

PREDESIGN/PRESURVEY REPORT

County: ROWAN

Project No.: 790353
TIP No.:
Let Date:
WBS No.:

Bridge No.: 353
Road No.: SR1349 (TURKEY RD)
Stream: CREEK

Type of Request:

Date: 10/27/2014

Name: AMK

Assigned to:

Checked by:

Prior Survey Date (attach copy of prior survey):

Study by Scour Section:

Flood Zone: N/A

Detail Study: N/A

Date: 6/16/09

Panel No.: 5634

BM Info:

Quad Map: CHINA GROVE

Drainage Area: 937ac

From: USGS QUAD

Q25: 801cfs

Q50: 950cfs

Q100: 1100cfs

Method: USGS URBAN 10%
(NEW FORMULA)

EXISTING BRIDGE INFORMATION

Location: SR1349

Average Daily Traffic: 220 (1981)

Length: 26'

Bed-to-Crown: 9'

Water Depth: 1'

Type of Structure: PPC CHANNELS, CAP; TIMBER PILES, PILES CONCRETE ENCASED

Type of Span(s): 1 @ 26'

Upstream Structure: 790122; 1 @ 31', PPC CHANNELS, CAPS; TIMBER PILES, CONCRETE BULKHEADS

Location: SR1348; 0.3 MILES SOUTH OF JUNCTION SR1308

Bed-to-Crown: 9'

Prior Survey:

Downstream Structure: N/A

Location:

Bed-to-Crown:

Prior Survey:

SCS Watershed:

ENVIRONMENTAL

Trout Stream:

Anadromous Fish:

Primary Nursery Area:

High Quality Waters:

Nutrient Sensitive Waters:

Near Water Supply Intake:

CAMA County: No

Stream Classification:

Notes: None

DENR River Basin Info: Yadkin/Pee-Dee

COULD FIND NOTHING ABOUT CREEK ON DENR WEBSITE NOR SDV

MAINTENANCE COORDINATION

Bridge Maintenance – Contact Superintendent and Supervisor.

High Water:

Relocation:New Alignment Staked:BM Information:

Road Maintenance – Contact District Engineer and County Maintenance Engineer.

High Water:

Road to be Paved:Relocation of Vicinity of Bridge:

New Alignment Staked:BM Information:

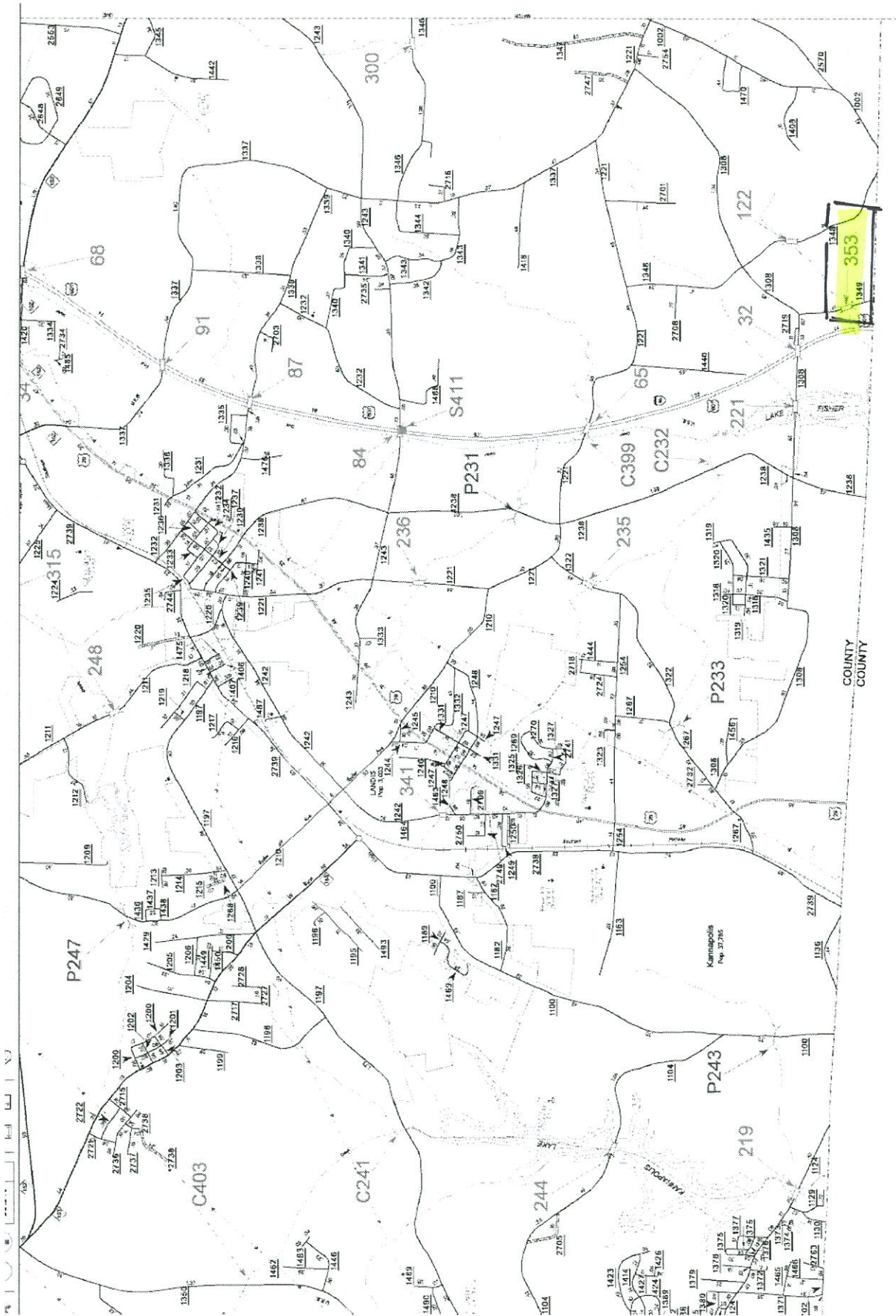
Initiated as:Date Initiated:

Man-days Estimated:

Date Surveyed:Date Completed:

Personnel	Hours	Pay Period

Comments:





NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION TEMPORARY REPAIRS
CHANGE IN AWS
PRIORITY MAINTENANCE

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection - Contract

COUNTY ROWAN BRIDGE NUMBER 790353 INSPECTION CYCLE 0 YRS
ROUTE SR1349 ACROSS CREEK M.P. 0

LOCATION 0.3 MI. S. JCT. SR1308

SUPERSTRUCTURE PRECAST PRESTRESSED CONCRETE CHANNELS

SUBSTRUCTURE END BENTS:PPC CAP ON TIMBER PILES,PILES CONCRETE ENCASED

SPANS 1@26'2

LONGITUDE 80° 33' 36.71"

LATITUDE 35° 30' 18.93"

INSPECTION DATE 06/13/2014

PRESENT CONDITION FAIR

PRESENT POSTING Not Posted

PROPOSED POSTING

OTHER SIGNS PRESENT (4) DELINEATORS



SOUTH APPROACH 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>		
<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

Update Date: 09/03/2014

IDENTIFICATION					
(1) STATE NAME -NORTH CAROLINA	BRIDGE	790353	SUFFICIENCY RATING =	34 86	
(8) STRUCTURE NUMBER(FEDERAL)	000000001590353		STATUS =	Structurally Deficient	
(5) INVENTORY ROUTE (ON/UNDER) - ON	31013490				
(2) STATE HIGHWAY DEPARTMENT DISTRICT	1		CLASSIFICATION		CODE
(3) COUNTY CODE 159 (4) PLACE CODE	0		(112)NBIS BRIDGE SYSTEM -	YES	
(6) FEATURE INTERSECTED - CREEK			(104)HIGHWAY SYSTEM Is not on NHS	0	
(7) FACILITY CARRIED SR1349			(26) FUNCTIONAL CLASS - Local	09	
(9) LOCATION 0.3 MI. S. JCT. SR1308			(100)STRAHNET HIGHWAY - Not a STRAHNET Route	0	
(11)MILEPOINT	0		(101)PARALLEL STRUCTURE - No Parallel Structure	N	
(16)LAT 35° 30' 18.93" (17)LONG 80° 33' 35.71"			(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	
			(31) MAINTAIN - State Highway Agency	01	
			(22) OWNER - State Highway Agency	01	
			(37) HISTORICAL SIGNIFICANCE - Not Eligible	5	
STRUCTURE TYPE AND MATERIAL					
(43) STRUCTURE TYPE MAIN: Prestressed Concrete					
TYPE - Channel Beam	CODE 522				
(44) STRUCTURE TYPE APPR :			CONDITION		CODE
TYPE -	CODE 000		(58) DECK	7	
(45) NUMBER OF SPANS IN MAIN UNIT	1		(59) SUPERSTRUCTURE	7	
(46) NUMBER OF APPROACH SPANS			(60) SUBSTRUCTURE	4	
(107)DECK STRUCTURE TYPE - 1	CODE		(61) CHANNEL & CHANNEL PROTECTION	6	
(108)WEARING SURFACE / PROTECTIVE SYSTEM :			(62) CULVERTS	N	
(A) TYPE OF WEARING SURFACE -	CODE				
(B) TYPE OF MEMBRANE -	CODE				
(C) TYPE OF DECK PROTECTION -	CODE				
AGE AND SERVICE				LOAD RATING AND POSTING	
(27) YEAR BUILT	1967		(31) DESIGN LOAD H 10	1	
(106)YEAR RECONSTRUCTED			(63) OPERATING RATING METHOD - Load Factor	1	
(42) TYPE OF SERVICE : ON - Highway			(64) OPERATING RATING - HS-1	1	
UNDER - Waterway	CODE 15		(65) INVENTORY RATING METHOD - Load Factor	1	
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE	0		(66) INVENTORY RATING - HS-1	1	
(29) AVERAGE DAILY TRAFFIC	220		(70) BRIDGE POSTING - No Posting Required	5	
(30) YEAR OF ADT 1981 (109) TRUCK ADT PCT	6%		(41) STRUCTURE OPEN, POSTED ,OR CLOSED	D	
(19) BYPASS OR DETOUR LENGTH	2 MI		DESCRIPTION - Open Temporary Shoring		
GEOMETRIC DATA				APPRAISAL	
(48) LENGTH OF MAXIMUM SPAN	24 FT		(67) STRUCTURAL EVALUATION	3	
(49) STRUCTURE LENGTH	26 FT		(68) DECK GEOMETRY	5	
(50)CURB OR SIDEWALK: LEFT 4165 FT RIGHT 4165 FT			(69) UNDERCLEARANCES,VERTI & HORIZ	N	
(51) BRIDGE ROADWAY WIDTH CURB TO CURB	24 FT		(71) WATERWAY ADEQUACY	7	
(52) DECK WIDTH OUT TO OUT	25.417 FT		(72) APPROACH ROADWAY ALIGNMENT	8	
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)	17 FT		(36) TRAFFIC SAFETY FEATURES	0000	
(33) BRIDGE MEDIAN - No Median	CODE 0		(113)SCOUR CRITICAL BRIDGES	U	
(34) SKEW 0° (35) STRUCTURE FLARED	0		PROPOSED IMPROVEMENTS		
(10) INVENTORY ROUTE MIN VERT CLEAR	999.9 FT		(75) TYPE OF WORK -	CODE	
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR	24 FT		(76) LENGTH OF STRUCTURE IMPROVEMENT		
(53) MIN VERT CLEAR OVER BRIDGE RDWY	999.9 FT		(94) BRIDGE IMPROVEMENT COST		
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad	0 FT		(95) ROADWAY IMPROVEMENT COST		
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad	000 FT		(96) TOTAL PROJECT COST		
(56) MIN LAT UNDERCLEAR LT REF -	000 FT		(97) YEAR OF IMPROVEMENT COST ESTIMATE		
			(114)FUTURE ADT 440 (115) YEAR FUTURE ADT	2025	
NAVIGATION DATA				INSPECTIONS	
(38) NAVIGATION CONTROL - No Navigational Control	CODE 0		(90) INSPECTION DATE	06/13/2014	
(111)PIER PROTECTION -	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	FT		B) UNDERWATER INSP - NO	B)	
(40) NAVIGATION HORIZONTAL CLEARANCE	0 FT		C) OTHER SPECIAL INSP NO	C)	
			SCOUR		

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Update Date: 09/03/2014

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
ROWAN	9	1	790353	26	FEET
ROUTE CARRIED :		FEATURE INTERSECTED :			
SR1349		CREEK			
LOCATED :		BRIDGE NAME :		CITY :	
0.3 MI. S. JCT. SR1308					
FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :	
09	NFA	NFA	220 1981	LT 233	RT 233
BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :	
1967	BMU	6.6320169		H 10	
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	9 FT		1 FT	
SUPERSTRUCTURE : PRECAST PRESTRESSED CONCRETE CHANNELS					
SUBSTRUCTURE : END BENTS:PPC CAP ON TIMBER PILES, PILES CONCRETE ENCASED					
SPANS : 1@26'2"					
BEAMS OR GIRDERS : 10 SECTIONS OF PRECAST PRESTRESSED CONCRETE CHANNELS					
FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :			
PPC.CH, 4" AWS		25.417 FT			
CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :			
24 FT	24.833 FT	LT	.4165 FT	RT	.4165 FT
VERT.CL.OVER : 999.9 FT					
INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	DATE
HS-1	HS-1	Chan Patt B	SV		
SYSTEM :			GREEN LINE ROUTE :		
Secondary S.R. Route			N		
UNDER ROUTES AND CLEARANCES					
REMARKS :					

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 790353 County: ROWAN Date: 06/13/2014 By: RJF

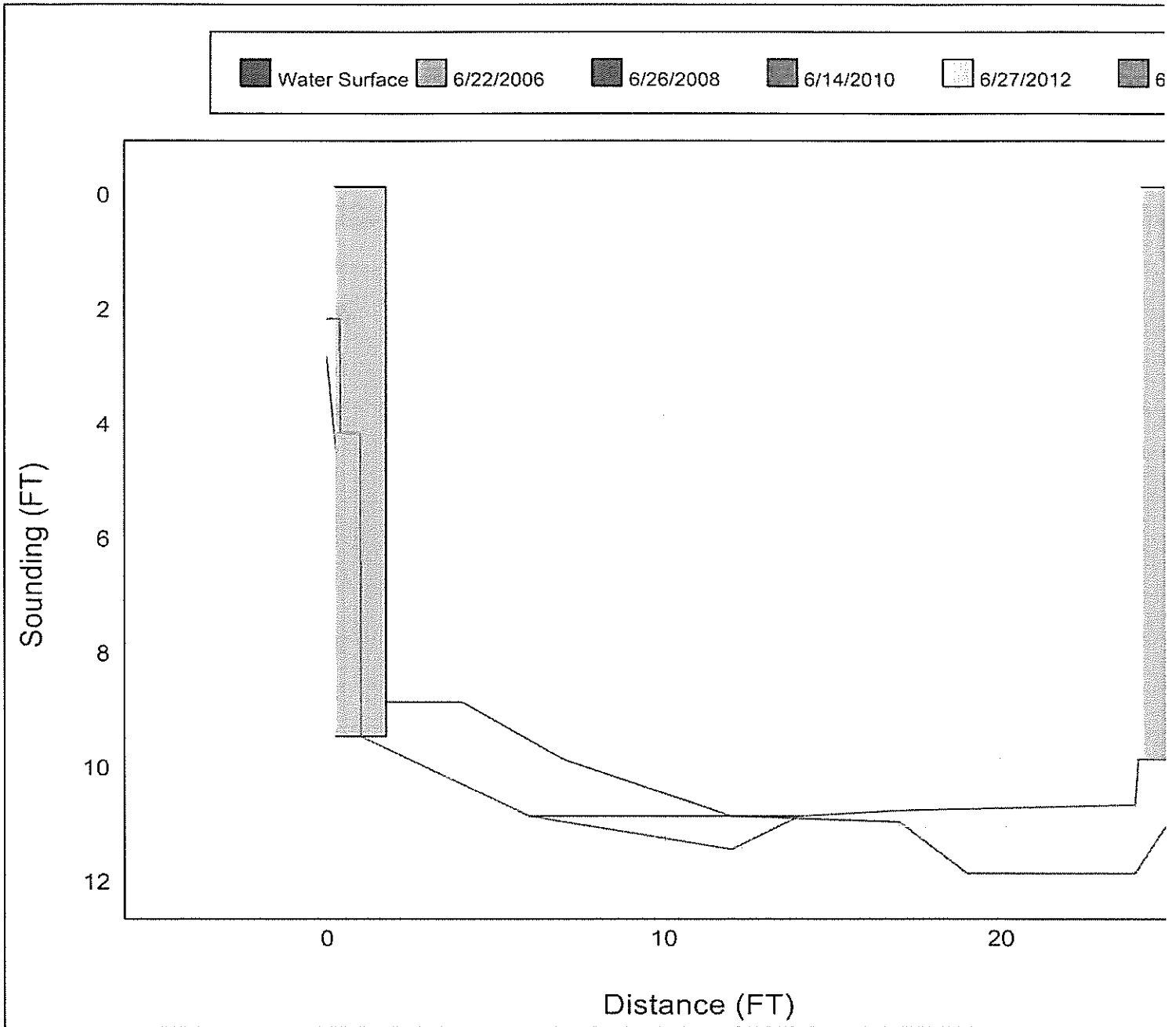
Record sounding from top of rail. Other location if needed: TOP OF RAIL

Distance from Highwater Mark to top of rail: 7 Location of Highwater Mark: TOP OF BANK

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	2.3	TOP BACKWALL			
0.4	2.3	TOP BACKWALL			
0.41	4.3	Top of Cap			
1	4.3	Top of Cap			
1.01	9.6	ABUTMENT 1	1.01	10.9	
6	11	Water Surface/Water Edge (WSWE)			
12	11.58				
14	11	Water Surface/Water Edge (WSWE)			
17	10.9				
24	10.8				
24.1	10				
25	10	ABUTMENT 2	25	9.4	
25.01	4.3	Top of Cap			
26	4.3	Top of Cap			
26.01	2.9	TOP BACKWALL			
26.4	2.9	TOP BACKWALL			

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch



Roadway	17ft Wide	2 Paved Lanes	Looking North
Left Shoulder	7ft Wide		7ft Unpaved
Right Shoulder	8ft Wide		8ft Unpaved
Left Guardrail			
Right Guardrail			

MEASUREMENTS TAKEN 25 FEET SOUTH OF BRIDGE LOOKING NORTH

MEASUREMENTS VERIFIED BY DH 6/27/2012

SKETCH UPDATED 6/13/14 RJF

Title

APPROACH ROADWAY SKETCH

Description

APPROACH ROADWAY SKETCH

Bridge No: 790353

Drawn By: GDP

Date: 06/26/08

File Name: S0066001418

Bridge Inspection Field Sketch

Deck Width/Out to Out	25.417ft	Wearing Surface Variable	2" to 6"
Between Rails	24.833ft	Median Width	
Curb Height	.667ft	Median Height	
Top Rail to Deck/Wearing Surface	2.75ft	Left Guardrail Width	1ft
Clear Roadway	24ft	Right Guardrail Width	1ft
Left Bridge Rail	Type 23	Right Bridge Rail	Type 23

Measurements for Span #	1		
Deck Thickness	.5	Left Overhang	.000000
Top of Rail to Bottom of Beam	4.29	Right Overhang	.000000

NOTE: WEARING SURFACE THICKNESS MEASURED 6" AT CENTERLINE AND 2" AT GUTTER LINE

No. of Channels	10
Leg Width	.208ft
Leg Height	1ft
Leg to Leg (Centers)	2ft
Channel Width	2.542ft
Channel Height	1.417ft
Comments	

verified by wc 6-14-10

SKETCH UPDATED 6/13/14 RJF

Title

STRUCTURE DATA SKETCH

Description

STRUCTURE DATA SKETCH

Bridge No: 790353

Drawn By: GDP

Date: 06/26/08

File Name: S0066001419



WEST ELEVATION



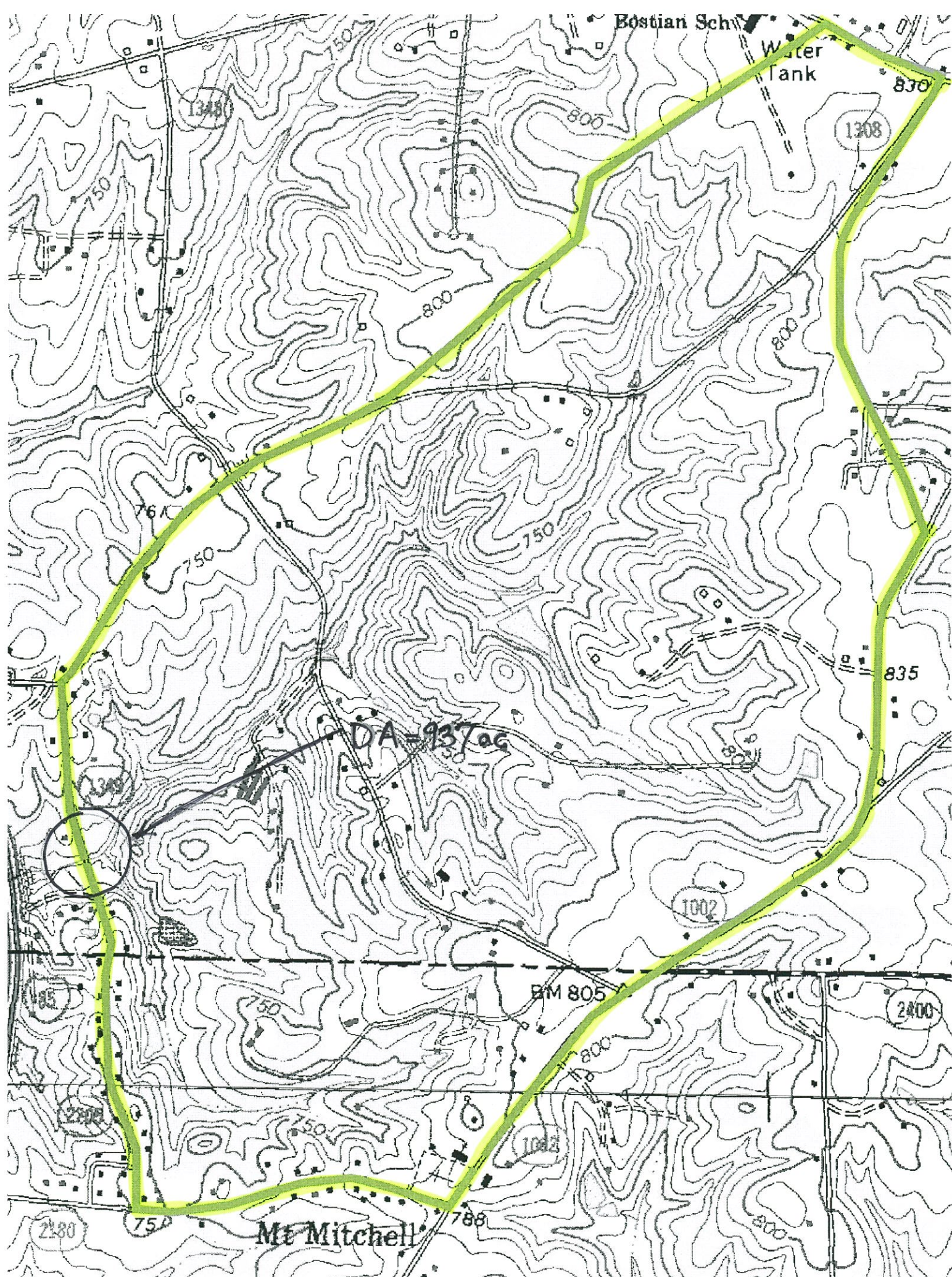
EAST ELEVATION

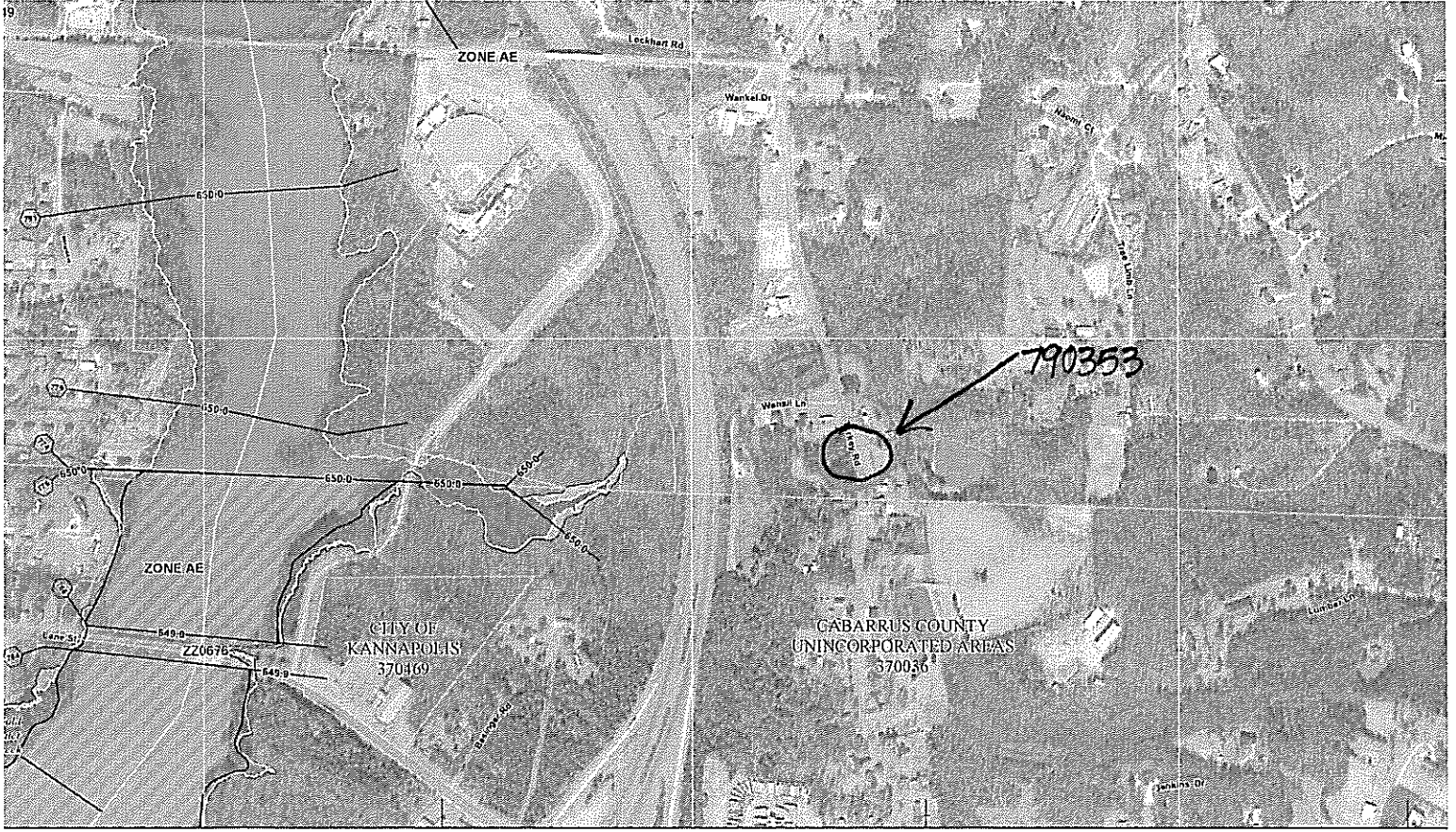


LOOKING UPSTREAM



LOOKING DOWNSTREAM





80°34'0"W

80°33'30"W

80°33'0"W