

PREDESIGN-PRESURVEY REPORT

Project# _____
TIP# _____
Let Date _____
WBS# 7BP.6.R.77

County ROBESON

Bridge# 770433
Road# SR 1160 (ADDISON FRAM DR)
Stream BACK SWAMP

Type Of Request: POC Force Account TIP NCMA

Date 6/6/16 Name MATTHEW MACON Assigned To _____

Checked By _____

Prior Survey Date NO (attach copy of prior survey)

Study By Scour Section NO

Flood Zone YES Detail Study REDLINEATION Date 1/19/2005 Panel# 9351

B.M. Info _____

Quad Map MCDONALD Drainage Area 22.9 From STREAM STATS
Q25 1634 cfs Q50 2022 cfs Q100 2441 cfs Method USGS RUAL REGRESSION

EXISTING BRIDGE INFORMATION

Location 0.3 MI. SW. JCT. SR 1159

Average Daily Traffic 760

Length 70 FT Bed- To Crown 13 FT Water Depth 4 FT

Type Structure RC FLOOR ON TIMBER JOISTS BMD-10 MR

Type Spans 1@ 17'10" 1@ 17'1" 1@ 16'11" 1@ 18'

Upstream Structure 770434- 1@ 25's; 1@ 25's; 1@ 25's

Location SR 1053 0.4 MI. N of JCT SR 1160 (ADDISON FRAM DR)

Bed- To Crown 10 FT Prior Survey _____

Downstream Structure 770172- 1@ 25

Location FLOYD ST. 0.1 MI. S JCT. CHURCH ST.

Bed- To Crown 8 FT Prior Survey _____

SCS Watershed _____

ENVIRONMENTAL

Trout Stream NO Anadromous Fish NO Primary Nursery Area NO

High Quality Waters NO Nutrient Sensitive Waters NO

Near Water Supply Intake NO CAMA County NO

Stream Classification WS-TV; SW

DENR River Basin Info. LOWER PEE DEE Lumber

office estimated Min brg length 90'



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION TEMP REPAIRS ENCASED PILES
PRIORITY MAINTENANCE ISSUED

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY ROBESON

BRIDGE NUMBER 770433

INSPECTION CYCLE 2 YRS

ROUTE SR1160

ACROSS BACK SWAMP

M.P. 0

LOCATION 0.3 MI. SW. JCT. SR1169

SUPERSTRUCTURE REINFORCED CONCRETE FLOOR ON TIMBER JOISTS; BMD-10 MR

SUBSTRUCTURE E.BTS&INT.BTS:TIMBER CAP/5 TIMBER PILES@VAR.CTS.

SPANS 1@17'10";1@17'1";1@16'11";1@18'

LONGITUDE 79° 9' 58.23"

LATITUDE 34° 36' 48.34"

INSPECTION DATE 04/08/2014

PRESENT CONDITION FAIR

PRESENT POSTING SV 20 TTST 29

SV 20 TTST 29

PROPOSED POSTING

OTHER SIGNS PRESENT 4 DELINEATORS



LOOKING NORTH (ADDISON TRAM ROAD)

Fracture Critical	No
Temporary Shoring	No
Scour Critical	No
Scour POA	Yes

SIGN NOTICE ISSUED FOR	NUMBERED REQUIRED
No WEIGHT LIMIT	
No DELINEATORS	
No NARROW BRIDGE	
No ONE LANE BRIDGE	
No LOW CLEARANCE	

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 05/19/2014

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
ROBESON	6	1	770433	70	FEET
ROUTE CARRIED :		FEATURE INTERSECTED :			
SR1180		BACK SWAMP			
LOCATED :		BRIDGE NAME :		CITY :	
.3 MI. SW OF JCT. SR1159					
FUNC. CLASS :		SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09		NFA	NFA	760 2005	LT 233 RT 233
BUILT :		BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1970		BML			Unknown
REHAB :		BY :	PROJ :	ALIGNMENT :	SKEW :
		DBM		TAN	121
LANES :		ON 2		UNDER 0	
NAVIGATION :		HT. CRN. TO BED :		WATER DEPTH :	
VC 0 FT HC 0 FT		13 FT		4 FT	
SUPERSTRUCTURE : REINFORCED CONCRETE FLOOR ON TIMBER JOISTS; BMD-10 MR					
SUBSTRUCTURE : E.B.TS&INT.BTS;TIMBER CAP/5 TIMBER PILES@VAR.CTS.					
SPANS : 1@17'10";1@17'1";1@18'11";1@18'					
BEAMS OR GIRDERS : 22 LINES 6X12 TIMBER JOISTS @ VAR.CENTERS					
FLOOR :		ENCROACHMENT :		DECK (OUT TO OUT) :	
5RC/NO AWS				28.25 FT	
CLEAR ROADWAY :		BETWEEN RAILS :		SIDEWALK OR CURB :	
27.833 FT		28.667 FT		LT .417 FT RT .417 FT	
VERT.CLOVER : 999.9 FT					
INV.RTG. :		OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST 29 DATE 06/23/2010
HS-1		HS-1	Jalst	SV 20	
SYSTEM :		GREEN LINE ROUTE			
Secondary S.R. Route		N			
UNDER ROUTES AND CLEARANCES					

REMARKS :

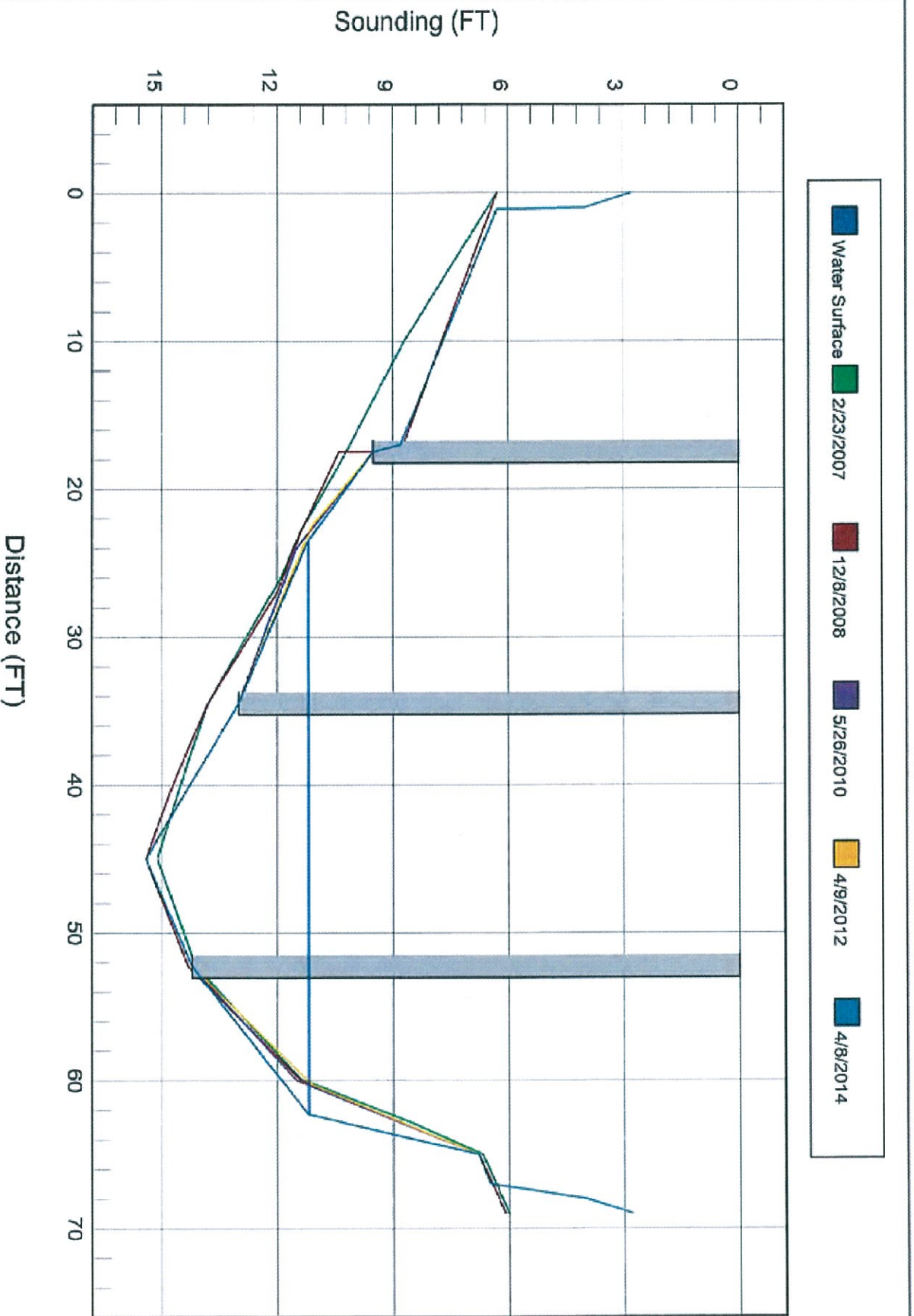
Bridge: 770433

County: ROBESON

Date: 04/08/2014

Top of Rail = 0 FT (Sounding)

STREAMBED PROFILE (Downstream)



$$13 \times 1.5 = 19.5 \times 2 = 39 + 20 + 30 = 89$$

UPSTREAM



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION PM ISSUED: ON PPC CHANNELS
TEMPORARY REPAIRS: ON PPC CHANNELS

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY ROBESON BRIDGE NUMBER 770434 INSPECTION CYCLE 2 YRS
ROUTE SR1003 ACROSS BACK SWAMP M.P. 0

LOCATION 0.4 MI.N.JCT.SR1160

SUPERSTRUCTURE PRESTR.CONC.CHANNELS,STD.BMD-13

SUBSTRUCTURE E.BTS&INT.BTS:PRESTR.CONC.CAPS/TIMBER PILES@5'8CTS.

SPANS 1@25'5;1@25';1@25'5

LONGITUDE 79° 11' 33.29"

LATITUDE 34° 37' 13.15"

INSPECTION DATE 04/08/2014

PRESENT CONDITION FAIR

PRESENT POSTING SV 21 TTST 28

SV 24 TTST 32

PROPOSED POSTING

OTHER SIGNS PRESENT NONE



LOOKING NORTH (N. CHICKEN ROAD)

Fracture Critical	<u>No</u>
Temporary Shoring	<u>No</u>
Scour Critical	<u>No</u>
Scour POA	<u>No</u>

SIGN NOTICE
ISSUED FOR

NUMBERED
REQUIRED

<u>No</u>	WEIGHT LIMIT	<u> </u>
<u>No</u>	DELINEATORS	<u> </u>
<u>No</u>	NARROW BRIDGE	<u> </u>
<u>No</u>	ONE LANE BRIDGE	<u> </u>
<u>No</u>	LOW CLEARANCE	<u> </u>

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 05/19/2014

COUNTY : ROBESON DIVISION : 6 DISTRICT : 1 STRUCTURE NUMBER : 770434 LENGTH : 76 FEET

ROUTE CARRIED : SR1003 FEATURE INTERSECTED : BACK SWAMP

LOCATED : 0.4 MI.N. OF JCT.SR1160 BRIDGE NAME : CITY :

FUNC. CLASS : 08 SYST.ON : NFA SYST.UNDER : NFA ADT & YR : 3200 2012 RAIL TYPE : LT 233 RT 233

BUILT : 1970 BY : SHC PROJ : 9363 FED.AID PROJ : DESIGN LOAD : H 15

REHAB : BY : DBM PROJ : ALIGNMENT : TAN. SKEW : 90 LANES : ON 2 UNDER 0

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 10 FT WATER DEPTH : 2 FT

SUPERSTRUCTURE : PRESTR.CONC.CHANNELS,STD.BMD-13

SUBSTRUCTURE : E.BTS&INT.BTS:PRESTR.CONC.CAPS/TIMBER PILES@5'CTS.

SPANS : 1@25'5;1@25';1@25'5

BEAMS OR GIRDERS : 12 PRESTRESSED CONCRETE CHANNEL SECTIONS

FLOOR : PPC.CH./1AWS ENCROACHMENT : DECK (CUT TO OUT) : 30.504 FT

CLEAR ROADWAY : 29.083 FT BETWEEN RAILS : 30 FT SIDEWALK OR CURB : LT 4685 FT RT 4585 FT

VERT.CLOVER : 999.0 FT

INV.RTG. : HS-1 OPER.TG. : HS-1 CONTR.MEMBER : BMD 13-30A POSTED : SV 24 TTST 32 DATE : 06/28/2012

SYSTEM : Secondary S.R. Route GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

REMARKS :

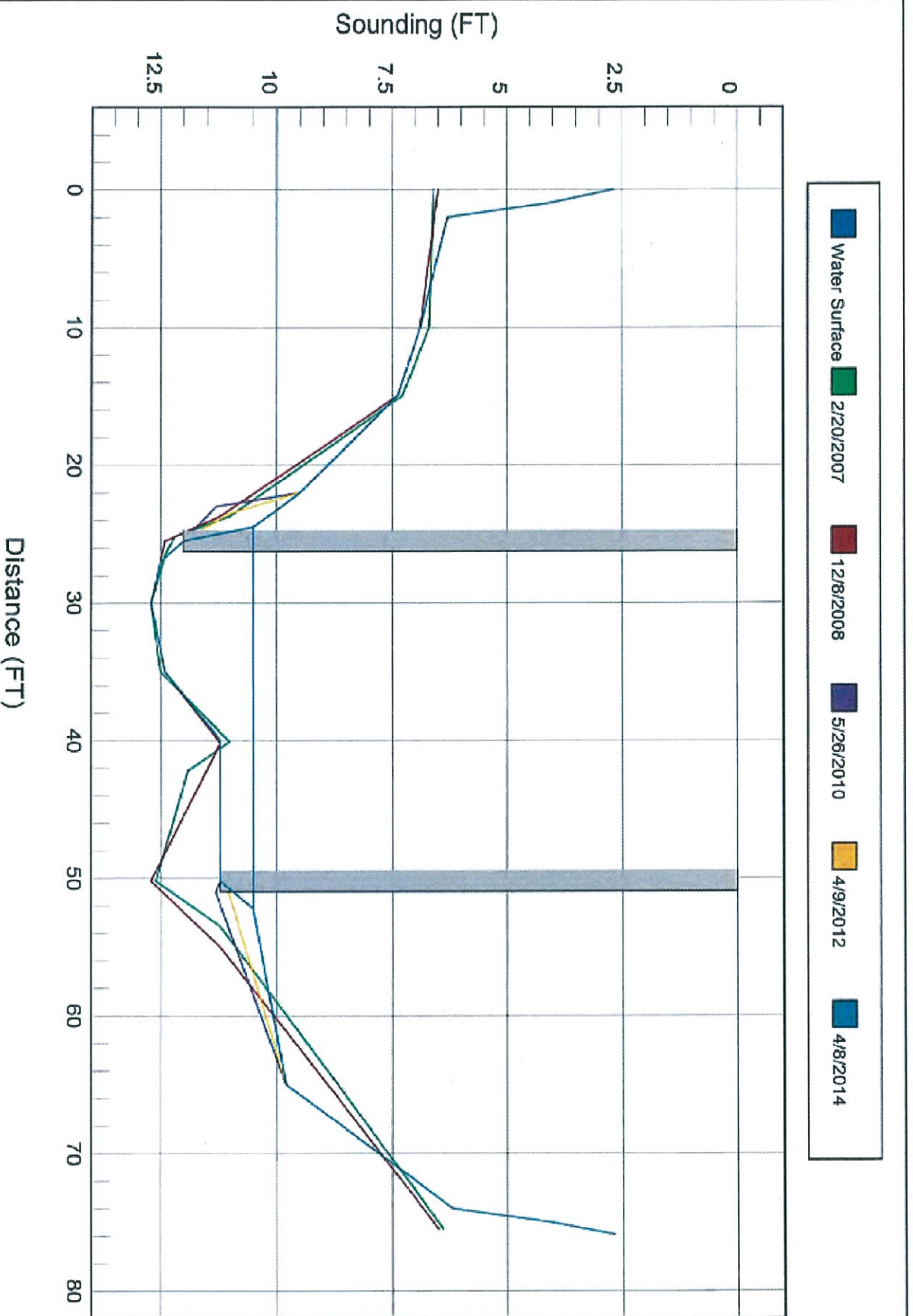
Bridge: 770434

County ROBESON

Date: 04/08/2014

Top of Rail = 0 FT (Sounding)

STREAMBED PROFILE (Downstream)



DOWNSTREAM



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION SIGN NOTICE - 2 DELINEATORS
TOWN OF FAIRMONT

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection - Municipal

COUNTY ROBESON BRIDGE NUMBER 770176 INSPECTION CYCLE 0 YRS
ROUTE FLOYD STREET ACROSS PITTMAN MILL BRANCH M.P. 0

LOCATION 0.1 MI.S.JCT.CHURCH ST.

SUPERSTRUCTURE PRESTRESSED CONCRETE CHANNELS (LOW WATER TYPE)

SUBSTRUCTURE E.BTS: RC CAPS/TIMBER PILES

SPANS 1 @ 25'

LONGITUDE 79° 7' 0.09"

LATITUDE 34° 29' 36.55"

INSPECTION DATE 01/09/2014

PRESENT CONDITION FAIR

PRESENT POSTING N

NOT POSTED

PROPOSED POSTING

OTHER SIGNS PRESENT 2 NARROW BRIDGE, 2 DELINEATORS



LOOKING NORTH

Fracture Critical	<u>No</u>
Temporary Shoring	<u>No</u>
Scour Critical	<u>No</u>
Scour POA	<u>Yes</u>

SIGN NOTICE ISSUED FOR	NUMBERED REQUIRED
<u>No</u> WEIGHT LIMIT	
<u>Yes</u> DELINEATORS	<u>2</u>
<u>No</u> NARROW BRIDGE	
<u>No</u> ONE LANE BRIDGE	
<u>No</u> LOW CLEARANCE	

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 03/14/2014

COUNTY : ROBESON DIVISION : 6 DISTRICT : 1 STRUCTURE NUMBER : 770176 LENGTH : 25 FEET

ROUTE CARRIED : FLOYD STREET FEATURE INTERSECTED : PITTMAN MILL BRANCH

LOCATED : 0.1 MI.S.JCT.CHURCH ST. BRIDGE NAME : CITY : FAIRMONT

FUNC. CLASS : 19 SYST.ON : NFA SYST.UNDER : NFA ADT & YR : 150 1991 RAIL TYPE : LT 0 RT 0

BUILT : 1950 BY : PROJ : FED.AID PROJ : DESIGN LOAD : Unknown

REHAB : BY : PROJ : ALIGNMENT : TAN SKEW : 90 LANES : ON 2 UNDER 0

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 8 FT WATER DEPTH : 2 FT

SUPERSTRUCTURE : PRESTRESSED CONCRETE CHANNELS (LOW WATER TYPE)

SUBSTRUCTURE : E.BTS: RC CAPS/TIMBER PILES

SPANS : 1 @ 25'

BEAMS OR GIRDERS : 10 PRESTRESSED CONCRETE CHANNEL SECTIONS

FLOOR : PPC.CH/2.5 AWS ENCROACHMENT : DECK (OUT TO OUT) : 25.917 FT

CLEAR ROADWAY : 24.5 FT BETWEEN RAILS : 0 FT SIDEWALK OR CURB : LT .7 FT RT .7 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-21 OPE.RTG. : HS-36 CONTR.MEMBER : PILE,TIM. POSTED : SV TTST DATE 03/08/2012

SYSTEM : Non-System Municipal roads or other non-system not in contact with State System GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

REMARKS :

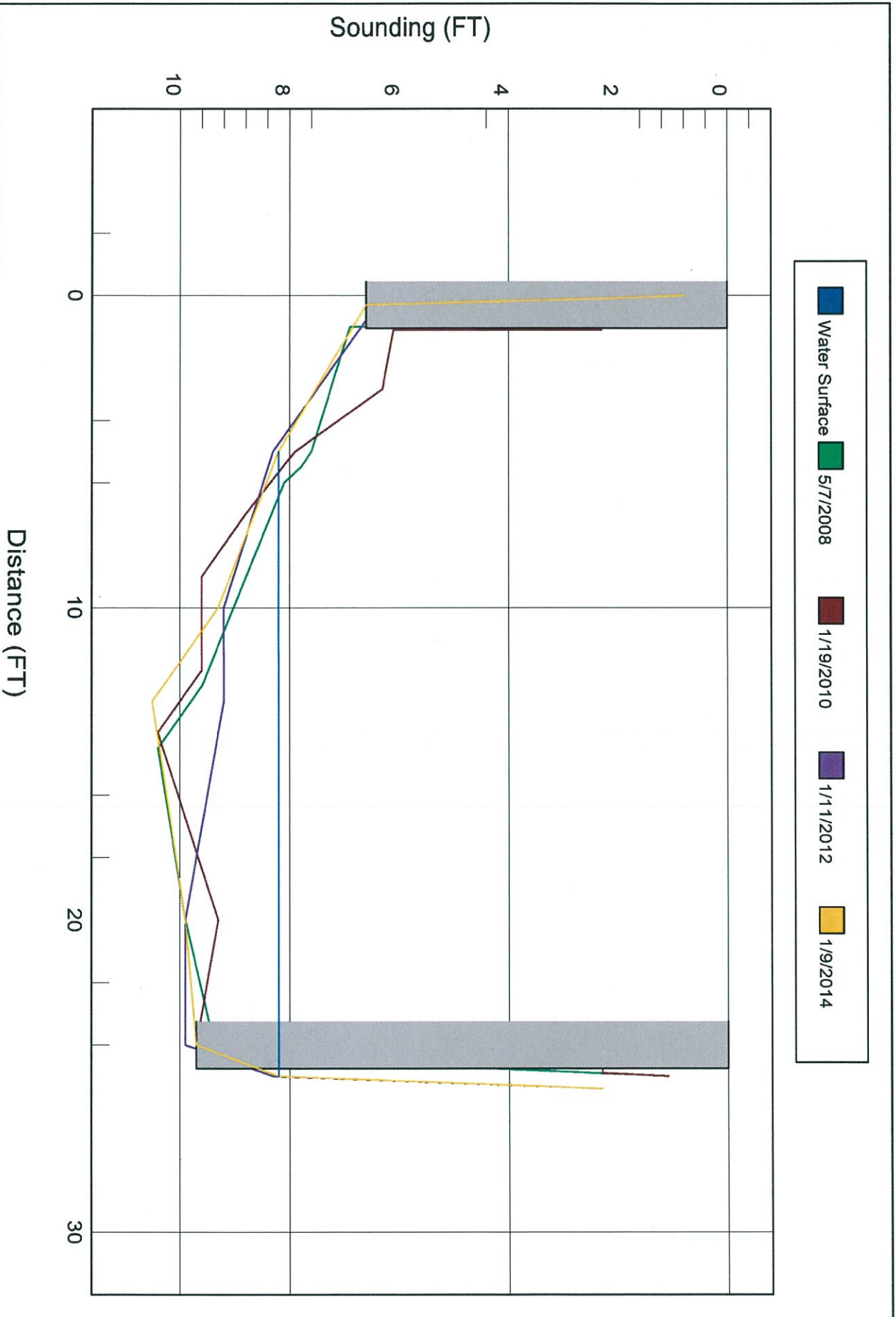
Bridge: 770176

County ROBESON

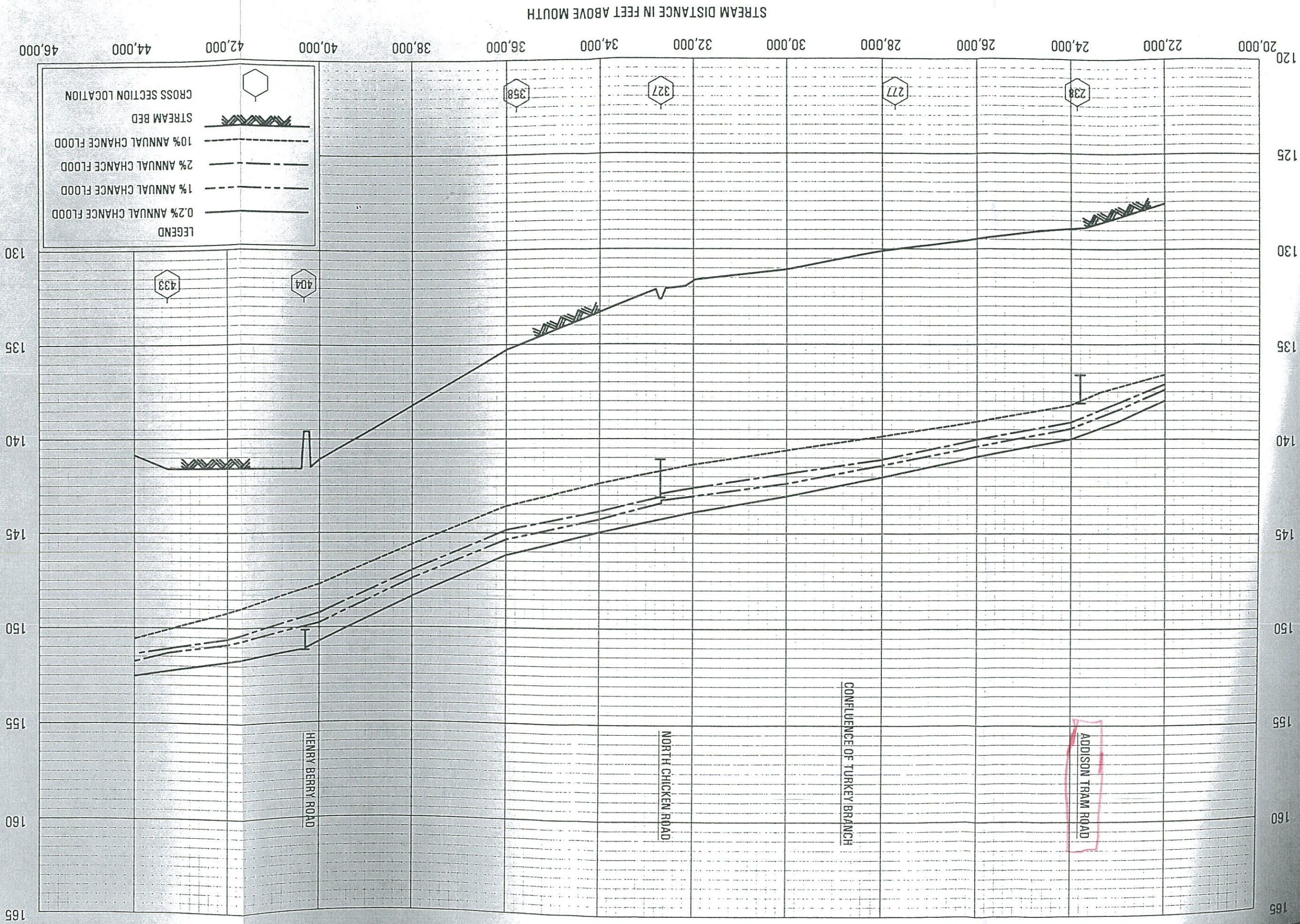
Date: 01/09/2014

Top of Rail = 0 FT (Sounding)

STREAMBED PROFILE (Downstream)



ELEVATION IN FEET (NAVD)



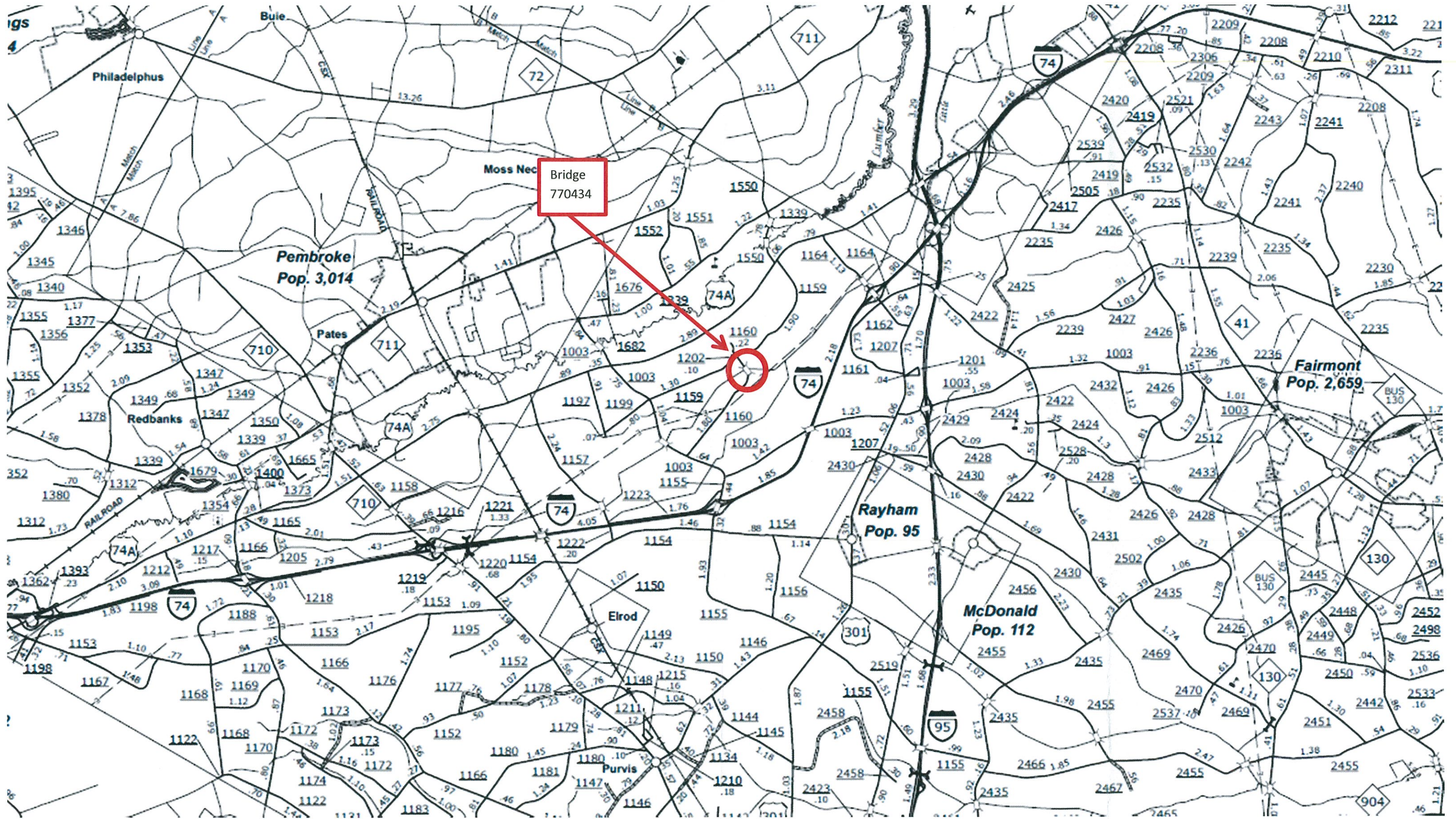
STREAM DISTANCE IN FEET ABOVE MOUTH

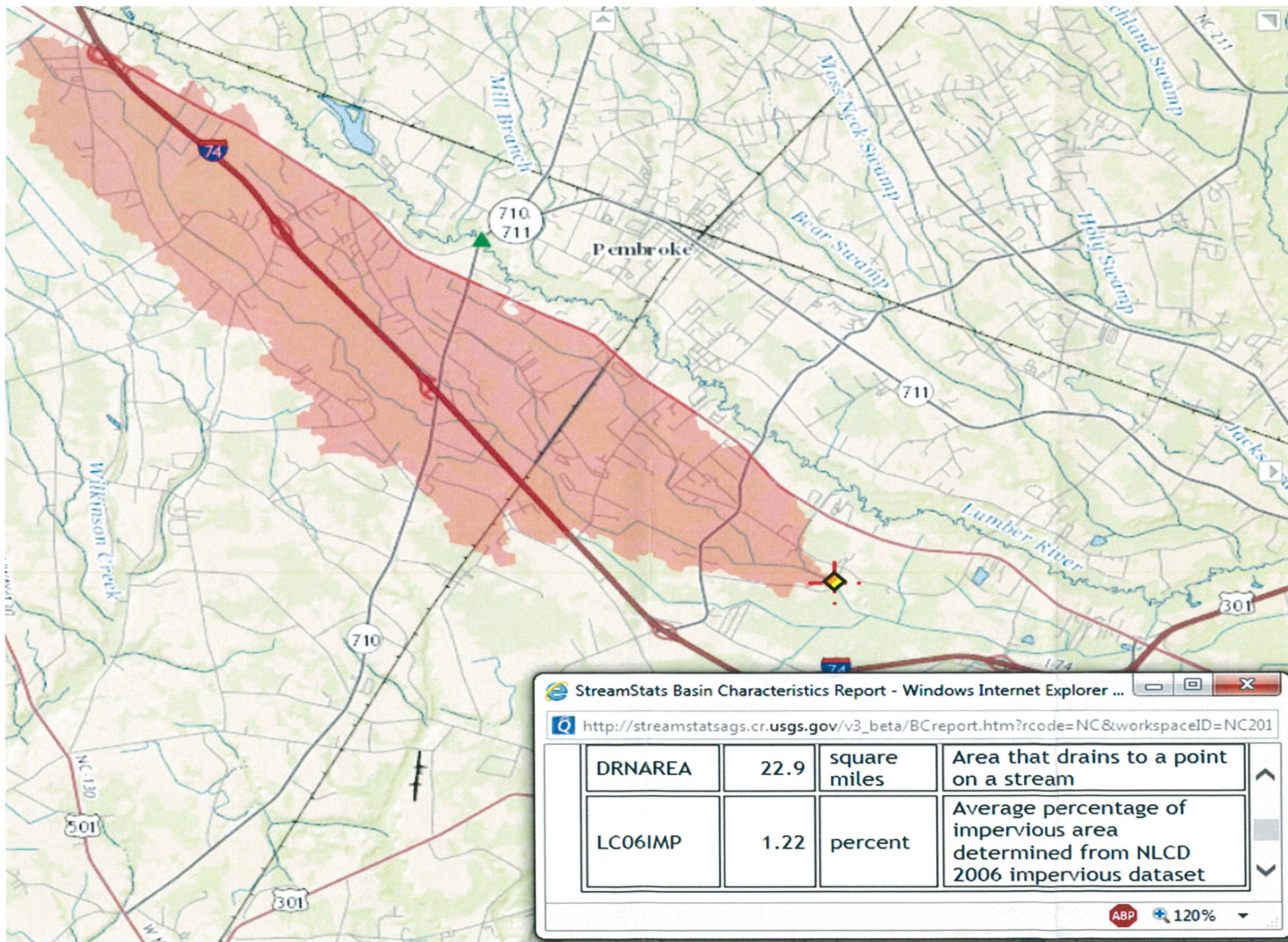
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION

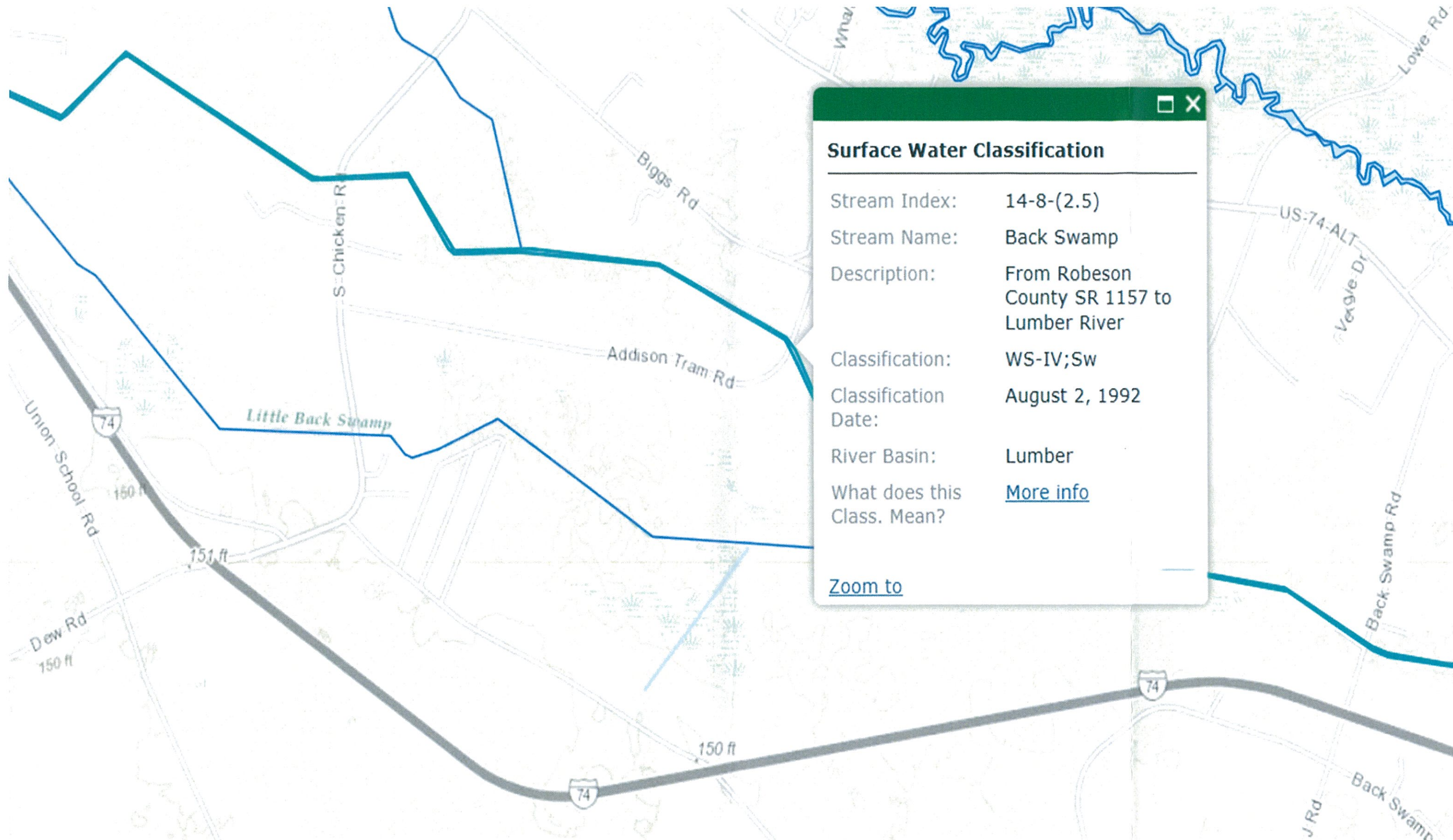
FEDERAL EMERGENCY MANAGEMENT AGENCY
ROBESON COUNTY, NC
AND INCORPORATED AREAS

FLOOD PROFILES
BACK SWAMP

02P







Surface Water Classification

Stream Index: 14-8-(2.5)
Stream Name: Back Swamp
Description: From Robeson
County SR 1157 to
Lumber River
Classification: WS-IV;Sw
Classification
Date: August 2, 1992
River Basin: Lumber
What does this
Class. Mean? [More info](#)

[Zoom to](#)

