

# STRUCTURE NO. 04601

NORTH BEAR HILL RD  
over  
NATCHAUG RIVER  
CHAPLIN

Indepth Inspection  
on  
7/8/2009

Inspected by Team 4  
for Area 4

<b>TEAM:</b>	Forwarded to TE3	Don Carlson	Date	10/28/2009
<b>TE3:</b>	Reviewed by TE3	DMC	Date	10/28/09
	BMM Required		No	
	Town Bridge		YES	
	Rating <= 5 (Items 58,59,60 or 62)		YES	
	Forwarded to Supervisor	JCK	Date	11/5/09
	Forwarded to "To Be Copied Drawer"	<input type="checkbox"/>	Date	
	Date BRI-19 Entered	11/2/09		
<b>SUPERVISOR:</b>	Reviewed by Supervisor	<i>[Signature]</i>	Date	Nov 18 2009
<b>SUPPORT:</b>	Date Copies Made	11/19/09	BMM No	four
	Scanned By:	8	Date Scanned	11/19/09
			PDF Box No.	

NBI: Yes

Structure No.  Town   
Inspection Date  Inspectors

## TABLE OF CONTENTS

### Loose Forms (not bound in report)

Number of  
Sheets Enclosed

Maintenance Memo	<input type="text"/>
Flagging Memos	<input type="text"/>
PONTIS Element Data Collection Form	<input type="text" value="1"/>
Plan Sheets <input type="checkbox"/> Already on File	<input type="text"/>

### Bound Report Pages

Title Cover Sheet	<input type="text" value="1"/>
Table of Contents	<input type="text" value="1"/>
Executive Summary	<input type="text"/>
Field Notes	<input type="text" value="13"/>
Calculations: Load Rating Evaluation	<input type="text"/>
Quantities & Cost Estimate	<input type="text"/>
Photo Sheets	<input type="text" value="18"/>
Photo Images	<input type="text" value="36"/>

### Forms

BRI-18 Bridge Inspection Report Form	<input type="text" value="9"/>
BRI-19 Highway Bridge Inventory Form	<input type="text" value="2"/>

### Comments:

Bridge Number

04601

STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

BRIDGE SAFETY & EVALUATION

STRUCTURE EVALUATION

SHEET 1 OF (INSP. REPORT)

Inspected By: Don Willis & T. VALLAR

Sufficiency Rating

45.17

Previous Inspection Date

6/1/2007

BS&E Received

Data Entry By: DMC

Copies Made

Data Entry Date: 11/02/09

IDENTIFICATION

Bridge Name

CHAPLIN

Town Code

138110

Inventory Route:

A) Record Type

1

B) Signing Prefix

5 City Street

D) Route Number

00000

E) Directional Suffix

0

C) Level of Service

0 None of the bel

NATCHAUG RIVER

NATCHAUG RIVER

Facility Carried:

NORTH BEAR HILL RD

Location

0.4 MILE EAST OF RTE 198

11) Milepoint

1.74 Miles

16) Latitude

41deg 48 min 6.00 sec

17) Longitude

72deg 7 min 6.00 sec

98) Border Bridge:

A) State Code

B) Percent Responsibility

C) Border Town Name

99) Border Bridge Structure No

STRUCTURE TYPE AND MATERIAL

43) Structure Type, Main:

A) Material

3 Steel

B) Design Type

2 Stringer/Multi-beam or Girder

44) Structure Type, Approach:

A) Material

0 Other

B) Design Type

0 Other

45) Number of Spans, Main Unit

2

46) Number of Approach Spans

0

107) Deck Structure Type

6 Corrugated Steel

108) Wearing Surface/Protective System:

A) Type of Wearing Surface

9 Other

B) Type of Membrane

0 None

C) Type of Deck Protection

0 None

90) Inspection Date

6/7/08

Inspection Team

2 014

91) Frequency Class:

24 01

Depth Insp

6/9/1999

Deck Survey

7/8/09

Access Flagman

0 0 0

CRITICAL FEATURE INSPECTIONS

Type Frequency Team Date

Fracture:

Uwater:

Special:

AGE AND SERVICE

27) Year Built

1969

42) Type of Service:

A) On

1 Highway

B) Under

5 WATERWAY

28) Number of Lanes:

A) On

2

B) Under

29) Average Daily Traffic

230

Half ADT?:

109) Percent Truck

7%

30) Year of ADT

2007

19) Bypass, Detour Length

4miles

GEOMETRIC DATA

48) Length of Max Span

36ft

49) Structure Length

75ft

50) Curb or Sidewalk Widths:

A) Left

0.0ft

B) Right

0.0ft

51) Brg Rdwy width, curb-curb

23.4ft

52) Deck Width, Out-Out

24.1ft

32) Approach Roadway Width

18ft

33) Bridge Median

0 No Median

Deck Area

1807 sqft

34) Skew Angle

10deg

35) Structure Flared

0

10) Inv. Rte. Min. Vert Clearance

99ft

47) Log Inv. Rte. Total Horiz Clr:

23.4ft

47) RLog Inv. Rte. Total Horiz Clr:

ft

53) Min Vert Clearance Over Bridge

99ft

54) Min Vert Under Clearance

N Ref

55) Min Lat Under Clearance on Right

N Ref

56) Min Lat Under Clearance on Left

0.0ft

BRIDGE COMMENTS

RED FLAG

# STRUCTURE EVALUATION

SHEET 2 OF 2 FORM BRI-19 REV 10/00

SHEET 2 OF 2

Bridge Number	<b>04601</b>	NBIS Length	
Town Name	CHAPLIN	Yes 75	
Facility Carried	NORTH BEAR HILL RD		
Feature Crossed	NATCHAUG RIVER		

Inspected By: Don Willis & M. Long Tom Kamm

CLASSIFICATION		Yes	No
112) NBIS Bridge Length	0 Off System		
104) Highway System	9 Rural Local		
26) Functional Class	0 Route is not a STRAHNET Route		
100) Defense Highway	N No parallel structure exists		
101) Parallel Structure	2 2-way traffic		
102) Direction of Traffic	0 Not on national network		
103) Temporary Structure	3 On Free Road		
110) Designated National Network	3 Town or Township Highway Agency		
20) Toll	3 Town or Township Highway Agency		
21) Maintain	L LOCAL		
22) Owner	5 Bridge is not eligible for National Register		
Report Class			
37) Historical Significance			

WATERWAY		Yes	No
38) Navigation Control	0 No navigation control on waterway		
39) Navigation Vert Cir.	0 Navigation Horiz Cir.		
116) Vert-Lift Brg Nav Min			
111) Pier Abutment Protection			

PROPOSED IMPROVEMENTS		Yes	No
75A) Type of Work Proposed			
75B) Work Done By			
76) Length of Struct. Improvement	0 ft		
94) Bridge Improvement Cost	\$ 0		
95) Roadway Improvement Cost	\$ 0		
96) Total Project Cost	\$ 0		
97) Year of Improvement	0		
114) Future ADT	0		
115) Year Future ADT	0		

POSTED SIGNS & UTILITIES		Yes	No
Other Posted Signs 1			
Other Posted Signs 2			
Actual P.L. Single Unit Truck	8 tons		
Rec. P.L. Single Unit Truck	tons		
Actual P.L. Semi-Trailer Truck	12 tons		
Rec. P.L. Semi-Trailer Truck	tons		
Rec. P.L. All Vehicles	ft		
Posted Vert Clearance On Bridge	in		
Posted Vert Under Clearance	ft		
Posted Speed Limit	mph		
Utility			

LOAD RATING AND POSTING		Rating	By
31) Design Load	5		
63) Operating Rating Type	1		
64) Operating Rating	36.0		
65) Inventory Rating Type	1		
66) Inventory Rating	21.6		

CONDITION		Rating	By
58) Deck	5		
59) Superstructure	4		
60) Substructure	4		
61) Channel & Chan. Protection	6		
62) Culverts	N		

APPRAISALS		Rating	By
67) Structure Evaluation	4		
68) Deck Geometry	4		
69) Under Clear Vert & Horiz	N		
71) Waterway Adequacy	4		
72) Approach Rwy Alignment	7		
113) Scour Critical	3		

TRAFFIC SAFETY FEATURES		Yes	No
36) Traffic Safety Features:			
A) Bridge Railings	0		
B) Transitions	0		
C) Approach Guardrail	0		
D) Approach Guardrail End	0		

OTHER FEATURES		Yes	No
Fence Required	No		
Fence Present	No		
Fence Height	ft		
Fence Type			
Fence Material			
Fence Top Type			
Barrel Ladder			
Stand Pipes			
Cat Walks			
Movable Inspection System			
Loose Concrete Checked?			

Proposed Next Indepth Insp Year 2009

Senior Paul D'Attilio

Supervisor Theodore Laplier

REVIEWED BY: D. Carlson Date 10/28/09

## Connecticut Department of Transportation

### Bridge Inspection Report BRI-18

**Bridge #: 04601**

**Inspection Date: 07/08/2009**

<b>Inspection Type:</b>	Indepth	<b>Previous Inspection Date:</b>	6/1/2007	<b>Snooper Required:</b>	No
<b>Inspection Performed By:</b>	Team 4	<b>Feature Carried:</b>	NORTH BEAR HILL RD	<b>Snooper Used:</b>	No
<b>Town:</b>	CHAPLIN	<b>Feature Intersected:</b>	NATCHAUG RIVER	<b>Year Built:</b>	1969
<b>Location:</b>	0.4 MILE EAST OF RTE 198	<b>Main Design:</b>	Stringer/Multi-beam or Girder	<b>Year Rebuilt:</b>	1990
<b>Main Material:</b>	Steel				

**Visits**

**Inspectors:**

Visit Date:	Temp:	Start Time:	End Time:	Inspector:	Task:
7/8/2009	74	11:35:00 AM	12:00:00 PM	D. Willis	Lead Inspector
7/29/2009	80	10:00:00 AM	3:00:00 PM	M. Long	Lead Inspector
9/23/2009	82	10:45:00 AM	11:00:00 AM	T. Kahak	Inspector

**DECK:** - **Overall Rating:** 5

Rating

<b>OVERLAY:</b>	6	THE ONE-HALF INCH THICK, OIL AND STONE SURFACE TREATMENT, OVER TWO INCHES OF BITUMINOUS MATERIALS, OVER A CORRUGATED STEEL DECK, STILL SHOWS FULL WIDTH TRANSVERSE CRACKING, OPEN A MAXIMUM OF ONE INCH, MAINLY IN THE AREAS OF THE DECK, ADJACENT TO THE PIER. AREAS OF BITUMINOUS PATCHES, ARE NOTED ALONG EACH DECK END, FROM THE REPAIR OF PAST REPORTED DECK END SPALLING. BOTH DECK ENDS SHOW MULTIPLE TRANSVERSE CRACKING, WITHIN THE PAST SURFACES, AS WELL AS IN THE NEWER BITUMINOUS PATCHES. SOME SCRAPES, AND GOUGES, ALONG THE DECK ENDS ARE ALSO NOTED. BOTH SHOULDERS SHOW LIGHT TO MODERATE SAND ACCUMULATION, WITH LIGHT SURFACE GOUGES. THE OUTSIDE FASCIA DECK EDGE PLATES STILL SHOW LIGHT TO MODERATE RUSTING, ALONG THEIR EDGES.
<b>DECK-STR. CONDITION:</b>	5	THE UNDERSIDES OF THE CORRUGATED STEEL DECK SECTIONS SHOW LIGHT RUSTING OF THE FORM EDGES, ALONG BOTH OUTSIDE FASCIAS. THE OVERLAP JOINTS OVER, AND ADJACENT TO, THE PIER SHOW SIGNS OF ACTIVE LEAKAGE, AND LIGHT TO HEAVY RUSTING. AREAS OF LIGHT RUSTING ARE ALSO NOTED ALONG LOCATIONS, ADJACENT TO THE STRINGER UPPER FLANGES. THE TOTAL AREA OF DETERIORATION, IS ABOUT FOUR PERCENT.
<b>CURBS:</b>	N	THIS STRUCTURE SHOWS NO CURBS.
<b>MEDIAN:</b>	N	THIS STRUCTURE SHOWS NO BRIDGE MEDIAN.

<b>SIDEWALKS:</b>	N	THIS STRUCTURE SHOWS NO SIDEWALKS.
<b>PARAPET:</b>	N	THIS STRUCTURE SHOWS NO PARAPETS, OR RAILBASES.
<b>RAILING:</b>	7	BOTH BRIDGE RAILS ARE COMPOSED OF H-BEAM POSTS, ATTACHED TO STEEL STAND-OFFS, WHICH ARE WELDED TO THE FASCIA STRINGER WEBS, AN ANGLE IRON CAP, WITH ONE COURSE OF METAL BEAM RAIL CARRIED ACROSS THE STRUCTURE, FROM THE APPROACH ROADWAY. THE SURFACES STILL SHOW AREAS OF BLUSH, AND LIGHT SPOTTY RUSTING, WITH SMALL POCKETS OF PEELING PAINT. THERE IS STILL A MINOR COLLISION RUB ALONG THE NORTHEASTERLY CORNER.
<b>PAINT:</b>	N	-
<b>FENCE:</b>	N	THIS STRUCTURE SHOWS NO BRIDGE FENCE.
<b>DRAINS:</b>	N	THIS STRUCTURE SHOWS NO BRIDGE SCUPPERS, OR PVC DECK WEEPS.
<b>LIGHTING STANDARD:</b>	N	THIS STRUCTURE SHOWS NO BRIDGE LIGHTING.
<b>UTILITIES TYPE/SIZE:</b>	N	THIS STRUCTURE SHOWS NO UTILITIES.
<b>CONSTR JOINTS:</b>	N	-
<b>EXPANSION JOINTS:</b>	N	WHILE THERE ARE NO FORMAL EXPANSION JOINTS, THE OVERLAY SURFACE, AND OLDER PAST REPAIRED AREAS, STILL SHOW MULTIPLE TRANSVERSE CRACKS, ALONG EACH END OF THE STRUCTURE.

59. SUPERSTRUCTURE:

Overall Rating: 4

Rating

BEARING DEVICES: 4

THERE ARE NO BEARINGS OVER THE WESTERLY ABUMENT. THE STRINGERS REST ON A THIN CONCRETE LEVELING CAP. THE CAP STILL RINGS HOLLOW ALONG THE OUTSIDE OF STRINGER 9. THE BEARINGS OVER THE PIER, ARE PLOW BLADE TYPE MATERIAL. THEY SHOW A VERY WAVY TEXTURE, AND A NON-UNIFORM BEARING TO THE CAP, BECAUSE THE CAP ITSELF, IS WAVY. THEY ALSO SHOW AREAS OF HEAVY RUSTING, WITH THICK LAMINAR SHEETS, MODERATE PITTING, AND VISIBLE LOSS AREAS. THE BEARINGS OVER THE EASTERLY ABUTMENT, ARE A VERY THIN PLATE TYPE, ABOUT AN EIGHT OF AN INCH IN THICKNESS. THEY SHOW MODERATE RUSTING, WITH THIN SHEETS OF LAMINAR, AND IMPACTED RUST BETWEEN THE PLATE, AND STRINGER LOWER FLANGES. BEARINGS FIVE, EIGHT, AND NINE, SHOW A NON UNIFORM BEARING SURFACE, AND SPREADING BETWEEN THE PLATE, AND LOWER FLANGES. BEARING THREE, SHOWS A QUARTER INCH GAP BETWEEN THE PLATE AND CAP, AND THE PLATE TO LOWER FLANGE. THE EAST EDGE OF BEARING PLATE EIGHT, EAST SPAN OVER THE PIER, IS UNDERMINED UP TO 3 INCHES, DUE TO SPALLING OF THE PIER CAP.

STRINGERS: 4

THE SALVAGED STRINGER SUPERSTRUCTURE, SHOWS FLAME CUT HOLES OF VARIOUS STRINGER ENDS, OVER THE EAST ABUTMENT, AND ALONG THE FASCIA STRINGER ENDS, OVER EACH SIDE, OF THE PIER. THIS HAS BEEN PAST DOCUMENTED. THE STRINGERS SHOW AREAS OF BLUSH, AND SPOTTY RUST, TO THE WEBS AND LOWER FLANGES, OF THE INTERIOR STRINGERS. ALSO NOTED ARE MILL SCALE, FINS, AND SLIVERS. THE FASCIA STRINGERS, SHOW LIGHT TO MODERATE RUSTING OF THE INTERIOR TOP FLANGES, THRU-OUT. THE INTERIOR STRINGER TOP FLANGES, SHOW ISOLATED AREAS OF MODERATE TO HEAVY RUST AREAS. MANY BOTTOM FLANGES ARE BENT UPWARDS, AS WELL AS LATERALLY. STRINGER 5, OVER THE EAST ABUTMENT, SHOWS HEAVY RUSTING WITH LAMINAR SHEETS. STRINGER 7, OVER THE EAST ABUTMENT, SHOWS HEAVY RUSTING WITH LAMINAR SHEETS. STRINGER 8 OVER THE EAST ABUTMENT, SHOWS HEAVY RUSTING WITH LAMINAR SHEETS, TO THE BOTTOM FLANGE, THE EDGE HAS BEEN REDUCED. REFER TO THE SECTION LOSS NOTES. THE FLANGE HAS PAST BENT WHEN STRUCK WITH A HAMMER. STRINGER 9, OVER THE EAST ABUTMENT, THE OUTSIDE LOWER FLANGE, AND A PORTION OF THE WEB, ARE COVERED WITH SAND DEBRIS. THERE IS A BAND OF LAMINAR RUST TO THE LOWER WEB, MEASURING TWO INCHES HIGH, BY FIVE FEET IN LENGTH. THERE IS SOME PITTING. ALL STRINGERS ENDS OF THE EASTERLY SPAN, OVER THE PIER, SHOW HEAVY RUSTING WITH LAMINAR SHEETS, OF THE UPPER, AND LOWER FLANGES, AS WELL AS WEB AREAS. THERE IS LOSS OF SECTION. THE TOP FLANGES OF STRINGERS 5, AND 6, OVER THE PIER, OF THE WESTERLY SPAN SHOW HEAVY RUSTING WITH LAMINAR SHEETS, OF THE TOP FLANGES. STRINGER 5 OF THE WESTERLY SPAN, OVER THE PIER, STILL SHOWS A ~~PERF~~ HOLE TO THE LOWER WEB AREA, MEASURING 33 INCHES LONG, BY UP TO 1- 1/4 INCH HIGH. THERE ARE ALSO POCKETS OF TIMBER DEBRIS LODGED BETWEEN THE STRINGERS AT RANDOM LOCATIONS. AS OF A SPOT INSPECTION DONE ON 9/23/09 GIRDER # 5 HAS BEEN CRIBED WITH CONCRETE BLOCKS BY THE TOWN ROAD CREW.

*pek*

GIRDERS: N

-

FLOOR BEAMS:	N	-
TRUSSES-GENERAL:	N	-
TRUSSES-PORTALS:	N	-
TRUSSES-BRACING:	N	-
PAINT:	5	REFER TO THE ABOVE DESCRIPTIONS.
RUST:	4	REFER TO THE ABOVE DESCRIPTIONS.
MACHINERY MOV SPAN:	N	-
RIVETS & BOLTS:	N	-
WELDS - CRACKS:	8	THE STRINGERS ARE CHECKED HANDS-ON.
TIMBER DECAY:	N	-
CONCRETE CRACKING:	N	-
COLLISION DAMAGE:	8	THE SUPERSTRUCTURE SHOWS NO COLLISION DAMAGE.
MEMBER ALIGNMENT:	8	-
DEFLECT. UNDER LOAD:	N	-
VIBRATION UNDER LOAD:	N	-
STAND PIPES:	N	-
BARREL LADDERS:	N	-

ARE BARREL LADDERS OSHA COMPLIANT? -

60. SUBSTRUCTURE:  Overall Rating:

Rating

ABUTMENTS-STEM:	6	BOTH ABUTMENTS ARE A CAST IN PLACE, TRI-STEP BLOCK SHAPE, WITH A CONCRETE RUB COAT FINISH. BOTH SHOW VERTICAL CRACKING, WITH DELAMINATIONS OF THE RUB COAT, POURLINE CRACKING, SHRINKAGE WITH CURING CRACKING, HONEYCOMBING, AND LIGHT SCALE AREAS. THE WESTERLY ABUTMENT SHOWS SEVERAL DELAMINATIONS ALONG THE UPPER CAP, ADJACENT TO THE STRINGERS. THE EASTERLY CAP EDGE SHOWS SOME MINIMAL EDGE SPALLING, BUT THE BEARINGS ARE NOT THREATENED.
ABUTMENTS-BACKWALL:	5	THE CHANNEL SHAPED STEEL BACKWALLS, SHOW POCKETS OF MODERATE, TO HEAVY RUSTING, SOME WITH LAMINAR SHEETS, OF BOTH FLANGE AREAS, WITH LIGHT RUST AREAS, ALONG THE WEBS.
ABUTMENTS-FOOTINGS:	6	SIX LINEAR FEET OF THE FOOTING EDGE, AND TOP FASCIA, ARE STILL VISIBLE, ALONG THE WESTERLY ABUTMENT. THE PORTION THAT IS VISIBLE SHOWS LIGHT SCALING. THERE ARE ALSO TWO, CONCRETE TRANSVERSE STRUTS, BETWEEN THE PIER, AND THE WESTERLY ABUTMENT. THEY SHOW ONLY LIGHT SCALING.
ABUTMENTS-		THERE ARE NO SIGNS OF SETTLEMENT TO THE ABUTMENTS.



SETTLEMENT:	8	
ABUTMENTS-WINGWALLS:	7	TWO FOOT, BY FOUR FOOT, CONCRETE PRE-CAST BLOCKS, ARE USED AS WINGS ALONG THE WESTERLY ABUTMENT. THEY SHOW VEGETATION, AND EMBANKMENT OVERBURDEN. BOULDERS ARE PLACED ALONG THE NORTHERLY END, OF THE EASTERLY ABUTMENT. IT SHOWS SMALL FILLER STONE VOIDS. THERE IS NO FORMAL WINGWALL ALONG THE SOUTHERLY CORNER, OF THE EASTERLY ABUTMENT.
PIERS/BENTS-CAPS:	4	THE ORIGINAL PIER CAP IS VISIBLE, AND HAS NOT RECIEVED REHABILITATION REPAIRS IN THE PAST. IT STILL SHOWS AREAS OF MULTIPLE CRACKING, AND DELAMINATIONS TO THE RUB COAT, WITH HORIZONTAL POURLINE CRACKING. THE SOUTHERLY END OF THE CAP, SHOWS ABOUT 4 SQUARE FEET OF CORNER SPALLING, AND SPALLING OF THE LOWER CAP BETWEEN THE CORNERS, ABOUT THREE INCHES IN DEPTH, REVEALING VERY LOOSE, AND PUNKY CONCRETE. THE REMAINING SURFACES WHERE NOT SPALLED, RING HOLLOW WHEN STRUCK WITH A HAMMER. THE EASTERLY FASCIA, UNDER STRINGERS THREE, AND FOUR, SHOW FOUR SQUARE FEET OF SPALLING, ABOUT TWO INCH IN DEPTH, AND 2.5 SQUARE FEET OF SPALLING, WITH ADJACENT DELAMINATIONS, UNDER STRINGER 8, PAST UNDERMINING THE BEARING PLATE, UP TO 3 INCHES.
PIERS/BENTS-PILE BENT:	N	-
PIERS/BENTS-COLUMNS:	7	A CAST IN PLACE, SQUARE BLOCK STRUCTURE, HAS BEEN CONSTRUCTED AROUND THE ORIGINAL STEM AREA, IN AN ATTEMPT TO ENCASE THE ORIGINAL STEM AREA. IT SHOWS RANDOM CRACKING, WITH AREAS OF LIGHT HONEYCOMB.
PIERS/BENTS-FOOTING:	6	THE FOOTING IS STILL GENERALLY VISIBLE AROUND THE PERIMETER OF THE PIER. THE NORTHERLY INLET FASCIA OF THE FOOTING, IS STILL EXPOSED UP TO 24 INCHES HIGH. THE FOOTING SHOWS LIGHT TO MODERATE SCALING, WITH TRANSVERSE CRACKING, ALONG THE CAP.
PIERS/BENTS-SETTLMT:	8	THERE ARE NO SIGNS OF SETTLEMENT TO THE PIER.
EROSION-SCOUR:	6	THREE VERTICAL FEET OF SCOUR, HAS PAST OCCURED AT THE NOSE OF THE PIER. THIS TAPERS OFF AS YOU MOVE DOWNSTREAM ALONG THE STEM.
CONCRETE CRACK-SPALL:	4	REFER TO ALL ABOVE DESCRIPTIONS.
STEEL CORROSION:	N	-
PAINT:	N	-
TIMBER DECAY:	N	-
COLLISION DAMAGE:	8	THE SUBSTRUCTURE SHOWS NO COLLISION DAMAGE.
DEBRIS:	7	THERE IS LIGHT SAND DEBRIS ON THE PIER, AND ABUTMENT CAPS.

61. CHANNEL & CHANNEL PROTECTION:

Overall Rating:

Rating

CHANNEL SCOUR:

	6	AS NOTED EARLIER, THERE IS THREE VERTICAL FEET OF PAST NOTED SCOUR, ALONG THE NOSE OF THE PIER. THE WATER DEPTH ALONG THE INLET, CAN RANGE FROM ONLY A COUPLE OF INCHES, TO AS MUCH AS 16, AT THIS TIME. THE WATER DEPTH IN FRONT OF THE PIER, IS AS MUCH AS 36 INCHES.
<b>EMBANKMENT EROSION:</b>	6	EMBANKMENT ENCROACHMENT, IS STILL NOTED TO THE SOUTHWESTERLY, AND SOUTHEASTERLY BANKS. THE NORTHEASTERLY, AND NORTHWESTERLY BANKS, SHOW PAST EROSION, EXPOSING TREE ROOT SYSTEMS.
<b>DEBRIS:</b>	6	THERE IS STILL A SILT ISLAND IN PLACE, DOWNSTREAM OF THE PIER. LIGHT TIMBER DEBRIS, IS NOTED ALONG THE EMBANKMENTS.
<b>VEGETATION:</b>	6	ALL BANKS ARE WELL VEGETATED, AND OVERHANG THE CHANNEL.
<b>CHANNEL CHANGE:</b>	6	THE CHANNEL HAS PAST CHANGED DUE TO ENCROACHMENT, EROSION, AND SCOUR.
<b>FENDER SYSTEM:</b>	N	-
<b>SPUR, DIKES &amp; JETTIES:</b>	N	-
<b>RIP RAP:</b>	N	RIP-RAP IS NOT USED ALONG THE BANKS OF THIS CHANNEL.

**62. CULVERTS & RETAINING WALL:**

-

Overall Rating:

**65. APPROACH CONDITION**

-

Overall Rating:

Rating

<b>APPROACH SLAB:</b>	N	-
<b>RELIEF JOINTS:</b>	N	-
<b>APPROACH GUIDE RAIL:</b>	7	LONGER SECTIONS OF METAL BEAM RAILING, ARE NOTED ALONG THE WESTERLY APPROACH SHOULDERS, AND CARRIED OVER THE STRUCTURE. THE RAIL ATTACHMENT TO THE BRIDGE AT THE NORTHWESTERLY CORNER, HAS BECOME PARTIALLY DISCONNECTED, AND IS STILL BOWING OUT SOMEWHAT, AND ALSO SHOWS SOME LONGITUDINAL TORN AREAS. VERY SHORT SECTIONS OF RAILING, ARE NOTED ALONG THE EASTERLY APPROACH SHOULDERS. THE RAILING IS STILL DENTED AT THE STRUCTURE, ALONG THE NORTHEASTERLY CORNER.
<b>APPROACH PAVEMENT:</b>	6	THE OIL AND STONE APPROACH ROADWAY SURFACES, SHOW LONGITUDINAL, TRANSVERSE, AND RANDOM CRACKING, SOME ARE OPEN UP TO 1/2 INCH, PAST BREAKAGE ALONG THE EASTERLY, AND WESTERLY ENDS OF THE STRUCTURE, BITUMINOUS PATCHES, MULTIPLE TRANSVERSE CRACKING WITH LIGHT BREAKAGE ALONG BOTH DECK ENDS, SETTLEMENT ALONG BOTH DECK ENDS OF UP TO 1 INCH, AND AN UNEVEN SURFACE. THERE ARE NEWER BITUMINOUS PATCHED AREAS ALONG EACH END OF THE STRUCTURE, DUE TO HOLES FOUND, IN THE PAST.
<b>APPROACH EMBANKMENT:</b>	7	MINOR EROSION, FROM ROADWAY RUN-OFF, IS NOTED ALONG ALL BANKS.

**TRAFFIC SAFETY  
FEATURES**

Rating

<b>BRIDGE RAILINGS:</b>	Last Inspection: 0 Recommended: -	-
<b>TRANSITIONS:</b>	Last Inspection: 0 Recommended: -	-
<b>APPROACH GUARDRAILS:</b>	Last Inspection: 0 Recommended: -	-
<b>APPR. GUARDRAIL ENDS:</b>	Last Inspection: 0 Recommended: -	-

**66. LOAD  
POSTING**

- Posted  
Loading -

<b>SINGLE UNIT (TONS):</b>	Last Inspection: 8 Recommended: -	-
<b>SEMI TRAILER (TONS):</b>	Last Inspection: 12 Recommended: -	-
<b>4 AXLE (TONS):</b>	Last Inspection: 30 Recommended: -	-
<b>3S2 (TONS):</b>	Last Inspection: - Recommended: -	-
<b>ADVANCE WARNING (Y/N):</b>	8	-
<b>LEGIBILITY:</b>	8	-
<b>VISIBILITY/LOCATION:</b>	8	-

**67. MISCELLANEOUS**

**Rating**

<b>MIN. VERT. UNDERCLEARANCE:</b>	Last Inspection: 0' 0" Recommended: - ' -"	-
<b>POSTED CLR. UNDER BRIDGE:</b>	Last Inspection: - ' -" Recommended: - ' -"	-
<b>POSTED CLR. ON BRIDGE:</b>	Last Inspection: - ' -" Recommended: - ' -"	-
<b>ADVANCED WARNING (YES/NO):</b>	No	-
<b>SPEED LIMIT (IF ANY):</b>	Last Inspection: - Recommended: -	-
<b>CHARACTER OF TRAFFIC:</b>	THE TRAFFIC VOLUME WAS LIGHT OVER THE STRUCTURE DURING THE INSPECTION, WITH ALL TYPES OF VEHICLES NOTED.	

**ADDITIONAL NOTES:**

DURING THE 2005 INSPECTION OF THIS STRUCTURE, THE CHAPLIN TOWN CREW HAD TO BE NOTIFIED, VIA SENIOR ENGINEER JOHN DAIGLE, DUE TO A HOLE ALONG THE EASTERLY END OF THE STRUCTURE, OVER THE BACKWALL, MEASURING ABOUT 2 LINEAR FEET IN LENGHT, AND UP TO 10 INCHES WIDE. THIS AREA WAS FILLED IN WITH BITUMINOUS PATCH. THIS HOLE AGAIN APPEARED TO BE A HAZARD TO MOTORCYCLE, OR BICYCLE TRAVEL. IT APPEARS THAT THIS AREA MAY AGAIN OPEN UP SOMETIMES IN THE FUTURE.

**ADDITIONAL COMMENTS:**

THE BRIDGE NUMBER IS NOT POSTED ON THIS STRUCTURE.

Inspectors' Signatures:

1)   
 2)   
 3) T. KANAK 

Date: 7/8/09  
 ---  
 Date: 7/8/09  
 ---  
 Date: 7/8/09  
 ---

4)

Date: ---/---/---  
---

P.E. Signature:

\_\_\_\_\_

Date: ---/---/---  
---

P.E. #:

\_\_\_\_\_

Date: ---/---/---  
---

Reviewed by:

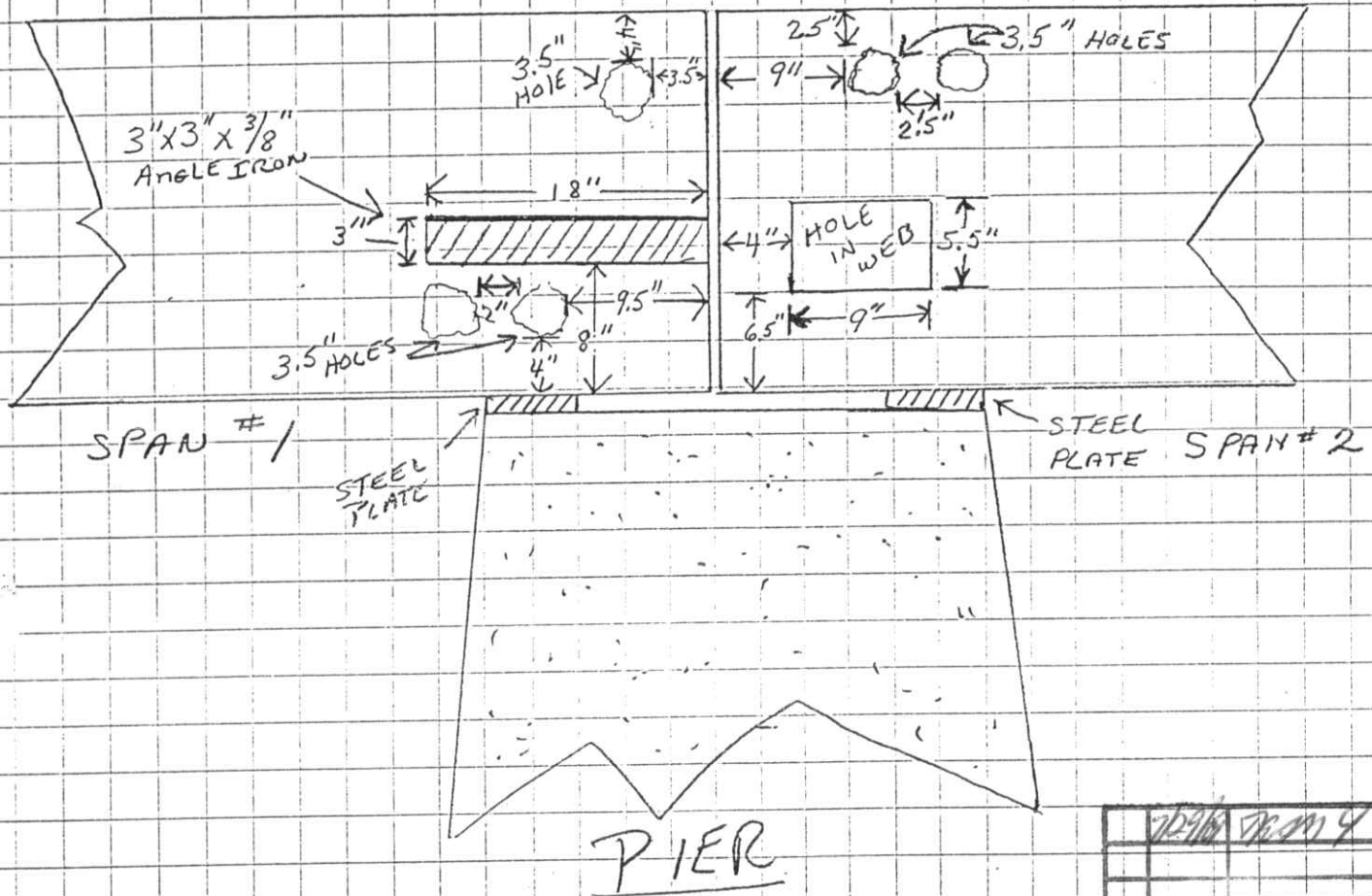
\_\_\_\_\_

Date: 10-28-09  
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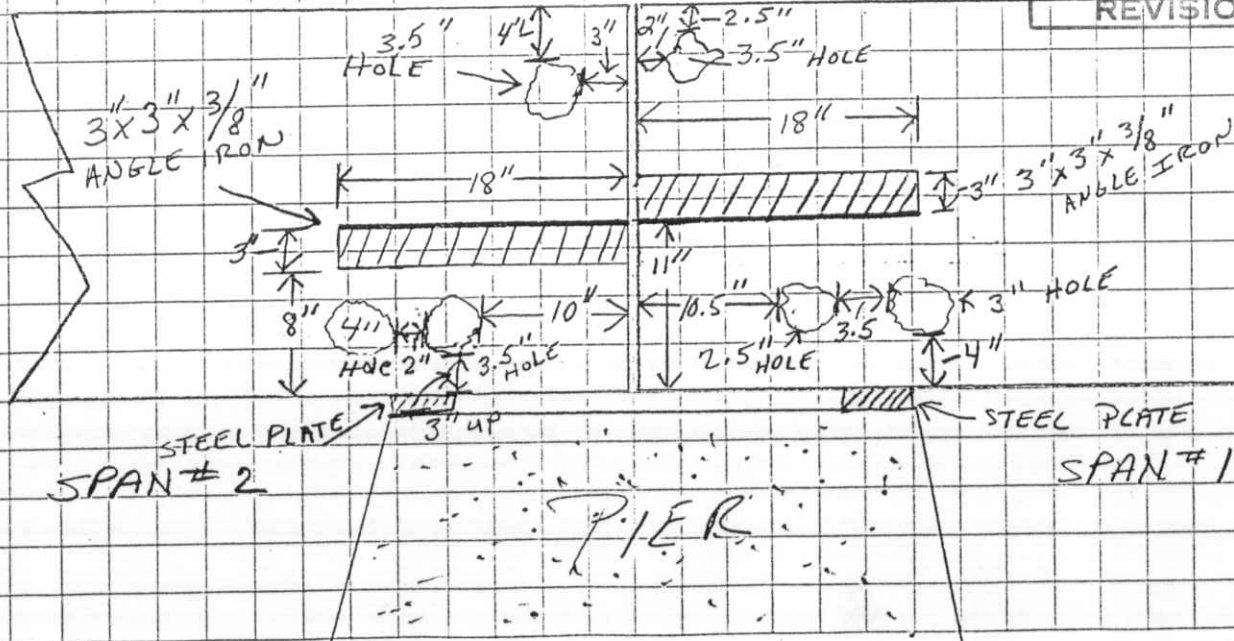
\_\_\_\_\_ *D. Carlson* conndot \_\_\_\_\_

SUBJECT: BR# 04601 North Bear Hill Rd. - o - Natchaug River Chaplin

SOUTH FASCIAS



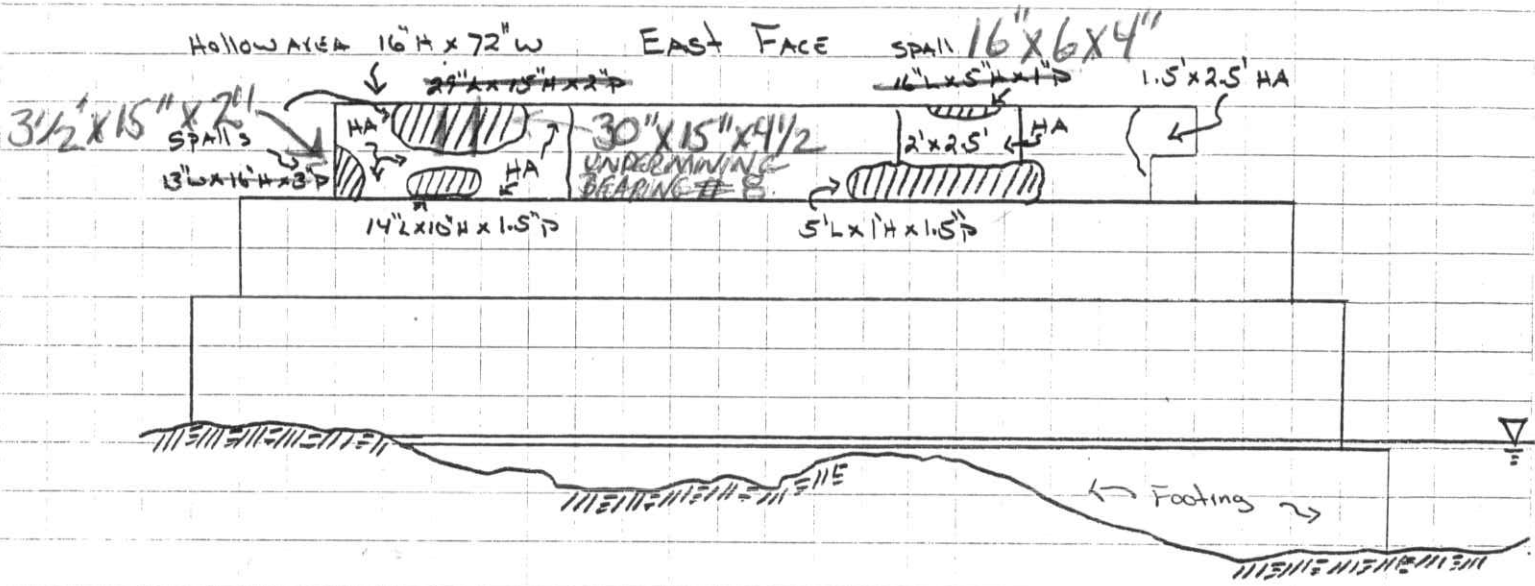
NORTH FASCIAS



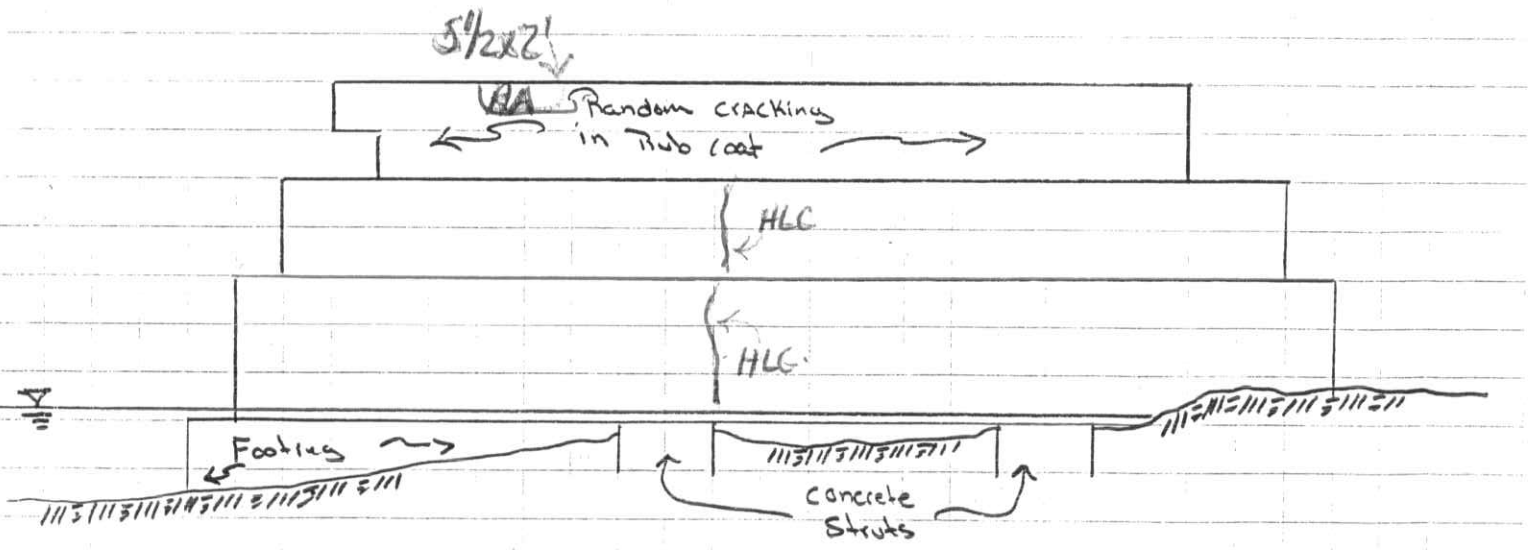
NO.	DATE	DESCRIPTION
REVISIONS		

SUBJECT: Bridge 4601 North Bear Hill Rd over Matchaug River (Chaplin) (N.T.S)

Pier



WEST FACE



NO.	DATE	DESCRIPTION

REVISIONS

DATE PREPARED  
 APR 29, 2001  
 DATE CHECKED

PREPARED BY  
 P.V.  
 CHECKED BY

State of Connecticut  
 Department of Transportation  
 Bureau of Engineering & Highway Operations  
 DES-003 REV 1-93  
 (302-06-0225)  
 COMPUTATION SHEET

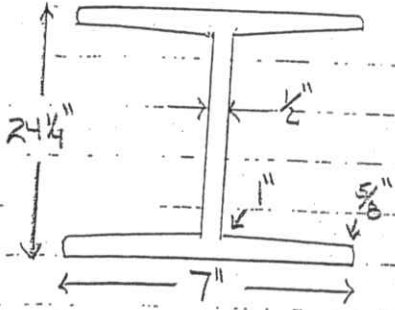
ORGANIZATION UNIT NO. 1307  
 WORK ORDER NO.  
 SHEET NO.

SUBJECT

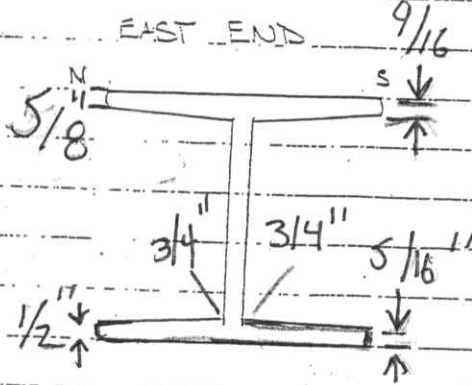
BRIDGE #601 NORTH BEAR RD. OVER NATCHAUG RIVER CHAPLIN (N.T.S.)

STRINGER: # 4 SPAN: 1

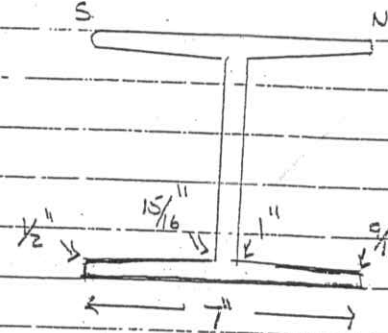
ORIGINAL



EAST END

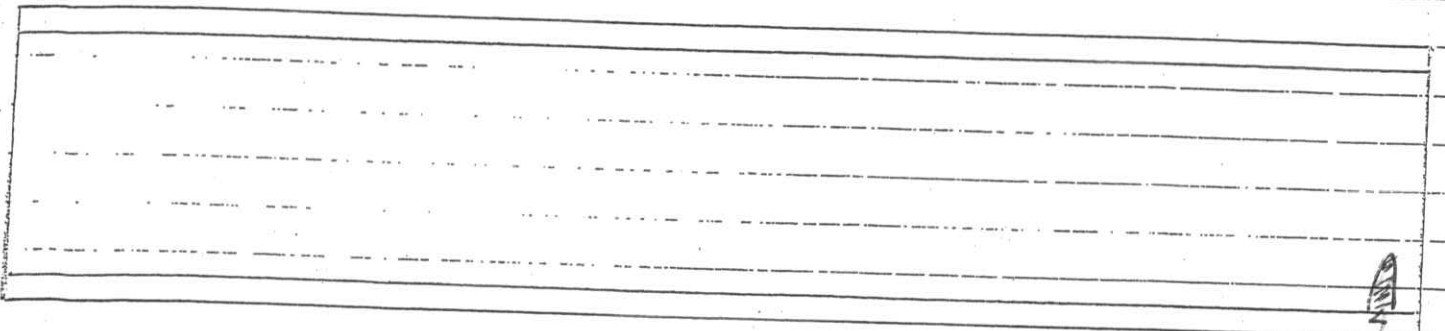


WEST END

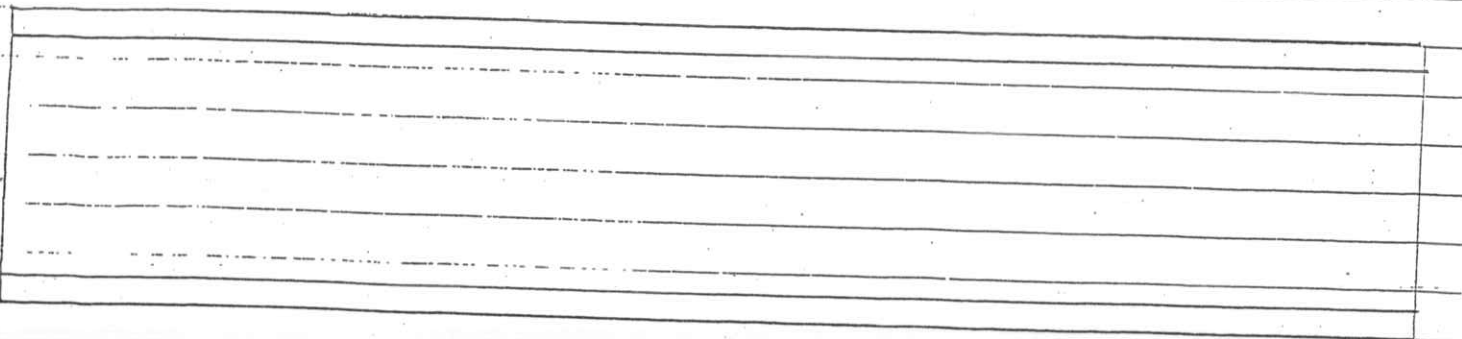


MEASUREMENTS TAKEN 20" FROM BEAM END

NORTH FACE



SOUTH FACE



5" x 2"  
 3/16" PITTING

NO.	DATE	DESCRIPTION
7-9-03		PA
7-05		PA
6-07		FORM 3
11-9-16		PKM 4

REVISIONS



DATE PREPARED  
Nov 29, 2001  
DATE CHECKED

PREPARED BY  
P.V.  
CHECKED BY

State of Connecticut  
Department of Transportation  
Bureau of Engineering & Highway Operations  
DES-003 REV 1-93  
(302-06-0225)  
COMPUTATION SHEET

ORGANIZATION UNIT NO. WORK ORDER NO.

1307

SHEET NO.

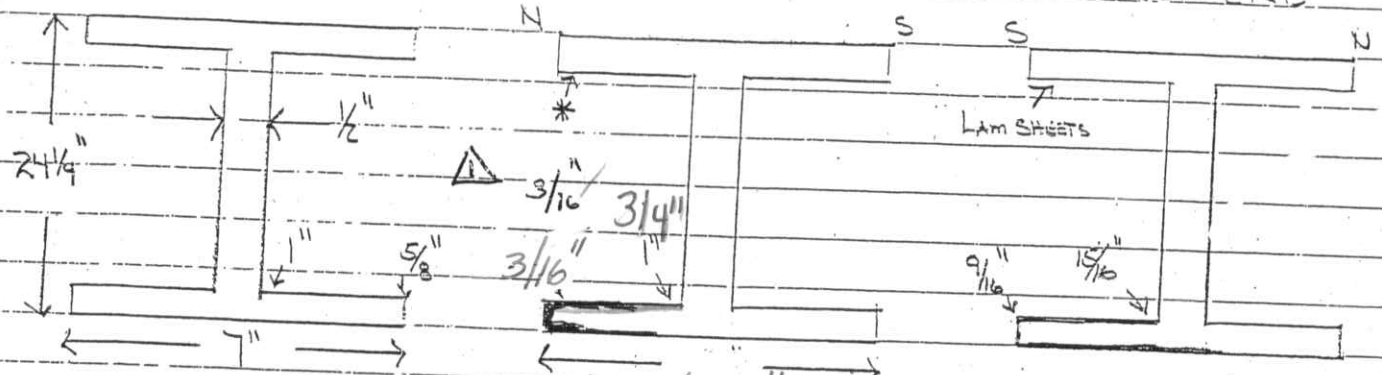
SUBJECT:

Bridge 4601 NORTH BEAR Rd. OVER NATCHAUG RIVER CHADLIN (N.T.S.)

ORIGINAL

EAST END

WEST END

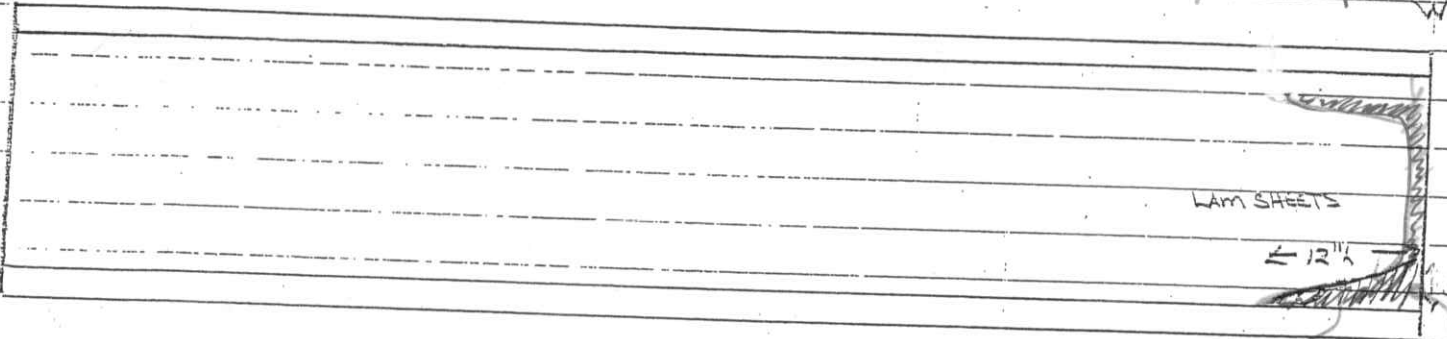


MEASUREMENTS TAKEN 19" FROM BEAM END [EAST] 18" FROM BEAM END [WEST] 63 1/4" REMAINS

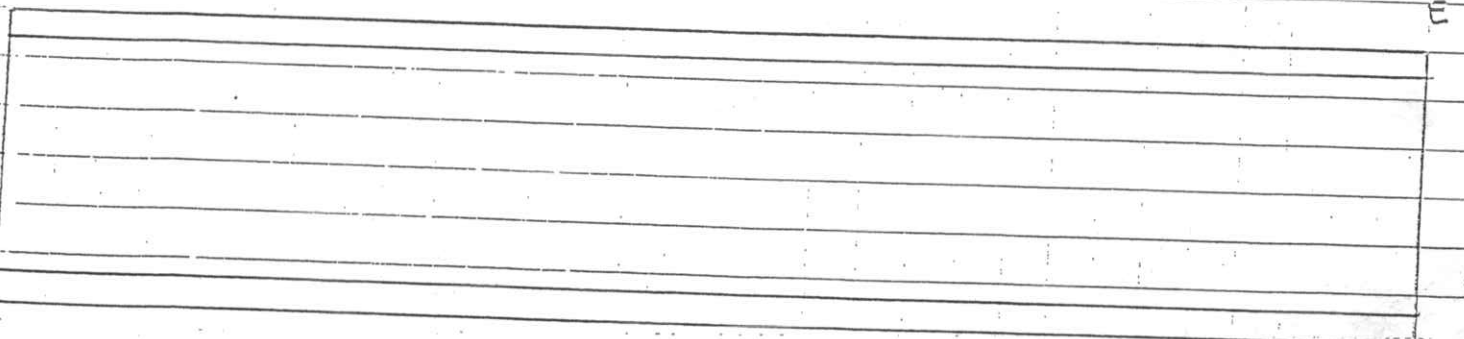
\* LAST 1' HEAVY RUST & LAM SHEETS

NORTH FACE

FULL Height 3" Wide



SOUTH FACE



STRINGER # 6

SPAN # 1

NO.	DATE	DESCRIPTION
1	7-05	PN
2	6-07	TEAM 7
3	7/30/01	TEAM 4

REVISIONS

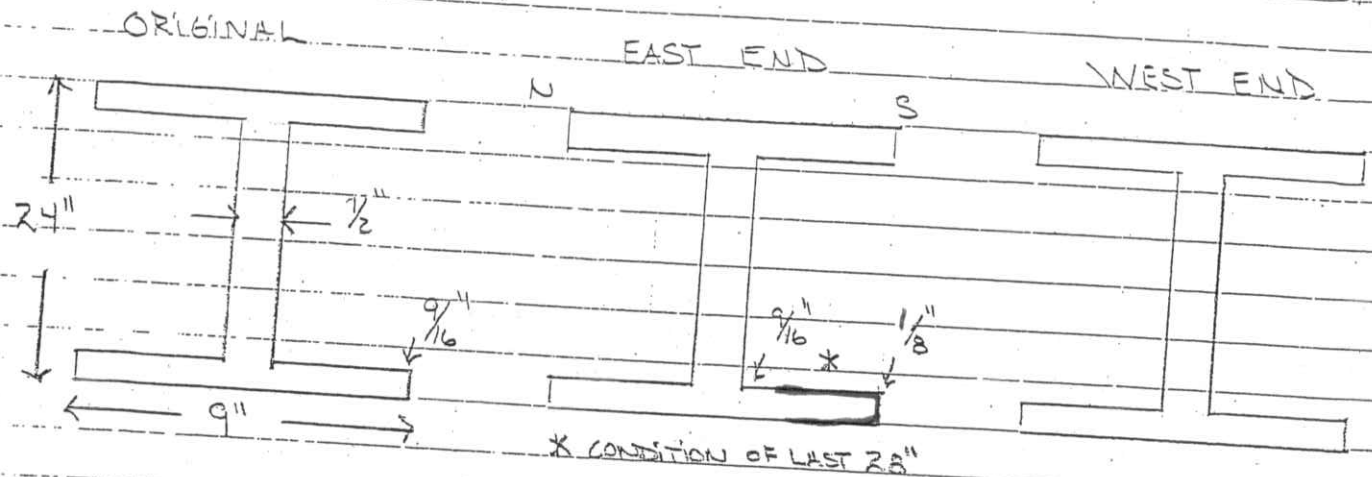
PREPARED  
DATE CHECKED  
29. 2001

PREPARED BY  
CHECKED BY  
P.V.

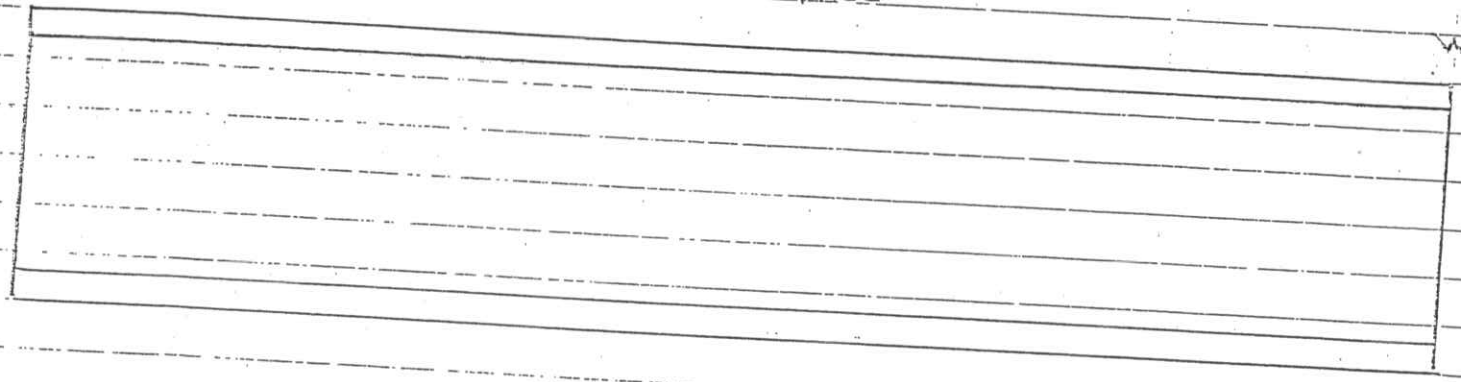
State of Connecticut  
Department of Transportation  
Bureau of Engineering & Highway Operations  
DES-003 REV 1-93  
(302-06-0225)  
COMPUTATION SHEET

ORGANIZATION UNIT NO. 1307  
WORK ORDER NO.  
SHEET NO.

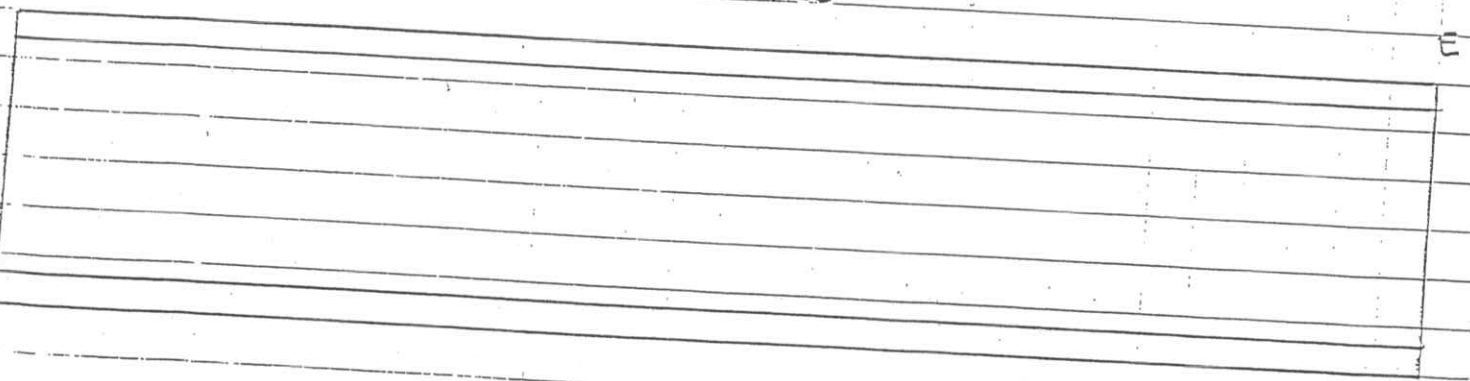
SUBJECT: Bridge 4601 NORTH BEAR Rd. OVER NATCHAUG RIVER CHASIN (N.T.S)



NORTH FACE



SOUTH FACE



STRINGER # 9 SPAN # 2

NO.	DATE	DESCRIPTION
2503	P.V.	
2-05	P.V.	
6-17	TEAM T	
7-30-01	TEAM Y	
<b>REVISIONS</b>		

27/25

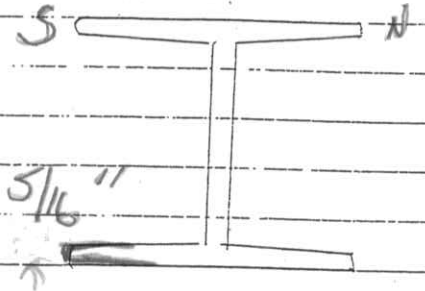
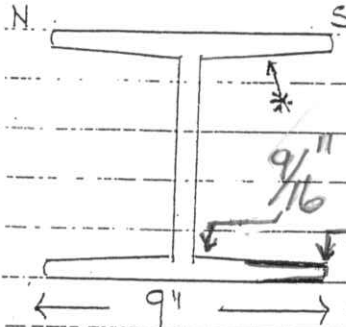
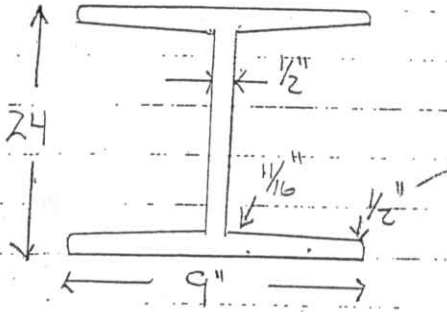
SUBJECT:

BRIDGE #601 NORTH BEAR RD. OVER NATCHAUG RIVER CHAPLIN (NTS)

STRINGER: # 1  
ORIGINAL

SPAN: 1  
EAST END

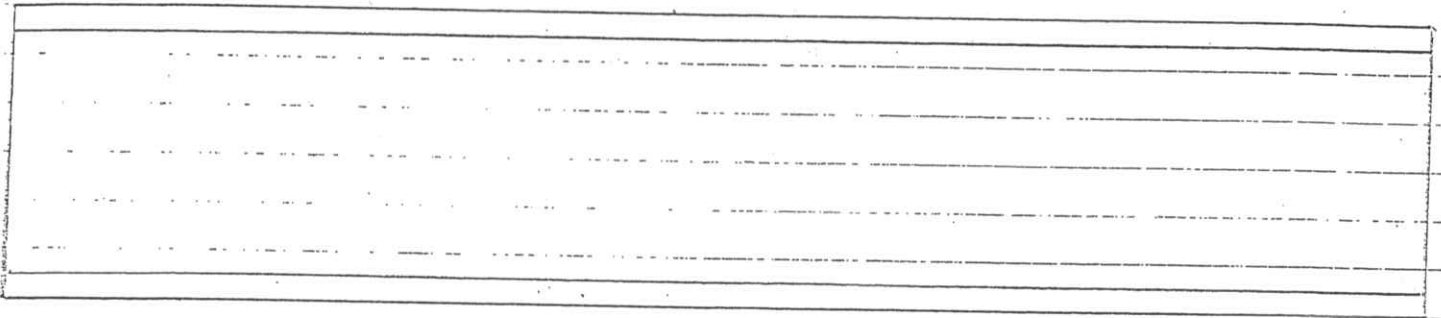
WEST END



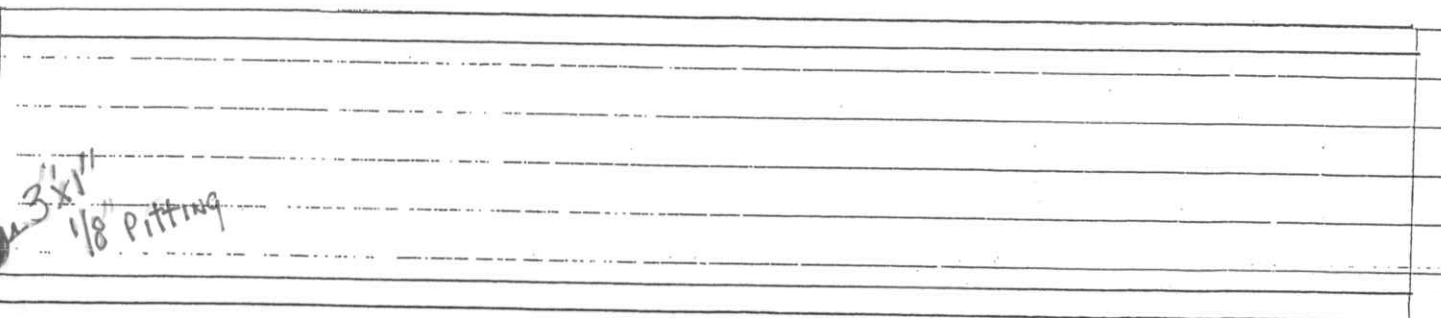
MEASUREMENTS TAKEN 20" FROM BEAM END

\* - LAST 5' OF TOP FLANGE HAS HEAVY RUST & LAM SHEETS

NORTH FACE



SOUTH FACE



7-50	P/C	
7-14-05	2/V	
6-07	TEP m 7	
11/30/09	9RAM 4	
NO.	DATE	DESCRIPTION
REVISIONS		

13/125

# FIELD NOTES

BRIDGE NO. 04601

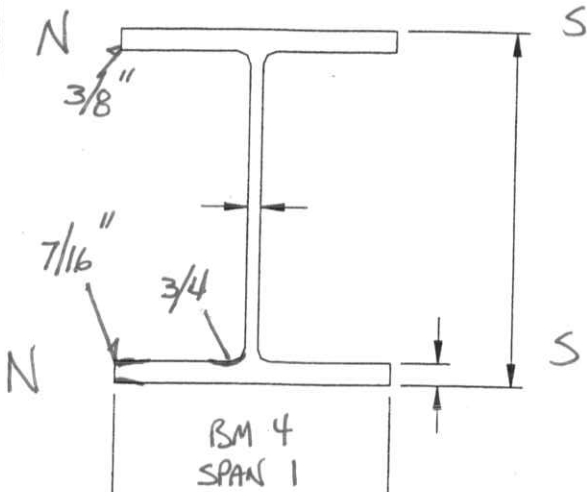
DATE: 7/29/09

CREW: TEAM 4

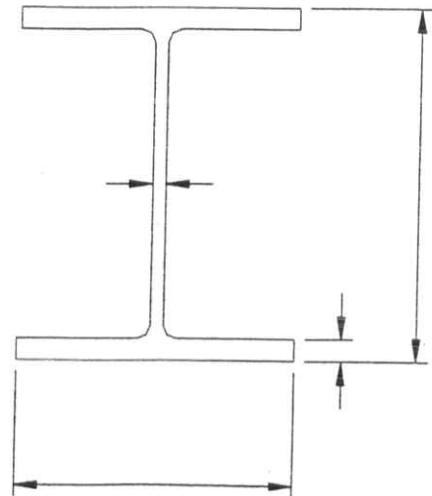
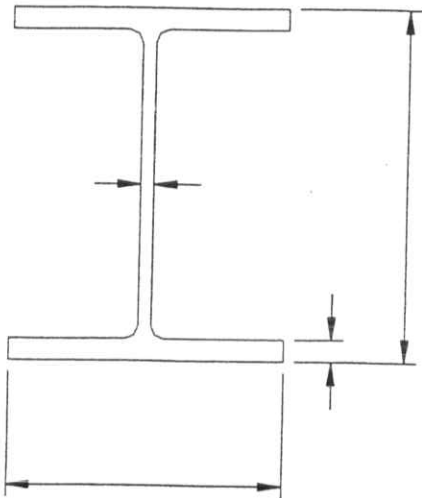
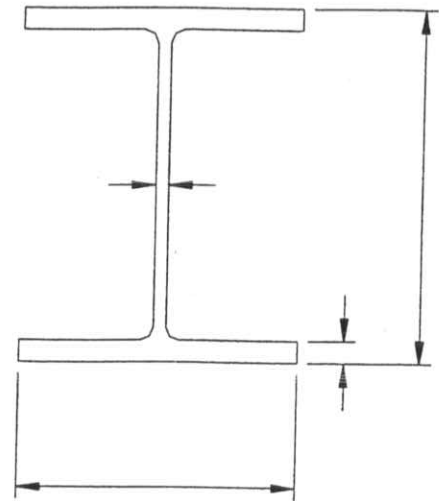
SHEET

## W-SHAPE BEAM

BM# 4 Approx 10' FROM PIER



NOTE: 10 FT OFF OF PIER  
LOOKING EAST



DATE PREPARED

7/29/09

PREPARED BY

TRAM

State of Connecticut  
Department of Transportation  
Bureau of Engineering & Highway Operations  
DES-003 REV 1-93  
(302-06-0225)  
COMPUTATION SHEET

ORGANIZATION UNIT NO.

1307

WORK ORDER NO.

DATE CHECKED

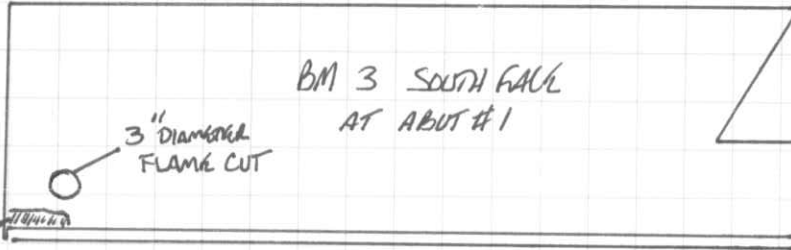
CHECKED BY

SHEET NO.

SUBJECT:

BR#04601 CHAPLIN

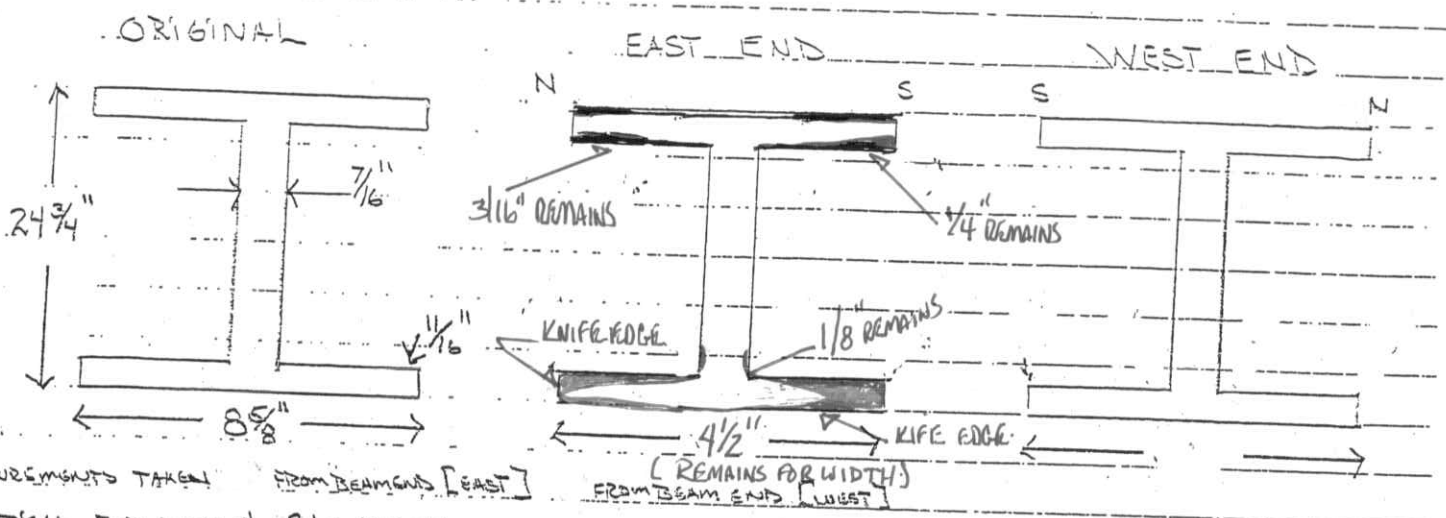
ELEVATION VIEW



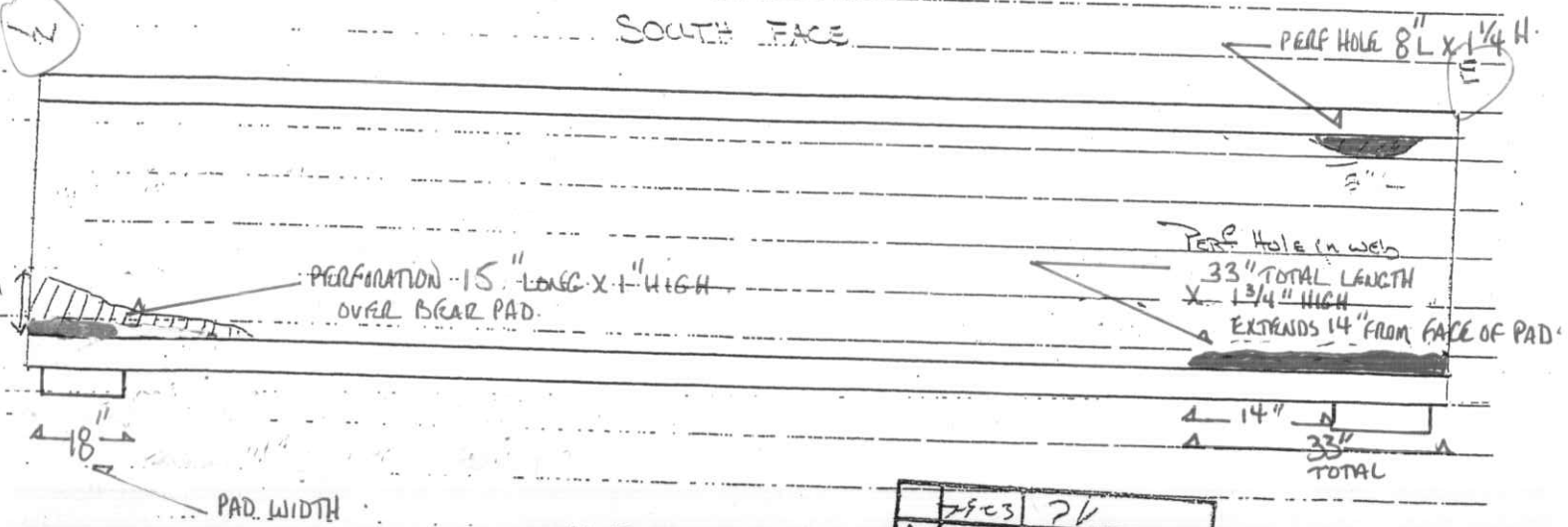
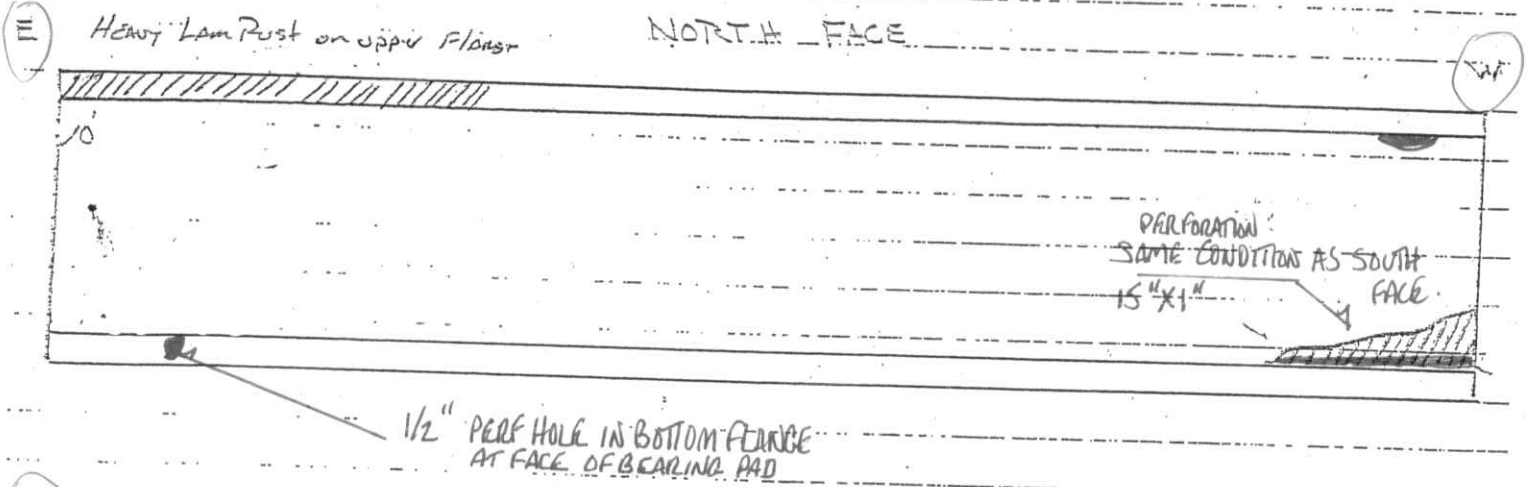
HUY PITING 4" X 2" 3/8" REMAINS.

7/29/09 TRAM 4		
NO.	DATE	DESCRIPTION
<b>REVISIONS</b>		

NTS



\* TYPICAL FOR LAST 3' OF TOP FLANGE



STRINGER # 5

SPAN # 1

NO.	DATE	DESCRIPTION
2-03	2/1	
7-05	7/1	
6-07	6/1	Terms
4/29/09		See Changes

REVISIONS

10/25

PREPARED BY  
2A, 2001  
CHECKED

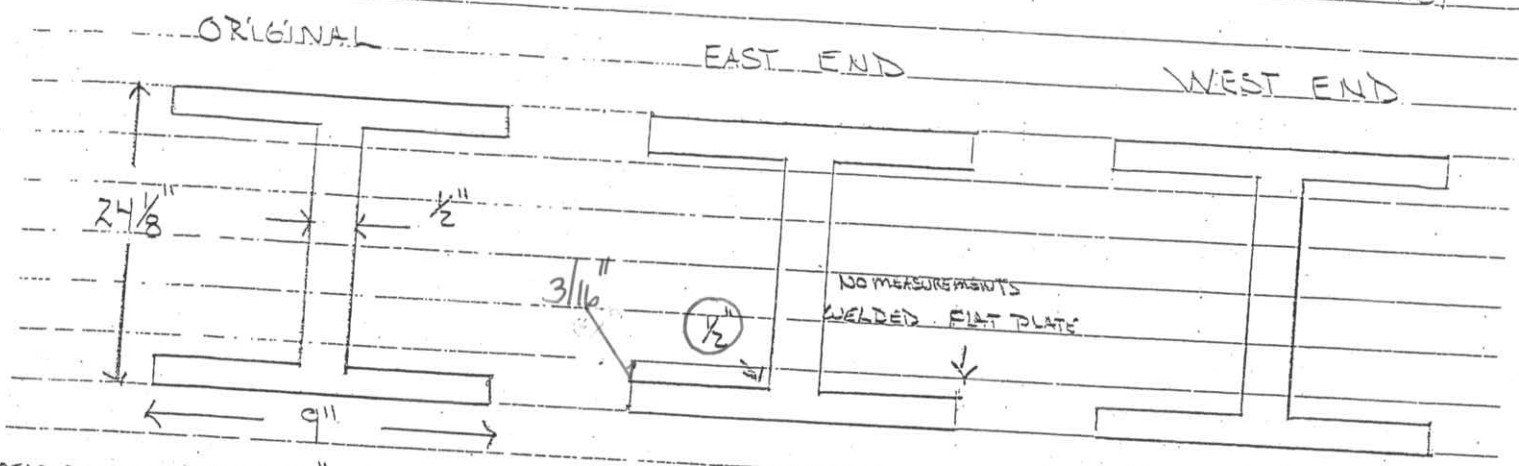
PREPARED BY  
P.V.  
CHECKED BY

State of Connecticut  
Department of Transportation  
Bureau of Engineering & Highway Operations  
DES-003 REV 1-93  
(302-06-0225)  
COMPUTATION SHEET

ORGANIZATION UNIT NO.  
1307

WORK ORDER NO.  
SHEET NO.

SUBJECT: Bridge 4601 NORTH BEAR Rd. OVER NATCHAUG RIVER CHASIN (N.T.S)

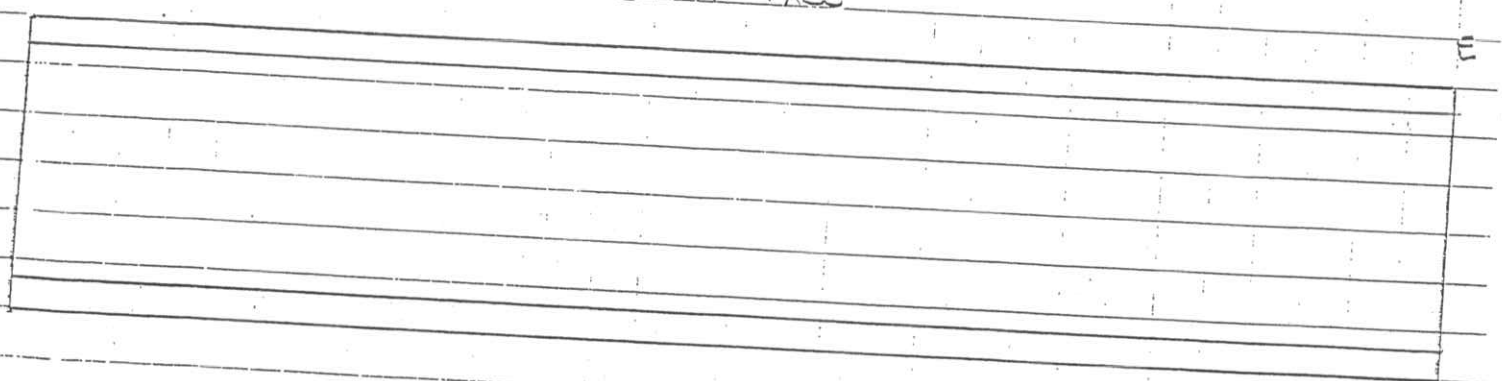


MEASUREMENTS TAKEN 22" FROM BEAM END

NORTH FACE



SOUTH FACE



Stringer # 7 SPAN # 2

7-9-03	PV	
7-05	PV	
6-07	TEAM 2	
7/30/09	TEAM 4	
NO.	DATE	DESCRIPTION
REVISIONS		

19/25

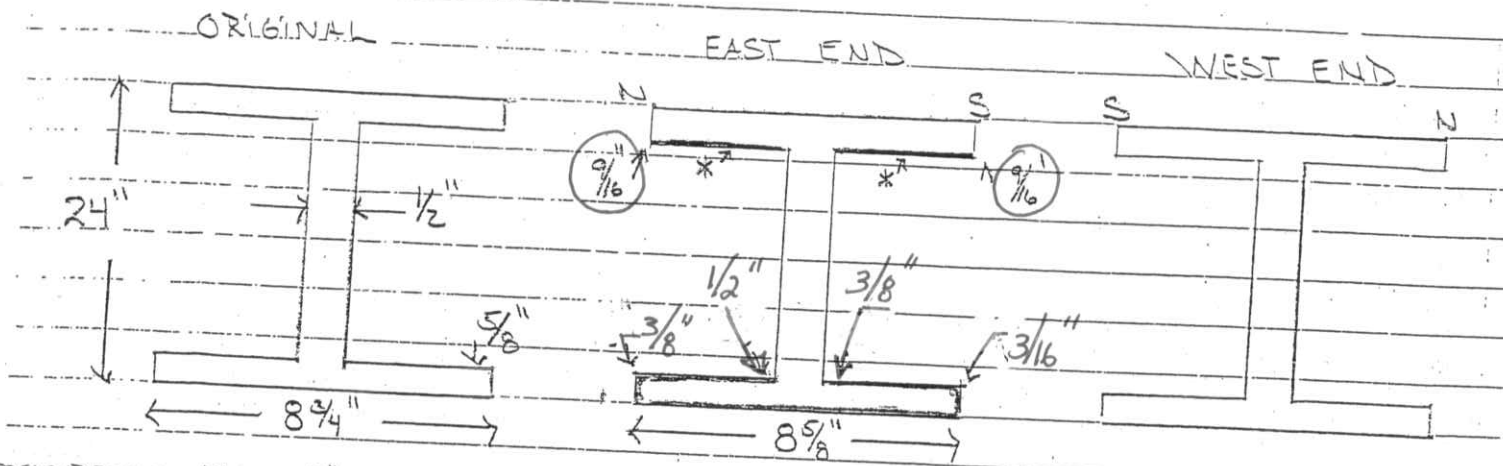
DATE PREPARED  
 Nov 29, 2001  
 DATE CHECKED

PREPARED BY  
 P.V.  
 CHECKED BY

State of Connecticut  
 Department of Transportation  
 Bureau of Engineering & Highway Operations  
 DES-003 REV 1-93  
 (302-06-0225)  
 COMPUTATION SHEET

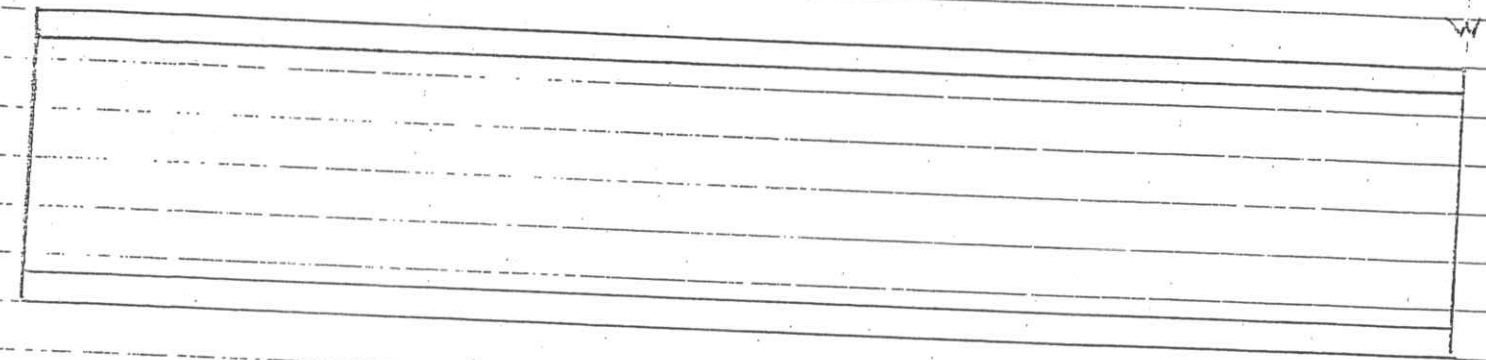
ORGANIZATION UNIT NO. 1307  
 WORK ORDER NO.  
 SHEET NO.

SUBJECT: Bridge 4601 NORTH BEAR Rd. OVER NATCHAUG RIVER CHASIN (N.T.S)

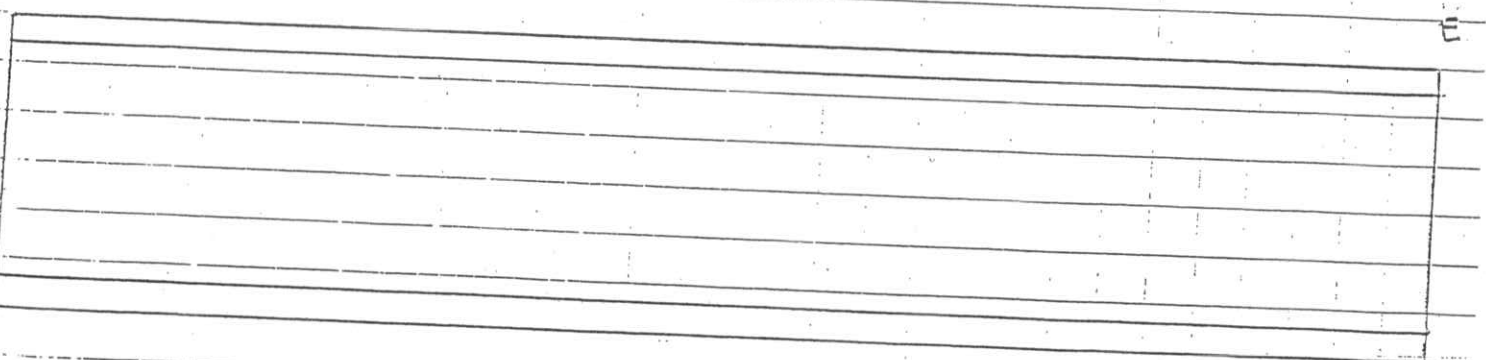


MEASUREMENTS TAKEN 16" FROM BEAM END  
 \* LAST 2.5' HAS HEAVY RUST WITH LAM

NORTH FACE



SOUTH FACE



STRINGER # 5 SPAN # 2

NO.	DATE	DESCRIPTION
7-9-03	PL	
7-05	PL	
7-27	TEAM 7	
7/29/06	TEAM 4	
<b>REVISIONS</b>		

18/25



DATE PREPARED  
 Aug 29, 2001  
 DATE CHECKED

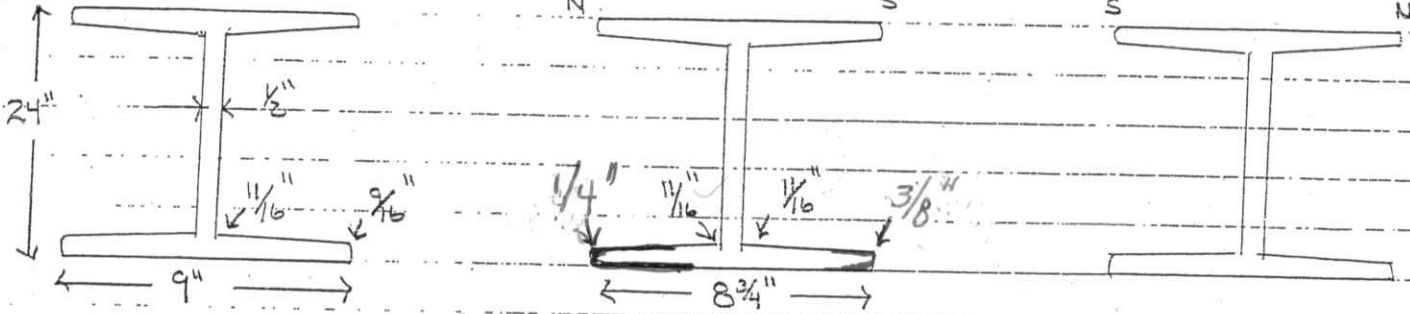
PREPARED BY  
 P.C.  
 CHECKED BY

State of Connecticut  
 Department of Transportation  
 Bureau of Engineering & Highway Operations  
 DES-003 REV 1-93  
 (302-06-0225)  
 COMPUTATION SHEET

ORGANIZATION UNIT NO. 1307  
 WORK ORDER NO.  
 SHEET NO.

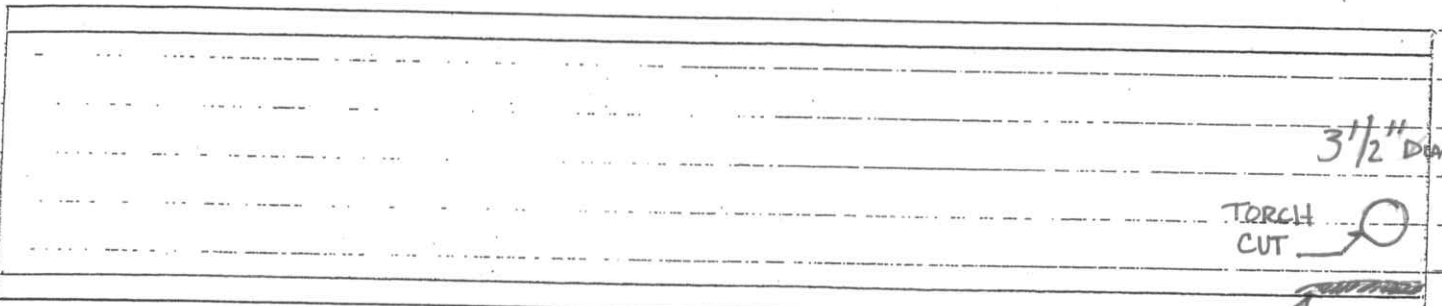
SUBJECT: Bridge 4601 NORTH BEAR RD. OVER NATCHAUG RIVER CHAPLIN CN.TS.

STRINGER: # 2 SPAN: 1  
 ORIGINAL EAST END WEST END



MEASUREMENT TAKEN 16" FROM BEAM END

NORTH FACE



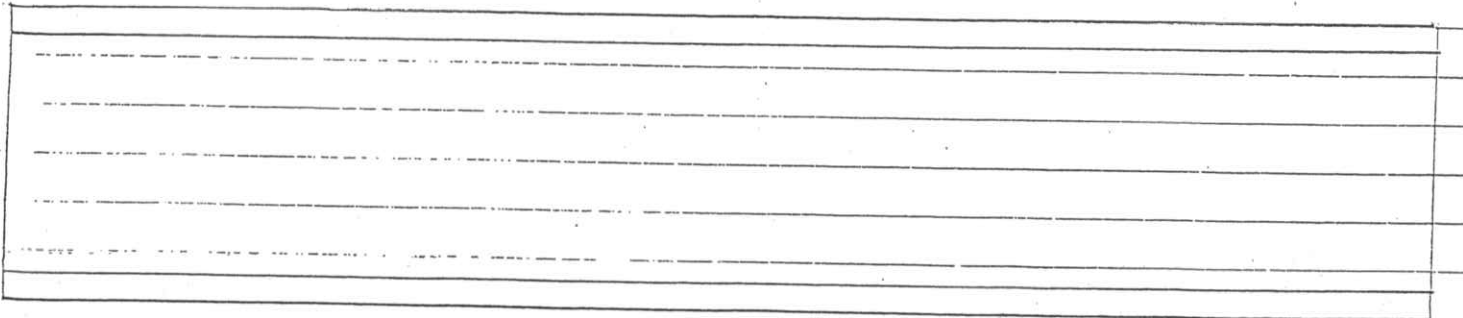
3 1/2" DIAMETER

TORCH CUT

Pitting Section

7" X 2" LOSS  
 X 3/16" DEEP

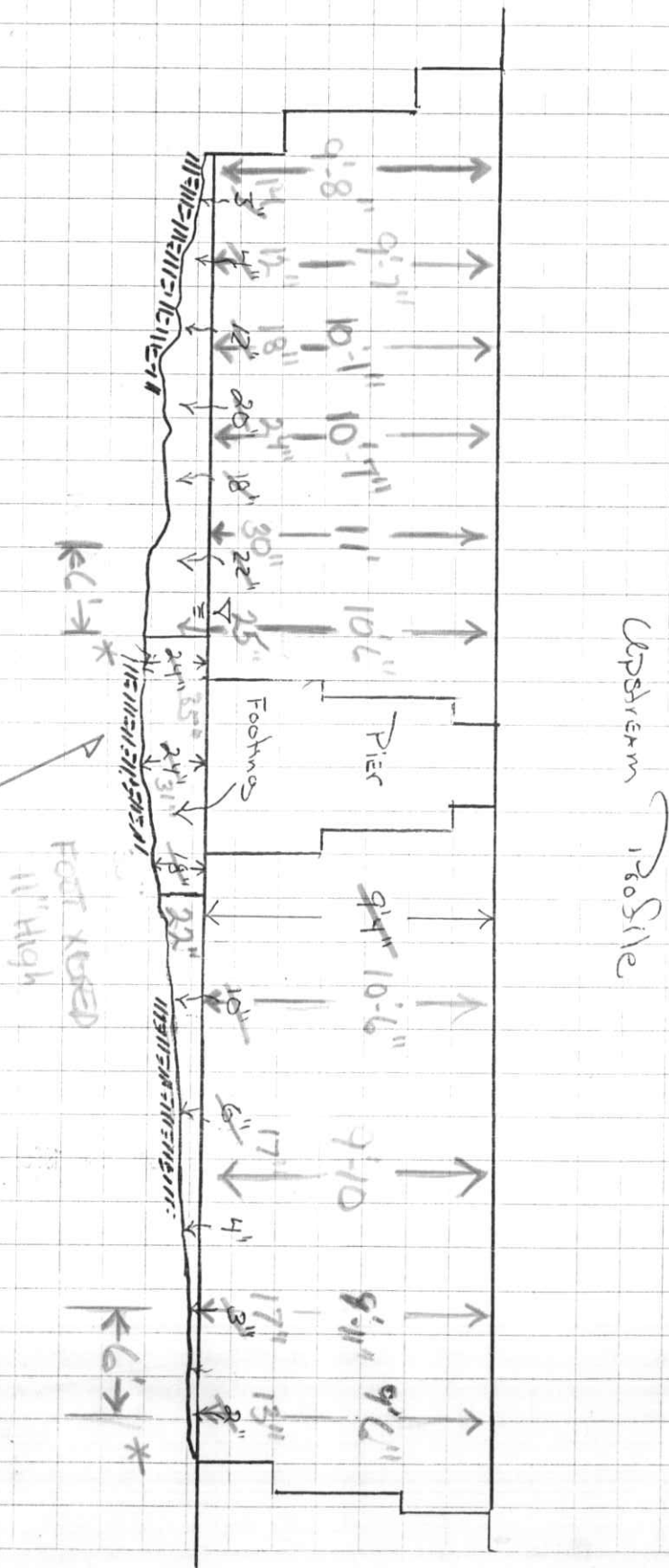
SOUTH FACE



7-9-05	PK	
7-05	SA	
6-07	TEAM 7	
7/30/09	TEAM 4	
NO.	DATE	DESCRIPTION
REVISIONS		

14/25

SUBJECT: Bridge 4601 North Bear Hill Rd. over Natchaug River (Chaplin) (N.T.S)



NOTE: LARGE ROCK AT NOSE OF PIER CAUSING SCOUR PROBLEM. SHOULD BE REMOVED.

7/29/09

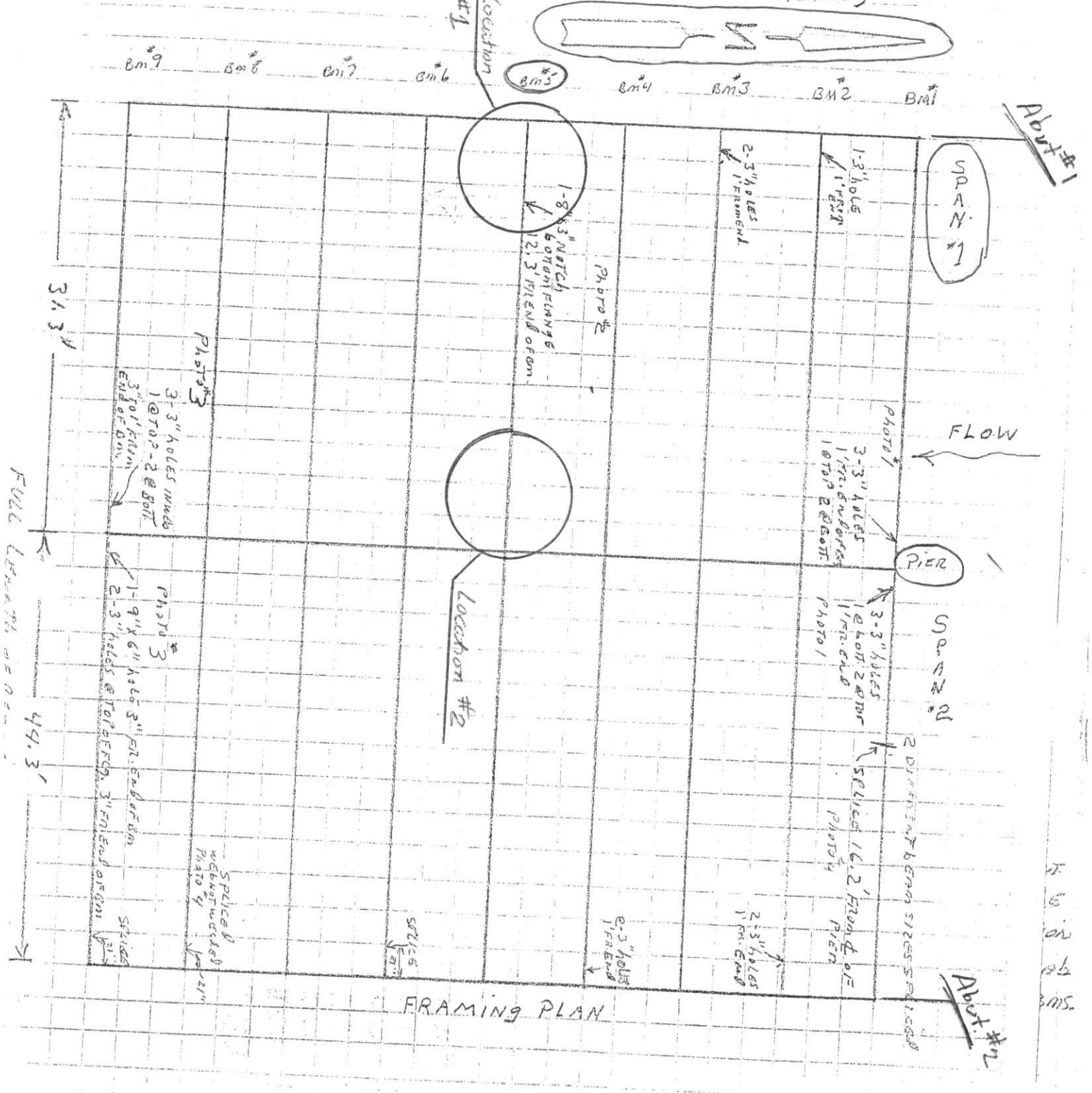
2-8-88  
 DATE CHECKED  
 J. [unclear]  
 CHECKED BY

DEPARTMENT OF TRANSPORTATION  
 BUREAU OF HIGHWAYS  
 STATE OF CONNECTICUT  
 COMPUTATION SHEET

ORGANIZATION UNIT NO. 1201  
 WORK ORDER NO.  
 SHEET NO. 10F1

1/3

SUBJECT: BRIDGE #4601 NORTH BEAR HILL RD CHAPLIN (OFF SYSTEM)

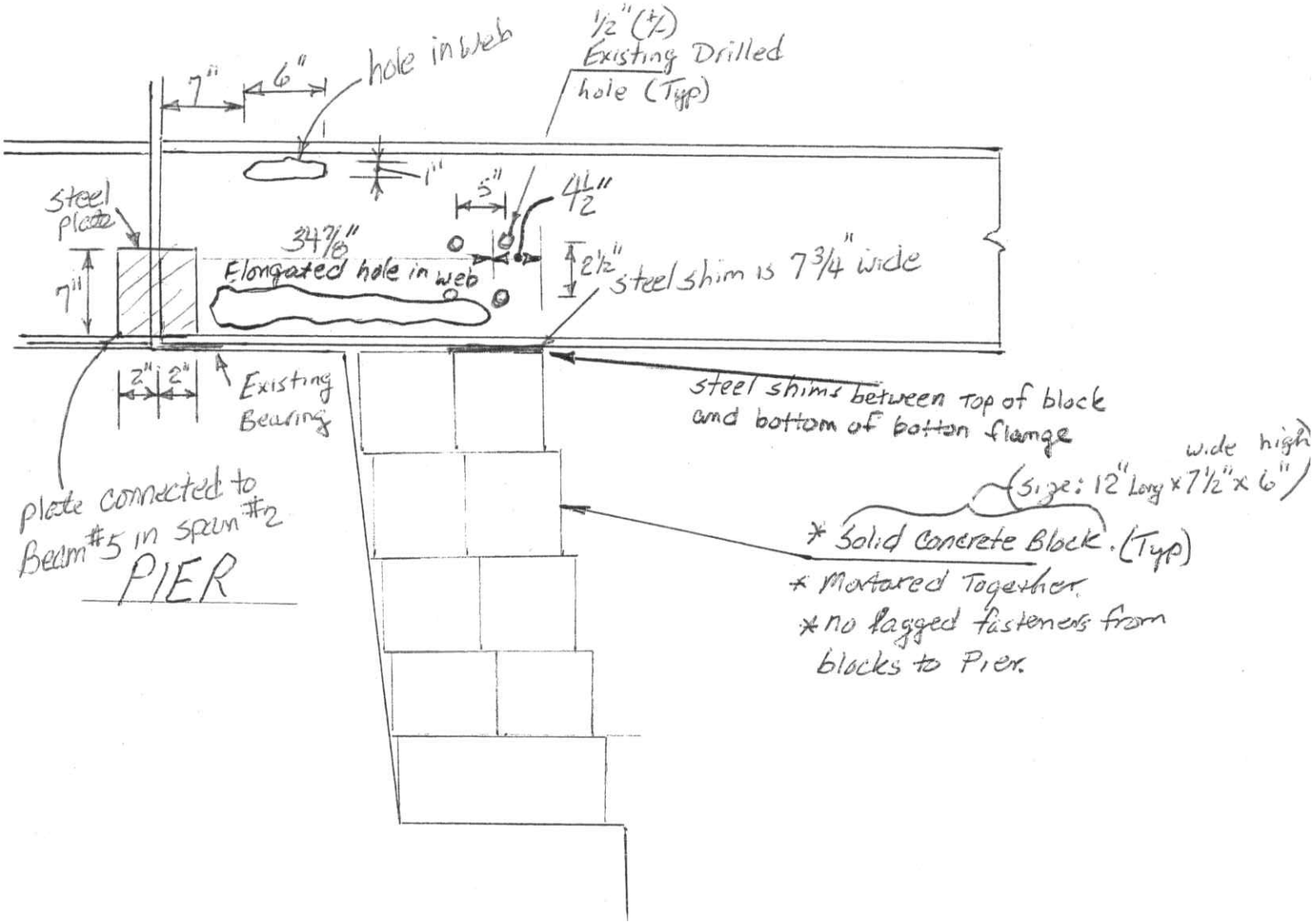


Br. # 04601, North Bear Hill Rd of Natchaug River  
Chaplin,

DMC  
11/6/09

(2/3)

Beam #5 (North Face) @ Pier



Location #2 (Elevation - Looking South)  
(N.T.S)

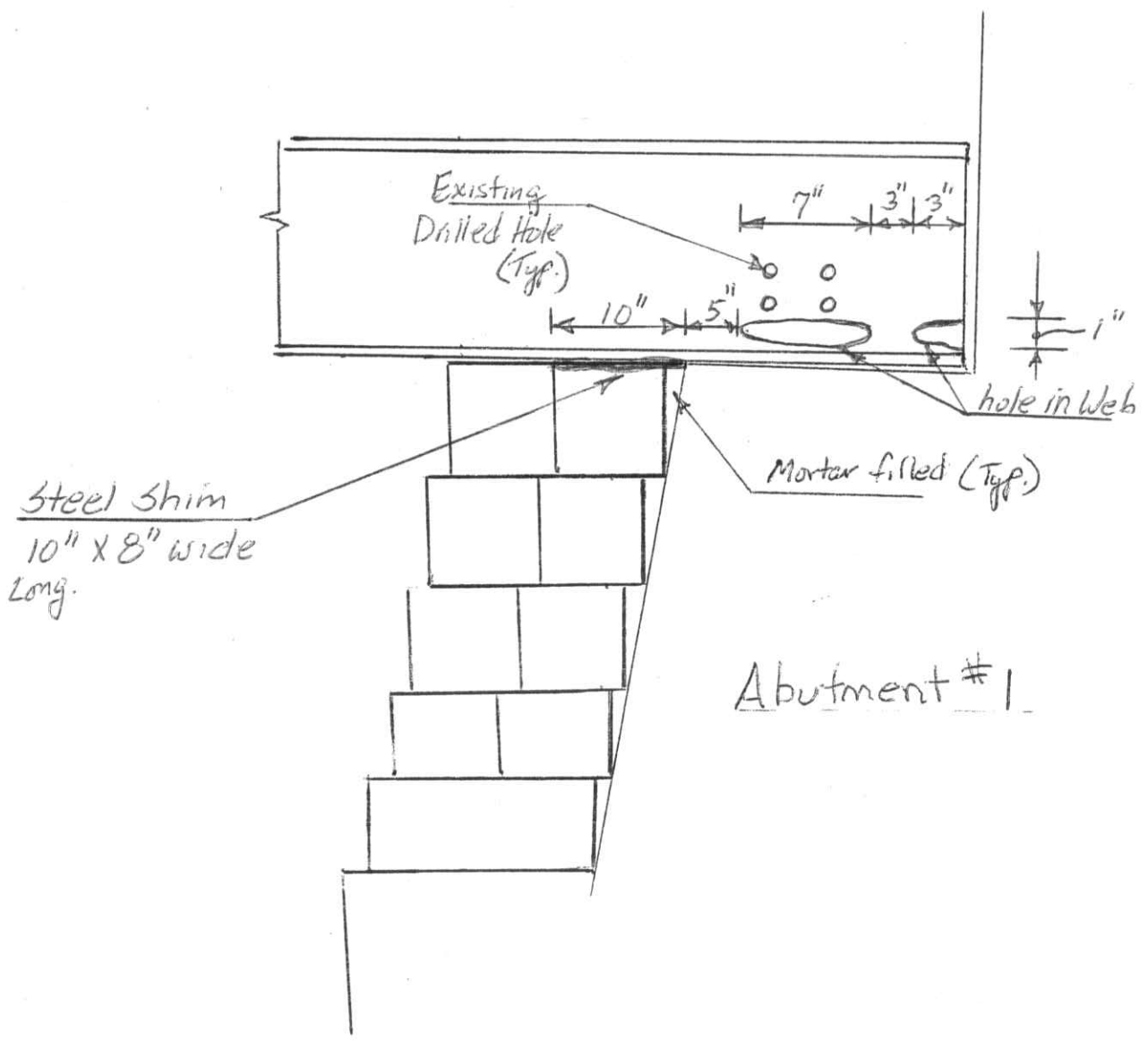
Br. # 04601, North Bear Hill Rd of Natchaug River

DMC  
11/6/07

3/3

Chaplin

Beam #5 (North Face) @ Abutment #1



Location #1 (Elevation - Looking South)  
(N.T.S.)

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	

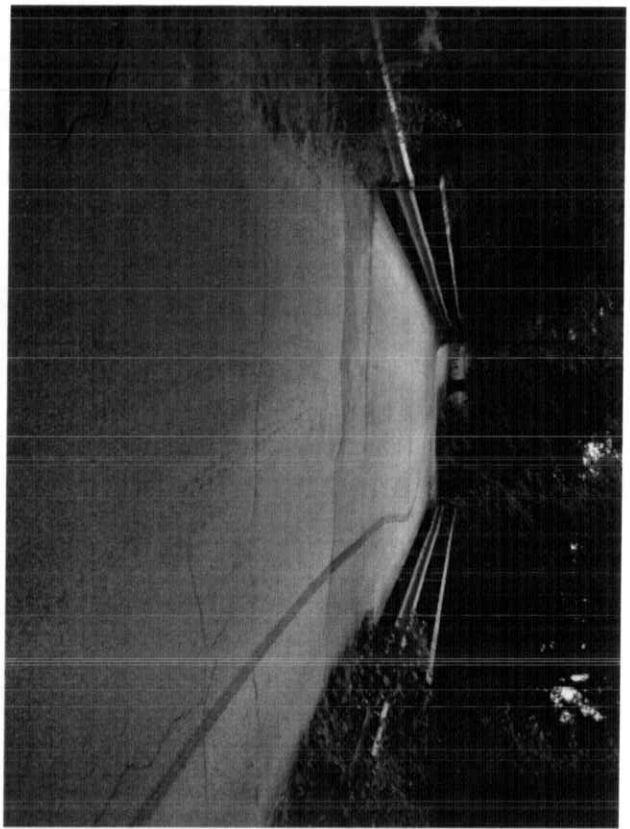


Photo # 1: WEST APPROACH.

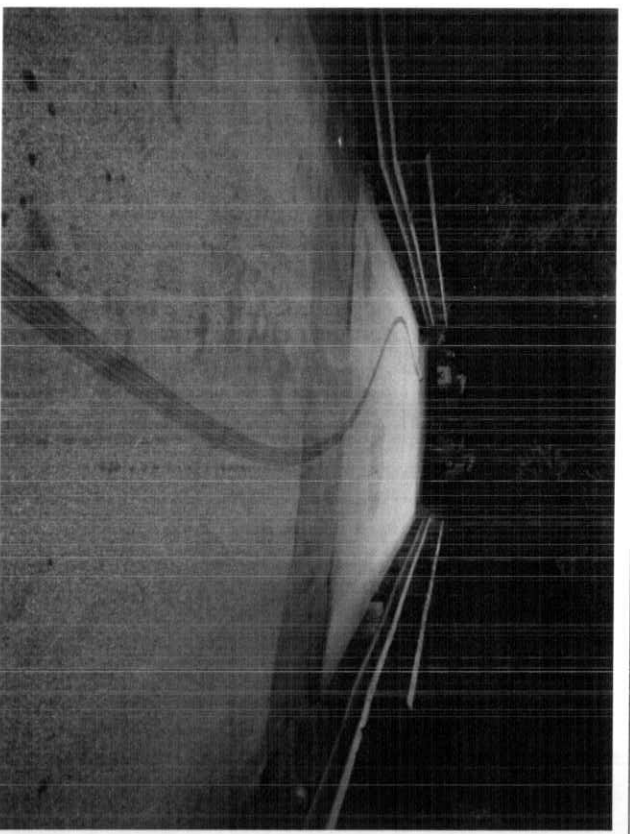


Photo # 2: EAST APPROACH.

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	

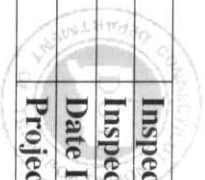


Photo # 3: NORTH ELEVATION.

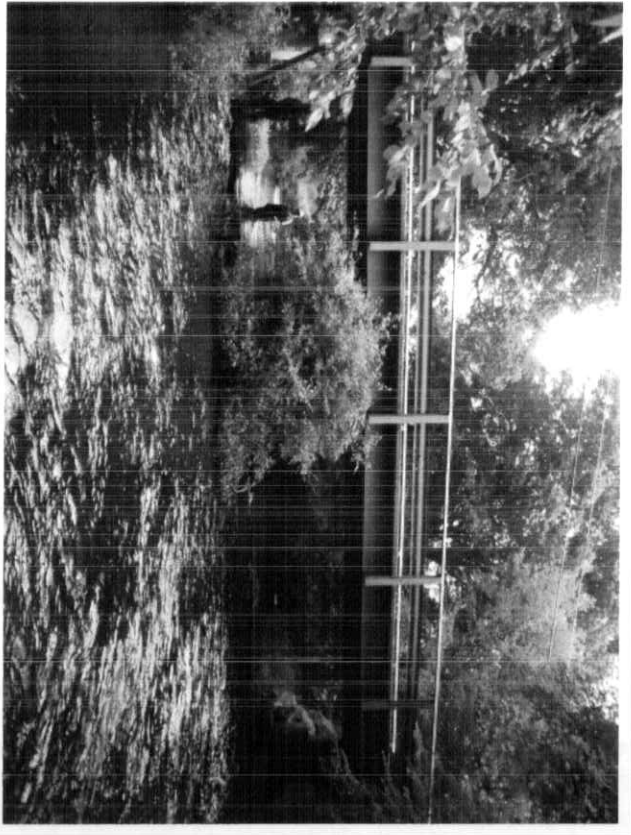
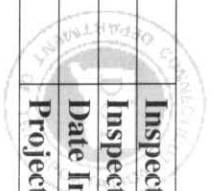


Photo # 4: SOUTH ELEVATION.

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	



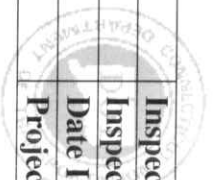
**Photo # 5: WEST APPROACH PAVEMENT.**


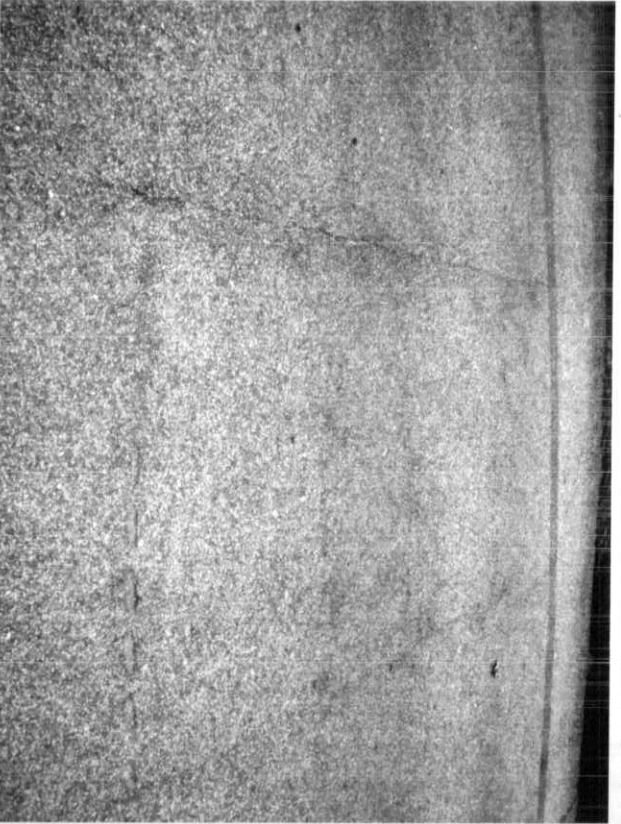


**Photo # 6: EAST APPROACH PAVEMENT.**



Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	



<p>Photo # 7: WEARING SURFACE OF SPAN # 1.</p> 	<p>Photo # 8: WEARING SURFACE OF SPAN # 2.</p> 
--	---

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	

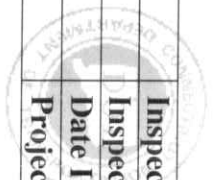


Photo # 9: TRANSVERSE CRACKS AT EAST DECK  
END.



Photo # 10: TRANSVERSE CRACKS AT WEST DECK  
END.

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	

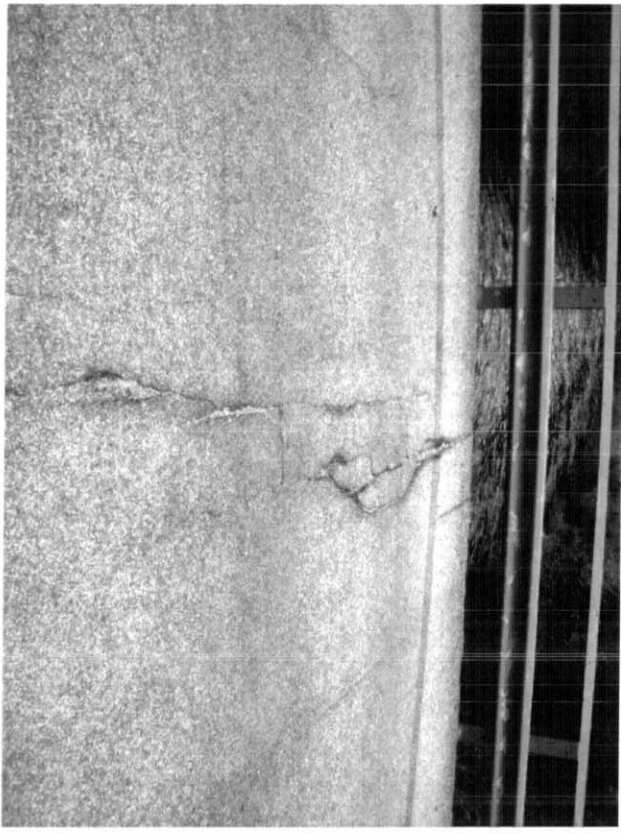
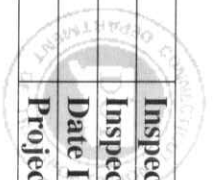


Photo # 11: TRANSVERSE CRACKS OVER PIER.

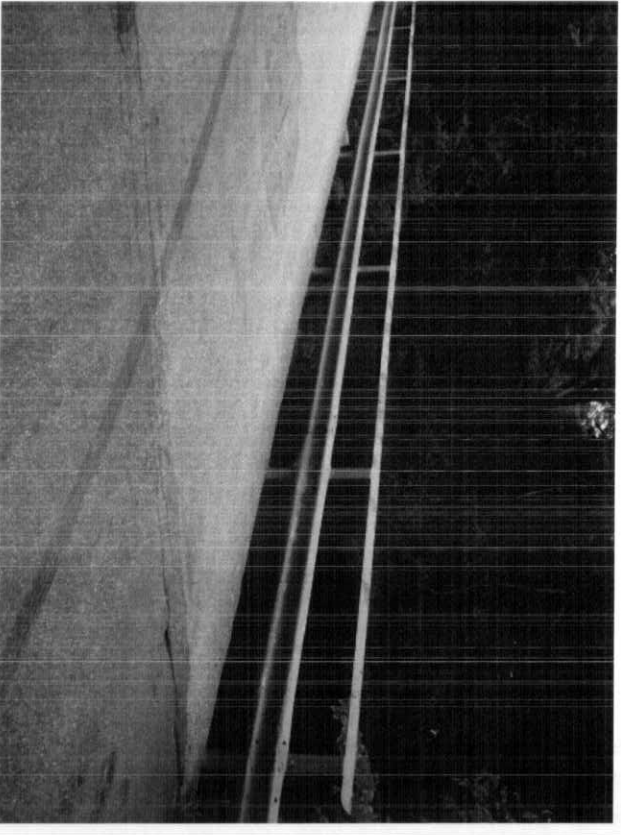


Photo # 12: TYPICAL BRIDGE RAIL.

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	

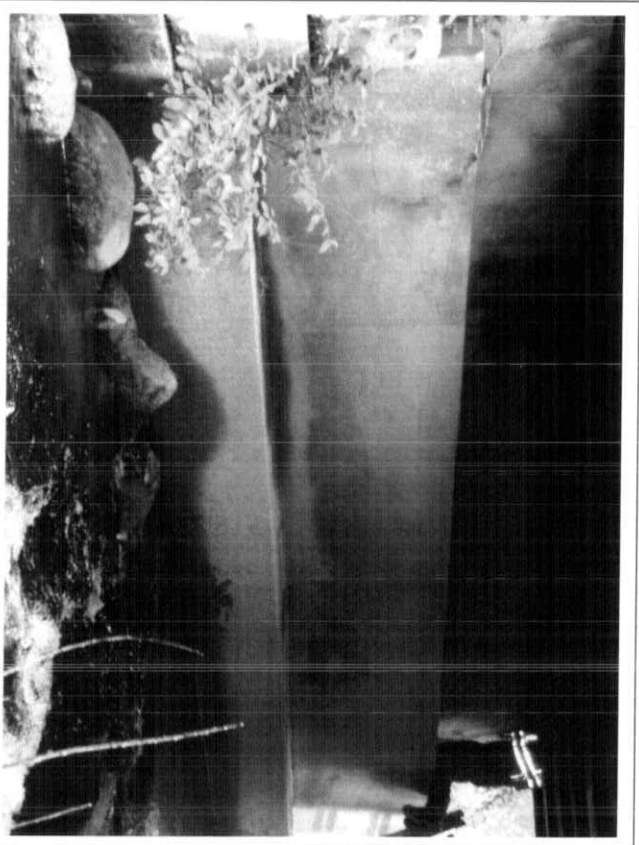
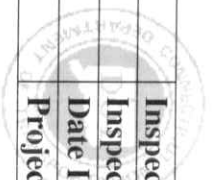


Photo # 13: TYPICAL ABUTMENT.



Photo # 14: WEST FACE OF PIER.

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	

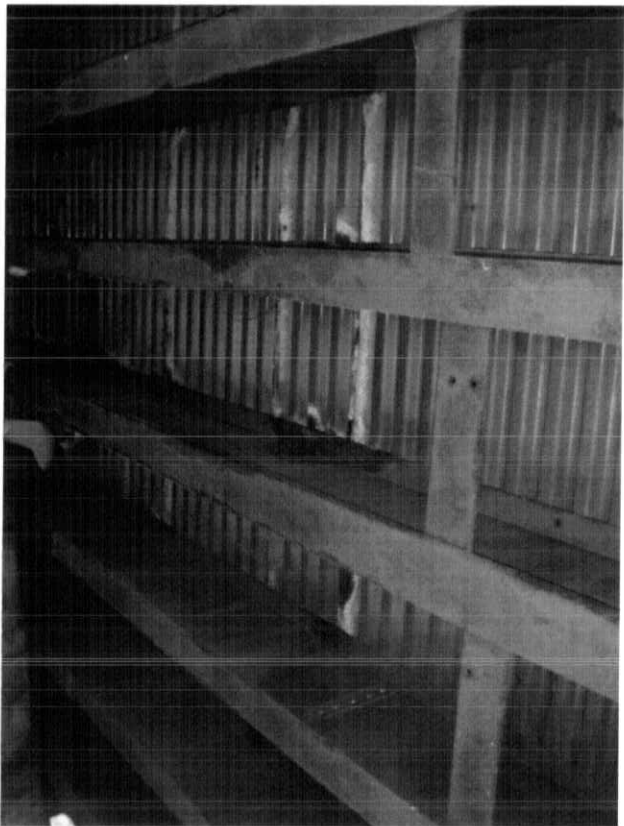


Photo # 15: UNDERSIDE.

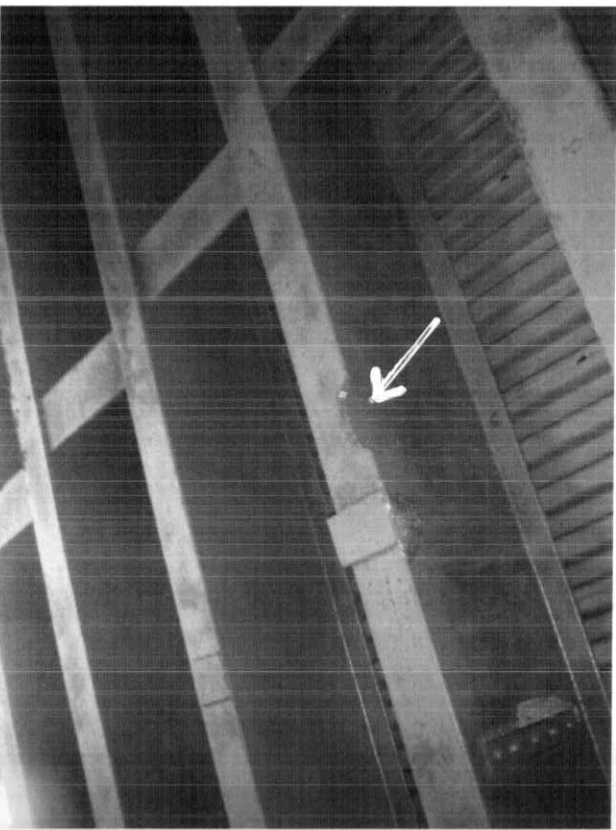
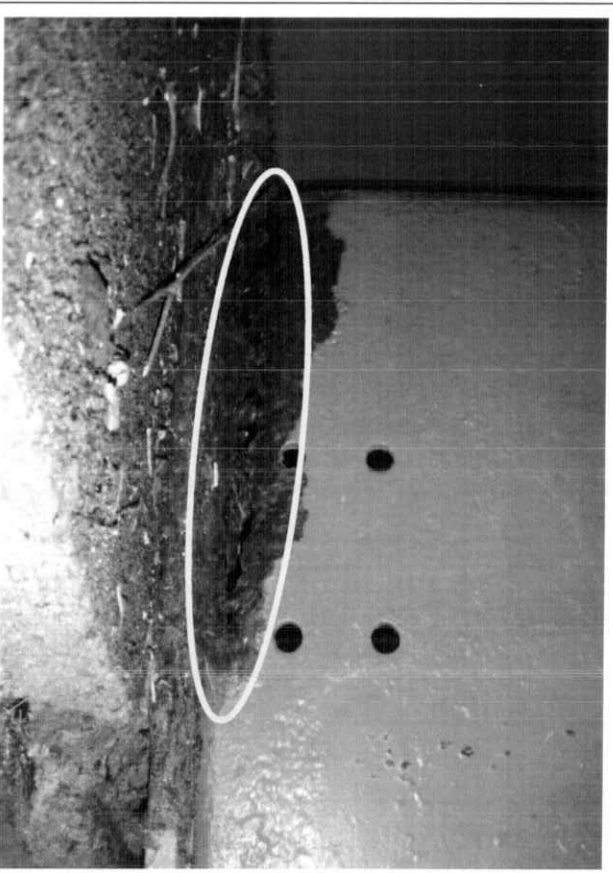
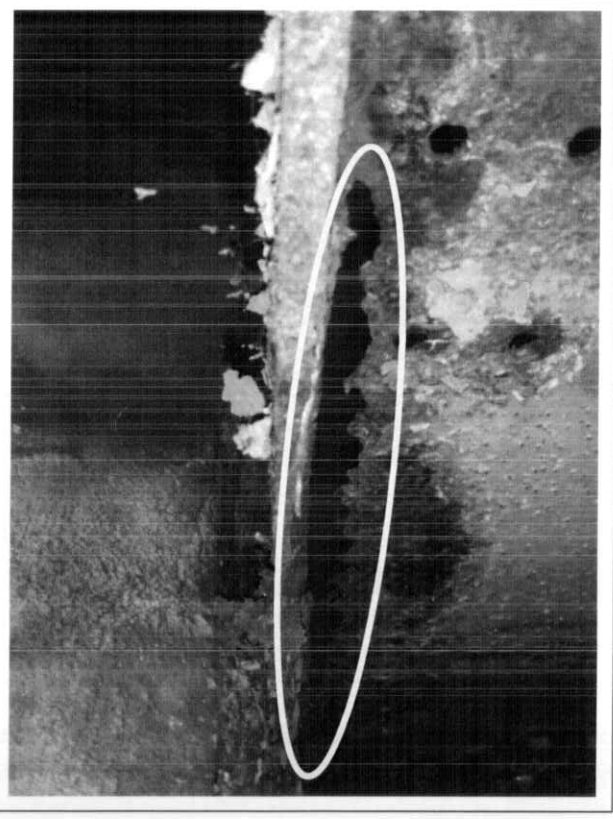


Photo # 16: BEAM # 6 IN SPAN # 1 WITH A TORCH CUT SECTION, 7 IN. X 3 IN., REMOVED FROM THE NORTHSIDE OF THE BOTTOM FLANGE, AT CENTER OF SPAN.

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	



**Photo # 17: BEAM # 5 NORTH FACE, OVER BEARING AREA, AT ABUTMENT # 1 WITH A 15 IN. X 1 IN. HOLE IN BOTTOM OF WEB.**



**Photo # 18: BEAM # 5 SOUTH FACE, OVER BEARING AREA, AT PIER IN SPAN # 1 WITH A 33 IN. X 1 3/4 IN. HOLE IN BOTTOM OF WEB.**

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	

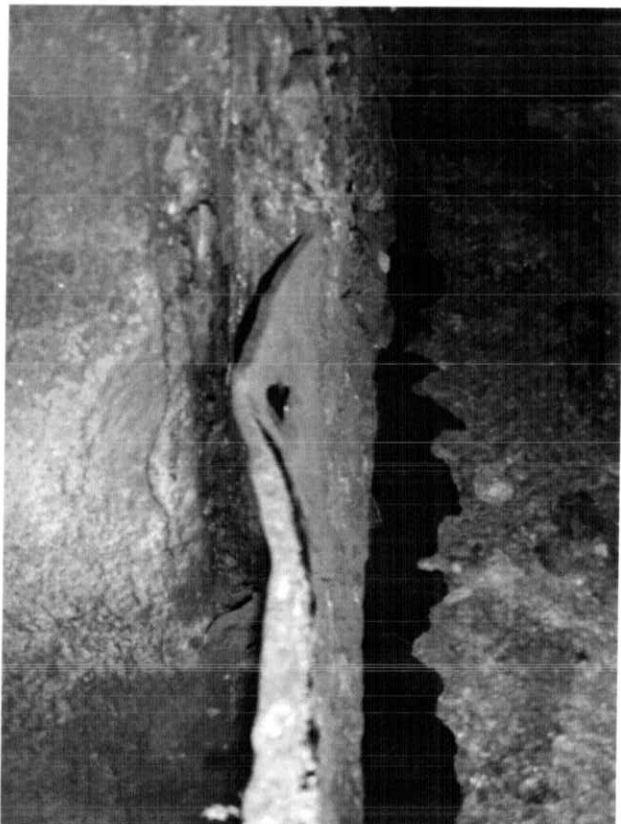


Photo # 19: BOTTOM FLANGE BEAM # 5 NORTH SIDE AT PIER, IN SPAN # 1 IN FRONT OF BEARING AREA.



Photo # 20: NORTH FACE OF HOLE IN PHOTO # 18.

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	

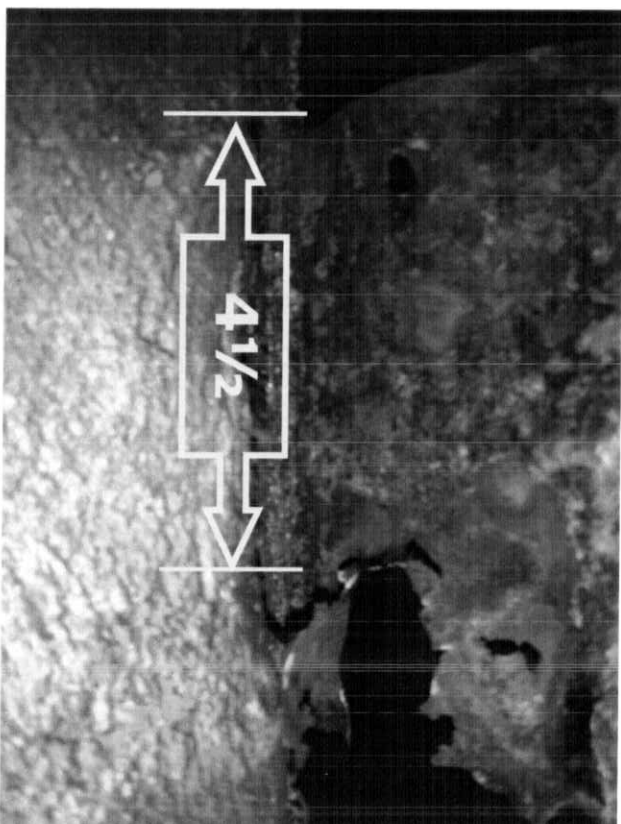


Photo # 21: UNDERSIDE OF FLANGE OF BEAM # 5 IN SPAN # 1 AT PIER.

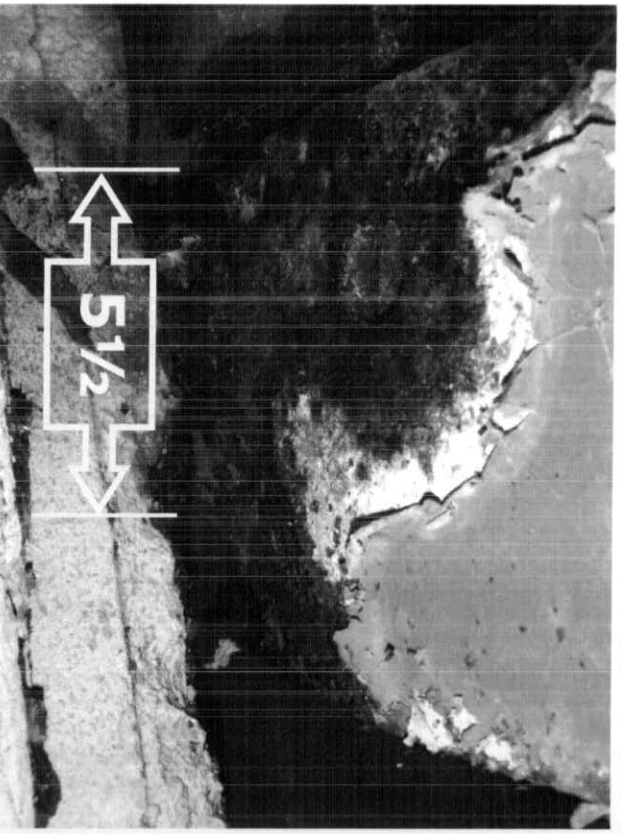


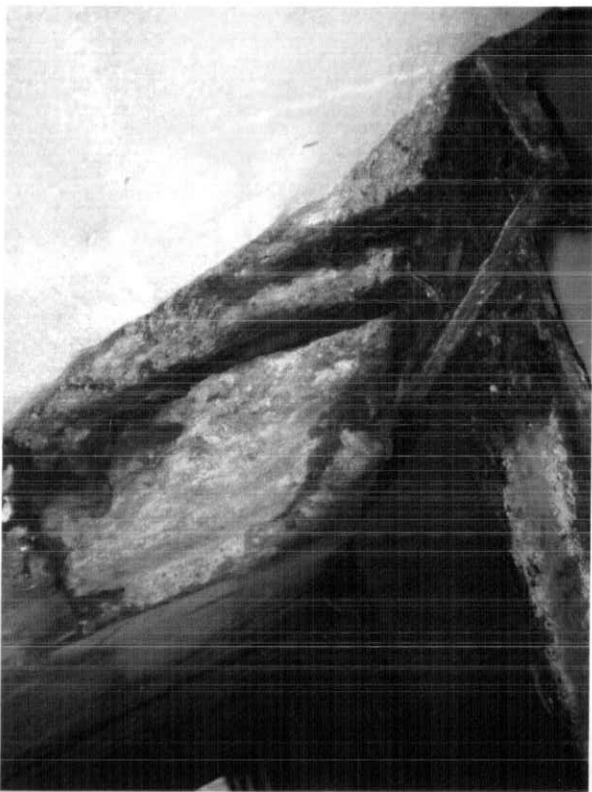
Photo # 22: UNDERSIDE OF FLANGE OF BEAM # 8 AT ABUTMENT # 2.



Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	



**Photo # 23: EAST FACE OF PIER WITH A 30 IN. X 15 IN. X 4 1/2 D. SPALL WITH EXPOSED REBAR UNDER BEARING # 8.**



**Photo # 24: SEE PHOTO 23. UNDERMINING, 18 IN. X 4 1/2, OF BEARING PLATE # 8.**

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	

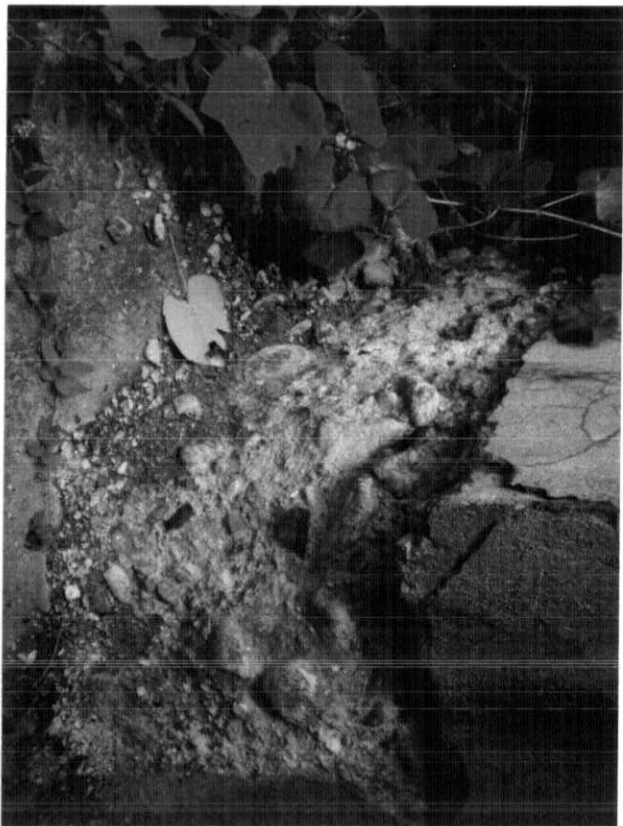


Photo # 25: SOUTH END OF PIER CAP WITH A 3½ FT. X 15 IN. X 2 IN. D. SPALL.

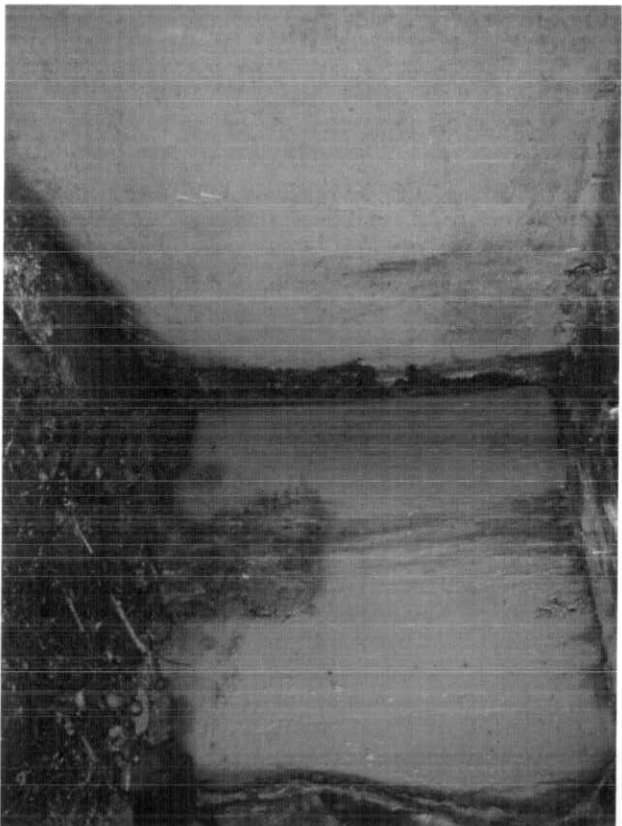


Photo # 26: BEAM END # 6 NORTH FACE AT ABUTMENT # 1.

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	N. BEAR HILL RD.	Date Inspected:	7/29/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	



Photo # 27: BEAM END # 7 NORTH FACE AT ABUTMENT # 1

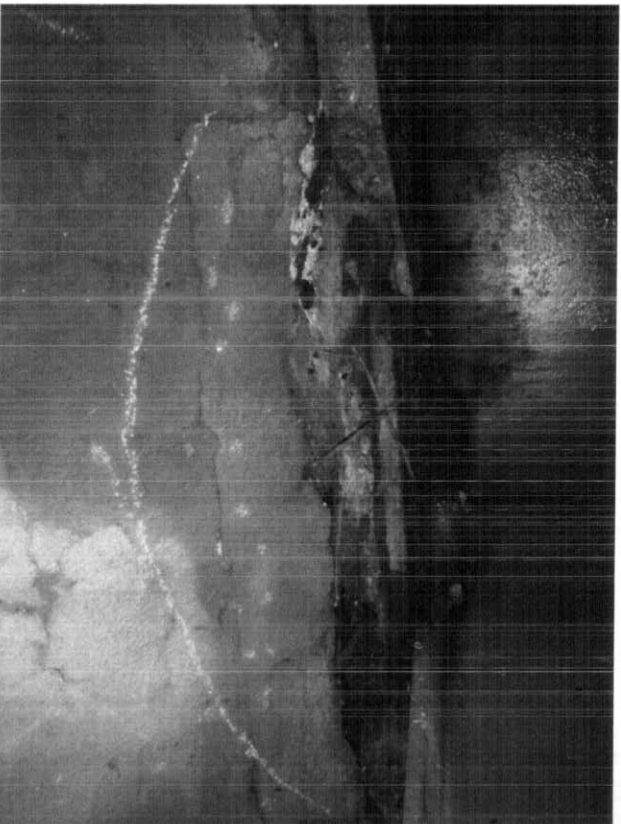


Photo # 28: 20 IN. X 3 IN. X 2 1/2 IN. SPALL IN ABUTMENT CAP # 2.

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	NORTH BEAR HILL RD.	Date Inspected:	9/23/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	

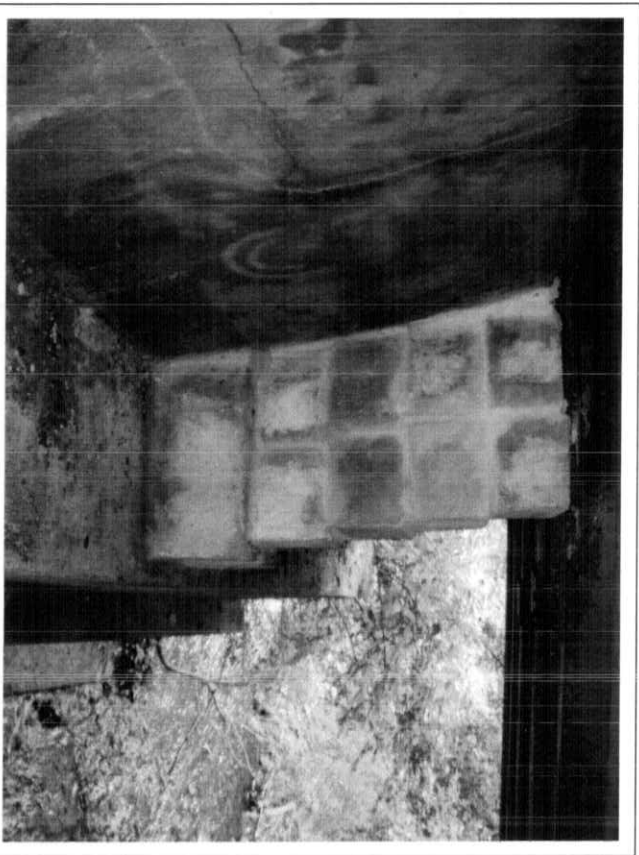
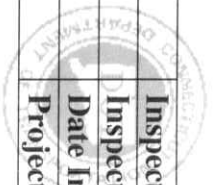


Photo # 1: CRIBBING UNDER BEAM 5 IN SPAN 1 AT PIER.

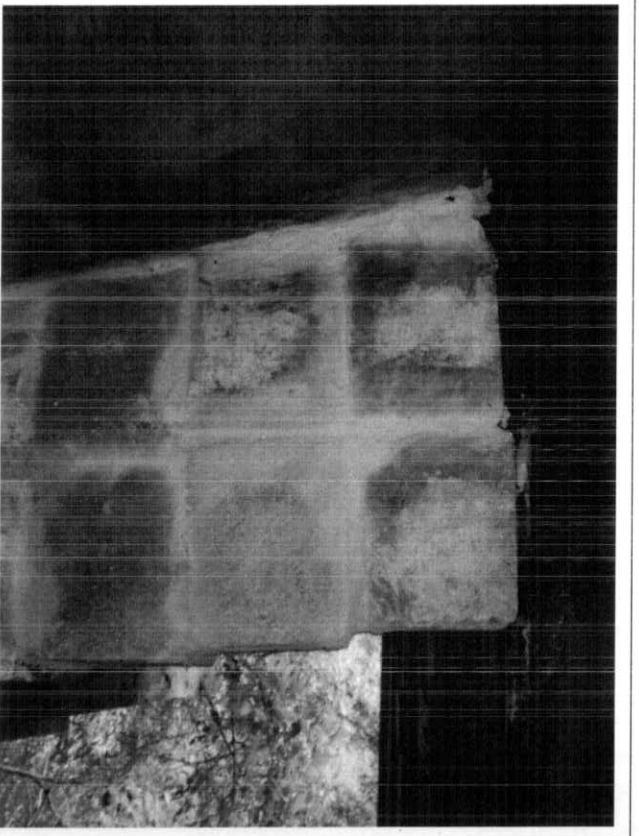
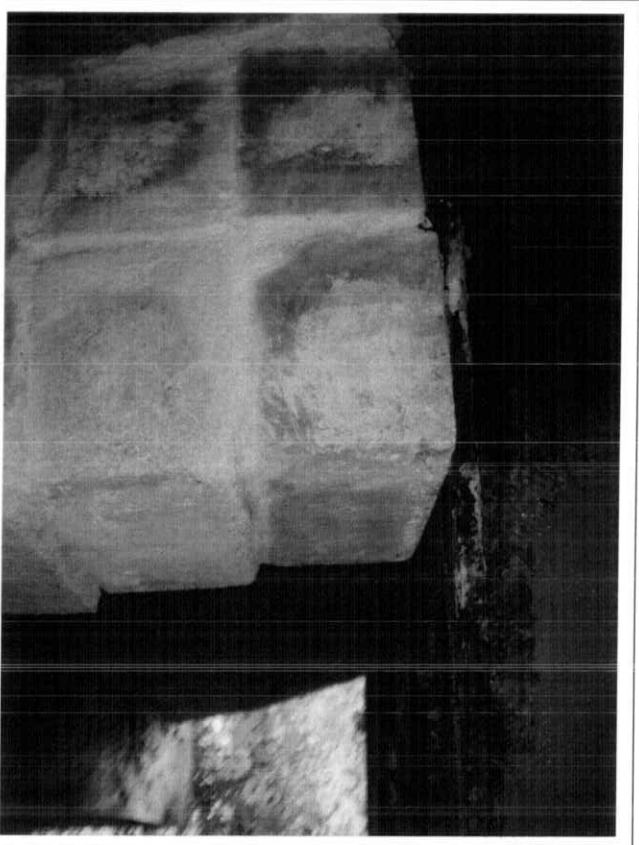
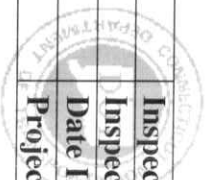
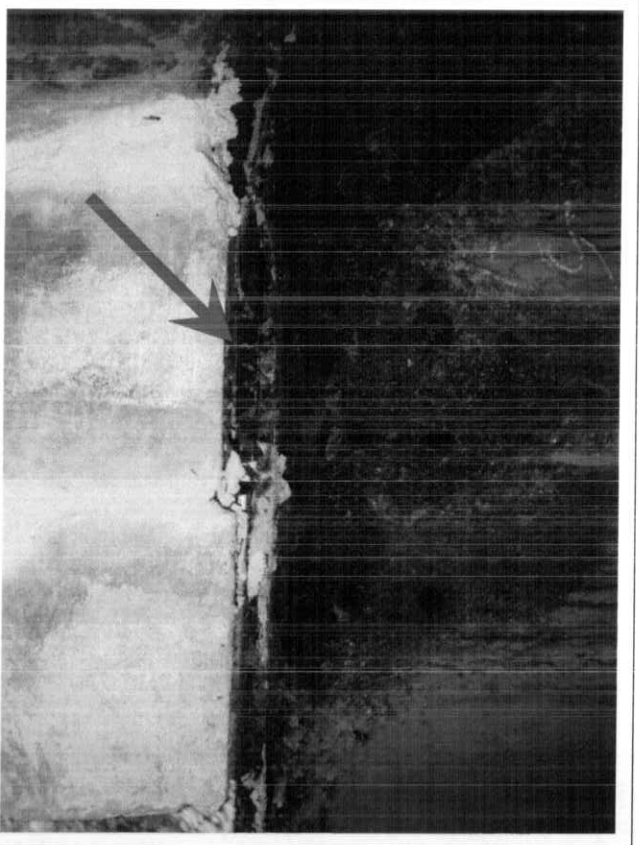


Photo # 2: CRIBBING UNDER BEAM 5 IN SPAN 1 AT PIER.

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	NORTH BEAR HILL RD.	Date Inspected:	9/23/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	



**Photo # 3: CRIBBING UNDER BEAM 5 IN SPAN 1 AT PIER.**



**Photo # 4: STEEL SHIM & BLOCK ON CRIBBING UNDER BEAM 5 IN SPAN 1 AT PIER.**

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	NORTH BEAR HILL RD.	Date Inspected:	9/23/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	

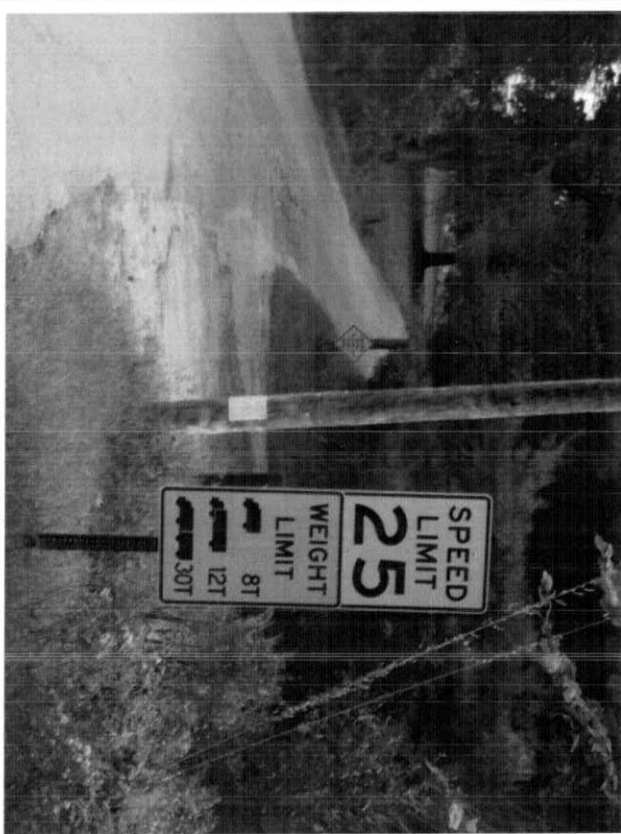
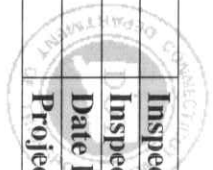


Photo # 5: PRE-WARNING SIGN WEST OF STRUCTURE.

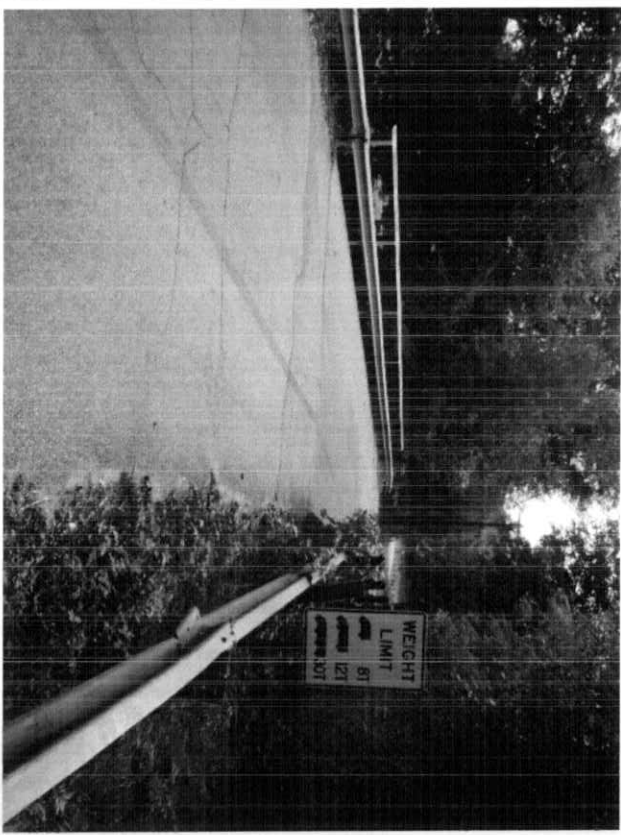


Photo # 6: WARNING SIGN WEST OF STRUCTURE.

Bridge No.	04601	Inspected by:	D. WILLIS
Town:	CHAPLIN	Inspected by:	T. KAHAK
Feature Carried:	NORTH BEAR HILL RD.	Date Inspected:	9/23/09
Feature Crossed:	NATCHAUG RIVER	Project No.:	

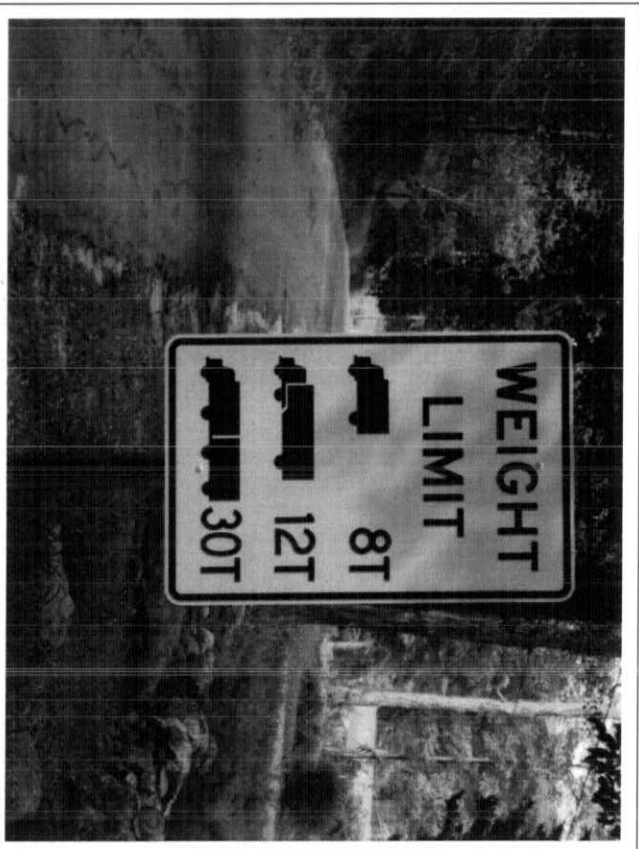


Photo # 7: PRE-WARNING SIGN EAST OF STRUCTURE.

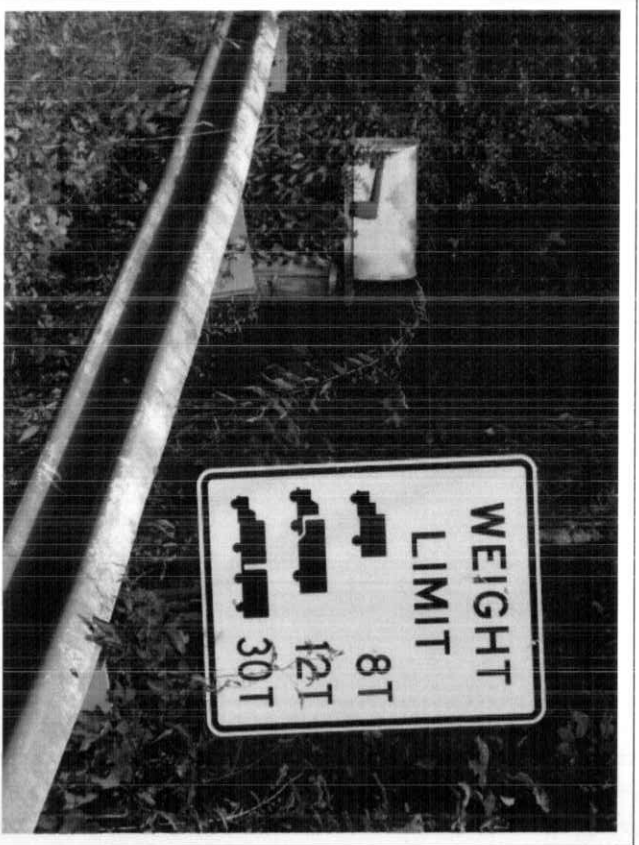


Photo # 8: WARNING SIGN EAST OF STRUCTURE.

# Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 04601

Agency ID: 04601

Sufficiency Rating: 87.2

### IDENTIFICATION

State 1: 91 Struc Num 8: 04601  
 Facility Carried 7: NO BEAR HILL ROAD Location 9: .4 MI FROM JCT ROUTE 198  
 Rte.(On/Under)5A: Route On Structure Rte. Signing Prefix 5B: 5 City Street  
 Level of Service 5C: 0 None of the below Rte. Number 5D: 00000  
 Directional Suffix 5E: 0 N/A (NBI) % Responsibility : 0  
 SHD District 2: 02 County Code 3: 15  
 Place Code 4: CHAPLIN Mile Post 11: 1.730 mi  
 Feature Intersected 6: NATCHAUG RIVER  
 Latitude 16: 00d 00' 00" Longitude 17: Missing  
 Border Bridge Code 98: Unknown (P)  
 Border Bridge Number 99: NA

### INSPECTION <sup>08</sup>

Frequency 91: 24 months Inspection Date 90: 7/28/2009 Next Inspection: 07/28/2011  
 FC Frequency 92A: NA FC Inspection Date 93A: NA Next FC Inspection: NA  
 UW Frequency 92B: NA UW Inspection Date 93B: NA Next UW Inspection: NA  
 SI Frequency 92C: NA SI Date 93C: NA Next SI: NA  
 Element Frequency: 24 months Element Inspection Date: 07/29/2009 Next Elem. Insp. Due: 07/29/2011

### CLASSIFICATION

Defense Highway 100: 0 Not a STRAHNET hwy Parallel Structure 101: No || bridge exists  
 Direction of Traffic 102: 2 2-way traffic Temporary Structure 103: Unknown (NBI)  
 Highway System 104: 0 Not on NHS NBIS Length 112: Long Enough  
 Toll Facility 20: 3 On free road Functional Class 26: 09 Rural Local  
 Historical Significance 37: 5 Not eligible for NRHP  
 Owner 22: 3 Town/Township Hwy Agency  
 Custodian 21: 3 Town/Township Hwy Agency

### STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 0 Number of Spans Main Unit 45: 2  
 Main Span Material/Design 43A/B:  
 3 Steel 02 Stringer/Girder  
 Deck Type 107: 6 Corrugated Steel  
 Wearing Surface 108A: 6 Bituminous  
 Membrane 108B: 0 None  
 Deck Protection 108C: None

### CONDITION

Deck 58: 5 Fair Super 59: 4 Poor Sub 60: 5 Fair  
 Culvert 62: N N/A (NBI) Channel/Channel Protection 61: 6 Bank Slumping

### LOAD RATING AND POSTING

Inventory Rating Method 65: 2 AS Allowable Stres Operating Rating Method 63: 2 AS Allowable Stress  
 Inventory Rating 66: HS20.6 Operating Rating 64: HS30.0  
 Design Load 31: 0 Other or Unknown Posting 70: 5 At/Above Legal Loads  
 Posting status 41: A Open, no restriction

### AGE AND SERVICE

Year Built 27: 1969 Year Reconstructed 106: 1990  
 Type of Service on 42A: 1 Highway  
 Type of Service under 42B: 5 Waterway  
 Lanes on 28A: 2 Lanes Under 28B: 0 Detour Length 19: 0.6 mi  
 ADT 29: 200 Truck ADT 109: 5 % Year of ADT 30: 1993

### APPRAISAL

Bridge Rail 36A: 0 Substandard Approach Rail 36C: 0 Substandard  
 Transition 36B: 0 Substandard Approach Rail Ends 36D: 0 Substandard  
 Str. Evaluation 67: 6 Deck Geometry 68: 4 Tolerable  
 Underclearance, Vertical and Horizontal 69: N Not applicable (NBI)  
 Waterway Adequacy 71: 6 Equal Minimum Approach Alignment 72: 5 Above Tolerable  
 Scour Critical 113: 6 Calcs not made

### GEOMETRIC DATA

Length Max Span 48: 36.0 ft Structure Length 49: 75.0 ft  
 Curb/Sdwk Width L 50A: 0.0 ft Curb/Sidewalk Width R 50B: 0.0 ft  
 Width Curb to Curb 51: 23.4 ft Width Out to Out 52: 24.1 ft  
 Approach Roadway Width 32: 18.0 ft Median 33: 0 No median (w' shoulders)  
 Deck Area: 1,808.3 sq. ft  
 Skew 34: 10.00 ° Structure Flared 35: 0 No flare  
 Minimum Vertical Clearance Over Bridge 53: 328.1 ft  
 Minimum Vertical Underclearance Reference 54A: N Feature not hwy or RR  
 Minimum Vertical Underclearance 54B: 0.0 ft  
 Minimum Lateral Underclearance Reference R 55A: N Feature not hwy or RR  
 Minimum Lateral Underclearance R 55: 327.8 ft  
 Minimum Lateral Underclearance L 56: 0.0 ft

### PROPOSED IMPROVEMENTS

Bridge Cost 94: \$ 1 Type of Work 75: 38 Other Structural  
 Roadway Cost 95: \$ 1 Length of Improvement 76: 20.0 ft  
 Total Cost 96: \$ 2 Future ADT 114: 200  
 Year of Cost Estimate 97: 1999 Year of Future ADT 115: 2013

### NAVIGATION DATA

Navigation Control 38: 0 Permit Not Required  
 Vertical Clearance 39: 0.0 ft Horizontal Clearance 40: 0.0 ft  
 Pier Protection 111: Unknown (NBI) Lift Bridge Vertical Clearance 116:

### ELEMENT CONDITION STATE DATA

Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
UNIT0	30/3	Corrug/Orthotpc Deck	(SF)	1,808	0 %	0	100 %	1,808	0 %	0	0 %	0	0 %	0
UNIT0	107/3	Paint Stl Opn Girder	(LF)	646	0 %	0	53 %	341	46 %	299	0 %	0	1 %	7
UNIT0	210/3	R/Conc Pier Wall	(LF)	30	0 %	0	0 %	0	100 %	30	0 %	0	0 %	0
UNIT0	217/3	Other Mtl Abutment	(LF)	59	92 %	52	9 %	7	0 %	0	0 %	0	0 %	0
UNIT0	311/3	Moveable Bearing	(EA)	18	0 %	0	0 %	0	100 %	18	0 %	0	0 %	0
UNIT0	313/3	Fixed Bearing	(EA)	18	0 %	0	0 %	0	100 %	18	0 %	0	0 %	0