
2GI
375mm RCP
FALSE SUMP
2GI
375mm RCP
FALSE SUMP
2GI
-L2-
LOLA'S BEAUTY SHOP LIMITED PARTNERSHIP DB 1592 PG 521
32
LOLA'S BEAUTY SHOP LIMITED PARTNERSHIP DB 1592 PG 521
32
B
LATERAL 'V' DITCH
Fill Slope
Natural Ground
0.08m/m
Min. D = 0.3 m
Min. b = 1.5 m
FROM -FLYOVER- STA. 6+00 TO STA. 7+60 RT. (EST. D.D.E. = cu.m)
FROM -FLYOVER- STA. 8+08 TO STA. 9+05 RT. (EST. D.D.E. = cu.m)
0.6 METER BASE DITCH
Natural Ground
Fill Slope
0.08 m/m
Min. D = 0.3 m
b = 1.5 m
(EST. D.D.E. = cu.m)
SPECIAL 0.6 BASE DITCH
Natural Ground
4:1 Max.
2:1 Max.
0.6 m
Min. D = Var. m
FROM -Y4- STA. 16+80 TO STA. 17+50 RT.
2.0 METER BASE DITCH
Natural Ground
Fill Slope
0.08 m/m
Min. D = 0.3 m
b = 1.5 m
FROM -L2- STA. 138+30 TO STA. 138+85 RT. (EST. D.D.E. = cu.m)
140
141
SITE C-7
50.000
DENOTES FILL IN SURFACE WATER (POND)
DENOTES MECHANIZED CLEARING
+37.361 -L2-
50.000 (164.04 ft)
-L2- CS Sta. 140+37.361
SPECIAL DITCH
RUINS
STD. BERM DITCH
-LOOP B-
STD. BERM DRAINAGE OUTLET
400mm CSP w/ CS ELBOW TYPE A COATING
2GI
FALSE SUMP
375mm RCP
2GI
450mm RCP
375mm RCP
CB
CB (EXTRA DEPTH)
450mm RCP
2GI (EXTRA DEPTH)
FALSE SUMP
450mm RCP
HUGH COATS MOORE DB 829 PG 499
36
-LOOP B- SC Sta. 0+90.000
-LOOP B- CS Sta.
MATCHLINE -L2- 141+00 SEE SHEET 14

MATCH LINE 13 B-C



MATCH LINE 13 A-D

MATCH LINE 13 C-D



PROJECT REFERENCE NO.
SHEET NO.
R-2552C
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
SPECIAL 'V' DITCH
Type of Liner = CLASS 'A' RIP RAP
FROM -RAMP A- STA. 10+70 TO STA. 10+80 RT.
SPECIAL 'V' DITCH
FROM -Y5- STA. 15+00 TO STA. 16+30 LT.
FROM -Y5- STA. 12+65 TO STA. 14+35 RT.
TAIL DITCH
-FLYOVER- STA. 10+05 RT.
NORWOOD GODWIN JONES, JR.
DB 1198 PG 142
2GI w/ FLAT GRATE
400mm CSP w/ 2 CS ELBOWS TYPE A COATING
CL. 'B' RIP RAP (2 M.TONS) w/ FIL. FAB. (6 SM)
LAT. 'V' DITCH
2GI TYPE A (EXTRA DEPTH)
600mm RCP CL IV METHOD B INSTALLATION
375mm RCP
BEGIN BRIDGE
-FLYOVER- POC Sta. 8+96.410
STD. BERM DRAIN OUTLET
-EY17REV- TS Sta. 16+76.8
CL. 'B' RIP RAP (5 M.TONS) w/ FIL. FAB. (12 SM)
F J C TRUST
DB 1566 PG 848
SPECIAL 0.6 BASE DITCH
-Y4- TS Sta. 16+23.592
RETAIN EXIST. RIP RAP IN EXIST. DITCH
CL. 'B' RIP RAP (3 M.TONS) w/ FIL. FAB. (6 SM)
-RAMP A-
+26758 -Y5- 15.240 (50.00 ft)
+87.658 -RAMPA- 25.000 (82.02 ft)
-RAMP A- TS Sta. 9+27.658
+27.658 -RAMPA- 25.000 (82.02 ft)
N 49° 47' 48.4" W
-RAMP A- ST Sta. 8+83.404
SPECIAL DITCH
CHORD
-Y5- ST Sta. 16+06.758
END BRIDGE -FLYOVER- POC Sta. 9+62.819
-Y4- SC Sta. 17+23.592
CL. 'B' RIP RAP (8 M.TONS) w/ FIL. FAB. (18 SM)
2GI w/ FLAT GRATE
400mm CSP w/2 CS ELBOWS TYPE A COATING
0.6 BASE TAIL DITCH
CARL B DEAN
DB 1183 PG 537
+83.404 -RAMPA- 25.000 (82.02 ft)
S 45° 22' 34.6" E
+70.137 -Y5- 15.240 (50.00 ft)
-Y5- TS Sta. 16+70.136

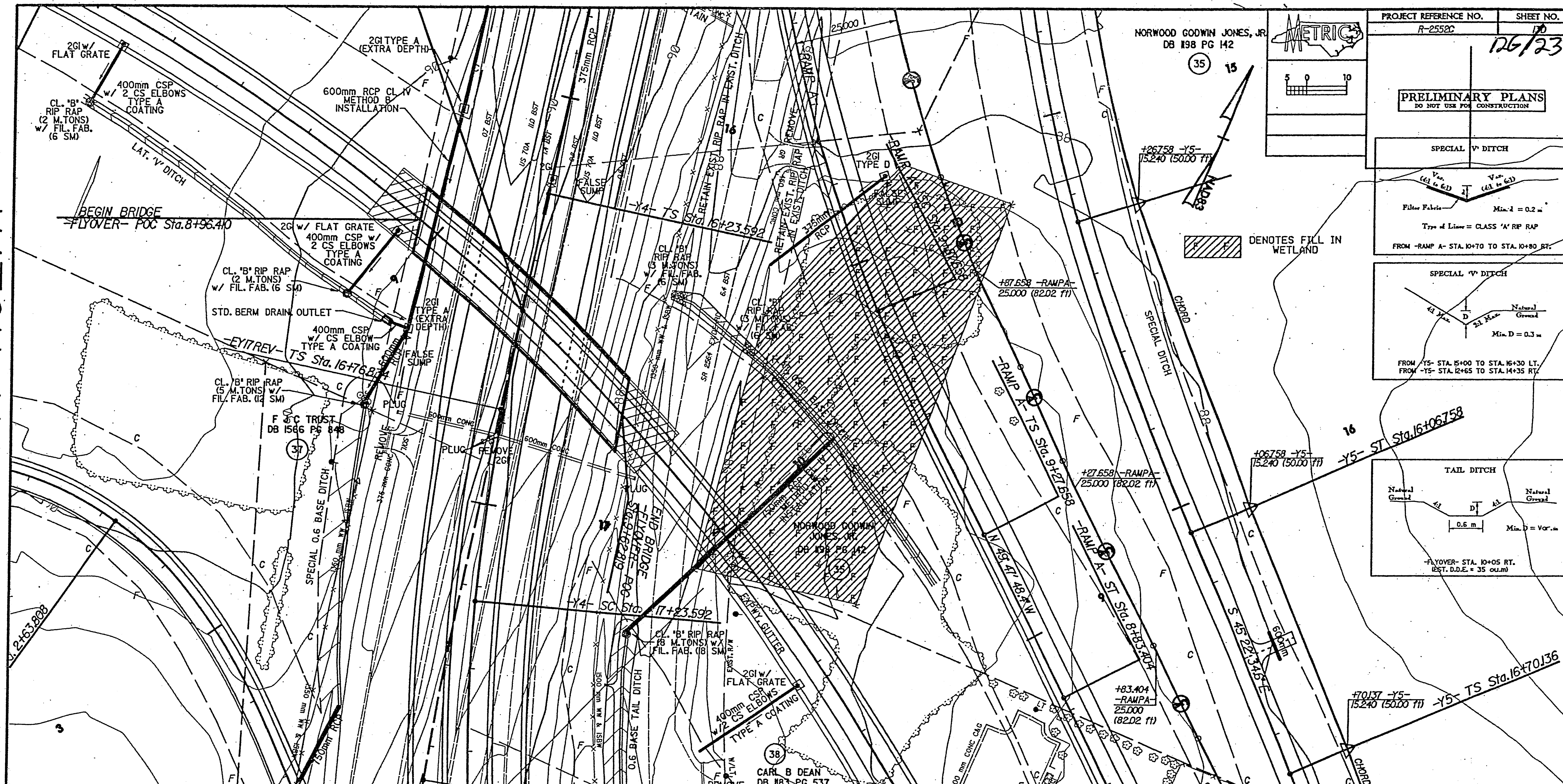
SITE C-8

MATCH LINE 14 A

	-Y4- GRADE SEE PROFILE SHEET 55	-RAMP A- GRADE SEE PROFILE SHEETS 43,44	-LOOP B- GRADE SEE PROFILE SHEET 45
-FLYOVER- GRADE SEE PROFILE SHEETS 40,41	-Y5- GRADE SEE PROFILE SHEET 58	-RAMP B- GRADE SEE PROFILE SHEETS 44,45	-L2- GRADE SEE PROFILE SHEET 36

MATCH LINE 13 A-D

MATCH LINE 13 C-D


PROJECT REFERENCE NO.
R-2552C
SHEET NO.
126/23
METRIC
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
NORWOOD GODWIN JONES, JR.
DB 1198 PG 142
SPECIAL 'V' DITCH
Filter Fabric
Min. d = 0.2 m
Type of Liner = CLASS 'A' RIP RAP
FROM -RAMP A- STA. 10+70 TO STA. 10+80 RT.
SPECIAL 'V' DITCH
Natural Ground
Min. D = 0.3 m
FROM -Y5- STA. 15+00 TO STA. 16+30 LT.
FROM -Y5- STA. 12+65 TO STA. 14+35 RT.
TAIL DITCH
Natural Ground
Min. D = Var. m
-FLYOVER- STA. 10+05 RT.
(EST. D.D.E. = 35 cu.m)
DENOTES FILL IN WETLAND
2GI w/ FLAT GRATE
400mm CSP w/ 2 CS ELBOWS TYPE A COATING
CL. 'B' RIP RAP (2 M.TONS) w/ FIL. FAB. (6 SM)
LAT. 'V' DITCH
BEGIN BRIDGE
-FLYOVER- POC Sta. 8+96.410
2GI TYPE A (EXTRA DEPTH)
600mm RCP CL IV METHOD B INSTALLATION
STD. BERM DRAIN OUTLET
400mm CSP w/ CS ELBOW TYPE A COATING
-EY17REV- TS Sta. 16+76.824
FALSE SUMP
CL. 'B' RIP RAP (5 M.TONS) w/ FIL. FAB. (12 SM)
F & C TRUST
DB 1566 PG 848
PLUG
REMOVE
SPECIAL 0.6 BASE DITCH
-Y4- TS Sta. 16+23.592
-Y4- SC Sta. 17+23.592
END BRIDGE
-FLYOVER- POC Sta. 9+62.819
RETAIN EXIST. RIP RAP IN EXIST. DITCH
2GI TYPE D
CL. 'B' RIP RAP (8 M.TONS) w/ FIL. FAB. (18 SM)
0.6 BASE TAIL DITCH
2GI w/ FLAT GRATE
400mm CSP w/ 2 CS ELBOWS TYPE A COATING
EXPWY. GUTTER
CARL B DEAN
DB 1183 PG 537
NORWOOD GODWIN JONES, JR.
DB 1198 PG 142
-RAMP A- TS Sta. 9+27.658
-RAMP A- ST Sta. 8+83.404
N 49°47'48.4" W
+87.658 -RAMPA- 25.000 (82.02 ft)
+27.658 -RAMPA- 25.000 (82.02 ft)
+83.404 -RAMPA- 25.000 (82.02 ft)
SPECIAL DITCH
CHORD
+26758 -Y5- 15.240 (50.00 ft)
+06758 -Y5- 15.240 (50.00 ft)
-Y5- ST Sta. 16+06.758
S 45°22'34.6" E
+70137 -Y5- 15.240 (50.00 ft)
-Y5- TS Sta. 16+70.136
600mm CONC C&G

SITE C-8

MATCH LINE 14 A

	-Y4- GRADE SEE PROFILE SHEET 55	-RAMP A- GRADE SEE PROFILE SHEETS 43,44	-LOOP B- GRADE SEE PROFILE SHEET 45
-FLYOVER- GRADE SEE PROFILE SHEETS 40,41	-Y5- GRADE SEE PROFILE SHEET 58	-RAMP B- GRADE SEE PROFILE SHEETS 44,45	-L2- GRADE SEE PROFILE SHEET 36

MATCH LINE A-D

MATCH LINE C-D

NOTE: IN TEMPORARY IMPACT AREAS, VEGETATION IS TO BE HAND CLEARED AND MACHINERY IS TO WORK ON MATS.

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

DENOTES TEMPORARY FILL IN SURFACE WATER

-L4- ST Sta. 19+60.784

-L00P. B- POT Sta. 5+47.957 (13.2 RT.)

-L4- S 44° 58' 42.0" E

-EY18- POT Sta. 10+00.000

-EY18- PC Sta. 10+32.553

S 28° 27' 49.5" E

-Y4- SC Sta. 21+52.715

-FLYOVER- CS Sta. 13+94.083

-FLYOVER- ST Sta. 14+54.083

S 13° 56' 42.0" E

-RAMP A- SC Sta. 5+39.485

-RAMP A- TS Sta. 4+79.485

N 14° 17' 31.5" W

S 14° 17' 31.5" E

-Y5- CS Sta. 19+92.936

-Y5- ST Sta. 20+62.936

PROJECT REFERENCE NO. R-2552C

SHEET NO. 13A

PRELIMINARY PLANS NOT FOR CONSTRUCTION

NORWOOD F THOMPSON DB 1109 PG 138 (44)

DONALD H WILLIAMSON DB 1172 PG 825 (39)

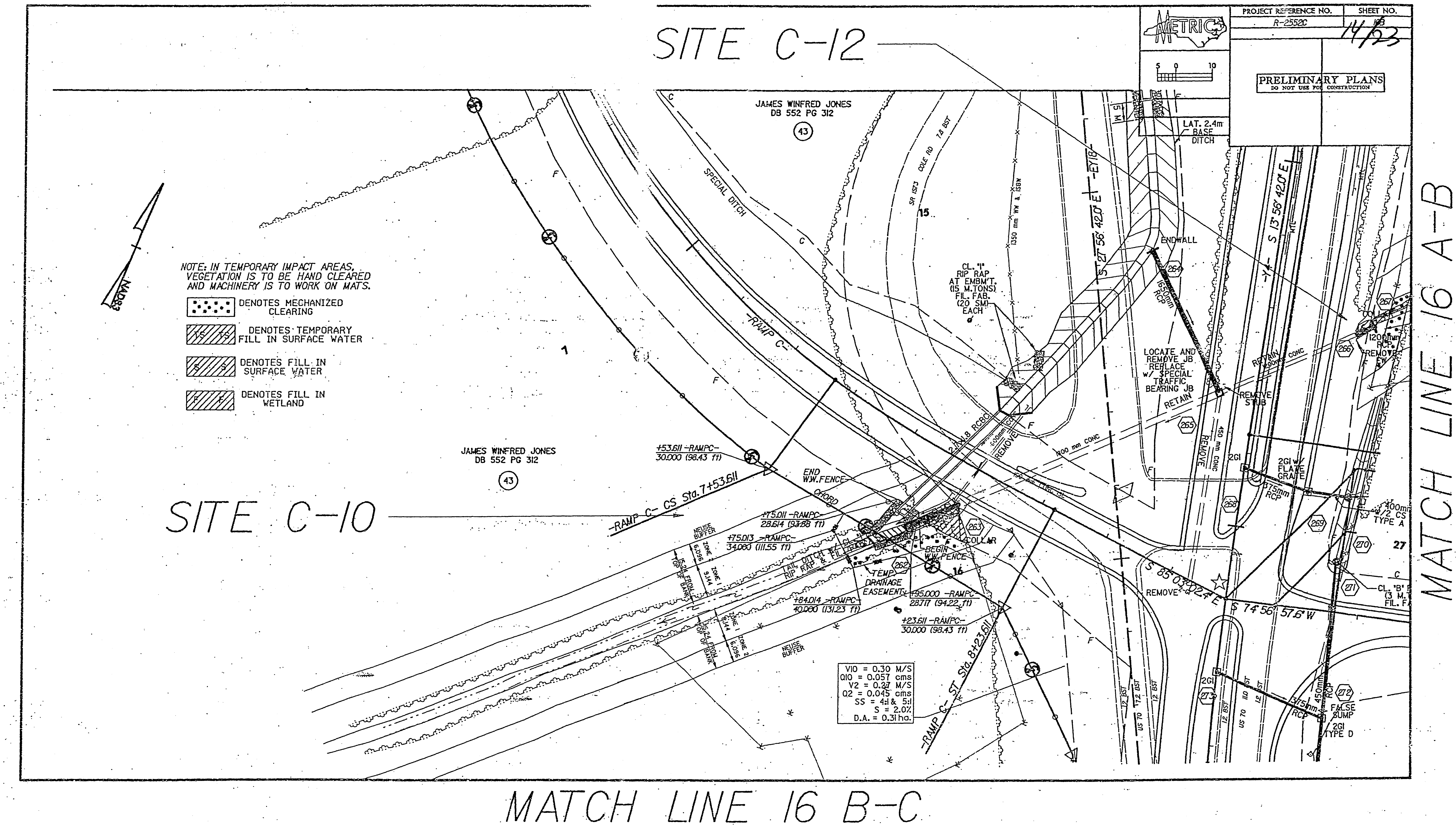
DB 1172 PG 825

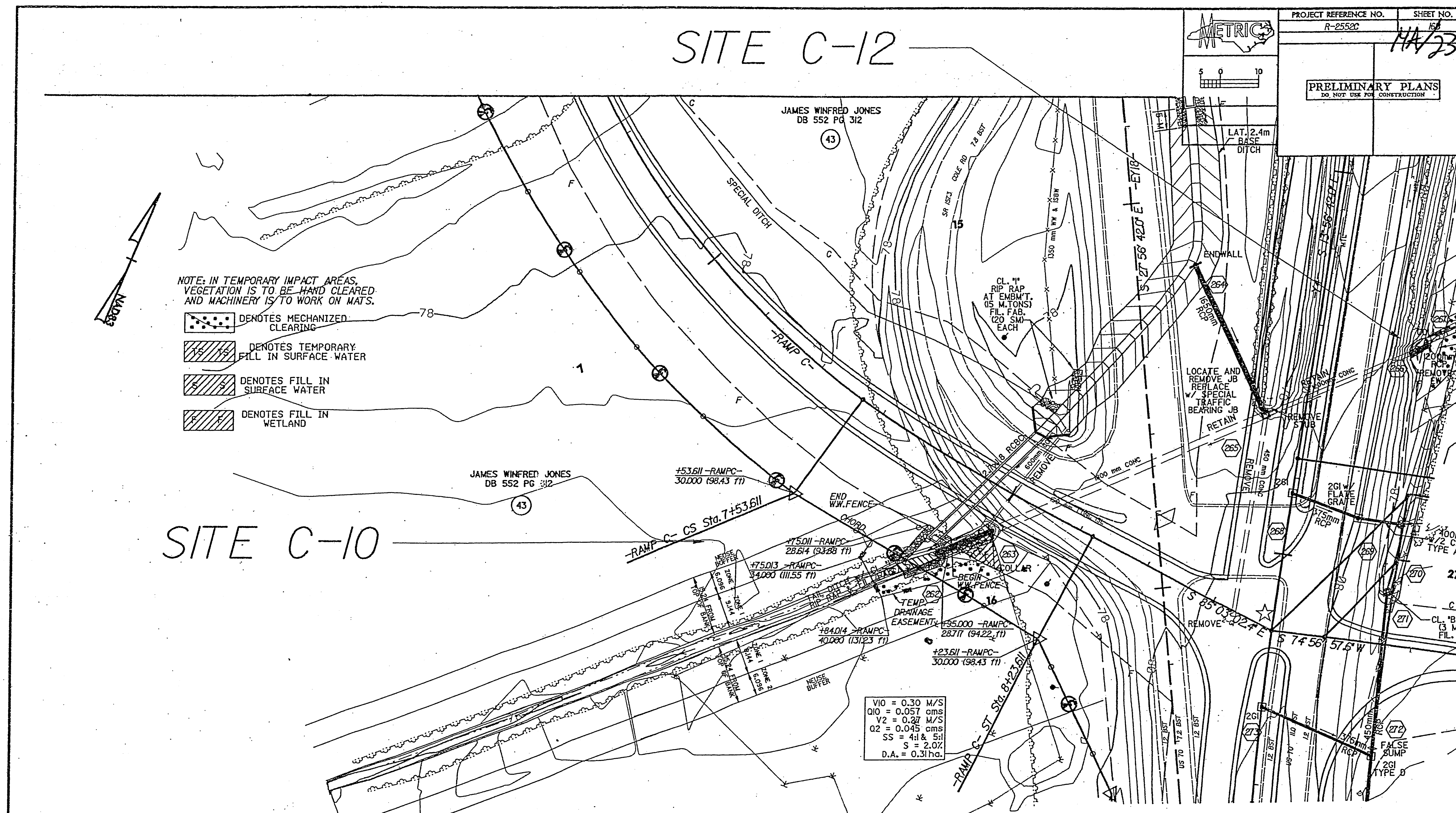
MATCHLINE -L2- 145+60 SEE SHEET 15

SITE C-9

MATCH LINE 14 A-D

MATCH LINE 14 C-D


PROJECT REFERENCE NO.
R-2552C
SHEET NO.
METRIC
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
SITE C-12
SITE C-10
JAMES WINFRED JONES
DB 552 PG 312
NOTE: IN TEMPORARY IMPACT AREAS, VEGETATION IS TO BE HAND CLEARED AND MACHINERY IS TO WORK ON MATS.
DENOTES MECHANIZED CLEARING
DENOTES TEMPORARY FILL IN SURFACE WATER
DENOTES FILL IN SURFACE WATER
DENOTES FILL IN WETLAND
NAD83
SPECIAL DITCH
-RAMP C-
CL. "I" RIP RAP AT EMBM'T. (15 M.TONS) FIL. FAB. (20 SM) EACH
ENDWALL
LOCATE AND REMOVE JB REPLACE w/ SPECIAL TRAFFIC BEARING JB
RETAIN
REMOVE STUB
LAT. 2.4m BASE DITCH
END W.W. FENCE
BEGIN W.W. FENCE
TEMP DRAINAGE EASEMENT
COLLAR
NEUSE BUFFER
-RAMP C- CS Sta. 7+53.611
-RAMP C- ST Sta. 8+23.611
V10 = 0.30 M/S
Q10 = 0.057 cms
V2 = 0.27 M/S
Q2 = 0.045 cms
SS = 4:1 & 5:1
S = 2.0%
D.A. = 0.31 ha.
2GI w/ FLAT GRATE
CL. "B"
FALSE SUMP
2GI TYPE D
MATCH LINE 16 A-B
MATCH LINE 16 B-C



MATCH LINE 16 A-B

MATCH LINE 16 B-C

MATCHLINE -L2- 145+60 SEE SHEET 14

METRIC

5 0 10

PROJECT REFERENCE NO. R-2552C | SHEET NO. 15A 15/23

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DONALD H WILLIAMSON
DB 1172 PG 825
(39)

DENOTES MECHANIZED CLEARING

DENOTES FILL IN WETLAND

THE STEPHENS CENTER INC.
DB 1728 PG 2085 PG 541
(67)

NADS

-RAMP C- CS Sta. 3+13.771

+13.771 -RAMPC-
30.000 (98.43 ft)

-EYIB- PT Sta. 11+65.023

RETAIN EXIST. RIP RAP IN EXIST. DITCH

SITE C-11

JAMES WINFRED JONES
DB 552 PG 312
(43)

CHORD

S 9°16'19"E

CL. "B" RIP RAP (10 M.TONS) w/ FIL. FAB. (24 SM)

-RAMP C- ST Sta. 4+03.771

+03.771 -RAMPC-
30.000 (98.43 ft)

-RAMP C- TS Sta. 4+49.417

-LOOP C-

-LOOP C- SC Sta. 0+90.000

LAT. 0.6m

LOm BASE HEAD DITCH

GRADE TO DRAIN

FALSE CUT

SPECIAL DITCH

REMOVE

REMOVE CONC

FALSE SUMP

SR 1573 COLE RD

450mm CONC

375mm CONC

750mm RCP

375mm RCP

CB

EW

0.6 METER BASE DITCH

Natural Ground
Var. (Existing)
Min. D = Var.. m
b = Var.. m

L0 BASE HEAD DITCH

Natural Ground
D = Var.. m
L0

FROM -LOOP C- STA. 0+82 TO STA. 1+96 LT.
(EST. O.D.E. = cu.m)

-LOOP C- STA. 1+20 RT.
(EST. O.D.E. = 720 cu.m)

MATCH LINE 15 B-C

MATCH LINE 15 A-B

MATCHLINE -12- 145+60 SEE SHEET 14

METRIC 5 0 10

PROJECT REFERENCE NO. R-2552C | SHEET NO. 15A

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DONALD H WILLIAMSON
DB 1172 PG 825
(39)

DENOTES MECHANIZED CLEARING

DENOTES FILL IN WETLAND

THE STEPHENS CENTER INC
DB 1172 PG 541
(67)

-RAMP C- CS Sta. 3+13.771

+13.771 -RAMPC-
30.000 (98.43 ft)

-EY18- PT Sta. 11+65.023

SITE C-11

JAMES WINFRED JONES
DB 552 PG 312
(43)

+03.771 -RAMPC-
30.000 (98.43 ft)

-RAMP C- ST Sta. 4+03.771

S 9°16'19.6" E

-RAMP C- TS Sta. 4+49.417

CL "B" RIP RAP (10 M.TONS) W/ FIL. FAB. (24 SM)

RETAIN EXIST. RIP/RAP IN EXIST. DITCH

REMOVE

450mm CONC

SR 1573 COLE RD

10m BASE HEAD DITCH

GRADE TO DRAIN

FALSE CUT

SPECIAL DITCH

REMOVE

450mm CMP

FALSE SUMP

375mm

750mm RCP

CB

375mm RCP

750mm RCP

CL "B" RIP RAP (18 M.TONS) W/ FIL. FAB. (41 SM)

-LOOP C-

LAT. 0.6m

-LOOP C- SC Sta. 0+90.000

0.6 METER BASE DITCH

Natural Ground | 2:1 | D | 2:1 | Var. (Existing)

Min. D = Var. m
b = Var. m

FROM -LOOP C- STA. 0+82 TO STA. 1+96 LT.
(EST. D.D.E. = cu.m)

1.0 BASE HEAD DITCH

Natural Ground | 2:1 | D | 2:1 | Natural Ground

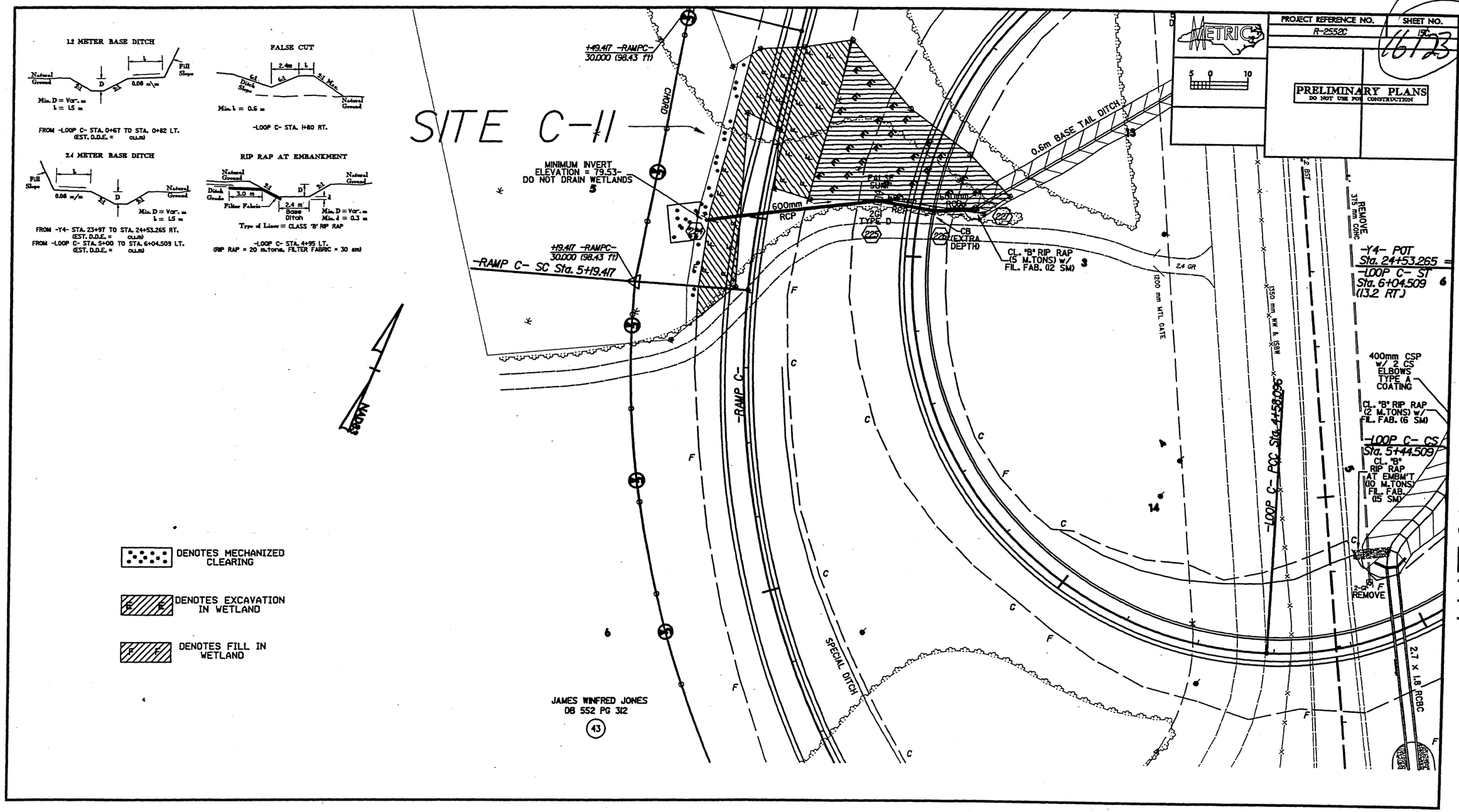
D = Var. m
1.0

-LOOP C- STA. 1+20 RT.
(EST. D.D.E. = 720 cu.m)

MATCH LINE 15 B-C

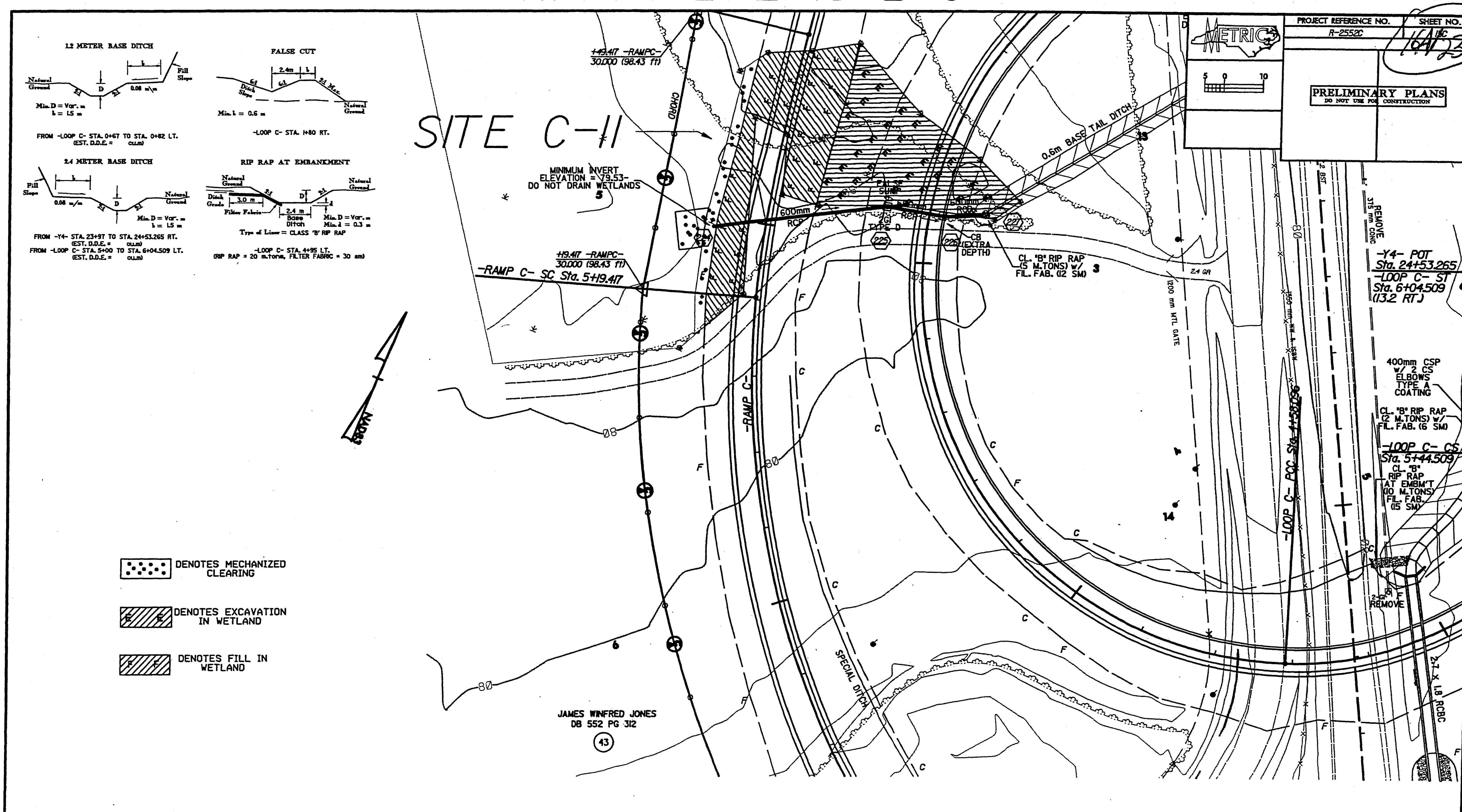
MATCH LINE 15 A-B

MATCH LINE 15 B-C

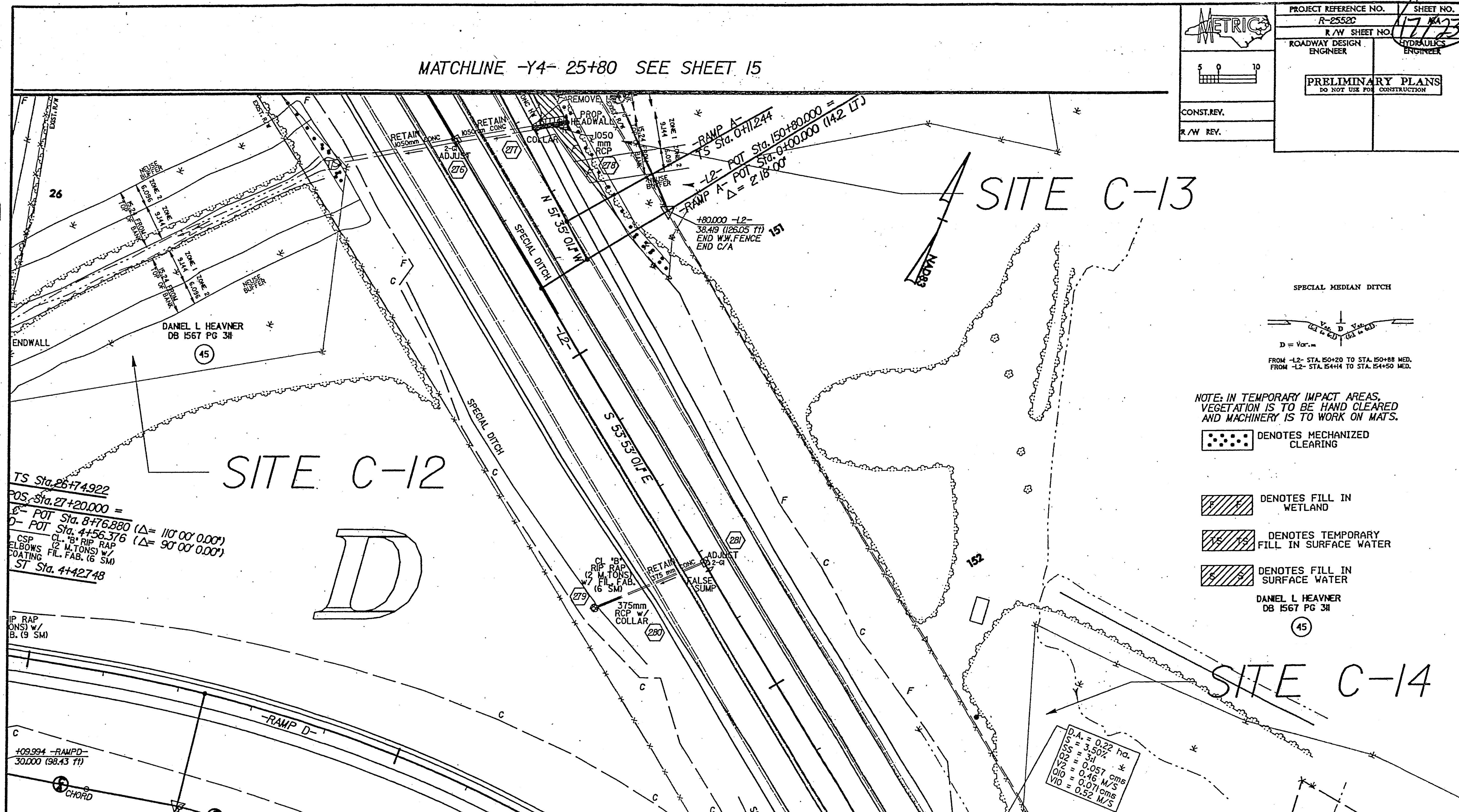


MATCH LINE 15 C-D

MATCH LINE 15 B-C



MATCH LINE 15 C-D



MATCH LINE 16 A-B

MATCH LINE 16 A-D

PROJECT REFERENCE NO. R-2552C
SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
CONST. REV.
R/W REV.
17A/23

MATCHLINE -Y4- 25+80 SEE SHEET 15

MATCH LINE 16 A-B

MATCH LINE 16 A-D

MATCH LINE 15 A-B

METRIC	PROJECT REFERENCE NO.	SHEET NO.
5 0 10	R-2552C	18
	R/W SHEET NO.	
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST.REV.	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
R/W REV.		

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

SITE C-13

DONALD H WILLIAMSON
DB 1172 PG 825
(39)

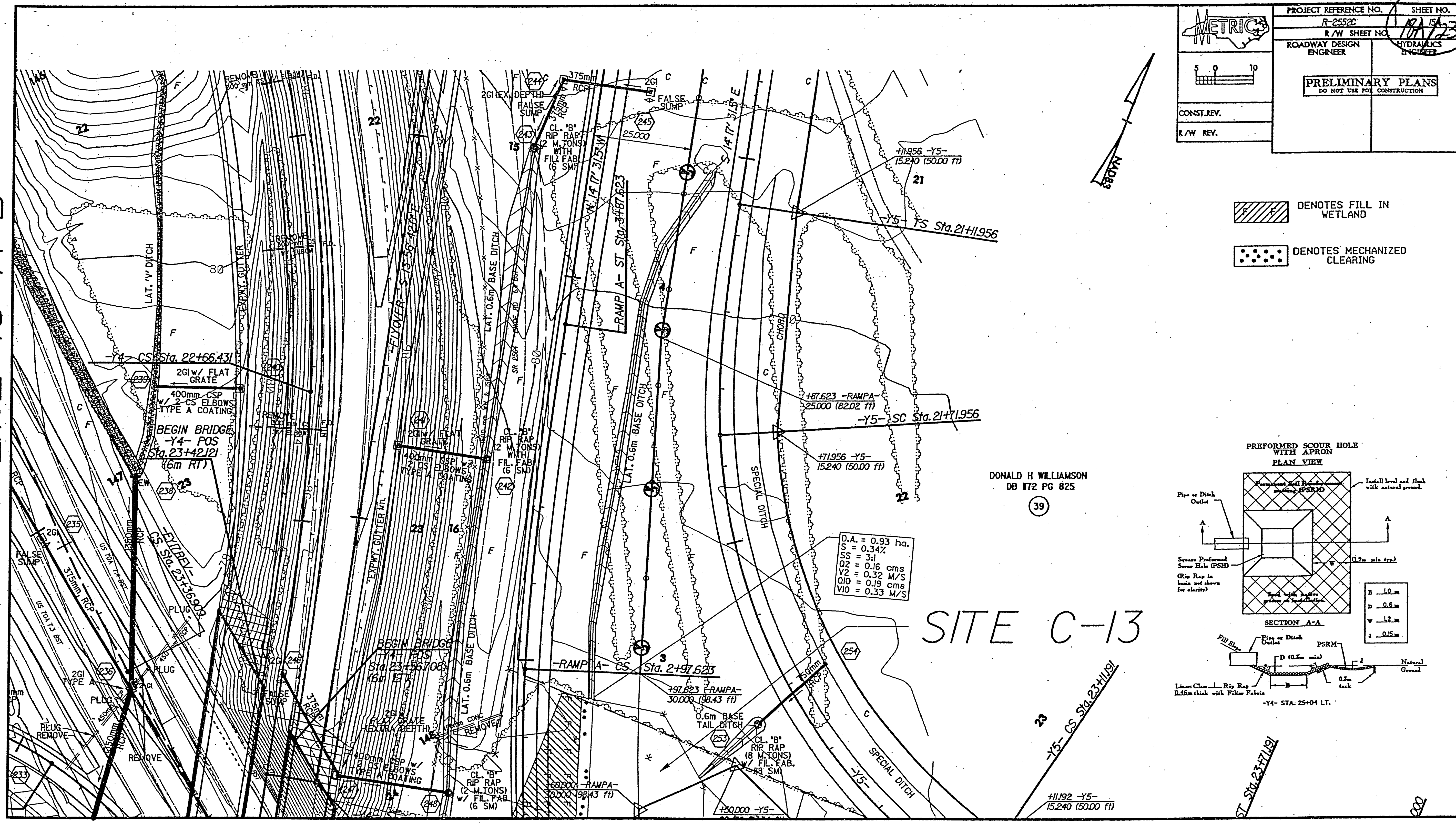
PREFORMED SCOUR HOLE WITH APRON
PLAN VIEW

SECTION A-A

-Y4- STA. 25+04 LT.

MATCH LINE 15 A-D

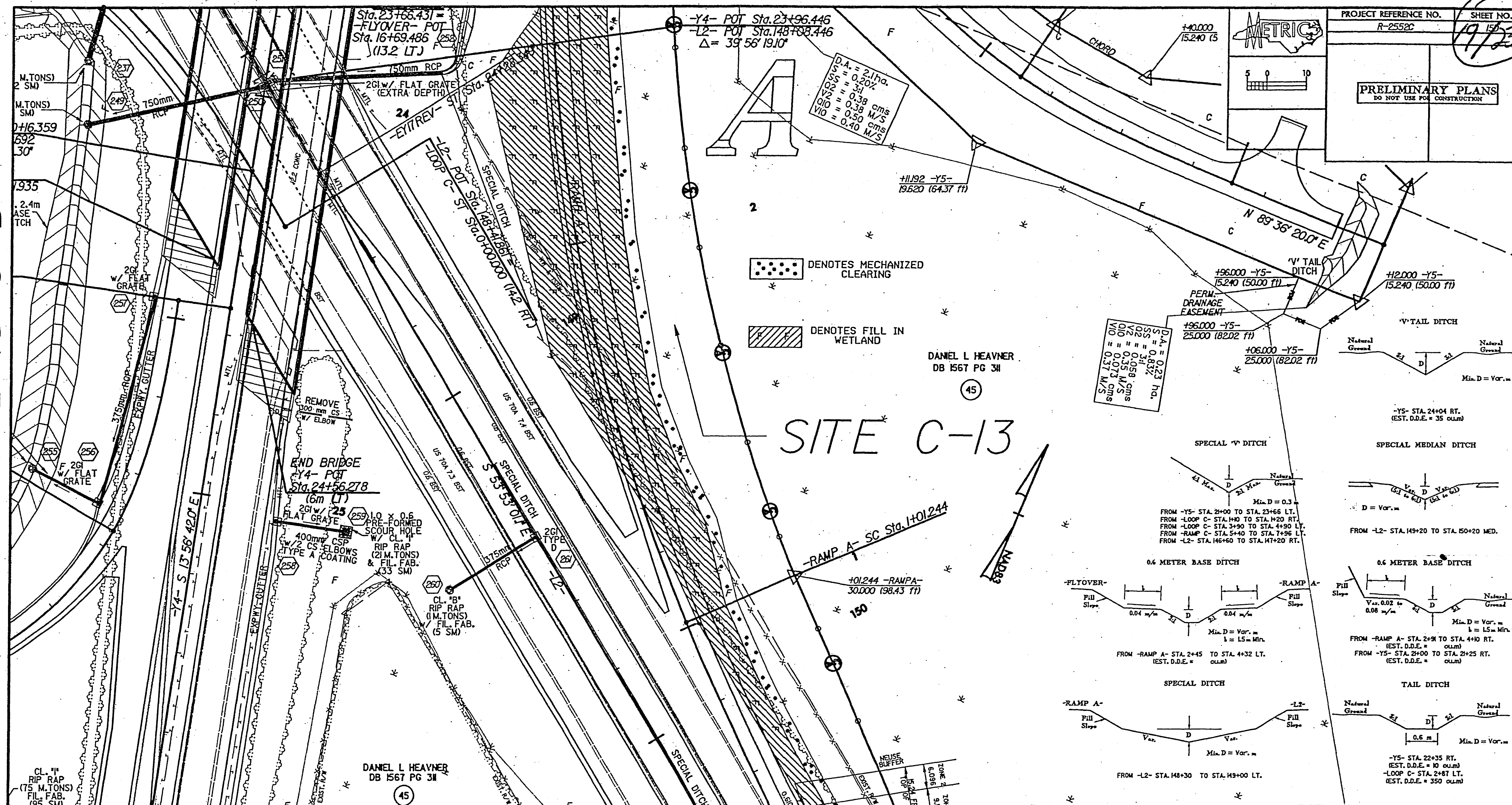
MATCH LINE 15 A-B



MATCH LINE 15 A-D

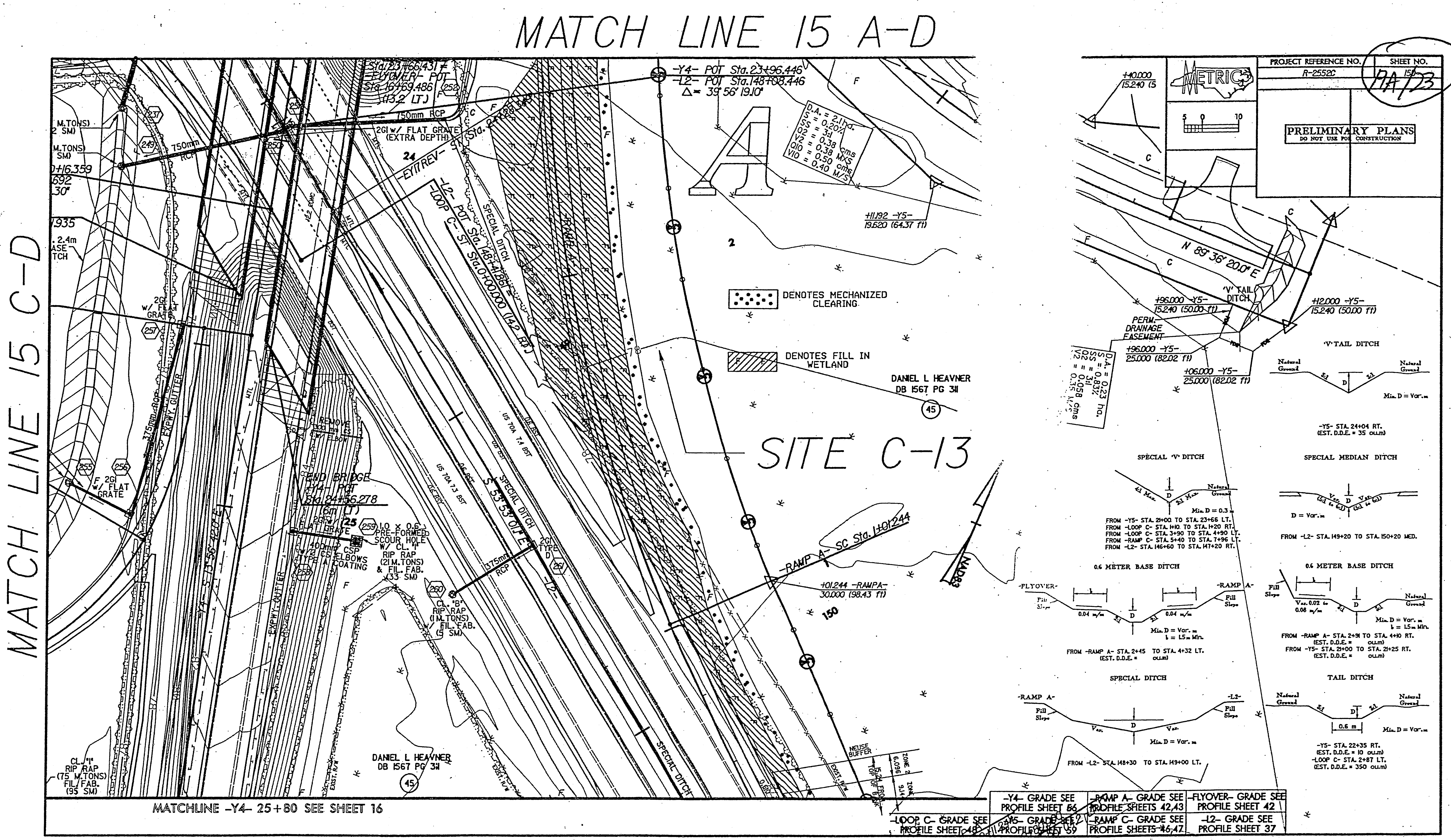
MATCH LINE 15 A-D

MATCH LINE 15 C-D



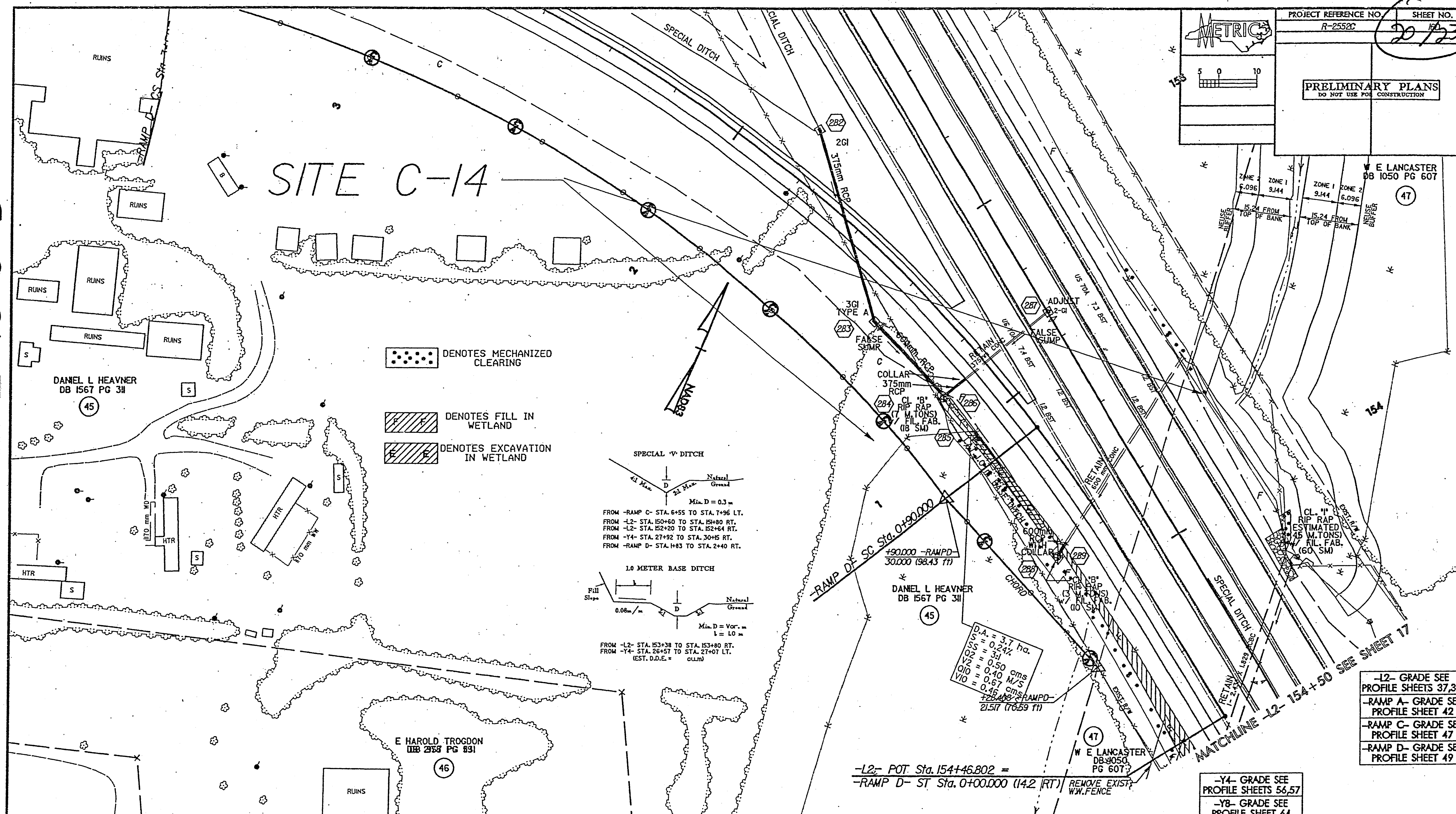
PROJECT REFERENCE NO.
R-2552C
SHEET NO.
19
METRIC
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
-Y4- POT Sta.23+96.446
-L2- POT Sta.148+08.446
Δ = 39°56'19.10"
Sta.23+66.431 = -FLYOVER- POT Sta.16+69.486 (13.2 LT.)
750mm RCP
2GI w/ FLAT GRATE (EXTRA DEPTH)
-EYITREV- ST Sta.
-L2- POT Sta.148+41.861 = -LOOP C- ST Sta.0+000.000 (14.2 RT.)
SPECIAL DITCH
-RAMP A-
D.A. = 2.1ha.
S = 0.20%
SS = 3:1
Q2 = 0.38 cms
Q10 = 0.50 cms
V2 = 0.38 M/S
V10 = 0.40 M/S
+11.192 -Y5- 19.620 (64.37 ft)
N 89°36'20.0"E
CHORD
+40.000 15.240
DENOTES MECHANIZED CLEARING
DENOTES FILL IN WETLAND
DANIEL L HEAVNER
DB 1567 PG 311
45
SITE C-13
D.A. = 0.23 ha.
S = 0.83%
SS = 3:1
Q2 = 0.058 cms
Q10 = 0.073 cms
V2 = 0.35 M/S
V10 = 0.37 M/S
+96.000 -Y5- 15.240 (50.00 ft)
'V' TAIL DITCH
PERM. DRAINAGE EASEMENT
+96.000 -Y5- 25.000 (82.02 ft)
+06.000 -Y5- 25.000 (82.02 ft)
+12.000 -Y5- 15.240 (50.00 ft)
'V' TAIL DITCH
Natural Ground
Min. D = Var. m
-Y5- STA. 24+04 RT. (EST. D.D.E. = 35 cu.m)
SPECIAL 'V' DITCH
Min. D = 0.3 m
FROM -Y5- STA. 21+00 TO STA. 23+66 LT.
FROM -LOOP C- STA. 1+10 TO STA. 1+20 RT.
FROM -LOOP C- STA. 3+90 TO STA. 4+90 LT.
FROM -RAMP C- STA. 5+40 TO STA. 7+96 LT.
FROM -L2- STA. 146+60 TO STA. 147+20 RT.
SPECIAL MEDIAN DITCH
D = Var. m
FROM -L2- STA. 149+20 TO STA. 150+20 MED.
0.6 METER BASE DITCH
-FLYOVER-
-RAMP A-
Fill Slope
Min. D = Var. m
b = 1.5 m Min.
FROM -RAMP A- STA. 2+45 TO STA. 4+32 LT.
0.6 METER BASE DITCH
FROM -RAMP A- STA. 2+91 TO STA. 4+10 RT.
FROM -Y5- STA. 21+00 TO STA. 21+25 RT.
SPECIAL DITCH
-RAMP A-
-L2-
Min. D = Var. m
FROM -L2- STA. 148+30 TO STA. 149+00 LT.
TAIL DITCH
Min. D = Var. m
-Y5- STA. 22+35 RT. (EST. D.D.E. = 10 cu.m)
-LOOP C- STA. 2+87 LT. (EST. D.D.E. = 350 cu.m)
-RAMP A- SC Sta.1+01.244
+01.244 -RAMPA- 30.000 (98.43 ft)
150
NAD83
END BRIDGE -Y4- POT Sta.24+56.278 (6m LT)
2GI w/ FLAT GRATE
1.0 x 0.6 PRE-FORMED SCOUR HOLE W/ CL. "I" RIP RAP (21 M.TONS) & FIL. FAB. (33 SM)
400mm CSP W/2 CS ELBOWS TYPE A COATING
REMOVE 300 mm CS W/ ELBOW
375mm RCP
2GI TYPE D
CL. "B" RIP RAP (1 M.TONS) W/ FIL. FAB. (5 SM)
-Y4- S 13°56'42.0"E
S 53°53'01.4"E
US 70A
EXPWY GUTTER
375mm RCP
2GI w/ FLAT GRATE
CL. "I" RIP RAP (75 M.TONS) FIL. FAB. (95 SM)
DANIEL L HEAVNER
DB 1567 PG 311
45
NEUSE BUFFER
MATCHLINE -Y4- 25+80 SEE SHEET 16

	-Y4- GRADE SEE PROFILE SHEET 66	-RAMP A- GRADE SEE PROFILE SHEETS 42,43	-FLYOVER- GRADE SEE PROFILE SHEET 42
-LOOP C- GRADE SEE PROFILE SHEET 48	-Y5- GRADE SEE PROFILE SHEET 69	-RAMP C- GRADE SEE PROFILE SHEETS 46,47	-L2- GRADE SEE PROFILE SHEET 37


MATCH LINE 15 A-D
MATCH LINE 15 C-D
PROJECT REFERENCE NO.
R-2552C
SHEET NO.
15D
9A/23
METRIC
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
-Y4- POT Sta. 23+96.446
-L2- POT Sta. 148+08.446
Δ = 39° 56' 19.10"
D.A. = 2.1 ha.
S = 0.20%
SS = 3:1
Q2 = 0.38 cms
V2 = 0.38 M/S
Q10 = 0.50 cms
V10 = 0.40 M/S
+11.192 -Y5-
19.620 (64.37 ft)
DENOTES MECHANIZED CLEARING
DENOTES FILL IN WETLAND
DANIEL L HEAVNER
DB 1567 PG 311
SITE C-13
-RAMP A- SC Sta. 1+01.244
+01.244 -RAMPA-
30.000 (98.43 ft)
-L2- POT Sta. 148+41.861 =
-LOOP C- ST Sta. 0+00.000 (14.2 RT)
SPECIAL DITCH
2GI w/ FLAT GRATE (EXTRA DEPTH)
750mm RCP
2GI w/ FLAT GRATE
375mm RCP
EXPWY. GUTTER
END BRIDGE -Y4- POT Sta. 24+56.278 (6m LT)
1.0 × 0.6 PRE-FORMED SCOUR HOLE W/ CL. "I" RIP RAP (21 M.TONS) & FIL. FAB. (33 SM)
400mm CSP W/ 2 CS ELBOWS TYPE A COATING
REMOVE 300 mm CS W/ ELBOW
CL. "B" RIP RAP (1 M.TONS) W/ FIL. FAB. (5 SM)
CL. "I" RIP RAP (75 M.TONS) FIL. FAB. (95 SM)
2GI TYPE D
375mm RCP
S 53° 53' 01" E
US 70A 7.3 BST
US 70A 7.4 BST
NEUSE BUFFER
ZONE 2 6.096
ZONE 1 9.14
15.24 FROM TOP OF BANK
EXIST. R/W
NAD83
MATCHLINE -Y4- 25+80 SEE SHEET 16
+40.000
15.240 (5
N 89° 36' 20.0" E
'V' TAIL DITCH
+96.000 -Y5-
15.240 (50.00 ft)
+12.000 -Y5-
15.240 (50.00 ft)
PERM. DRAINAGE EASEMENT
+96.000 -Y5-
25.000 (82.02 ft)
+06.000 -Y5-
25.000 (82.02 ft)
D.A. = 0.23 ha.
S = 0.83%
SS = 3:1
Q2 = 0.058 cms
V2 = 0.35 M/S
'V' TAIL DITCH
Min. D = Var. m
-Y5- STA. 24+04 RT.
(EST. D.D.E. = 35 cu.m)
SPECIAL 'V' DITCH
Min. D = 0.3 m
FROM -Y5- STA. 21+00 TO STA. 23+66 LT.
FROM -LOOP C- STA. 1+10 TO STA. 1+20 RT.
FROM -LOOP C- STA. 3+90 TO STA. 4+90 LT.
FROM -RAMP C- STA. 5+40 TO STA. 7+96 LT.
FROM -L2- STA. 146+60 TO STA. 147+20 RT.
SPECIAL MEDIAN DITCH
D = Var. m
FROM -L2- STA. 149+20 TO STA. 150+20 MED.
0.6 METER BASE DITCH
-FLYOVER-
-RAMP A-
Min. D = Var. m
b = 1.5 m Min.
FROM -RAMP A- STA. 2+45 TO STA. 4+32 LT.
(EST. D.D.E. = cu.m)
0.6 METER BASE DITCH
Min. D = Var. m
b = 1.5 m Min.
FROM -RAMP A- STA. 2+91 TO STA. 4+10 RT.
(EST. D.D.E. = cu.m)
FROM -Y5- STA. 21+00 TO STA. 21+25 RT.
(EST. D.D.E. = cu.m)
SPECIAL DITCH
-RAMP A-
-L2-
Min. D = Var. m
FROM -L2- STA. 148+30 TO STA. 149+00 LT.
TAIL DITCH
0.6 m
Min. D = Var. m
-Y5- STA. 22+35 RT.
(EST. D.D.E. = 10 cu.m)
-LOOP C- STA. 2+87 LT.
(EST. D.D.E. = 350 cu.m)
-Y4- GRADE SEE PROFILE SHEET 56
-RAMP A- GRADE SEE PROFILE SHEETS 42,43
-FLYOVER- GRADE SEE PROFILE SHEET 42
-LOOP C- GRADE SEE PROFILE SHEET 48
-Y5- GRADE SEE PROFILE SHEET 59
-RAMP C- GRADE SEE PROFILE SHEETS 46,47
-L2- GRADE SEE PROFILE SHEET 37

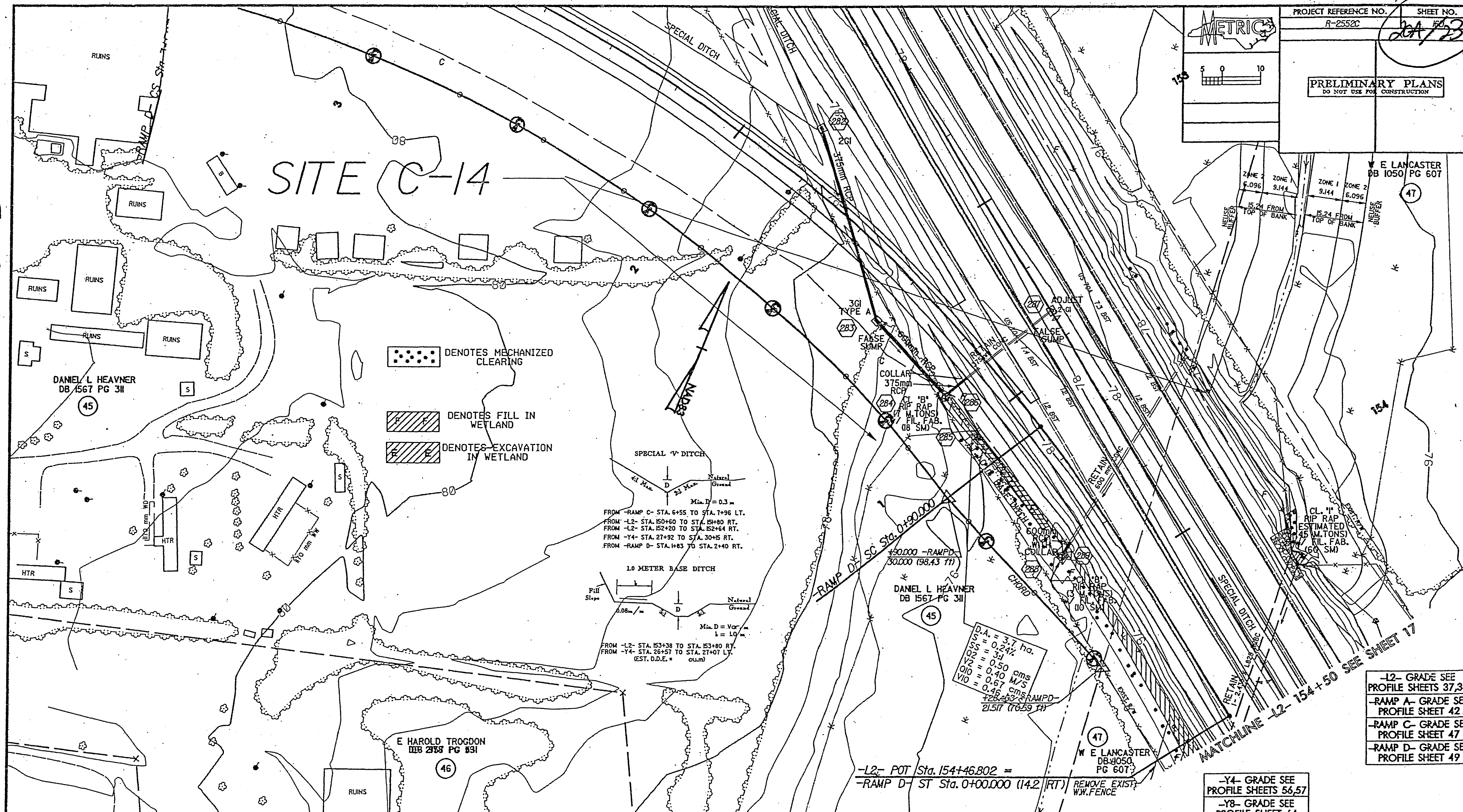
MATCH LINE 16 A-D

MATCH LINE 16 C-D



MATCH LINE 16 A-D

MATCH LINE 16 C-D



REVISIONS

SITE C-14

NOTE: IN TEMPORARY IMPACT AREAS, VEGETATION IS TO BE HAND CLEARED AND MACHINERY IS TO WORK ON MATS.

DENOTES MECHANIZED CLEARING

DENOTES FILL IN WETLAND

DENOTES EXCAVATION IN WETLAND

DENOTES TEMPORARY FILL IN SURFACE WATER

DENOTES FILL IN SURFACE WATER

METRIC

5 0 10

CONST.REV.

R/W REV.

PROJECT REFERENCE NO. R-2552C | SHEET NO. 21/23

R/W SHEET NO.

ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NAD83

MATCHLINE -L2- 154+50 SEE SHEET 16

MATCHLINE -L2- 157+80 SEE SHEET 18

W E LANCASTER DB 1050 PG 607 (47)

CREEK LOCATION BASED ON SCS SOILS MAP

NEUSE BUFFER

ZONE 2 6.096 | ZONE 1 9.144 | 15.24 TOP OF BANK FROM

-L2- TS Sta. 156+86.510

-L2- SC Sta. 157+76.510

155 | 156 | 157

EXIST. R/W

ENDWALL (293)

CONC HW

F

07 BST

US 70A 7.4 BST

BORE & JACK 1650mm SPIRAL WELDED STEEL (22mm THICK)

ADJUST (291) SPECIAL DITCH

S 53° 53' 01" E -L2-

0.6 BST

FALSE SUMP

ADJUST (297)

ADJUST (298)

US 70A 7.5 BST

900mm CONC

375mm CONC RETAIN

COLLAR (294) (295) (296)

375mm RCP

EXIST. R/W

CL. "A" RIP RAP (22 M.TONS) w/ FIL. FAB. (30 SM)

CL. "B" RIP RAP (25 M.TONS) w/ FIL. FAB. (35 SM)

LAT. 2.0 m BASE DITCH

LAT. 3.0 m BASE DITCH

+25.000 -L2- 38.332 (124.870)

CL. "B" RIP RAP (45 M.TONS) w/ FIL. FAB. (80 SM)

+20.000 -L2- 40.000 (131.23 ft)

CL. "B" RIP RAP (55 M.TONS) w/ FIL. FAB. (100 SM)

+35.000 -L2- 34.761 (ON EX.R/W)

+90.000 -L2- 35.197 (ON EX.R/W) & 37.500 (123.03 ft)

SPECIAL MEDIAN DITCH

D = Var.m

FROM -L2- STA. 154+50 TO STA. 155+00 MED.

LATERAL 2 METER BASE DITCH

Fill Slope | 0.08 m/m | Natural Ground

D = Var.m
Min. b = 1.0 m

FROM -L2- STA. 155+30 TO STA. 156+15 RT.
(EST. D.D.E. = cu.m)

2.0 METER BASE DITCH

0.08 m/m | Natural Ground

D = Var.m
Min. b = 1.0 m

FROM -L2- STA. 156+25 TO STA. 157+20 RT.
(EST. D.D.E. = cu.m)

VARIABLE BASE DITCH

0.08 m/m | Natural Ground | Filter Fabric

Min. D = 0.3 m
Var. B = 0-3.0 m
d = 0.3 m
b = 1.0 m

Type of Liner = CLASS 'B' RIP RAP
FROM -L2- STA. 156+15 TO STA. 156+25 RT.
FROM -L2- STA. 157+20 TO STA. 157+35 RT.
(EST. D.D.E. = cu.m, RIP RAP = m.tons, FILTER FABRIC = sm)

D.A. = 2.2 ha.
S = 0.75%
SS = 3:1
Q2 = 0.41 cms
V2 = 0.55 M/S
Q10 = 0.54 cms
V10 = 0.61 M/S

W E LANCASTER DB 1050 PG 607 (47)

DANIEL L HEAVNER DB 1567 PG 311 (45)

HAROLD A YOUNG DB 960 PG 657 (48)

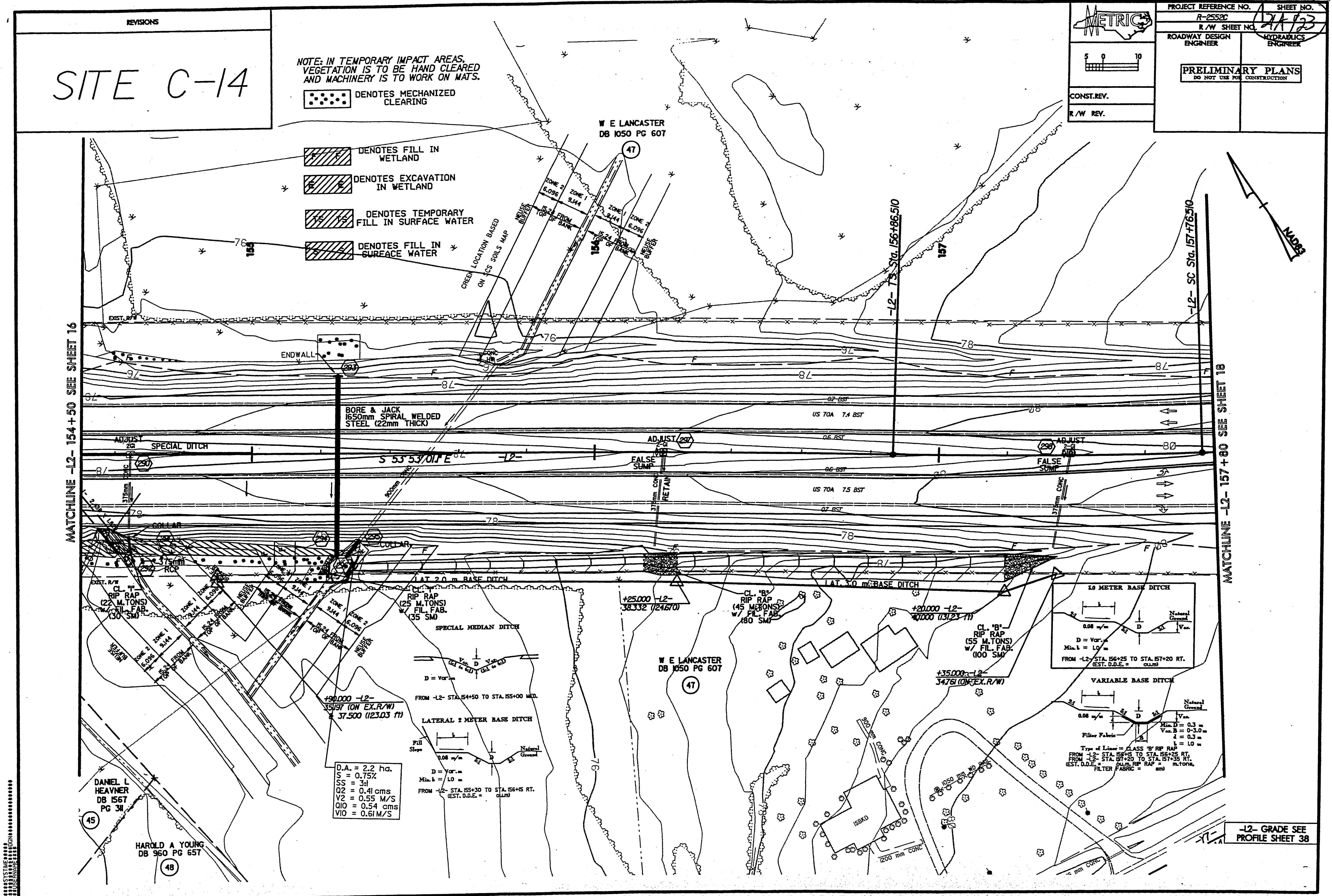
900 mm CONC

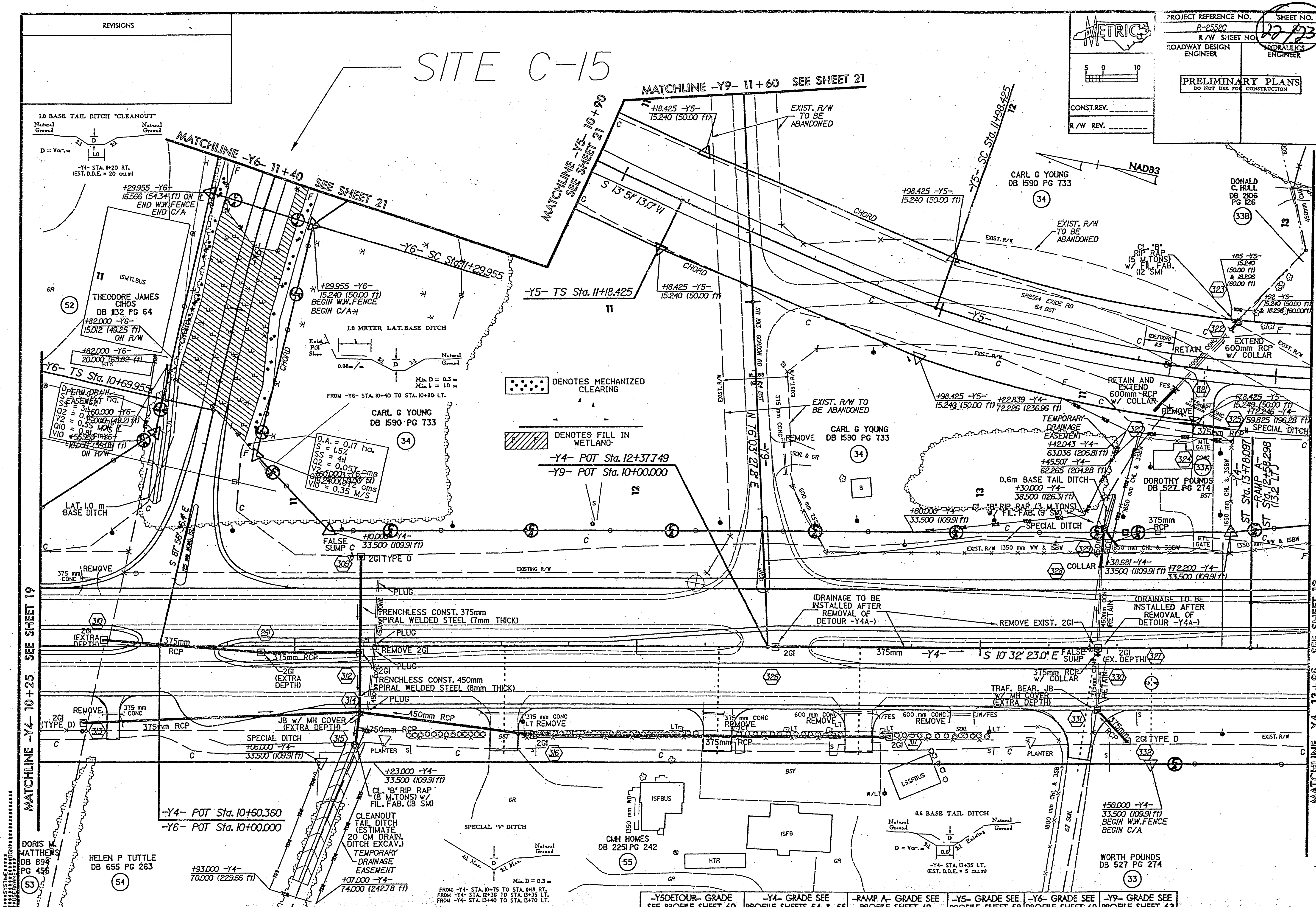
1050 RW WD RAIL

ISOKO

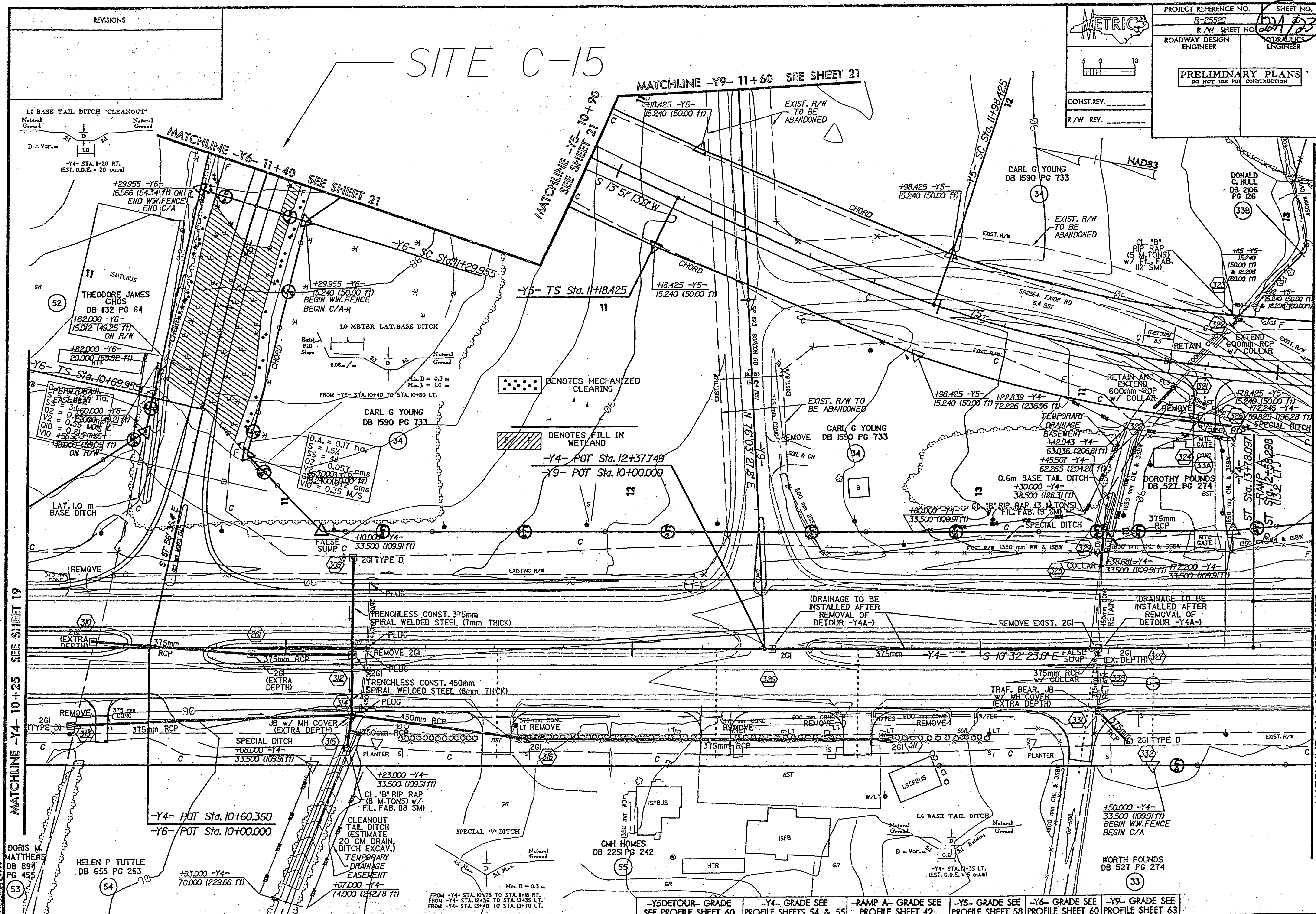
1200 mm CONC

-L2- GRADE SEE PROFILE SHEET 38

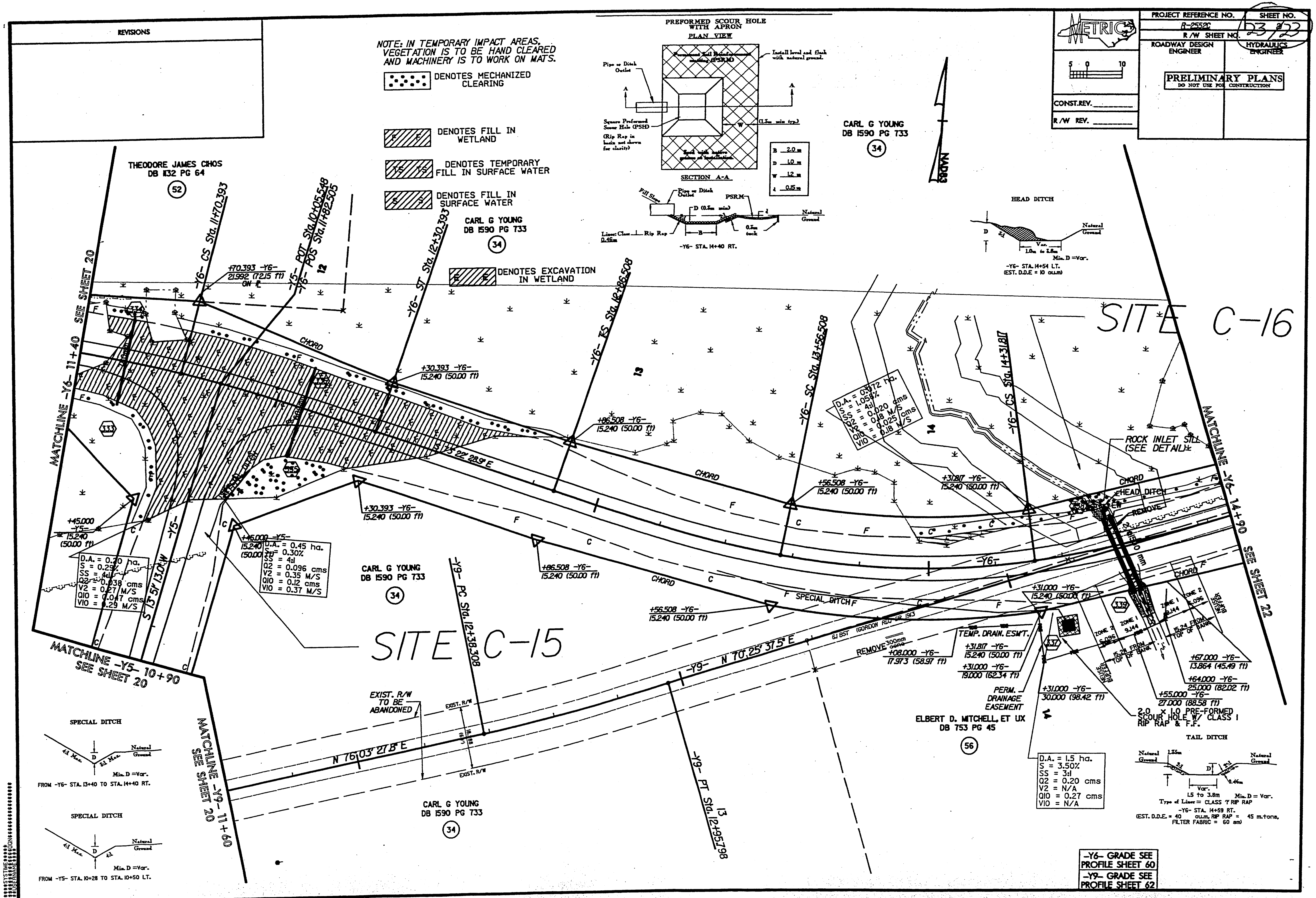

REVISIONS
SITE C-14
NOTE: IN TEMPORARY IMPACT AREAS, VEGETATION IS TO BE HAND CLEARED AND MACHINERY IS TO WORK ON MATS.
DENOTES MECHANIZED CLEARING
DENOTES FILL IN WETLAND
DENOTES EXCAVATION IN WETLAND
DENOTES TEMPORARY FILL IN SURFACE WATER
DENOTES FILL IN SURFACE WATER
METRIC
PROJECT REFERENCE NO.
R-2552C
SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
CONST. REV.
R/W REV.
W E LANCASTER
DB 1050 PG 607
CREEK LOCATION BASED ON SCS SOILS MAP
NAD83
-L2- TS Sta. 156+86.510
-L2- SC Sta. 157+76.510
MATCHLINE -L2- 154+50 SEE SHEET 16
MATCHLINE -L2- 157+80 SEE SHEET 18
EXIST. R/W
ENDWALL
BORE & JACK
1650mm SPIRAL WELDED
STEEL (22mm THICK)
ADJUST
SPECIAL DITCH
S 53°53'01" E
-L2-
US 70A 7.4 BST
US 70A 7.5 BST
FALSE SUMP
RETAIN
COLLAR
375mm RCP
CL. "I" RIP RAP (22 M.TONS) W/ FIL. FAB. (30 SM)
CL. "I" RIP RAP (25 M.TONS) W/ FIL. FAB. (35 SM)
LAT 2.0 m BASE DITCH
LAT 3.0 m BASE DITCH
+25.000 -L2-
38.332 (124.670)
CL. "B" RIP RAP (45 M.TONS) W/ FIL. FAB. (80 SM)
+20.000 -L2-
40.000 (131.23 ft)
CL. "B" RIP RAP (55 M.TONS) W/ FIL. FAB. (100 SM)
+35.000 -L2-
34.761 (ON EX. R/W)
+90.000 -L2-
35.197 (ON EX. R/W)
& 37.500 (123.03 ft)
ZONE 1 9.144
ZONE 2 6.096
15.24 FROM TOP OF BANK
NEUSE BUFFER
SPECIAL MEDIAN DITCH
FROM -L2- STA. 154+50 TO STA. 155+00 MED.
LATERAL 2 METER BASE DITCH
FROM -L2- STA. 155+30 TO STA. 156+15 RT.
2.0 METER BASE DITCH
FROM -L2- STA. 156+25 TO STA. 157+20 RT.
VARIABLE BASE DITCH
Type of Liner = CLASS 'B' RIP RAP
FROM -L2- STA. 156+15 TO STA. 156+25 RT.
FROM -L2- STA. 157+20 TO STA. 157+35 RT.
D.A. = 2.2 ha.
S = 0.75%
SS = 3:1
Q2 = 0.41 cms
V2 = 0.55 M/S
Q10 = 0.54 cms
V10 = 0.61 M/S
DANIEL L HEAVNER
DB 1567 PG 311
HAROLD A YOUNG
DB 960 PG 657
900 mm CONC
1050 mm WD
1200 mm CONC
-L2- GRADE SEE PROFILE SHEET 38

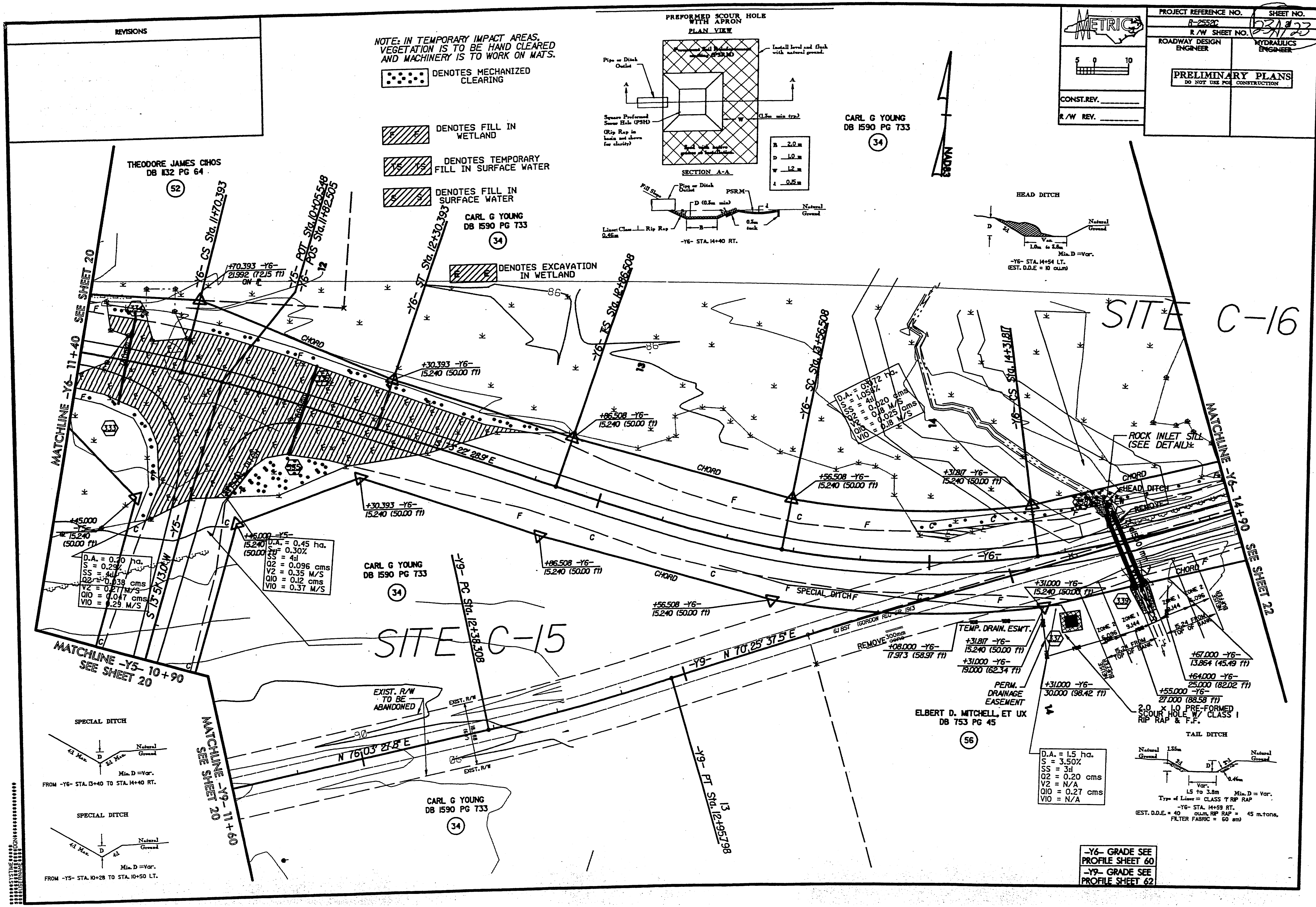


REVISIONS
SITE C-15
METRIC
PROJECT REFERENCE NO.
R-2552C
SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
CONST. REV.
R/W REV.
MATCHLINE -Y9- 11+60 SEE SHEET 21
MATCHLINE -Y6- 11+40 SEE SHEET 21
MATCHLINE -Y5- 10+90 SEE SHEET 21
MATCHLINE -Y4- 10+25 SEE SHEET 19
MATCHLINE -Y4- 13+95 SEE SHEET 13
1.0 BASE TAIL DITCH "CLEANOUT"
-Y4- STA. 11+20 RT.
(EST. D.D.E. = 20 cu.m)
1.0 METER LAT. BASE DITCH
FROM -Y6- STA. 10+40 TO STA. 10+80 LT.
DENOTES MECHANIZED CLEARING
DENOTES FILL IN WETLAND
-Y6- SC Sta. 11+29.955
-Y5- TS Sta. 11+18.425
-Y5- SC Sta. 11+98.425
-Y6- TS Sta. 10+69.955
-Y4- POT Sta. 12+37.749
-Y9- POT Sta. 10+00.000
-Y4- POT Sta. 10+60.360
-Y6- POT Sta. 10+00.000
S 13°51'13.0" W
N 76°03'27.8" E
S 10°32'23.0" E
S 87°58'36.4" E
THEODORE JAMES CHOS DB 1132 PG 64
CARL G YOUNG DB 1590 PG 733
DONALD C. HULL DB 2106 PG 126
DOROTHY POUNDS DB 527 PG 274
WORTH POUNDS DB 527 PG 274
DORIS M. MATTHEWS DB 894 PG 455
HELEN P TUTTLE DB 655 PG 263
CMH HOMES DB 2251 PG 242
SR 2564 EXIDE RD
TRENCHLESS CONST. 375mm SPIRAL WELDED STEEL (7mm THICK)
TRENCHLESS CONST. 450mm SPIRAL WELDED STEEL (8mm THICK)
(DRAINAGE TO BE INSTALLED AFTER REMOVAL OF DETOUR -Y4A-)
CLEANOUT TAIL DITCH (ESTIMATE 20 CM DRAIN. DITCH EXCAV.)
TEMPORARY DRAINAGE EASEMENT
SPECIAL 'V' DITCH
FROM -Y4- STA. 10+75 TO STA. 11+18 RT.
FROM -Y4- STA. 12+36 TO STA. 13+35 LT.
FROM -Y4- STA. 13+40 TO STA. 13+70 LT.
0.6 BASE TAIL DITCH
-Y4- STA. 13+35 LT.
(EST. D.D.E. = 5 cu.m)
-Y5DETOUR- GRADE SEE PROFILE SHEET 60
-Y4- GRADE SEE PROFILE SHEETS 54 & 55
-RAMP A- GRADE SEE PROFILE SHEET 42
-Y5- GRADE SEE PROFILE SHEET 58
-Y6- GRADE SEE PROFILE SHEET 60
-Y9- GRADE SEE PROFILE SHEET 63



REVISIONS
PROJECT REFERENCE NO.
SHEET NO.
R-2552C
R/W SHEET NO.
24/23
METRIC
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
CONST.REV.
R/W REV.
SITE C-15
MATCHLINE -Y9- 11+60 SEE SHEET 21
MATCHLINE -Y6- 11+40 SEE SHEET 21
MATCHLINE -Y5- 10+90 SEE SHEET 21
1.0 BASE TAIL DITCH "CLEANOUT"
Natural Ground
D = Var.
-Y4- STA. 11+20 RT.
(EST. D.D.E. = 20 cu.m)
+29.955 -Y6-
16.566 (54.34 ft) ON
END W.W. FENCE
END C/A
THEODORE JAMES CIHOS
DB 1132 PG 64
+82.000 -Y6-
15.012 (49.25 ft)
ON R/W
+82.000 -Y6-
20.000 (65.62 ft)
-Y6- TS Sta. 10+69.955
-Y6- SC Sta. 11+29.955
+29.955 -Y6-
15.240 (50.00 ft)
BEGIN W.W. FENCE
BEGIN C/A
1.0 METER LAT. BASE DITCH
FROM -Y6- STA. 10+40 TO STA. 10+80 LT.
CARL G YOUNG
DB 1590 PG 733
D.A. = 0.17 ha.
SS = 1.5%
LAT. 1.0 m BASE DITCH
FALSE SUMP
+10.000 -Y4-
33.500 (109.91 ft)
2GI TYPE D
DENOTES MECHANIZED CLEARING
DENOTES FILL IN WETLAND
-Y4- POT Sta. 12+37.749
-Y9- POT Sta. 10+00.000
-Y5- TS Sta. 11+18.425
+18.425 -Y5-
15.240 (50.00 ft)
S 13°51'13.0" W
EXIST. R/W TO BE ABANDONED
N 76°03'21.8" E
-Y5- SC Sta. 11+98.425
+98.425 -Y5-
15.240 (50.00 ft)
CARL G YOUNG
DB 1590 PG 733
NAD83
DONALD C. HULL
DB 2106
PG 126
CL. 'B' RIP RAP (5 M.TONS) W/ FIL. FAB. (12 SM)
SR2554 EXIDE RD
EXTEND 600mm RCP W/ COLLAR
RETAIN AND EXTEND 600mm RCP W/ COLLAR
+22.839 -Y4-
72.226 (236.96 ft)
TEMPORARY DRAINAGE EASEMENT
+42.043 -Y4-
63.036 (206.81 ft)
+45.507 -Y4-
62.265 (204.28 ft)
0.6m BASE TAIL DITCH
+30.000 -Y4-
38.500 (126.31 ft)
'B' RIP RAP (3 M.TONS) FIL. FAB. (9 SM)
SPECIAL DITCH
+80.000 -Y4-
33.500 (109.91 ft)
DOROTHY POUNDS
DB 527 PG 274
-RAMP A- ST Sta. 12+58.298
-Y4- ST Sta. 13+78.097
+78.425 -Y5-
15.240 (50.00 ft)
+72.246 -Y4-
59.825 (196.28 ft)
SPECIAL DITCH
+38.681 -Y4-
33.500 (109.91 ft)
+12.200 -Y4-
33.500 (109.91 ft)
REMOVE
TRENCHLESS CONST. 375mm SPIRAL WELDED STEEL (7mm THICK)
PLUG
REMOVE 2GI
TRENCHLESS CONST. 450mm SPIRAL WELDED STEEL (8mm THICK)
(DRAINAGE TO BE INSTALLED AFTER REMOVAL OF DETOUR -Y4A-)
REMOVE EXIST. 2GI
S 10°32'23.0" E
JB W/ MH COVER (EXTRA DEPTH)
SPECIAL DITCH
+08.000 -Y4-
33.500 (109.91 ft)
TRAF. BEAR. JB W/ MH COVER (EXTRA DEPTH)
2GI TYPE D
MATCHLINE -Y4- 10+25 SEE SHEET 19
MATCHLINE -Y4- 13+95 SEE SHEET 13
+23.000 -Y4-
33.500 (109.91 ft)
CL. 'B' RIP RAP (8 M.TONS) W/ FIL. FAB. (18 SM)
CLEANOUT TAIL DITCH (ESTIMATE 20 CM DRAIN. DITCH EXCAV.)
TEMPORARY DRAINAGE EASEMENT
-Y4- POT Sta. 10+60.360
-Y6- POT Sta. 10+00.000
SPECIAL 'V' DITCH
CMH HOMES
DB 2251 PG 242
0.6 BASE TAIL DITCH
-Y4- STA. 13+35 LT.
+50.000 -Y4-
33.500 (109.91 ft)
BEGIN W.W. FENCE
BEGIN C/A
WORTH POUNDS
DB 527 PG 274
DORIS M. MATTHEWS
DB 894
PG 455
HELEN P TUTTLE
DB 655 PG 263
+93.000 -Y4-
70.000 (229.66 ft)
+07.000 -Y4-
74.000 (242.78 ft)
FROM -Y4- STA. 10+75 TO STA. 11+18 RT.
FROM -Y4- STA. 12+36 TO STA. 13+35 LT.
FROM -Y4- STA. 13+40 TO STA. 13+70 LT.
-Y5DETOUR- GRADE SEE PROFILE SHEET 60
-Y4- GRADE SEE PROFILE SHEETS 54 & 55
-RAMP A- GRADE SEE PROFILE SHEET 42
-Y5- GRADE SEE PROFILE SHEET 58
-Y6- GRADE SEE PROFILE SHEET 60
-Y9- GRADE SEE PROFILE SHEET 63


PROJECT REFERENCE NO. R-2552C
SHEET NO. 23
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
METRIC
CONST.REV.
R/W REV.
REVISIONS
NOTE: IN TEMPORARY IMPACT AREAS, VEGETATION IS TO BE HAND CLEARED AND MACHINERY IS TO WORK ON MATS.
DENOTES MECHANIZED CLEARING
DENOTES FILL IN WETLAND
DENOTES TEMPORARY FILL IN SURFACE WATER
DENOTES FILL IN SURFACE WATER
DENOTES EXCAVATION IN WETLAND
PREFORMED SCOUR HOLE WITH APRON
PLAN VIEW
SECTION A-A
-Y6- STA. 14+40 RT.
HEAD DITCH
-Y6- STA. 14+54 LT.
TAIL DITCH
-Y6- STA. 14+59 RT.
SPECIAL DITCH
FROM -Y6- STA. 13+40 TO STA. 14+40 RT.
FROM -Y5- STA. 10+28 TO STA. 10+50 LT.
SITE C-15
SITE C-16
THEODORE JAMES CHOS DB 1132 PG 64
CARL G YOUNG DB 1590 PG 733
ELBERT D. MITCHELL, ET UX DB 753 PG 45
MATCHLINE -Y6- 11+40 SEE SHEET 20
MATCHLINE -Y6- 14+90 SEE SHEET 22
MATCHLINE -Y5- 10+90 SEE SHEET 20
MATCHLINE -Y9- 11+60 SEE SHEET 20
D.A. = 0.20 ha. S = 0.23% SS = 4:1 Q2 = 0.038 cms V2 = 0.27 M/S Q10 = 0.047 cms V10 = 0.29 M/S
D.A. = 0.45 ha. S = 0.30% SS = 4:1 Q2 = 0.096 cms V2 = 0.35 M/S Q10 = 0.12 cms V10 = 0.37 M/S
D.A. = 0.372 ha. S = 1.05% SS = 4:1 Q2 = 0.020 cms V2 = 0.18 M/S Q10 = 0.025 cms V10 = 0.18 M/S
D.A. = 1.5 ha. S = 3.50% SS = 3:1 Q2 = 0.20 cms V2 = N/A Q10 = 0.27 cms V10 = N/A
ROCK INLET SILL (SEE DETAIL)
2.0 × 1.0 PRE-FORMED SCOUR HOLE W/ CLASS I RIP RAP & F.F.
TEMP. DRAIN. ESM'T.
PERM. DRAINAGE EASEMENT
EXIST. R/W TO BE ABANDONED
-Y6- GRADE SEE PROFILE SHEET 60
-Y9- GRADE SEE PROFILE SHEET 62


REVISIONS
PROJECT REFERENCE NO. R-2552C
SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
METRIC
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
CONST.REV.
R/W REV.
NOTE: IN TEMPORARY IMPACT AREAS, VEGETATION IS TO BE HAND CLEARED AND MACHINERY IS TO WORK ON MATS.
DENOTES MECHANIZED CLEARING
DENOTES FILL IN WETLAND
DENOTES TEMPORARY FILL IN SURFACE WATER
DENOTES FILL IN SURFACE WATER
DENOTES EXCAVATION IN WETLAND
PREFORMED SCOUR HOLE WITH APRON
PLAN VIEW
SECTION A-A
-Y6- STA. 14+40 RT.
HEAD DITCH
-Y6- STA. 14+54 LT.
(EST. D.D.E = 10 cu.m)
NAD83
THEODORE JAMES CIHOS
DB 1132 PG 64
52
CARL G YOUNG
DB 1590 PG 733
34
SITE C-16
SITE C-15
MATCHLINE -Y6- 11+40 SEE SHEET 20
MATCHLINE -Y6- 14+90 SEE SHEET 22
MATCHLINE -Y5- 10+90 SEE SHEET 20
MATCHLINE -Y9- 11+60 SEE SHEET 20
-Y6- CS Sta. 11+70.393
-Y5- POT Sta. 10+05.548
-Y6- POS Sta. 11+82.505
-Y6- ST Sta. 12+30.393
-Y6- TS Sta. 12+86.508
-Y6- SC Sta. 13+56.508
-Y6- CS Sta. 14+31.817
-Y9- PC Sta. 12+38.308
-Y9- PT Sta. 12+95.798
N 75° 22' 28.9" E
-Y9- N 70° 25' 37.5" E
N 76° 03' 27.8" E
D.A. = 0.20 ha.
S = 0.25%
SS = 4:1
Q2 = 0.038 cms
V2 = 0.27 M/S
Q10 = 0.047 cms
V10 = 0.29 M/S
D.A. = 0.45 ha.
S = 0.30%
SS = 4:1
Q2 = 0.096 cms
V2 = 0.35 M/S
Q10 = 0.12 cms
V10 = 0.37 M/S
D.A. = 0.72 ha.
S = 1.056%
SS = 4:1
Q2 = 0.020 cms
V2 = 0.18 M/S
Q10 = 0.025 cms
V10 = 0.18 M/S
D.A. = 1.5 ha.
S = 3.50%
SS = 3:1
Q2 = 0.20 cms
V2 = N/A
Q10 = 0.27 cms
V10 = N/A
ROCK INLET SILL (SEE DETAIL)
HEAD DITCH
SPECIAL DITCH
TEMP. DRAIN. ESMT.
PERM. DRAINAGE EASEMENT
EXIST. R/W TO BE ABANDONED
REMOVE
2.0 x 1.0 PRE-FORMED SCOUR HOLE W/ CLASS I RIP RAP & F.F.
ELBERT D. MITCHELL, ET UX
DB 753 PG 45
56
SPECIAL DITCH
FROM -Y6- STA. 13+40 TO STA. 14+40 RT.
SPECIAL DITCH
FROM -Y5- STA. 10+28 TO STA. 10+50 LT.
TAIL DITCH
Type of Liner = CLASS 'I' RIP RAP
-Y6- STA. 14+59 RT.
(EST. D.D.E. = 40 cu.m, RIP RAP = 45 m.tons, FILTER FABRIC = 60 sm)
-Y6- GRADE SEE PROFILE SHEET 60
-Y9- GRADE SEE PROFILE SHEET 62