OFFICE ESTIMATE: _____

24435
24312

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

PREDESIGN-SCOPING REPORT

D-6

County SURRY (DIV. 11)

Bridge# 850 012
Road# SR 1122 DOBBINS MILL RD.
Stream SNOW CREEK

Type Of Request: POC Force Account TIP NCMA

Date 5/5/17 Name WSH Assigned To PFF/MTS

Checked By _____

Prior Survey Date NO (attach copy of prior survey) BRN. BK.: NONE CO. FILE: NO

Study By Scour Section NO CODE: U PDR: NO BSR: NO

Flood Zone AE Detail Study LIMITED Date 8-18-09 Panel# 4964

B.M. Info N/A ESM DA = 7.7 SQ MI. STREAMS DA = 6.0 SQ MI.

Quad Map ELKIN N. Drainage Area 9.04 Sq mi. YES From DASS STA. 21123719.6

Q25 1900 cfs Q50 2300 Q100 2700 cfs Method REG. EQU.

LONG: -80.771482 FEMA 2486 cfs IA = 1.30 %

LAT: 36.330533

EXISTING BRIDGE INFORMATION

YEAR BUILT: 1964

CLEAR ROADWAY WIDTH: _____

Location _____

Average Daily Traffic 590 2012 6% TRK

Length 121 Bed-To Crown 15 Water Depth 1'

Type Structure TIM. FLR ON I BEAMS / TIM. CAPS & SILLS

Type Spans 1@40'3", 1@40', 1@40'3"

Upstream Structure 850314 YR. BUILT: 1964

Location SR1122 0.8M E JCT SR 1129 TIM. FLR. ON I BEAM LONG: -80.783098

Bed-To Crown 15' (1' deep) 1@40'3", 1@40', 1@40'3" Prior Survey N/A LAT: 36.355623

Downstream Structure FLOWS INTO LITTLE CRK.

Location 0.86M D/S YR. BUILT: N/A

Bed-To Crown N/A Prior Survey N/A LONG: -80.780254

LAT: 36.323632

ENVIRONMENTAL

TVA: No

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

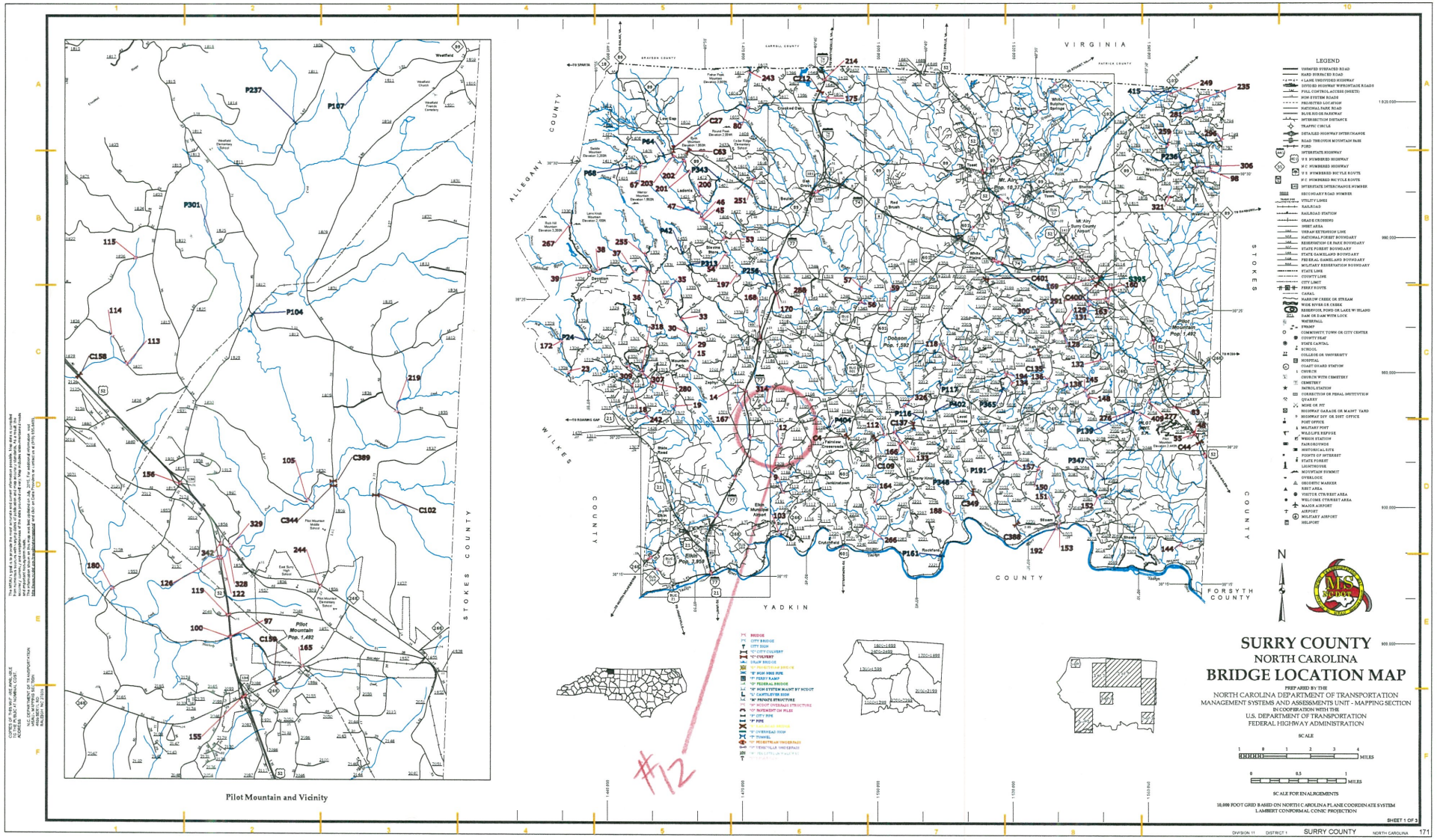
Stream Classification C STREAM #: 12-62-15

DENR River Basin Info. YADKIN PEE DEE

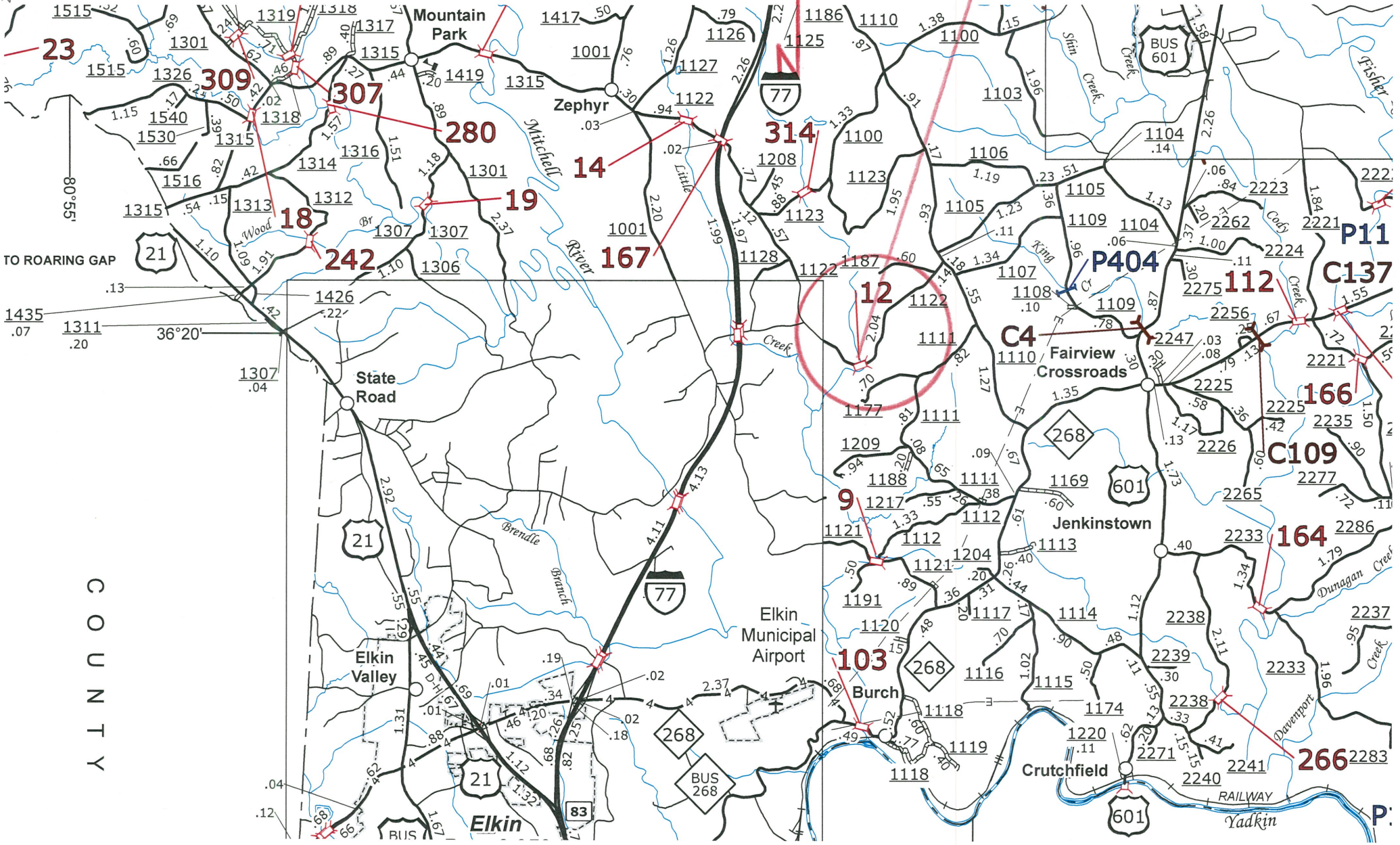
1,489,645

U/S 39

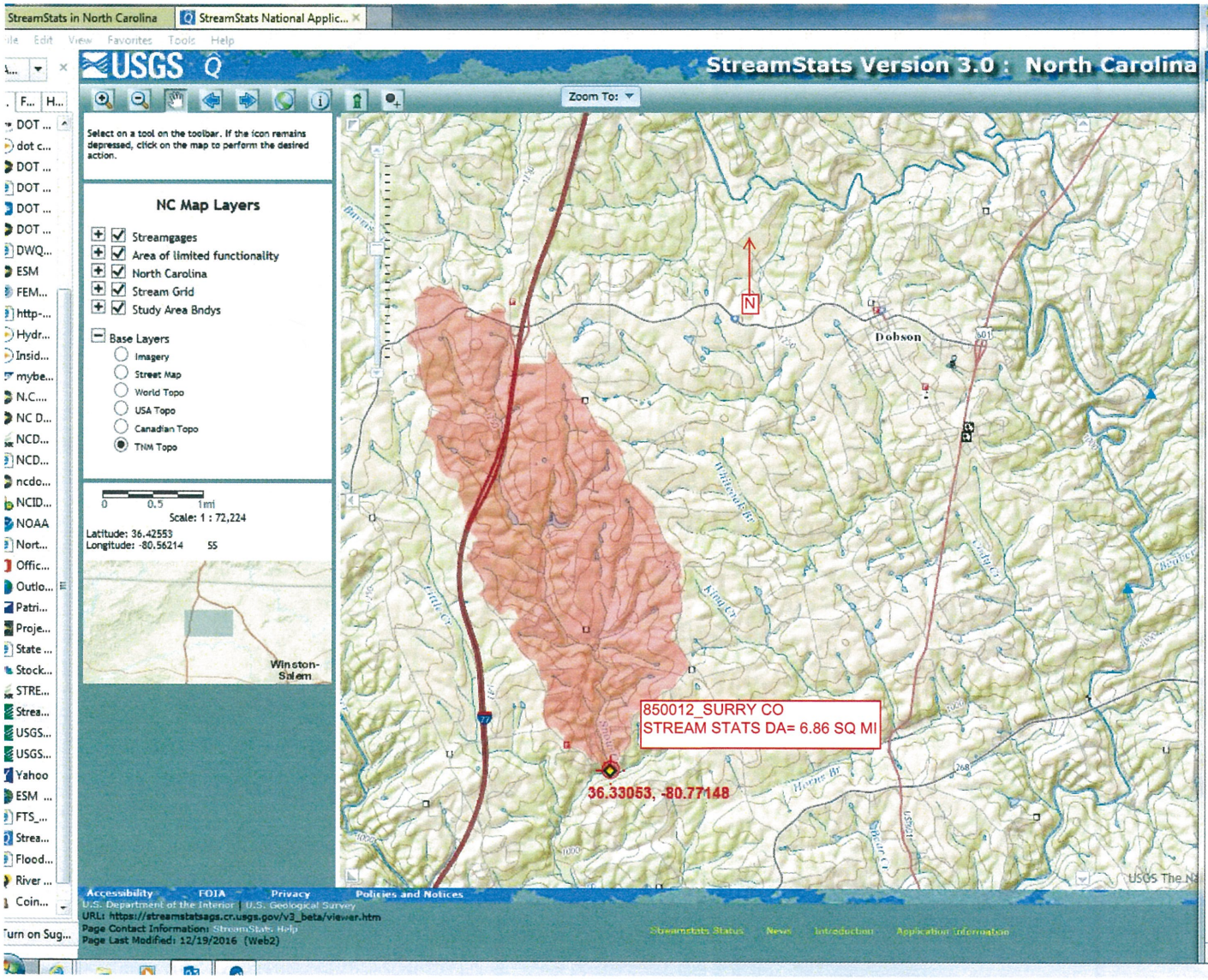
850 012

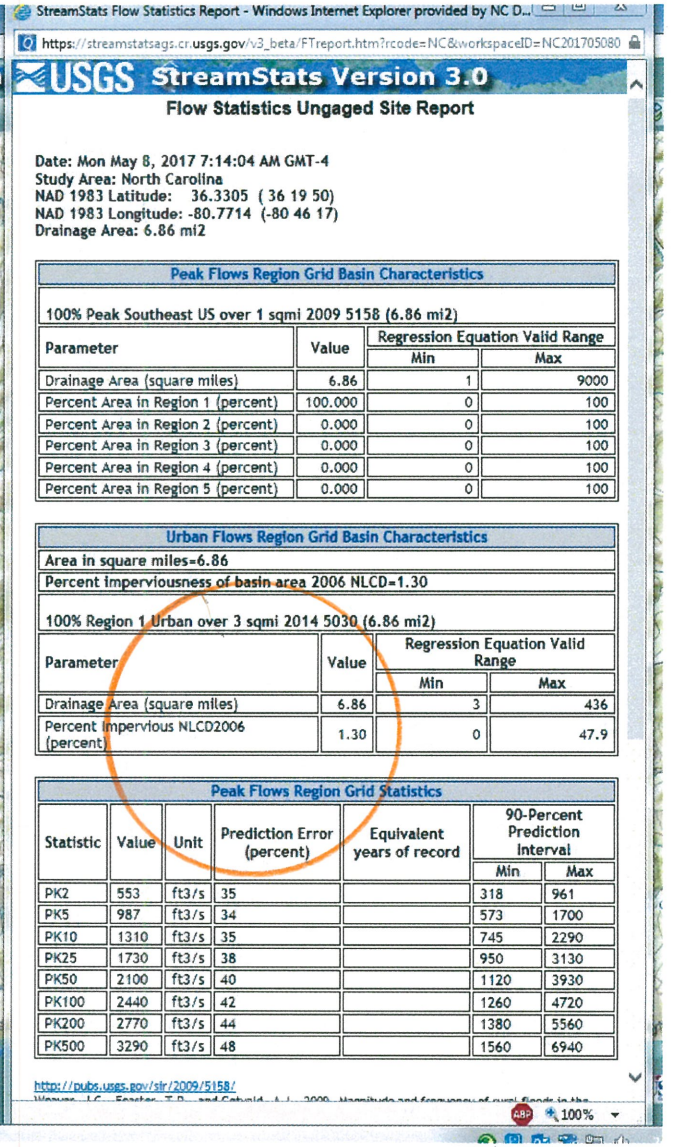

VIRGINIA
ALLEGANY COUNTY
WILKES COUNTY
STOKES COUNTY
FORSYTH COUNTY
YADKIN COUNTY
Pilot Mountain and Vicinity
LEGEND
SURRY COUNTY
NORTH CAROLINA
BRIDGE LOCATION MAP
PREPARED BY THE
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
MANAGEMENT SYSTEMS AND ASSESSMENTS UNIT - MAPPING SECTION
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
SCALE
SCALE FOR ENLARGEMENTS
10,000 FOOT GRID BASED ON NORTH CAROLINA PLANE COORDINATE SYSTEM
LAMBERT CONFORMAL CONIC PROJECTION
SHEET 1 OF 3
DIVISION 11
DISTRICT 1
SURRY COUNTY
NORTH CAROLINA
171

#12


#12
Mountain Park
Zephyr
Mitchell River
Little
Wood
Br
Creek
State Road
Brendle Branch
Elkin Valley
Elkin Municipal Airport
Elkin
Fairview Crossroads
Jenkinstown
Burch
Crutchfield
Yadkin
RAILWAY
Davenport
Dunagan
Cody
King
Shim Creek
Fisher
TO ROARING GAP
36°20'
80°55'
COUNTY
23
309
307
280
14
19
18
242
167
12
314
9
103
C4
P404
112
166
C109
164
266
P11
C137
21
77
268
601
83
BUS 601
BUS 268

850012


StreamStats in North Carolina
StreamStats National Applic...
USGS
StreamStats Version 3.0 : North Carolina
Zoom To:
Select on a tool on the toolbar. If the icon remains depressed, click on the map to perform the desired action.
NC Map Layers
Streamgages
Area of limited functionality
North Carolina
Stream Grid
Study Area Bndys
Base Layers
Imagery
Street Map
World Topo
USA Topo
Canadian Topo
TNM Topo
0 0.5 1mi
Scale: 1 : 72,224
Latitude: 36.42553
Longitude: -80.56214
Winston-Salem
Dobson
850012_SURRY CO
STREAM STATS DA= 6.86 SQ MI
36.33053, -80.77148
Accessibility FOIA Privacy Policies and Notices
U.S. Department of the Interior | U.S. Geological Survey
URL: https://streamstatsags.cr.usgs.gov/v3_beta/viewer.htm
Page Contact Information: StreamStats Help
Page Last Modified: 12/19/2016 (Web2)
Streamstats Status News Introduction Application Information


StreamStats Flow Statistics Report - Windows Internet Explorer provided by NC D...
https://streamstatsags.cr.usgs.gov/v3_beta/FTreport.htm?rcode=NC&workspaceID=NC201705080
USGS StreamStats Version 3.0
Flow Statistics Ungaged Site Report
Date: Mon May 8, 2017 7:14:04 AM GMT-4
Study Area: North Carolina
NAD 1983 Latitude: 36.3305 (36 19 50)
NAD 1983 Longitude: -80.7714 (-80 46 17)
Drainage Area: 6.86 mi2
Peak Flows Region Grid Basin Characteristics
100% Peak Southeast US over 1 sqmi 2009 5158 (6.86 mi2)
Parameter | Value | Regression Equation Valid Range Min | Max
Drainage Area (square miles) | 6.86 | 1 | 9000
Percent Area in Region 1 (percent) | 100.000 | 0 | 100
Percent Area in Region 2 (percent) | 0.000 | 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
Area in square miles=6.86
Percent imperviousness of basin area 2006 NLCD=1.30
100% Region 1 Urban over 3 sqmi 2014 5030 (6.86 mi2)
Parameter | Value | Regression Equation Valid Range Min | Max
Drainage Area (square miles) | 6.86 | 3 | 436
Percent Impervious NLCD2006 (percent) | 1.30 | 0 | 47.9
Peak Flows Region Grid Statistics
Statistic | Value | Unit | Prediction Error (percent) | Equivalent years of record | 90-Percent Prediction Interval Min | Max
PK2 | 553 | ft3/s | 35 | | 318 | 961
PK5 | 987 | ft3/s | 34 | | 573 | 1700
PK10 | 1310 | ft3/s | 35 | | 745 | 2290
PK25 | 1730 | ft3/s | 38 | | 950 | 3130
PK50 | 2100 | ft3/s | 40 | | 1120 | 3930
PK100 | 2440 | ft3/s | 42 | | 1260 | 4720
PK200 | 2770 | ft3/s | 44 | | 1380 | 5560
PK500 | 3290 | ft3/s | 48 | | 1560 | 6940
http://pubs.usgs.gov/sir/2009/5158/
100%

850012

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION: PRIORITY MAINTENANCE, TEMPORARY SHORING

Structure Safety Report

Routine Element Inspection - Contract

COUNTY: SURRY STRUCTURE NUMBER: 850012 FREQUENCY: 24 MONTHS

FACILITY CARRIED: SR1122 MILE POST:

LOCATION: .8 MI.E.JCT.SR1129

FEATURE INTERSECTED: SNOW CREEK

LATITUDE: 36° 19' 49.83" LONGITUDE: 80° 46' 17.63"

SUPERSTRUCTURE: TIMBER FLOOR ON I-BEAMS

SUBSTRUCTURE: E.BTS:TIM.CAPS/TIM.POST&SILLS;BTS:TIM.CAP/TIM.PILES

1 @ 40'-3"; 1 @ 40'; 1 @ 40'-3"
SPANS: 1 @ 40'-3; 1 @ 40'; 1 @ 40'-3

☐ FRACTURE CRITICAL ☑ TEMPORARY SHORING ☐ SCOUR CRITICAL ☐ SCOUR PLAN OF ACTION

PRESENT CONDITION: Poor INSPECTION DATE: 12/02/2015

POSTED SV: 21 POSTED TTST: 26

OTHER SIGNS PRESENT: 4 DELINEATORS



WEST APPROACH LOOKING EAST

Sign noticed issued for		Number Required
NO	WEIGHT LIMIT	0
NO	DELINEATORS	0
NO	NARROW BRIDGE	0
NO	ONE LANE BRIDGE	0
NO	LOW CLEARANCE	0

INSPECTED BY	SIGNATURE	ASSISTED BY
H.W. HICKS, JR.		T.L. GOINS

850012

Structure: 850012 County: SURRY Date: 12/02/2015 Structure Photos



BENT 1 LOOKING WEST



SUPERSTRUCTURE SPAN 3

Structure: 850012 County: SURRY Date: 12/02/2015 Structure Photos



LOOKING NORTH



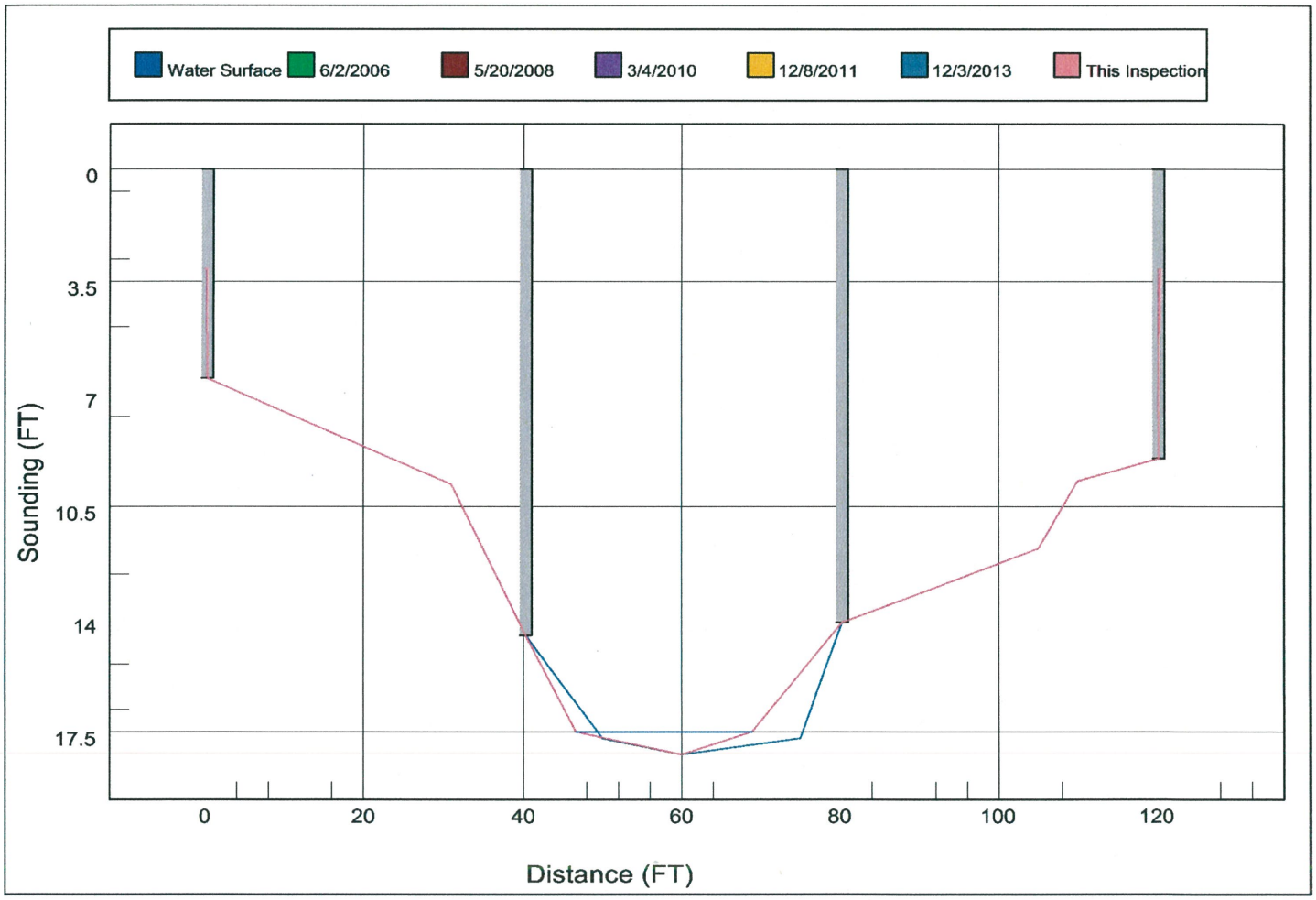
LEFT RAIL SIMILAR RIGHT RAIL

850012

Bridge: 850012 County SURRY Date:

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



SITE: 850012

DATE: 5/8/2017

old regression equations:

	REGION 1	REGION 2
Q25	1752.279	1635.03
Q50	2131.793	1944.879
Q100	2473.545	2311.996

D.A. = 7.04 sq mi lpArea= 1.3

current regression equations:

UPDATED: .1 to 3mi

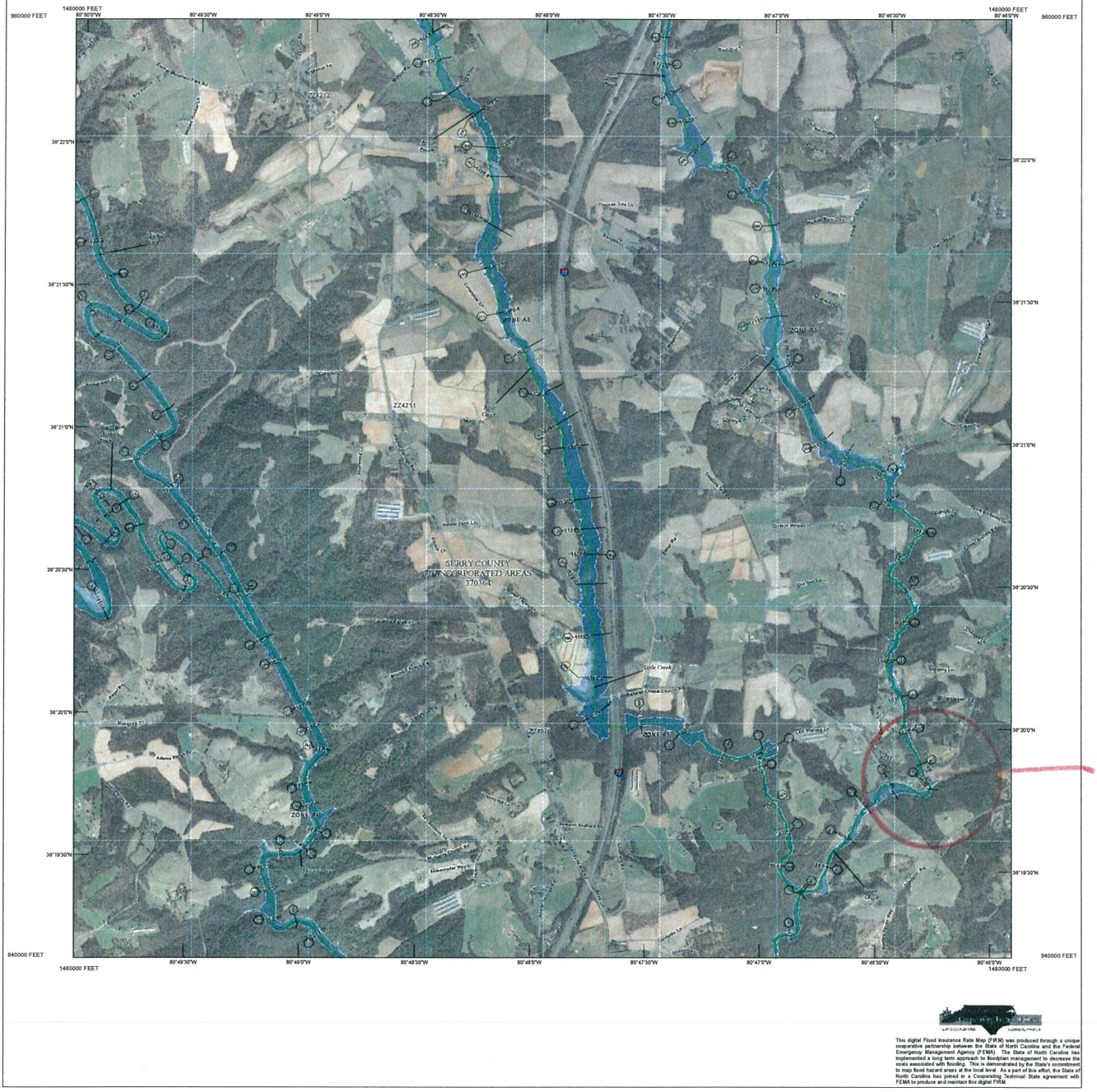
	REGION 1	REGION 2
Q25	2389.231	
Q50	2987.884	
Q100	3640.775	

1.015991

3mi T0 436mi

	REGION 1
Q25	1910.68
Q50	2315.76
Q100	2714.77

850012



This digital Flood Insurance Rate Map (FIRM) was produced through a unique cooperative partnership between the State of North Carolina and the Federal Emergency Management Agency (FEMA). The State of North Carolina has implemented a long term approach to floodplain management to decrease the costs associated with flooding. This is demonstrated by the State's commitment to map flood hazard areas at the local level. As a part of this effort, the State of North Carolina has joined in a Cooperating Technical State agreement with FEMA to produce and maintain this digital FIRM.

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR ZONE DESCRIPTIONS AND INDEX MAP

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTP://FRIS.NC.GOV/FRIS

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% Annual Chance Flood with Average Depth Less Than One Foot or With Drainage Areas of Less Than One Square Mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee See Notes *Zone X*

OTHER AREAS
- Areas Determined to be Outside the 0.2% Annual Chance Floodplain *Zone X*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Accredited or Provisionally Accredited Levee, Dike, or Floodwall
- Non-accredited Levee, Dike, or Floodwall
- BM5510 North Carolina Geodetic Survey bench mark
- BM5510 National Geodetic Survey bench mark
- BM5510 Contractor Est. NCFMP Survey bench mark
- 012 18.2 Cross Sections with 1% Annual Chance Water Surface Elevation (BFE)
- B Coastal Transect
- Coastal Transect Baseline
- Profile Baseline

OTHER FEATURES
- Hydrographic Feature
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service Center website at http://msc.fema.gov. An accompanying Flood Insurance Study report, Letter of Map Revision (LOMR) or Letter of Map Amendment (LOMA) revising portions of this panel, and digital versions of this FIRM may be available. Visit the North Carolina Floodplain Mapping Program website at http://www.ncfloodmaps.com or contact the FEMA Map Service Center.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided in digital format by the North Carolina Floodplain Mapping Program (NCFMP). The source of this information can be determined from the metadata available in the digital FLOOD database and in the Technical Support Data Notebook (TSDN).

ACCREDITED LEVEE NOTES TO USERS: If an accredited levee note appears on this panel check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1-percent-annual-chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and floodproofing or other protective measures. For more information on flood insurance, interested parties should visit the FEMA Website at http://www.fema.gov/business/nfip/index.shtm.

PROVISIONALLY ACCREDITED LEVEE NOTES TO USERS: If a Provisionally Accredited Levee (PAL) note appears on this panel, check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1-percent-annual-chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection. To maintain accreditation, the levee owner or community is required to submit the data and documentation necessary to comply with Section 65.10 of the NFIP regulations. If the community or owner does not provide the necessary data and documentation or if the data and documentation provided indicates the levee system does not comply with Section 65.10 requirements, FEMA will revise the flood hazard and risk information for this area to reflect de-accreditation of the levee system. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and floodproofing or other protective measures. For more information on flood insurance, interested parties should visit the FEMA Website at http://www.fema.gov/business/nfip/index.shtm.

LIMIT OF MODERATE WAVE ACTION NOTES TO USERS: For some coastal flooding zones the AE Zone category has been divided by a Limit of Moderate Wave Action (LIMWA). The LIMWA represents the approximate landward limit of the 1.5-foot breaking wave. The effects of wave hazards between the VE Zone and the LIMWA (or between the shoreline and the LIMWA for areas where VE Zones are not identified) will be similar to, but less severe than those in the VE Zone.

Limit of Moderate Wave Action (LIMWA)

COASTAL BARRIER RESOURCES SYSTEM (CBRS) NOTE

This map may include approximate boundaries of the CBRS for informational purposes only. Flood insurance is not available within CBRS areas for structures that are newly built or substantially improved on or after the date(s) indicated on the map. For more information see http://www.fws.gov/habitatconservation/coastal_barrier.html, the FIS Report, or call the U.S. Fish and Wildlife Service Customer Service Center at 1-800-344-WILD.

CBRS Area | Otherwise Protected Area

SCALE

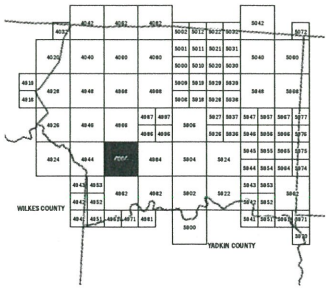
Map Projection:
North Carolina State Plane Projection Feet (Zone 3200)
Datum: NAD 1983 (Horizontal), NAVD 1988 (Vertical)

1 inch = 1,000 feet 1:12,000

0 500 1,000 2,000 Feet

0 150 300 600 Meters

PANEL LOCATOR



FEMA

National Flood Insurance Program

NORTH CAROLINA FLOODPLAIN MAPPING PROGRAM
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

NORTH CAROLINA

PANEL 4964

4964

Panel Contains:

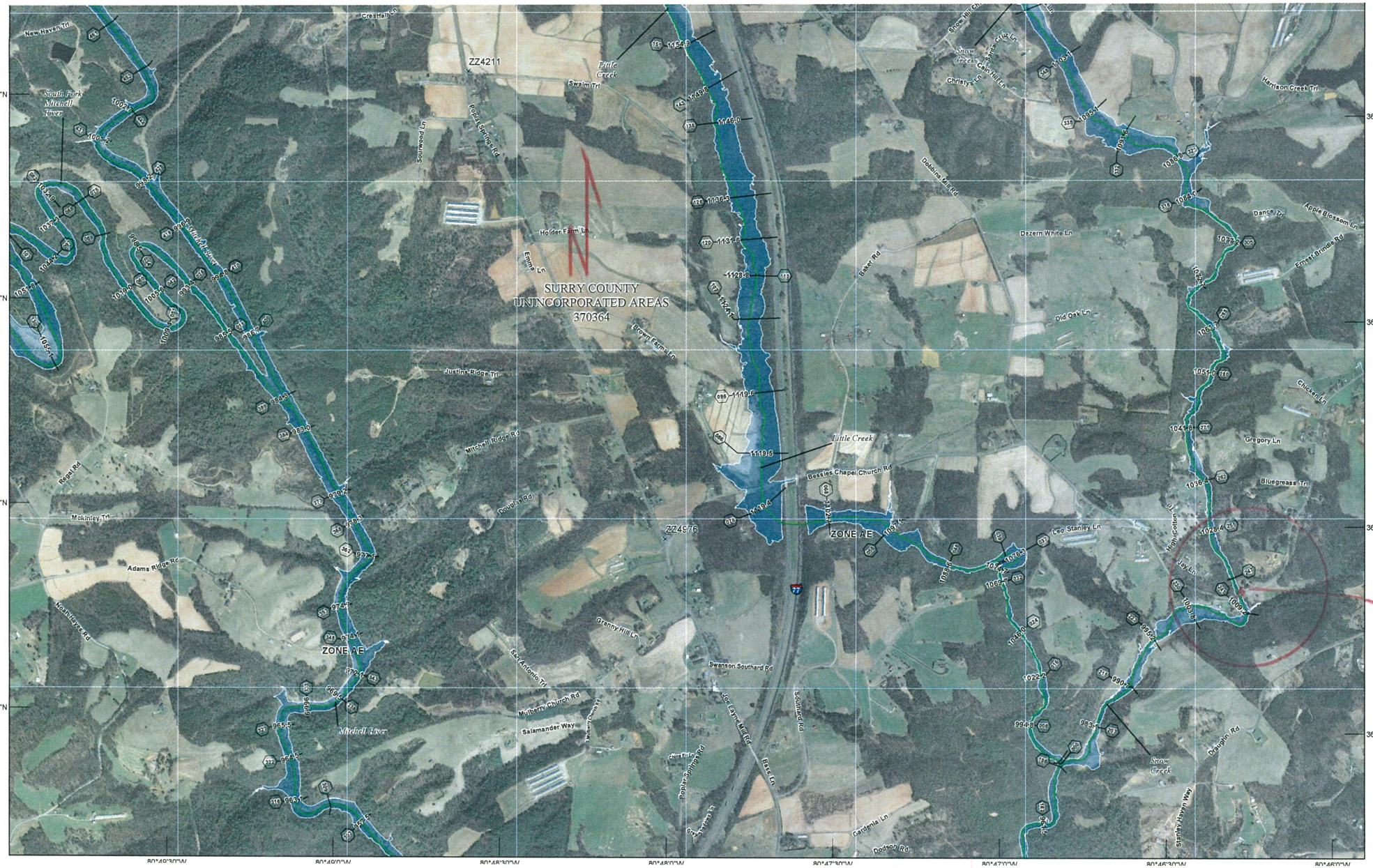
COMMUNITY	CID	PANEL	SUFFIX
SURRY COUNTY	370364	4964	J

8/18/09

MAP NUMBER
3710496400J
MAP REVISED
8/18/2009

850012

4964



12

940

21058


FRIS
Map Theme
Search
County: Surry
DFIRM: 4964
Places: SR 1122
Streams: SNOW CREEK
Address:
Coordinates: Lat - Lon (Decimal Degrees)
Latitude-Northing-Y: 36.330533
Longitude-Easting-X: -80.771482
Who Am I : Advanced
Effective
Flood Information
Risk Information
Financial Vulnerability
Flood Insurance
FIS Reports
Floodway Data
Summary of Discharges
Limited Detail Flood Hazard Data
FIS Report Builder
Effective Index Map
Engineering Models
Map Export
Data Export
N
1015.7
1009.2
1009.2
1009.2
Snow Creek
Dobbins Mill Rd
Horse Haven Trl
Summary of Discharges
Flooding Source
Discharges (cfs)
Location
Drainage Area (square miles)
10% Annual Chance
2% Annual Chance
1% Annual Chance
0.2% Annual Chance
Snow Creek
Approximately 150 feet downstream of Dobbins Mill Road (SR 1122)
6.88
*
*
2486
*
Print

Upstrm Z4385

850 012

