STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	11C.095101	EC-1	19

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

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WATAUGA COUNTY

LOCATION: SR–1331B ROBY GREEN RD

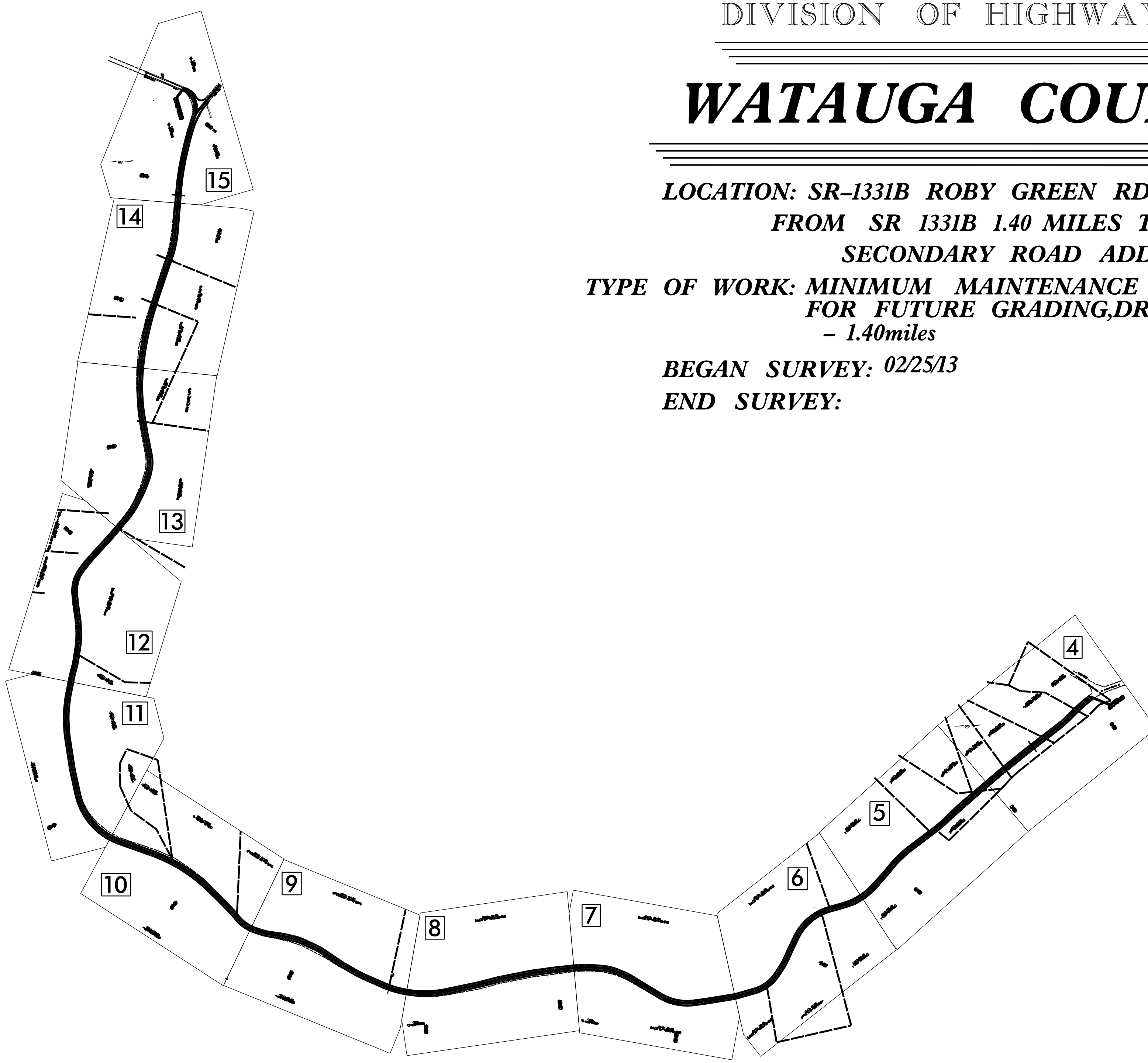
FROM SR 1331B 1.40 MILES TO BRIDGE STA 0+00 to 73+70.6

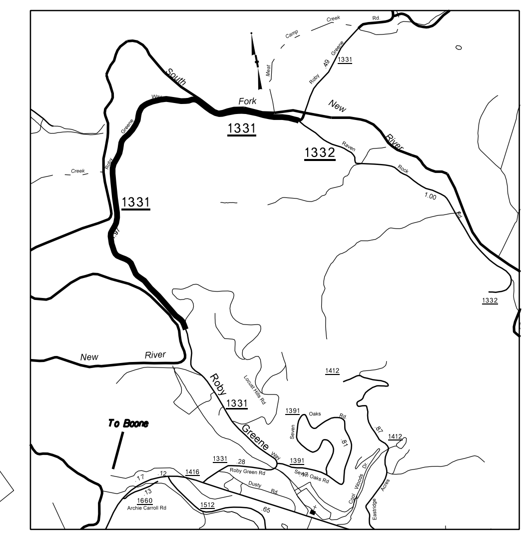
SECONDARY ROAD ADDITION – IMPROVE TO

TYPE OF WORK: MINIMUM MAINTENANCE STANDARDS; R/W & PLANS FOR FUTURE GRADING,DRAINAGE,BASE AND PAVING – 1.40miles

BEGAN SURVEY: *02/25/13*

END SURVEY:





VICINITY MAP

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle / Coir Fiber Wattle	
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	
1632.02	Type B	
1632.03	Type C	
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

GRAPHIC SCALE

25 0 50

PLANS

5 0 10

PROFILE (HORIZONTAL)

5 0 10

PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG–010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared In the Office of:

DIVISION OF HIGHWAYS
DIVISION 11, DISTRICT 2 BOONE
P.O. BOX 1460, BOONE, N.C. 28607

2012 STANDARD SPECIFICATIONS

The following roadway english standards as appear in "Roadway Standard Drawings"– Roadway Design Unit – N. C. Department of Transportation – Raleigh, N. C., dated January 2012 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01	Railroad Erosion Control Detail
1605.01	Temporary Silt Fence
1606.01	Special Sediment Control Fence
1607.01	Gravel Construction Entrance
1622.01	Temporary Berms and Slope Drains
1630.01	Riser Basin
1630.02	Silt Basin Type B
1630.03	Temporary Silt Ditch
1630.04	Stilling Basin
1630.05	Temporary Diversion
1630.06	Special Stilling Basin
1631.01	Matting Installation
1632.01	Rock Inlet Sediment Trap Type A
1632.02	Rock Inlet Sediment Trap Type B
1632.03	Rock Inlet Sediment Trap Type C
1633.01	Temporary Rock Silt Check Type A
1633.02	Temporary Rock Silt Check Type B
1634.01	Temporary Rock Sediment Dam Type A
1634.02	Temporary Rock Sediment Dam Type B
1635.01	Rock Pipe Inlet Sediment Trap Type A
1635.02	Rock Pipe Inlet Sediment Trap Type B
1640.01	Coir Fiber Baffle
1645.01	Temporary Stream Crossing

PROJECT REFERENCE NO.	SHEET NO.
SR-1331B	1A

EROSION CONTROL & PIPE INSTALLATION SCHEDULE
TROUT BUFFER ZONE SEQUENCE
GENERAL E&SC NOTES
GROUND STABILIZATION CHART

Erosion Control Schedule and Notes

1. Generally, the order of installation of the erosion control measures will be as follows:

   A. Temporary silt basins shall be installed before clearing and grubbing begins.

   B. Silt fences and temporary silt ditches shall be installed after clearing and before grading.

   C. Temporary stone ditch checks with PAM or wattles with PAM shall be installed in all disturbed areas as soon as the disturbance begins.

   D. Final stone ditch checks or wattles shall be installed as soon as ditch line is established.

   E. Pipe outlet and inlet protection will be done as soon as the pipe is installed.

   F. Other permanent erosion control measures are to be implemented as soon as practical.

2. Temporary rock silt checks, type B will be spaced by percent grade as shown in the erosion control plan.

3. No. 5 stone, or equivalent, will be used in conjunction with the temporary rock silt checks in locations where water is leaving the project or entering a pipe.

4. All devices are to be cleaned out when half full.

5. Establish permanent vegetation per ground stabilization chart.

Notes:

For silt basin size see the attached erosion control plans.

PAM is to be placed on all Type A checks and wattles in the erosion control chain except for the final device in HWQ and Trout projects.

Wet Pipe Installation Schedule and Notes

1. Prior to installing any E&SC measures identify permit conditions and impact area limits.

2. Install erosion control devices.

3. Manage the water course. The pipe must be placed in the dry. Install dewatering measures.

4. Remove material and existing pipe while limiting, material and sediment from entering stream and escaping the project.

5. Excavation of stream channel shall not exceed 10' on either side of new pipe or culvert unless indicated on permit.

6. Per permit conditions for Corps of Engineers and the Wildlife Resources Commission, all pipes in streams 48”or greater must be buried 12” below streambed elevation. Pipes less than 48”must be buried with 20% of the diameter below streambed elevation.

7. Place the new pipe and compact backfill.

8. Install slope protection on the outlet and inlet ends of the pipe. Also complete installation of erosion control measures and perform maintenance as needed on existing measures.

9. Establish permanent vegetation per ground stabilization chart.

10. More information on wet pipe installation can be found in the BMP manual section 4.2 "Pipe & Culvert installation"

General Erosion Control Sequence & Notes for NC DOT Projects in Trout Buffer Zones

1. Prior to installing any E&SC measures identify permit conditions and impact area limits. Review trout buffer variance approval conditions for any special provisions.

2. All materials should be on the hand before work is commenced.

3. Install EC devices

4. Work within the buffer zone should be sequenced to minimize the length of time that disturbed areas are exposed. Stream bank stabilization, which includes the area from the edge of water to the top of bank, should be phased so that each day’s work is a completed work, including provision of adequate ground cover.

5. Graded slopes and fills within the trout buffer zone will within 7 calendar days of completion of any phase of grading be planted or otherwise provided with temporary or permanent ground cover, devices, or structures sufficient to restrain erosion.

6. Graded slopes and fills within the trout buffer zone (excluding road shoulders) shall be protected with rolled erosion control product, bonded fiber matrix, or flexible growth medium after seeding.

Notes:

Silt fence backed by woven wire, with a post spacing of 6 feet, shall be used instead of standard silt fence in trout buffer zone. Special sediment control fence shall be used in areas where bedrock is encountered which prohibits the proper anchoring of fabric, and in low points of the silt fence in 3-foot sections to allow for concentrated flows.

The disturbed areas within the stream buffer shall be restored to native vegetation characteristic of an undisturbed buffer to the extent practical upon completion of construction.

Flyrock protection such as blast mats should be provided for blasting in close proximity to streams.

PAM is to be placed on all Type A checks and wattles in the erosion control chain except for the final device in HWQ and Trout projects.

GROUND STABILIZATION CHART

Site Area Description	Stabilization Time Frame	Stabilization Time Frame Exceptions
Perimeter dikes, swales, ditches and slopes	7 days	None
High Quality Water Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10 ft. or less in length and are not steeper than 2:1, 14 days are allowed
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50' in lenght
All other areas flatter than 4:1	14 days	None (except for perimeters and HQW zones)

PROJECT REFERENCE NO.	SHEET NO.
SR-1331B	EC-1
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

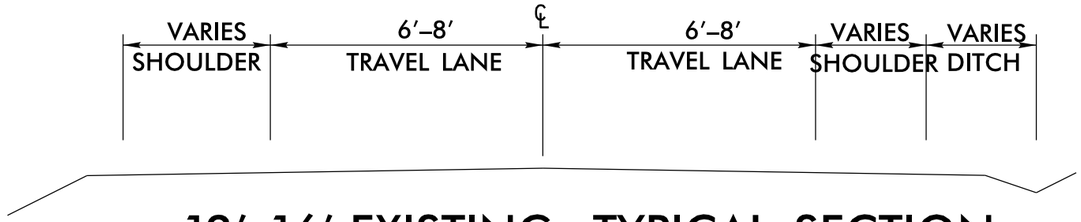
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

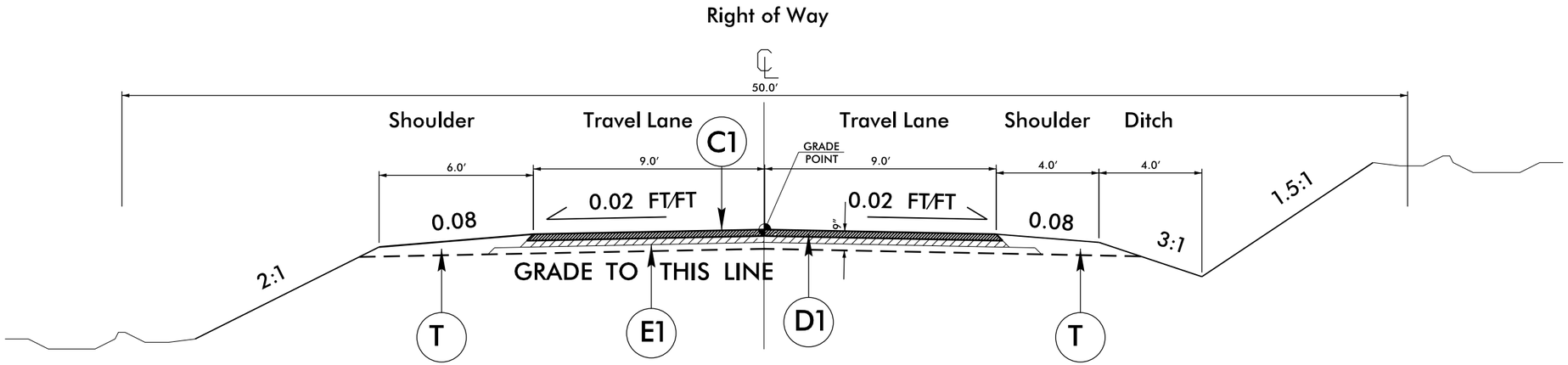
SITE DESCRIPTION	*STABILIZATION TIME*	*TIMEFRAME EXCEPTIONS*
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14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

6/2/99

PROJECT REFERENCE NO.	SHEET NO.
SR-1331B	2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER



12'–16' EXISTING TYPICAL SECTION
SR 1331B



TYPICAL SECTION NO. 1

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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
SR 1331B	3-C

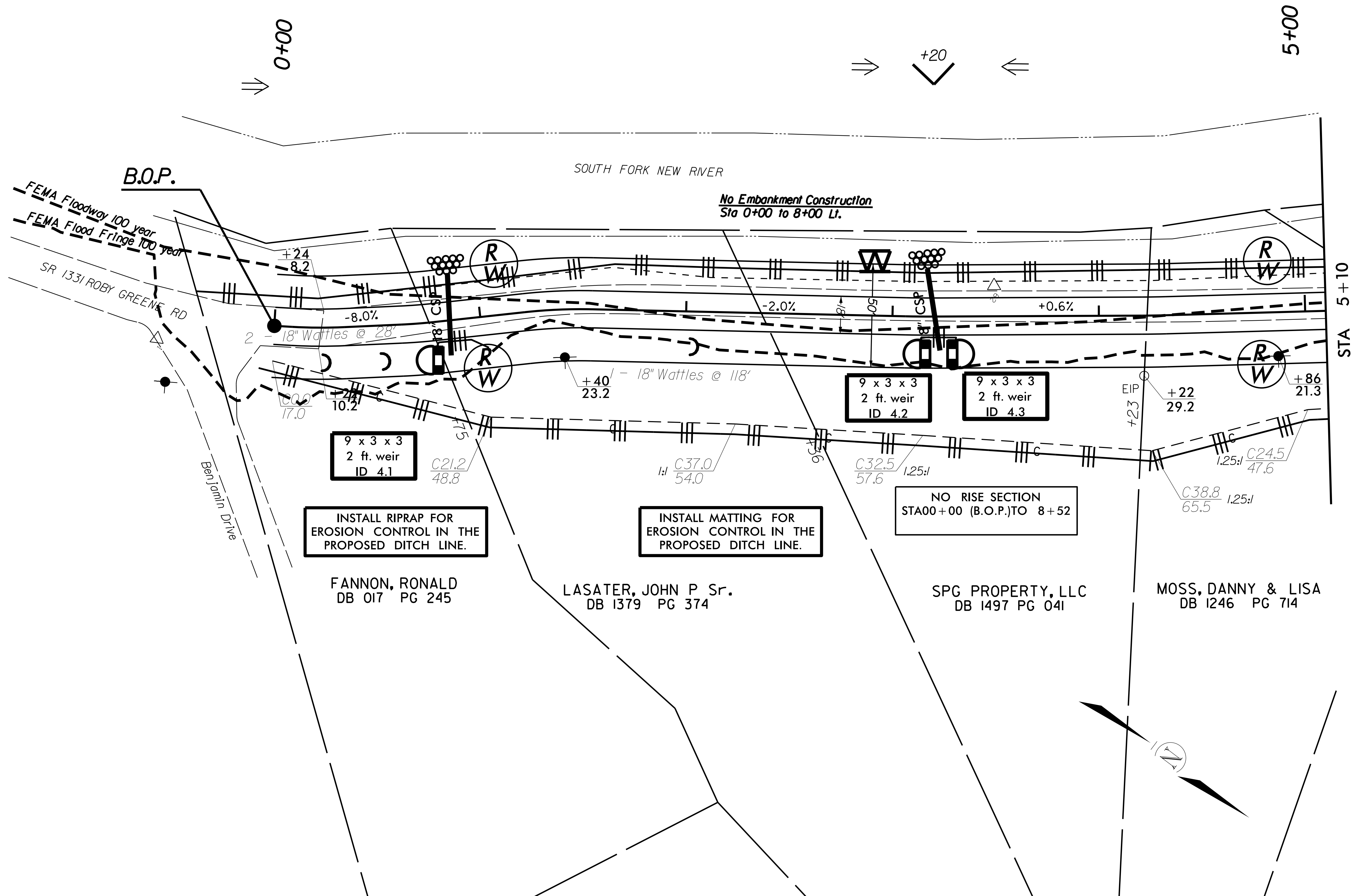
LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

NEW PIPES												EXISTING PIPES													
		BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE)																							
SIZE	LOCATION (LT, RT, OR CL)'	12"	15"	18"	24"	30"	36"	42"	48"			12"	15"	18"	24"	30"	36"	42"	48"		PIPE REMOVAL	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE STD. 840.16	J.B. STD. 840.31 OR 840.32	REMARKS
TYPE																									
STATION																									
																					0'				
00+85	CL			40'										30'							30'				
																					0'				
03+20	CL			40'										30'							30'				
																					0'				
06+58	CL				45'									38'							38'				
																					0'				
09+24	CL													34'							34'				REMOVE
																					0'				
09+30	CL						60'														0'				WET PIPE
12+53	CL				40'									34'							34'				
																					0'				
19+94	CL			40'										34'							34'				
																					0'				
25+60	CL			45'										31'							31'				
																					0'				
29+00	CL			45'																	0'				
																					0'				
32+37	CL			45'										24'							24'				
																					0'				
33+86	RT		30'																		0'				
																					0'				
34+57	CL				40'									35'							35'				
																					0'				
35+56	CL			40'										30'							30'				
																					0'				
49+96	CL				49'																0'				
																					0'				
51+87	CL				32'									32'							32'				
																					0'				
52+92	LT			183'									183'								183'				
																					0'				
53+63	CL				75'										60'						60'				
																					0'				
54+88	CL				39'																0'				
																					0'				
56+13	CL				36'																0'				
56+82	CL			40'										32'							32'				
57+33	CL				40'										30'						30'				
58+20	CL				31'																0'				
60+82	RT													40'							40'				REMOVE
60+96	RT			40'																	0'				
62+59	CL				45'									33'							33'				WET PIPE
63+35	RT		30'																		0'				
63+41	RT													20'							20'				REMOVE
63+90	CL				35'																0'				
64+83	CL				40'									33'							33'				
66+41	CL				33'																0'				
68+10	CL			40'										39'							39'				
71+73	CL			50'										31'							31'				
SHEET TOTALS		0	60	648	580	0	60	0	0	**1348**		0	183	580	90	0	0	0	0	**853**					

PROJECT REFERENCE NO.	SHEET NO.
11C.095101	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

REVISIONS

8/17/99


0+00
5+00
+20
SOUTH FORK NEW RIVER
No Embankment Construction
Sta 0+00 to 8+00 Lt.
B.O.P.
FEMA Floodway 100 year
FEMA Flood Fringe 100 year
SR 1331 ROBY GREENE RD
Benjamin Drive
+24
8.2
-8.0%
-2.0%
+0.6%
2 - 18" Wattles @ 28'
1 - 18" Wattles @ 118'
18" CSP
+40
23.2
+24
10.2
C0.0
17.0
+75
+22
29.2
+23
EIP
+86
21.3
STA 5+10
9 x 3 x 3
2 ft. weir
ID 4.1
9 x 3 x 3
2 ft. weir
ID 4.2
9 x 3 x 3
2 ft. weir
ID 4.3
C21.2
48.8
1:1
C37.0
54.0
C32.5
57.6
1.25:1
C38.8
65.5
1.25:1
C24.5
47.6
1.25:1
NO RISE SECTION
STA00+00 (B.O.P.)TO 8+52
INSTALL RIPRAP FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.
INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.
FANNON, RONALD
DB 017 PG 245
LASATER, JOHN P Sr.
DB 1379 PG 374
SPG PROPERTY, LLC
DB 1497 PG 041
MOSS, DANNY & LISA
DB 1246 PG 714
N

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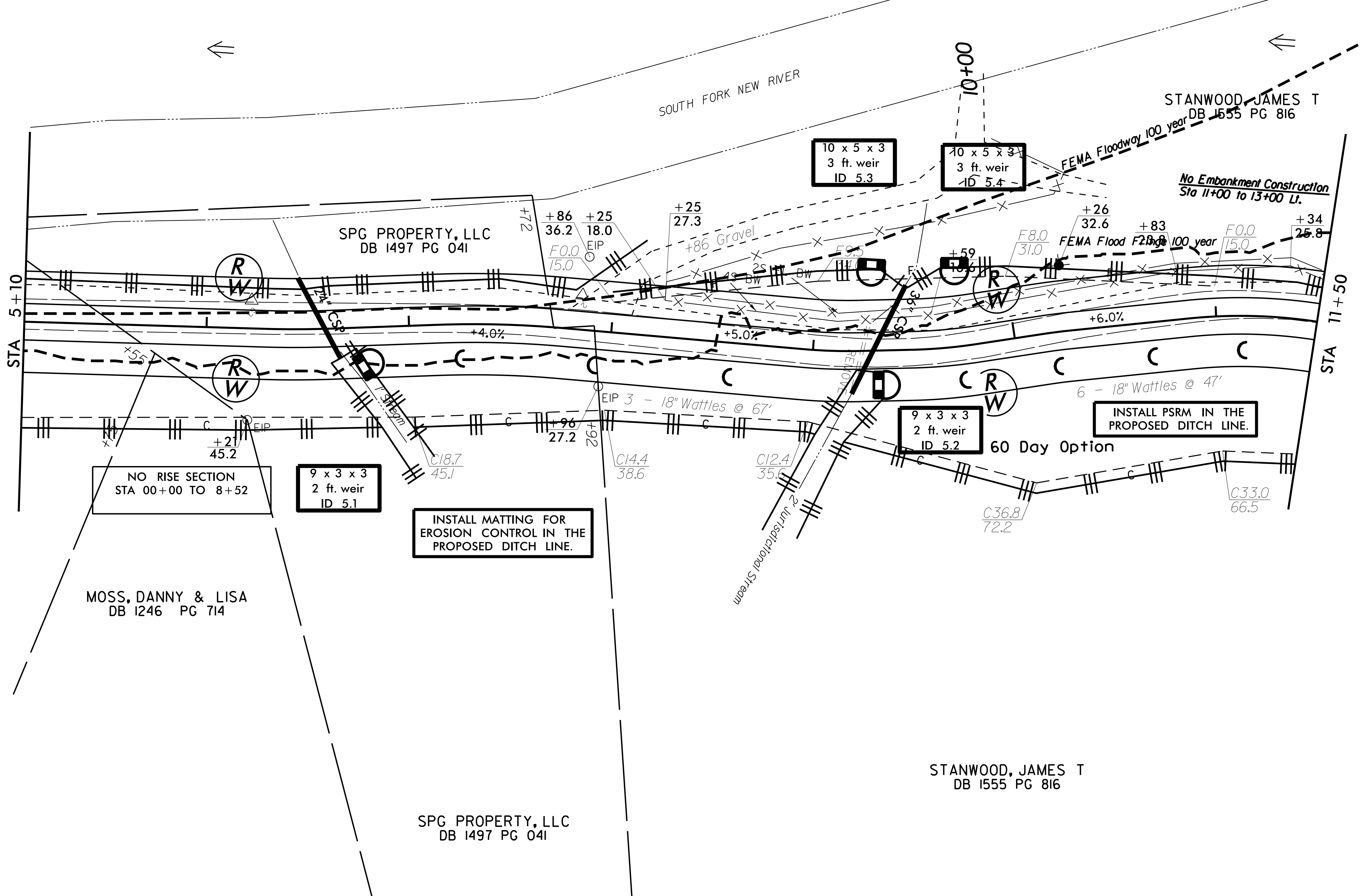
PROJECT REFERENCE NO.	SHEET NO.
11C.095101	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS



SOUTH FORK NEW RIVER
10+00
STANWOOD, JAMES T
DB 1555 PG 816
FEMA Floodway 100 year
No Embankment Construction
Sta 11+00 to 13+00 Lt.
FEMA Flood Fringe 100 year
10 x 5 x 3
3 ft. weir
ID 5.3
10 x 5 x 3
3 ft. weir
ID 5.4
SPG PROPERTY, LLC
DB 1497 PG 041
+86 Gravel
STA 5+10
STA 11+50
+4.0%
+5.0%
+6.0%
3 - 18" Wattles @ 67'
6 - 18" Wattles @ 47'
INSTALL PSRM IN THE PROPOSED DITCH LINE.
9 x 3 x 3
2 ft. weir
ID 5.2
60 Day Option
NO RISE SECTION
STA 00+00 TO 8+52
9 x 3 x 3
2 ft. weir
ID 5.1
INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.
2' Jurisdictional Stream
MOSS, DANNY & LISA
DB 1246 PG 714
STANWOOD, JAMES T
DB 1555 PG 816
SPG PROPERTY, LLC
DB 1497 PG 041

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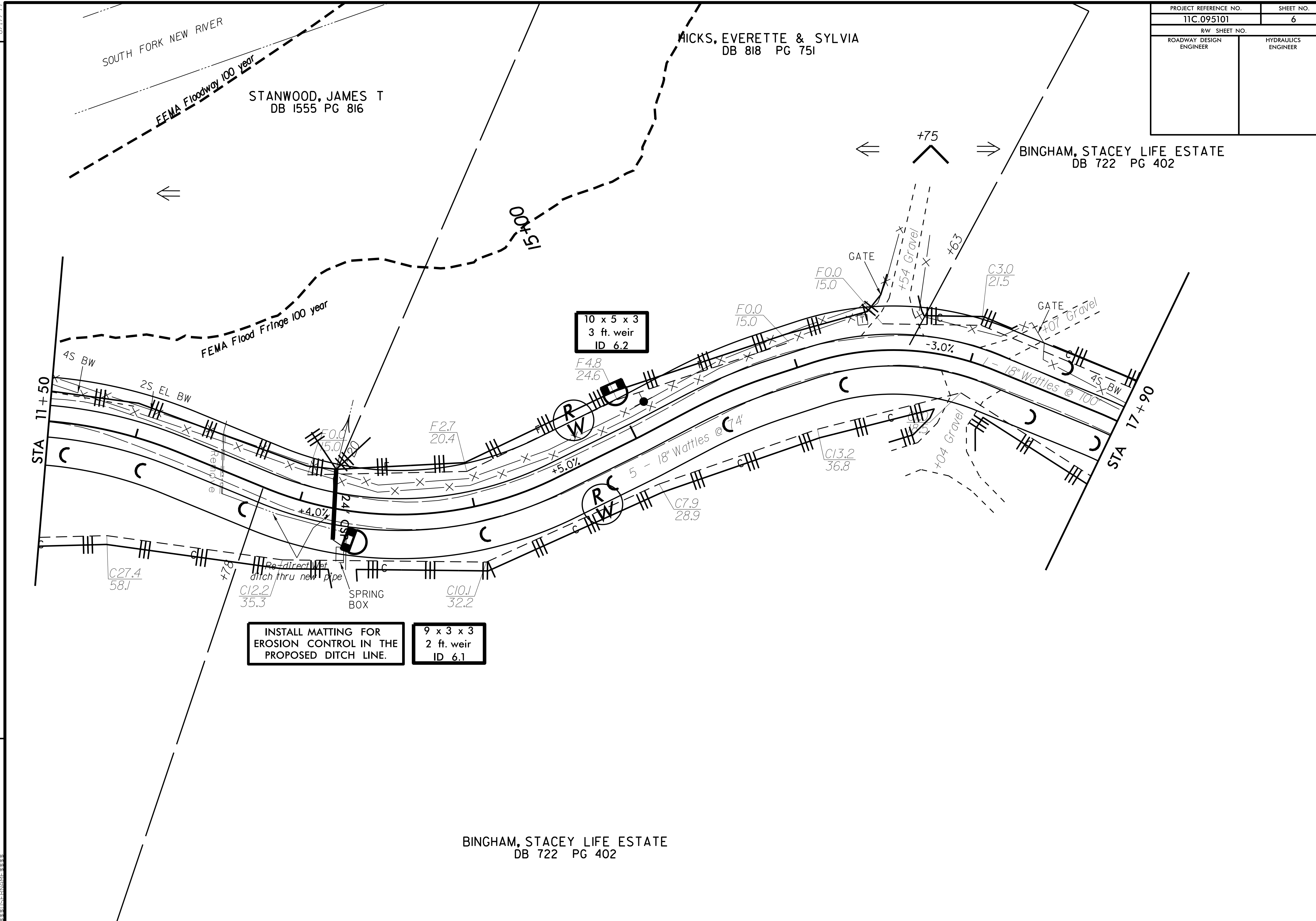
PROJECT REFERENCE NO.	SHEET NO.
11C.095101	6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



SOUTH FORK NEW RIVER
FEMA Floodway 100 year
STANWOOD, JAMES T
DB 1555 PG 816
HICKS, EVERETTE & SYLVIA
DB 818 PG 751
BINGHAM, STACEY LIFE ESTATE
DB 722 PG 402
+75
15+00
FEMA Flood Fringe 100 year
GATE
+54 Gravel
+63
F0.0
15.0
C3.0
21.5
GATE
+07 Gravel
10 x 5 x 3
3 ft. weir
ID 6.2
F0.0
15.0
-3.0%
1 - 18" Wattles @ 100'
F4.8
24.6
4S BW
4S BW
STA 11+50
2S EL BW
STA 17+90
F2.7
20.4
F0.0
15.0
+5.0%
5 - 18" Wattles @ 74'
C13.2
36.8
+04 Gravel
+4.0%
24" CSP
C7.9
28.9
Re-direct wet ditch thru new pipe
+78
C27.4
58.1
C12.2
35.3
SPRING BOX
C10.1
32.2
INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.
9 x 3 x 3
2 ft. weir
ID 6.1
BINGHAM, STACEY LIFE ESTATE
DB 722 PG 402

8/17/99

REVISIONS

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PROJECT REFERENCE NO.	SHEET NO.
11C.095101	7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

HENSON, MARY G.
N.D.F.

BINGHAM, STACEY LIFE ESTATE
DB 722 PG 402

20+00

FEMA Flood Fringe 100 year

FEMA Floodway 100 year

SOUTH FORK NEW RIVER

12 x 6 x 3
4 ft. weir
ID 7.3

9 x 3 x 3
2 ft. weir
ID 7.4

9 x 3 x 3
2 ft. weir
ID 7.1

8 x 4 x 3
2 ft. weir
ID 7.2

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

F11.9
38.8

F5.8
26.6

F0.0
15.0

ALL GUARD POST TO BE REMOVED

45 BW

45 EL BW

-7.0%

-6.0%

18"

No Embankment Construction
Sta 21+00 to 31+00 Lt.

GUARD POST

C3.0
21.5

C12.2
35.3

C20.2
47.3

C32.6
65.9

C31.6
48.6

C33.0
50.0

C54.0
71.0

C47.8
64.8

6 - 18" Wattles @ 40'

11 - 18" Wattles @ 48'

INSTALL PSRM IN THE PROPOSED DITCH LINE.

STA 17+90

STA 24+30

BINGHAM, STACEY LIFE ESTATE
DB 722 PG 402

REVISIONS

8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
11C.095101	8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

25+00

+00

30+00

HENSON, MARY G.
N.D.F.

No Embankment Construction
Sta 21+00 to 31+00 Lt.

ALL GUARD POST TO BE REMOVED

GUARD POST

STA 24+30

STA 30+70

18"

FEMA Floodway 100 year

FEMA Flood Fringe 100 year

3 - 18" Wattles @ 85'

18" CSP

+2.0%

2 - 18" Wattles

9 x 3 x 3
2 ft. weir
ID 8.1

9 x 3 x 3
2 ft. weir
ID 8.2

9 x 3 x 3
2 ft. weir
ID 8.3

1:1 C50.7 / 67.7

1.25:1 C34.2 / 59.8

1.25:1 C33.3 / 58.6

1:1 C40.0 / 57.0

1:1 C39.1 / 56.1

1:1 C32.7 / 49.7

30 Day Option

INSTALL PSRM IN THE PROPOSED DITCH LINE.

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

NO RISE SECTION
STA 24+83 TO 37+95

BINGHAM, STACEY LIFE ESTATE
DB 722 PG 402

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PROJECT REFERENCE NO.	SHEET NO.
11C.095101	9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

DARBO, RONALD R II
DB 1338 PG 589

HOWARD'S CREEK

SOUTH FORK NEW RIVER

35+00

FEMA Floodway 100 year

WLB

No Embankment Construction
Sta 33+00 to 38+00 Lt.

12 x 4 x 3
4 ft. weir
ID 9.1

F8.7
32.4

F0.0
15.0

GATE

STA 30+70

135°

3S BW

+4.0%

18" CSP

FEMA Floodway 100 year

F0.0
15.0

3S BW

3S BW

+2.0%

FEMA Flood Fringe 100 year @ 109'

FEMA Flood Fringe 100 year @ 87'

9 x 3 x 3
2 ft. weir
ID 9.2

15" CSP

-4.0%

Add Pipe & Proposed Driveway

-0.5%

24" CSP

18"

+2.0%

FEMA Flood Fringe 100 year @ 118 Widths @ 115'

STA 37+10

9 x 3 x 3
2 ft. weir
ID 9.5

+39

1.25:1

C35.1
60.9

C29.1
60.7

C38.3
64.9

1.25:1

C35.2
69.8

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

9 x 3 x 3
2 ft. weir
ID 9.3

NO RISE SECTION
STA 24+83 TO 37+95

C12.6
35.9

9 x 3 x 3
2 ft. weir
ID 9.4

C26.0
56.0

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

C19.6
46.6

+00

+50

SHUPE, WILLIAM JEFFERSON,JR
DB 979 PG 190

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PROJECT REFERENCE NO.	SHEET NO.
11C.095101	10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DARBO, RONALD R II
DB 1338 PG 589

FEMA Floodway 100 year

FEMA Floodway 100 year

40+00

+00

NO RISE SECTION
STA43+39 TO 73+70(E.O.P.)

WOVEN WIRE

F9.2
33.4

12 x 6 x 3
4 ft. weir
ID 10.1

F0.0
15.0

F10.5
36.0

F11.2
37.4

F11.1
37.2

FEMA Flood Fringe 100 year

F7.8
30.6

STA 37+10

STA 43+50

3S BW

3S BW

WOVEN WIRE

-3.0%

+3.0%

EIP

C16.0
41.0

+78

C0.0
17.0

NO RISE SECTION
STA 24+83 TO 37+95

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

No Embankment Construction
Sta. 39+00 to 44+00 Rt.

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

SIGN +04

+04

+59 Paved

BEAR CUB TRAIL

SHUPE, WILLIAM JEFFERSON,JR
DB 979 PG 190

GORELICK, JEFFERY A.
DB 019 PG 223

HARTLEY, JOHN K.
DB 627 PG 287

REVISIONS

8/17/99

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$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095101	11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

DARBO, RONALD R II
DB 1338 PG 589

45+00

No Embankment Construction
Sta. 46+00 to 48+00 Lt.

25'x 20'R/W Reduction
+74.0

20'x 25'R/W Reduction
+08.0

FEMA Floodway 100 year

9 x 3 x 3
2 ft. weir
ID 11.2

12 x 6 x 3
4 ft. weir
ID 11.1

F9.0
45.0

GATE

4S BW

F0.0
15.0

BARN

+66 Soil

+32 Soil

F9.5
34.0

F0.0
15.0

F5.7
26.4

3P WW

4S BW

WOVEN WIRE

-1.0%

18" Wattles @ 299'

FEMA Flood Fringe 100 year

-3.0%

STA 43+50

STA 49+90

C0.0
17.0

C15.2
39.8

C33.6
67.4

C14.8
39.2

C17.8
43.7

1.25:1

C21.5
43.9

NO RISE SECTION
STA43+39 TO 73+70(E.O.P.)

NO RISE SECTION
STA43+39 TO 73+70(E.O.P.)

9 x 3 x 3
2 ft. weir
ID 11.3

HARTLEY, JOHN K.
DB 627 PG 287

HARTLEY, JOHN K.
DB 627 PG 287

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PROJECT REFERENCE NO.	SHEET NO.
11C.095101	12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MORETZ, JACOB&PHYLLIS DIXON
DB 156 PG 897

ROBY & MARIE MORETZ FAMILY TRUST,
DB 1125 PG 119

SOUTH FORK NEW RIVER

50+00

55+00

25'x 14'R/W Reduction
+36.0

14'x 25'R/W Reduction
+59.0

WOOD BRIDGE

Conc. WW

No Embankment Construction
Sta.53+00 To 70+00 Lt.

NO RISE SECTION
STA43+39 TO 73+70(E.O.P.)

10 x 5 x 3
2 ft. weir
ID 12.1

FEMA Floodway 100 year

F8.0
31.0

F2.2
19.4

F1.6
18.2

JB w/Slab Lid

4S BW

C0.0
17.0

18" CSP

24" CSP

-2.0%

-1.0%

-5.0%

1 - 18" Wattles @ 76'

3 - 18" Wattles @ 45'

TREE

C1.0
18.5

C3.6
22.4

9 x 3 x 3
2 ft. weir
ID 12.3

9 x 3 x 3
2 ft. weir
ID 12.4

GARDEN

WOVEN WIRE

+48 Gravel

STA 49+90

STA 56+30

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

9 x 3 x 3
2 ft. weir
ID 12.2

C6.8
27.2

+98

POND (DRY)

C3.5
22.3

Install Safety Fence

9 x 3 x 3
2 ft. weir
ID 12.5

FRITCHIE, DONALD & LEANNE
DB 490 PG 730

C34.0
68.0

INSTALL PSRM IN THE PROPOSED DITCH LINE.

HARTLEY, JOHN K.
DB 627 PG 287

FEMA Flood Fringe 100 year

NO RISE SECTION
STA43+39 TO 73+70(E.O.P.)

REVISIONS

8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
11C.095101	13
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

KOSTERMAN, CATHY
DB 1472 PG 061

60+00

25' x 16' R/W Reduction
+86.0

16' x 25' R/W Reduction
+16.0

SOUTH FORK NEW RIVER

STA 56+30

STA 62+70

CONC BRIDGE

GATE

Conc. WW

EIP

-1.0%

-0.5%

+1.0%

+5.0%

-3.0%

No Embankment Construction
Sta.53+00 to 70+00 Lt.

FEMA Floodway 100 year

FEMA Flood Fringe 100 year

3 - 18" Wattles @ 45'

2 - 18" Wattles @ 85'

REMOVE 18" CSP

24" CSP

0+00

+71 Gravel

+40 Gravel

C3.6
22.4

C16.4
33.5

C10.5
67.1

C1.0
18.5

C26.8
46.5

C63.3
108.1

C66.6
112.2

9 x 3 x 3
2 ft. weir
ID 13.1

9 x 3 x 3
2 ft. weir
ID 13.2

9 x 3 x 3
2 ft. weir
ID 13.3

9 x 3 x 3
2 ft. weir
ID 13.4

9 x 3 x 3
2 ft. weir
ID 13.5

W.L.B.

Install Safety Fence

NO RISE SECTION
STA43+39 TO 73+70(E.O.P.)

INSTALL PSRM IN THE PROPOSED DITCH LINE.

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

NO RISE SECTION
STA43+39 TO 73+70(E.O.P.)

+25

+00

2+00

McLENITHAN, PATRICK
DB 1521 PG 687

MORETZ, AUDNA AUSTIN
DB 1227 PG 515

MORETZ, AUDNA AUSTIN
155 • 730

Tie to Existing Sta.2+00

I' STREAM Jurisdictional

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

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PROJECT REFERENCE NO.	SHEET NO.
11C.095101	14
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

65+00

MEAT CAMP CREEK

JS

SOUTH FORK NEW RIVER

STA 62+70

STA 69+10

No Embankment Construction
Sta.53+00 to 70+00 Lt.

+19

+93

REMOVE 15" CSP

-1.0%

-1.0%

+2.0%

+4.0%

FEMA Floodway 100 year

18" Wattle @ 8'

2 - 18" Wattles @ 57'

JS BW

24" CSP

24" CSP

15" CSP

C4.3
23.5

C3.9
22.9

C6.8
27.2

C3.3
22.0

C2.8
21.2

C8.0
29.0

C17.8
43.7

+36 Soil

+90 Soil

9 x 3 x 3
2 ft. weir
ID 14.1

9 x 3 x 3
2 ft. weir
ID 14.2

9 x 3 x 3
2 ft. weir
ID 14.3

9 x 3 x 3
2 ft. weir
ID 14.4

9 x 3 x 3
2 ft. weir
ID 14.5

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

FEMA Flood Fringe (100 yr)

NO RISE SECTION
STA43+39 TO 73+70(E.O.P.)

MORETZ, AUDNA AUSTIN
DB 1227 PG 515

MORETZ, AUDNA AUSTIN
155 • 730

MORETZ, ETHEL
056 • 270

+80

09-JAN-2015 09:51
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PROJECT REFERENCE NO.	SHEET NO.
11C.095101	15
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

09-JAN-2015 09:51
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$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
IIC.095101 (CONST)	SHEET 1 OF 2
R/W SHEET NO.	18
ROADWAY DESIGN ENGINEER DATE: 8-01-14	HYDRAULICS ENGINEER

8+00

+86 Gravel

9+00

10+00

50'

8'

36" CSP

REMOVE

R/W

R/W

SR 1331B ROBY GREENE RD.

WET PIPE SURVEY STA. 9+30

STREAM NAME: Un-named tributary to South Fork of the New River (INDEX 10-1-(1)

RATING: WS-IV;CA;+ 2ft Stream

EXISTING PIPE SIZE: 34" x 18"

NEW PIPE SIZE: 60" x 36"

PIPE TO BE LAID ON A 120° SKEW WITH 6% FALL

50'

6' 9' 9' 6'

REVISIONS

8/17/99

13-AUG-2014 09:40
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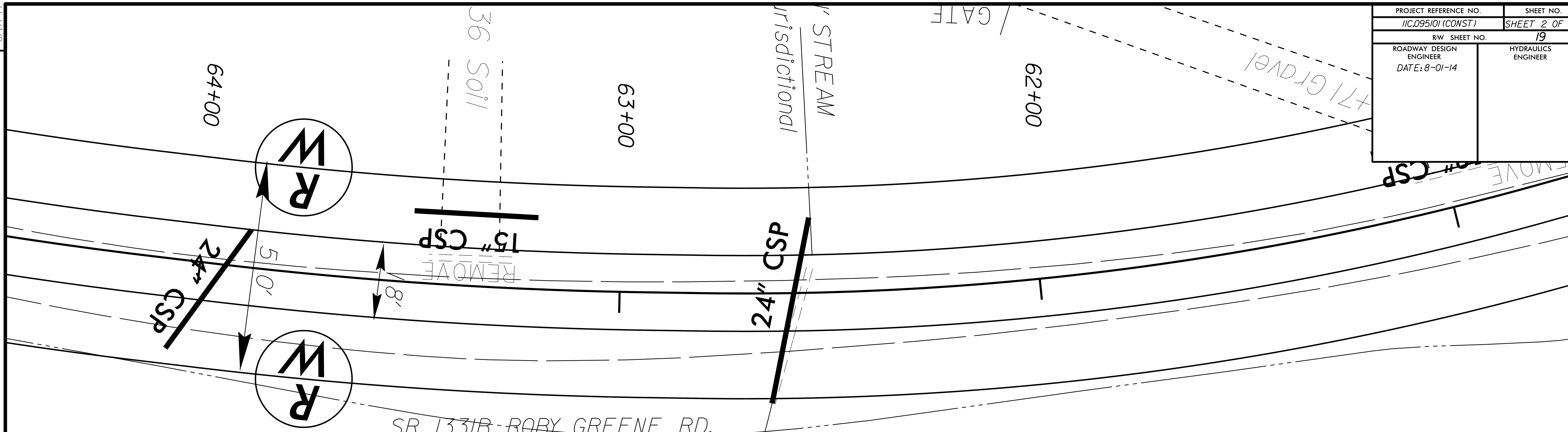
PROJECT REFERENCE NO.	SHEET NO.
11C.095101 (CONST)	SHEET 2 OF 2
R/W SHEET NO.	19
ROADWAY DESIGN ENGINEER DATE: 8-01-14	HYDRAULICS ENGINEER



SR 1331B ROBY GREENE RD.

WET PIPE SURVEY STA. 62+59

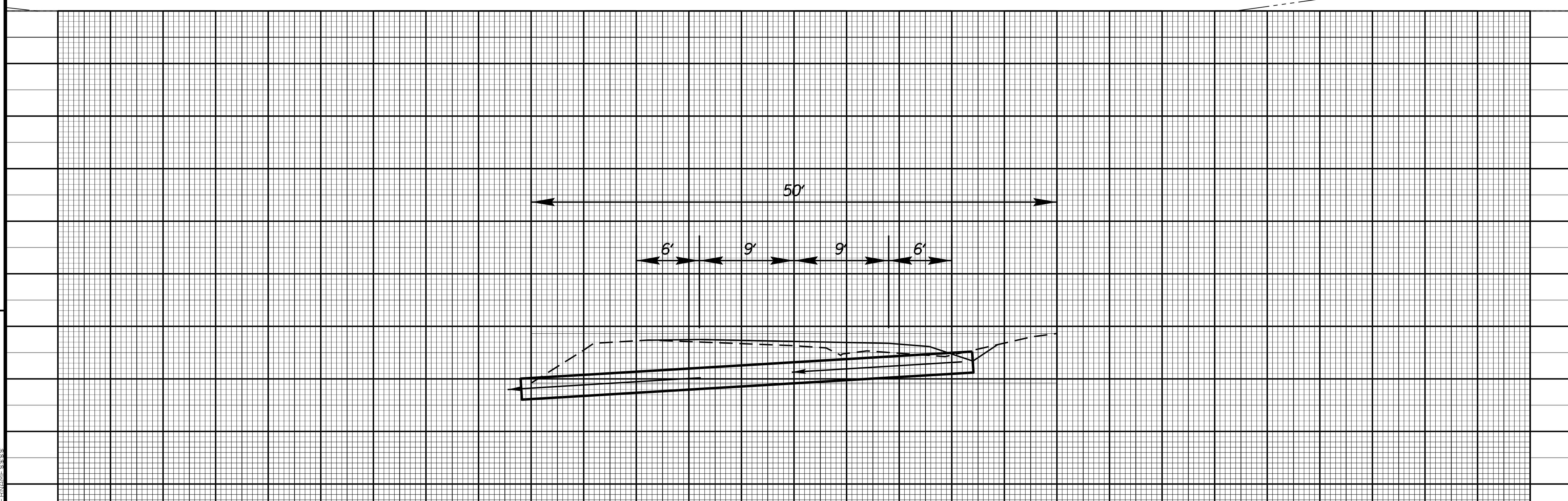
STREAM NAME: Un-named tributary to South Fork of the New River (INDEX 10-1-(1))

RATING: WS-IV;CA;+ 1ft Stream

EXISTING PIPE SIZE: 33' x 18"

NEW PIPE SIZE: 45' x 24"

PIPE TO BE LAID ON A 100° SKEW WITH 6% FALL



REVISIONS

8/17/99

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