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

PREDESIGN-PRESURVEY REPORT

Bridge# 580108
County McDowell (Division: 13)
Road# SR1560 (Old Linville Rd.)
Stream N. Fork Catawba River

Type Of Request: POC Force Account TIP NCMA
Date 12/8/15 Name SNM Assigned To PFF / MTS
Checked By WSH 12-15-15
Prior Survey Date NONE (attach copy of prior survey) BRN. BK.: 4-70 CO. FILE 4/1970
Study By Scour Section None
Flood Zone YES/AE Detail Study Detailed Date 10/2/08 Panel# 1706
B.M. Info N/A. 44.5 SQ.mi From nearby DASS Sta.# 213805100
Quad Map N/A Drainage Area 43.75 sq.mi (SS) From StreamStats
Q25 6100 cfs Q50 7200 cfs Q100 8500 cfs Method USGS Rural Reg. Eqn.
COORD: Lat.: 35.802642 (27.22), Long.: -82.017752 (89.5)

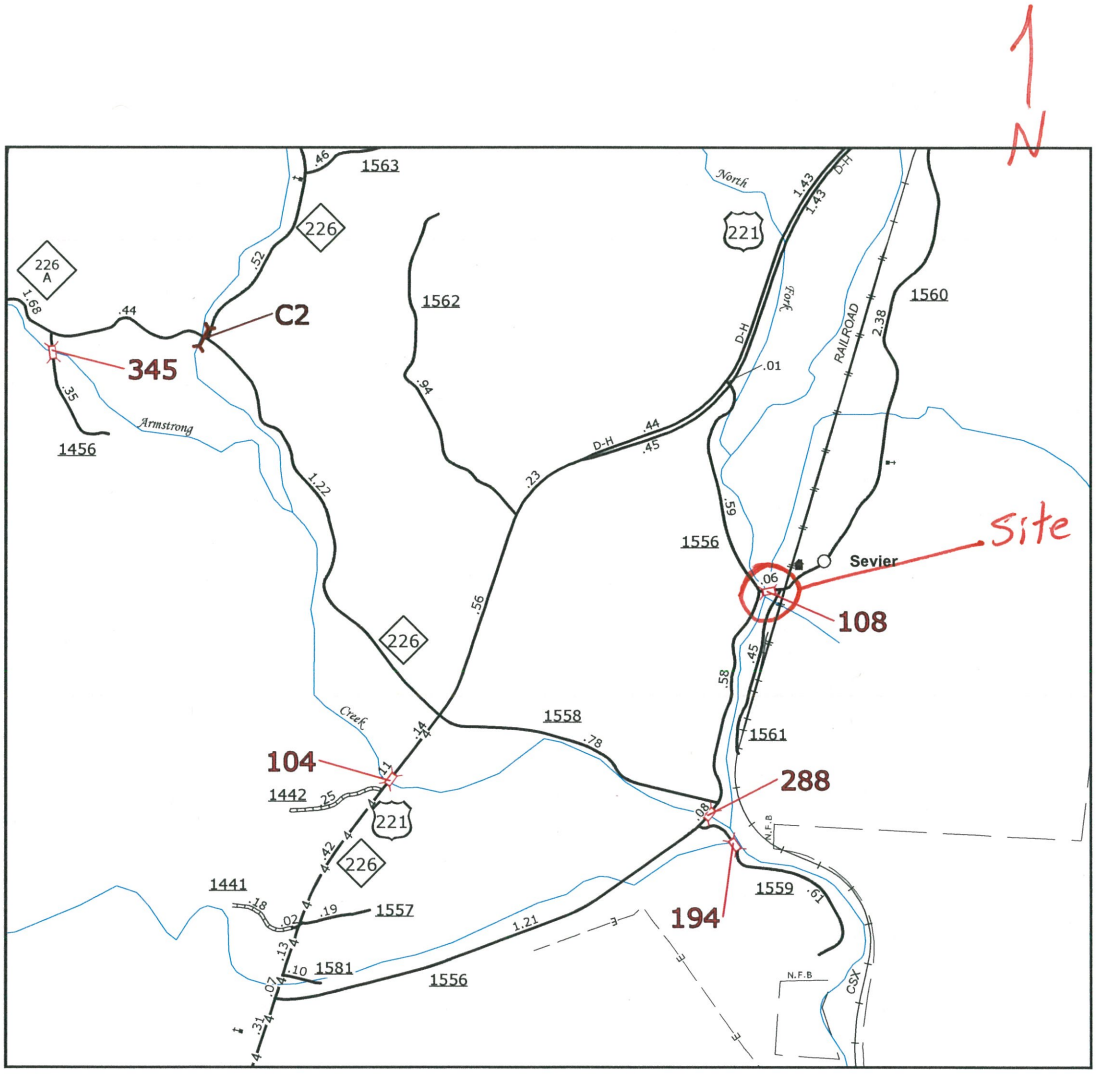
EXISTING BRIDGE INFORMATION

Location 20' E. JCT. SR 1556 (American Thread Rd.)
Average Daily Traffic 270 (2011) 6% Trk
Length 161' Bed- To Crown 23' Water Depth 7'
Type Structure Prestressed Concrete Cored Slab (STD. BMD-19-24-90)
Type Spans 1@40'-3, 2@40', 1@40'-3
Upstream Structure 580111 - L=121' Prestressed Concrete Cored Slab (widened)
Location 50' E. JCT. US221
Bed- To Crown 18' H2O: 5' Prior Survey 05/1971 (YES)
Downstream Structure #288 [1st (Junction Point with Armstrong creek)]
Location 0.5mi S. existing bridge
Bed- To Crown ___ Prior Survey N/A ___
SCS Watershed N/A

ENVIRONMENTAL

TVA: No
Trout Stream YES 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 B; Tr
DENR River Basin Info. Catawba (# 11-24-(2.5)b)

580108



Sevier

580108

on a tool on the toolbar. If the icon remains
sed, click on the map to perform the desired

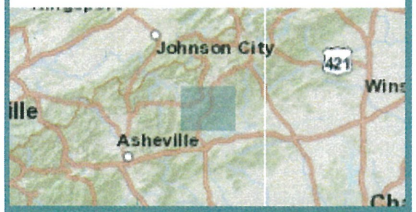
NC Map Layers

- [x] Streamgages
- [x] Area of Limited Functionality
- [x] North Carolina
- [x] Stream Grid
- [x] Study Area Bndys

Base Layers

- ( ) Imagery
- ( ) Street Map
- ( ) World Topo
- ( ) USA Topo
- ( ) Canadian Topo
- (•) TNM Topo

0 1 2mi
Scale: 1 : 144,448
Latitude: 35.76623
Longitude: -82.05586 SS





Accessibility FOIA Privacy Policies and Notices

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StreamStats Version 3 Beta

Basin Characteristics Ungaged Site Report

Date: Tues Dec 8, 2015 7:48:54 AM GMT-5
Study Area: North Carolina
NAD 1983 Latitude: 35.8026 (35 48 09)
NAD 1983 Longitude: -82.0177 (-82 01 04)

Label	Value	Units	Definition
DRNAREA	43.7	square miles	Area that drains to a point on a stream

Accessibility **FOIA** **Privacy** **Policies and Notices**
U.S. Department of the Interior | U.S. Geological Survey
URL: http://streamstatsags.cr.usgs.gov/v3_beta/BCreport.htm
Page Contact Information: StreamStats Help
Page Last Modified: 11/13/2015 12:55:34 (Web1)
Streamstats Status News
USA.gov

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NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION PRIORITY MAINTENANCE X 4 (DRIFT, CROSS BRACING AT THE INT. BENTS , RIGHT RAIL) TEMP. REPAIRS

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY MCDOWELL BRIDGE NUMBER 580108 INSPECTION CYCLE 2 YRS

ROUTE SR1560 ACROSS NORTH FORK RIVER M.P. 0

LOCATION 20 FT.E.JCT.SR1556

SUPERSTRUCTURE PRESTRESSED CONCRETE CORED SLAB (STD.BMD-19-24-90)

SUBSTRUCTURE E.BTS&INT.BTS:PPC CAPS/H-PILES;INT.BTS:ENCASED IN CONC.

SPANS 1 @ 40'-3, 2 @ 40', 1 @ 40'-3

LONGITUDE 82° 1' 3.89" LATITUDE 35° 48' 9.51"

INSPECTION DATE 01/23/2014 PRESENT CONDITION FAIR

PRESENT POSTING Not Posted PROPOSED POSTING

OTHER SIGNS PRESENT DELINEATORS (4)



EAST

Fracture Critical	No
Temporary Shoring	No
Scour Critical	No
Scour POA	Yes

SIGN NOTICE ISSUED FOR		NUMBERED REQUIRED
No	WEIGHT LIMIT	
No	DELINEATORS	
No	NARROW BRIDGE	
No	ONE LANE BRIDGE	
No	LOW CLEARANCE	

580108

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE Run Date: 04/16/2014

COUNTY :	DIVISION :	DISTRICT:	STRUCTURE NUMBER :	LENGTH :
MCDOWELL	13	1	580108	161 FEET

ROUTE CARRIED : SR1560

FEATURE INTERSECTED : NORTH FORK CATAWBA RIVER

LOCATED : 20 FT.E.JCT.SR1556

BRIDGE NAME :

CITY :

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	270 2011	LT 233 RT 233

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1971	BMU	6.8720079		HS 20 + MOD

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	23	FT	7	FT

SUPERSTRUCTURE : PRESTRESSED CONCRETE CORED SLAB (STD.BMD-19-24-90)

SUBSTRUCTURE : E.BTS&INT.BTS:PPC CAPS/H-PILES;INT.BTS:ENCASED IN CONC.

SPANS : 1 @ 40'-3, 2 @ 40', 1 @ 40'-3

BEAMS OR GIRDERS : 9 PRESTRESSED CONCRETE CORED SLAB SECTIONS

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
PPC.CS/3 AWS		24.75 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
23.75 FT	24.1667 FT	LT .2 FT RT .2 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :		
HS-1	HS-1	Cor.slab	SV	TTST	DATE

SYSTEM : Secondary S.R. Route

GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

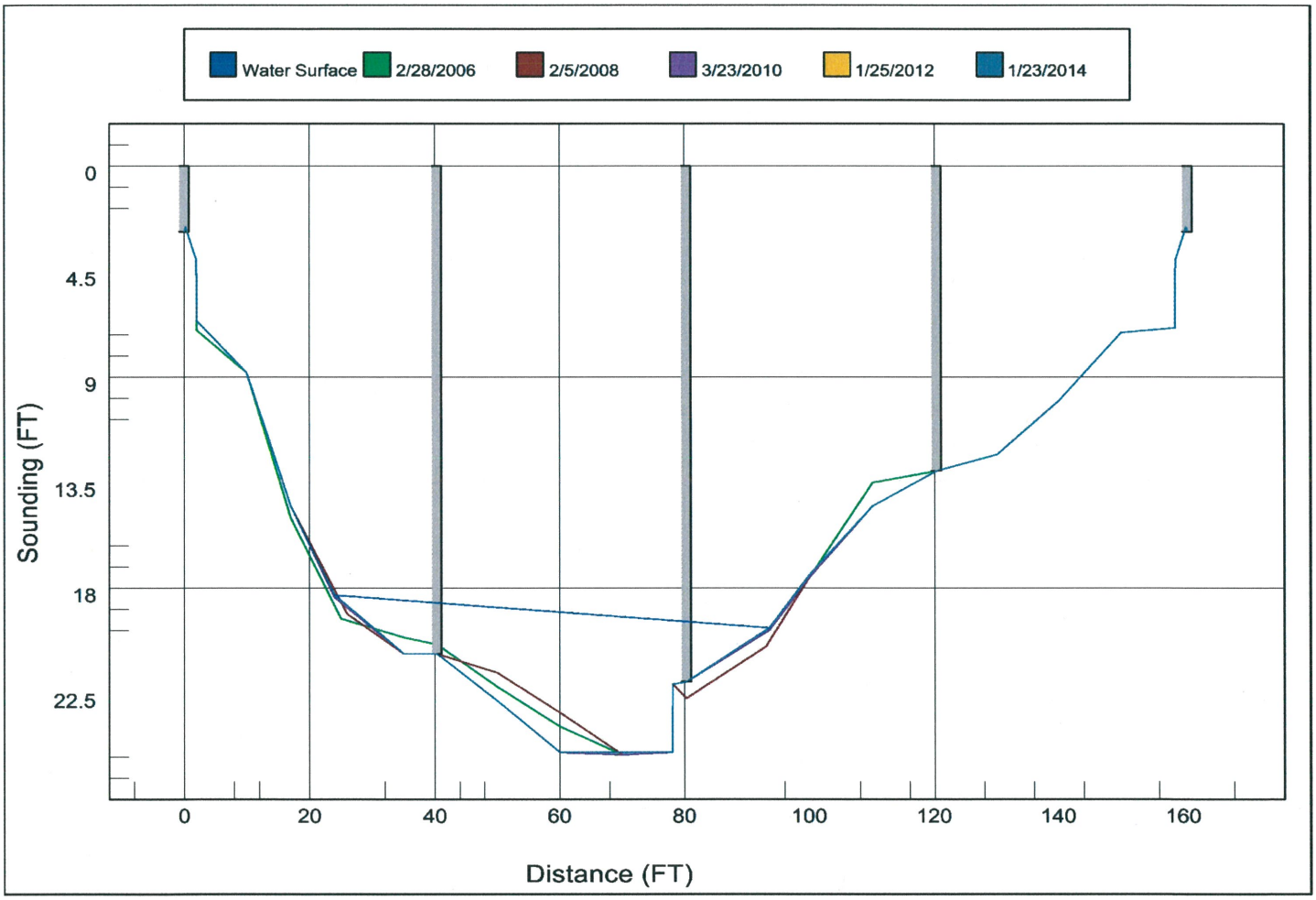
REMARKS :

580108

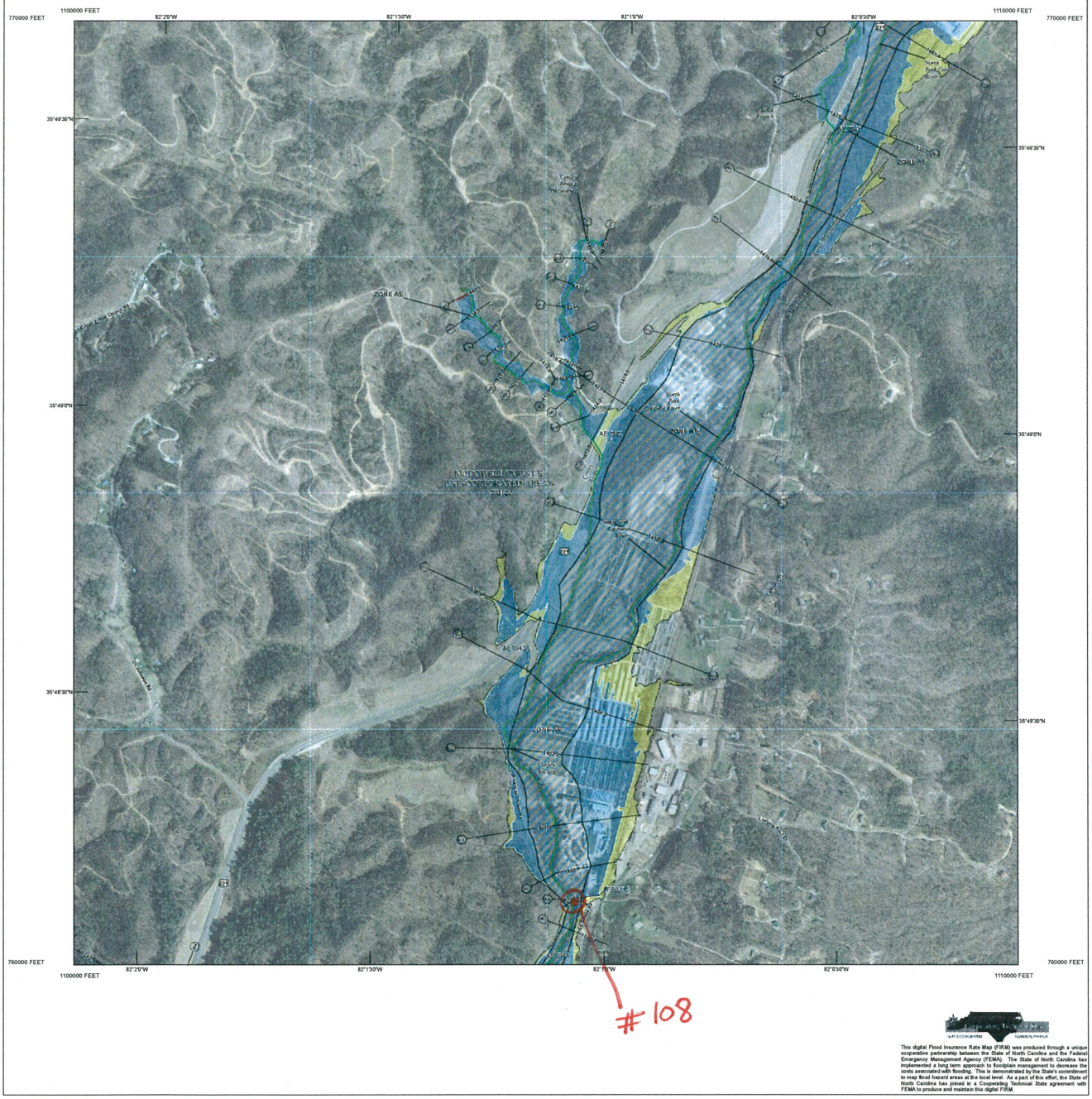
Bridge: 580108 County MCDOWELL Date: 01/23/2014

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



580108



1
N

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

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR ZONE DESCRIPTIONS AND INDEX MAP

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTP://FRIS.NC.GOV/FRIS

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% Annual Chance Flood with Average Depth Less Than One Foot or With Drainage Areas of Less Than One Square Mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee See Notes *Zone X*

OTHER AREAS
- Areas Determined to be Outside the 0.2% Annual Chance Floodplain *Zone X*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Accredited or Provisionally Accredited Levee, Dike, or Floodwall
- Non-accredited Levee, Dike, or Floodwall
- BM5510 North Carolina Geodetic Survey bench mark
- BM5510 National Geodetic Survey bench mark
- BM5510 Contractor Est. NCFMP Survey bench mark
- 512 18.2 Cross Sections with 1% Annual Chance Water Surface Elevation (BFE)
- 8 Coastal Transect
- Coastal Transect Baseline
- Profile Baseline

OTHER FEATURES
- Hydrographic Feature
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service Center website at http://msc.fema.gov. 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.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided in digital format by the North Carolina Floodplain Mapping Program (NCFMP). The source of this information can be determined from the metadata available in the digital FLOOD database and in the Technical Support Data Notebook (TSDN).

ACCREDITED LEVEE NOTES TO USERS: If an accredited levee note appears on this panel check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1-percent-annual-chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and floodproofing or other protective measures. For more information on flood insurance, interested parties should visit the FEMA Website at http://www.fema.gov/business/nfip/index.shtm.

PROVISIONALLY ACCREDITED LEVEE NOTES TO USERS: If a Provisionally Accredited Levee (PAL) note appears on this panel, check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1-percent-annual-chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection. To maintain accreditation, the levee owner or community is required to submit the data and documentation necessary to comply with Section 65.10 of the NFIP regulations. If the community or owner does not provide the necessary data and documentation or if the data and documentation provided indicates the levee system does not comply with Section 65.10 requirements, FEMA will revise the flood hazard and risk information for this area to reflect de-accreditation of the levee system. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and floodproofing or other protective measures. For more information on flood insurance, interested parties should visit the FEMA Website at http://www.fema.gov/business/nfip/index.shtm.

LIMIT OF MODERATE WAVE ACTION NOTES TO USERS: For some coastal flooding zones the AE Zone category has been divided by a Limit of Moderate Wave Action (LiMWA). The LiMWA represents the approximate landward limit of the 1.5-foot breaking wave. The effects of wave hazards between the VE Zone and the LiMWA (or between the shoreline and the LiMWA for areas where VE Zones are not identified) will be similar to, but less severe than those in the VE Zone.

Limit of Moderate Wave Action (LiMWA)

COASTAL BARRIER RESOURCES SYSTEM (CBRS) NOTE

This map may include approximate boundaries of the CBRS for informational purposes only. Flood insurance is not available within CBRS areas for structures that are newly built or substantially improved on or after the date(s) indicated on the map. For more information see http://www.fws.gov/habitatconservation/coastal_barrier.html, the FIS Report, or call the U.S. Fish and Wildlife Service Customer Service Center at 1-800-344-WILD.

CBRS Area | Otherwise Protected Area

SCALE

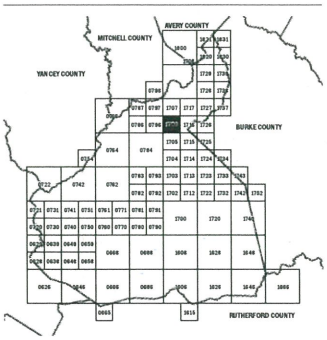
Map Projection:
North Carolina State Plane Projection Feet (Zone 3200)
Datum: NAD 1983 (Horizontal), NAVD 1988 (Vertical)

1 inch = 500 feet 1:6,000

0 250 500 1,000 Feet

0 75 150 300 Meters

PANEL LOCATOR



FEMA

National Flood Insurance Program

NORTH CAROLINA FLOODPLAIN MAPPING PROGRAM
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

NORTH CAROLINA

PANEL 1706

Panel Contains:

COMMUNITY	CID	PANEL	SUFFIX
MCDOWELL COUNTY	370148	1706	J

MAP NUMBER
37101706 0J

MAP REVISED
10/2/2008

580108

1940 Dam Broke Up Str.

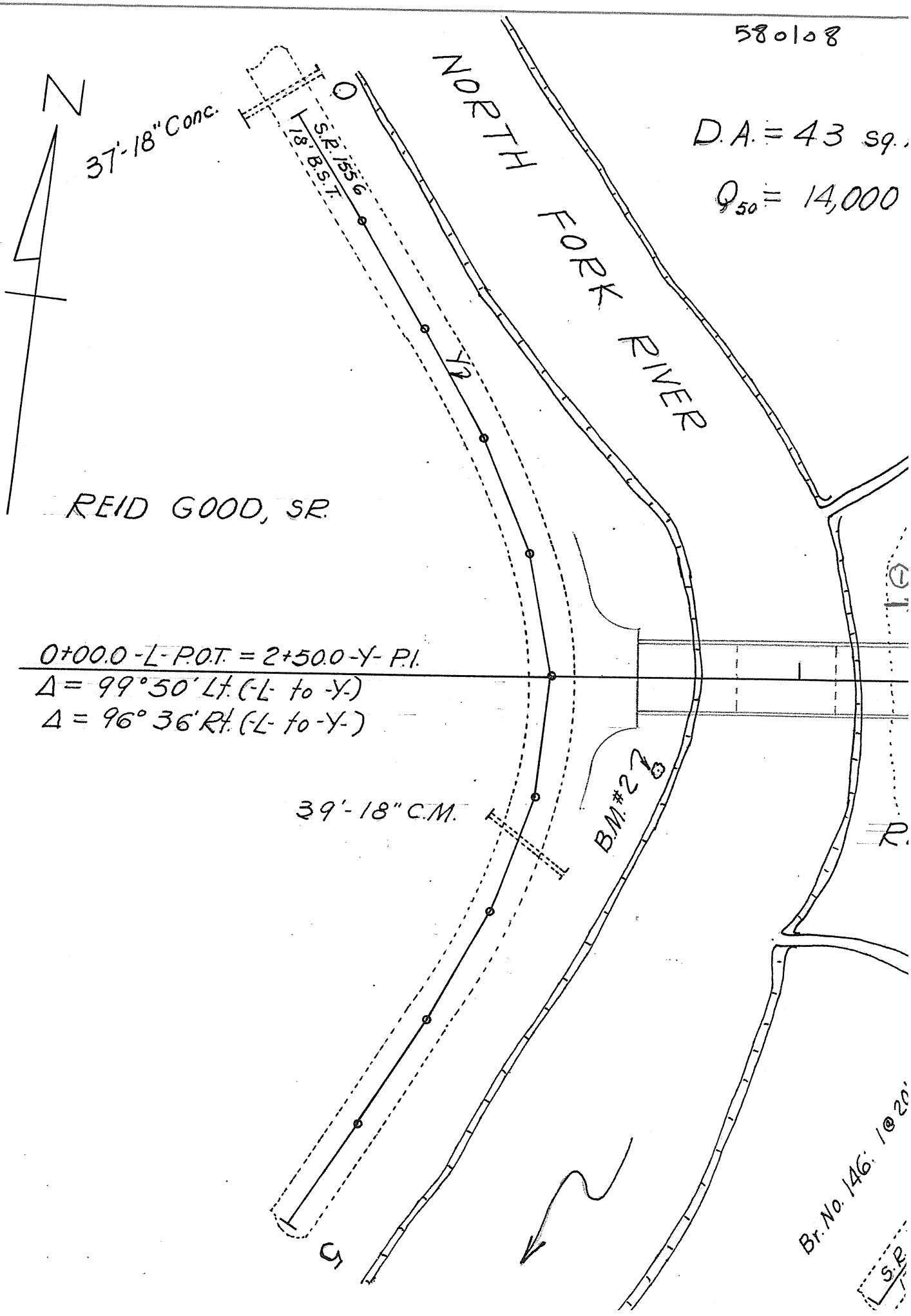
N.C. STATE HIGHWAY COMMISSION
RALEIGH, N. C.
PROJ. Mc DOWELL COUNTY

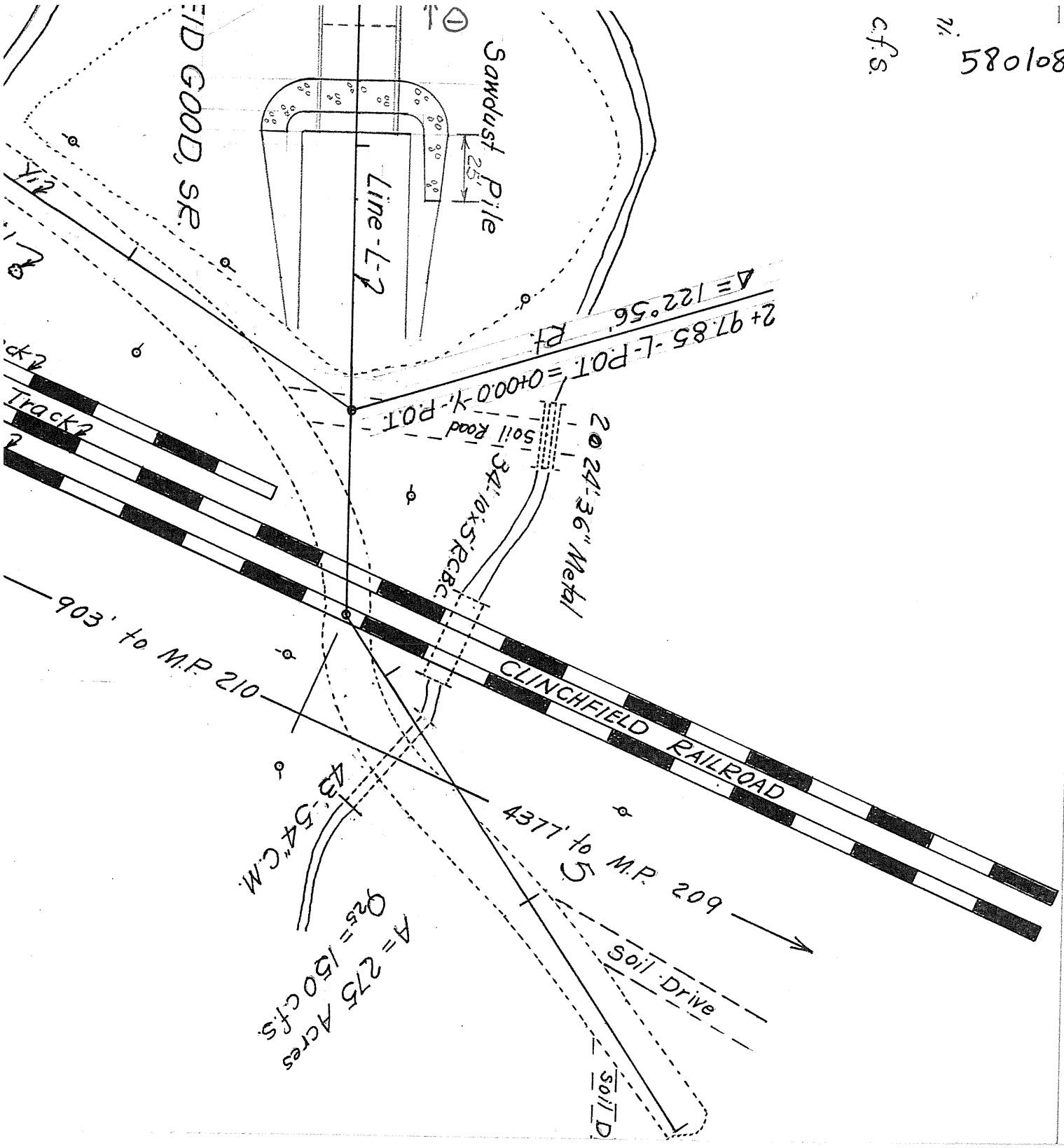
BRIDGE NO. 108 ON S.R. 1560
ACROSS NORTH FORK RIVER

Scale: 1"=50' Horz.
1"=10' Vert.

April 1970

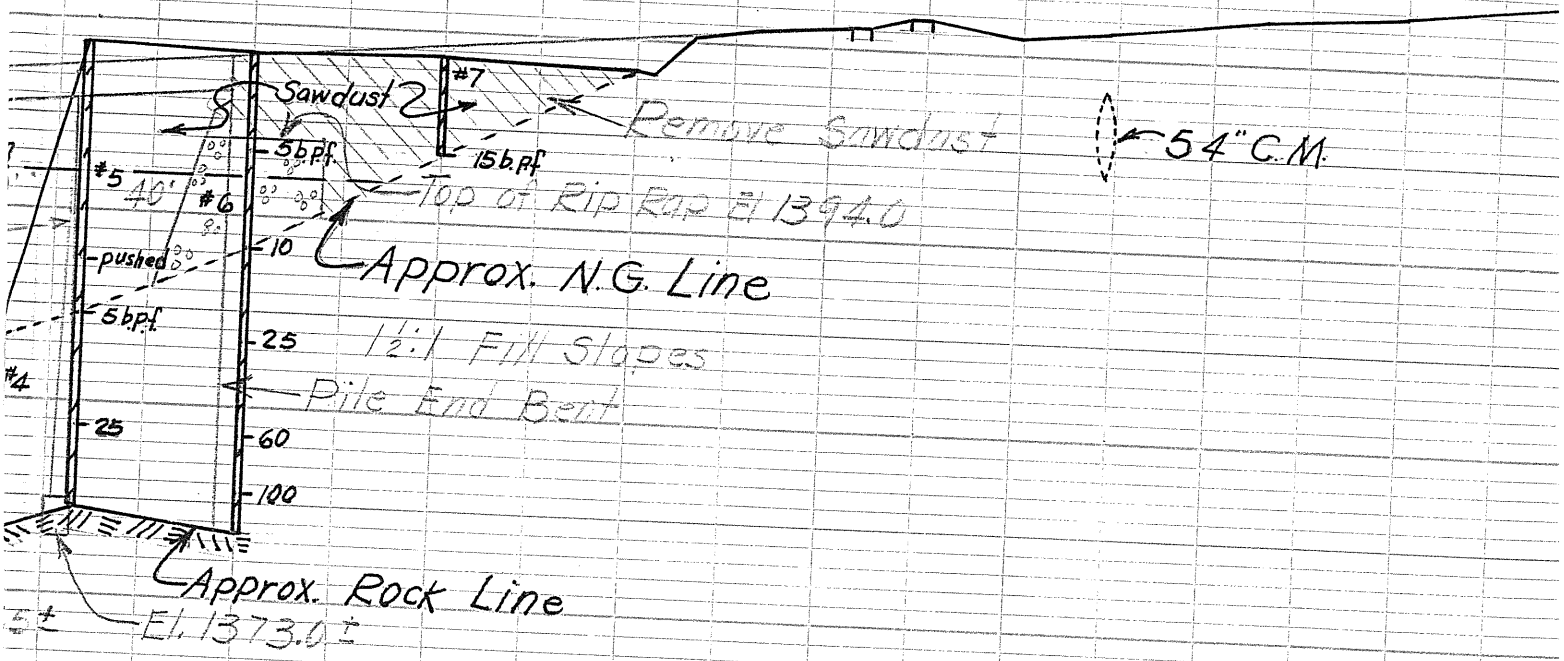
580108


N
37'-18" Conc.
S.P. 155'6
18' B.S.T.
NORTH FORK RIVER
D.A. = 43 sq.
Q_{50} = 14,000
REID GOOD, S.R.
0+00.0 -L- P.O.T. = 2+50.0 -Y- P.I.
Δ = 99°50' Lt. (-L- to -Y-)
Δ = 96°36' Rt. (-L- to -Y-)
39'-18" C.M.
BM. #27
Br. No. 146: 1@20'


580108
c.f.s.
Sawdust Pile
25'
Line-L-2
2+97.85 -L- P.O.T. = 0+00.0 -Y- P.O.T.
Δ = 122°56' Rt.
Soil Road
34-10x5 RCBC
2 @ 24"36" Metal
Track 2
Track 1
903' to M.P. 210
CLINCHFIELD RAILROAD
4377' to M.P. 209
43-54" C.M.
A = 2.75 Acres
Qds = 150 c.f.s.
Soil Drive
Soil D
5

580108

s/a. 1+15 - 90° skew
1 @ 40' Prestr.
r. Gr El 1396.9 on +1.8% Grade



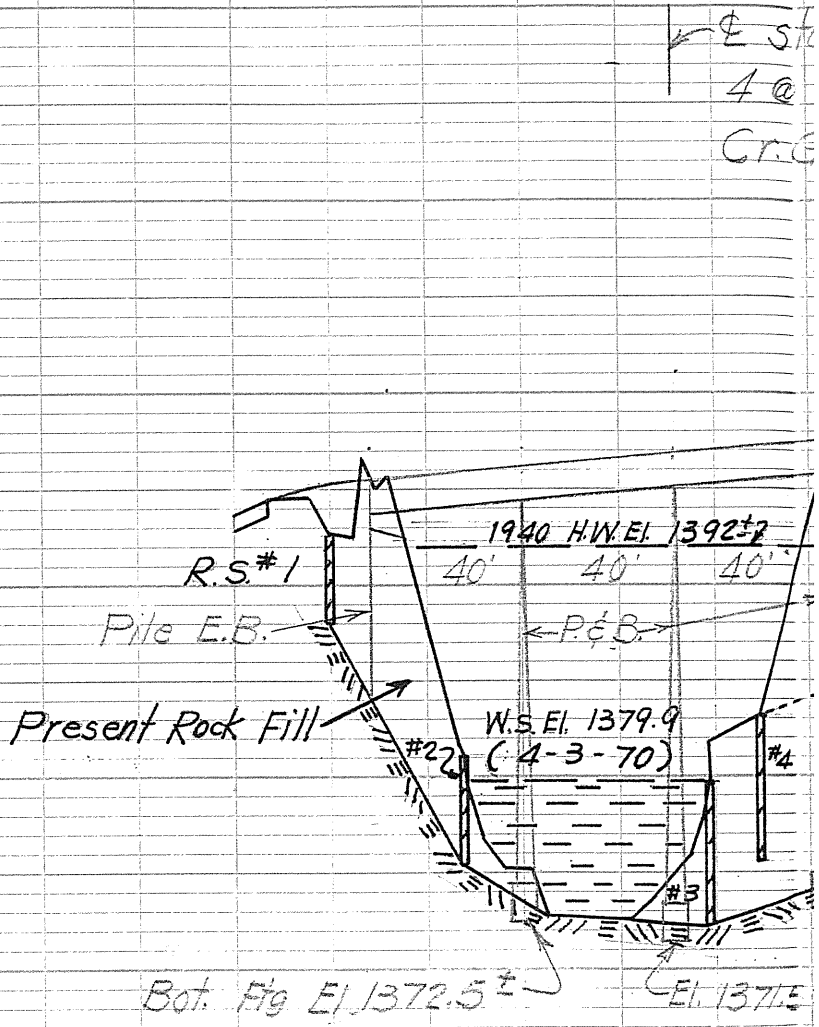
←(2)

2 3 4 5

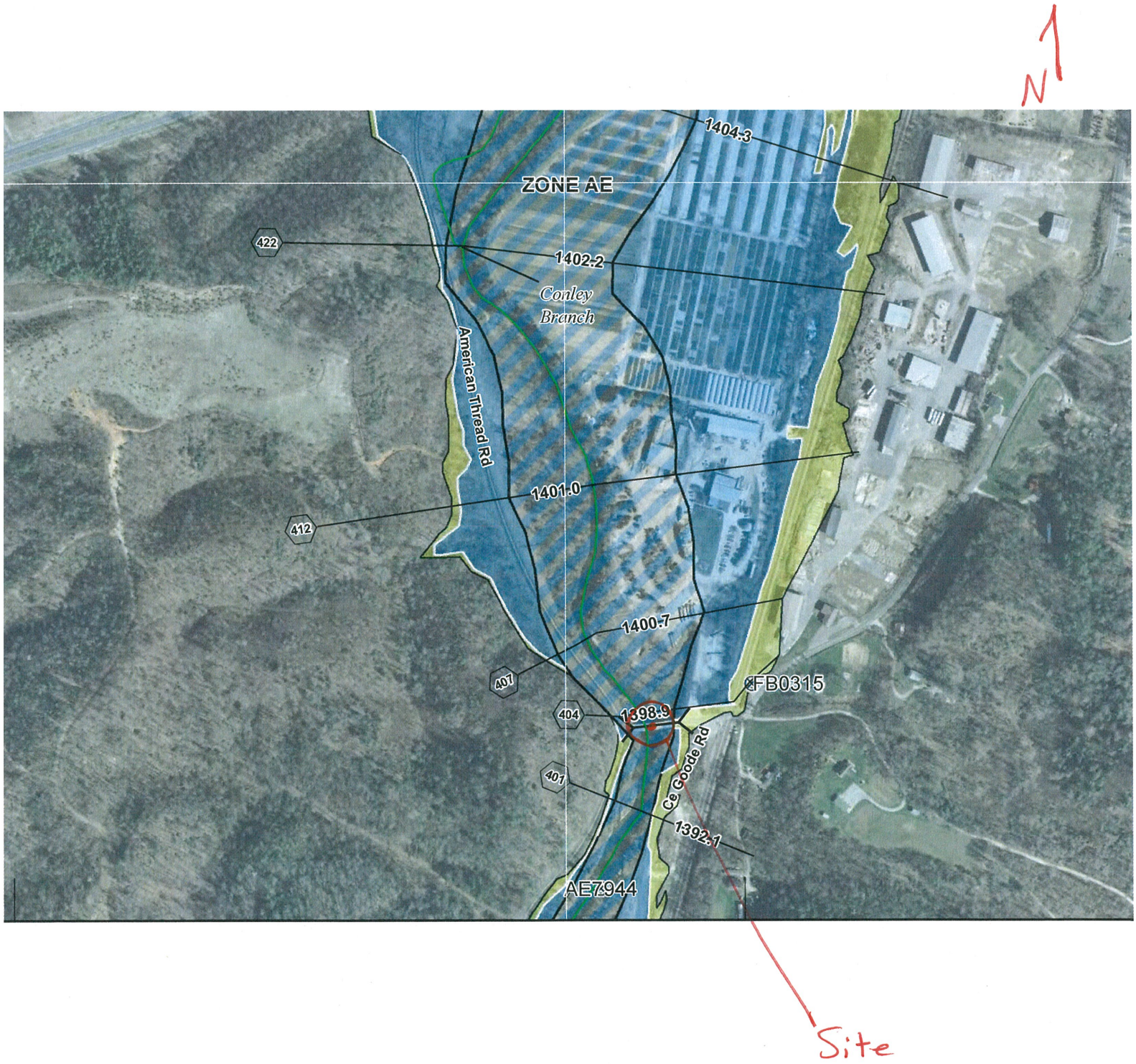
B.M. No 1: Railroad Spike in root of 24" Poplar 27' Lt. of sta 1+32-Y1- Elev. 1400.5.5 (Approx. M.S.L. Datum - Accuracy ± 0.5 ft.)

580108

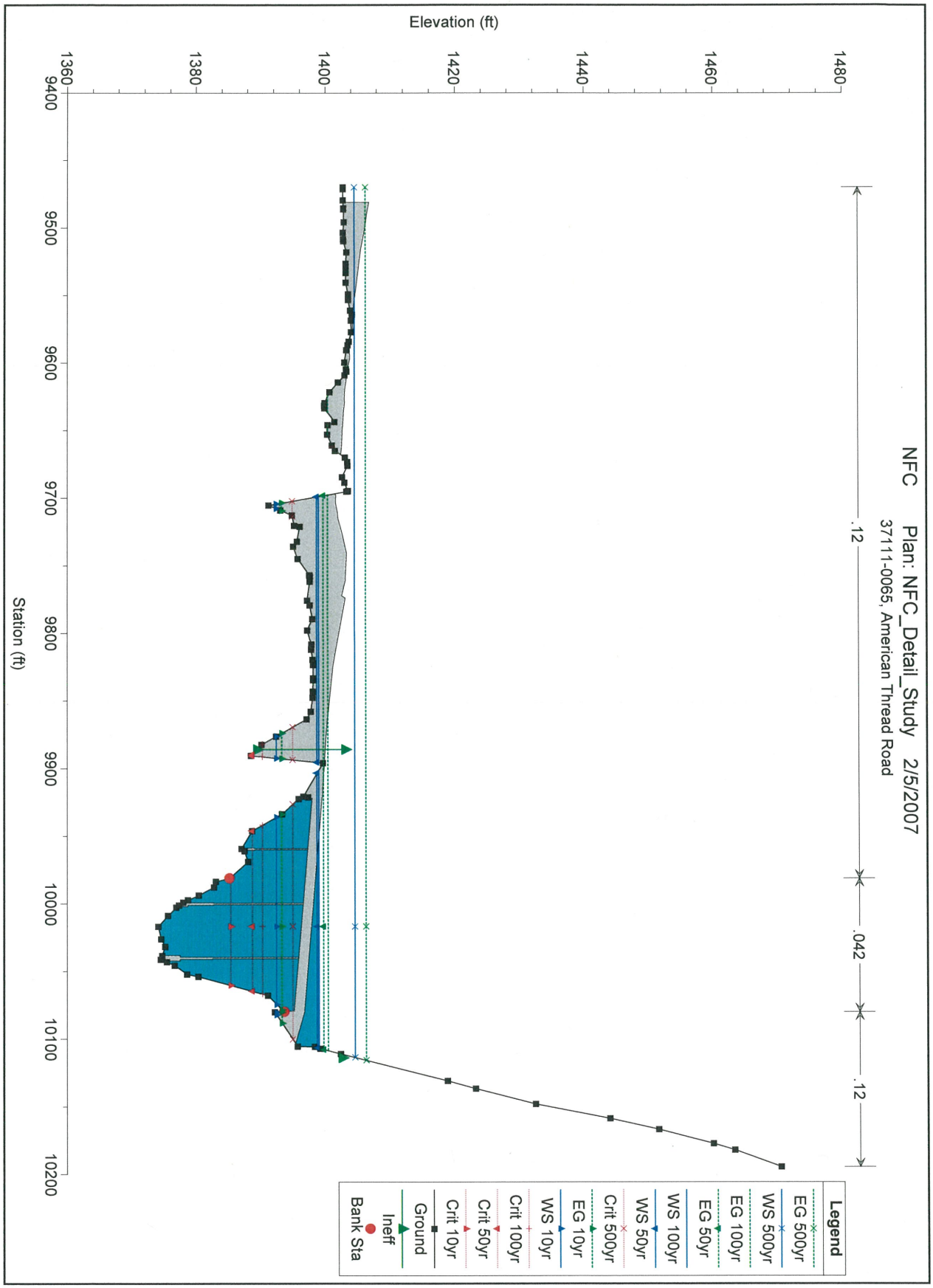
B.M. No. 2: 2 Nails in base of 15" Sycamore 38' Rt. of sta. 0+43-L-. Elev. 1382.81.



580108


N
ZONE AE
1404.3
422
1402.2
Conley
Branch
American Thread Rd
1401.0
412
1400.7
407
404
1398.9
CFB0315
Ce Goode Rd
401
1392.1
AE7944
Site

580108


NFC Plan: NFC_Detail_Study 2/5/2007
37111-0065, American Thread Road
.12
.042
.12
Elevation (ft)
1480
1460
1440
1420
1400
1380
1360
Station (ft)
9400
9500
9600
9700
9800
9900
10000
10100
10200
Legend
EG 500yr
WS 500yr
EG 100yr
EG 50yr
WS 100yr
WS 50yr
Crit 500yr
EG 10yr
WS 10yr
Crit 100yr
Crit 50yr
Crit 10yr
Ground
Ineff
Bank Sta