

OFFICE ESTIMATE

1 @ 45' Bridge

PREDESIGN-PRESURVEY REPORT

Project# _____
TIP# _____
Let Date _____
WBS# 17BP.11.R.89

County SURRY (DIV.11)

Bridge# 850213
Road# SR 1600 (LUMBER PLANT RD)
Stream GULLY CREEK
(BRANCH-ESM)

Type Of Request: POC Force Account TIP NCMA

Date 7/03/13 Name MSY Assigned To RCH

Checked By Wsh 7-17-13

Prior Survey Date _____ (attach copy of prior survey) BRN BK: NO ✓ CO. FILE NO ✓

Study By Scour Section NO ✓

Flood Zone AE Detail Study NO Date 8/18/09 Panel# 4040 ✓

B.M. Info _____

Quad Map LAMBSBURG Drainage Area 2.3 SQ. MI. From USGS STREAM STATS
Q25 750 cfs ✓ Q50 900 cfs ✓ Q100 1100 cfs Method REG. EQNS./REG 2 ✓

EXISTING BRIDGE INFORMATION

Location 0.3 MI. N. JCT. NC 89 ✓
Average Daily Traffic 380 (6% TRK (2010))
Length 31' Bed- To Crown 9' Water Depth 1'
Type Structure TIM. FLOOR ON I-BEAMS; TIM. POSTS, LAPs, & SILLS
Type Spans 1 @ 30'-7"
Upstream Structure 850397 ✓ (NC 89, CREEK)
Location 0.1 MI. E. JCT. SR 1420
Bed- To Crown 10' (D=1') Prior Survey _____
Downstream Structure 850213 (SR 1600 @ LOW GAP CREEK)
Location 0.3 MI. N. JCT. NC 89
Bed- To Crown 9' (H₂O=1' DEEP) Prior Survey _____
SCS Watershed _____

ENVIRONMENTAL TVA NO ✓

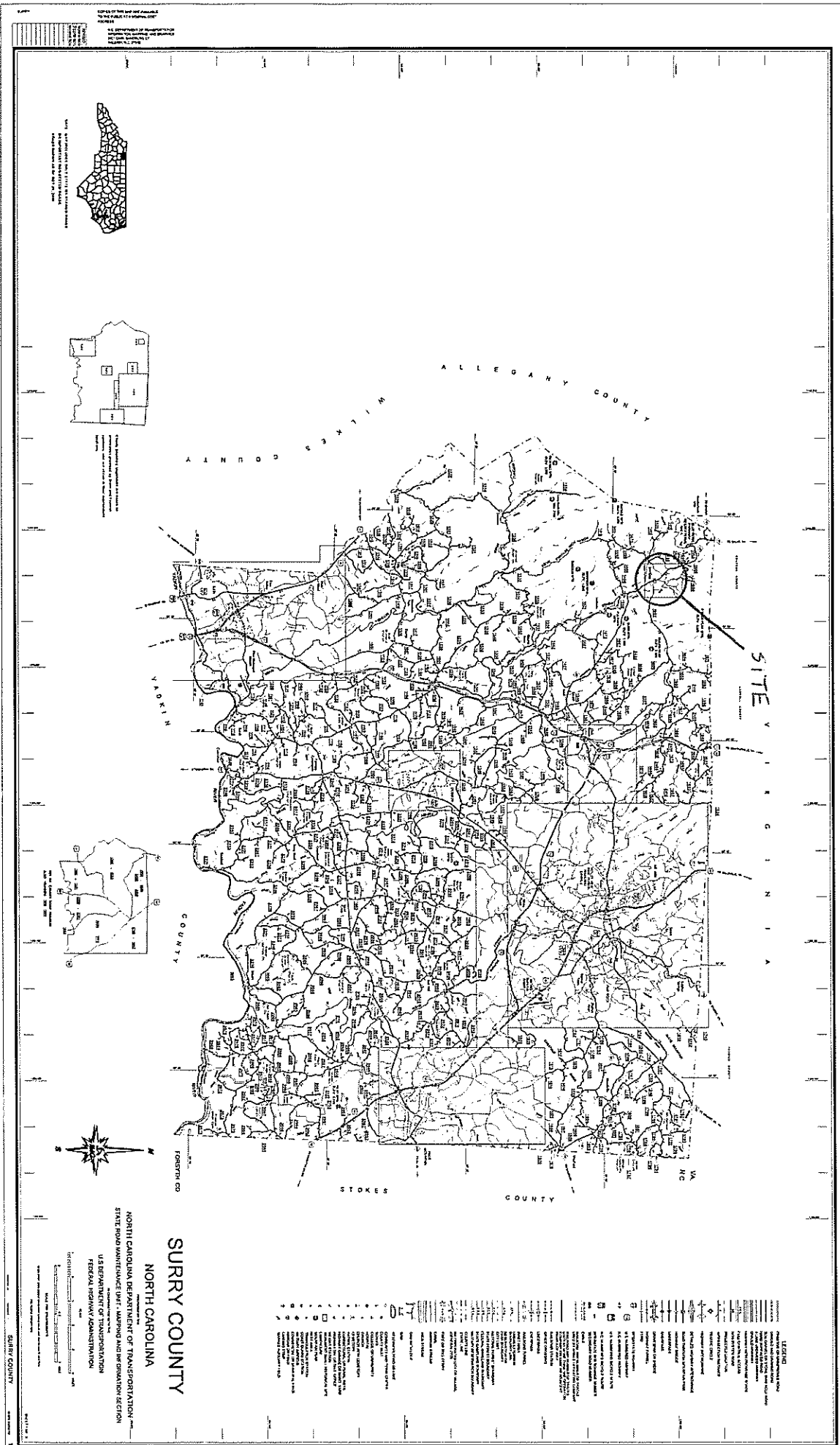
Trout Stream YES ✓ Anadromous Fish NO Primary Nursery Area NO ✓

High Quality Waters YES ✓ Nutrient Sensitive Waters NO ✓

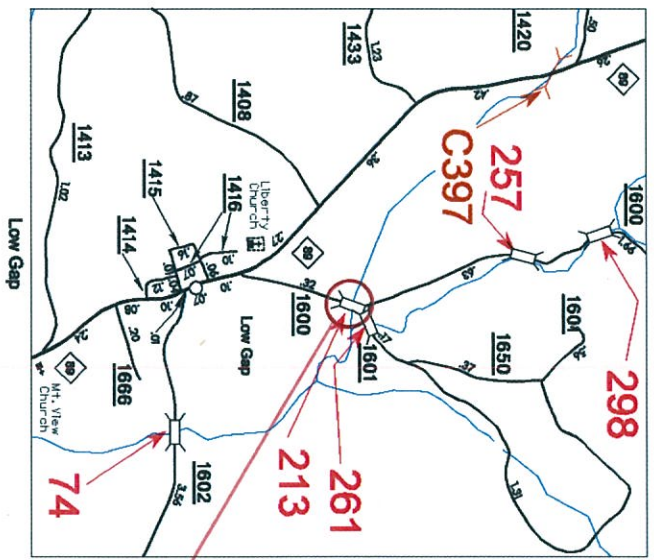
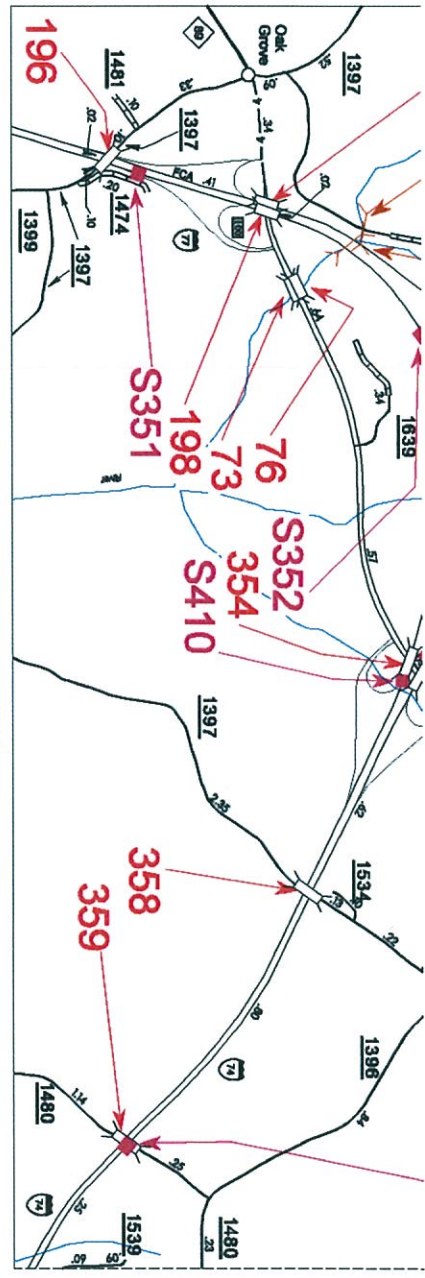
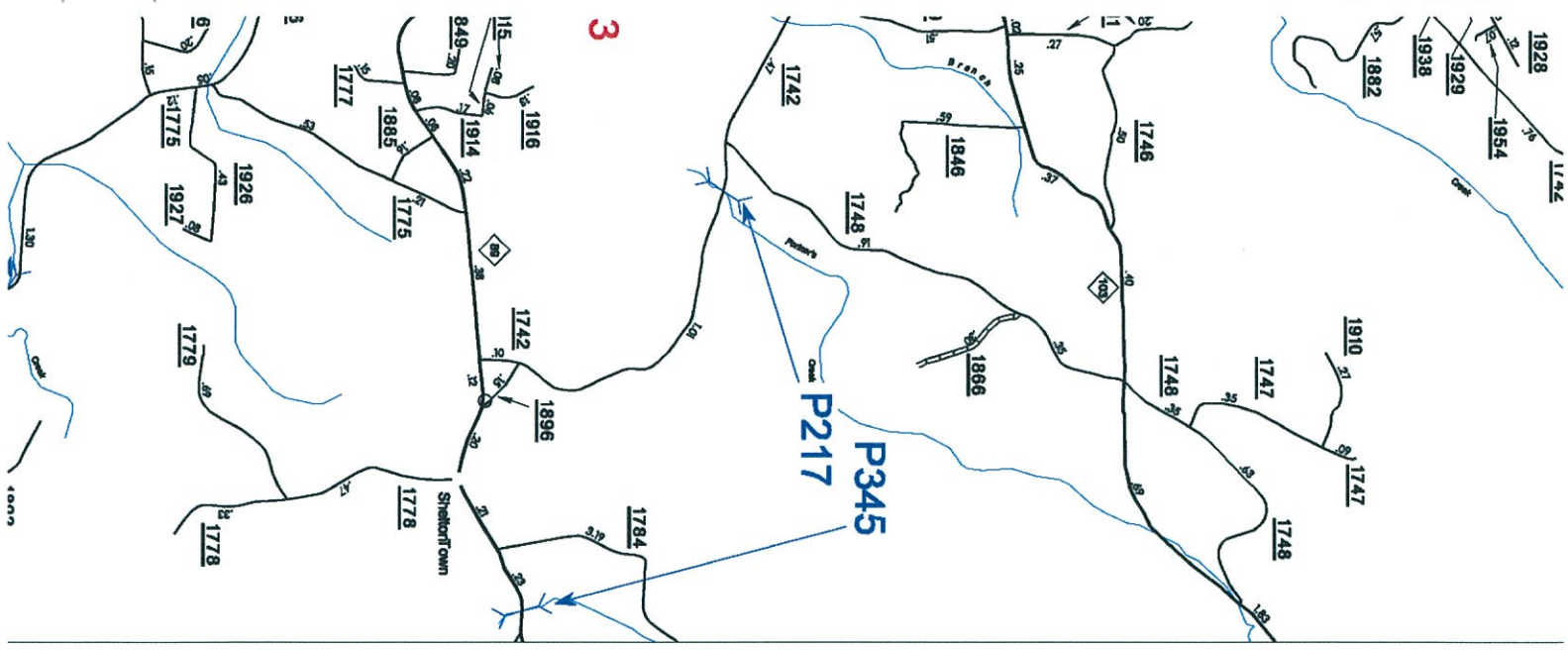
Near Water Supply Intake NO ✓ CAMA County NO

Stream Classification WS-II; Tr.; HAW ✓ # 12-63-2 ✓

DENR River Basin Info. YADKIN (FROM VA. STATE LN. TO)
(FISHER RIVER)



850213



- NORMAL
- CULV
- PEDE
- PEDE
- FERR
- FED
- NON
- CANTI
- PRIV
- NCDX
- RAILR
- OVER
- TUNN
- PEDE
- VEHIC
- NCDX
- SING

850213



North Carolina StreamStats

Streamstats Ungaged Site Report

Date: Wed Jul 3 2013 12:27:55 Mountain Daylight Time

Site Location: North_Carolina

NAD27 Latitude: 36.5317 (36 31 54)

NAD27 Longitude: -80.8671 (-80 52 01)

NAD83 Latitude: 36.5319 (36 31 55)

NAD83 Longitude: -80.8669 (-80 52 01)

Drainage Area: 2.33 mi²

Percent Urban: 11.0 %

Percent Impervious: 1.0 %

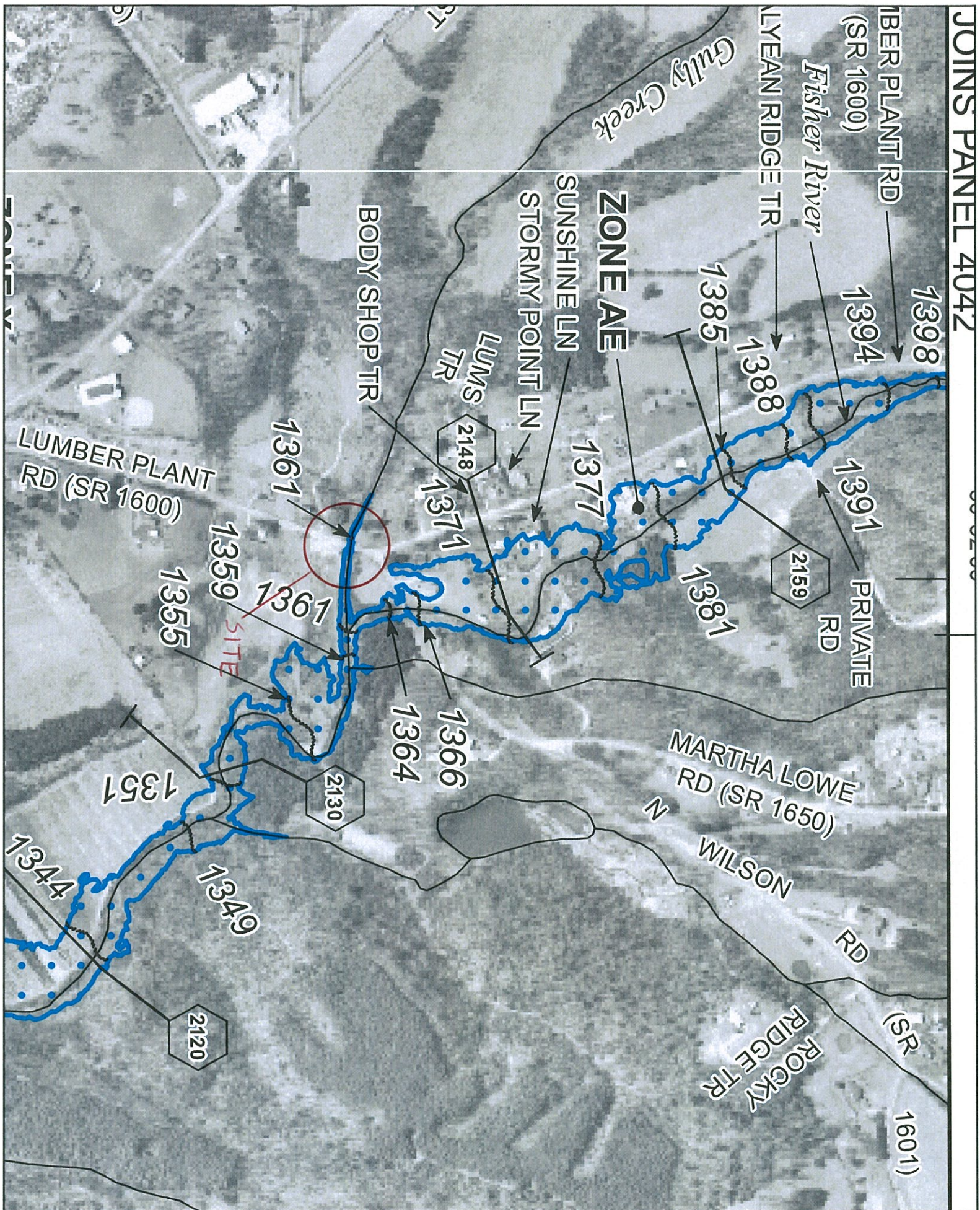
Peak Flows Region Grid Basin Characteristics			
100% Peak Southeast US 2009 5158 (2.33 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	2.33	1	9000
Percent Area in Region 1 (percent)	16.048	0	100
Percent Area in Region 2 (percent)	83.952	0	100
Percent Area in Region 3 (percent)	0.000	0	100
Percent Area in Region 4 (percent)	0.000	0	100
Percent Area in Region 5 (percent)	0.000	0	100

Urban Flows Region Grid Basin Characteristics			
100% Peak urban Blue Ridge-Piedmont FS007-00 (2.33 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	2.33	0.04	41
Area of Impervious Surfaces (percent)	1.00 (below min value 2)	2	54.6

Warning: Some parameters are outside the suggested range. Estimates will be extrapolations with unknown errors.

Peak Flows Region Grid Streamflow Statistics					
Statistic	Flow (ft ³ /s)	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
				Minimum	Maximum
PK2	221	35		126	387
PK5	409	34		235	713
PK10	557	35		314	987
PK25	758	38		412	1390
PK50	910	40		479	1730
PK100	1090	42		552	2140
PK200	1240	44		609	2530
PK500	1490	48		693	3190

Urban Flows Region Grid Streamflow Statistics					
Statistic	Flow (ft ³ /s)	Standard Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
				Minimum	Maximum
PK2U	62.2				
PK5U	140				
PK10U	212				
PK25U	382				
PK50U	493				
PK100U	618				



850213



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY SURRY BRIDGE NUMBER 850213 INSPECTION CYCLE 2 YRSROUTE SR1600 ACROSS LOW GAP CREEK M.P. 0LOCATION 0.3 MI.N.JCT.NC89SUPERSTRUCTURE TIMBER FLOOR ON CONT. I-BEAMSSUBSTRUCTURE E.BTS:TIMBER CAPS/TIMBER POST & SILLS @ 6' CENTERSSPANS 1 @ 30'-7LONGITUDE 80° 52' 1.0"LATITUDE 36° 31' 55.0"PRESENT CONDITION FAIR

INVENTORY RATING

INSPECTION DATE 10/04/2011

OPERATING RATING

PRESENT POSTING SV 14 TTST 19 **NOT POSTED**

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT 3 DELINEATORS

SOUTH TO NORTH

SIGN NOTICE
ISSUED FORNUMBERED
REQUIRED

<u>Yes</u>	WEIGHT LIMIT	<u>2</u>
<u>Yes</u>	DELINEATORS	<u>1</u>
<u>No</u>	NARROW BRIDGE	
<u>No</u>	ONE LANE BRIDGE	
<u>No</u>	LOW CLEARANCE	

850213

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 02/10/2012

COUNTY : SURRY	DIVISION : 11	DISTRICT : 1	STRUCTURE NUMBER : 850213	LENGTH : 31 FEET
ROUTE CARRIED : SR1600		FEATURE INTERSECTED : LOW GAP CREEK		
LOCATED : 0.3 MI.N.JCT.NC89		BRIDGE NAME :		CITY :
FUNC. CLASS : 09	SYST.ON : NFA	SYST.UNDER : NFA	ADT & YR : 380 2010	RAIL TYPE : LT 227 RT 227
BUILT : 1959	BY : BMU	PROJ :	FED.AID PROJ :	DESIGN LOAD : Other or Unknown
REHAB :	BY : BMU	PROJ :	ALIGNMENT : TAN	SKEW : 90
		LANES : ON 2 UNDER		
NAVIGATION : VC 0 FT	HC 0 FT	HT. CRN. TO BED : 9 FT	WATER DEPTH : 1 FT	
SUPERSTRUCTURE : TIMBER FLOOR ON CONT. I-BEAMS				
SUBSTRUCTURE : E.BTS:TIMBER CAPS/TIMBER POST & SILLS @ 6' CENTERS				
SPANS : 1 @ 30'-7				
BEAMS OR GIRDERS : 8 LINES 14 I-BEAMS @ 2'-7 CENTERS				
FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) : 20.1 FT		
CLEAR ROADWAY : 19.2 FT	BETWEEN RAILS : 19.8 FT	SIDEWALK OR CURB : LT .3 FT RT .3 FT		
VERT.CL.OVER : 999.9 FT				
INV.RTG. : HS-7	OPE.RTG. : HS-13	CONTR.MEMBER : Int Bm	POSTED : SV 14	TTST 19 DATE 06/29/1999
SYSTEM : Secondary S.R. Route		GREEN LINE ROUTE : N		
UNDER ROUTES AND CLEARANCES				

REMARKS :

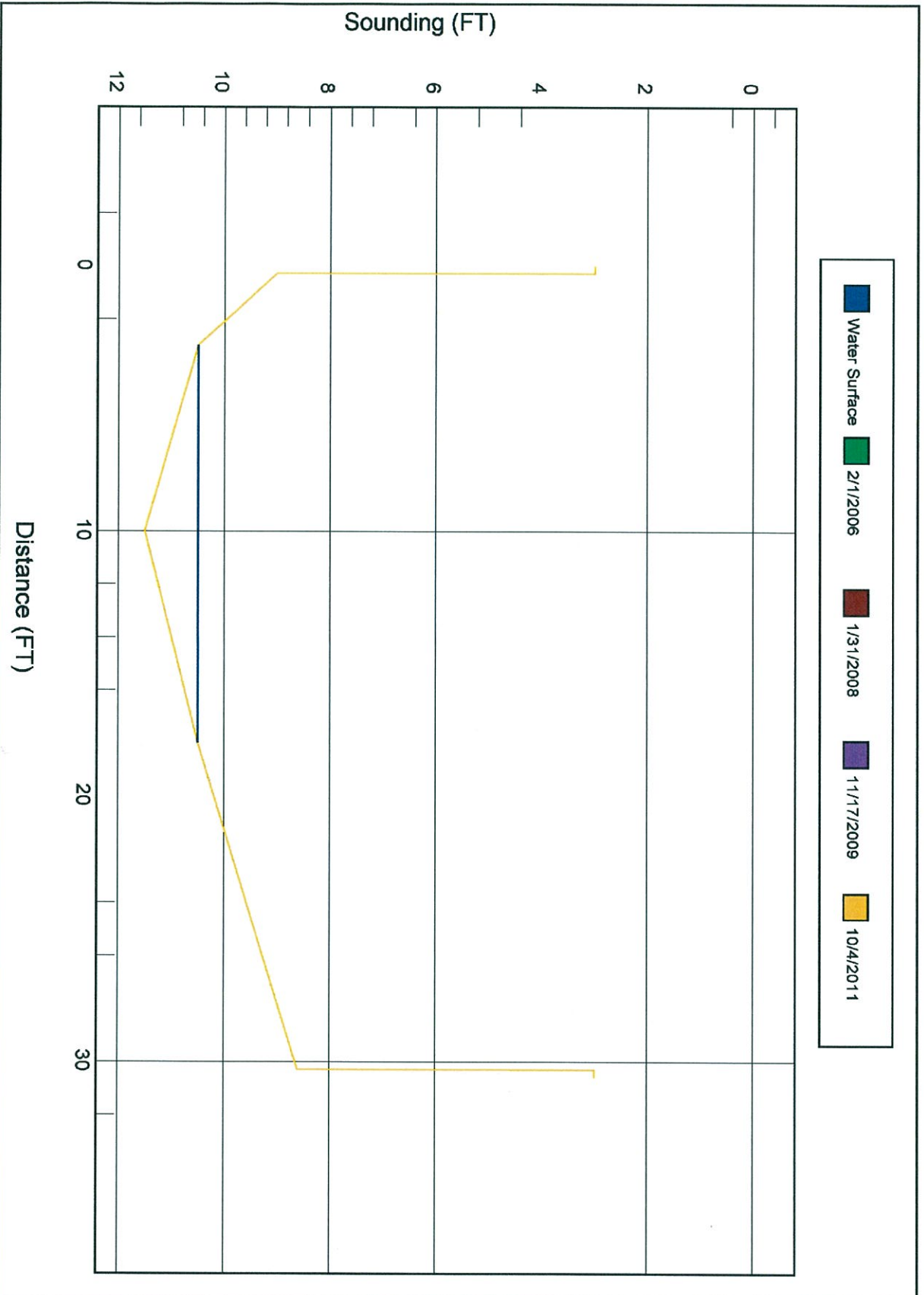
Bridge: 850213

County SURRY

Date: 10/04/2011

Top of Rail = 0 FT (Sounding)

STREAMBED PROFILE (Downstream)



Structure 850213

County SURRY

Date: 10/04/2011

Structure Photos



ABUT. (A)



EAST PROFILE