

Project Number _____
TIP Number _____
Let Date _____

PREDESIGN-PRESURVEY REPORT

County Harnett

Bridge Number 420245
Road Number SR 2054 (marshbanks Ra)
Stream East Buies Creek

Type Of Request: POC Force Account TIP
Date 1/11/16 Name EAKpuega Assigned To _____
Checked By _____

Prior Survey Date No (attach copy of prior survey)

Study By Scour Section yes

Flood Zone yes Detail Study Redelineated Date 10/3/2006 (attach copy of flood map) Have microfiche Panel: # 0660

B.M. Info _____

Quad Map _____ Drainage Area 7.6 Smi From Stream Stat.
Q25 835 Q50 1045 Q100 1270 Method USGS-Rural Regression
eqn (SR Report 2009-5158)

EXISTING BRIDGE INFORMATION

Location 0.1 mi N US 421 AND NC 27

Average Daily Traffic 2300 (2009)

Length 32 Bed- To Crown 11 Water Depth 3

Type Structure RC Thru Girders- RC Full height Abuts.

Type Spans 1 @ 31'7

Upstream Structure (SR 2084) C 262

Location 0.2 mi W Jct SR 2002

Bed- To Crown 14 Prior Survey None

Downstream Structure (US 421, NC 27) C-18

Location 0.1 mi N Jct SR 2054

Bed- To Crown 16 Prior Survey 2-85 - Not Found

SCS Watershed _____

ENVIRONMENTAL

Trout Stream No Anadromous Fish No Primary Nursery Area No

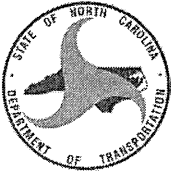
High Quality Waters No Nutrient Sensitive Waters No

Near Water Supply Intake Yes CAMA County No

Stream Classification WS-IV

DENR River Basin Info. Cape Fear

Office estimated min. bry length = 80'



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION PRIORITY MAINTENANCE
CORRECTION TO BETWEEN RAIL AND TOP OF RAIL
TO WEAR SURFACE.

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY HARNETT BRIDGE NUMBER 420245 INSPECTION CYCLE 2 YRS
SR2054 MARSHBANKS ST
ROUTE SR2054 ACROSS EAST BUIES CREEK M.P. 0

LOCATION 0.1MI.N.US421&NC27

SUPERSTRUCTURE REINFORCED CONCRETE THRU GIRDER

SUBSTRUCTURE REINFORCED CONCRETE FULL HEIGHT ABUTMENTS

SPANS 1@31'7

LONGITUDE 78° 44' 2.08"

LATITUDE 35° 24' 1.48"

INSPECTION DATE 06/03/2014

PRESENT CONDITION FAIR

PRESENT POSTING SV 21 TTST 27

SV 21 TTST 27

PROPOSED POSTING

OTHER SIGNS PRESENT 4-DELINEATORS; 2-NARROW BRIDGE



LOOKING NORTH

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: 07/23/2014

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
HARNETT	6	2	420245	32	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR2054	EAST BUIES CREEK

LOCATED :	BRIDGE NAME :	CITY :
0.1MI.N.US421&NC27		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	2300 2009	LT 281 RT 281

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1923	SHC	437		H 15

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

NAVIGATION :	HT. CRN. TO BED :	WATER DEPTH :
VC 0 FT HC 0 FT	11 FT	3 FT

SUPERSTRUCTURE : REINFORCED CONCRETE THRU GIRDER

SUBSTRUCTURE : REINFORCED CONCRETE FULL HEIGHT ABUTMENTS

SPANS : 1@31'7

BEAMS OR GIRDERS : RC THRU GIRDERS

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
17 RC/4 AWS		24.833 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
20 FT	20.917 FT	LT .4585 FT RT .4585 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	DATE
HS-12	HS-20	thruGird	SV 21	27	09/10/2008

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

UNDER ROUTES AND CLEARANCES

REMARKS :

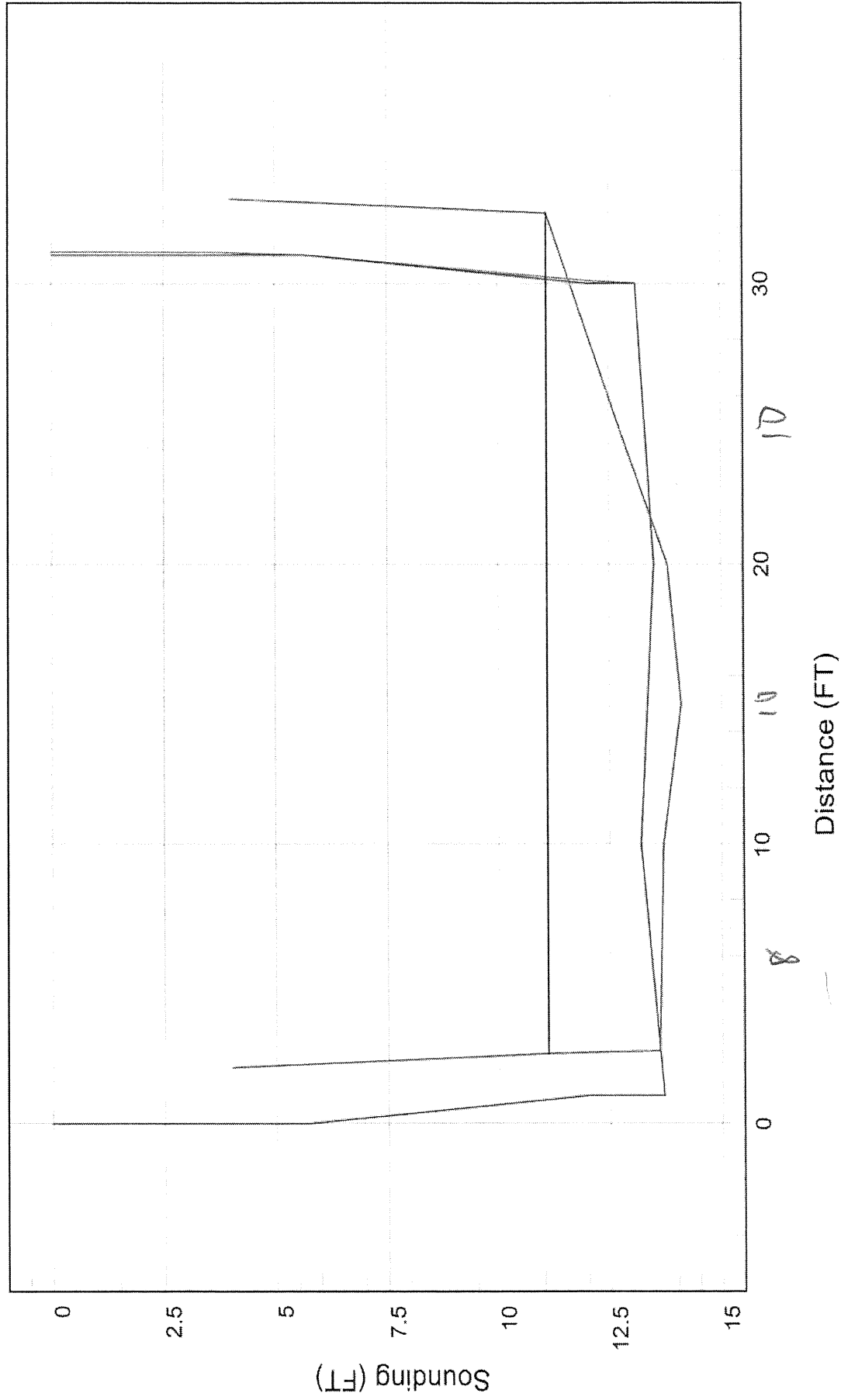
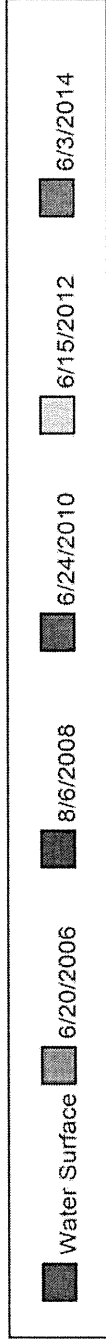
Bridge: 420245

County HARNETT

Date: 06/03/2014

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



$$11 \times 15 = 165 \times 2 = 33 + 20 + 28 = 81$$

Summary of Discharges

- x

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
- Buies Creek					
Just downstream of the confluence of West Buies Creek	27.45	1361	2706	3415	5862
- East Buies Creek					
At mouth	8.66	684	1440	1874	3458
Approximately 1,850 feet downstream of State Route 27	6.86	597	1270	1664	3115
- West Buies Creek					
At mouth	11.00	789	1641	2123	3859
Print					

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BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 10/20/2014

COUNTY : HARNETT DIVISION : 6 DISTRICT : 2 STRUCTURE NUMBER : 420262 LENGTH : 25 FEET

ROUTE CARRIED : SR2084 FEATURE INTERSECTED : EAST BUIES CREEK

LOCATED : 0.2 MI. W. OF JCT. SR2002 BRIDGE NAME : CITY :

FUNC. CLASS : 07 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 5800 2012 RAIL TYPE : LT 0 RT 0

BUILT : 1962 BY : BMU PROJ : FED.AID PROJ : DESIGN LOAD : HS 20 + MOD

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

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 14 FT WATER DEPTH : 6 FT

SUPERSTRUCTURE : TRIPLE 8'X8' RCBC;44' 5" ALONG CENTERLINE OF CULVERT

SUBSTRUCTURE :

SPANS :

BEAMS OR GIRDERS :

FLOOR : ENCROACHMENT : DECK (OUT TO OUT) : 0 FT

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

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-20 OPE.RTG. : HS-26 CONTR.MEMBER : RCBC POSTED : SV TTST DATE 01/01/0001

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

UNDER ROUTES AND CLEARANCES

Upstream structure

REMARKS :

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 05/12/2015

COUNTY : HARNETT DIVISION : 6 DISTRICT : 2 STRUCTURE NUMBER : 420018 LENGTH : 28 FEET

ROUTE CARRIED : US421,NC27 FEATURE INTERSECTED : EAST BUIES CREEK

LOCATED : 0.1 MI N. OF JCT SR2054 BRIDGE NAME : CITY : * COATS

FUNC. CLASS : 14 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 11000 2013 RAIL TYPE : LT 0 RT 0

BUILT : 1958 BY : BMU PROJ : FED.AID PROJ : DESIGN LOAD : HS 20 + MOD

REHAB : BY : PROJ : ALIGNMENT : TAN. SKEW : 90 LANES : ON 5 UNDER 0

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 16 FT WATER DEPTH : 5 FT

SUPERSTRUCTURE : TRIPLE 9'X9' RCBC;104'2 ALONG CENTERLINE OF CULVERT

SUBSTRUCTURE :

SPANS :

BEAMS OR GIRDERS :

FLOOR : ENCROACHMENT : DECK (OUT TO OUT) : 0 FT

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

VERT.CL.OVER : 999.9 FT

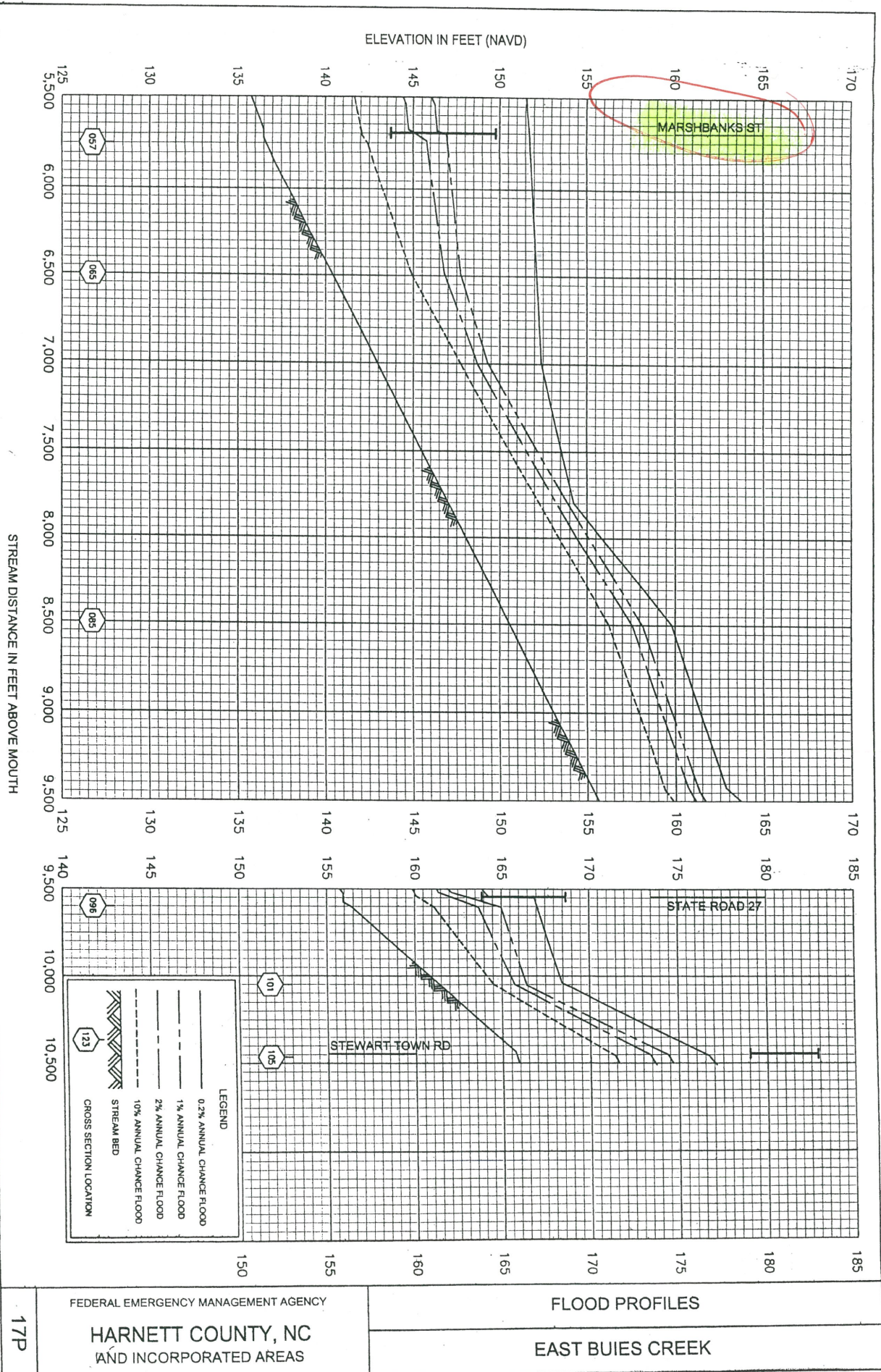
INV.RTG. : HS-55 OPE.RTG. : HS-55 CONTR.MEMBER : RCBC POSTED : SV TTST DATE 01/01/0001

SYSTEM : Primary U.S. Route GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

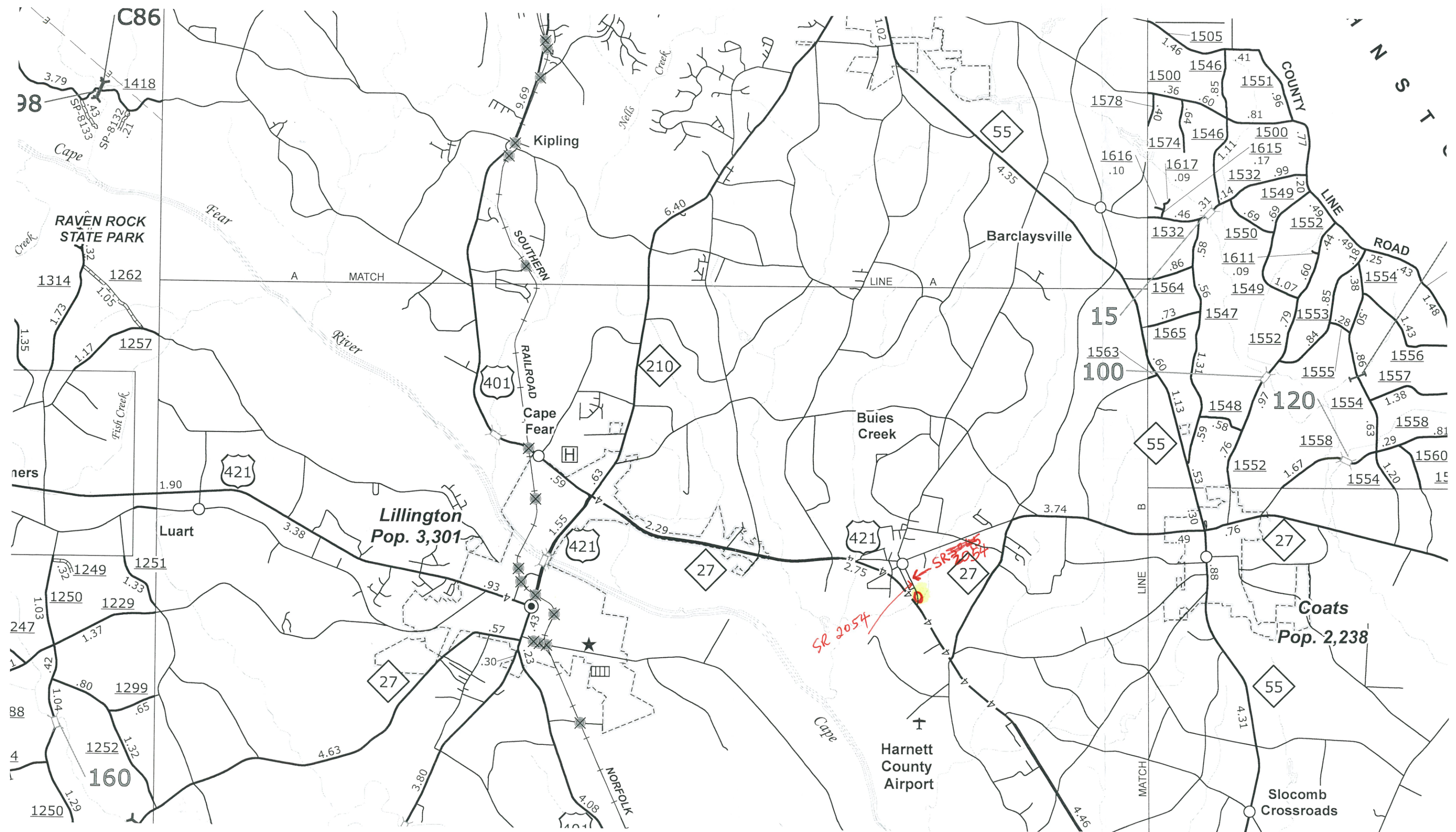
Downstream Structure

REMARKS :



FEDERAL EMERGENCY MANAGEMENT AGENCY

HARNETT COUNTY, NC
AND INCORPORATED AREAS



StreamStats

Delineation Results

Be sure to thoroughly check the delineated basin for accuracy before using the tools below.

StreamStats Basin Characteristics Report - Google Chrome

streamstatsags.cr.usgs.gov/v3_beta/BCreport.htm?rcode=N

US StreamStats Version 3.0

Basin Characteristics Ungaged Site Report

Date: Mon Jan 11, 2016 2:11:42 PM GMT-5
Study Area: North Carolina
NAD 1983 Latitude: 35.4005 (35 24 02)
NAD 1983 Longitude: -78.7338 (-78 44 02)

Label	Value	Units	Definition
DRNAREA	7.59	square miles	Area that drains to a point on a stream
LC01IMP	1.95	percent	Percentage of impervious land cover from NLCD 2001



Who Am I - General Public Effective

Flood Information

Click the map to view information.

Map Location

Flood Zone: AE (Floodway)

Flood Source: East Buies Creek

Base Flood Elevation: 146.7 ft

County: Harnett

Political Area: Harnett County

CID: 370328

Panel: 0660 Download

Map Number: 3720066000J

Panel Effective Date: 10/3/2006

Latitude: 35.4005

Longitude: -78.7338

Risk Information

Financial Vulnerability

FIS Reports

Map Export

Data Export

Harnett 245