

Office Estimate 60' Bridge
MOA Required Yes

PREDESIGN-PRESURVEY REPORT

Project#
TIP#
Let Date
WBS# 17BP.13.R.56

County McDowell

Bridge# 580232
Road# SR 1101
Name Hebron Hill Dr.

Stream Crooked Creek

Type Of Request: POC Force Account TIP NCMA
Date 8/12/11 Name MLH (Mulkey, Inc.)
Checked By KBA (Mulkey, Inc.)
Prior Survey Date N/A (attach copy of prior survey)
Study By Scour Section S; 7/8/2010
Flood Zone Yes Detail Study Limited Date January 6, 2010
B.M. Info N/A
Quad Map Moffitt Hill Drainage Area 2.0 Sq. Mi.
Q25 650 cfs Q50 800 cfs Q100 950 cfs

Assigned To Mulkey, Inc.

Panel# 0646
From USGS Quad Map
Method USGS Regression

EXISTING BRIDGE INFORMATION

Location 0.05 Mi. S. Jct. SR 1100
Average Daily Traffic 80 - Yr. 2000
Length 21 Ft. Bed- To Crown 6 Ft. Water Depth 1 Ft.
Type Structure Timber Floor On I-Beams; E.BTS: Timber Caps/Timber Post & Sills
Type Spans 1@20'-6
Upstream Structure 580187/1@22'-6
Location 0.85 Mi. W. Jct. SR 1101
Bed- To Crown 7 Ft. Prior Survey
Downstream Structure 580204/1@25'-4
Location 0.2 Mi. S. Jct. SR 1100
Bed- To Crown 9 Ft. Prior Survey
SCS Watershed N/A

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 C
DENR River Basin Info. Catawba
State Stormwater Permit Required No



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION TEMPORARY REPAIRS (ADDITIONAL POSTS)

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY MCDOWELL BRIDGE NUMBER 580232 INSPECTION CYCLE 2 YRS
ROUTE SR1101 ACROSS CREEK M.P. 0

LOCATION .05 MI.S.JCT.SR1100

SUPERSTRUCTURE TIMBER FLOOR ON I-BEAMS

SUBSTRUCTURE E.BTS:TIMBER CAPS/TIMBER POST&SILLS @ VAR.CENTERS

SPANS 1 @ 20'-6

LONGITUDE 82° 13' 24.2"

LATITUDE 35° 34' 7.2"

PRESENT CONDITION FAIR

INVENTORY RATING

INSPECTION DATE 05/26/2010

OPERATING RATING

PRESENT POSTING SV 37 TTST 99 SV 24 TTST 37

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT DELINEATORS (4), ONE LANE BRIDGE (2)



SOUTH APPROACH

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: 07/09/2010

COUNTY : MCDOWELL		DIV : 13		DIST : 1		STRUCTURE NUMBER : 580232		LENGTH : 21 FEET	
ROUTE CARRIED : SR1101				FEATURE INTERSECTED : CREEK					
LOCATED : .05 MI.S.JCT.SR1100				BRIDGE NAME :				CITY :	
FUNC. CLASS : 09		SYST.ON : NFA		SYST.UNDER : NFA		ADT & YR : 80 2000		RAIL TYPE : LT 227 RT 227	
BUILT : 1961		BY : BMU		PROJ :		FED.AID PROJ :		DESIGN LOAD : Other or Unknown	
REHAB :		BY :		PROJ :		ALIGNMENT : 5.8751 TAN		SKEW : 90	
								LANES : ON 1 UNDER	
NAVIGATION : VC 0.0 FT HC 0.0 FT				HT. CRN. TO BED : 6 FT				WATER DEPTH : 1 FT	
SUPERSTRUCTURE : TIMBER FLOOR ON I-BEAMS									
SUBSTRUCTURE : E.BTS:TIMBER CAPS/TIMBER POST&SILLS @ VAR. CENTERS									
SPANS : 1 @ 20'-6									
BEAMS OR GIRDERS : 7 LINES 10 I-BEAMS @ VAR. CENTERS									
FLOOR : 4X8 TIM/1.5 AWS		ENCROACHMENT :				DECK (OUT TO OUT) : 12.3 FT			
CLEAR ROADWAY : 11.3 FT		BETWEEN RAILS : 12.0 FT				SIDEWALK OR CURB : LT 0.3 FT RT 0.3 FT			
VERT.CL.OVER : 99 FT 99 IN		VERT.CL.UNDER : 00 FT 00 IN				HOR.CL.UNDER : 0.0 FT			
INV.RTG. : HS-1		OPE.RTG. : HS-1		CONTR.MEMBER : Int.bms		POSTED : SV 23		TTST 33 DATE 07/08/2010	
SYSTEM : Secondary S.R. Route						GREEN LINE ROUTE : N			
2ND OPENING :		3RD OPENING :		4TH OPENING :		5TH OPENING :			
REMARKS :									

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 580232 County: MCDOWELL Date: 05/26/2010 By: DCR

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	F.F.END BENT 1			
0.2	3				
1.2	4.5	RAIL TO CAP			
1.3	6.3	S.F.	1.3	7.0	
6.5	8				
10	8.8	Water Surface/Water Edge (WSWE)			
16	9.1				
19.1	8.5	Water Surface/Water Edge (WSWE)			
19.2	8.7	S.F.	19.2	8.9	
19.3	4.5	RAIL TO CAP			
20.3	3				
20.5	3	F.F.END BENT 2			

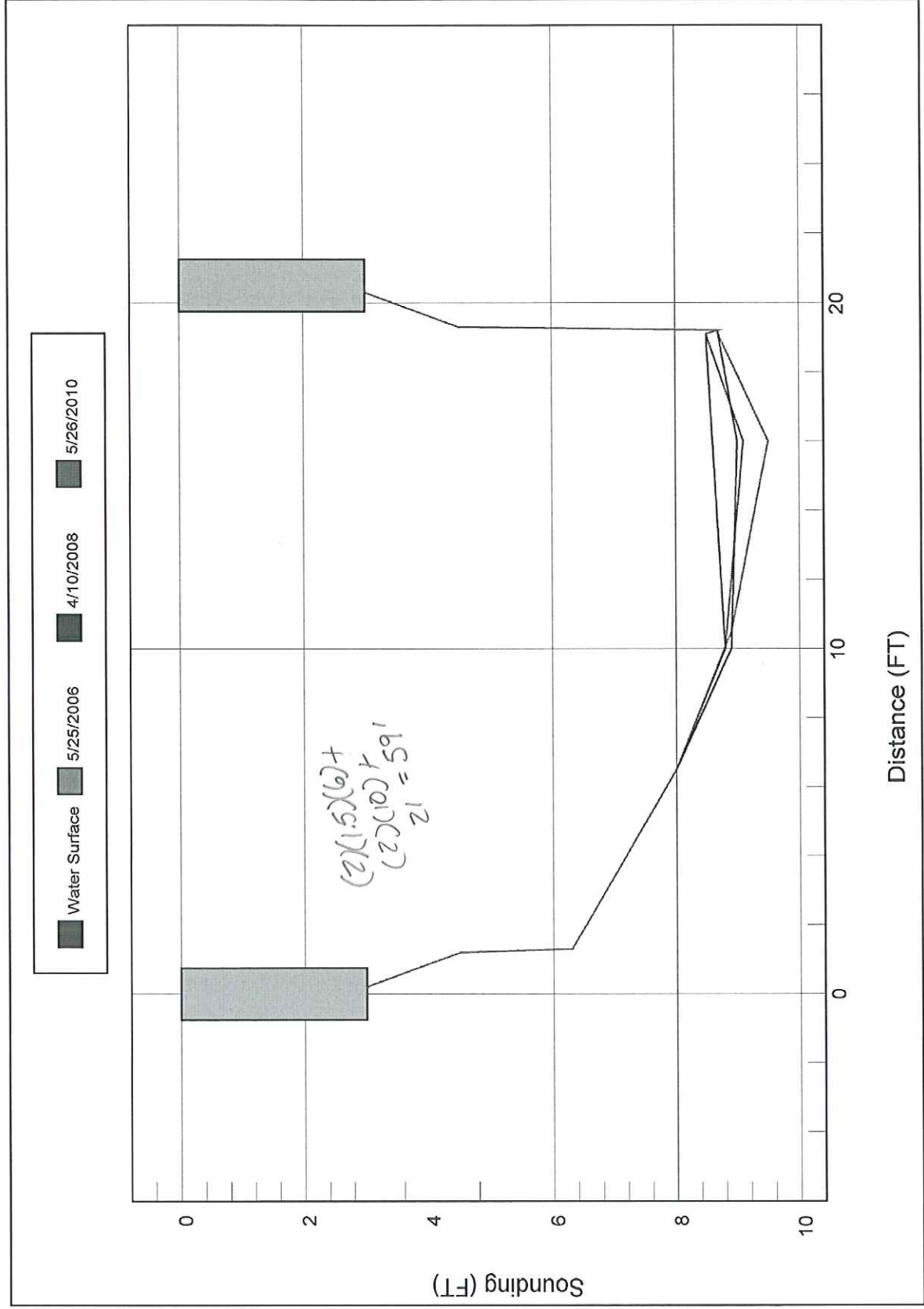
Bridge: 580232

County MCDOWELL

Date: 05/26/2010

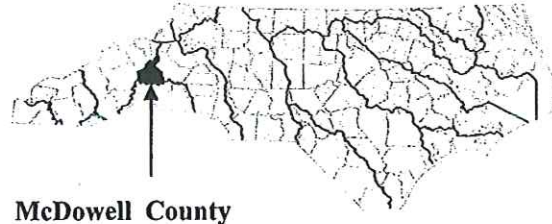
STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



FLOOD INSURANCE STUDY

A Report of Flood Hazards in
MCDOWELL COUNTY,
NORTH CAROLINA
AND INCORPORATED AREAS



Community Name	Community Number	River Basin
Marion, City of	370266	Catawba
McDowell County (Unincorporated Areas)	370148	Broad and Catawba
Old Fort, Town of	370149	Catawba



October 2, 2008

**Federal Emergency Management Agency
State of North Carolina**

**Flood Insurance Study Number
37111CV000A**

www.fema.gov and www.ncfloodmaps.com



Section 5.0 – Engineering Methods

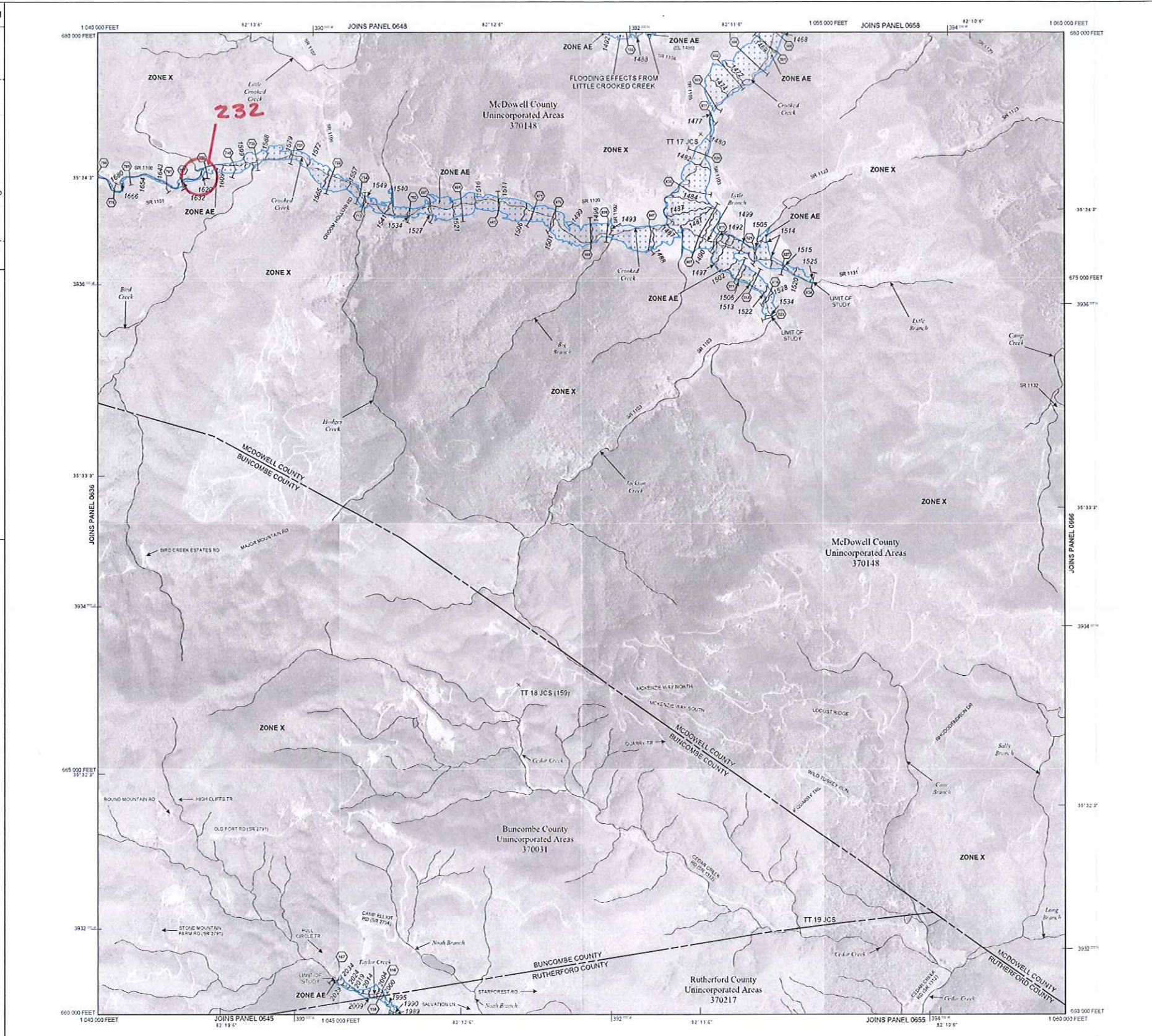
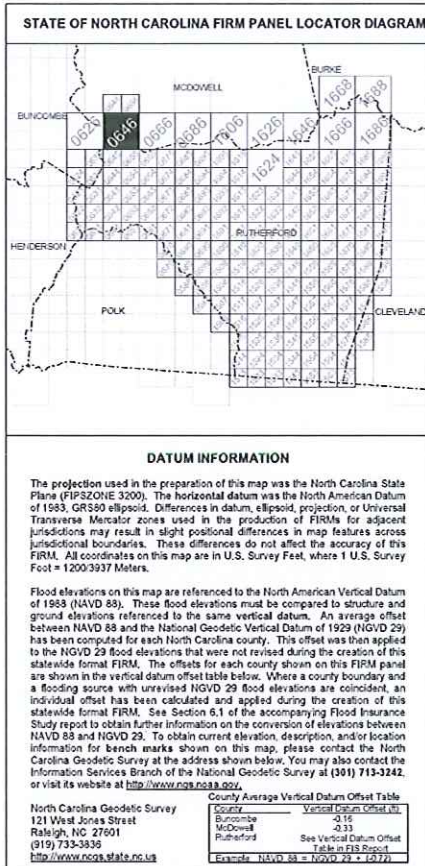
Table 7—Summary of Discharges

Flooding Source	Location	Drainage Area (square miles)	Discharges (cfs)			
			10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Cove Creek	Approximately 0.8 mile upstream of SR 1267	13.9	*	*	4,660	*
	Just upstream of the confluence of Elliot Creek	11.1	*	*	4,050	*
	Just upstream of the confluence of Morgan Creek (near Ledbetter Mountain)	8.3	*	*	3,400	*
Cox Creek	At the confluence with Armstrong Creek	4.3	*	*	2,240	*
	Approximately 1.0 mile upstream of NC 226	3.5	*	*	1,990	*
Crooked Creek	At the confluence with Catawba River	35.8	*	*	8,440	*
	Just upstream of the confluence of Haw Branch	31.2	*	*	7,740	*
	At SR 1123	28.3	*	*	7,270	*
	Approximately 0.4 mile downstream of the confluence of Camp Creek	23.9	*	*	6,550	*
	At the confluence of Camp Creek	19.1	*	*	5,700	*
	Just downstream of the confluence of Little Crooked Creek	17.0	*	*	5,290	*
	At the confluence of Little Crooked Creek	10.2	*	*	3,870	*
	At the confluence of Lytle Branch	6.7	*	*	2,960	*
	Approximately 0.9 mile upstream of the confluence of Lytle Branch	5.7	*	*	2,680	*
	Approximately 1.3 miles upstream of the confluence of Lytle Branch	4.4	*	*	2,280	*
	Approximately 1.8 miles upstream of the confluence of Lytle Branch	2.3	*	*	1,530	*
	Approximately 2.2 miles upstream of the confluence of Lytle Branch	2.0	*	*	1,380	*

Section 5.0 – Engineering Methods

Table 9—Limited Detailed Flood Hazard Data

Cross Section ¹	Stream Station ²	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width ³ (feet)
CROOKED CREEK				
635	63,542	3,870	1,484.0	30 / 281
647	64,690	3,870	1,488.3	26 / 223
650	65,033	3,670	1,490.7	44 / 261
655	65,529	2,960	1,492.4	135 / 55
655	65,548	2,960	1,493.3	107 / 72
656	65,606	2,960	1,494.3	115 / 71
657	65,666	2,960	1,494.4	86 / 63
660	66,031	2,960	1,496.2	164 / 22
669	66,934	2,960	1,500.1	142 / 243
670	66,993	2,960	1,500.8	125 / 270
670	67,038	2,960	1,501.2	148 / 243
671	67,099	2,960	1,501.5	126 / 182
675	67,454	2,960	1,504.4	46 / 154
683	68,251	2,960	1,511.2	69 / 155
691	69,062	2,960	1,518.9	69 / 121
697	69,741	2,960	1,526.4	73 / 35
702	70,234	2,960	1,533.4	154 / 28
706	70,648	2,680	1,540.0	190 / 17
711	71,149	2,680	1,545.7	43 / 30
712	71,220	2,680	1,548.7	121 / 107
713	71,288	2,680	1,549.3	89 / 131
714	71,427	2,680	1,551.0	52 / 32
719	71,947	2,680	1,560.3	34 / 177
722	72,166	2,280	1,563.8	54 / 93
725	72,531	2,280	1,569.3	31 / 51
731	73,148	2,280	1,578.2	75 / 34
737	73,733	2,280	1,588.2	94 / 24
738	73,793	2,280	1,590.0	134 / 33
738	73,845	2,280	1,591.3	132 / 48
739	73,912	2,280	1,593.6	128 / 39
745	74,453	2,280	1,603.9	67 / 73
745	74,508	1,530	1,605.1	26 / 80
746	74,552	1,530	1,606.6	49 / 105
746	74,643	1,530	1,608.0	30 / 155
750	75,048	1,530	1,616.9	17 / 97
756	75,586	1,530	1,628.7	26 / 30
756	75,647	1,530	1,630.2	24 / 27
757	75,692	1,530	1,632.6	75 / 45
758	75,784	1,530	1,633.4	64 / 36
761	76,109	1,530	1,641.7	58 / 18
764	76,395	1,530	1,648.4	13 / 12
769	76,926	1,380	1,659.2	14 / 15
775	77,523	1,380	1,674.9	24 / 18
780	78,029	1,380	1,690.8	39 / 13
782	78,152	1,380	1,703.0	19 / 20
782	78,215	1,380	1,709.1	47 / 48
785	78,457	1,380	1,711.9	44 / 17
786	78,622	1,380	1,716.0	25 / 25



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood) also known as the base flood is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.
ZONE AE Base Flood Elevations determined.
ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently derelict. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE D Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary
0.2% annual chance floodplain boundary
Floodway boundary
Zone D boundary
CBRS and OPA boundary
Boundary dividing Special Flood Hazard Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
Base Flood Elevation line and value, elevation in feet
Base Flood Elevation value where uniform within zone, elevation in feet

Referenced to the North American Vertical Datum of 1988
Cross section line
Transect line
Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
2000-meter Universal Transverse Mercator grid ticks, zone 17
5000-foot grid values, North Carolina State Plane coordinate system (FIPSZONE 3200, State Plane NAD 83 feet)
North Carolina Geographic Survey bench mark (for more information visit <http://www.ncgs.state.nc.us>)
National Geographic Survey bench mark (for more information visit <http://www.ngs.noaa.gov>)
NAD 83 GPS 2.5 cm Vertical Control Mark or Contractor-Established (CEM) Bench Mark (for more information visit <http://www.ncgs.state.nc.us>)
M 1:5 River Mile

GRID NORTH

MAP SCALE 1" = 1000' (1 : 12,000)

500 0 1000 2000 3000 FEET

300 0 300 600 METERS

Cooperating Technical State

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 of floodplain management to decrease the costs associated with flooding. This is demonstrated by the State's commitment to map floodplain 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.

www.ncfloodmaps.com

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **Floodways** have been determined, users are encouraged to consult the Flood Profiles, Floodway Data, Limited Detailed Flood Hazard Data, and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of **regulatory floodways** shown on the FIRM for flooding sources studied by detailed methods were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data for flooding sources studied by detailed methods as well as non-encroachment widths for flooding sources studied by limited detailed methods are provided in the FIS report for this jurisdiction. The FIS report also provides instructions for determining a floodway using non-encroachment widths for flooding sources studied by limited detailed methods.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 4.4 "Flood Protection Measures" of the Flood Insurance Study report for information on the flood control structures in this jurisdiction.

Base map information and geospatial data used to develop this FIRM were obtained from various organizations, including the participating local community(ies), state and federal agencies, and/or other sources. The primary base for this FIRM is aerial imagery acquired by Buncombe County and the State. The time period of collection for the Buncombe County imagery is 2002. The time period of collection for the State imagery is 2005 and 2006. Information and geospatial data supplied by the local community(ies) that met FEMA base map specifications were considered the preferred source for development of the base map. See geospatial metadata for the associated digital FIRM for additional information about base map preparation.

Base map features shown on this map, such as corporate limits, are based on the most up-to-date data available at the time of publication. Changes in the corporate limits may have occurred since this map was published. Map users should consult the appropriate community official or website to verify current conditions of jurisdictional boundaries and base map features. This map may contain roads that were not considered in the hydraulic analysis of streams where no new hydraulic model was created during the production of this statewide formal FIRM.

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** at 1-800-358-6616 for information on all related products associated with this FIRM. The FEMA Map Service Center may also be reached by Fax at 1-800-358-6620 and its website at <http://www.fema.gov/business/shdp>.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels, community map repository addresses, and a Listing of Communities table containing National Flood Insurance Program data for each community as well as a listing of the panels on which each community is located.

If you have questions about this map, or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA MAP (1-877-339-2627) or visit the FEMA website at <http://www.fema.gov>.

MAP REPOSITORY

Refer to listing of Map Repositories on Map Index or visit: <http://www.ncfloodmaps.com>.

EFFECTIVE DATE OF FLOOD INSURANCE RATE MAP PANEL

JULY 2, 2008

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

OCTOBER 2, 2008¹
JANUARY 6, 2010¹

¹Updated flood hazards to reflect seamless statewide mapping.

For community map revision history prior to statewide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent, the North Carolina Division of Emergency Management or the National Flood Insurance Program at the following phone numbers or websites:

NC Division of Emergency Management
(919) 715-8000 <http://www.ncemergency.com>

National Flood Insurance Program
1-800-638-6620 <http://www.fema.gov/business/shdp>

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0646L

FIRM FLOOD INSURANCE RATE MAP NORTH CAROLINA

PANEL 0646
(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTENTS

COMMUNITY	DATE	PANEL	SUFFIX
BUNCOMBE COUNTY	7/2/08	0646	L
MCDOVELL COUNTY	7/2/08	0646	L
RUTHERFORD COUNTY	7/2/08	0646	L

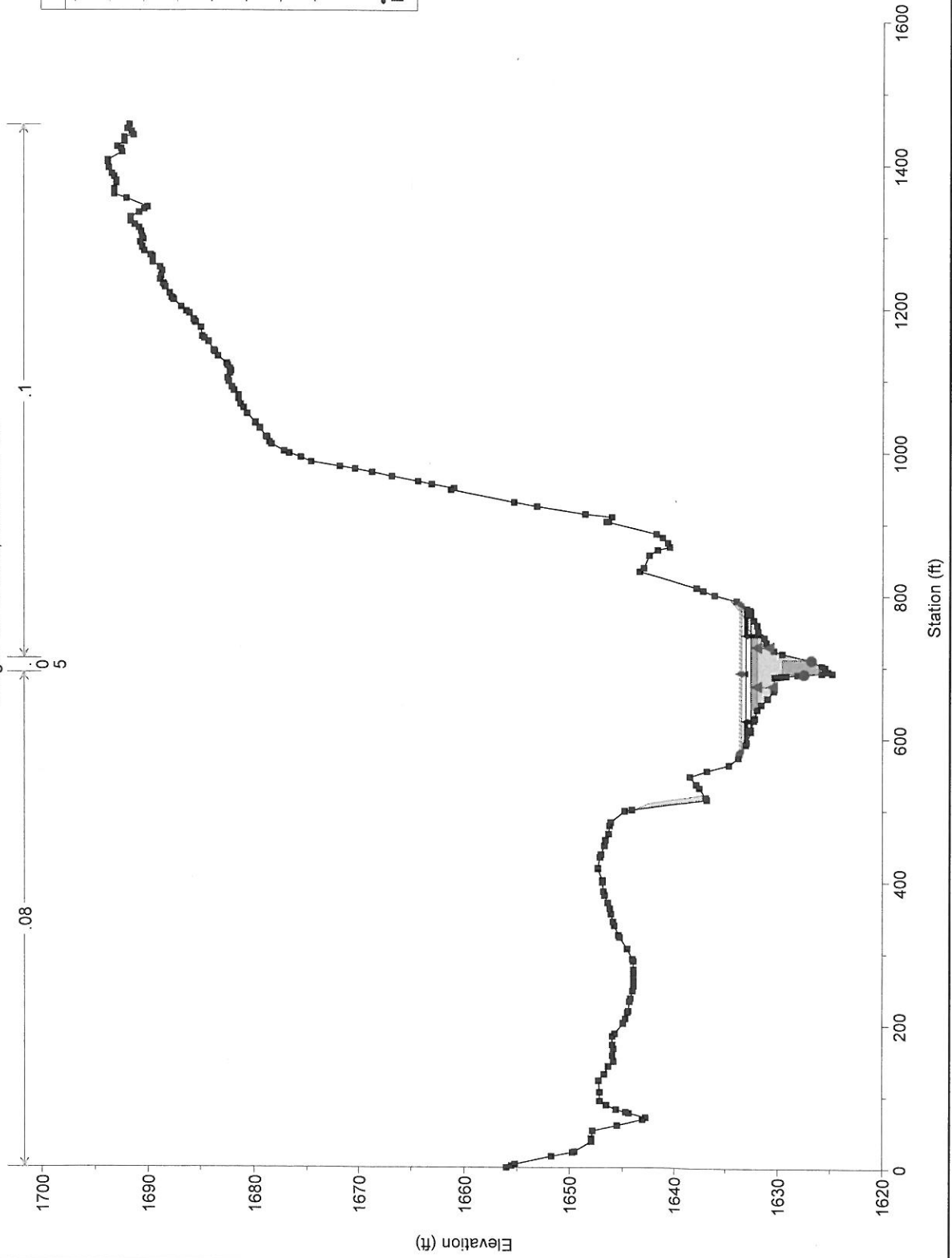
Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on all correspondence for the subject community.

MAP REVISED
JANUARY 6, 2010

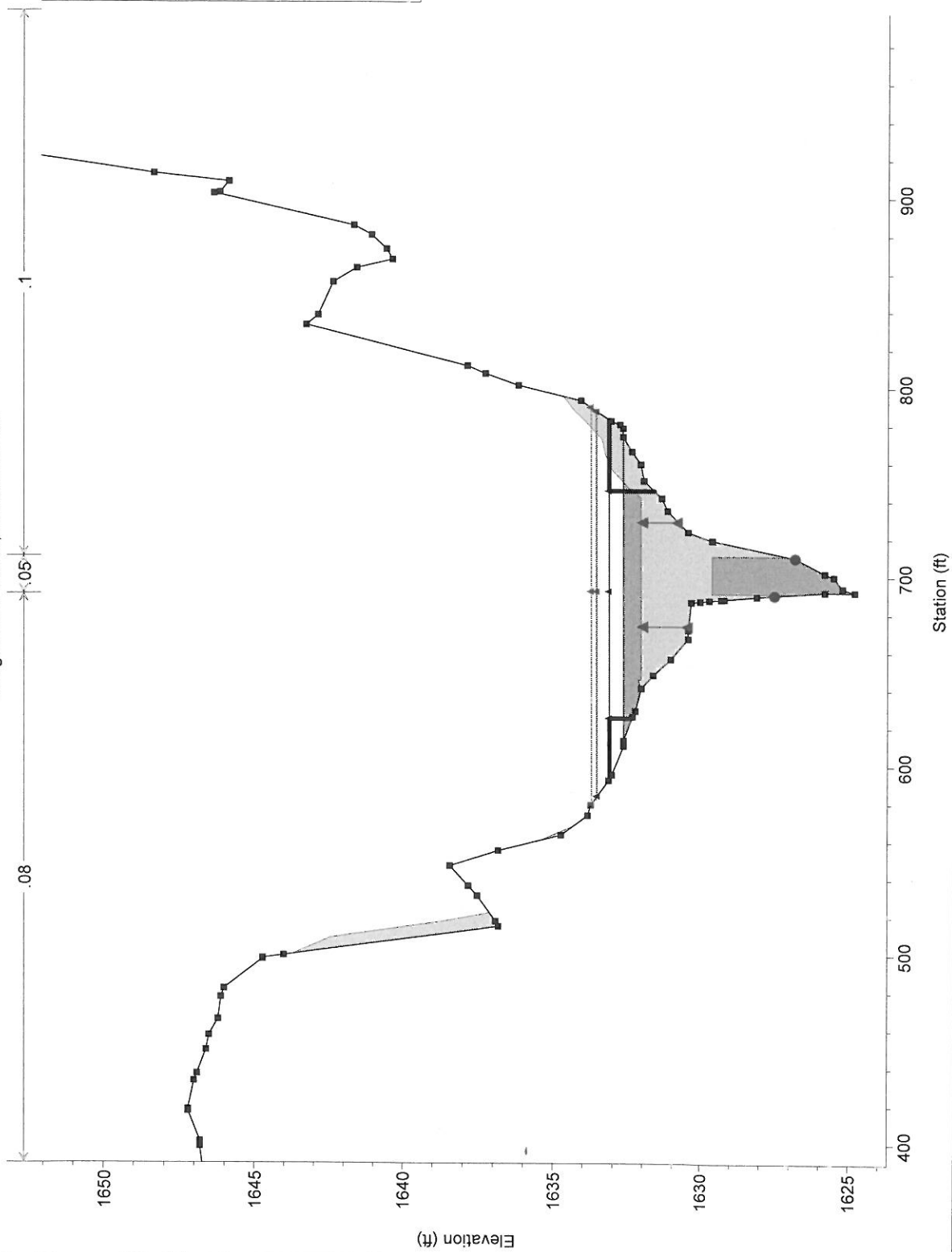
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State of North Carolina
Federal Emergency Management Agency

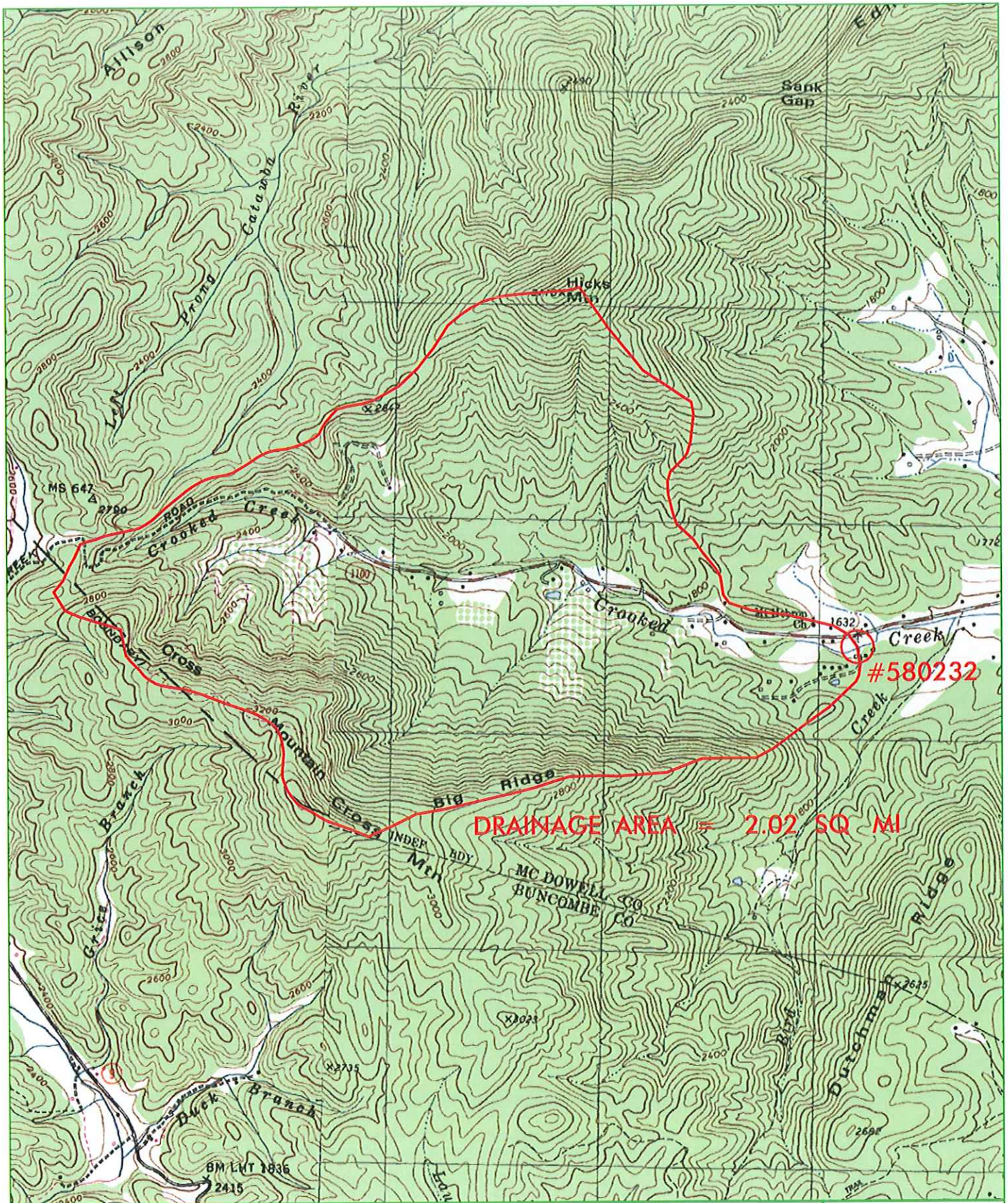
Crooked_Creek Plan: Crooked_Creek 10/31/2005
 Bridge : 37111-0263, Hebron Hill Rd.



Crooked_Creek Plan: Crooked_Creek 10/31/2005
 Bridge : 37111-0263, Hebron Hill Rd.



Legend	
EG FWY	—▲—
Crit FP 100yr	—▲—
EG FP 100yr	—▲—
Crit FWY	—▲—
WS FWY	—▲—
WS FP 100yr	—▲—
Ground	—■—
Ineff	—▲—
Bank Sta	●
Encroachment	—■—



QUAD MAP - BRIDGE #580232

1,000 0 1,000 2,000
SCALE:





NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION NEW SUPERSTRUCTURE

U/S

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY MCDOWELL

BRIDGE NUMBER 580187

INSPECTION CYCLE 2 YRS

ROUTE SR1100

ACROSS CROOKED CREEK

M.P. 0

LOCATION .85 MI.W.JCT.SR1101

SUPERSTRUCTURE TIMBER FLOOR ON TIMBER JOISTS

SUBSTRUCTURE ABUTMENTS:EXISTING REINFORCED CONCRETE

SPANS 1 @ 22'-6"

LONGITUDE 82° 14' 12.2"

LATITUDE 35° 34' 11.2"

PRESENT CONDITION GOOD

INVENTORY RATING

INSPECTION DATE 05/28/2010

OPERATING RATING

PRESENT POSTING SV 99 TTST 99 NOT POSTED

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT DELINS (4) & NARROW BRIDGE (2)



LOOKING EAST

SIGN NOTICE
ISSUED FOR

NUMBERED
REQUIRED

No	WEIGHT LIMIT	
No	DELINEATORS	
No	NARROW BRIDGE	
No	ONE LANE BRIDGE	
No	LOW CLEARANCE	

U/S

BRIDGE MANAGEMENT UNIT
DATA ON EXISTING STRUCTURE

Run Date: 07/07/2010

COUNTY :	DIV :	DIST :	STRUCTURE NUMBER :	LENGTH :		
MCDOWELL	13	1	580187	23	FEET	
ROUTE CARRIED :		FEATURE INTERSECTED :				
SR1100		CROOKED CREEK				
LOCATED :		BRIDGE NAME :		CITY :		
.85 MI.W.JCT.SR1101						
FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :		
09	NFA	NFA	420 2007	LT 227 RT 227		
BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :		
1958	BMU			Other or Unknown		
REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :	
	BMU	5.8751	TAN	60	ON 2 UNDER	
NAVIGATION :		HT. CRN. TO BED :		WATER DEPTH :		
VC	0.0 FT	HC	0.0 FT	7	FT	1 FT
SUPERSTRUCTURE : TIMBER FLOOR ON TIMBER JOISTS						
SUBSTRUCTURE : ABUTMENTS:TIM.CAPS/EXISTING REINFORCED CONCRETE						
SPANS : 1 @ 22'-6						
BEAMS OR GIRDERS : 29 LINES 6X 12 TIMBER JOISTS @ VAR. CENTERS						
FLOOR :	ENCROACHMENT :		DECK (OUT TO OUT) :			
4X8 TIM/1 AWS			21.5 FT			
CLEAR ROADWAY :	BETWEEN RAILS :		SIDEWALK OR CURB :			
20.5 FT	21.3 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 :	DATE		
HS-24	HS-34	int joist	SV	TTST	02/11/2009	
SYSTEM :			GREEN LINE ROUTE :			
Secondary S.R. Route			N			
2ND OPENING :		3RD OPENING :		4TH OPENING :		5TH OPENING :
REMARKS :						

4/3

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 580187 County: MCDOWELL Date: 05/28/2010 By: MER

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	2.3	F.F.END BENT 1			
0.5	2.8				
2	4.083	RAIL TO CAP			
2.1	8.4	S.F.	2.1	7.0	
2.5	7.7		2.5	7.0	
2.6	8.3	FACE/FTING.	2.6	8.2	
5	8.8				
6	9	Water Surface/Water Edge (WSWE)			
10	9.2				
12	9.4				
14	9.4				
16	9.3				
19.2	9	Water Surface/Water Edge (WSWE)			
19.3	9.1	FACE/FTING.			
19.4	7.8				
19.9	7.7	S.F.	19.9	7.7	
20	4.083	RAIL TO CAP			
22	2.8				
22.5	2.3	F.F.END BENT 2			

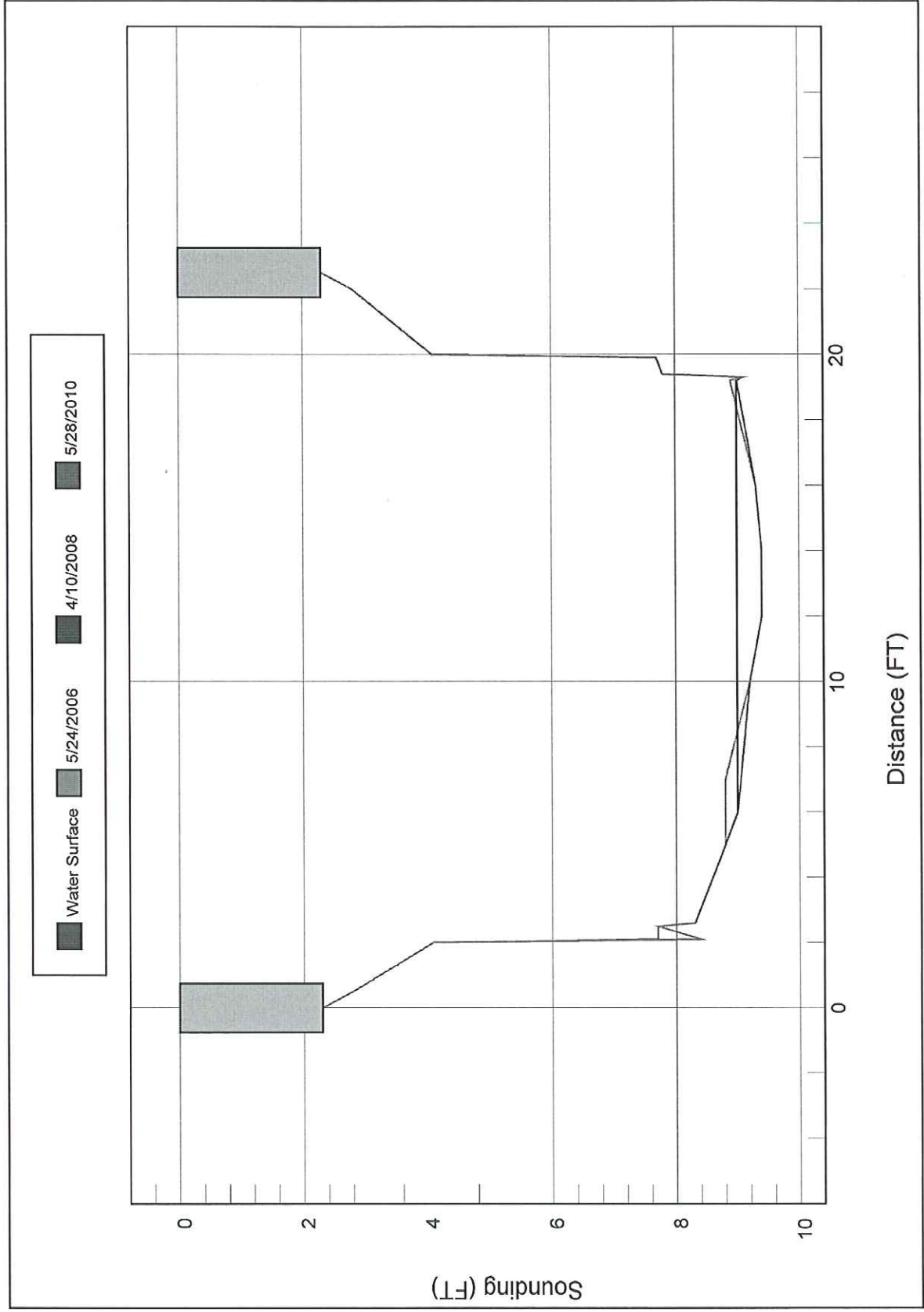
Bridge: 580187

County MCDOWELL

Date: 05/28/2010

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



U/S



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

D/S

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY MCDOWELL BRIDGE NUMBER 580204 INSPECTION CYCLE 2 YRS
ROUTE SR1102 ACROSS CREEK M.P. 0

LOCATION .2 MI.S.JCT.SR1100

SUPERSTRUCTURE TIMBER FLOOR ON I-BEAMS

SUBSTRUCTURE E.BT.1:TIM.CAP/TIM.P&S/ENC.CONC.E.BT.2:TIM.CAP/TIM.P&CONC.S.

SPANS 1 @ 25'-4

LONGITUDE 82° 11' 34.9"

LATITUDE 35° 33' 54.9"

PRESENT CONDITION POOR

INVENTORY RATING

INSPECTION DATE 05/26/2010

OPERATING RATING

PRESENT POSTING SV 12 TTST 17

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT



LOOKING NORTH AT APPROACH

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>

D/S

BRIDGE MANAGEMENT UNIT
DATA ON EXISTING STRUCTURE

Run Date: 07/15/2010

COUNTY :	DIV :	DIST :	STRUCTURE NUMBER :	LENGTH :	
MCDOWELL	13	1	580204	25	FEET
ROUTE CARRIED :		FEATURE INTERSECTED :			
SR1102		CREEK			
LOCATED :		BRIDGE NAME :		CITY :	
.2 MI.S.JCT.SR1100					
FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :	
09	NFA	NFA	50 1998	LT 227 RT 227	
BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :	
1958	BMU			Other or Unknown	
REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :
			TAN	90	ON 2 UNDER
NAVIGATION :		HT. CRN. TO BED :		WATER DEPTH :	
VC	0.0	FT	HC	0.0	FT
				9	FT
					1
					FT
SUPERSTRUCTURE : TIMBER FLOOR ON I-BEAMS					
SUBSTRUCTURE : E.BT.1:TIM.CAP/TIM.P&S/ENC.CONC.E.BT.2:TIM.CAP/TIM.P&CONC.S.					
SPANS : 1 @ 25'-4					
BEAMS OR GIRDERS : 7 LINES 12 I-BEAMS @ 2'-8 CENTERS					
FLOOR :		ENCROACHMENT :		DECK (OUT TO OUT) :	
4X8 TIM/1. 25AWS				18.0 FT	
CLEAR ROADWAY :		BETWEEN RAILS :		SIDEWALK OR CURB :	
17.1 FT		17.8 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	Extbm	SV	12	TTST 17
			DATE 07/14/2008		
SYSTEM :			GREEN LINE ROUTE :		
Secondary S.R. Route			N		
2ND OPENING :		3RD OPENING :		4TH OPENING :	
				5TH OPENING :	
REMARKS :					

D/S

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 580204 County: MCDOWELL Date: 05/26/2010 By: JCH

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	2.9	F.F.END BENT 1			
0.2	2.9				
1	4.6	RAIL TO CAP			
1.1	9.8	S.F.	1.1	9.5	
2.4	9.8				
2.5	10.6	FACE/ENCASEMENT			
2.6	10.3	WS/WE			
6	10.5	BED			
12	10.8	BED			
15	11	BED			
19	10.2	BED			
22	10.1	WS/WE			
22.8	10.1	FACE/ENCASEMENT			
22.9	9.4				
24.2	9.3	S.F.	24.2	9.7	
24.3	4.6	RAIL TO CAP			
25.1	3				
25.3	3.4	F.F.END BENT 2			

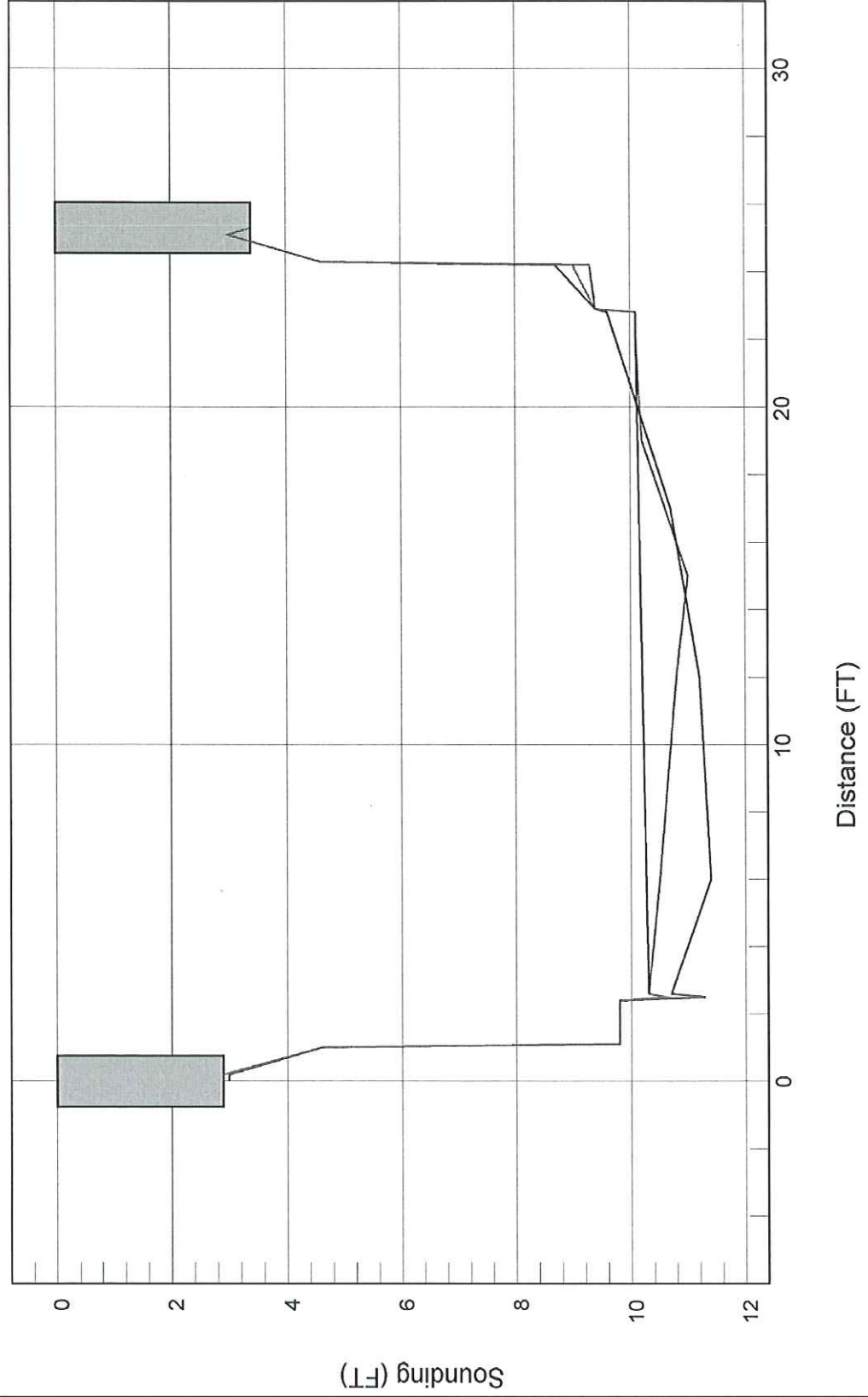
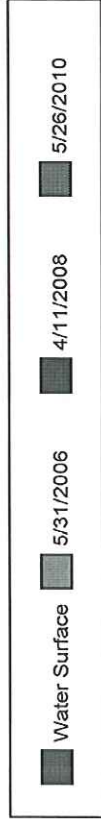
Bridge: 580204

County MCDOWELL

Date: 05/26/2010

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



D/S