

office estimate 1P
81"x59"
CSA

Min Brg = 90'

No FEMA - No MDA

STATE STORMWATER
Permit Required

Print Record

Form PDR Action PDR P/P 412

GENERAL INFO

Date 5/24/2011 Div WBS TIP #
13 Proj #
Let Date

County YANCEY Bridge # 54
Road # SR 1100 Road Name: EWART WILSON RD

Stream Falling Water Branch

Req Type Name Assigned To Checked By
Prior Survey Survey Date Recommendation
Study by Scour Section

DRAINAGE INFO

Flood Zone NO Panel # 716 Study Type NO STUDY Study Date 6/2/2009

IS THERE A HEC RAS TYPE MODEL ☐

BM info
Quad MT MITCHELL
Drainage Area 373.52 Acres DA Source QUAD
Q25 200 cfs Q 50 270 cfs Q100 330 cfs
METHOD RURAL HIGHWAY CHARTS BASIN TYPE REGION 2

EXISTING INFO

Location 1.9 M.I.S.JCT.NC197
GPS CO-ORD(Dec) 82.3140 35.8046
OAL 19 B-C 6 Depth 1
ADT 250 Skew 90 Stream Slope
STRUCTURE TYPE TIMBER DECK/ TIMBER JOISTS
Spans 1 @ 18'-6

UP STREAM INFO

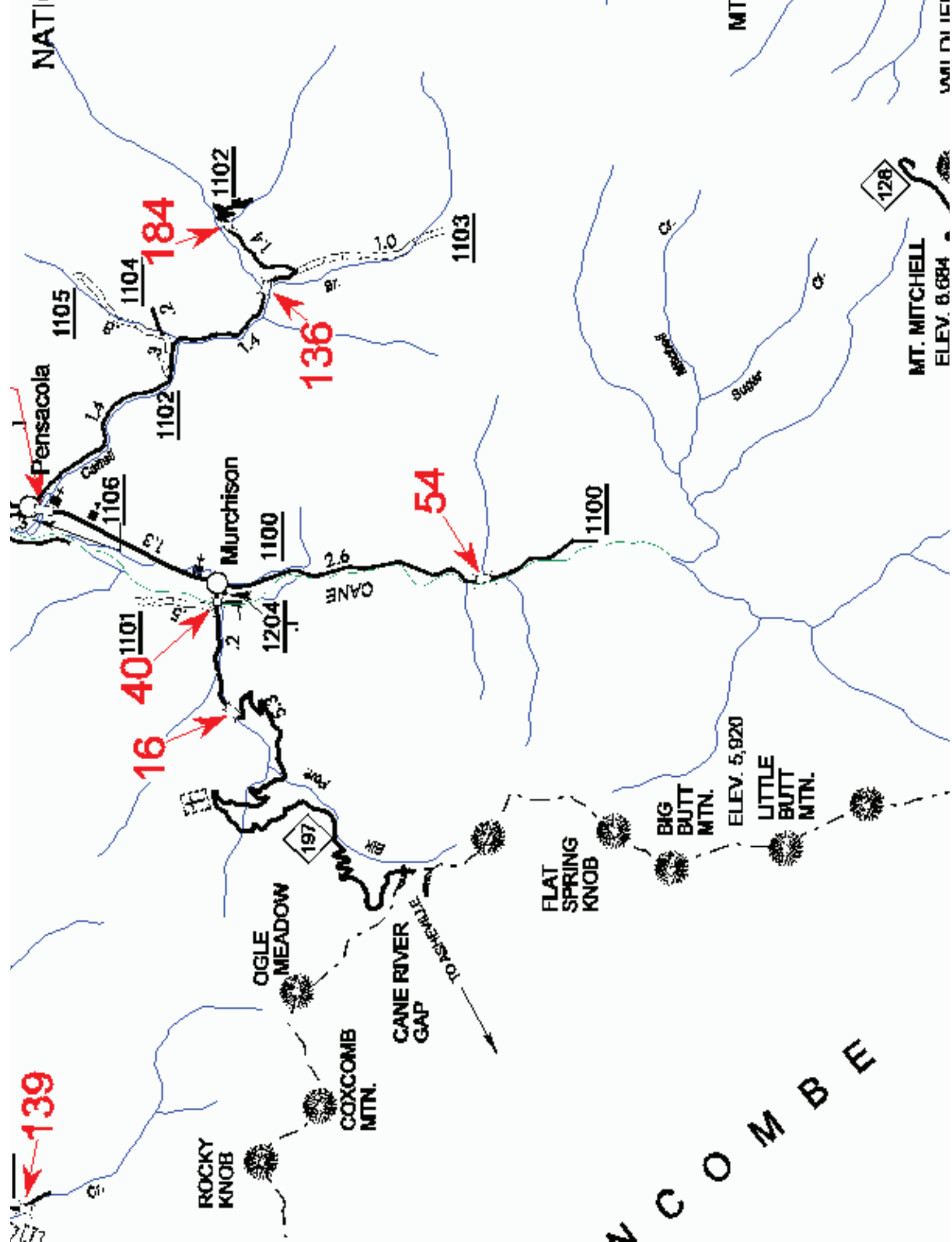
US Structure US Road # US Str OAL
US Location
US B-C US Prior survey

DOWN STREAM INFO

DS Structure DS Road # DS Str OAL
DS Location
DS B-C DS Prior survey SCS Watershed

ENVIRONMENTAL INFO

Trout Stream NO Anadromous Fish NO Primary Nursery Area NO
High Quality Waters YES NUTRIENT SENSITIVE WATERS NO
NEAR WATER SUPPLY INTAKE NO CAMA COUNTY NO
STREAM CLASSIFICATION WS-II;HQW
DENR RIVER BASIN FRENCH BROAD





NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY YANCEY BRIDGE NUMBER 990054 INSPECTION CYCLE 2 YRS
ROUTE SR1100 ACROSS BRANCH M.P. 0

LOCATION 1.9 MI.S.JCT.NC197

SUPERSTRUCTURE TIMBER FLOOR ON TIMBER JOISTS

SUBSTRUCTURE E.BTS:TIMBER CAPS/TIMBER POST&SILLS @ 6' CENTERS

SPANS 1 @ 18'-6

LONGITUDE 82° 18' 50.4"

LATITUDE 35° 48' 16.6"

PRESENT CONDITION POOR

INVENTORY RATING

INSPECTION DATE 08/27/2009

OPERATING RATING

PRESENT POSTING SV 12 TTST 19

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT Delineators



NORTH

SIGN NOTICE ISSUED FOR		NUMBERED REQUIRED
<u>No</u>	WEIGHT LIMIT	<u></u>
<u>Yes</u>	DELINEATORS	<u>1</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: 10/06/2009

COUNTY :	DIV :	DIST :	STRUCTURE NUMBER :	LENGTH :		
YANCEY	13	2	990054	19	FEET	
ROUTE CARRIED :		FEATURE INTERSECTED :				
SR1100		BRANCH				
LOCATED :		BRIDGE NAME :				
1.9 MI.S.JCT.NC197						
FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :		
09	NFA	NFA	250 2007	LT 227 RT 227		
BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :		
1964	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	6 FT	1 FT	
SUPERSTRUCTURE :		TIMBER FLOOR ON TIMBER JOISTS				
SUBSTRUCTURE :		E.BTS:TIMBER CAPS/TIMBER POST&SILLS @ 6' CENTERS				
SPANS :		1 @ 18'-6				
BEAMS OR GIRDERS :		10 LINES 6X12 TIMBER JOISTS & 1 LINE DBL.6X12 TIMBER JOISTS				
FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :				
4X8 TIM/2 AWS		20.1 FT				
CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :				
19.1 FT	19.8 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-6	HS-9	int jost (Decay)	SV 8	TTST 13	DATE 10/05/2009	
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: 990054 County: YANCEY Date: 08/27/2009 By: RWS

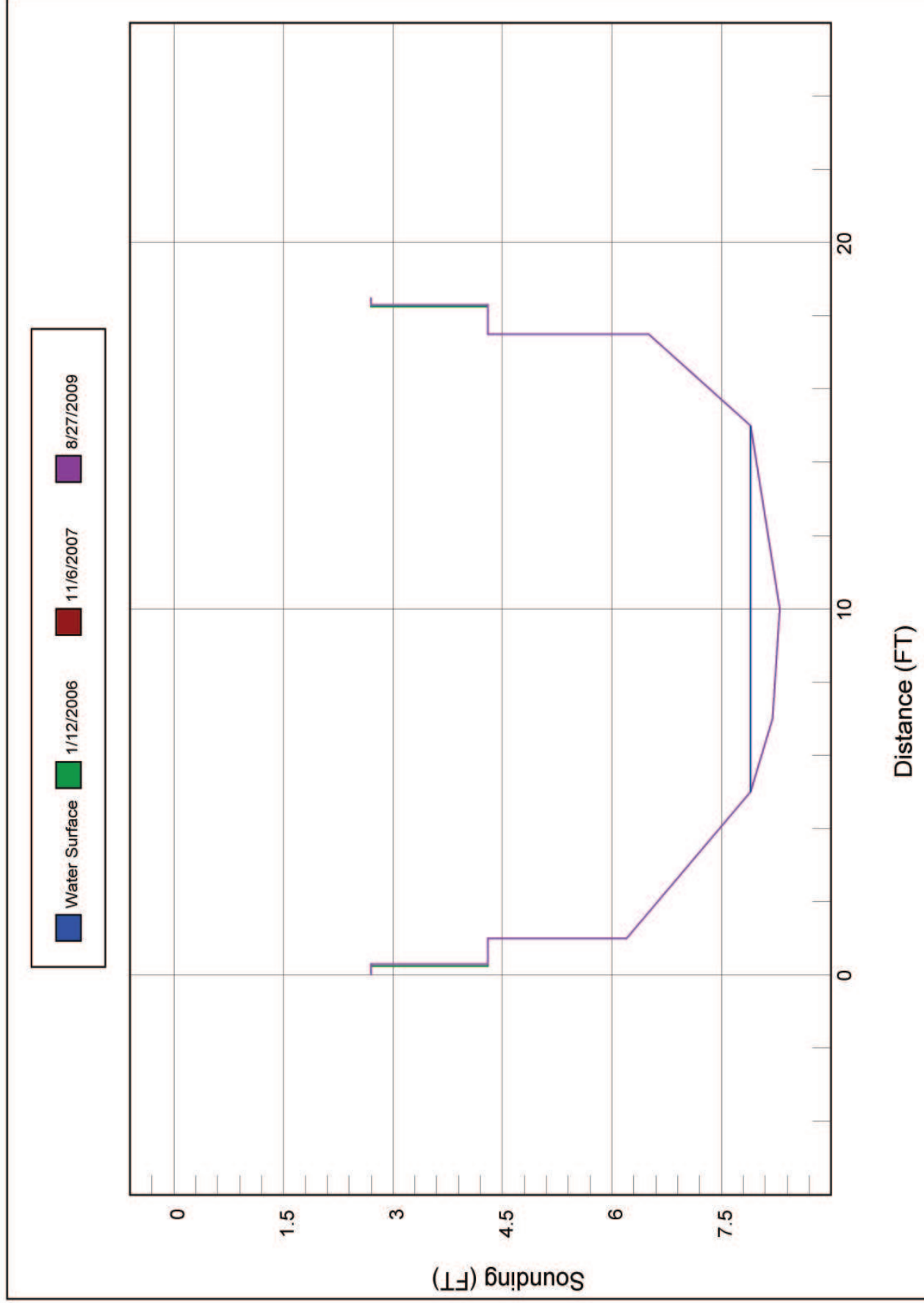
Record sounding from top of rail. Other location if needed: _____

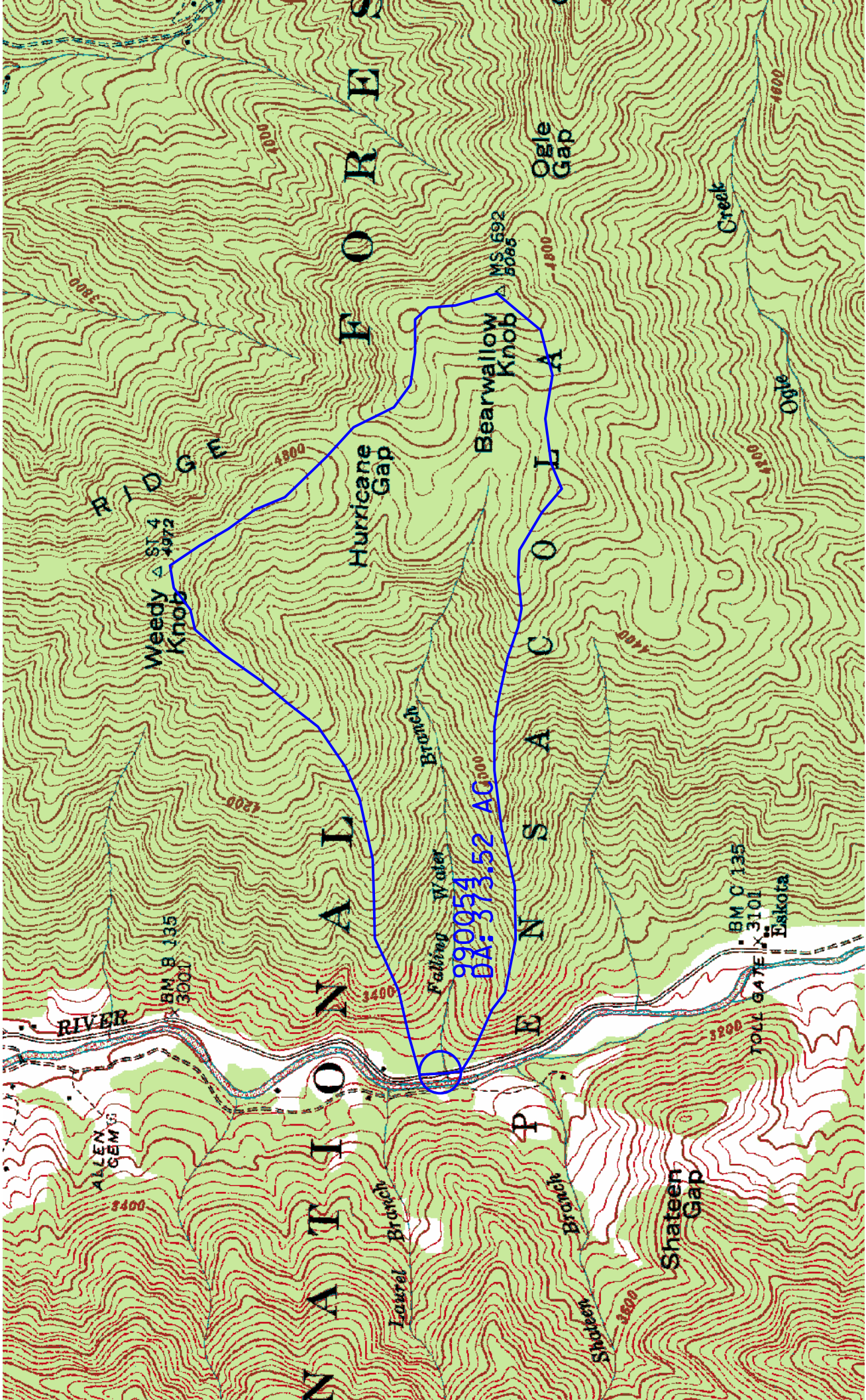
Distance from Highwater Mark to top of rail: _____ Location of Highwater Mark: _____

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	2.7				
0.3	2.7				
0.3	4.3				
1	4.3				
1	6.2				
5	7.9	Water Surface/Water Edge (WSWE)			
7	8.2				
10	8.3				
15	7.9	Water Surface/Water Edge (WSWE)			
17.5	6.5				
17.501	4.3				
18.3	4.3				
18.301	2.7				
18.5	2.7				

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)





Use this if rural area is < than 1.0 sq. mi., otherwise use USGS

Rural

	D.A.=(acres)	373.52
Chart # 200.1	Hydrologic Contour	7
Chart # 200.2	Q50(ft ³ /s)	340
Correction Factors	D.A.Length=(ft.)	8334
	A/L ² =	0.2
Chart # 200.4	Shape Correction	0.8
Chart # 200.5	Cover Correction	N/A
	Total Correction	0.8

4 is minimum

min=0.7, max=1.5

Q5	106.1	Ft ³ /s
Q10	144.2	Ft ³ /s
Q25	206.7	Ft ³ /s
Corrected Q50(ft ³ /s)	272.0	Ft ³ /s
Q100	329.1	Ft ³ /s