

210
~~Min bvg = 55'~~

office estimate min. bridge = 65'
possible 33'9" x 9'1" if FEMA M.O.A works out.

PREDESIGN-PRESURVEY REPORT

Project# _____
TIP# _____
Let Date _____
WBS# _____

County Columbus

Bridge# 230 308
Road# SR 1005 (Peacock Rd)
Stream Soules Swamp

Type Of Request: POC Force Account TIP NCMA

Date _____ Name _____ Assigned To _____

Checked By _____

Prior Survey Date _____ (attach copy of prior survey)

Study By Scour Section _____

Flood Zone Yes Detail Study Limited Date June 2, 2006 Panel# 0260

B.M. Info _____

Quad Map Chad bourn Drainage Area 2.3 sq mi From USGS, NC stream stat.
Q25 410 Q50 510 Q100 625 Method USGS-Rural regression eqn
Region 4, Coastal plain
FIS Q100 = 750 cfs

EXISTING BRIDGE INFORMATION

Location 0.2 mi S Jct US 74 Bus

Average Daily Traffic 2000 (2009)

Length 37' Bed- To Crown 10' Water Depth 1'

Type Structure RC Floor

Type Spans 2 @ 18'6"

Upstream Structure N/A

Location _____

Bed- To Crown _____ Prior Survey _____

Downstream Structure Brg # 144 (SR 1429)

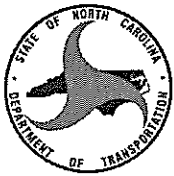
Location 0.4 mi W Jct SR 1435

Bed- To Crown 8' Prior Survey _____

SCS Watershed _____

ENVIRONMENTAL

Trout Stream No Anadromous Fish _____ Primary Nursery Area No
High Quality Waters No Nutrient Sensitive Waters No
Near Water Supply Intake No CAMA County No
Stream Classification C, SW
DENR River Basin Info. Lumber



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION TEMP REPAIRS: ENCASED PILES AT BENT 1

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY COLUMBUS BRIDGE NUMBER 230308 INSPECTION CYCLE 2 YRS
ROUTE SR1005 ACROSS CREEK M.P. 0

LOCATION 0.2 MI.S.US74BUS.

SUPERSTRUCTURE RC FLOOR/I-BEAMS

SUBSTRUCTURE EBTS&IBT:RC CAPS/TIMBER PILES @ 7'6 CTS.

SPANS 2@18'6

LONGITUDE 78° 47' 57.5"

LATITUDE 34° 19' 31.2"

PRESENT CONDITION FAIR

INVENTORY RATING

INSPECTION DATE 01/25/2011

OPERATING RATING

PRESENT POSTING SV 18 TTST 26 SV 18 TTST 26

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT 4 DELINEATORS



LOOKING NORTH (PEACOCK ROAD)

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: 02/11/2011

COUNTY : COLUMBUS		DIV : 6		DIST : 3		STRUCTURE NUMBER : 230308		LENGTH : 37 FEET	
ROUTE CARRIED : SR1005				FEATURE INTERSECTED : CREEK					
LOCATED : 0.2 MI.S.US74BUS.				BRIDGE NAME :				CITY :	
FUNC. CLASS : 08		SYST.ON : NFA		SYST.UNDER : NFA		ADT & YR : 2000 2009		RAIL TYPE : LT 241 RT 241	
BUILT : 1951		BY : BMU		PROJ :		FED.AID PROJ :		DESIGN LOAD : Other or Unknown	
REHAB :		BY :		PROJ :		ALIGNMENT : TAN.		SKEW : 90	
								LANES : ON 2 UNDER	
NAVIGATION : VC 0.0 FT HC 0.0 FT				HT. CRN. TO BED : 10 FT				WATER DEPTH : 1 FT	
SUPERSTRUCTURE : RC FLOOR/I-BEAMS									
SUBSTRUCTURE : EBTS&IBT:RC CAPS/TIMBER PILES @ 7'6 CTS.									
SPANS : 2@18'6									
BEAMS OR GIRDERS : 12 LINES W12X16.5 I-BEAMS @ 2'2.5 CENTERS									
FLOOR : 5 RC/NO AWS		ENCROACHMENT :		DECK (OUT TO OUT) : 25.3 FT					
CLEAR ROADWAY : 24.0 FT		BETWEEN RAILS : 25.5 FT		SIDEWALK OR CURB : LT 0.8 FT RT 0.8 FT					
VERT.CL.OVER : 99 FT 99 IN		VERT.CL.UNDER : 00 FT 00 IN		HOR.CL.UNDER : 0.0 FT					
INV.RTG. : HS-9		OPE.RTG. : HS-16		CONTR.MEMBER : BEAM INT.		POSTED : SV 18 TTST 26		DATE 09/04/2008	
SYSTEM : Secondary S.R. Route				GREEN LINE ROUTE : N					
2ND OPENING :		3RD OPENING :		4TH OPENING :		5TH OPENING :			
REMARKS :									

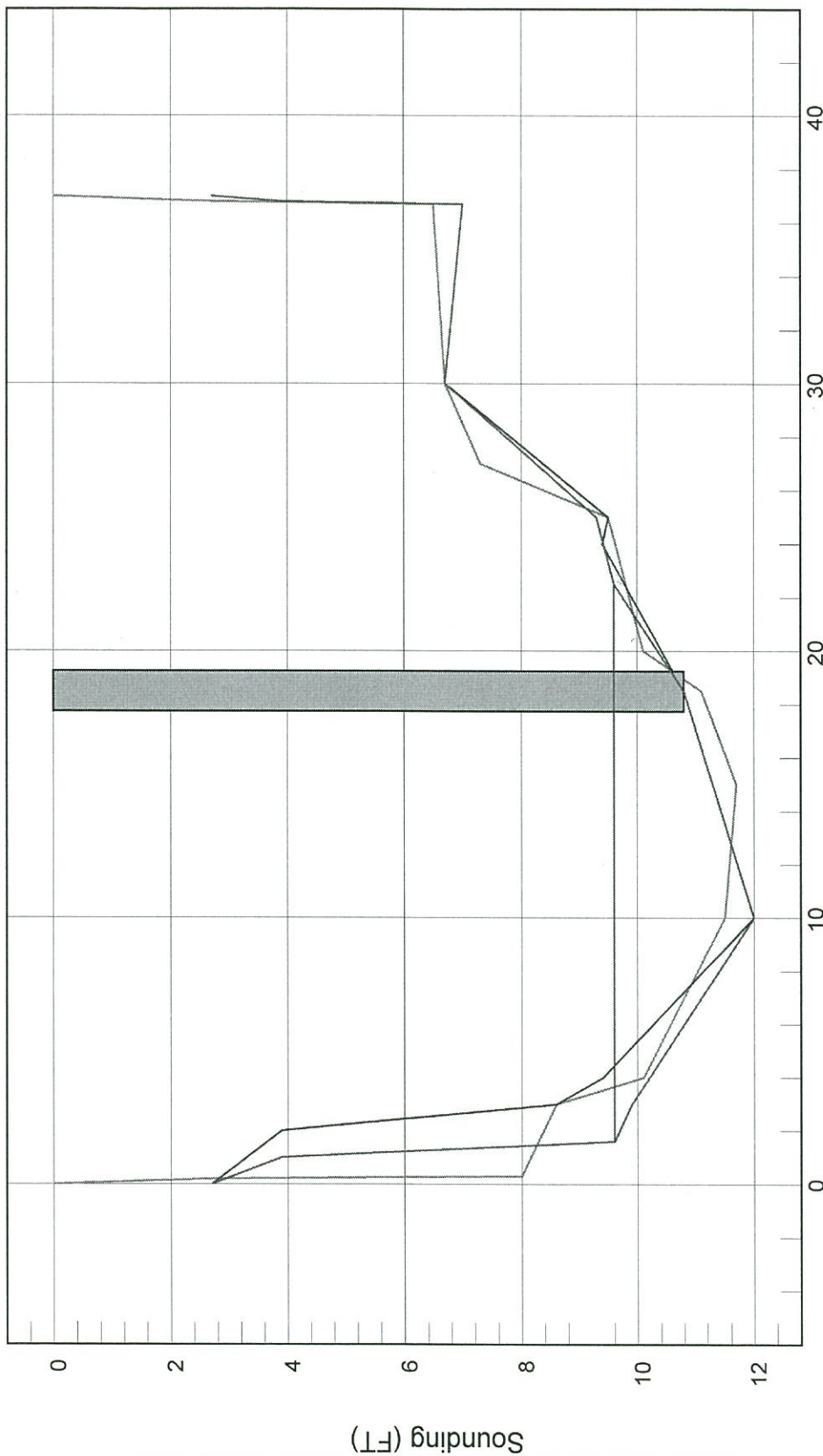
Bridge: 230308

County COLUMBUS

Date: 01/25/2011

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Distance (FT) stream width = 20'

$$12' - 3' = 9' \times 1.5 = 13.5$$

~~$$27 + 20 + 10 = 67 \text{ say } 65'$$~~
$$13.5 + 20 + 20 = 53.5$$

Section 5.0 – Engineering Methods

Table 7—Summary of Discharges

Flooding Source	Location	Drainage Area (square miles)	Discharges (cfs)			
			10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Soules Swamp (continued)	Approximately 1,300 feet downstream of Peacock Road	4.75	*	*	1,060	*
	Approximately 1,300 feet downstream of Railroad	1.97	*	*	640	*
	Approximately 700 feet upstream of Railroad	0.80	*	*	380	*
Spring Branch into Bogue Swamp	Approximately 10,000 feet downstream of Old Northeast Road	2.38	*	*	720	*
	Approximately 6,040 feet downstream of Old Northeast Road	2.21	*	*	680	*
	Approximately 3,500 feet downstream of Old Northeast Road	0.96	*	*	460	*
Spring Branch into Horsepen Branch	Confluence with Horsepen Branch	5.5	*	*	470	*
Sweet Water Branch	Approximately 2,800 feet downstream of Sellers Town Road	1.90	*	*	630	*
	Approximately 150 feet upstream of Sellers Town Road	0.99	*	*	430	*
Tailor Creek	At the confluence with Johns Branch	6.3	*	*	1,331	*
	Approximately 0.22 mile upstream of the confluence with Johns Branch	6.2	*	*	1,319	*

Section 5.0 – Engineering Methods

Table 10—Limited Detailed Flood Hazard Data

Cross Section ¹	Stream Station ²	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width ³ (feet)
SOULES SWAMP (continued)				
526	52,607	1,170	73.0	209 / 204
528	52,771	1,170	73.0	368 / 106
530	52,960	1,170	73.1	393 / 92
534	53,420	1,170	73.3	306 / 101
538	53,795	1,170	73.6	230 / 53
542	54,151	1,170	74.0	269 / 62
546	54,614	1,060	74.4	176 / 97
548	54,801	1,060	74.6	91 / 231
550	55,016	1,060	74.8	220 / 115
553	55,330	1,060	75.1	158 / 156
556	55,630	1,060	75.4	301 / 8
559	55,948	1,060	75.9	225 / 115
563	56,286	1,060	76.4	88 / 219
566	56,622	1,060	76.9	54 / 227
570	57,010	1,060	77.3	12 / 202
574	57,359	1,060	77.6	109 / 214
577	57,741	1,060	78.0	76 / 143
582	58,201	1,060	78.6	263 / 65
586	58,583	1,060	79.0	330 / 164
587	58,691	1,060	80.1	60 / 60
588	58,846	1,060	80.2	38 / 232
590	58,983	1,060	80.2	55 / 229
592	59,239	750	80.3	318 / 186
595	59,473	750	80.3	375 / 64
597	59,696	750	80.3	249 / 122
601	60,062	750	80.4	210 / 65
602	60,242	750	80.4	18 / 19
603	60,347	750	81.0	18 / 19
605	60,506	700	81.4	156 / 43
607	60,656	700	81.4	122 / 52
610	61,030	700	81.6	143 / 13
614	61,386	700	81.8	139 / 116
617	61,659	700	82.0	70 / 9
620	61,981	660	82.3	100 / 68
622	62,241	660	82.4	43 / 13
626	62,561	640	83.1	49 / 15
629	62,885	640	83.6	62 / 8
631	63,095	640	84.0	65 / 13
634	63,375	640	84.4	43 / 14
637	63,706	640	84.9	10 / 38
641	64,071	640	85.7	14 / 34
644	64,377	600	86.3	56 / 11
646	64,639	600	86.8	64 / 19

2 060 000 FEET

78°48'0"

703 000 M

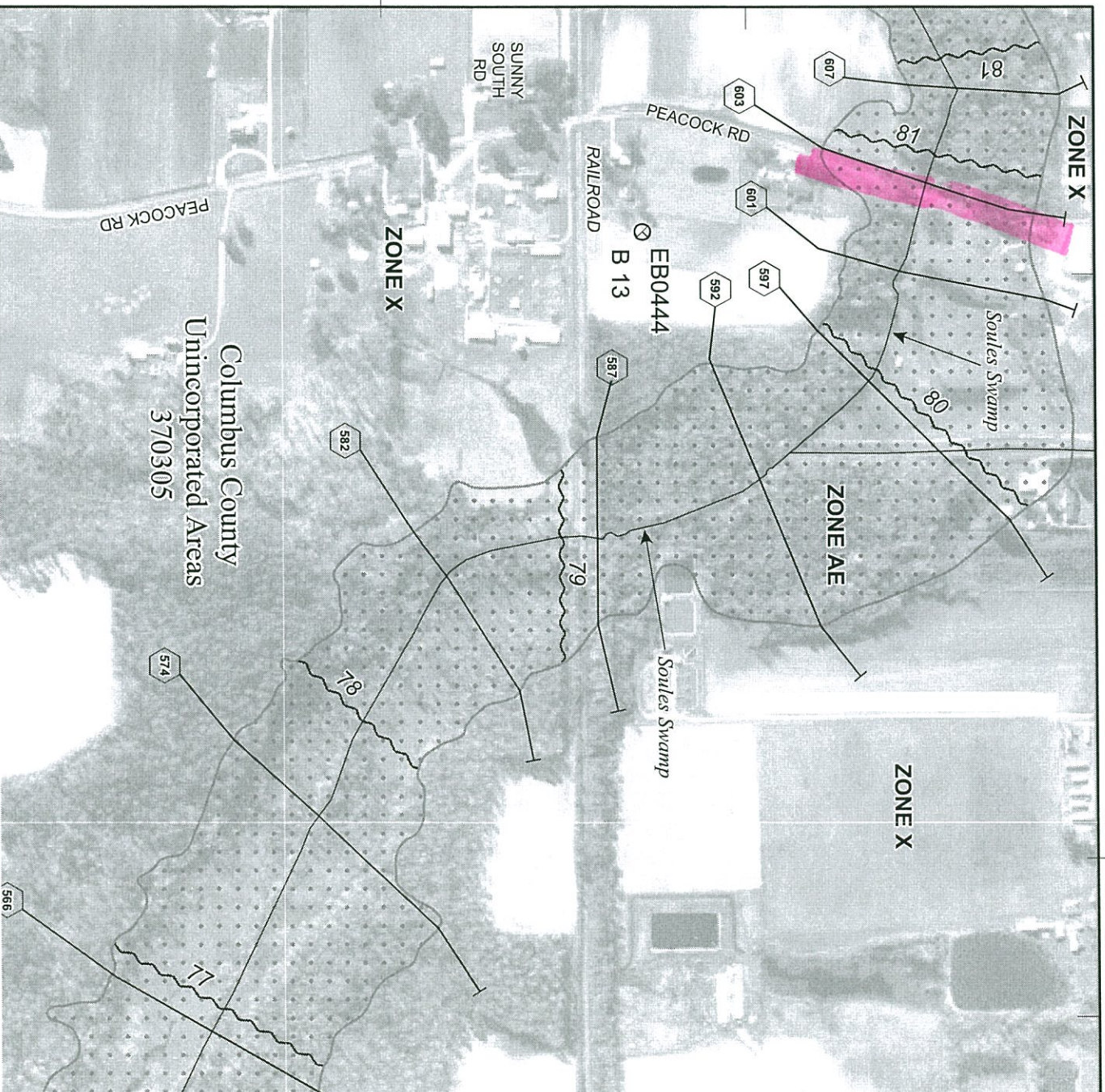
78°47'30"

210 000 FEET

34°19'30"

3800 000 M

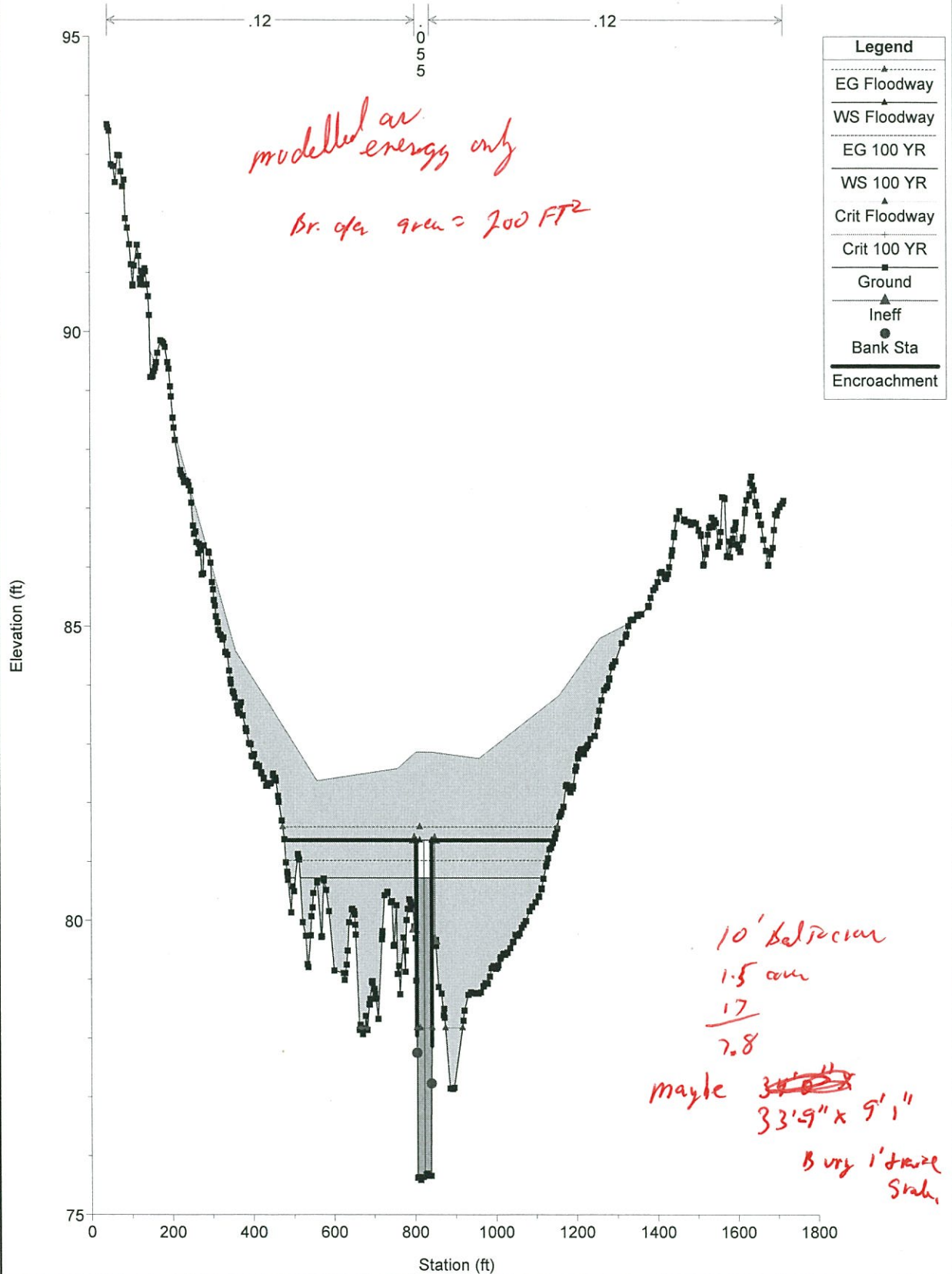
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Soules Swamp

Plan: Soules Swamp Plan 6/4/2003

38548 SR 1005





North Carolina StreamStats

Basin Characteristics Report

Date: Fri May 24 2013 08:41:01 Mountain Daylight Time

NAD27 Latitude: 34.3253 (34 19 31)

NAD27 Longitude: -78.7998 (-78 47 59)

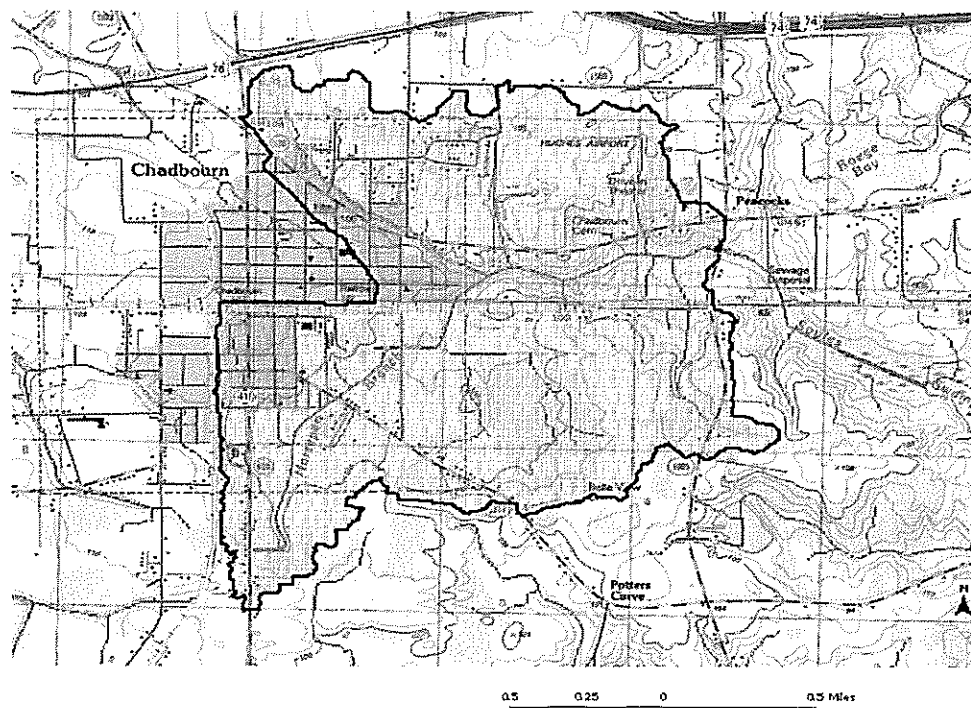
NAD83 Latitude: 34.3254 (34 19 32)

NAD83 Longitude: -78.7996 (-78 47 58)

Parameter	Value
Area in square miles	2.3
Percent of area covered by all densities of developed land using 2001 NLCD	23.532
Percent of area covered by all densities of developed land using 2006 NLCD	23.532
Percent of area developed in 2006 NLCD but not developed in 2001 NLCD	0
Percent of area covered by forest using 1992 NLCD	17.864
Percent of area covered by forest using 2001 NLCD	9.683
Percent of area covered by forest using 2006 NLCD	9.683
Percent of area forested 2001 NLCD but not forested 2006 NLCD	0.000
Percent of area covered by grassland/herbaceous using 2001 NLCD	1.096
Percent of area covered by grassland/herbaceous using 2006 NLCD	1.745
Percent of area covered by impervious surface 2001 NLCD	6.04
Percent of area covered by impervious surface 2006 NLCD	6.04
Difference in percent impervious between 2001 NLCD and 2006 NLCD	0.000
Mean annual precipitation in inches	50
Percent of area of protected Federal and State owned land	0
Percent of area covered by shrubland using 2001 NLCD	13.775
Percent of area covered by shrubland using 2006 NLCD	13.775
Percent of area in hydric soil 'A' defined by SSURGO	5.05
Percent of area in hydric soil 'B' defined by SSURGO	67.6
Percent of area in hydric soil 'C' defined by SSURGO	15.6
Percent of area in hydric soil 'D' defined by SSURGO	11.7
Percent of area covered by water using 1992 NLCD	0.000
Percent of area covered by water using 2001 NLCD	0.000
Percent of area covered by water using 2006 NLCD	0.000
Percent of area covered by wetland using 1992 NLCD	7.015
Percent of area covered by wetland using 2001 NLCD	6.763
Percent of area covered by wetland using 2006 NLCD	6.763



StreamStats Print Page



Explanation

- ☆ GlobalWatershedPoint
- GSP1000Point
- NCDOT Points
- ▲ LocalGages
- ▲ Gaging Station, Continuous Record
- ▲ Low Flow, Partial Record
- ▲ Peak Flow, Partial Record
- ▲ Peak and Low Flow, Partial Record
- ▲ Stage Only
- ▲ Low Flow, Partial Record, Stage
- ▲ Miscellaneous Record
- ▲ Unknown
- LocalHHD2
- LongestFlowpath3D
- Stream Grid
- GlobalWatershed
- Pilot Study Area
- hucpoly

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