

PREDESIGN-PRESURVEY REPORT

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

County ALEXANDER

Bridge# 010 149
 Road# SR 1664
 Stream BIG BRANCH CREEK

Type Of Request: POC Force Account TIP NCMA

Date 10/10/11 Name _____ Assigned To _____

Checked By _____

Prior Survey Date _____ (attach copy of prior survey)

Study By Scour Section _____

Flood Zone YES Detail Study LIMITED Date 12/18/07 Panel# 3776

B.M. Info _____

Quad Map STONY POINT Drainage Area 1.96 SQ MI From _____
 Q25 800 CFS Q50 1000 CFS Q100 1200 CFS Method USGS RURAL 20

EXISTING BRIDGE INFORMATION

Location 0.4 MI E JCT SR 1605

Average Daily Traffic 210 (2008)

Length 26 FT Bed- To Crown 9' Water Depth 1'

Type Structure TIMBER DECK ON I BEAMS

Type Spans 1 @ 25'

Upstream Structure _____

Location _____

Bed- To Crown _____ Prior Survey _____

Downstream Structure _____

Location _____

Bed- To Crown _____ Prior Survey _____

SCS Watershed _____

ENVIRONMENTAL

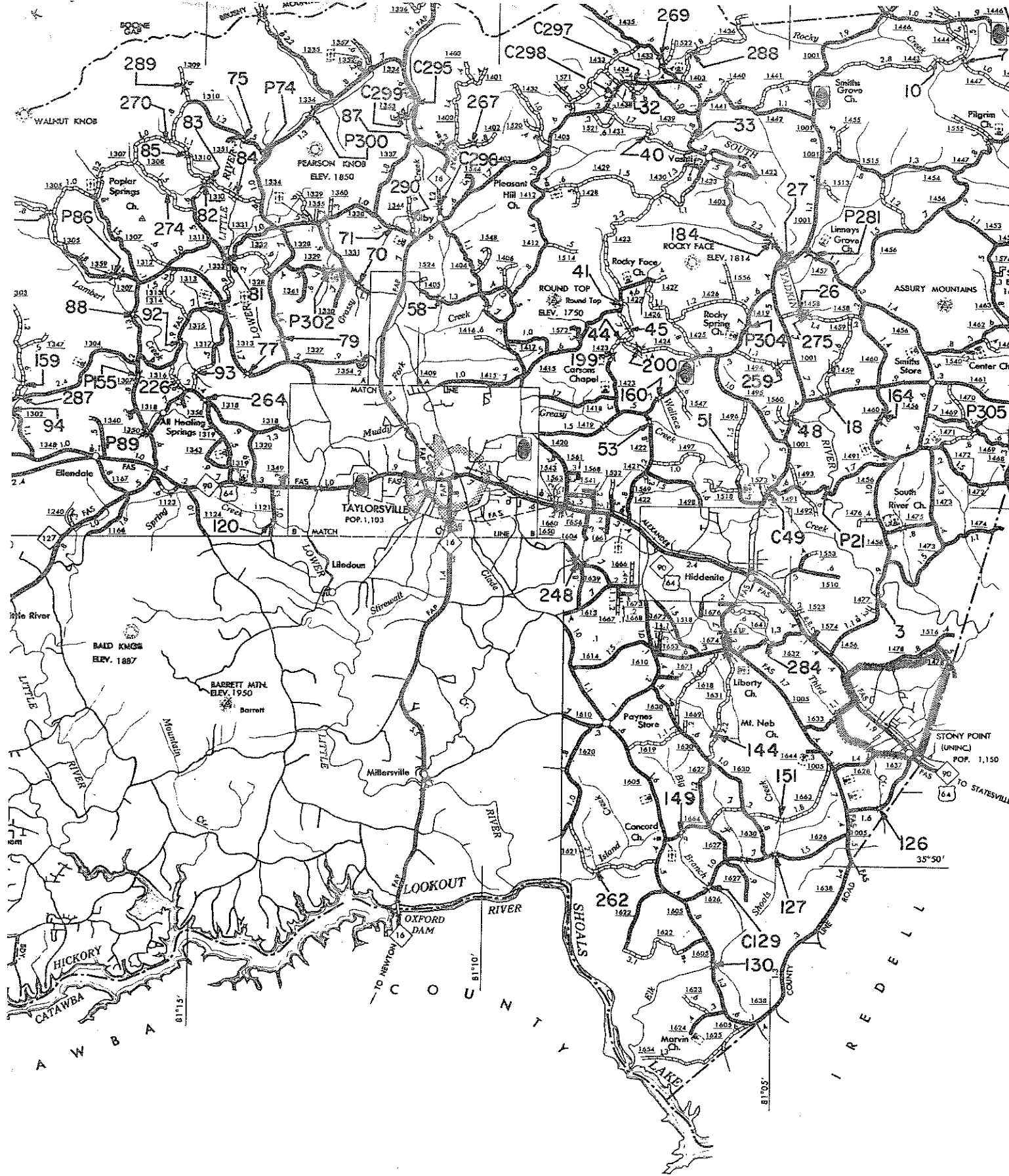
Trout Stream NO Anadromous Fish NO Primary Nursery Area NO

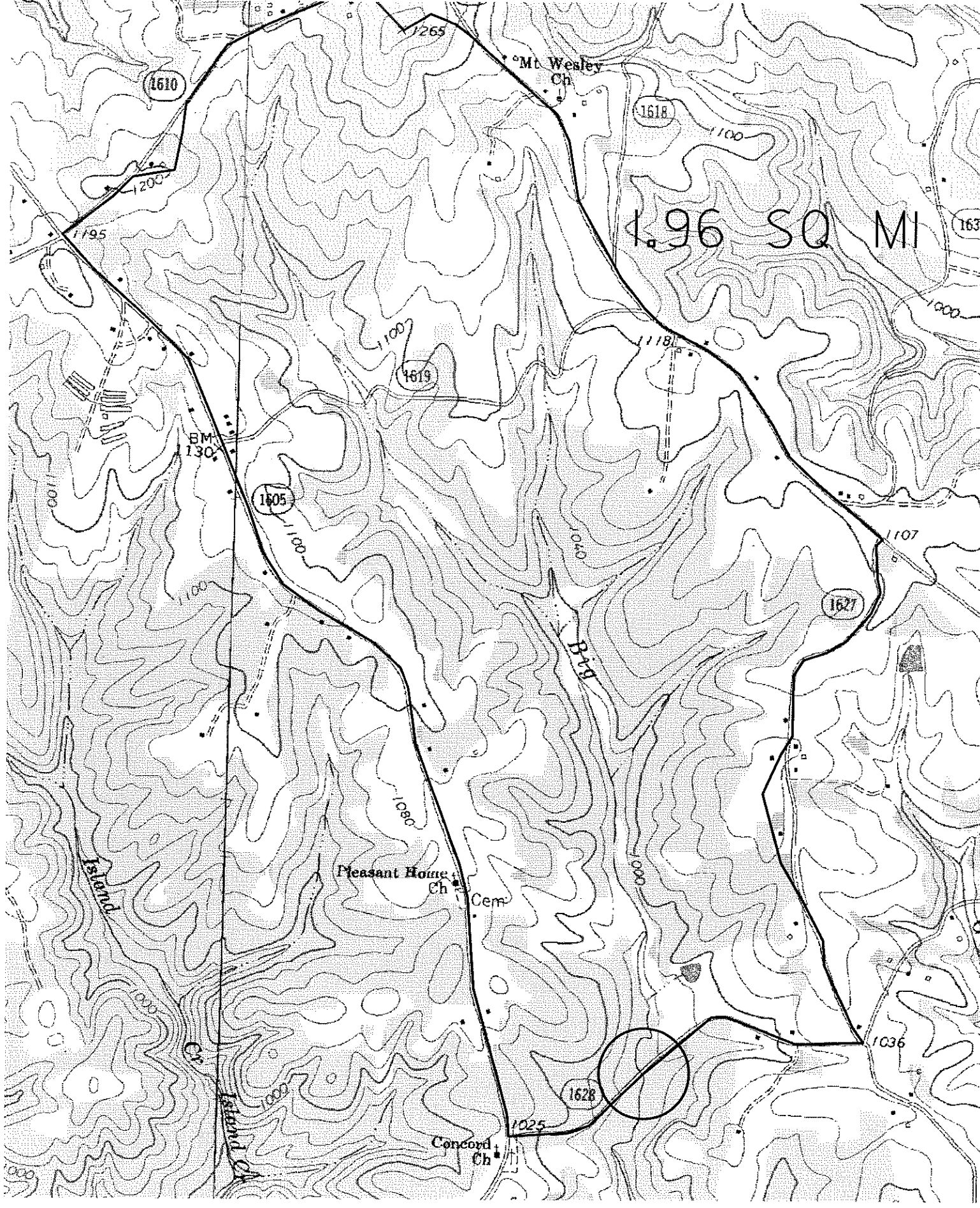
High Quality Waters NO Nutrient Sensitive Waters NO

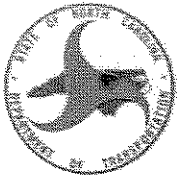
Near Water Supply Intake NO CAMA County NO

Stream Classification WS-IV 11-73-2

DENR River Basin Info. CATAWBA







NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION TEMPORARY REPAIRS

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY ALEXANDER BRIDGE NUMBER 010149 INSPECTION CYCLE 2 YRS

ROUTE SR1664 ACROSS BIG BRANCH CREEK M.P. 0

LOCATION 0.4 MI. E. JCT. SR1605

SUPERSTRUCTURE TIMBER DECK ON I-BEAMS

SUBSTRUCTURE END BENTS:TIMBER CAPS, POSTS & SILLS, TIMBER BULKHEADS

SPANS 1@25'7"

LONGITUDE 81° 6' 34.1"

LATITUDE 35° 50' 27.8"

PRESENT CONDITION FAIR

INVENTORY RATING HS 8.4

INSPECTION DATE 11/18/2010

OPERATING RATING HS 14.1

PRESENT POSTING SV 20 TTST 27

PROPOSED POSTING SV 14, TTST: 19

COMPUTER UPDATE 1-6-11

ANALYSIS DATE 12-13-10

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT 4 DELINEATORS



WEST TO EAST

SIGN NOTICE
ISSUED FOR

NUMBERED
REQUIRED

<u>No</u>	WEIGHT LIMIT	<u>01</u>
<u>No</u>	DELINEATORS	<u>01</u>
<u>No</u>	NARROW BRIDGE	
<u>No</u>	ONE LANE BRIDGE	
<u>No</u>	LOW CLEARANCE	

BRIDGE INSPECTION RECORD AND SUMMARY FOR SHORED STRUCTURES OR STRUCTURES WITH TEMPORARY REPAIRS MADE TO KEEP A BRIDGE OPEN

BRIDGE: 010149 COUNTY: Alexander

DATE: 3/22/07

THE FOLLOWING S. I. & A ITEMS ARE TO BE CODED TO REFLECT THE FACT
THAT THE STRUCTURE IS SHORED OR HAS HAD TEMPORARY REPAIRS MADE
TO KEEP THE BRIDGE OPEN :

	<u>CODE</u>	<u>BY</u>
S I & A ITEM 103 - TEMPORARY STRUCTURE DESIGNATION	T	JRJ
S I & A ITEM 59 - SUPERSTRUCTURE		
S I & A ITEM 60 - SUBSTRUCTURE	4	JRJ
S I & A ITEM 64 OPERATING RATING		4/11/07
HS 0.0 BY: AM		
S I & A ITEM 66 - INVENTORY RATING		
HS 0.0 BY: AM		

COMMENTS

pile #3 @ abut #1 & piles #1 through #3 @ abut #2 Bepplemented

NATIONAL BRIDGE INVENTORY - STRUCTURE INVENTORY AND APPRAISAL Run Date: 01/06/2011

IDENTIFICATION				CLASSIFICATION	
(1) STATE NAME - NORTH CAROLINA	BRIDGE	010149	SUFFICIENCY RATING =	21.5	
(8) STRUCTURE NUMBER(FEDERAL)		000000000030149	STATUS =	Structurally Deficient	
INVENTORY ROUTE (ON/UNDER) - ON		131016840			
(2) STATE HIGHWAY DEPARTMENT DISTRICT		12			
(3) COUNTY CODE 3	(4) PLACE CODE	00000	(112)NBIS BRIDGE SYSTEM -	YES	
(6) FEATURE INTERSECTED - BIG BRANCH CREEK			(104)HIGHWAY SYSTEM NON NHS Route	0	
(7) FACILITY CARRIED SR1864			(26) FUNCTIONAL CLASS - Local	09	
(9) LOCATION 0.4 MI. E. JCT. SR1805			(100)STRAHNET HIGHWAY - Not a STRAHNET Route	0	
(11)MILEPOINT		0	(101)PARALLEL STRUCTURE - No Parallel Structure	N	
(16)LAT 35° 50' 27.8"	(17)LONG 81° 6' 34.1"		(102)DIRECTION OF TRAFFIC - 2-way Traffic	2	
(98)BORDER BRIDGE STATE CODE	PCT SHARE		(103)TEMPORARY STRUCTURE - Temporary	T	
(99)BORDER BRIDGE STRUCTURE NO			(110)DESIGNATED NATIONAL NETWORK - Not Part of	0	
			(20) TOLL On Free Road	3	
STRUCTURE TYPE AND MATERIAL			(31) MAINTAIN - State Highway Agency	01	
(43) STRUCTURE TYPE MAIN: Steel			(22) OWNER - State Highway Agency	01	
TYPE - Stringer Multibeam or Girder	CODE	302	(37) HISTORICAL SIGNIFICANCE - Not Eligible	5	
(44) STRUCTURE TYPE APPR:					
TYPE -	CODE		CONDITION	CODE	
(45) NUMBER OF SPANS IN MAIN UNIT		1	(58) DECK	7	
(46) NUMBER OF APPROACH SPANS			(59) SUPERSTRUCTURE	6	
(107)DECK STRUCTURE TYPE - Timber	CODE	8	(60) SUBSTRUCTURE	4	
(108)WEARING SURFACE / PROTECTIVE SYSTEM:			(61) CHANNEL & CHANNEL PROTECTION	7	
(A) TYPE OF WEARING SURFACE - Bituminous	CODE	6	(62) CULVERTS	N	
(B) TYPE OF MEMBRANE - None	CODE	0			
(C) TYPE OF DECK PROTECTION - None	CODE	0	LOAD RATING AND POSTING	CODE	
			(31) DESIGN LOAD Other or Unknown	0	
AGE AND SERVICE			(64) OPERATING RATING - HS-1	101	
(27) YEAR BUILT		1956	(66) INVENTORY RATING - HS-1	101	
(106)YEAR RECONSTRUCTED			(70) BRIDGE POSTING - Posting Required	0	
(42) TYPE OF SERVICE: ON - Highway			(41) STRUCTURE OPEN, POSTED, OR CLOSED	P	
UNDER - Waterway	CODE	15	DESCRIPTION - Posted for Load		
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE					
(29) AVERAGE DAILY TRAFFIC		210	APPRAISAL	CODE	
(30) YEAR OF ADT 2008	(109) TRUCK ADT PCT	6 %	(67) STRUCTURAL EVALUATION	2	
(19) BYPASS OR DETOUR LENGTH		2 MI	(68) DECK GEOMETRY	3	
GEOMETRIC DATA			(69) UNDERCLEARANCES, VERT & HORIZ	N	
(48) LENGTH OF MAXIMUM SPAN		26 FT	(71) WATERWAY ADEQUACY	6	
(49) STRUCTURE LENGTH		26 FT	(72) APPROACH ROADWAY ALIGNMENT	7	
(50)CURB OR SIDEWALK: LEFT 0.3 FT RIGHT		0.3 FT	(36) TRAFFIC SAFETY FEATURES	0000	
(51) BRIDGE ROADWAY WIDTH CURB TO CURB		19.0 FT	(113)SCOUR CRITICAL BRIDGES	U	
(52) DECK WIDTH OUT TO OUT		20.1 FT	SCOUR PLAN OF ACTION S		
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)		18.0 FT			
(33) BRIDGE MEDIAN - No Median	CODE	0	PROPOSED IMPROVEMENTS	CODE	
(34) SKEW 21° (35) STRUCTURE FLARED		NO	(75) TYPE OF WORK -	311	
(10) INVENTORY ROUTE MIN VERT CLEAR		99 FT 99 IN	(76) LENGTH OF STRUCTURE IMPROVEMENT	49 FT	
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		19.0 FT	(94) BRIDGE IMPROVEMENT COST	\$106,000	
(53) MIN VERT CLEAR OVER BRIDGE RDWY		99 FT 99 IN	(95) ROADWAY IMPROVEMENT COST	\$27,000	
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad			(96) TOTAL PROJECT COST	\$159,000	
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad		99.9 FT	(97) YEAR OF IMPROVEMENT COST ESTIMATE	2007	
(56) MIN LAT UNDERCLEAR LT REF -		0.0 FT	(114)FUTURE ADT 420	(115) YEAR FUTURE ADT	2025
NAVIGATION DATA			INSPECTIONS		
(38) NAVIGATION CONTROL - No Navigational Control	CODE	0	(90) INSPECTION DATE	11/18/2010	
(111)PIER PROTECTION - Not Applicable	CODE		(92) CRITICAL FEATURE INSPECTION:	(93) CFI DATE	
(39) NAVIGATION VERTICAL CLEARANCE		0	A) FRACTURE CRIT DETAIL - NO	A)	
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR			B) UNDERWATER INSP - NO	B)	
(40) NAVIGATION HORIZONTAL CLEARANCE		0	C) OTHER SPECIAL INSP NO	C)	
			SCOUR		

BRIDGE MANAGEMENT UNIT
DATA ON EXISTING STRUCTURE

Run Date: 01/06/2011

COUNTY :	DIV :	DIST :	STRUCTURE NUMBER :	LENGTH :		
ALEXANDER	12	2	010149	26	FEET	
ROUTE CARRIED :		FEATURE INTERSECTED :				
SR1664		BIG BRANCH CREEK				
LOCATED :		BRIDGE NAME :		CITY :		
0.4 MI. E. JCT. SR1605						
FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :		
09	NFA	NFA	210 2008	LT 227 RT 227		
BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :		
1956	BMU			Other or Unknown		
REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :	
	BMU	5.7851	TAN	111	ON 2 UNDER	
NAVIGATION :		HT. CRN. TO BED :		WATER DEPTH :		
VC	0.0 FT	HC	0.0 FT	9	FT	1 FT
SUPERSTRUCTURE : TIMBER DECK ON I-BEAMS						
SUBSTRUCTURE : END BENTS.TIMBER CAPS, POSTS & SILLS, TIMBER BULKHEADS						
SPANS : 1@25'7						
BEAMS OR GIRDERS : 10 LINES OF W12X27 I-BEAMS @ 2'0 1/2 CENTERS						
FLOOR :	ENCROACHMENT :		DECK (OUT TO OUT) :			
4X8 TIM,1.5 AWS			20.1 FT			
CLEAR ROADWAY :	BETWEEN RAILS :		SIDEWALK OR CURB :			
19.0 FT	19.5 FT		LT 0.3 FT RT 0.3 FT			
VERT.CL.OVER :	VERT.CL.UNDER :		HOR.CL.UNDER :			
99 FT 99 IN	00 FT 00 IN		0.0 FT			
INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :			
HS-1	HS-1	intbm 3	SV 14 TTST 19 DATE 01/06/2011			
SYSTEM :			GREEN LINE ROUTE :			
Secondary S.R. Route			N			
2ND OPENING :		3RD OPENING :		4TH OPENING :		5TH OPENING :
REMARKS :						

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 010149 County: ALEXANDER Date: 11/18/2010 By: MF

Record sounding from top of rail. Other location if needed: _____

Distance from Highwater Mark to top of rail: _____ Location of Highwater Mark: _____

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	3	TOP OF FILLFACE			
0.27	3	TOP OF FILLFACE			
0.28	4.7	TOP OF CAP			
0.29	11.3	WSWE			
0.3	11.5	FACE OF ABUT	0.3	11	FACE OF ABUT
10	12	BED			
19	11.3	WSWE			
20	8.5	SLOPE			
25.3	8.3	FACE OF ABUT	25.3	9	FACE OF ABUT
25.31	4.7	TOP OF CAP			
25.32	3	TOP OF FILLFACE			
25.6	3	TOP OF FILLFACE			

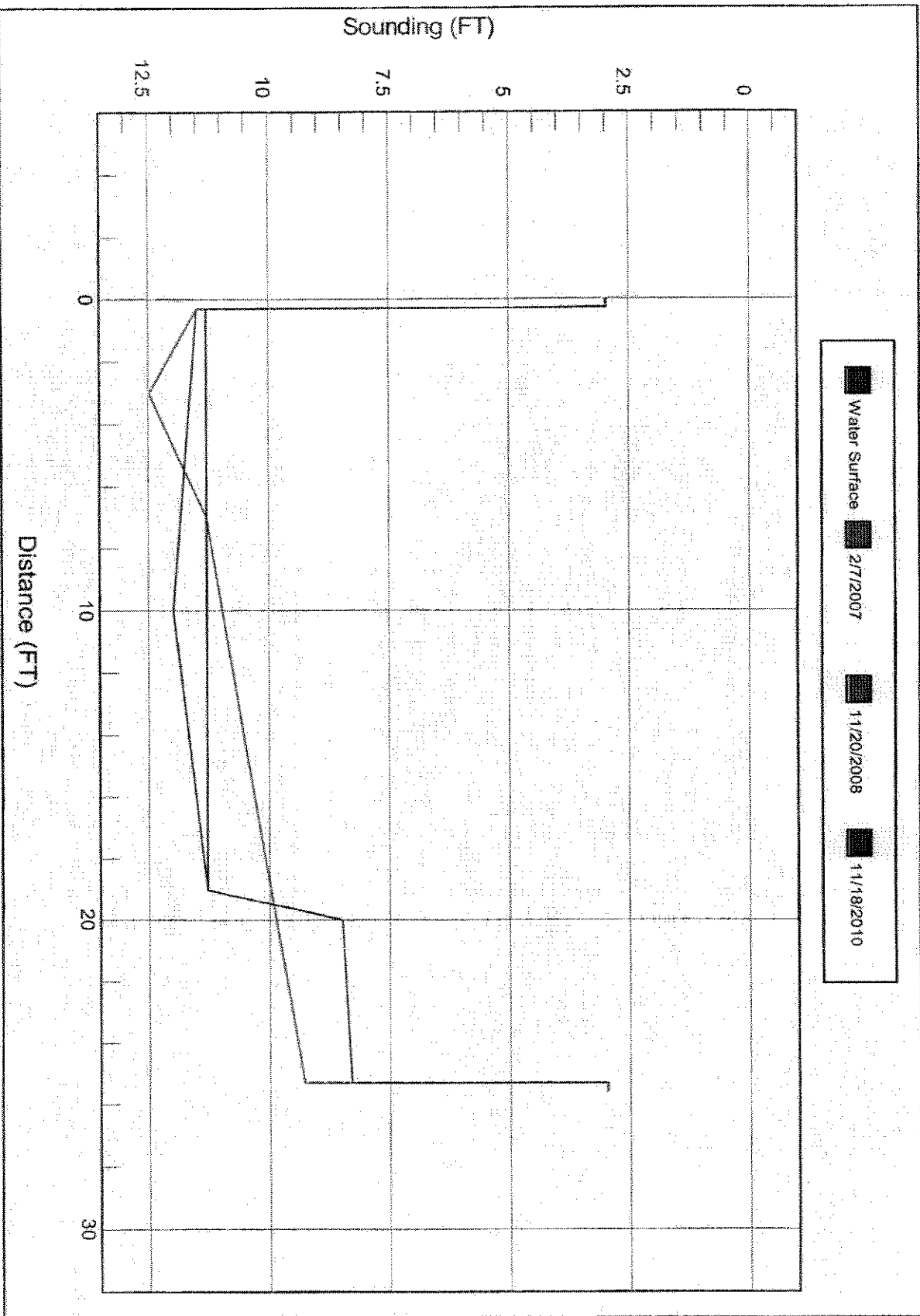
Bridge: 010149

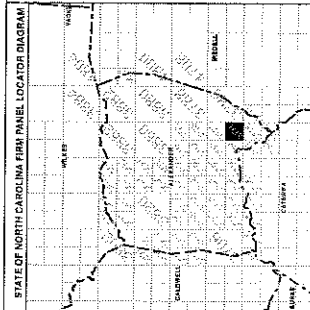
County: ALEXANDER

Date: 11/18/2010

Top of Rail = 0 FT (Sounding)

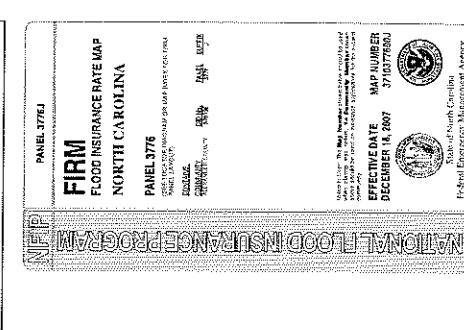
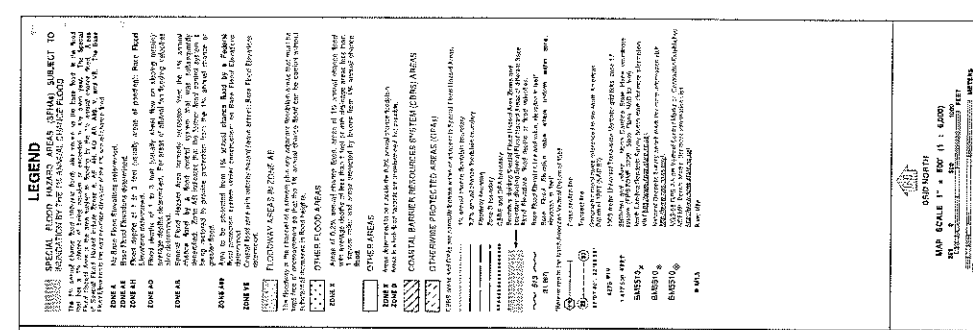
STREAMBED PROFILE (Downstream)



[illegible]

NOTES TO USERS

may be used in a laboratory for the purpose of determining the actual physical properties of a material. The use of a laboratory for the purpose of determining the actual physical properties of a material is a common practice in the field of materials science. The use of a laboratory for the purpose of determining the actual physical properties of a material is a common practice in the field of materials science. The use of a laboratory for the purpose of determining the actual physical properties of a material is a common practice in the field of materials science.



ZONE X

SR 1621

Big Branch

ZONE AE

ZONE X

Alexander County
Unincorporated Areas
370398

SR 1564

X 64 ATA (189)

WEIMAR LN

ZONE AE

ZONE X

SR 1621

