

PREDESIGN-PRESURVEY REPORT

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

County WATAUGA DIV 11

Bridge# 940046
 Road# SR 1351(CastleFordRd)
 Stream Grassy Creek

Type Of Request: POC Force Account TIP NCMA

Date 12.27.13 Name wsh Assigned To MTS

Checked By _____ MJY 1-3-14

Prior Survey Date 11-89 BrnBk: 3@103x71" (11-89)

Study By Scour Section None Co.File: None

Flood Zone X Detail Study None Date 12-3-09 Panel# 2932

B.M. Info N/A

Quad Map TODD Drainage Area 2.3 SqMi From Quad sheet
Q25 750 cfs Q50 850 cfs Q100 1000cfs Method REG EQU.
REGION 2

Lat: 36° 15' 53.80" Long: 81°35'58.32"

EXISTING BRIDGE INFORMATION

Location 0.3 mi NE JCT SR 1354 (Milton Moretz Rd.)

Average Daily Traffic 120 (2000) 6% Trk

Length 26' Bed- To Crown 8' Water Depth 2'

Type Structure I Beams, Tim.: Flr, E Bts, Caps, Sills & post. (E Bt 2 conc sill).

Type Spans 1 @ 25 '6"

Upstream Structure 940303 (L=22' Tim. Flr on salvaged I Beams, Conc. Abutments)

Location 0.3 mi N JCT SR 1334 (1 @ 21'6")

Bed- To Crown 6' (h2o= 1' deep) Prior Survey N/A

Downstream Structure 940047 on SR 1351 (w/ I Beams, Tim.: Flr, Caps, Sills, Posts)

Location 0.35 mi NE JCT SR 1354 (Milton Moretz Rd) (1 @ 25' 10")

Bed- To Crown 6' (h2o= 1' deep) Prior Survey N/A

SCS Watershed N/A

ENVIRONMENTAL

TVA: YES

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:+ (#10-1-14)

DENR River Basin Info. NEW

COUNTY: WATKINS BRIDGE No.: 46

DATE: 12/17/13

OAL = 25.3'

⊥ OPENING = 24.0 FT

CLEAR ROWY = 19.3'

CLEAR ROWY ALONG SKREW = 20.1'

ONIZ FOOT PESTS
AND CAPS

RAIL TO BED =

RAIL TO SEAT =

VERTICAL ABUT
STEEL GIRDER

HEIGHT OF RAIL = 2.5

NW DEPTH = 1 FT

STREAM WIDTH = 10 FT

WATERWAY OPENING =

DETOUR =

TRIB DOWNSTREAM RT



+0 SEAT 4.4

+0 ABUT 8.4

+06 WR/WS 9.4

+11 10.5

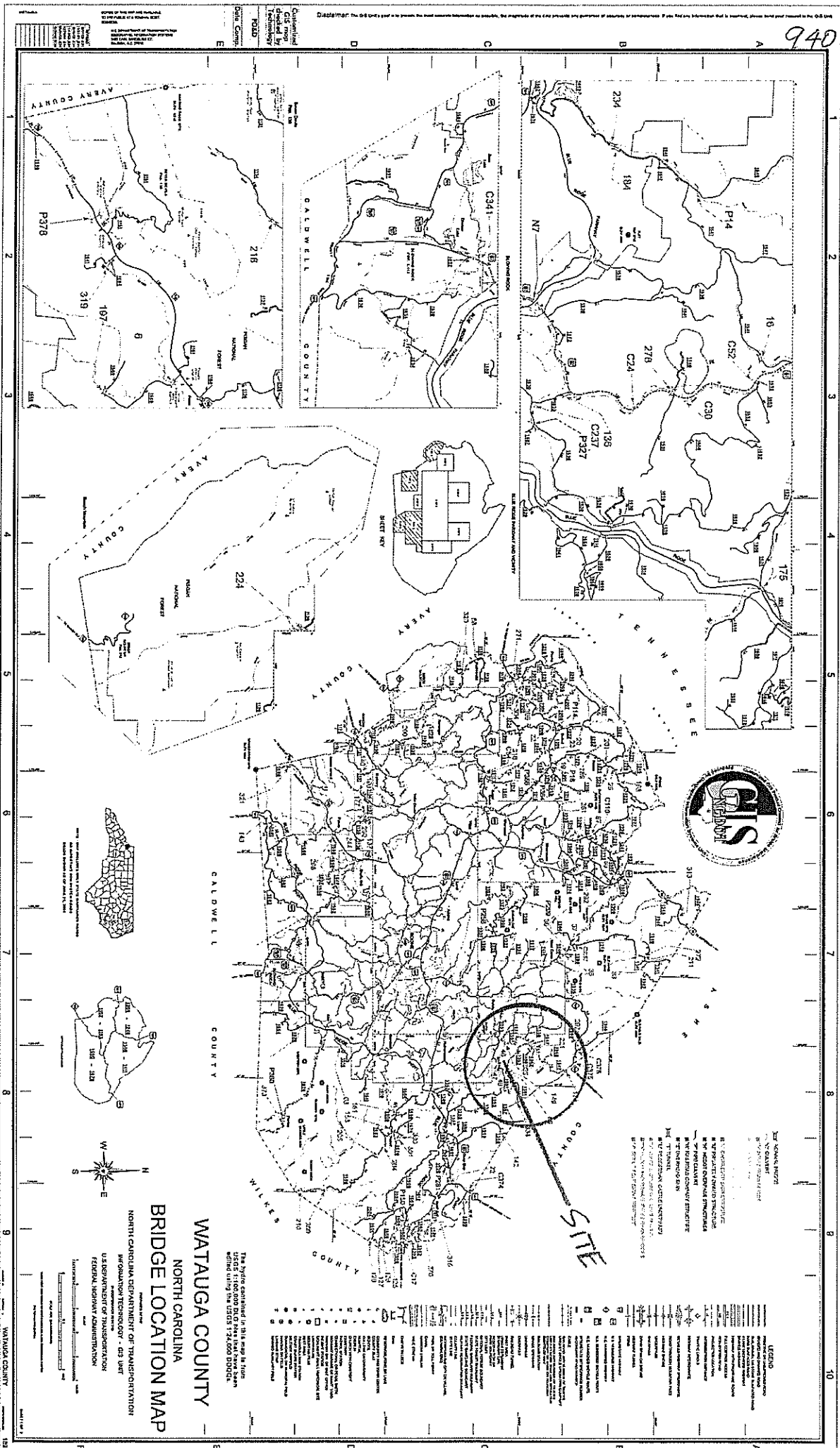
+16 WR 9.7

+20 TB 7.9

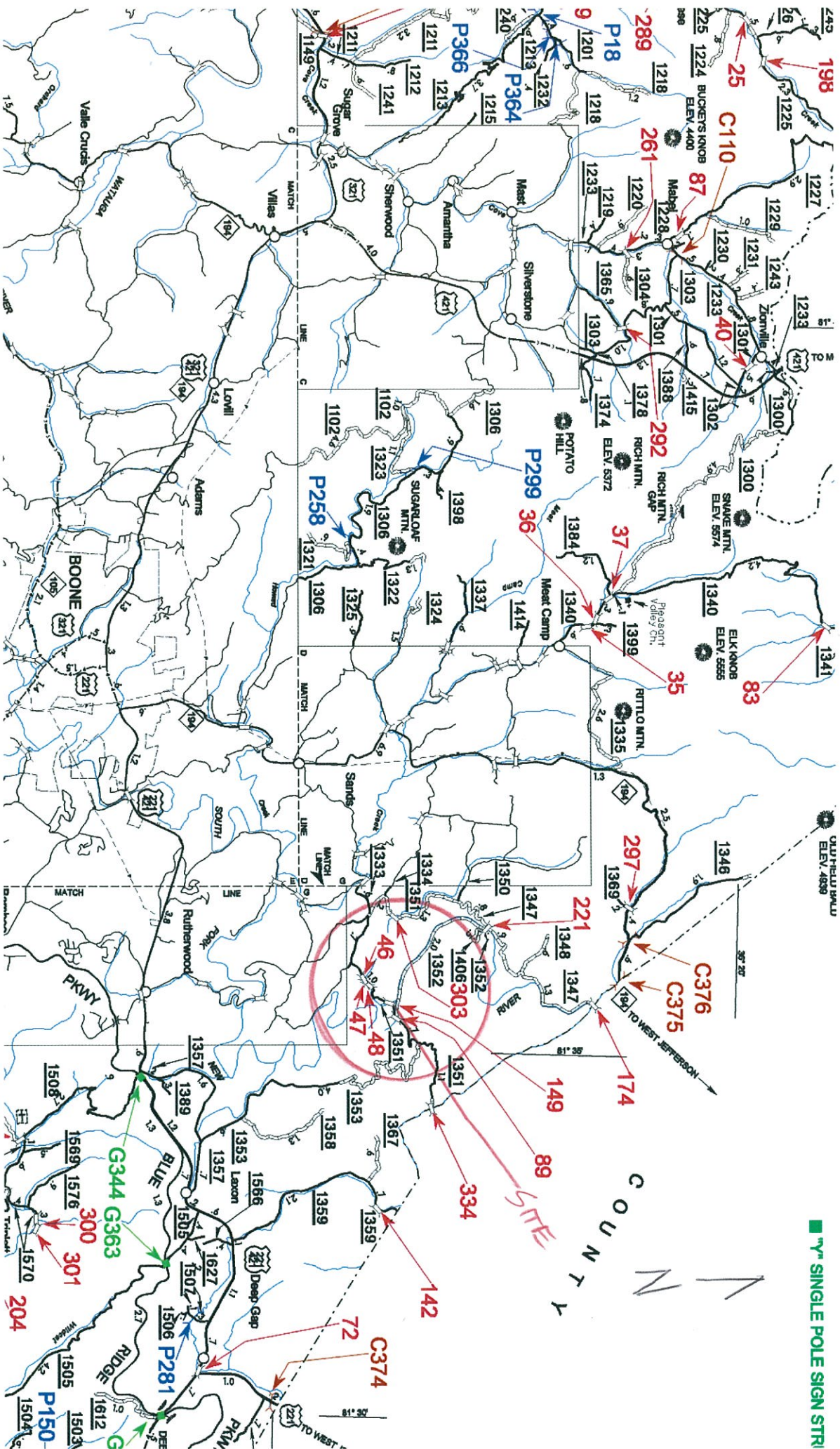
+25.3 ABUT 7.5

+25.3 SEAT 4.4

940046



■ "Y" SINGLE POLE SIGN STRIP



940046

South Fork

MCD 314
3975

LITTLE
ELK
CAMP

Stone
Mtn

BALD M

SOUTH
RIDGE
FORK

940046 WATAUGA CO.
SR 1351 CASTLE FORD RD.
DA=2.3 SQ MI
QUAD SHT= T000

1"=1655'

47 48
46

Bethany Ch
Mount Pleasant Ch
Soda Hill

Meat
Camp

Bethelview
Ch

940046

ZONE X

MILTON MORETZ RD (SR 1354)

HUNTER DR

Watauga County
Unincorporated Areas
370251

ZONE X

CASTLE RD (SR 1335)

N

RIVER RIDGE RD

ZONE X

RIVER RIDGE RD

HAMILTON WAY

WILD TURKEY RD

ZONE AE

ZONE X

Private Dr





Ergebnis: Speed 100 x 110 x 20 x 140, 200

1	GOOD ILLAND DAIN IABLE
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2008	283,843	NA	3,012.6
Feed (all four months)			

www.ncfloodmaps.com



NOTES TO USER

shown as providing protection from the 1% annual chance flood. Flooding is not covered by standards.

direction of this worldwide formal FPM.

Center for Emergency Management
1191 7th Avenue
<http://www.cemcenter.org>
1-800-696-0620

National Flood Insurance Program
<http://www.nfip.com>

LEGEND

STREET RAILROAD AREAS (SEMA) CURB CUT

surface elevation of the 1% annual chance flood.

food by a flood control system that was subsequently described. Zone A indicates that the former flood control system is being restored to provide

A floodway is the channel of a stream plus any adjacent floodplain areas that must be kept of encroachment so that the 1% annual chance flood can be carried without substantial

Areas determined to be outside the 0.2% annual chance floodplain.

250. *annual chance floodplain boundary*

Beam Flood Elevation (line and value); elevation in feet
Beam Flood Elevation value where uniform within beam elevation

2000 member National Treasury and Risk, June 17
[163] (p. 83)

[illegible]

ELI GOOD INSURANCE RATE MAP

FREE 1 GIGANTIC OYSTERS (at least 4 inches) per person.
LAST BUT NOT LEAST!

SU

©

940046



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

PRIORITY MAINTENANCE ISSUED
TEMPORARY REPAIRS

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection - Contract

COUNTY WATAUGA BRIDGE NUMBER 940046 INSPECTION CYCLE 0 YRS
ROUTE SR1351 ACROSS CREEK M.P. 0

.3 MILES NORTHEAST OF JUNCTION WITH SR1354 (MILTON MORETZ RD)

LOCATION .3 MI.NE.JCT.SR1354

SUPERSTRUCTURE TIMBER FLOOR ON I-BEAMS

SUBSTRUCTURE E.BT1:TIM.CAP/TIM.POST&SILL;E.BT2:TIM.CAP/TIM.P&CONC.SILL

1 @ 25'-6"

SPANS 1 @ 25'-6"

LONGITUDE 81° 35' 58.32"

LATITUDE 36° 15' 53.80"

INSPECTION DATE 10/15/2013

PRESENT CONDITION FAIR

PRESENT POSTING SV 17 TTST 23 SV 12 TTST 18 PROPOSED POSTING

OTHER SIGNS PRESENT (4) DELINEATORS, (2) NARROW BRIDGE



WEST APPROACH LOOKING EAST

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>

5, 29, 46

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 11/06/2013

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
WATAUGA	11	2	940046	26	FEET
ROUTE CARRIED :		FEATURE INTERSECTED :			
SR1351		GRASSY CREEK			
LOCATED :		BRIDGE NAME :		CITY :	
.3 MI.NE.JCT.SR1354					
FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :	
09	NFA	NFA	120 2000	LT 227	RT 227
BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :	
1963	BMU			Unknown	
REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :
			TAN	80	ON 2 UNDER 0
NAVIGATION :			HT. CRN. TO BED :		WATER DEPTH :
VC 0 FT	HC 0 FT		8 FT		2 FT
SUPERSTRUCTURE : TIMBER FLOOR ON I-BEAMS					
SUBSTRUCTURE : E.BT1:TIM.CAP/TIM.POST&SILL;E.BT2:TIM.CAP/TIM.P&CONC.SILL					
SPANS : 1 @ 25'-6					
BEAMS OR GIRDERS : 9 LINES 12 I-BEAMS @ 2'-3.625 CENTERS					
FLOOR :	ENCROACHMENT :		DECK (OUT TO OUT) :		
4X8 TIM/2.5AWS			20.79 FT		
CLEAR ROADWAY :	BETWEEN RAILS :		SIDEWALK OR CURB :		
19.14 FT	19.78 FT		LT	.3 FT	RT .3 FT
VERT.CL.OVER : 999.9 FT					
INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	DATE
HS-1	HS-1	Int.Beams	SV 10	14	11/05/2013
SYSTEM : Secondary S.R. Route			GREEN LINE ROUTE : N		
UNDER ROUTES AND CLEARANCES					
REMARKS :					

940046

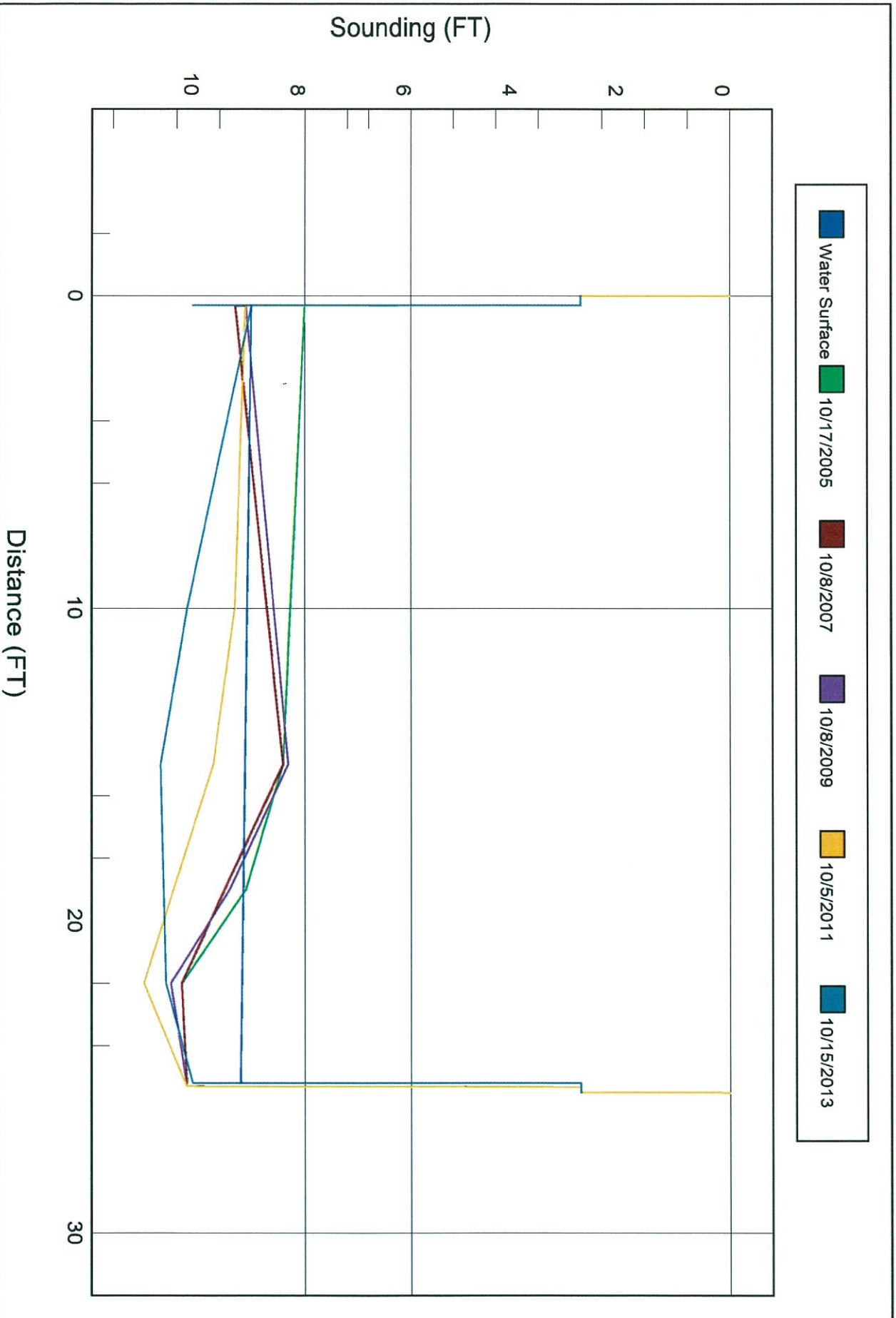
Bridge: 940046

County WATAUGA

Date: 10/15/2013

Top of Rail = 0 FT (Sounding)

STREAMBED PROFILE (Downstream)





NORTH PROFILE LOOKING SOUTH



BEARING GENERAL VIEW