

Project Number 38410.1.2
TIP Number B-4562
Let Date _____

PREDESIGN-PRESURVEY REPORT

County JOHNSTON

Bridge Number 500216
Road Number SR 2143 - Old Route 22
Stream Little Buffalo Creek

Type Of Request: POC Force Account TIP
Date 1-27-16 Name SJ Sykes Assigned To _____
Checked By _____

Prior Survey Date Jan '51 (attach copy of prior survey) recommend 5 @ 17'
Study By Scour Section _____

Flood Zone AE Detail Study Limited Date 12/2/2005 (attach copy of flood map) Panel 2647
B.M. Info _____

Quad Map Kenly W Drainage Area 23.7 sq mi From STREAM Stats
Q25 1670 Q50 2100 Q100 2500 Method USGS SI Report 2009-5158

EXISTING BRIDGE INFORMATION

Location 0.3 m. W of JCT SR 2165

Average Daily Traffic 700 (yr 2012)

Length 86' Bed-To Crown 10' Water Depth 2'

Type Structure RC Floors on timber joist E bents + int bents: timber caps/timber piles

Type Spans 1 @ 17' 7", 3 @ 17', 1 @ 17' 7"

Upstream Structure Brgs #347 + 348 (SR 2110)

Location 0.7 + 0.8 m. South of JCT SR 2148

Bed-To Crown 9' (#347) 10' (#348) Prior Survey Feb '79

Downstream Structure Brg #90 (US 301)

Location 0.7 m. N of JCT SR 2339

Bed-To Crown 29' Prior Survey No

SCS Watershed _____

ENVIRONMENTAL

Trout Stream No Anadromous Fish No Primary Nursery Area No

High Quality Waters No Nutrient Sensitive Waters YES

Near Water Supply Intake No CAMA County No

Stream Classification C, NSW

DENR River Basin Info. Neuse

office estimated min. brg length = 115'



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION PRIORITY MAINTENANCE ISSUED ON JOISTS
TEMPORARY PILE REPAIRS CONCRETE
ENCASEMENTS

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY JOHNSTON BRIDGE NUMBER 500216 INSPECTION CYCLE 2 YRS
ROUTE SR2143 ACROSS LITTLE BUFFALO CREEK M.P. 0

LOCATION 0.3 MI W JCT SR2165

SUPERSTRUCTURE R.C.FLOOR ON TIMBER JOISTS STD. BMD-10

SUBSTRUCTURE E.BTS&INT.BTS:TIM.CAPS/TIM. PILES;

SPANS 1@17'-7,3@17',1@17'-7

LONGITUDE 78° 9' 48.72"

LATITUDE 35° 35' 47.26"

INSPECTION DATE 10/08/2013

PRESENT CONDITION FAIR

PRESENT POSTING SV 6 TTST 0

SV 19 TTST 28

PROPOSED POSTING _____

OTHER SIGNS PRESENT 4 DELINEATORS



LOOKING NORTH

Fracture Critical	<u>No</u>
Temporary Shoring	<u>No</u>
Scour Critical	<u>No</u>
Scour POA	<u>Yes</u>

SIGN NOTICE ISSUED FOR	WEIGHT LIMIT	NUMBERED REQUIRED
<u>No</u>	WEIGHT LIMIT	_____
<u>No</u>	DELINEATORS	_____
<u>No</u>	NARROW BRIDGE	_____
<u>No</u>	ONE LANE BRIDGE	_____
<u>No</u>	LOW CLEARANCE	_____

NATIONAL BRIDGE INVENTORY----- STRUCTURE INVENTORY AND APPRAISAL Run Date: 10/21/2013

IDENTIFICATION					
(1) STATE NAME -NORTH CAROLINA	BRIDGE	500216	SUFFICIENCY RATING =		26.63
(8) STRUCTURE NUMBER(FEDERAL)	000000001010216	STATUS =		Structurally Deficient	
(5) INVENTORY ROUTE (ON/UNDER) - ON	31021430				
(2) STATE HIGHWAY DEPARTMENT DISTRICT	3	CLASSIFICATION		CODE	
(3) COUNTY CODE 101 (4) PLACE CODE	0	(112)NBIS BRIDGE SYSTEM -		YES	
(6) FEATURE INTERSECTED - LITTLE BUFFALO CREEK		(104)HIGHWAY SYSTEM Is not on NHS		0	
(7) FACILITY CARRIED SR2143		(26) FUNCTIONAL CLASS - Minor Collector		08	
(9) LOCATION 0.3 MI W JCT SR2165		(100)STRAHNET HIGHWAY - Not a STRAHNET Route		0	
(11)MILEPOINT	0	(101)PARALLEL STRUCTURE - No Parallel Structure		N	
(16)LAT 35° 35' 47.26" (17)LONG 78° 9' 48.72"		(102)DIRECTION OF TRAFFIC - 2-way Traffic		2	
(98)BORDER BRIDGE STATE CODE	PCT SHARE	(103)TEMPORARY STRUCTURE - Temporary Structure/Conditions		T	
(99)BORDER BRIDGE STRUCTURE NO		(110)DESIGNATED NATIONAL NETWORK - Not on the National Network		0	
		(20) TOLL On Free Road		3	
STRUCTURE TYPE AND MATERIAL		(31) MAINTAIN - State Highway Agency		01	
(43) STRUCTURE TYPE MAIN: Wood or Timber		(22) OWNER - State Highway Agency		01	
TYPE - Stringer Multibeam or Girder	CODE 702	(37) HISTORICAL SIGNIFICANCE - Not Eligible		5	
(44) STRUCTURE TYPE APPR :		CONDITION		CODE	
TYPE -	CODE 000	(58) DECK		6	
(45) NUMBER OF SPANS IN MAIN UNIT	5	(59) SUPERSTRUCTURE		5	
(46) NUMBER OF APPROACH SPANS		(60) SUBSTRUCTURE		4	
(107)DECK STRUCTURE TYPE - 1	CODE	(61) CHANNEL & CHANNEL PROTECTION		7	
(108)WEARING SURFACE / PROTECTIVE SYSTEM :		(62) CULVERTS		N	
(A) TYPE OF WEARING SURFACE -	CODE	LOAD RATING AND POSTING		CODE	
(B) TYPE OF MEMBRANE -	CODE	(31) DESIGN LOAD Unknown		0	
(C) TYPE OF DECK PROTECTION -	CODE	(63) OPERATING RATING METHOD - Allowable Stress		2	
		(64) OPERATING RATING - HS-1		1	
		(65) INVENTORY RATING METHOD - Allowable Stress		2	
		(66) INVENTORY RATING - HS-1		1	
		(70) BRIDGE POSTING - Posting Required		0	
		(41) STRUCTURE OPEN, POSTED ,OR CLOSED		P	
		DESCRIPTION - Posted for Load			
AGE AND SERVICE		APPRAISAL		CODE	
(27) YEAR BUILT	1958	(67) STRUCTURAL EVALUATION		3	
(106)YEAR RECONSTRUCTED		(68) DECK GEOMETRY		4	
(42) TYPE OF SERVICE : ON - Highway		(69) UNDERCLEARANCES,VERTI & HORIZ		N	
UNDER - Waterway	CODE 15	(71) WATERWAY ADEQUACY		5	
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE	0	(72) APPROACH ROADWAY ALIGNMENT		8	
(29) AVERAGE DAILY TRAFFIC	700	(36) TRAFFIC SAFETY FEATURES		0000	
(30) YEAR OF ADT 2012 (109) TRUCK ADT PCT	6%	(113)SCOUR CRITICAL BRIDGES		U	
(19) BYPASS OR DETOUR LENGTH	4 MI				
GEOMETRIC DATA		PROPOSED IMPROVEMENTS			
(48) LENGTH OF MAXIMUM SPAN	17 FT	(75) TYPE OF WORK -		CODE	
(49) STRUCTURE LENGTH	86 FT	(76) LENGTH OF STRUCTURE IMPROVEMENT			
(50)CURB OR SIDEWALK: LEFT .7915 FT RIGHT .7915 FT		(94) BRIDGE IMPROVEMENT COST			
(51) BRIDGE ROADWAY WIDTH CURB TO CURB	24 FT	(95) ROADWAY IMPROVEMENT COST			
(52) DECK WIDTH OUT TO OUT	25.33 FT	(96) TOTAL PROJECT COST			
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)	20 FT	(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(33) BRIDGE MEDIAN - No Median	CODE 0	(114)FUTURE ADT 1400 (115) YEAR FUTURE ADT 2025			
(34) SKEW 0° (35) STRUCTURE FLARED	0				
(10) INVENTORY ROUTE MIN VERT CLEAR	999.9 FT	INSPECTIONS			
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR	24 FT	(90) INSPECTION DATE		10/08/2013	
(53) MIN VERT CLEAR OVER BRIDGE RDWY	999.9 FT	(92) CRITICAL FEATURE INSPECTION :		(93) CFI DATE	
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad	0 FT	A) FRACTURE CRIT DETAIL - NO		A)	
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad	000 FT	B) UNDERWATER INSP - NO		B)	
(56) MIN LAT UNDERCLEAR LT REF -	000 FT	C) OTHER SPECIAL INSP NO		C)	
NAVIGATION DATA		SCOUR			
(38) NAVIGATION CONTROL - No Navigational Control	CODE 0				
(111)PIER PROTECTION -	CODE				
(39) NAVIGATION VERTICAL CLEARANCE	0				
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR	FT				
(40) NAVIGATION HORIZONTAL CL EARANCE	0 FT				

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 10/21/2013

COUNTY : JOHNSTON DIVISION : 4 DISTRICT : 3 STRUCTURE NUMBER : 500216 LENGTH : 86 FEET

ROUTE CARRIED : SR2143 FEATURE INTERSECTED : LITTLE BUFFALO CREEK

LOCATED : 0.3 MI W JCT SR2165 BRIDGE NAME : CITY :

FUNC. CLASS : 08 SYST.ON : NFA SYST.UNDER : NFA ADT & YR : 700 2012 RAIL TYPE : LT 241 RT 241

BUILT : 1958 BY : BMU PROJ : FED.AID PROJ : DESIGN LOAD : Unknown

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

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 10 FT WATER DEPTH : 2 FT

SUPERSTRUCTURE : R.C.FLOOR ON TIMBER JOISTS STD. BMD-10

SUBSTRUCTURE : E.BTS&INT.BTS:TIM.CAPS/TIM. PILES;

SPANS : 1@17'-7,3@17',1@17'-7

BEAMS OR GIRDERS : 19 LINES 6X12 TIMBER JOISTS@ VAR. CENTERS

FLOOR : 5 RC/3.5 AWS ENCROACHMENT : DECK (OUT TO OUT) : 25.33 FT

CLEAR ROADWAY : 24 FT BETWEEN RAILS : 25.583 FT SIDEWALK OR CURB : LT .7915 FT RT .7915 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-1 OPE.RTG. : HS-1 CONTR.MEMBER : Int Joist POSTED : SV 19 TTST 28 DATE 11/29/2011

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

UNDER ROUTES AND CLEARANCES

REMARKS :

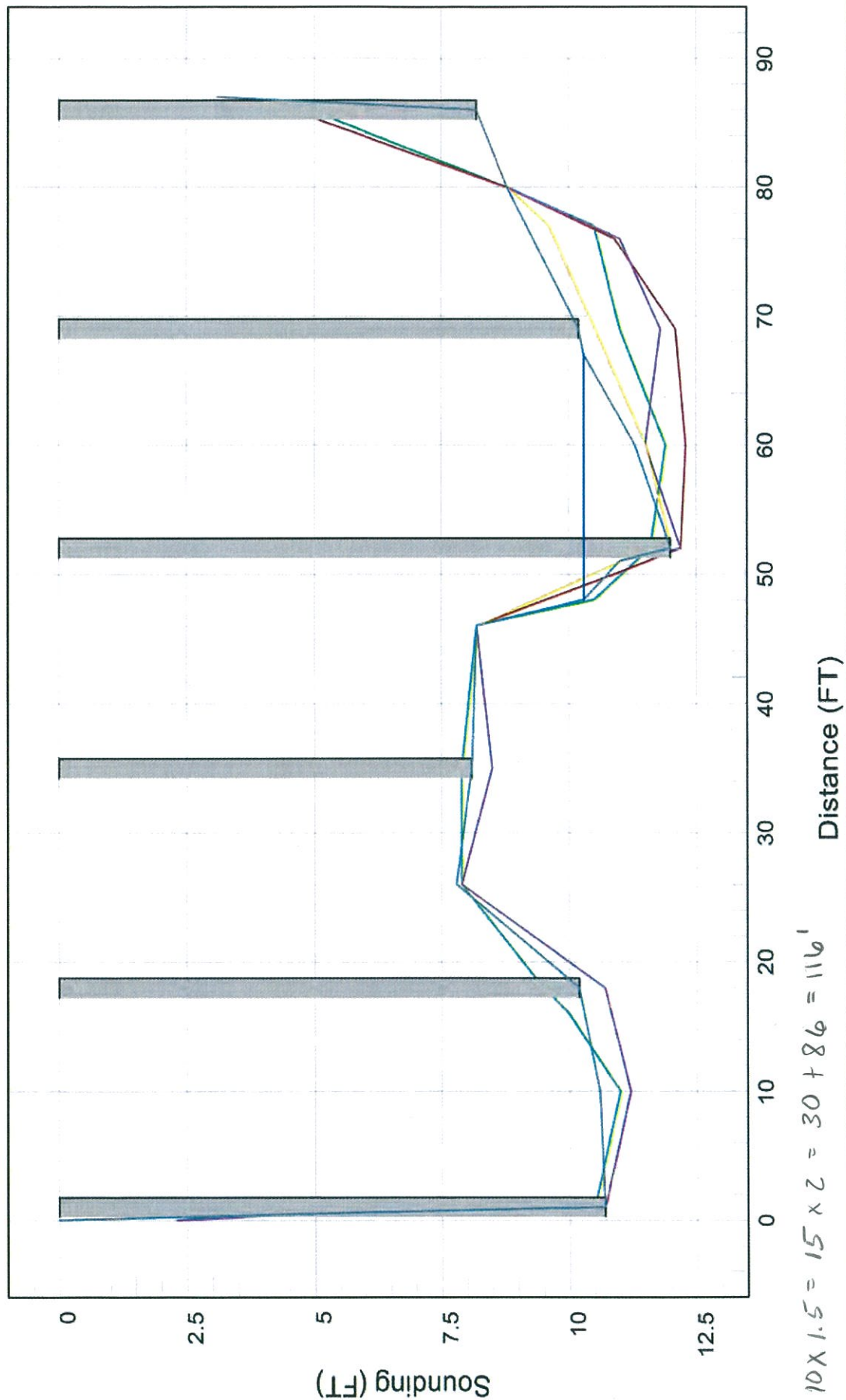
Bridge: 500216

County JOHNSTON

Date: 10/08/2013

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 10/21/2013

COUNTY : JOHNSTON DIVISION : 4 DISTRICT : 3 STRUCTURE NUMBER : 500347 LENGTH : 120 FEET

ROUTE CARRIED : SR2110 FEATURE INTERSECTED : LITTLE BUFFALO CREEK

LOCATED : 0.7MI.S.JCT.SR2148 BRIDGE NAME : CITY :

FUNC. CLASS : 09 SYST.ON : NFA SYST.UNDER : NFA ADT & YR : 560 2012 RAIL TYPE : LT 253 RT 253

BUILT : 1980 BY : BMU PROJ : 6.312231 FED.AID PROJ : DESIGN LOAD : HS 15

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

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 9 FT WATER DEPTH : 2 FT

SUPERSTRUCTURE : PPC CORED SLAB

SUBSTRUCTURE : E.BTS&INT.BTS:PPC CAP/STL. PILES

SPANS : 3@40'

BEAMS OR GIRDERS : 11 PPC CORED SLAB SECTIONS

FLOOR : PPCCS/2.5 AWS ENCROACHMENT : DECK (OUT TO OUT) : 30 FT

CLEAR ROADWAY : 28.667 FT BETWEEN RAILS : 28.667 FT SIDEWALK OR CURB : LT 0 FT RT 0 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-18 OPE.RTG. : HS-31 CONTR.MEMBER : C. Slab POSTED : SV TTST DATE 02/21/2008

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: 01/21/2015

COUNTY : JOHNSTON DIVISION : 4 DISTRICT : 3 STRUCTURE NUMBER : 500348 LENGTH : 60 FEET

ROUTE CARRIED : SR2110 FEATURE INTERSECTED : LITTLE BUFFALO CK. OV.

LOCATED : 0.8 MI. S. OF SR2148 BRIDGE NAME : CITY :

FUNC. CLASS : 09 SYST.ON : NFA SYST.UNDER : NFA ADT & YR : 560 2012 RAIL TYPE : LT 253 RT 253

BUILT : 1980 BY : BMU PROJ : 5.3151 FED.AID PROJ : DESIGN LOAD : HS 15

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

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 10 FT WATER DEPTH : 3 FT

SUPERSTRUCTURE : PPC CORED SLAB STD BMD-19-29-90

SUBSTRUCTURE : EBTS&IBT:PPC CAPS ON 6HP12X53 STEEL PILES

SPANS : 2@30'

BEAMS OR GIRDERS : 11 LINES OF 33" PRESTRESSED CONCRETE CORED SLAB SECTIONS

FLOOR : PPCCS/2.5 AWS ENCROACHMENT : DECK (OUT TO OUT) : 30.3 FT

CLEAR ROADWAY : 28.7 FT BETWEEN RAILS : 28.7 FT SIDEWALK OR CURB : LT 0 FT RT 0 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-25 OPE.RTG. : HS-42 CONTR.MEMBER : cored slab POSTED : SV TTST DATE

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

UNDER ROUTES AND CLEARANCES

UPSTREAM STRUCTURE OVERFLOW

REMARKS :

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 01/17/2014

COUNTY : JOHNSTON DIVISION : 4 DISTRICT : 3 STRUCTURE NUMBER : 500090 LENGTH : 168 FEET

ROUTE CARRIED : US301 FEATURE INTERSECTED : LITTLE RIVER

LOCATED : 0.7 MI N JCT SR2339 BRIDGE NAME : CITY :

FUNC. CLASS : 06 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 3100 2012 RAIL TYPE : LT 111 RT 111

BUILT : 1926 BY : SHPWC PROJ : 241 FED.AID PROJ : DESIGN LOAD : H 15

REHAB : 1951 BY : SHPWC PROJ : 2342 ALIGNMENT : TAN. SKEW : 90 LANES : ON 2 UNDER 0

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 29 FT WATER DEPTH : 3 FT

SUPERSTRUCTURE : REINFORCED CONCRETE DECK GIRDER

SUBSTRUCTURE : ABUTS RC SPILL THRU BTS:RC P&W.

SPANS : 1@41'6;2@42'6;1@41'6

BEAMS OR GIRDERS : 5 LNS.RCGD;2 EXT.27X18 @ 4'6 CTS;3 INT.39X18@8' CTS.

FLOOR : 12 RC/5 AWS ENCROACHMENT : DECK (OUT TO OUT) : 31.5 FT

CLEAR ROADWAY : 28.25 FT BETWEEN RAILS : 31.33 FT SIDEWALK OR CURB : LT 1.54 FT RT 1.54 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-13 OPE.RTG. : HS-23 CONTR.MEMBER : int.RCDG POSTED : SV TTST DATE

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

UNDER ROUTES AND CLEARANCES

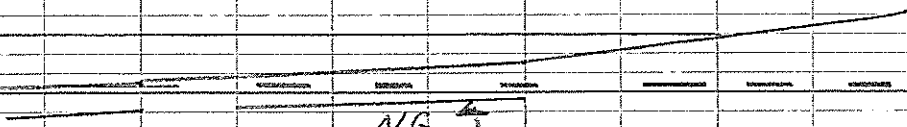
DOWNSTREAM STRUCTURE

REMARKS :

12+00

13+00

14+00

N.G. 

H.W.

500

490

N.C. Dept. of Transportation
Division of Highways
Johnston County
Bridge No. 347+348 over
Little Buffalo Creek

Scale:

1" = 50' Horiz.

1" = 10' Vert.

Surveyed by G.D.J.

Drawn by G.D.J.

Feb. 79

CHECKED BY WCC

" " ALH

HEC-RAS Plan: Plan01 River: Little Buffalo C Reach: Reach - 1

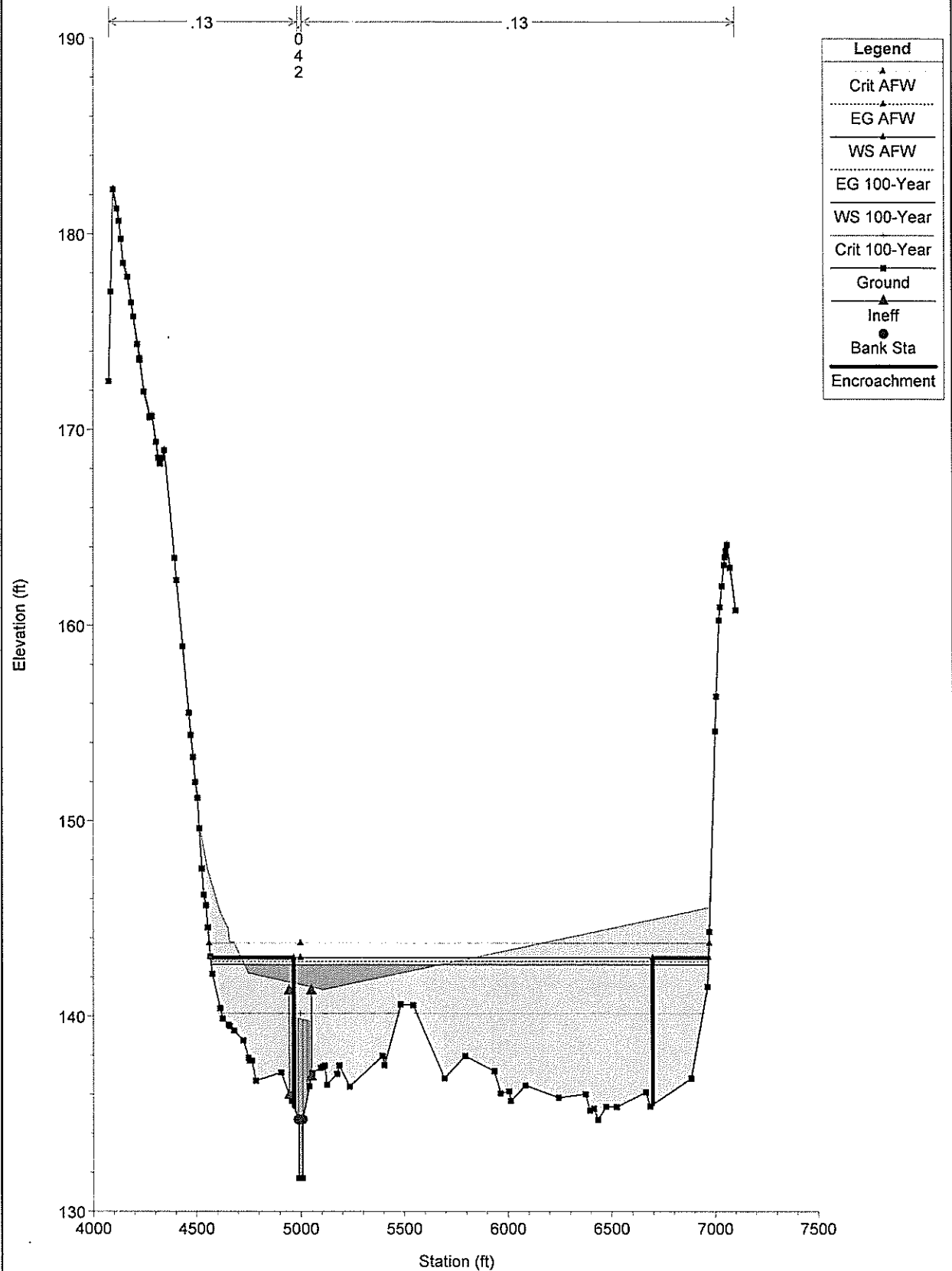
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Reach - 1	8735.5	100-Year	5346.00	136.37	144.59		144.68	0.001184	4.60	4496.04	1164.32	0.29
Reach - 1	8735.5	AFW	5346.00	136.37	145.13		145.26	0.001294	5.02	3381.48	623.15	0.30
Reach - 1	8139.3	100-Year	5346.00	134.65	144.01		144.09	0.000848	4.25	5185.27	1320.20	0.25
Reach - 1	8139.3	AFW	5346.00	134.65	144.48		144.60	0.000956	4.67	3830.85	698.74	0.26
Reach - 1	7421.3	100-Year	5346.00	133.55	143.47		143.54	0.000702	4.02	5756.57	1498.25	0.23
Reach - 1	7421.3	AFW	5346.00	133.55	143.85		143.96	0.000833	4.49	4181.36	789.43	0.25
Reach - 1	6879.5	100-Year	5346.00	133.37	143.17		143.22	0.000499	3.37	7327.86	1721.92	0.19
Reach - 1	6879.5	AFW	5346.00	133.37	143.49		143.56	0.000623	3.84	5271.48	1067.49	0.21
Reach - 1	6255.9	100-Year	5346.00	133.22	142.90		142.93	0.000410	3.03	9204.34	2018.61	0.17
Reach - 1	6255.9	AFW	5346.00	133.22	143.15		143.20	0.000519	3.46	5454.85	965.81	0.19
Reach - 1	5632.5	100-Year	5475.00	131.97	142.78	141.30	142.79	0.000127	1.73	13051.46	2396.21	0.09
Reach - 1	5632.5	AFW	5475.00	131.97	142.99	141.30	143.00	0.000185	2.12	10220.73	1732.29	0.11
Reach - 1	5610.5	Bridge										
Reach - 1	5588.5	100-Year	5475.00	131.70	141.30	141.30	141.31	0.000282	2.38	10155.38	2366.45	0.14
Reach - 1	5588.5	AFW	5475.00	131.70	141.30	141.30	141.32	0.000448	3.00	7759.95	1732.29	0.17
Reach - 1	5434.7	100-Year	5475.00	131.54	137.99	137.43	138.36	0.005001	8.05	4634.01	1742.24	0.56
Reach - 1	5434.7	AFW	5475.00	131.54	138.69	137.94	139.20	0.005005	8.63	2173.86	675.07	0.57

Little Buffalo Creek

Plan: 100 Year Single

12/17/2002

Old Route 22-TOR



Section 5.0 – Engineering Methods

Table 8—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
Little Black Creek (continued)	Approximately 0.8 mile upstream of Jackson King Road	11.1	*	*	1,824	*
	Approximately 1.0 mile downstream of Old Stage Road	9.2	*	*	1,647	*
	Approximately 0.7 mile downstream of Old Stage Road	7.4	*	*	1,455	*
	Approximately 0.3 mile downstream of Old Stage Road	7.1	*	*	1,420	*
	At the Johnston/Wake County boundary	6.4	*	*	1,334	*
Little Buffalo Creek	Approximately 0.4 mile downstream of Old Route 22	24.3	*	*	5,480	*
	Just upstream of Old Route 22	23.4	*	*	5,350	*
	Just downstream of Glendale Road	22.4	*	*	5,200	*
	Just upstream of Glendale Road	21.5	*	*	5,060	*
	Approximately 0.1 mi upstream of Glendale Road	10.3	*	*	3,200	*
	Just upstream of the confluence with Little Buffalo Creek Tributary	10.0	*	*	3,140	*
	Approximately 0.8 mile upstream of Beulah town Road	8.5	*	*	2,840	*
	Approximately 0.7 mile upstream of Beulah town Road	8.1	*	*	2,760	*
	Approximately 1.1 mile Little Buffalo Creek downstream of Bay Valley Road	7.2	*	*	2,560	*
	Approximately 0.2 mile downstream of Bay Valley Road	6.6	*	*	2,430	*
	Approximately 0.2 mile downstream of Bay Valley Road	4.5	*	*	1,900	*
	Approximately 0.5 mile downstream of Glendale Road	3.8	*	*	1,720	*

StreamStats

Delineation Results

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



StreamStats Basin Characteristics Report - Windows Intern...

http://streamstats.cr.usgs.gov/v3_beta/BCreport.htm?rcode=NC&workspac

US StreamStats Version 3.0

Basin Characteristics Ungaged Site Report

Date: Thurs Jan 28, 2016 8:56:01 AM GMT-5

Study Area: North Carolina

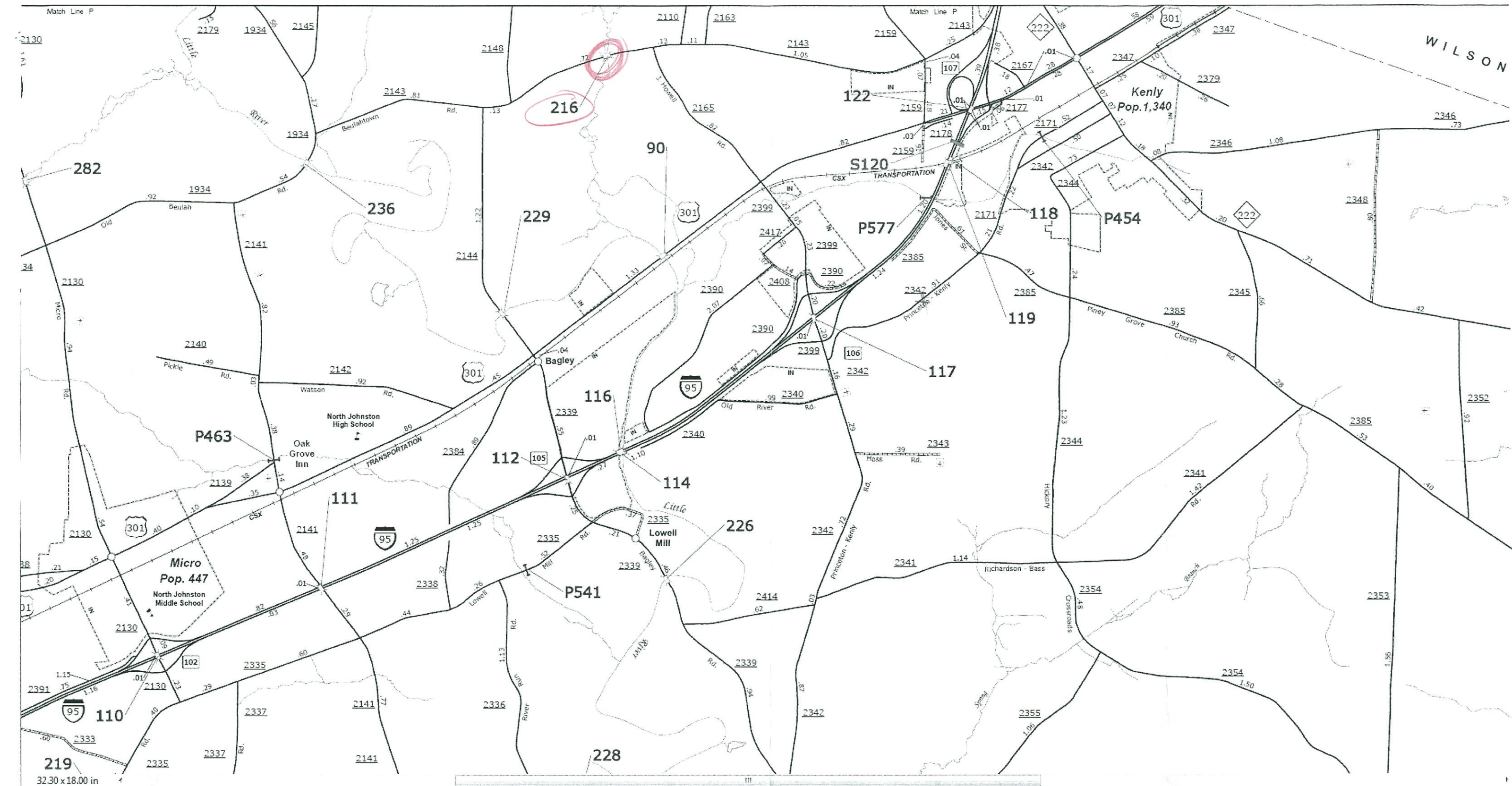
NAD 1983 Latitude: 35.5964 (35 35 47)

NAD 1983 Longitude: -78.1634 (-78 09 49)

Label	Value	Units	Definition
DRNAREA	23.7	square miles	Area that drains to a point on a stream
LC06IMP	1.33	percent	Percentage of impervious area determined from NLCD 2006 impervious dataset

100%

35.59646, -78.16353



75 76 77 78 79 80 81 82

Sta 76+26
5@17' Cree Tim Comp
90° skew

Crown Grade El. 94.5

WSE 188.7
12 Jan 51

Approx Rock Line

Conc. Peds
around Piles

N

B.A. 25.59 Mi
Tol C=0.3
Waterway Reg'd 427

Pl. Sta 80+00°
Δ 8° 29' Rt
D 4°
T 106.2
L 212.1

To Kenly

Rapids
Present bed
to be lowered
2 1/2'

78+93.8 P.C.

4-9-36-219
JOHNSTON CO
Little Buffalo Cr.
Brs #216, 287, 338
Jan 1951 K.B.J.

81+05.8 P.T.

69

70

71

72

73

74

75

76

Elav 100

HWEL 92.8 ± 7

90

80

Pres Brs	338	237	216
CI Rdwy	173'	174'	173'
Overall Length	180'	180'	34.0'
Spans	1@17'	1@17'	2@16.5'

Conc.
around

BM. El. 90.13
Nail in side 18" Pipe 30' 4" 69 ± 12

← To Beulah town

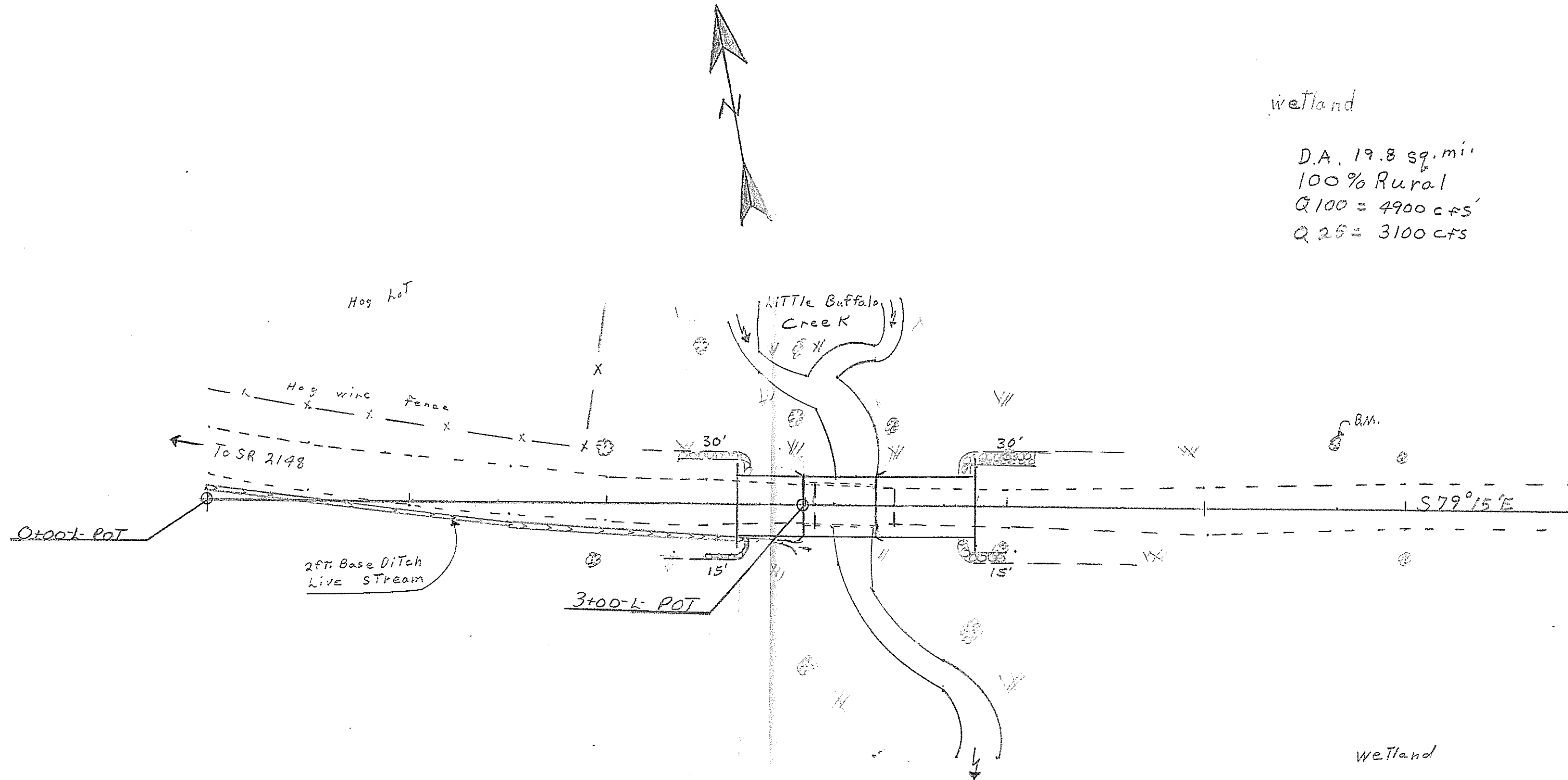
N 78° E →

11" 2

BRG # 347

wetland

D.A. 19.8 sq. mi.
100% Rural
Q100 = 4900 cfs
Q25 = 3100 cfs



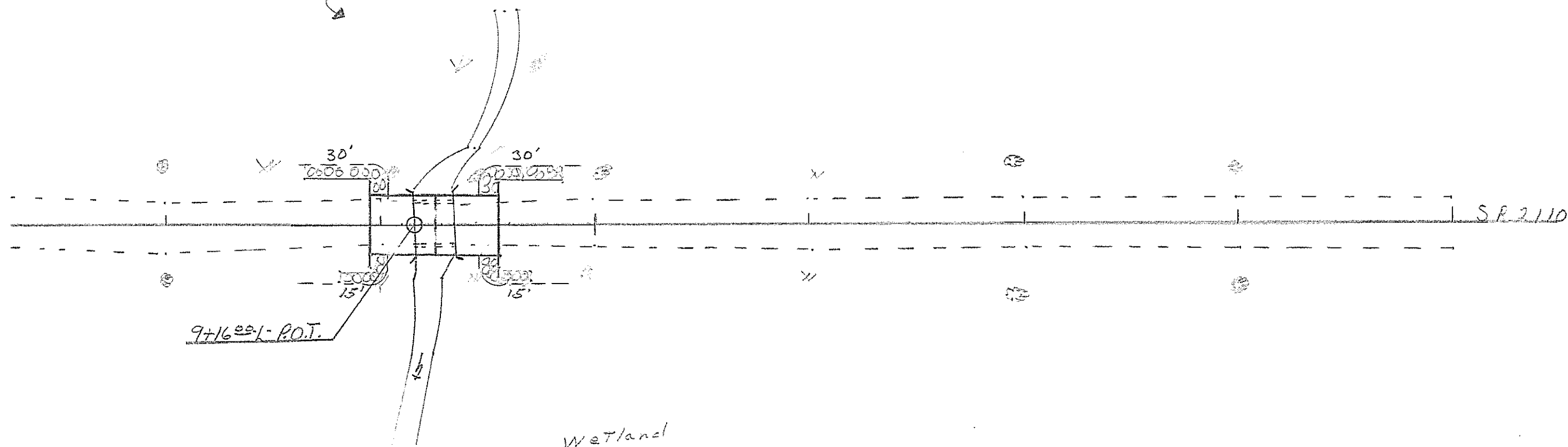
wetland

overflow

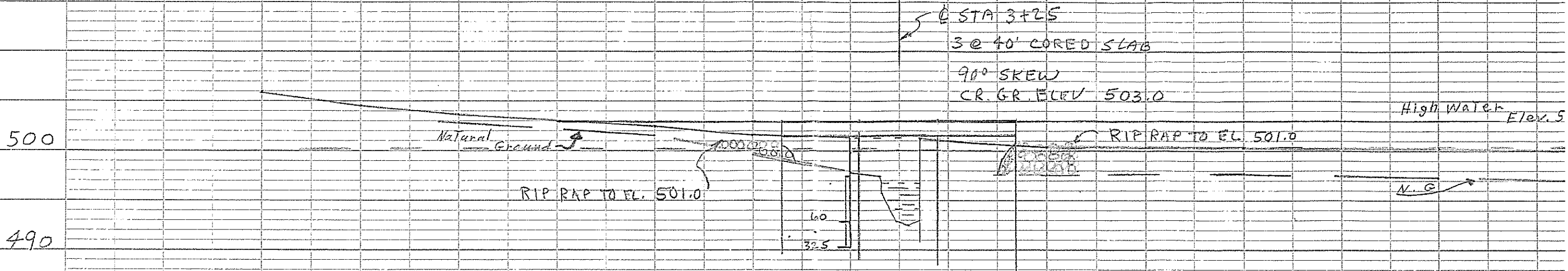
S.R. 2110

9+16.00 L.P.O.T.

Wetland



OF TWIN OAK,
32' RT
EL. 500.00 (ASS)



Br. No. 347: 2@17'
Cres. Timber bridge
(OAL 35.46') Cl. Ret. by 19.0'
Area opening 15.5 sq. ft.

8+00

9+00

10+00

11+00

12+00

13+00

14+00

← STA 9+25 90° SKIWN
 2 @ 30' CORED SLABS
 C.R. GR. EL. 503.00 ON 0% GRADE

RIP RAP TO EL. 521.0

RIP RAP TO EL. 501.0

H.W.

500

N.G.

75
325

490

Br. No. 348: 1 @ 17'
 crec. Timber bridge,
 (OAL. 17.9) C.R. Rwy. 17.2'
 Area opening of 50 sq. ft.

N.C. Dept. of Transportation
 Division of Highways
 Johnston County
 Bridge No. 347 & 348 over
 Little Buffalo Creek

Scale: 1" = 50' Horiz.

1" = 10' Vert.

Surveyed by G.D.J.

Drawn by G.D.J.

Feb. 79

CHECKED BY WCC

" " ALH



FRIS

Map Theme



Who Am I: General Public

Effective

Flood Information

Click the map to view information.

Map Location

Flood Zone: A15

Flood Source: Little Buffalo Creek

Base Flood Elevation: 146.9 ft

County: Johnston

Political Area: Johnston County

CID: 370138

Panel: 2647 Download

Map Number: 3720264700J

Panel Effective Date: 12/2/2005

Latitude: 35.5964

Longitude: -78.1634

Risk Information

Financial Vulnerability

FIS Reports

Map Export

Data Export

