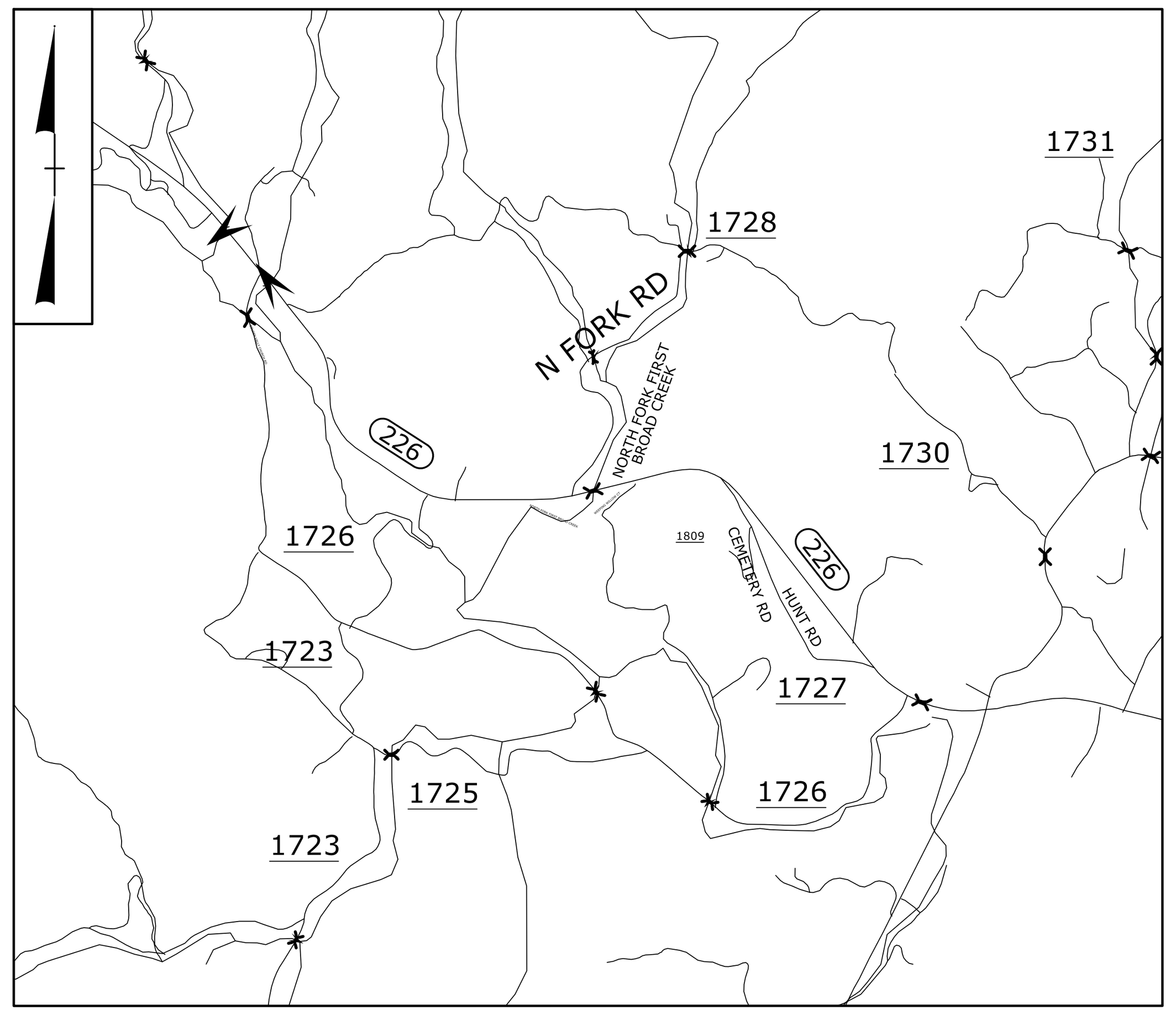
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0100	EC-1	12

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
67100.1.1	N/A	PE

TIP PROJECT: BR-0100

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



VICINITY MAP

NOT TO SCALE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

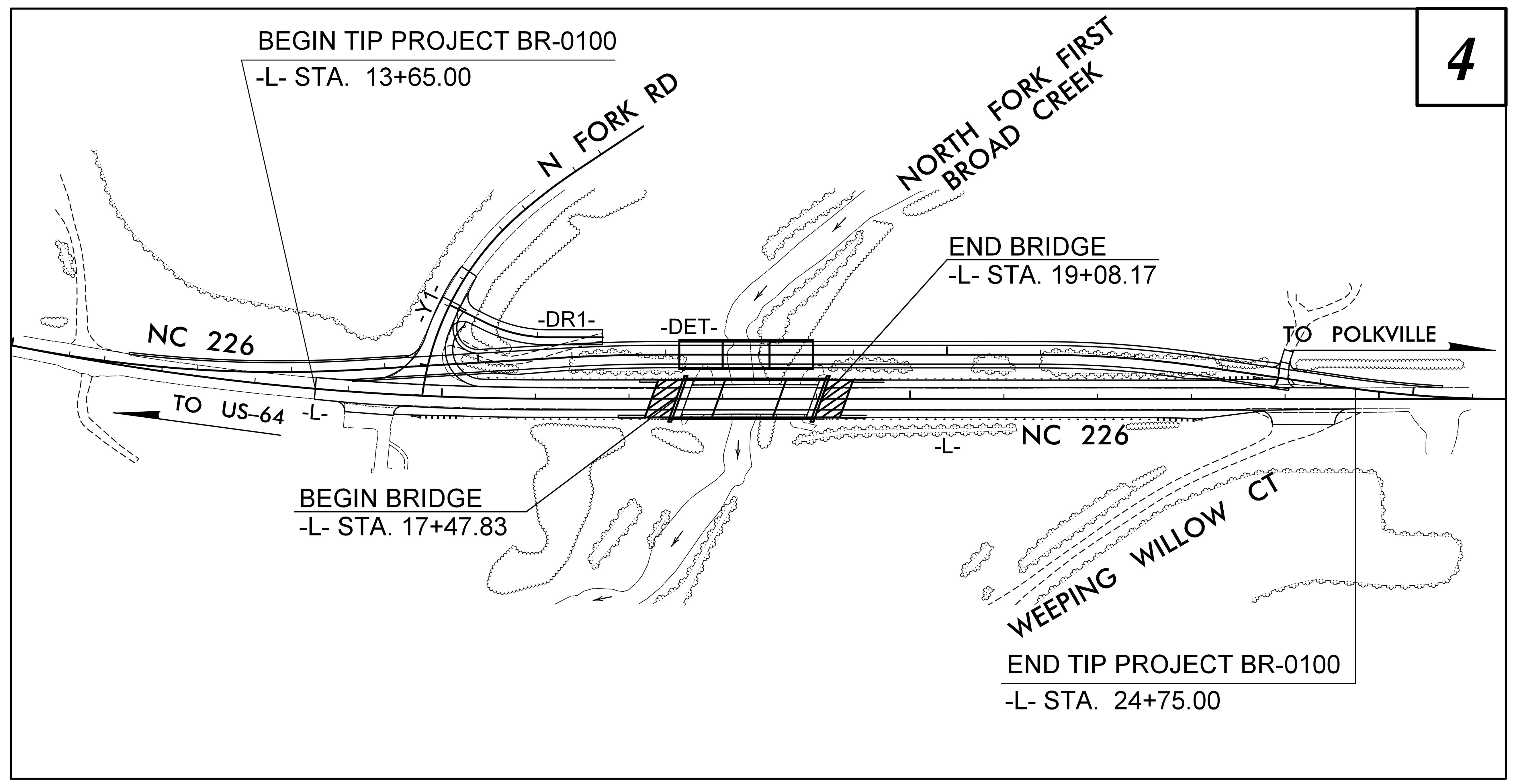
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

RUTHERFORD COUNTY

LOCATION: BRIDGE No. 40 ON NC 226 OVER NORTH FORK FIRST BROAD CREEK

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

NAD 83/2011



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

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT

Refer To E. C. Special Provisions for Special Considerations.

HIGH QUALITY WATER(S) EXIST ON THIS PROJECT

High Quality Water Zone(s) Exist
From Begin
To End
Refer To E. C. Special Provisions for Special Considerations.

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II .

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

GRAPHIC SCALE

50 25 0 50 100

PLANS

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES.

wsp

Prepared In the Office of:

WSP

434 FAYETTEVILLE STREET
SUITE 1500
RALEIGH, NC 27601

LICENSE NO. F-0165

Designed by:

Victoria Fyfe	*4319*
NAME	LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

24-JUL-2024 09:54
WSP

PROJECT REFERENCE NO.	SHEET NO.
BR-0100	EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

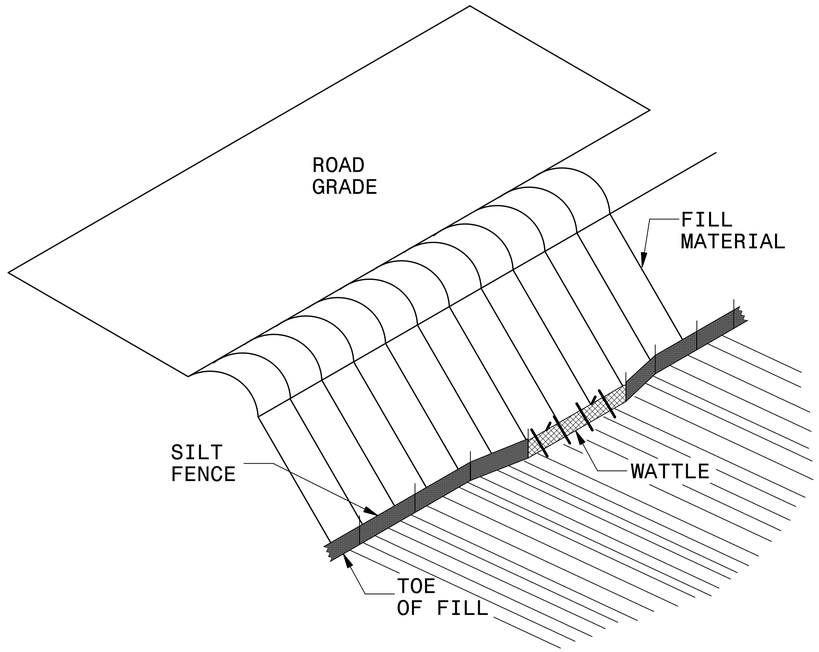
EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.04	Stilling Basin	
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1630.07	Skimmer Basin	
1630.08	Tiered Skimmer Basin	
1630.09	Earthen Dam with Skimmer	
	Infiltration Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C

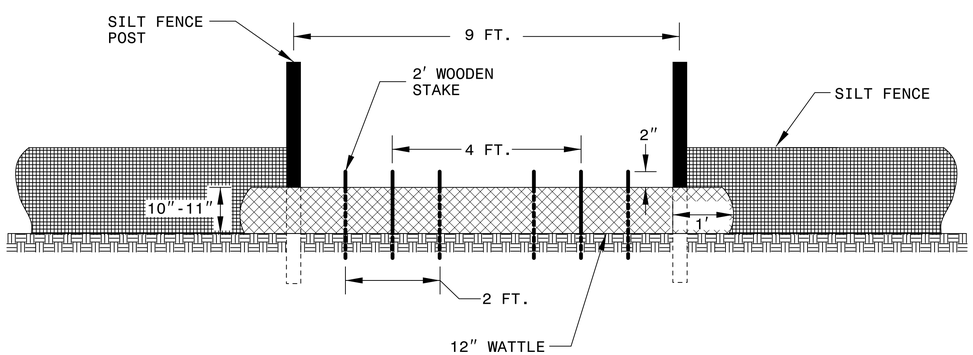
Std. #	Description	Symbol
1633.01	Temporary Rock Silt Check Type A	
1633.02	Temporary Rock Silt Check Type B	
1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1634.01	Temporary Rock Sediment Dam Type A	
1634.02	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet Sediment Trap Type A	A
1635.02	Rock Pipe Inlet Sediment Trap Type B	B
1636.01	Excelsior Wattle Check	
1636.01	Excelsior Wattle Check with Flocculant	
1636.01	Coir Fiber Wattle Check	
1636.01	Coir Fiber Wattle Check with Flocculant	
1636.02	Silt Fence Excelsior Wattle Break	FF
	Silt Fence Coir Fiber Wattle Break	FFF
1636.03	Excelsior Wattle Barrier	EW EW EW
1636.03	Coir Fiber Wattle Barrier	CFW CFW CFW

PROJECT REFERENCE NO.	SHEET NO.
BR-0100	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SILT FENCE COIR FIBER WATTLE BREAK DETAIL



ISOMETRIC VIEW



VIEW FROM SLOPE

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.

EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.

DO NOT PLACE WATTLE ON TOE OF SLOPE.

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

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

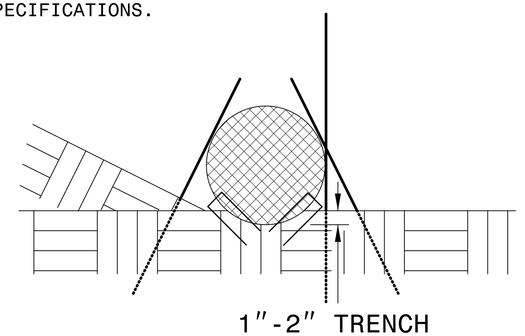
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

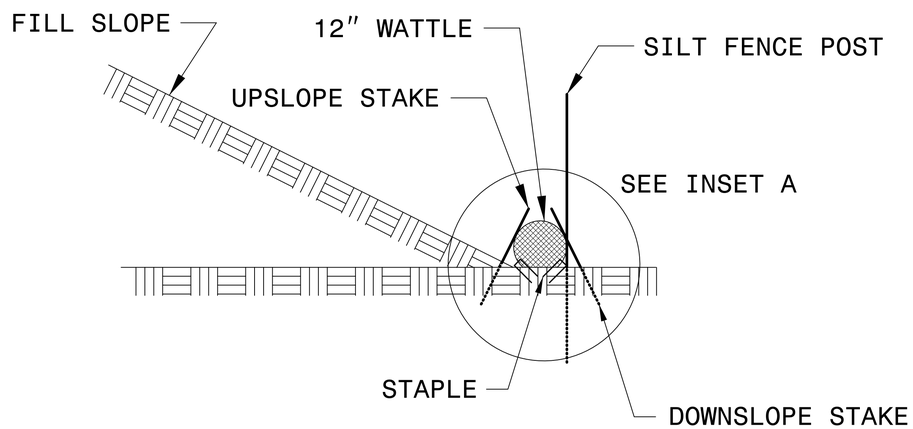
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.

INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

INSET A

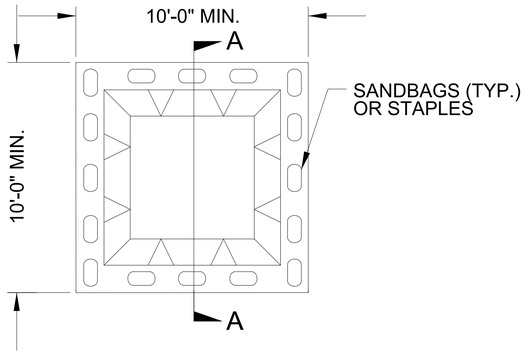




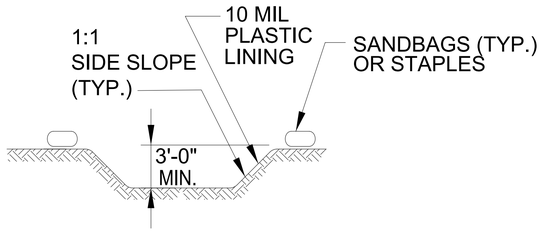
SIDE VIEW

PROJECT REFERENCE NO.	SHEET NO.
BR-0100	EC-28
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



PLAN



SECTION A-A

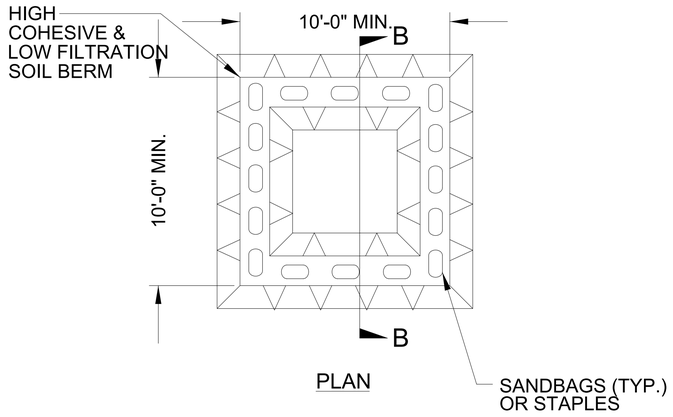
NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.

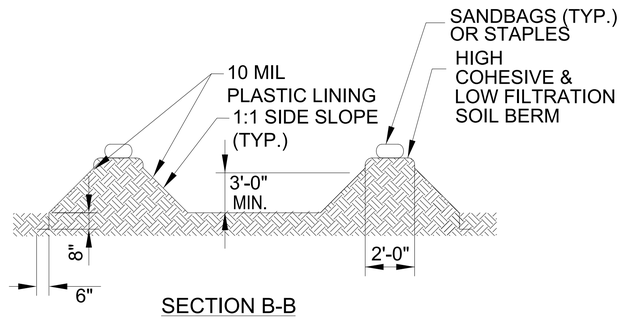
3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

BELOW GRADE WASHOUT STRUCTURE

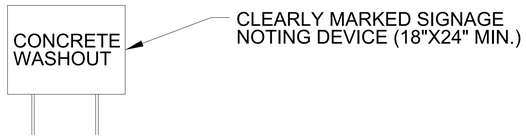
NOT TO SCALE



PLAN



SECTION B-B



NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.

3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

ABOVE GRADE WASHOUT STRUCTURE

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
BR-0100	EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL (DITCHES)– STRAW

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	L	16+50	17+95	LT	135
4	L	14+75	15+89	RT	60
4	DET	12+75	14+25	LT	155
4	DET	15+25	17+60	LT	370
4	DET	18+15	22+00	LT	710
4	DET	18+75	21+25	LT	140
4	L PHASING	15+50	17+00	MED	85
4	L PHASING	17+00	17+50	MED	30
4	L PHASING	19+25	21+75	MED	140
4	L PHASING	13+75	14+60	LT	90
4	L PHASING	15+60	17+00	LT	225
4	L PHASING	18+89	22+95	LT	55
			SUBTOTAL		2175
				SUBTOTAL	
			MISCELLANEOUS MATTING		
				TOTAL	
				SAY	

MATTING FOR EROSION CONTROL (SLOPES)–STRAW

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	L	16+75	17+75	LT	356
4	L	19+05	22+50	LT	1303
4	L	16+50	17+50	RT	422
4	L	19+15	22+00	RT	1045
4	DET	15+20	17+41	RT	762
4	DET	18+29	22+45	LT	1369
			SUBTOTAL		5257
7432					
11216					
18648					
18650					

PROJECT REFERENCE NO.	SHEET NO.
BR-0100	EC-3A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

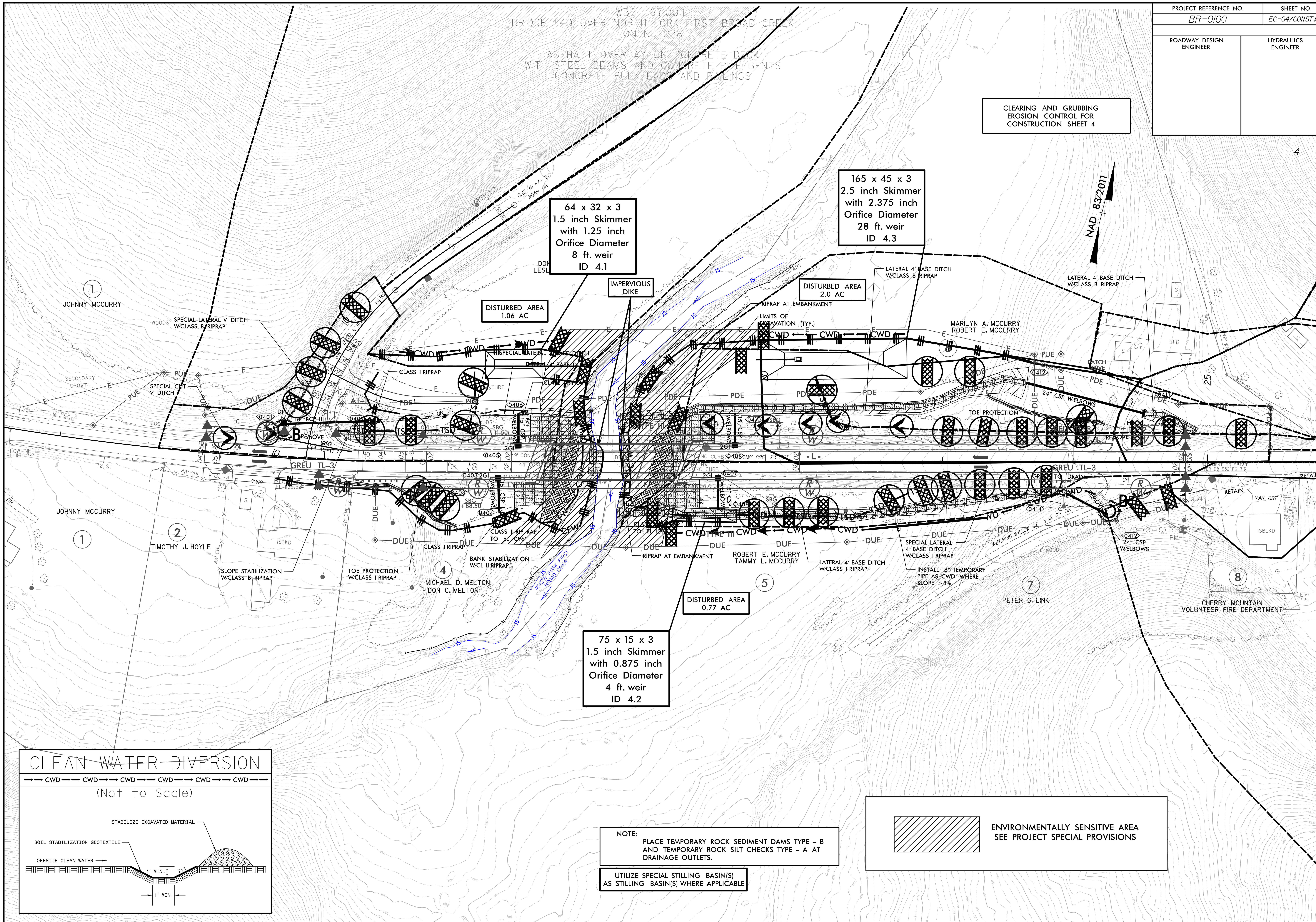
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

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 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

PROJECT REFERENCE NO.	SHEET NO.
BR-0100	EC-04/CONST.04
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4



WBS 67100.1.1
BRIDGE #40 OVER NORTH FORK FIRST BROAD CREEK ON NC 226
ASPHALT OVERLAY ON CONCRETE DECK WITH STEEL BEAMS AND CONCRETE PILE BENTS CONCRETE BULKHEADS AND RAILINGS
NAD 83/2011
64 x 32 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
8 ft. weir
ID 4.1
165 x 45 x 3
2.5 inch Skimmer
with 2.375 inch
Orifice Diameter
28 ft. weir
ID 4.3
75 x 15 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 4.2
IMPERVIOUS DIKE
DISTURBED AREA 1.06 AC
DISTURBED AREA 2.0 AC
DISTURBED AREA 0.77 AC
JOHNNY MCCURRY
TIMOTHY J. HOYLE
MICHAEL D. MELTON
DON C. MELTON
ROBERT E. MCCURRY
TAMMY L. MCCURRY
MARILYN A. MCCURRY
ROBERT E. MCCURRY
PETER G. LINK
CHERRY MOUNTAIN VOLUNTEER FIRE DEPARTMENT
SPECIAL LATERAL V DITCH W/CLASS B RIPRAP
SPECIAL CUT V DITCH
CLASS I RIPRAP
LATERAL 4' BASE DITCH W/CLASS B RIPRAP
RIPRAP AT EMBANKMENT
LIMITS OF EXCAVATION (TYP.)
TOE PROTECTION
24" CSP W/ELBOWS
SLOPE STABILIZATION W/CLASS B RIPRAP
TOE PROTECTION W/CLASS I RIPRAP
BANK STABILIZATION W/CL II RIPRAP
LATERAL 4' BASE DITCH W/CLASS I RIPRAP
SPECIAL LATERAL 4' BASE DITCH W/CLASS I RIPRAP
INSTALL 18" TEMPORARY PIPE AS CWD WHERE SLOPE > 8%
GREU TL-3
-L-
CLEAN WATER DIVERSION
(Not to Scale)
STABILIZE EXCAVATED MATERIAL
SOIL STABILIZATION GEOTEXTILE
OFFSITE CLEAN WATER
1' MIN.
2:1

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

UTILIZE SPECIAL STILLING BASIN(S) AS STILLING BASIN(S) WHERE APPLICABLE

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

PROJECT REFERENCE NO.	SHEET NO.
BR-0100	EC-05/CONST.2B-1
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

WBS 67100.1.1
BRIDGE #40 OVER NORTH FORK FIRST BROAD CREEK
ON NC 226

ASPHALT OVERLAY ON CONCRETE DECK
WITH STEEL BEAMS AND CONCRETE PILE BENTS
CONCRETE BULKHEADS AND RAILINGS

DETOUR

64 x 32 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
8 ft. weir
ID 4.1

165 x 45 x 3
2.5 inch Skimmer
with 2.375 inch
Orifice Diameter
28 ft. weir
ID 4.3

75 x 15 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 4.2

DISTURBED AREA
1.06 AC

DISTURBED AREA
2.0 AC

DISTURBED AREA
0.77 AC

END CONSTRUCTION
-Y1_DET- STA. 10+73.40

BEGIN BRIDGE
-DET-

END BRIDGE
-DET- Sta. 18+57.01

BEGIN GRADE
-DET- Sta. 12+56.65

END GRADE
-DET- Sta. 24+32.01

NAD 83/2011

JOHNNY MCCURRY

TIMOTHY J. HOYLE

MICHAEL D. MELTON
DON C. MELTON

ROBERT E. MCCURRY
TAMMY L. MCCURRY

MARILYN A. MCCURRY
ROBERT E. MCCURRY

PETER G. LINK

CHERRY MOUNTAIN
VOLUNTEER FIRE DEPARTMENT

SPECIAL LATERAL V DITCH
W/CLASS B RIPRAP
EST 10 TONS
EST 39 SY GF

SPECIAL CUT V DITCH

CLASS I RIPRAP
EST 3 TONS
EST 7 SY GF

LATERAL 4' BASE DITCH
EST 74 CY DDE

RIPRAP AT EMBANKMENT

TEMP TYPE III

TEMP GREU TL-2

SLOPE STABILIZATION
W/CLASS B RIPRAP

MEDIAN V DITCH

LATERAL 4' BASE DITCH
W/CLASS I RIPRAP
EST 18 TONS
EST 39 SY GF
EST 48 CY DDE

SPECIAL LATERAL 2' BASE DITCH
W/CLASS I RIPRAP
EST 48 TONS
EST 192 SY GF

24" CSP W/ELBOWS

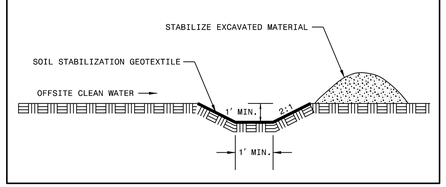
MEDIAN V DITCH
W/CLASS B RIPRAP
EST 31 TONS
EST 68 SY GF

INSTALL 18" TEMPORARY
PIPE AS CWD WHERE
SLOPE >8%

CLEAN WATER DIVERSION

CWD — CWD — CWD — CWD — CWD — CWD

(Not to Scale)



PROJECT REFERENCE NO.	SHEET NO.
BR-0100	EC-06/CONST.04
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

WBS 67100.1.1
BRIDGE #40 OVER NORTH FORK FIRST BROAD CREEK
ON NC 226

ASPHALT OVERLAY ON CONCRETE DECK
WITH STEEL BEAMS AND CONCRETE PILE BENTS
CONCRETE BULKHEADS AND RAILINGS

64 x 32 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
8 ft. weir
ID 4.1

165 x 45 x 3
2.5 inch Skimmer
with 2.375 inch
Orifice Diameter
28 ft. weir
ID 4.3

IMPERVIOUS DIKE

NAD 83/2011

JOHNNY MCCURRY

SPECIAL LATERAL V DITCH W/CLASS B RIPRAP

SPECIAL CUT V DITCH

LATERAL 4' BASE DITCH W/CLASS B RIPRAP

RIPRAP AT EMBANKMENT

LIMITS OF EXCAVATION (TYP.)

MARILYN A. MCCURRY
ROBERT E. MCCURRY

PATCH DRIVE

24" CSP W/ELBOWS

TOE PROTECTION

GREU TL-3

REMOVE

TIMOTHY J. HOYLE

SLOPE STABILIZATION W/CLASS B RIPRAP

TOE PROTECTION W/CLASS I RIPRAP

CLASS I RIPRAP

CLASS II RIP RAP TO EL 1096'

BANK STABILIZATION W/CL II RIPRAP

MICHAEL D. MELTON
DON C. MELTON

NORTH FORK FIRST BROAD RIVER

CLASS II RIP RAP TO EL 1091'

ROBERT E. MCCURRY
TAMMY L. MCCURRY

LATERAL 4' BASE DITCH W/CLASS I RIPRAP

SPECIAL LATERAL 4' BASE DITCH W/CLASS I RIPRAP

INSTALL 18" TEMPORARY PIPE AS CWD WHERE SLOPE > 8%

PETER G. LINK

CHERRY MOUNTAIN VOLUNTEER FIRE DEPARTMENT

Place Matting for Erosion Control on Slope as Work Allows.
Sta. –DET– 15+20 to 17+41 LT

75 x 15 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 4.2

Place Matting for Erosion Control on Slope as Work Allows.
Sta. –DET– 18+29 to Sta. 22+45 LT

Place Coir Fiber Matting for Erosion Control on bench as Work Allows.
Sta. 17+44 to Sta. 17+85 –L–
Sta. 18+45 to Sta. 18+90 –L–

INSTALL STRAW MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.
From –DET– Sta. 18+15 to Sta. 22+00 LT
From –DET– Sta. 18+75 to Sta. 21+25 MED
From –L_PHASING– Sta. 15+50 to Sta. 17+00 MED
From –L_PHASING– Sta. 17+00 to Sta. 17+50 MED
From –L_PHASING– Sta. 19+25 to Sta. 21+75 MED
From –L_PHASING– Sta. 13+75 to Sta. 14+60 LT
From –L_PHASING– Sta. 15+60 to Sta. 17+00 LT
From –L_PHASING– Sta. 18+89 to Sta. 22+95 LT

CLEAN WATER DIVERSION

CWD — CWD — CWD — CWD — CWD — CWD

(Not to Scale)