

STRUCTURE NO. 01061

ROUTE 67
over
LITTLE RIVER
SEYMOUR

Above & Underwater Inspection
on
10/23/06

Inspected by McLaren - 51
for Area 8

<u>TEAM:</u>	Forwarded to Senior	Sandra Dumas	Date	12/15/06
<u>SENIOR:</u>	Reviewed by Senior	Sandra Dumas	Date	1/25/07
	BMM Required		Yes	
	Town Bridge		No	
	Rating <= 5 (Items 58,59,60 or 62)		Yes	
	Forwarded to Supervisor	Sandra Dumas	Date	1/25/07
	Forwarded to "To Be Copied Drawer"	<input type="checkbox"/>	Date	
	Date BRI-19 Entered		1/27/07	
<u>SUPERVISOR:</u>	Reviewed by Supervisor	Sandra Dumas	Date	2/9/07
<u>SUPPORT:</u>	Date Copies Made	2/9/07	BMM No	07-042

NBI: Yes

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

subject: BMM No. 07-042
Bridge No. 01061
Route 67 over Little River
Seymour

MEMORANDUM

date: February 9, 2007

to: Mr. Charles A. Drda
Transportation Maintenance Director
Bureau of Engineering and Highway
Operations

Sandra A. Dumas
from: Sandra A. Dumas
Transportation Supervising Engineer
Bridge Safety and Evaluation
Bureau of Engineering
and Highway Operations

Attached are two copies of our most recent inspection report for the subject structure. The following deficiencies were found:

1. The bituminous ramp at the southeast corner of the bridge sidewalk is cracked, breaking up, and exhibits potholes up to 1.5 feet long x 3 inches wide x 1.5 inches deep. There are other deficiencies causing the concrete filled grid sidewalk to be rated poor (4).
2. Both the asphaltic plug joints over the abutments exhibit depressed areas up to ½ inch deep, heaved/pushed areas up to 1 ¼ inches high and minor adhesion cracking with active leakage noted.
3. There is one broken weld at the utility support bracket connection to the sidewalk stringer between floorbeams 16 and 17, leaving the bracket unsupported at this side.

Please direct persons under your jurisdiction to:

1. Repair ramp at southeast corner.
2. Repair joints (160 linear feet).
3. Repair connection (1 location).

Items 1 and 2 should be considered Priority D. The remaining item should be considered Priority E. There may be other deficiencies which are considered routine maintenance and should be corrected.

All repairs shall be performed utilizing appropriate, approved materials and tried and proven methods unless otherwise specified.

If you have any questions concerning this matter, please contact me at (860) 594-2072. Please notify this office when the work has been completed.

Attachments

W. Kristoff/wmk

cc: Joseph J. Obara
Robert P. Zaffetti – Sandra A. Dumas – Ned T. Statchen
McLaren – Baker Engineering
Team 8

CLASSIFICATION	
112) NBIS Bridge Length	Yes
104) Highway System	0 Off System
26) Functional Class	16 Urban Minor Arterial
100) Defense Highway	1 Defense Highway
101) Parallel Structure	N No parallel structure exists
102) Direction of Traffic	2 2-way traffic
103) Temporary Structure	
110) Designated National Network	0 Not on national network
20) Toll	3 On Free Road
21) Maintain	1 State Highway Agency
22) Owner	1 State Highway Agency
Report Class	S STATE
37) Historical Significance	5 Bridge is not eligible for National Register

STRUCTURE EVALUATION

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

SHEET ____ OF ____ (INSP. REPORT)

Bridge Number	01061	NBIS Length	
Town Name	SEYMOUR	Yes	110
Facility Carried	ROUTE 67		
Feature Crossed	LITTLE RIVER		

Inspected By: M. ORLOWSKY & D. KORKOSZ

LOAD RATING AND POSTING			
31) Design Load	5	Evaluation Code	L
63) Operating Rating Type	1	Year of Evaluation	2002
64) Operating Rating	56.9	70) Bridge Posting	5
65) Inventory Rating Type	1	41) Structure Status	A
66) Inventory Rating	34.2	Open, no restriction	

WATERWAY			
DrainageBasinCode	6920		
38) Navigation Control	0 No navigation control on waterway		
39) Navigation Vert Clr.	0	40) Navigation Horiz Clr.	0
116) Vert-Lift Brg Nav Min			
111) Pier Abutment Protection			

CONDITION		APPRAISALS	
	Rating	By	
58) Deck	7	T MJS	67) Structure Evaluation
59) Superstructure	5	4 MJS	68) Deck Geometry
60) Substructure	6	5 MJS	69) Under Clear Vert & Horiz
61) Channel & Chan. Protection	5	5 MJS	71) Waterway Adequacy
62) Culverts	N	N MJS	72) Approach Rdwy Alignment
			113) Scour Critical

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

Items 58 Thru 72 Checked By: George Anis

36) Traffic Safety Features:

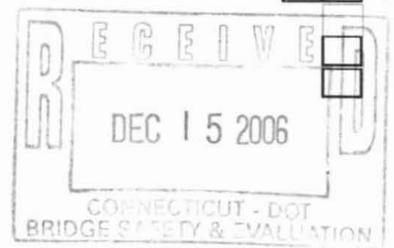
A) Bridge Railings	1	1
B) Transitions	0	0
C) Approach Guardrail	1	0
D) Approach Guardrail End	1	0

POSTED SIGNS & UTILITIES			
Other Posted Signs 1			
Other Posted Signs 2			
Actual P.L. Single Unit Truck	tons	Actual P.L. 4Axle Truck	tons
Rec. P.L. Single Unit Truck	tons	Rec. P.L. 4Axle Truck	tons
Actual P.L. Semi-Trailer Truck	tons	Actual P.L. 3S2 Truck	tons
Rec. P.L. Semi-Trailer Truck	tons	Rec. P.L. 3S2 Truck	tons
Rec. P.L. All Vehicles	tons	Actual P.L. All Vehicles	tons
Posted Vert Clearance On Bridge	ft in		
Posted Vert Under Clearance	ft in		
Posted Speed Limit	30 mph		
Utility			
Utility	2 Water		
Utility	4 Telephone		

OTHER FEATURES			
Fence Required	No	Barrel Ladder	No
Fence Present	No	Stand Pipes	No
Fence Height	0.0 ft	Cat Walks	No
Fence Type		Movable Inspection System	No
Fence Material		Loose Concrete Checked?	No
Fence Top Type			

INSPECTION COMMENTS	
Proposed Next Indepth Insp Year	2012
Senior Supervisor	pawlikowskid kozlowskijc

REVIEWED BY George Anis Date 12/13/06



Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 01061

Agency ID: 01061

Sufficiency Rating: 86.0

IDENTIFICATION

State 1: 09 Connecticut Struc Num 8: 01061
 Facility Carried 7: ROUTE 67 Location 9: 0.3 MI WEST OF ROUTE 8
 Rte.(On/Under)5A: Route On Structure Rte. Signing Prefix 5B: 3 State Hwy
 Level of Service 5C: 1 Mainline Rte. Number 5D: 00067
 Directional Suffix 5E: 0 N/A (NBI) % Responsibility : 0
 SHD District 2: 04 County Code 3: New Haven
 Place Code 4: SEYMOUR Mile Post 11: 26.350 mi
 Feature Intersected 6: LITTLE RIVER
 Latitude 16: 41d 23' 48" Longitude 17: 073d 04' 48"
 Border Bridge Code 98: Unknown (P)
 Border Bridge Number 99: NA

INSPECTION

Frequency 91: 24 months Inspection Date 90: 10/23/2006 Next Inspection: 10/23/2008
 FC Frequency 92A: 24 months FC Inspection Date 93A: 10/23/2006 Next FC Inspection: 10/23/2008
 UW Frequency 92B: 24 months UW Inspection Date 93B: 10/23/2006 Next UW Inspection: 10/23/2008
 SI Frequency 92C: NA SI Date 93C: NA Next SI: NA
 Element Frequency: 24 months Element Inspection Date: 10/23/2006 Next Elem. Insp. Due: 10/23/2008

CLASSIFICATION

Defense Highway 100: 1 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: 14 Urban Other Princ
 Historical Significance 37: 5 Not eligible for NRHP
 Owner 22: 1 State Highway Agency
 Custodian 21: 1 State Highway Agency

STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 0 Number of Spans Main Unit 45: 1
 Main Span Material/Design 43A/B:
 3 Steel 03 Girder-Floorbeam
 Deck Type 107: 1 Concrete-Cast-in-Place
 Wearing Surface 108A: 6 Bituminous
 Membrane 108B: 1 Built-up
 Deck Protection 108C: None

CONDITION

Deck 58: 7 Good Super 59: 4 Poor Sub 60: 5 Fair
 Culvert 62: N/A (NBI) Channel/Channel Protection 61: 5 Bank Prot Eroded

LOAD RATING AND POSTING

Inventory Rating Method 65: 2 AS Allowable Stres Operating Rating Method 63: 2 AS Allowable Stress
 Inventory Rating 66: HS32.5 Operating Rating 64: HS51.8
 Design Load 31: 5 MS 18 (HS 20) Posting 70: 5 At/Above Legal Loads
 Posting status 41: A Open, no restriction

AGE AND SERVICE

Year Built 27: 1950 Year Reconstructed 106: 1982
 Type of Service on 42A: 5 Highway-pedestrian
 Type of Service under 42B: 5 Waterway
 Lanes on 28A: 2 Lanes Under 28B: 0 Detour Length 19: 0.0 mi
 ADT 29: 20,400 Truck ADT 109: 5 % Year of ADT 30: 2005

APPRAISAL

Bridge Rail 36A: 1 Meets Standards Approach Rail 36C: 1 Meets Standards
 Transition 36B: 1 Meets Standards Approach Rail Ends 36D: 0 Substandard
 Str. Evaluation 67: 5 Deck Geometry 68: 5 Above Tolerable
 Underclearance, Vertical and Horizontal 69: N Not applicable (NBI)
 Waterway Adequacy 71: 7 Above Minimum Approach Alignment 72: 7 Above Min Criteria
 Scour Critical 113: 8 Stable Above Footing

GEOMETRIC DATA

Length Max Span 48: 106.0 ft Structure Length 49: 113.0 ft
 Curb/Sdwk Width L 50A: 0.0 ft Curb/Sidewalk Width R 50B: 7.0 ft
 Width Curb to Curb 51: 40.6 ft Width Out to Out 52: 44.1 ft
 Approach Roadway Width 32: 40.0 ft Median 33: 0 No median (w/ shoulders)
 Deck Area: 5,774. sq ft
 Skew 34: 60.00 ° 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: \$ 1,000 Type of Work 75: 38 Other Structural
 Roadway Cost 95: \$ 1,000 Length of Improvement 76: 0.3 ft
 Total Cost 96: \$ 2,000 Future ADT 114: 9,200
 Year of Cost Estimate 97: 2000 Year of Future ADT 115: 2019

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
0	29/3	Steel Deck/Conc Grid	(SF)	4,983	100 %	4,983	0 %	0	0 %	0	0 %	0	0 %	0
0	58/3	Other Sidewalk	sq.ft	791	0 %	0	0 %	0	0 %	0	100 %	791	0 %	0
0	107/3	Paint Stl Opn Girder	(LF)	217	77 %	167	23 %	50	0 %	0	0 %	0	0 %	0
0	113/3	Paint Stl Stringer	(LF)	217	0 %	0	0 %	0	74 %	160	24 %	51	3 %	6
0	152/3	Paint Stl Floor Beam	(LF)	620	100 %	620	0 %	0	0 %	0	0 %	0	0 %	0
0	215/3	R/Conc Abutment	(LF)	204	90 %	184	10 %	20	0 %	0	0 %	0	0 %	0

Structure Inventory and Appraisal Sheet (English Units)

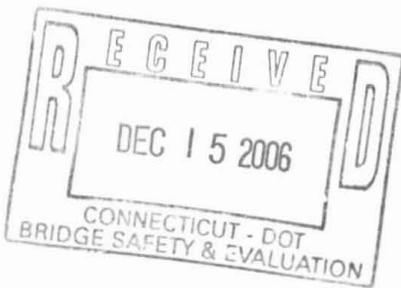
Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
0	305/3	Asphaltic Plug Joint	(LF)	161	81 %	131	19 %	30	0 %	0	0 %	0	0 %	0
0	310/3	Elastomeric Bearing	(EA)	18	100 %	18	0 %	0	0 %	0	0 %	0	0 %	0
0	311/3	Moveable Bearing	(EA)	4	0 %	0	100 %	4	0 %	0	0 %	0	0 %	0
0	314/3	Pot Bearing	(EA)	4	100 %	4	0 %	0	0 %	0	0 %	0	0 %	0
0	330/3	Metal Rail Uncoated	(LF)	217	50 %	109	50 %	109	0 %	0	0 %	0	0 %	0
0	361/3	Scour Smart Flag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0
0	363/3	Section Loss SmFlag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0

COMBINED UNDERWATER AND ROUTINE INSPECTION



BRIDGE NO. 01061
ROUTE 67 OVER LITTLE RIVER
SEYMOUR, CONNECTICUT
OCTOBER 23, 2006

BRIDGE SAFETY INSPECTION STATE PROJECT NO. 170-2687



Prepared by:



116 Washington Avenue, North Haven, CT 06473
100 Snake Hill Road, West Nyack, NY 10994

Baker

2096B Silas Deane Hwy
Rocky Hill, CT 06067

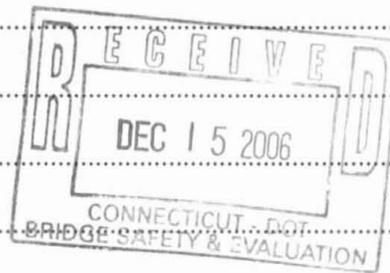
Structure No. 01061 Town Seymour

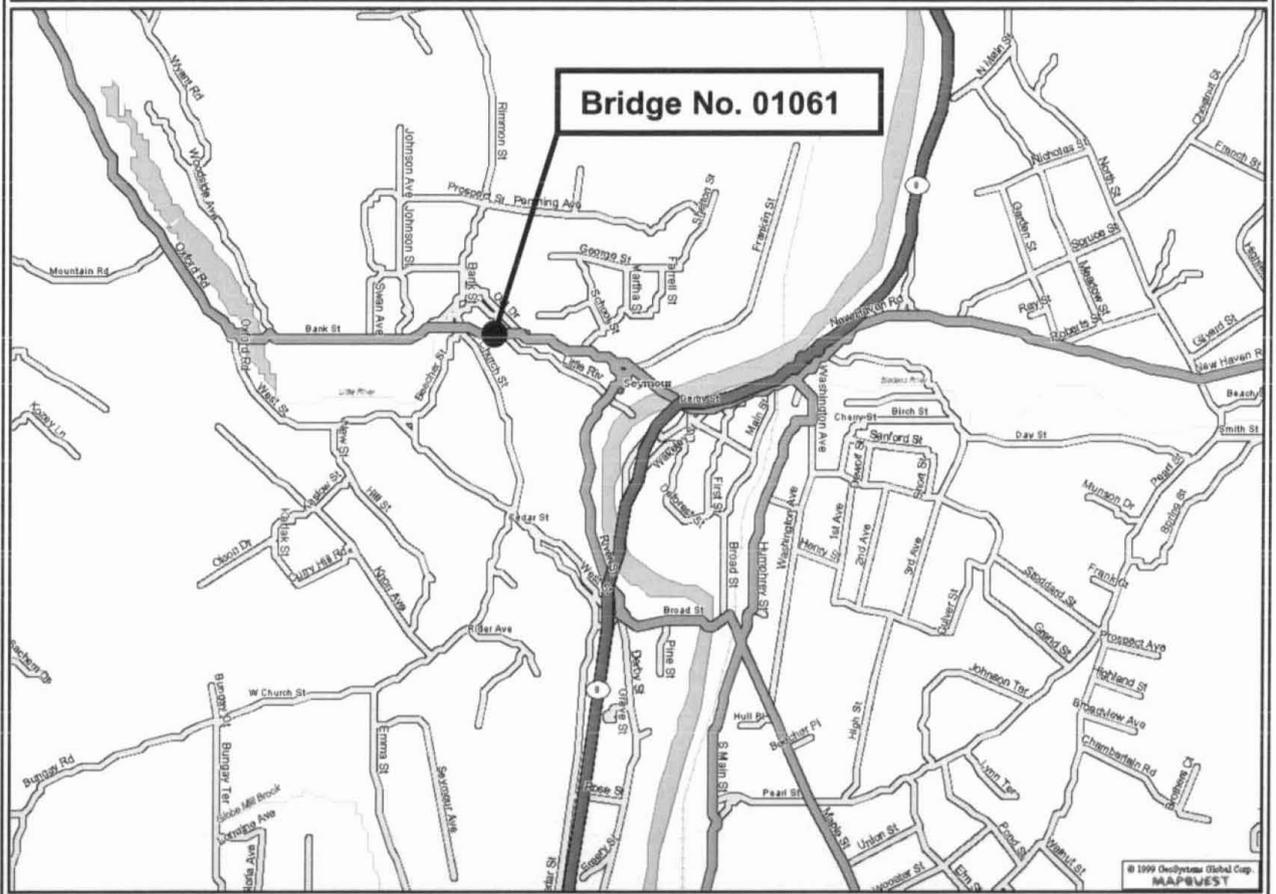
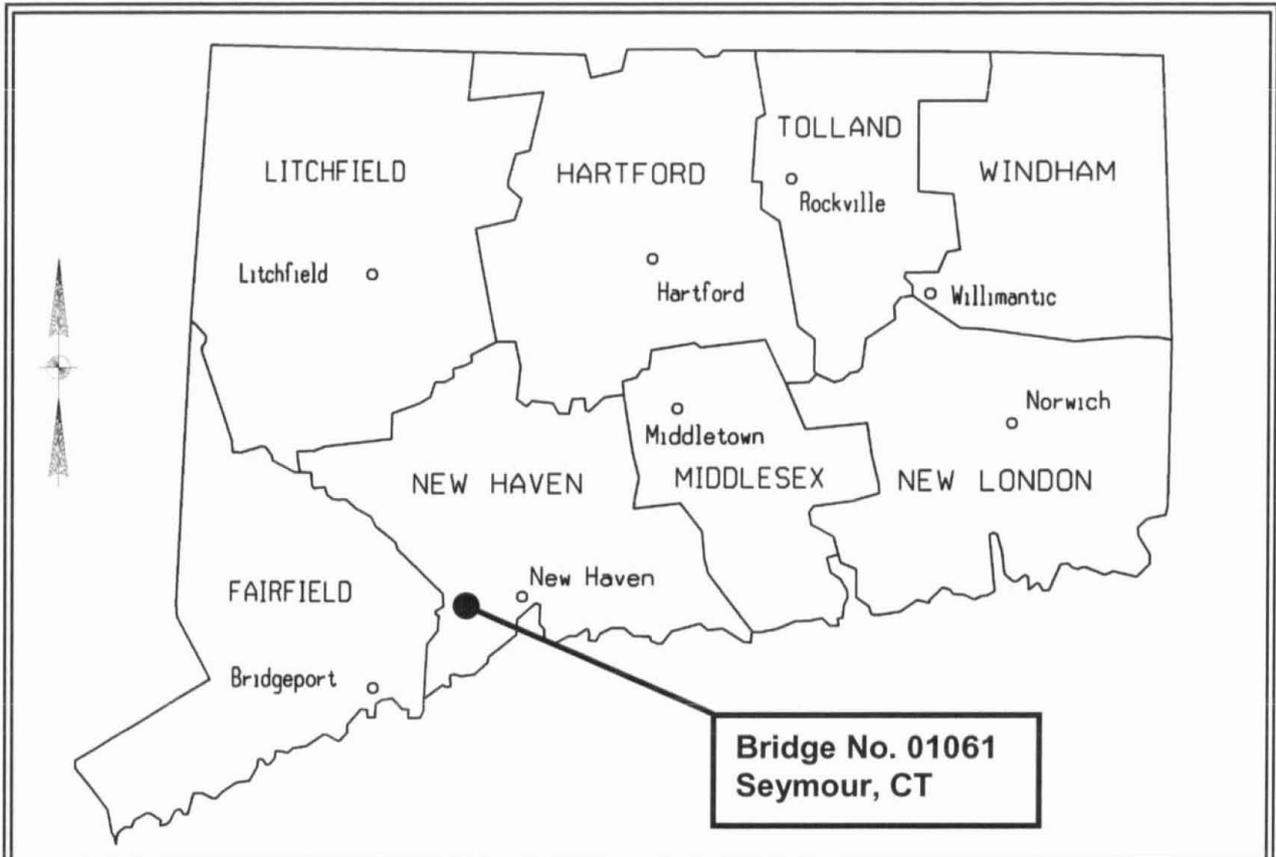
Inspectors Baker Engineering & McLaren (M. Orłowski/D. Korkosz) Date: 10-23-06

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BRI-25, Under Entry SI&A Form	--
BRI-39, RR Bridge SI&A Form	--
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BRIDGE LOCATION PLAN

Executive Summary

Bridge No. 01061 carries Route 67 over Little River in Seymour, CT. The bridge consists of a single span steel thru-girder/floorbeam superstructure supported by concrete abutments. The bridge has an overall length of 113 feet, a curb to curb measurement of 40.6 feet and was originally constructed in 1950 and rehabilitated in 1982. According to information on file at ConnDOT, the bridge has an inventory load rating capacity of 34 tons for an AASHTO HS loading. Section losses noted this inspection along the steel floorbeams may warrant re-analysis. The bridge was found to be in poor condition during a routine inspection completed in November 2006.

List of deficiencies and repair recommendations:

Deck:

1. The underside of the partially filled concrete grid deck exhibits random areas of moderate to heavy rust and random peeling paint. No loss of section was noted along the bearing bars. No repairs required at this time.
2. The concrete approach curbs at the southeast corner of the bridge exhibit several areas of severe spalling/scaling, up to full height x full width x 7.5' long. Repair approach curbs (¼ cubic yard).
3. The top of the concrete filled grid sidewalk exhibits scaling and delamination of the top 1/2" of concrete, exposing the steel grating below which exhibits surface rust. The bituminous ramp at the southeast corner of the bridge is cracked, breaking up, and exhibits potholes up to 1.5' long x 3" wide x 1.5" deep. The southwest bituminous ramp exhibits a 3.5' long x 4" wide x up to 3" deep pothole and there is also a 4" x 3" area of missing concrete in the sidewalk adjacent to the ramp with one broken longitudinal grating bar. Both these areas are not in the traveled portion of the walkway. The underside of the sidewalk exhibits areas of heavy to laminated rust along the bottom flanges of the bearings bars with areas of 1/16" section loss and areas of up to full width x 80% loss of bottom flange along the south 1.5' of the sidewalk. The sidewalk is bowed upwards at the southwest corner in an area up to 4' long x full width. The sidewalk does not bear on the sidewalk stringers and backwall at this area with gaps up to 4.25". Repair potholes/holes/bowed areas of sidewalk (40 square feet). Consider replacing the sidewalk (791 square feet).
4. The coupling/splice bolts (nine at each splice) for the water main exhibit heavy laminated rust and up to 75% section loss on up to 3 bolts per splice. In addition, at the splice in the fifth sidewalk panel from the west abutment, up to 1' of the pipe flanges at the splice and two splice bolts exhibit up to 100% section loss. Finally, there are a total of five hangers that do not support the water main, four of which are consecutive and near the east end of the bridge. Repair splice bolts (20 each) and hanger connections (5 each).
5. Both the asphaltic plug joints over the abutments exhibit depressed areas up to 1/2" deep, heaved/pushed areas up to 1.75" high and minor adhesion cracking. Both joints also exhibit active leakage. Repair joints (160 linear feet).

Superstructure:

1. The bearings exhibit isolated areas of laminated and impacted rust. The west anchor bolt is sheared off for floorbeam 4 over the west abutment. Replace anchor bolt (1 location).

Executive Summary

2. The sidewalk stringers exhibit areas of laminated rust with loss, with the worst loss locations along the south steel channel. The top flange of this channel exhibits areas of heavy rust and up to 1/2" loss of width with knife edging. The bottom flange of the channel exhibits knife edging up to 1" wide and random perforations up to 1/2" wide x 1' long. Continue to monitor these conditions. Consideration should be given to replacing the south stringer (108 linear feet).
3. The inside faces of the main girder webs and stiffeners exhibit areas of laminated rust with up to 8" high x 1/8" deep (isolated areas up to 1/4" deep) section losses just above the curbs. Continue to monitor this condition.
4. The original floorbeams exhibit painted over section losses to the flanges and webs. Maximum section loss to the webs in shear areas is estimated to be 6% and maximum section losses to the top and bottom flanges in areas of high moment were found to be 18% and 13%, respectively. The third knee brace from the east abutment along the south elevation of girder 1 exhibits a rusted through hole up to 2.5" x 3.5" in one flange and 1/16" - 1/8" remaining x up to 2" high along the other flange, just above the curb line. Provide repair plates at loss locations if re-evaluation of structure warrants strengthening of the floorbeams (7 locations). Rating lowered from "5" to "4" due to pitting losses along the floorbeams.
5. There is one broken weld at the utility support bracket connection to the sidewalk stringer between floorbeams 16 and 17, leaving the bracket unsupported at this side (no change). Repair connection (1 location).

Substructure:

1. Both abutments exhibit full height cracks up to 1/4" wide, isolated hollow areas up to 4' x 3.5' and isolated spalls up to 1' diameter x 1" deep with exposed rebar. The west abutment stem is horizontally offset 1/8" to 3/16" along the crack at the top of the bridge seat. Continue to monitor these conditions. Rating lowered from "6" to "5".
2. The north end of the east abutment footing is exposed up to 0.6' over 20' long with no significant deficiencies noted along the footing. Install additional rip-rap at this location (2 cubic yards).

Channel:

1. The mudlines along both abutments exhibit general degradation (scour) since the last inspection, up to 1.4'. See item #2 above under Substructure.
2. Several random areas of man-made debris exist throughout the channel, mostly consisting of shopping carts. Remove debris (10 cubic yards).
3. Lateral migration of the upstream channel and sand bar/island at the upstream end near the west abutment restrict the channel and direct the flow towards the north end of the east abutment (location of exposed abutment footing). Continue to monitor these conditions.

Approaches:

1. Both approach pavements exhibit random cracking up to 1" wide. Seal cracks (100 linear feet).
2. The northeast approach guide rail exhibits a 10" x 3.5" tear near the guide rail end and the southeast guide rail exhibits a 9" x 1" tear. Repair sections of rail (2 linear feet).

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Connecticut Department of Transportation UNDERWATER INSPECTION

BRI-59 Form

Bridge No: 01061 Date Inspected: 10/23/2006

Job Number: 170-2687

Client: Connecticut D.O.T.

Route: 000067

Mile point: 26.35

City: SEYMOUR

Feature Crossed: LITTLE RIVER

State: CT

Inspector: D. Korkosz

Assistants: B. Fischer

Time Arrived: 11:45 AM

Time Departed: 4:30 PM

Time In Water: 12:30 PM

Time Out of Water: 3:00 PM

Type of Inspection: Routine

Year built: 1950

Total Length: 000113

No. Spans: 1

Bridge Type: Steel built-up plate girders

Total Number of Piers: 0

Piers in the Water: 0

Type of Piers: N/A

Abutments: Reinforced concrete.

Bottom Composition: Sand and silt with up to 4.0' penetration into the streambed.

Previous U/W Insp: 9/17/2003

Marine Growth: Light algae

Max. Water Depth: 5.4'

Max. Depth at Pier: 5.4'

Current Strength: Negligible

U/W Visibility: 5'

Type of Water: Fresh

Access to Bridge: Shore

Remarks:

Inspection Equipment

Number of Boats: 0

RR Protection: No

Boat Size: 0

Equipment Comments:

Dive Station: Yes

Inspected by: *[Signature]*

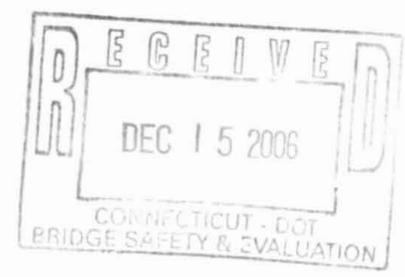
Date: 12/14/06

Inspected by: *[Signature]*

Date: 12/12/06

D.O.T. reviewed by: *Sandra A Dumas*

Date: 1/25/07



Connecticut Department of Transportation
Bridge Inspection Report BRI-18

8/40

BRIDGE #: 01061

INSPECTION DATE: 10/23/2006

58. DECK

OVERALL RATING 7

PAINT	7	See "Railing" item above. Less than 10% of painted surfaces exhibit deterioration.
FENCE	N	
DRAINS	8	PVC weeps exhibit no deficiencies. Rating raised from "7" to "8".
LIGHTING STANDARD	N	
UTILITIES TYPE/SIZE	4	Water main under the sidewalk: Water main exhibits areas of moderate to heavy surface rust. The coupling/splice bolts (nine at each splice) exhibit heavy laminated rust and up to 75% section loss on up to 3 per splice. In addition, at the splice in the fifth sidewalk panel from the west abutment, up to 1' of the pipe flanges at the splice and two splice bolts exhibit up to 100% section loss. Finally, there are a total of five hangers that do not support the water main, four of which are consecutive and near the east end of the bridge. See "Welds" item for the condition of the utility support bracket welds. See sheet 15 and photo 14. There is a large bank of PVC conduits below the sidewalk. Two of these conduits are separated at the east abutment, but no wires are inside. See sheet 15.
CONSTRUCTION JOINTS	N	
EXPANSION JOINTS	5	Asphaltic plug joints: The west abutment exhibits depressed areas up to 1/2" deep and heaved/pushed areas up to 1.75" high, mostly along the south end of the joint. The east abutment joint exhibits a 2' long section of heaved and segregated material, up to 1" high, and a 2' long x 1/8" wide adhesion crack. Both joints exhibit active leakage. See sheet 13 and photo 15.

59. SUPERSTRUCTURE

OVERALL RATING 4

	RATING	
BEARING DEVICES	6	Pot bearings for the girders exhibit light rust and evidence of movement. The elastomeric bearings (with steel sole and masonry plates) for the floorbeams are typically in good condition. The north anchor bolt is sheared off for floorbeam 4 over the west abutment. There is a steel wedge in place between the masonry plate and pedestal for floorbeam 7 at the west abutment. There is laminated rust along the underside of the sole plate and moderate rust along the masonry plate for floorbeam 9 at the west abutment. The bearings for the sidewalk stringers exhibit light to moderate rust. The bearing at the north sidewalk stringer exhibits impacted rust between the stacked plates (3" total height for the plates and the impacted rust). See sheet 15 and photos 16 & 21.
STRINGERS	4	Sidewalk stringers: The north sidewalk stringer is a rolled W-shape and exhibits laminated rust and approximately 1/16" deep section loss along the top flange at the west end of the bridge. The south sidewalk stringer is a steel channel. The top flange of this channel exhibits areas of heavy rust and up to 1/2" loss of width with knife edging. The bottom flange of the channel exhibits knife edging up to 1" wide and random perforations up to 1/2" wide x 1' long. See sheet 15 and photo 12.
GIRDERS	6	Steel thru-girders: Girders exhibit random areas of light to moderate rust. The inside faces of the webs and stiffeners exhibit areas of laminated rust with up to 8" high x 1/8" deep (isolated areas up to 3/16" deep) section losses just above the curbs. The south elevation of the girder 2 web and stiffeners exhibits painted over section losses up to 1/4" deep x 2" high with random re-occurring rust. Impacted rust fills the gap between the girder 2 and floorbeam 10 bottom flanges ($\pm 3/4"$). See sheets 13 and 15 and photos 17, 18 & 21.
FLOOR BEAMS	4	During rehabilitation, new floorbeams were added at locations throughout the structure. The new floorbeams are in good condition. The remaining original floorbeams exhibit painted over section losses to the flanges and webs. Maximum section loss to the webs in shear areas is estimated to be 6% (floorbeam 16 at the east abutment). Maximum section losses to the top and bottom flanges in areas of high moment were found to be 18% (floorbeam 10) and 13% (floorbeam 8), respectively. Note also that remnants of old stringer connections are still in place along the old floorbeams. The floorbeam knee braces exhibit 1/8" deep section losses just above the curb lines. In addition, the third knee brace from the east abutment along the south elevation of girder 1 exhibits a rusted through hole up to 2.5" x 3.5" in one flange and 1/16" - 1/8" remaining x up to 2" high along the other flange, just above the curb line. The end of the concrete floorbeam cantilever at the southeast corner of the bridge exhibits spalls up to 2.5" deep with exposed rebar. Rating lowered to a "4" based on section 10.5 of CDOT BIM. See sheets 13 and 15-19 and photos 19, 20 & 22.

Connecticut Department of Transportation
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BRIDGE #: 01061

INSPECTION DATE: 10/23/2006

59. SUPERSTRUCTURE		OVERALL RATING 4
TRUSSES-GENERAL	N	
TRUSSES-PORTALS	N	
TRUSSES-BRACING	N	
PAINT	7	Paint is generally in good condition, except below the sidewalk and just above the curb line (less than 10% of painted surfaces exhibit deterioration). Also, see above items.
RUST	6	See above items.
MACHINERY MOV SPAN	N	
RIVETS & BOLTS	8	
WELDS & CRACKS	6	<p>Thru steel plate girders are considered to be fracture critical. Transition welds (fatigue category C) were checked hands-on. Note that a bolted retrofit was installed along the east-most girder 2 bottom flange transition weld due to defects noted in the weld during a previous ultrasonic test. No deficiencies were noted at the horizontal welds along the girder webs in tension zones. There is a broken weld at the top of the vertical stiffener at floorbeam 4 over the west abutment (probably due to construction damage during the past removal of the stringers). See sheet 15 and photos 23 and 24.</p> <p>Utility hanger welds. There is one broken weld at the utility support bracket connection to the north sidewalk stringer between floorbeams 16 and 17, leaving the bracket unsupported at this side. See sheet 15.</p>
TIMBER DECAY	N	
CONCRETE CRACKING	N	
COLLISION DAMAGE	7	The east end of girder 1 exhibits one web stiffener that is slightly bent due to collision/plow damage (no change). There is also one vertical stiffener that is bent at the top at floorbeam 4 over the west abutment, probably due to past construction damage. See sheet 15.
MEMBER ALIGNMENT	8	
DEFLECT. UNDER LOAD	N	Normal.
VIBR. UNDER LOAD	N	Normal.
STAND PIPES	N	None.
BARREL LADDERS	N	None.
ARE BARREL LADDERS OSHA COMPLIANT?		NA

60. SUBSTRUCTURE	Ratings lowered from "6" to "5" due to up to 1/4" wide vertical cracking in stems and backwalls with some differential movement.	OVERALL RATING 5
	<small>RATING</small>	
ABUTMENTS-STEM	5	<p>West abutment: The west abutment stem exhibits a 4.5' x 2' hollow area with light efflorescence below the sidewalk. In addition, there is a 4' x 3.5' hollow area with random spalls with exposed rebar up to 1' diameter x 1" deep. There is also spalling up to 1" deep x 8" diameter around a weep drain. The stem exhibits a full height crack up to 1/4" wide that extends into the backwall. The stem is horizontally offset 1/8" - 3/16" along the crack at the top of the bridge seat. There is also moderate scaling along the waterline. See sheet 21 and photo 26.</p> <p>East abutment: The east abutment stem exhibits moderate scaling along the waterline, as well as other random moderate scaling. There is a full height x 1/16" wide vertical crack with efflorescence that extends into the backwall in the north portion of the stem. The south portion of the stem exhibits a 1/8"-1/4" wide full height vertical crack, a short hairline crack, and a 1.2' high x 0.4' wide x 0.3' deep spall. See sheet 22.</p>
ABUTMENTS-BACKWALL	5	West abutment: The west abutment backwall exhibits a full height x 1/4" wide crack that extends from the abutment stem with spalling up to 3" wide x 2" deep along the crack. The backwall below the sidewalk exhibits minor edge spalling, a vertical hairline crack with hollow areas up to 6" away, and a 10" x 8" potential spall. See sheet 21 and photos 16 & 27.

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BRIDGE #: 01061

INSPECTION DATE: 10/23/2006

60. SUBSTRUCTURE Ratings lowered from "6" to "5" due to up to 1/4" wide vertical cracking in stems and backwalls with some differential movement. **OVERALL RATING** 5

		<p>East abutment: There is a full height x 1/16" wide crack in the backwall that extends from the crack in the bridge seat. There is also a 2.5' long diagonal hairline crack with minor edge spalling at the south end of the backwall. See sheet 22.</p>	
ABUTMENTS-FOOTINGS	7	The east abutment footing is exposed along the north end up to 0.6' over 20' long (previously was 0.8' over 6' long). No significant deficiencies noted along the footing (rating raised from "6" to "7"). See sheet 22.	
ABUT.-SETTLEMENT	5	See "Abutments-Stem" item above (full height vertical cracks in stems).	
ABUTMENTS-WINGWALLS	6	The wingwalls exhibit moderate scaling along the waterline. The northwest wingwall exhibits a 1/16"-1/8" wide vertical crack with efflorescence and hollow areas up to 6" away from the crack. See sheets 21-22.	
PIERS/BENTS-CAPS	N		
PIERS/BENTS-PILE BENT	N		
PIERS/BENTS-COLUMN	N		
PIERS/BENTS-FOOTINGS	N		
PIERS/BENTS-SETTLEMENT	N		
EROSION-SCOUR	5	The mudlines along both abutments exhibit general degradation (scour) since the last inspection up to 1.1' and 1.4' respectively at the west and east abutments. The east abutment footing is exposed along the north end up to 0.6' over 20' long (previously was 0.8' over 6' long). Random minor erosion areas along embankments. See sheets 20-22.	
CONCRETE CRACK-SPALL	6	See above items.	
STEEL CORROSION	N		
PAINT	N		
TIMBER DECAY	N		
COLLISION DAMAGE	8		
DEBRIS	7	There are areas of pigeon debris on the abutment seats.	

61. CHANNEL & CHANNEL PROTECTION **OVERALL RATING** 5

	RATING		
CHANNEL SCOUR	5	The mudlines along both abutments exhibit general degradation (scour) since the last inspection up to 1.1' and 1.4' respectively at the west and east abutments. The east abutment footing is exposed along the north end up to 0.6' over 20' long (previously was 0.8' over 6' long). The upstream profile exhibits both minor aggradation and localized scour, up to 0.3' and 2.1' respectively. See sheets 20-22 and photos 28-29.	
EMBANKMENT EROSION	7	Minor erosion areas along the downstream embankments.	
DEBRIS	5	Several random areas of man-made debris throughout channel, mostly consisting of shopping carts. Moderate brush and limbs along channel embankments.	
VEGETATION	7	Moderate to heavy vegetation growth along the embankments with some overhanging the channel. Moderate vegetation growth along the upstream island/sand bar. Rating raised from "6" to "7". See photos 28-29.	
CHANNEL CHANGE	5	See above "Channel Scour" item. Lateral migration of upstream channel and sand bar/island at upstream end near the west abutment restrict the channel and direct the flow towards the north end of the east abutment (location of exposed abutment footing). Spillway at downstream end of structure, perpendicular to southeast wingwall. See sheets 20-22.	
FENDER SYSTEM	N		
SPUR DIKES & JETTIES	N		
RIP RAP	6	Rip-rap at the northeast end only.	

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BRIDGE #:

INSPECTION DATE:

62. CULVERTS & RETAINING WALL **OVERALL RATING**

APPROACH CONDITION **OVERALL RATING**

RATING

APPROACH SLAB Paved over. Rating is based on the condition of the approach pavement.

RELIEF JOINTS

APPROACH GUIDE RAIL The metal beam railing exhibits random scrapes and minor dents. The northeast approach guide rail exhibits a 10" x 3.5" tear near the guide rail end. The southeast guide rail exhibits a 9" x 1" tear. See sheet 13 and photo 30.

APPROACH PAVEMENT The west approach pavement exhibits random cracks, typically less than or equal to 1/8" wide, but isolated cracks are up to 1/2" wide. The east approach pavement along the Route 67 travelway exhibits random cracks up 1/8" - 1/4" wide. However, the east approach pavement at the intersection with Old Drive Road exhibits map cracking up to 1" wide. See sheet 13.

APPROACH EMBANKMENT Mostly covered with leaves.

TRAFFIC SAFETY FEATURES:

BRIDGE RAILINGS Steel MBR continuous across the bridge (off-system bridge).

TRANSITIONS Spacer block does not meet current standards.

APPROACH GUARDRAILS Spacer block does not meet current standards.

APPR. GUARDRAIL ENDS Offsets do not meet current standards.

LOAD POSTING

SINGLE UNIT (TONS)

HS (TONS)

4 AXLE (TONS)

3S2 (TONS)

ADVANCE WARNING Y/N

LEGIBILITY

VISIBILITY/LOCATION

MISC.

MIN VERT. UNDERCLR. ' "

POSTED CLR. UNDER BRIDGE ' "

POSTED CLR. ON BRIDGE ' "

ADVANCE WARNING (Y/N)

SPEED LIMIT (IF ANY) MPH

CHARACTER OF TRAFFIC

ADDITIONAL NOTES

- Bridge ID is legible.
 - Bridge is logged from west to east (girder 1 at the north fascia).
 - Inspected using an inspection boat/platform with step ladder.

ADDITIONAL COMMENTS:

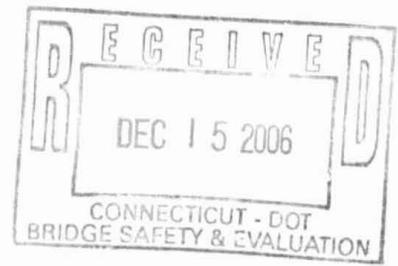
Connecticut Department of Transportation
Bridge Inspection Report BRI-18

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BRIDGE #: 01061

INSPECTION DATE: 10/23/2006

Inspectors' Signatures: 1) *[Signature]* Date: 12/12/06
2) *[Signature]* Date: 12/14/06
3) _____ Date: __/__/__
4) _____ Date: __/__/__
P.E. Signature: *George Smith* Date: 12/13/06
P.E.#: 24536
Reviewed by: *Sandra A Dumas* CDOT Date: 12/25/07



SUPPLEMENTAL SHEET

BRIDGE NO. 1061

DATE: 4/14/01

FIELD ORIGINAL TRANSCRIBED BY: _____

CREW: mjo

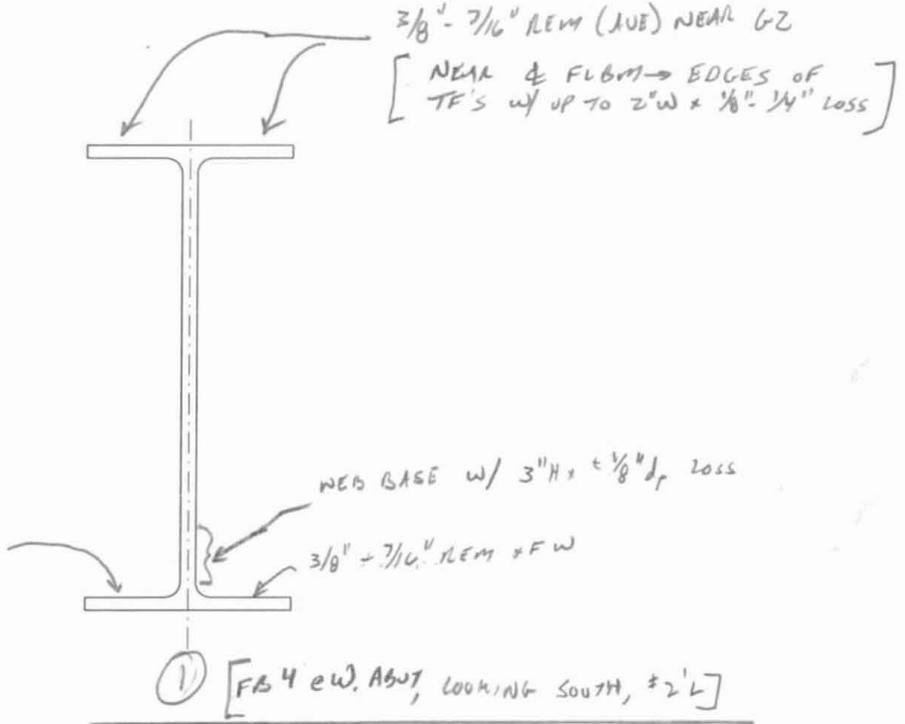
SHEET 16 OF 40

DESCRIPTION: FLBM X-SECTIONS

W21 x 82 ORIG
 WEB = 20.86" x 0.499"
 FLG = 8.962" x 0.775"

WEB LOSS = 4 7/8

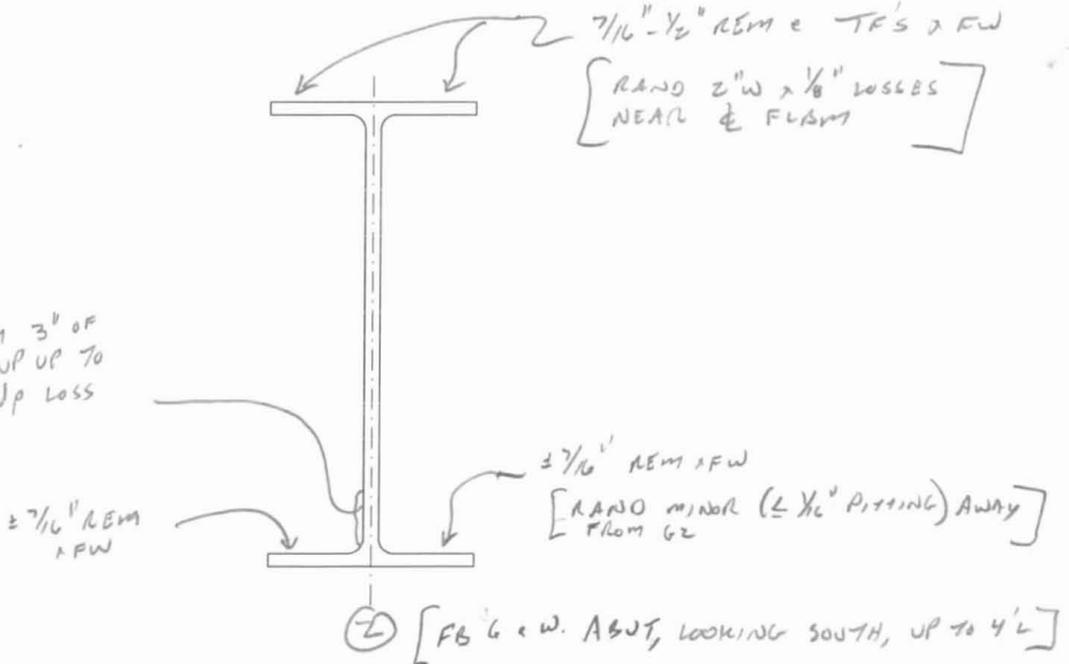
7/16" - 1/2" REM & FW



W30 x 116 ORIG
 WEB = 30" x 0.565"
 FLG = 10.495" x 0.850"

WEB LOSS = 10 7/8

BOTTOM 3" OF WEB UP UP TO 1/16" dp LOSS



UPDATE NO.	DATE	COMPANY	CREW
△			
△			
△			
△			

SUPPLEMENTAL SHEET

BRIDGE NO. 1061

DATE: 11/14/06

FIELD ORIGINAL TRANSCRIBED BY: _____

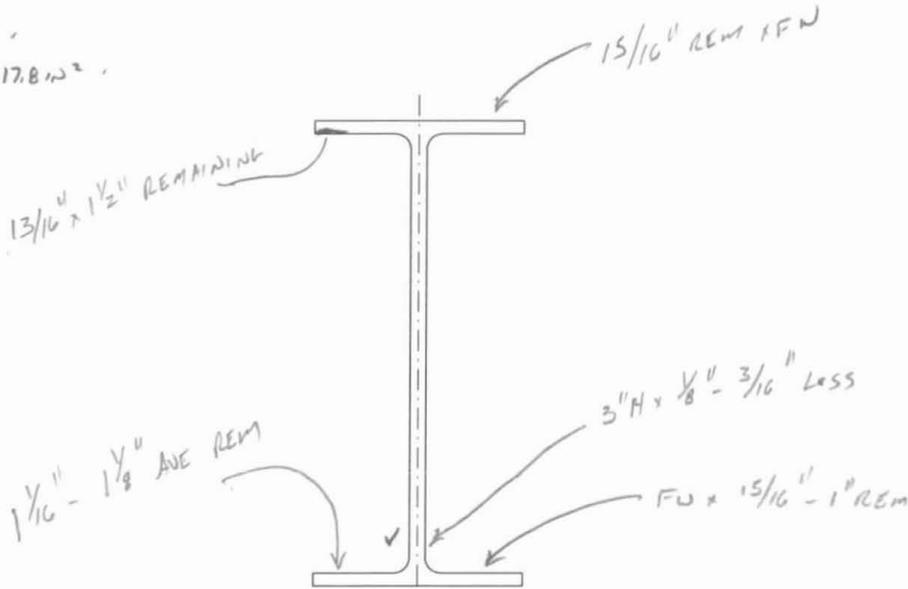
CREW: MTD

SHEET 17 OF 40

DESCRIPTION: FLOWN X-SECTIONS

W30x190 ORIG
 WEB = 30" x 0.720"
 FLG = 15" x 1.188" = 17.822"

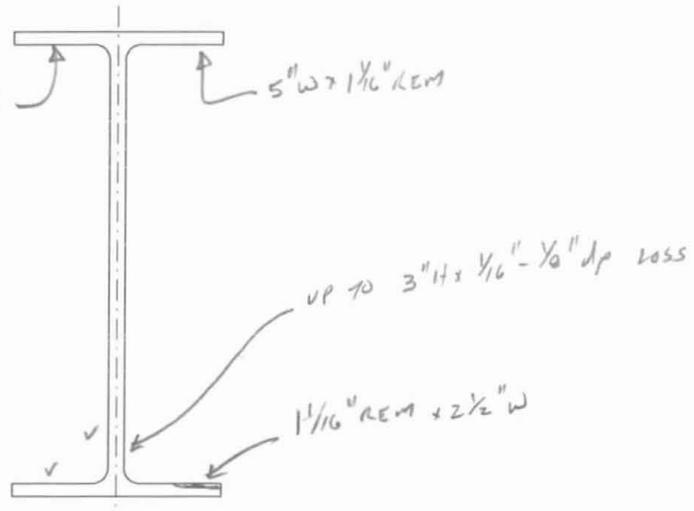
TF LOSS = 147
 BP LOSS = 138



(3) [FB #8, TYP X-SECTION THRU-OUT (MEAS NEAR G2); LOOKING SOUTH]

W33x240 ORIG
 WEB = 33.5" x 0.830"
 FLG = 15.865" x 1.40" = 22.211"

TF LOSS = 187
 BP LOSS = 48



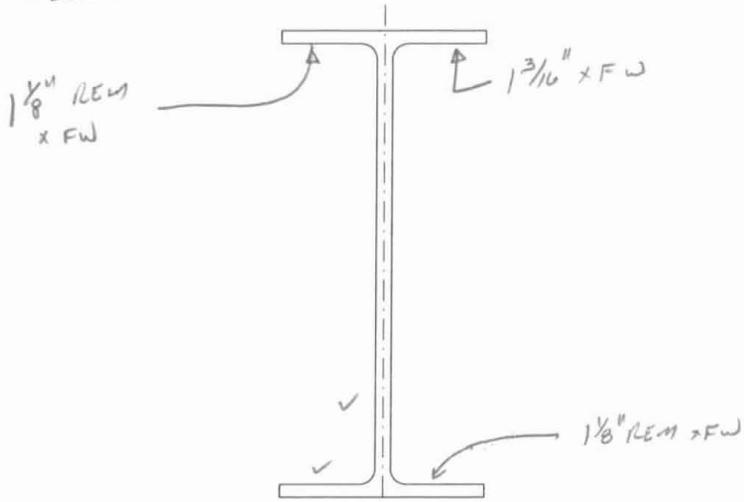
(4) [FB #10, ± 13' FROM G2, LOOKING SOUTH ± SAME ± 21' FROM G2]

UPDATE NO.	DATE	COMPANY	CREW
△			
△			
△			
△			

<h1>SUPPLEMENTAL SHEET</h1>	BRIDGE NO. 1061	DATE: 11/14/06
	CREW: MJD	SHEET 18 OF 40

DESCRIPTION: FLBM X-SECTION

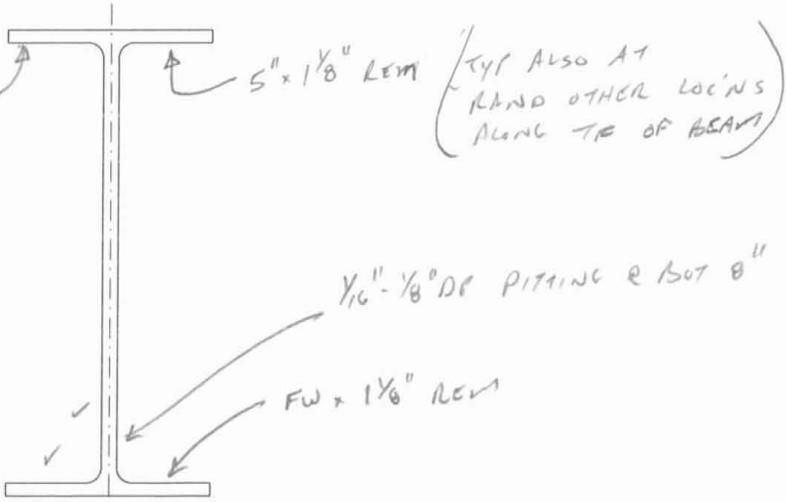
W33 x 240 ORIG
 WEB = 33.5 x 0.83
 FLG = 15.865 x 1.40 = 22.2 in²



TF LOSS = 16%
 BF LOSS = 9%

⑤ [FB #12, ± 15' FROM GZ, LOOKING SOUTH (± 4' L), SIMILAR @ MIDSPAN]

UP TO 3" W x 1/8" LOSS @ U-SIDE TF
 (TYP ALSO AT OTHER RAND LOC'S ALONG BEAM)



W33 x 240 ORIG
 WEB = 33.5 x 0.83
 FLG = 15.865 x 1.40 = 22.2 in²

TF LOSS = 8%
 BF LOSS = 9%

⑥ [FB #14 @ MIDSPAN, ± 8' L, LOOKING SOUTH]

(PHOTO 20)

UPDATE NO.	DATE	COMPANY	CREW
△			
△			
△			
△			

SUPPLEMENTAL SHEET

BRIDGE NO. 1061

DATE: 11/17/06

FIELD ORIGINAL

TRANSCRIBED BY: _____

CREW: MJO

SHEET 19 OF 20

DESCRIPTION: FLBM X-SECTIONS

W 30 X 190 ORIG
 WEB = 30" x 0.720"
 FLG = 15" x 1.188"

15/16" REM > FW 13/16" REM > 4" WIDE

WEB LOSS = 6"

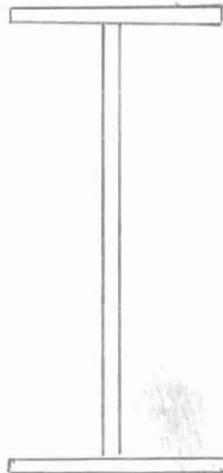
13/16" - 7/8" REM > FW &
 EFL AT BRG;
 MINOR LOSSES AT
 REM LOC'S

10" H x 1/16" - 1/8" dp LOSS

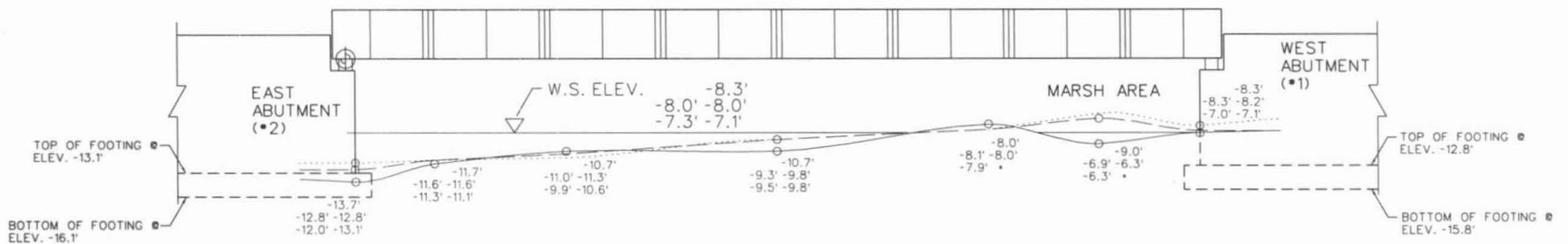
15/16" REM > FW

3 1/2" H x 1/16" -
 1/8" dp LOSS

⑦ [FB 16 @ E. ABUT, ± 0'L, LOOKING NORTH]



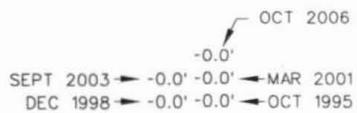
UPDATE NO.	DATE	COMPANY	CREW
△			
△			
△			
△			



NORTH ELEVATION (UPSTREAM PROFILE)

N.T.S.

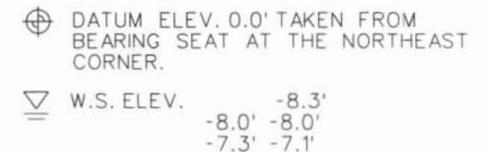
LEGEND FOR BOTTOM ELEVATIONS



LEGEND FOR MUDLINE ELEVATIONS



LEGEND FOR SYMBOLS



• INDICATES NO INFORMATION



BAKER ENGINEERING NY, INC.
 2096-B SILAS DEANE HIGHWAY
 ROCKY HILL, CT 06067
 (860) 563-3044

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 01061
 ROUTE 67 OVER LITTLE RIVER

SEYMOUR

CONNECTICUT

NORTH ELEVATION (UPSTREAM PROFILE)

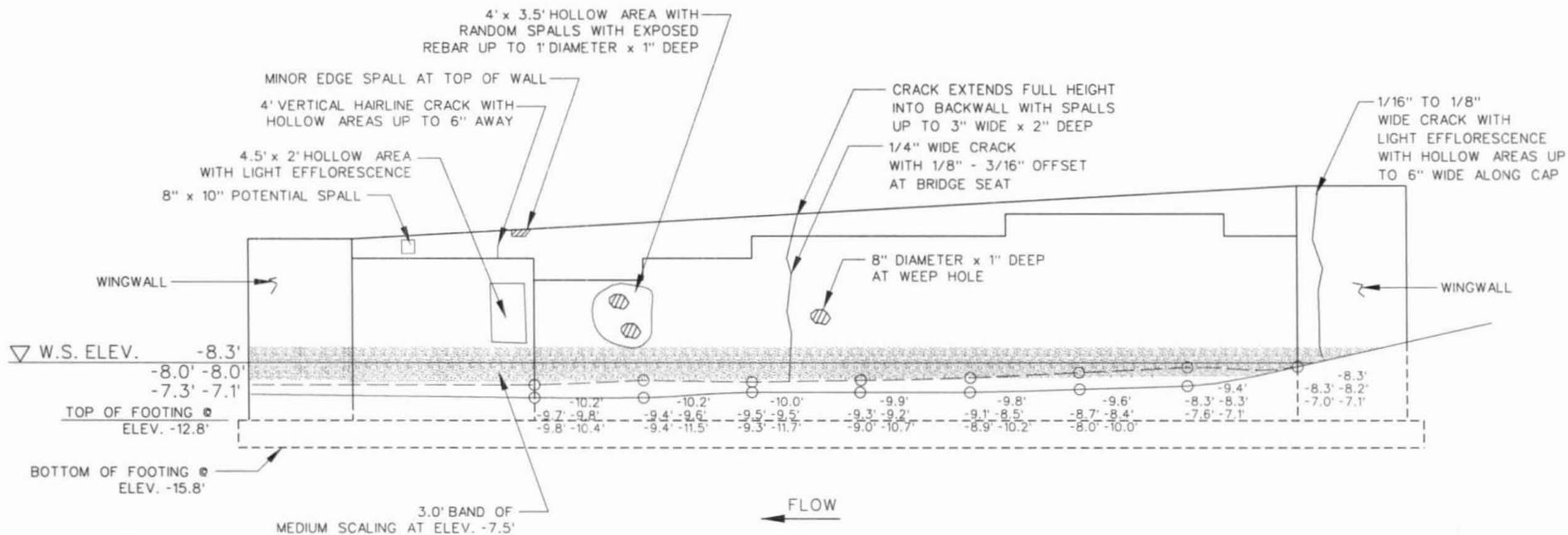
INSPECTED BY: DK
 REVISED BY: CP

SCALE:
 AS SHOWN

DATE OF INSPECTION
 10/23/06

DRAWING NO. 01061B

SHEET 20 OF 40



NOTES:

1. FOOTING ELEVATIONS OBTAINED FROM PREVIOUS UNDERWATER REPORT AND FIELD MEASUREMENTS.
2. WINGWALLS WITH RANDOM FULL HEIGHT HAIRLINE CRACKS WITH EFFLORESCENCE, SLIGHTLY OPEN AT THE CAPS.

WEST ABUTMENT ELEVATION

N.T.S.

LEGEND FOR MUDLINE ELEVATIONS

- OCT 2006
- - - - - SEPT 2003

LEGEND FOR SYMBOLS

- ⊕ DATUM ELEV. 0.0' TAKEN FROM BEARING SEAT AT THE NORTHEAST CORNER.
- ▽ W.S. ELEV. -8.3'
- 8.0' -8.0'
- 7.3' -7.1'

LEGEND FOR BOTTOM ELEVATIONS

- ▲ OCT 2006
- SEPT 2003
- -0.0' -0.0'
- MAR 2001
- DEC 1998
- -0.0' -0.0'
- OCT 1995

• INDICATES NO INFORMATION

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- ▨ SPALL AREA
- ▨ SPALL AREA WITH EXPOSED REBAR
- ▨ MAP CRACKS (MPC) OR HAIRLINE MAP CRACKS (HLMPC)
- ▨ HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HYV, MED OR LT)

Baker

BAKER ENGINEERING NY, INC.
2096-B SILAS DEANE HIGHWAY
ROCKY HILL, CT 06067
(860) 563-3044

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 01061
ROUTE 67 OVER LITTLE RIVER

SEYMOUR

CONNECTICUT

WEST ABUTMENT ELEVATION

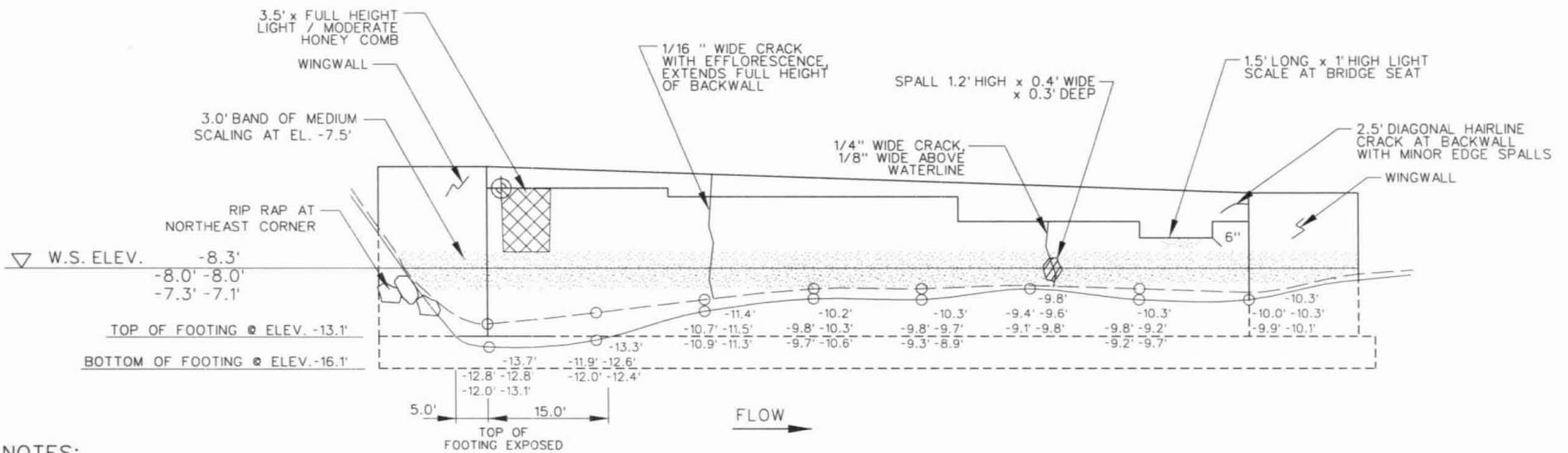
INSPECTED BY: DK
REVISED BY: CP

SCALE:
AS SHOWN

DATE OF INSPECTION
10/23/06

DRAWING NO. 01061C

SHEET 21 OF 40



NOTES:

- 1. FOOTING ELEVATIONS BASED ON FIELD MEASUREMENTS.
- 2. FOOTING IS EXPOSED OVER 20' IN LENGTH.

EAST ABUTMENT ELEVATION

N.T.S.

LEGEND FOR MUDLINE ELEVATIONS

- OCT 2006
- - - SEPT 2003

LEGEND FOR BOTTOM ELEVATIONS

- OCT 2006
- SEPT 2003
- DEC 1998
- MAR 2001
- OCT 1995

* INDICATES NO INFORMATION

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MPC) OR HAIRLINE MAP CRACKS (HLMPC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVT, MED OR LT)

LEGEND FOR SYMBOLS

- DATUM ELEV. 0.0' TAKEN FROM BEARING SEAT AT THE NORTHEAST CORNER.
- W.S. ELEV. -8.3', -8.0', -7.3' -7.1'



BAKER ENGINEERING NY, INC.
2096-B SILAS DEANE HIGHWAY
ROCKY HILL, CT 06067
(860) 563-3044

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 01061
ROUTE 67 OVER LITTLE RIVER

SEYMOUR

CONNECTICUT

EAST ABUTMENT ELEVATION

INSPECTED BY: DK
REVISED BY: CP

SCALE:
AS SHOWN

DATE OF INSPECTION
10/23/06

DRAWING NO. 01061D

SHEET 22 OF 40

PHOTO LOG

Form BRI-13, Rev. 9/97

Bridge Information System	
Image Inventory	
Bridge No. <u>1061</u>	Date <u>11/14/06</u>
Town: <u>SEYMOUR</u>	Photographer: <u>MJO</u>
Carried / Crossed: <u>RT 67 / LITTLE RIVER</u>	
Film Frame #	Image Description
1	IP
2	BR FROM W
3,4	NW TRANS
5	W. ABUT TT
6	W. APPR
7,8	TYP T.O.P (VOID #2)
9.	E APPR
10	UPSTREAM
11	DOWN STREAM
12	SIDEWALK (SOUTH ONLY)
13	SE SIDEWALK TRANS - BIT PATCH BREAKING UP
14	BR FROM EAB
15	N ELEV
16	TEAR c NE CR NEAR ENB
17	S. ELEV
18	W. JOINT, E/B - HEAVED/DEPRESSED
19	G1 KNEE BRACK w/ RTH
20	G1 w/ LAM AUG1 - LOSSES ABOVE CURB
21	TYP G2 WEB LOSS c S. ELEV
22,23	BIT AT SW SIDEWALK TRANS
24	HOLE IN SIDEWALK c SW CORNER
25	RAIL POST LOSSES AT SIDEWALK
26,27	SE APPR CURBS - USE #27 -> SHOWS BRIDGE LOC'D

PHOTO LOG

Form BRI-13, Rev. 9/97

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Bridge Information System	
Image Inventory	
Bridge No. <u>1061</u>	Date <u>11/14/06</u>
Town: <u>SEYMOUR</u>	Photographer: <u>MSD</u>
Carried / Crossed: <u>RT 67 / LITTLE RIVER</u>	
Film Frame #	Image Description
28, 29	TOP U/S / EXAMINE
30	E. ABUT
31	W. ABUT, 1/4" W CRK
32	W. BACKWALL, " " w/ []
33	S END W. ABUT WING HA
34	BRG BARS DO NOT BEAR ON SIDEWALK STR @ SW CORNER
35	FB #4 @ W. ABUT → W AB SHEARDED OFF
36	FB #4 W ELEV - STIFF WELD BROKEN
37	FB #9 BRG @ W. ABUT
38	SIDEWALK - DOES NOT BEAR ON S. SIDEWALK STR, SW CORNER
39	N. SIDEWALK STR - IN B/W BRG BARS
40	SAME AS 38, BUT @ E. SIDEWALK STR, NOT U.A.
41	GAP B/W TOP OF W. MH BACKWALL + SIDEWALK
42	GZ, E-MOST BF TRANS - RUSTED RETROFIT
43, 44	FB #4, W. ELEV / BF
45	JR B/W GIRDER @ FB #10 BF
46	SIDEWALK: CANT @ SE CORNER OF BR.
47/48	" BRG BARS + CHANNEL TF
49	UTIL SPLICE W/ RUSTED OUT PIG/BARS
50	UTIL SUPPORT HANGER NOT IN CONTACT

Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687

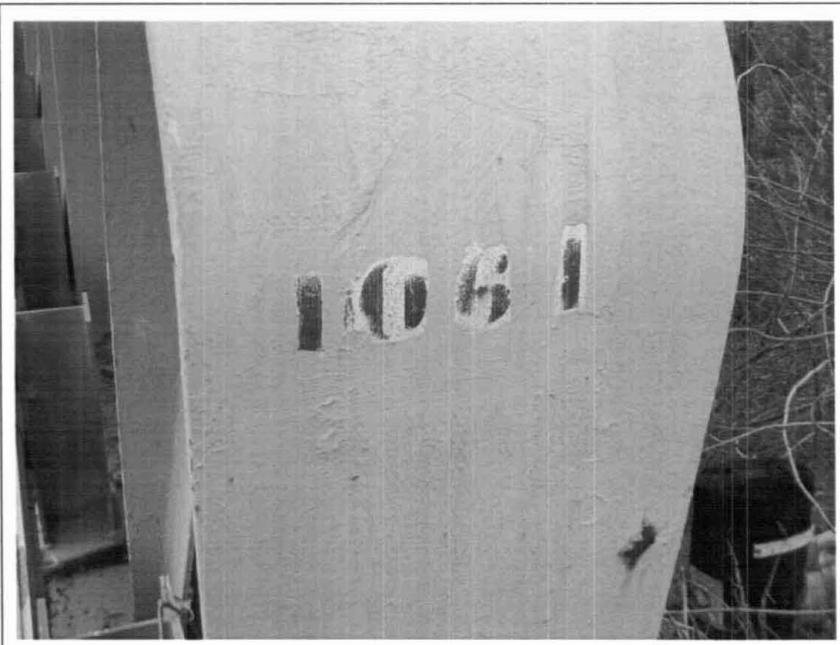
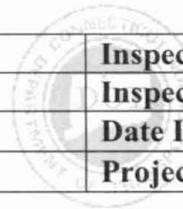


Photo #1:
Description: Bridge ID

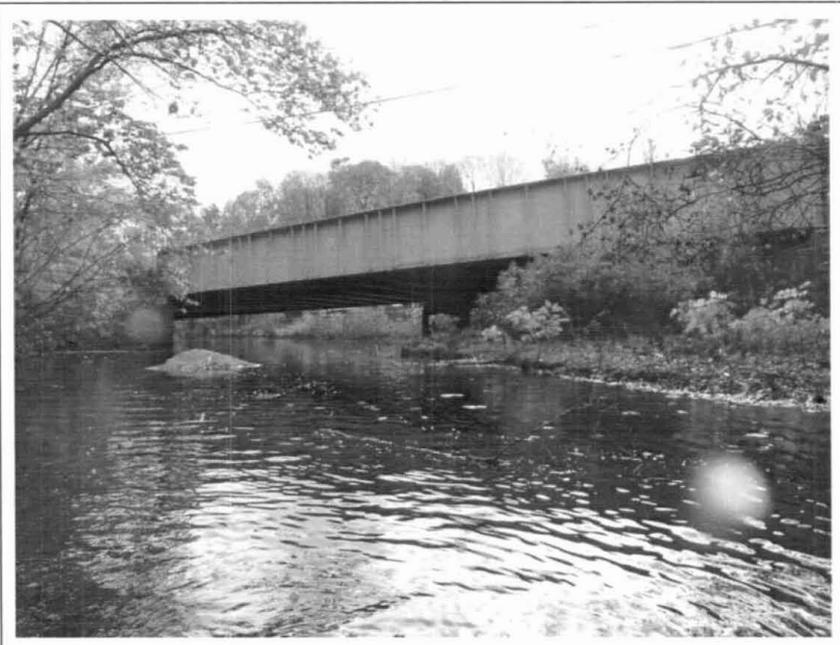


Photo #2:
Description: North elevation.

Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687



Photo #3:
Description: Bridge from the west approach.

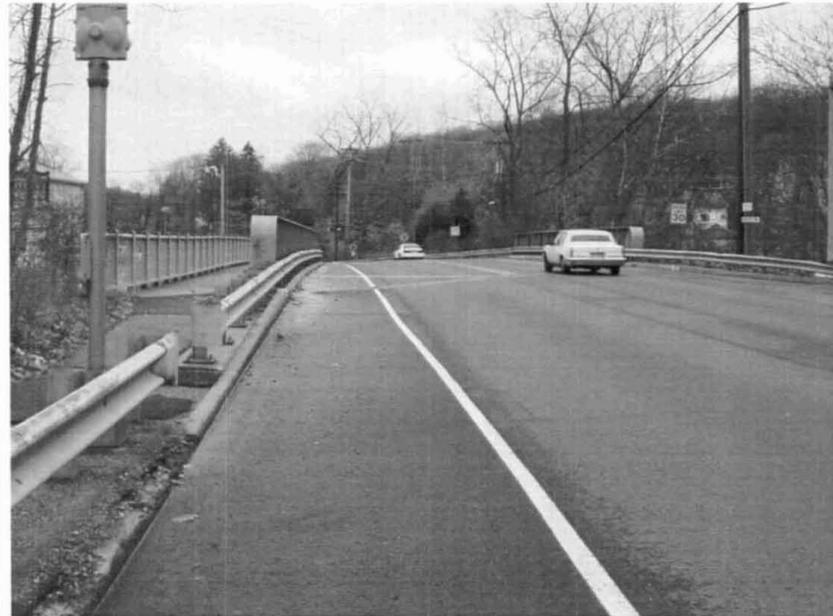


Photo #4:
Description: Bridge from the east approach.

Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687

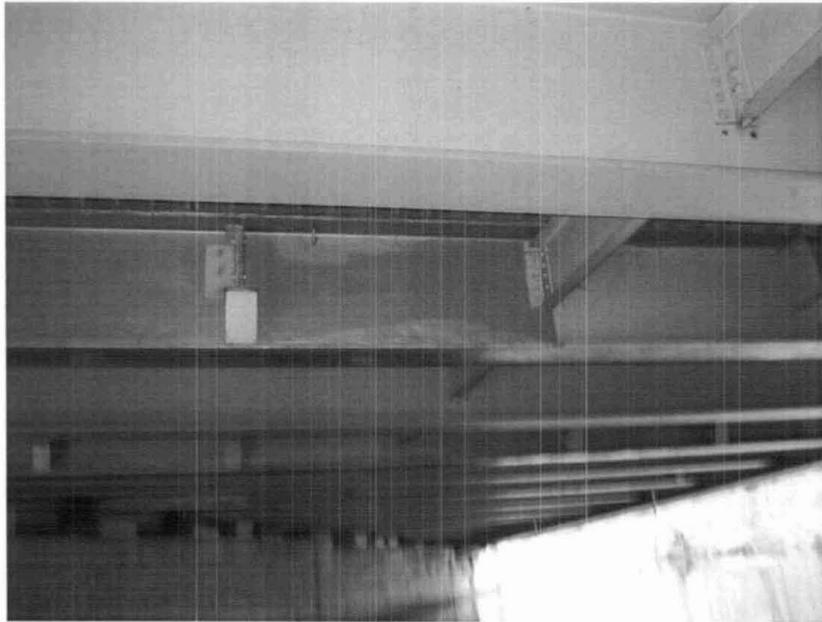
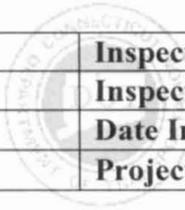


Photo #5:
Description: Typical underside and framing.



Photo #6:
Description: Typical top of deck.



Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687

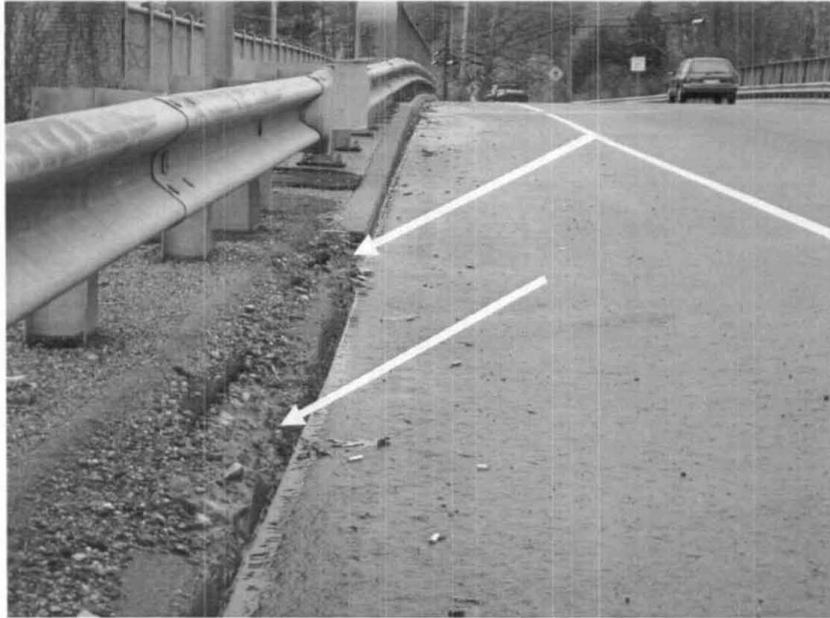


Photo #7:
Description: Severe scaling/spalling of the southeast approach curb.



Photo #8:
Description: Scaling and delamination of the sidewalk up to 1/2" deep exposing the steel grid.

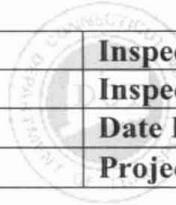
Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687



Photo #9:
Description: Cracked and breaking up bituminous ramp at the southeast corner of the bridge.



Photo #10:
Description: Concrete filled grid deck is not in contact with the south sidewalk stringer, one longitudinal grid bar is broken and a small section of concrete is missing below the railing.



Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687



Photo #11:
Description: Gap up to 4.25" between the underside of the sidewalk and the top of the west abutment backwall. Note the bituminous on top of the backwall.

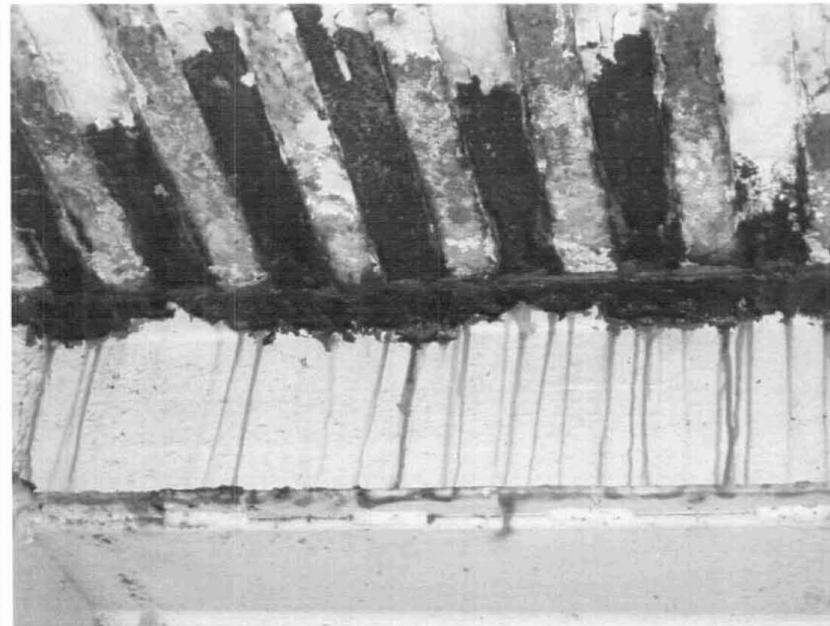


Photo #12:
Description: Bearing bars with heavy rust and areas of loss of width along their bottom flanges. South sidewalk stringer (channel) with heavy laminated rust, knife edging, and perforations along the top flange.

Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687

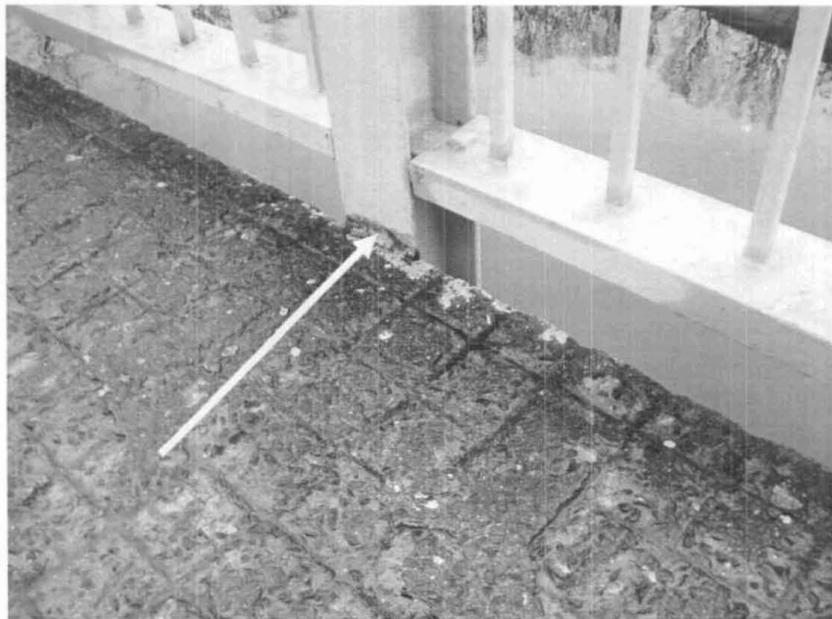


Photo #13:
Description: Typical painted over section losses along the base of the railing posts, just above the junction with the sidewalk.

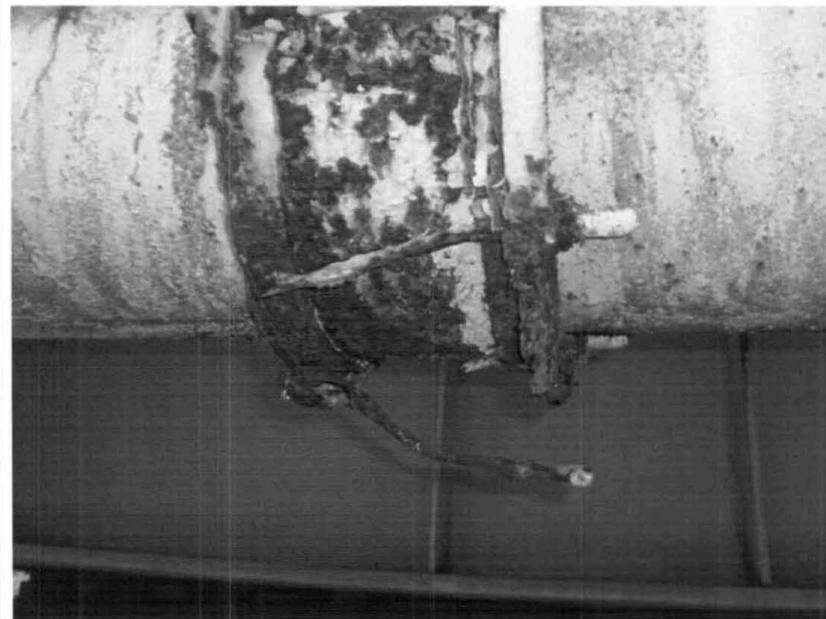


Photo #14:
Description: Water pipe below the sidewalk exhibits rusted out flanges and bolts with up to 100% section loss at a splice in the fifth sidewalk panel from the west abutment.

Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687

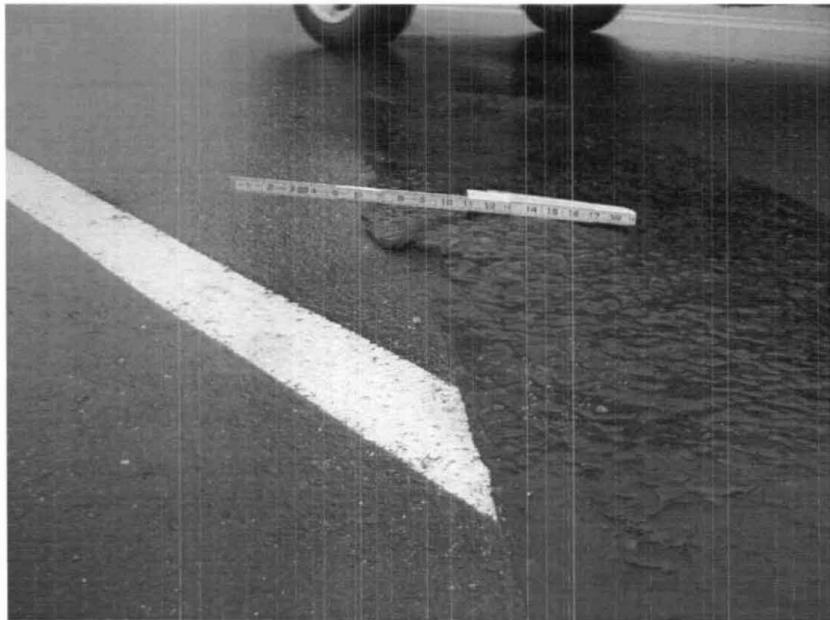


Photo #15:
Description: Asphaltic plug joint at the west abutment, south end, with heaved and depressed areas.



Photo #16:
Description: Heavy laminated rust between the stacked plates at the north sidewalk stringer bearing at the west abutment. Also note the potential spall at the top of the backwall.

Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687

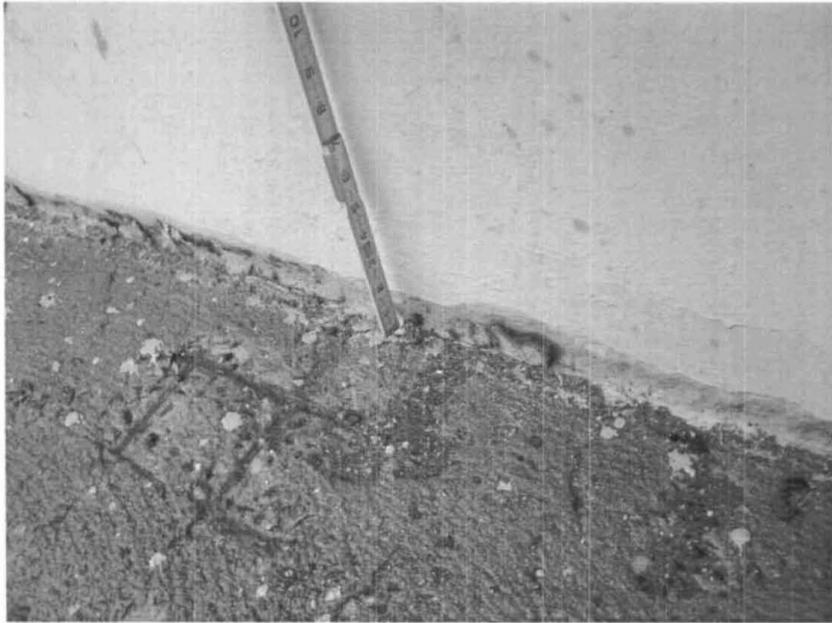
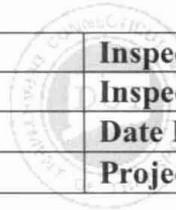


Photo #17:
Description: Painted over section loss along the girder 2 web, just above the sidewalk.



Photo #18:
Description: Laminated rust and section loss along the south elevation of the girder 1 web, just above the curb line.



Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687



Photo #19:
Description: Third floorbeam knee brace from the east abutment along girder 1 exhibits a rusted through hole in the flange.

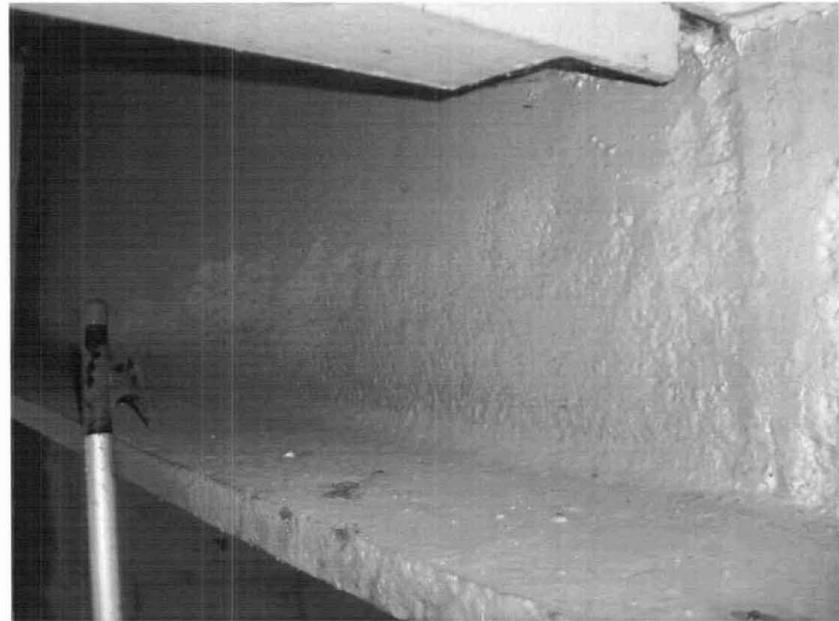


Photo #20:
Description: Section losses to the web and bottom flange of floorbeam 14.

Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687

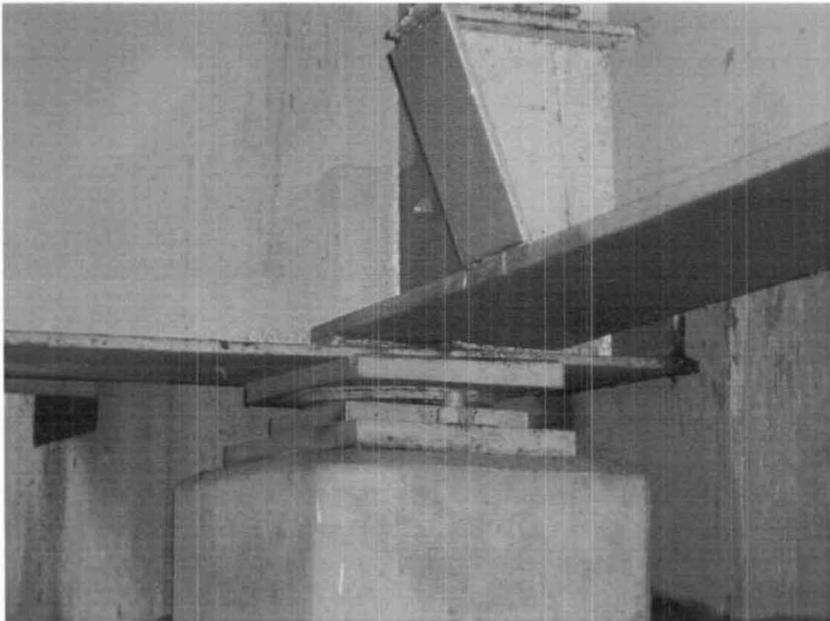


Photo #21:
Description: Impacted rust between the girder 2 and floorbeam 10 bottom flanges.

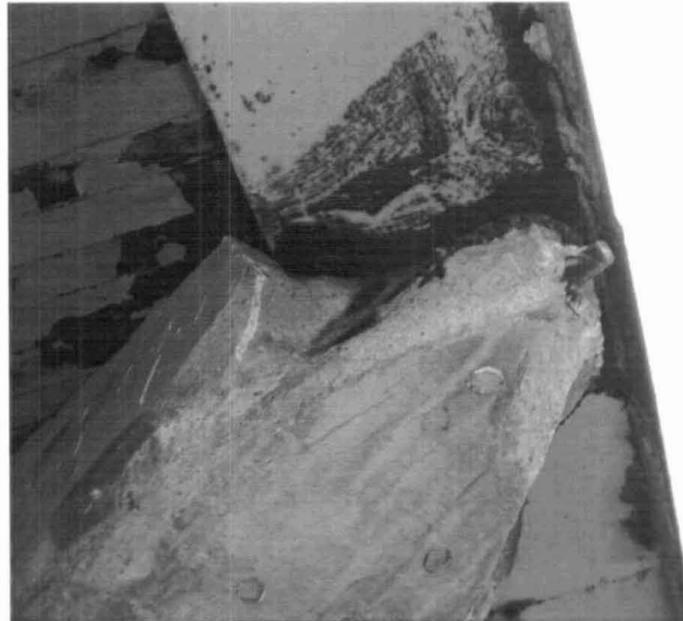


Photo #22:
Description: Spalls with exposed rebar in the floorbeam cantilever at the south elevation of girder 2 near the east abutment.

Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687

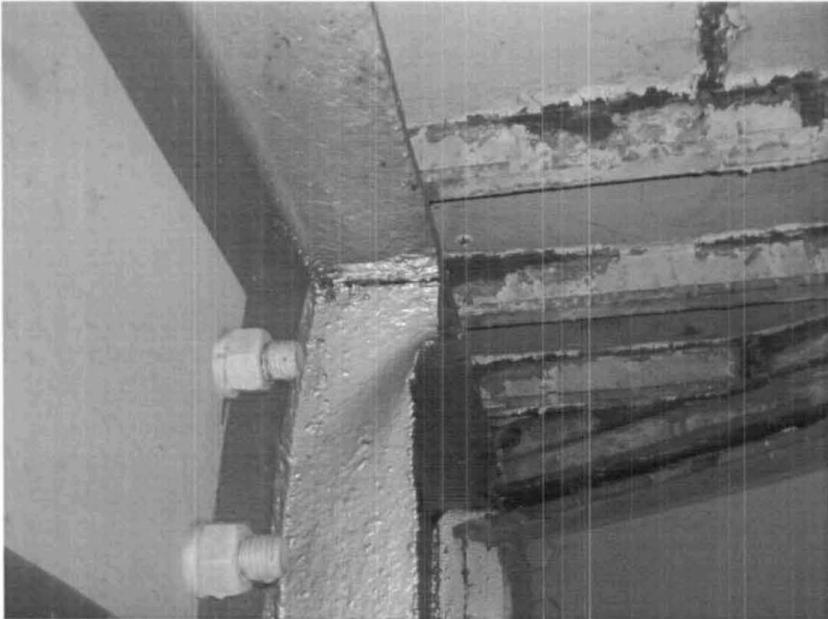


Photo #23:
Description: Broken weld between the top flange of floorbeam 4 and the vertical stiffener. Appears to be construction damage that occurred during rehabilitation while removing the stringers.

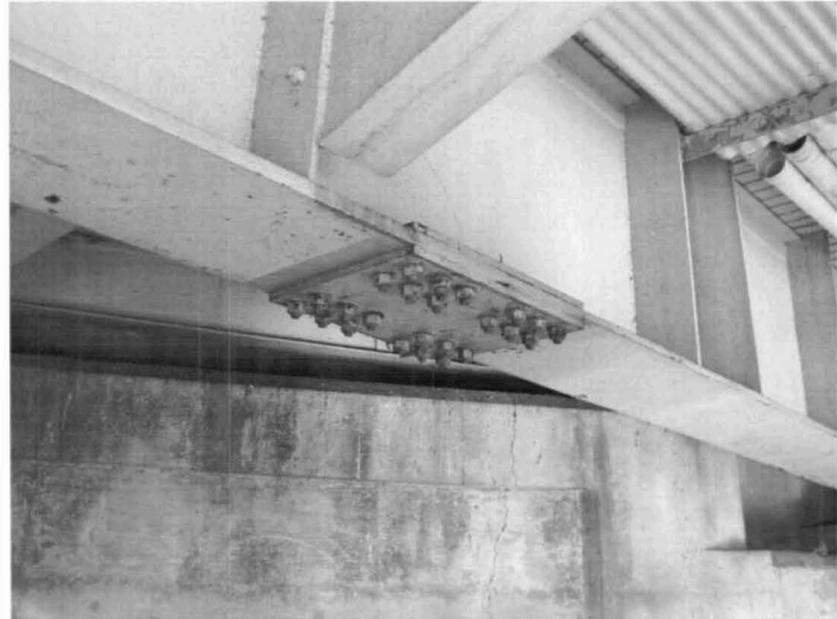


Photo #24:
Description: Bolted retrofit along the bottom flange transition weld of girder 2 near the east abutment.

Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687



Photo #25:
Description: East abutment, typical.



Photo #26:
Description: Up to 1/4" wide crack at the west abutment stem.

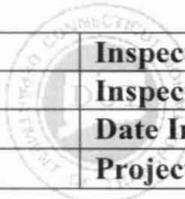
Bridge No.	01061	Inspected by:	M. Orłowski
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687



Photo #27:
Description: Crack up to 1/4" wide in the west abutment backwall with spalling along the crack.



Photo #28:
Description: Channel, looking upstream.



Bridge No.	01061	Inspected by:	M. Orlowsky
Town:	Seymour	Inspected by:	D. Korkosz
Feature Carried:	Route 67	Date Inspected:	October 23, 2006
Feature Crossed:	Little River	Project No.:	170-2687



Photo #29:
Description: Channel, looking downstream.



Photo #30:
Description: Tear in the northeast guide rail near the guide rail end.

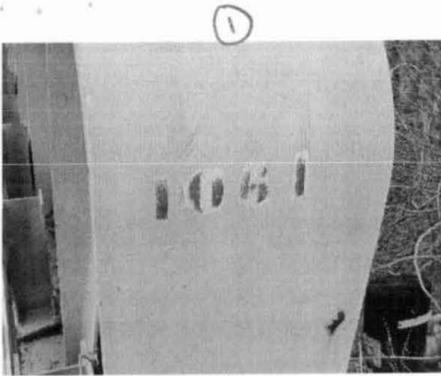
BAKER ENGINEERING NY, INC.

BRIDGE # 01061

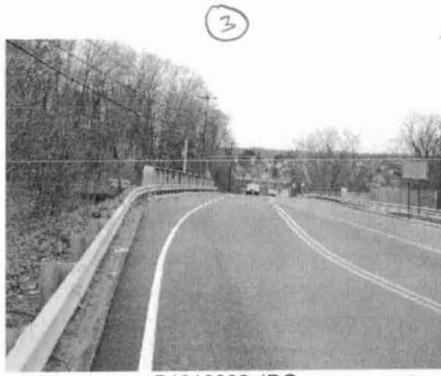
ADDITIONAL FIELD NOTES

(BACK-UP MATERIAL)

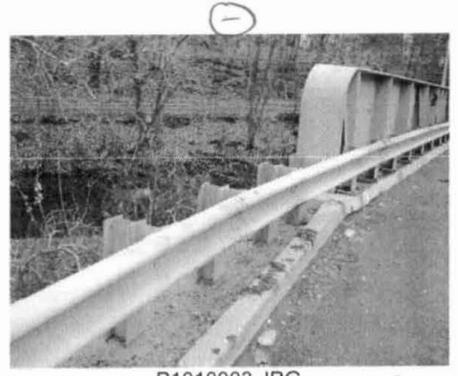
DATE: October 23, 2006



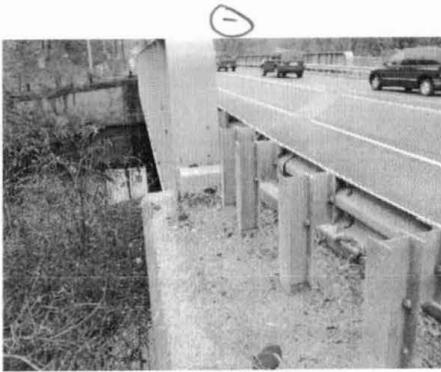
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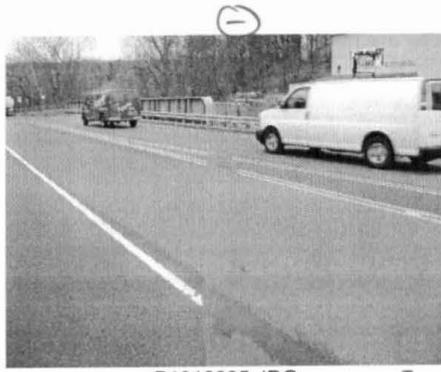
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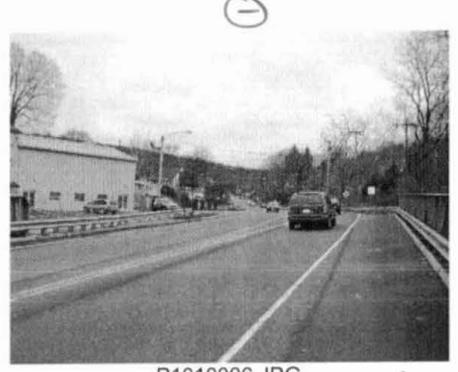
P1010003.JPG 3



P1010004.JPG 4



P1010005.JPG 5



P1010006.JPG 6



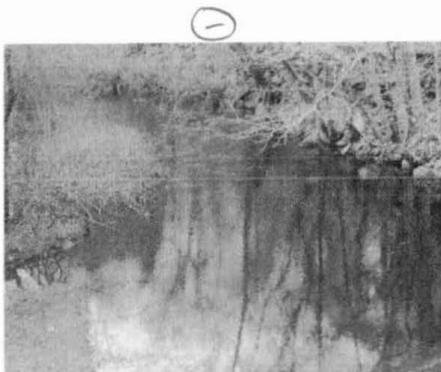
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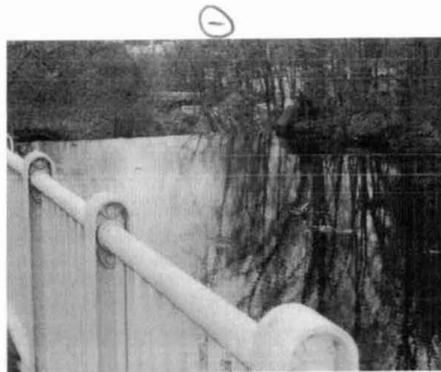
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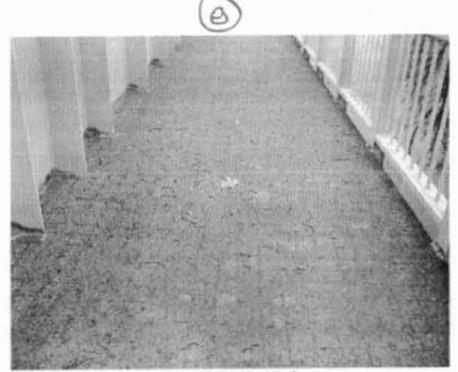
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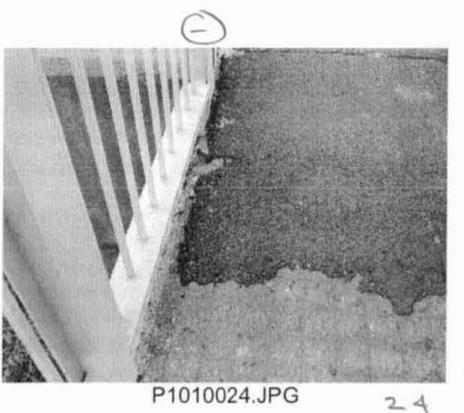
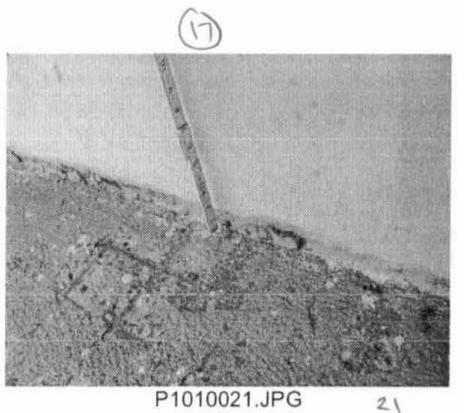
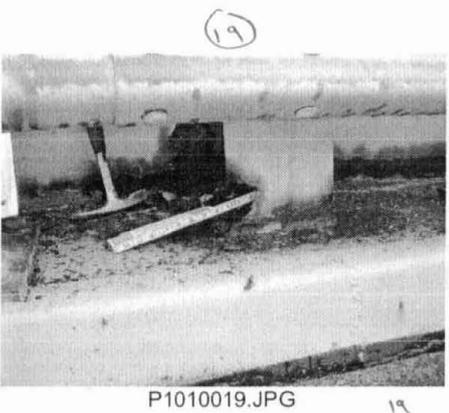
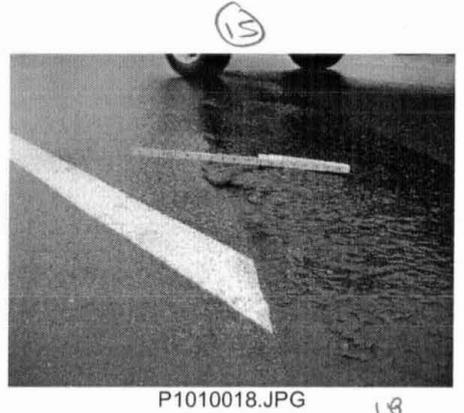
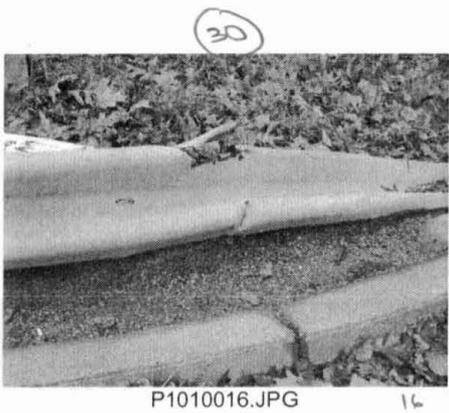
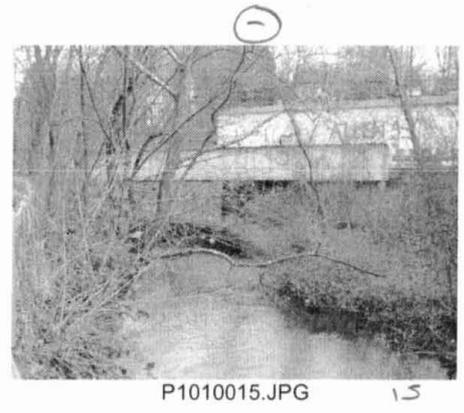
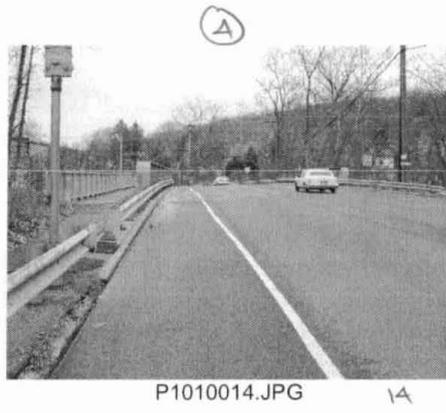
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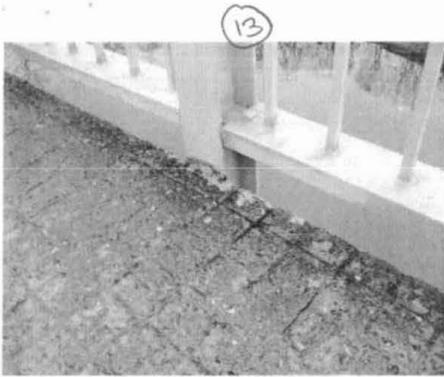


P1010011.JPG 11



P1010012.JPG 12

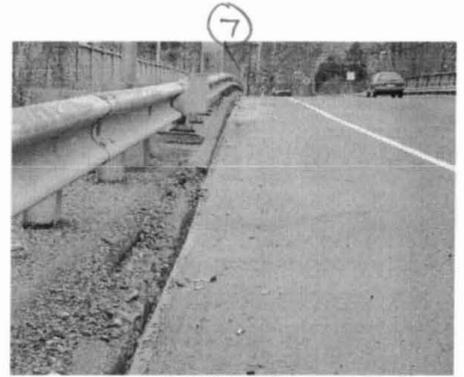




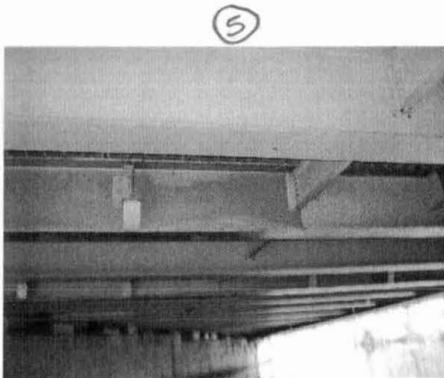
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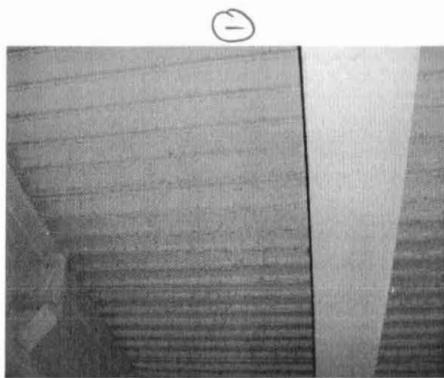
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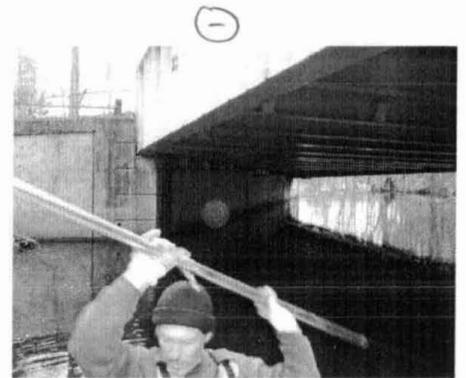
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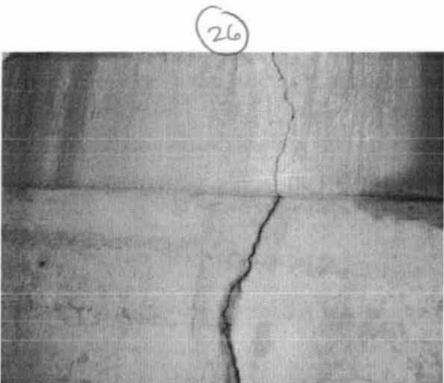
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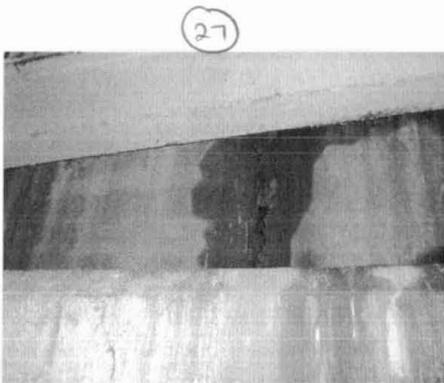
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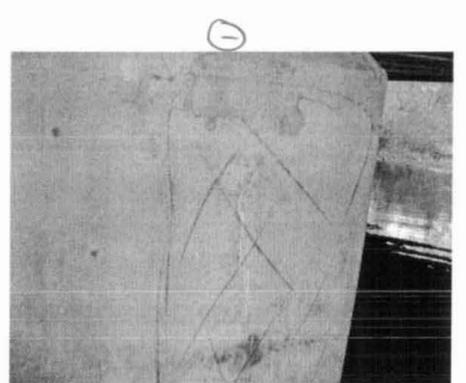
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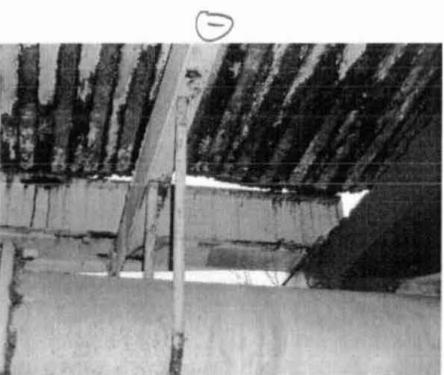
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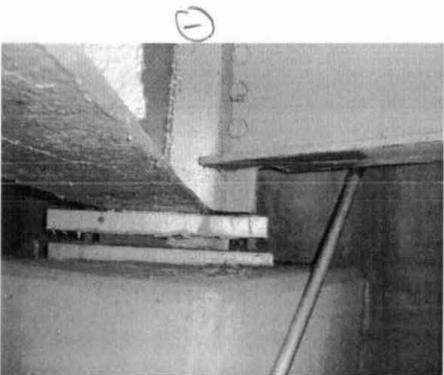
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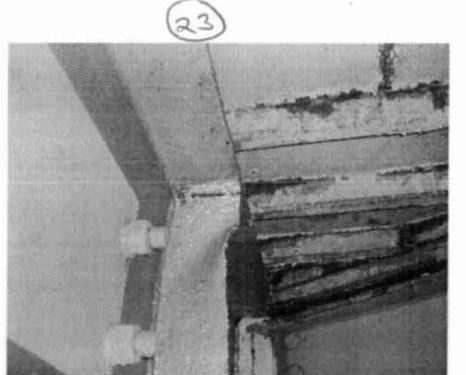
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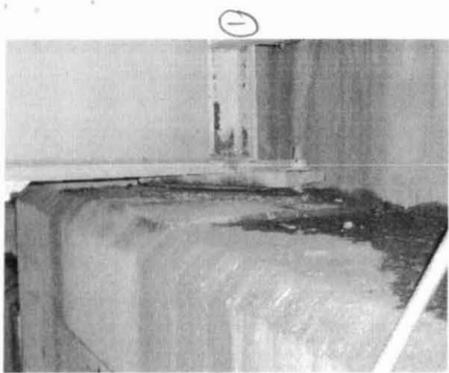
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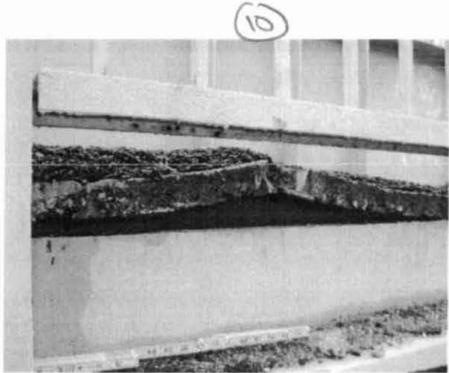
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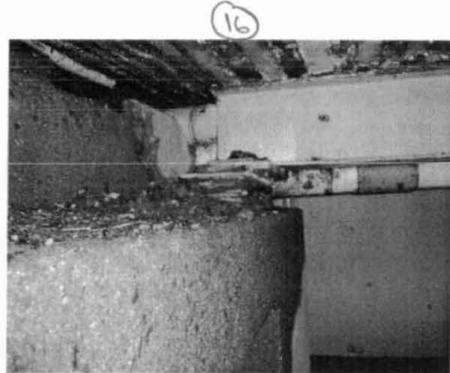
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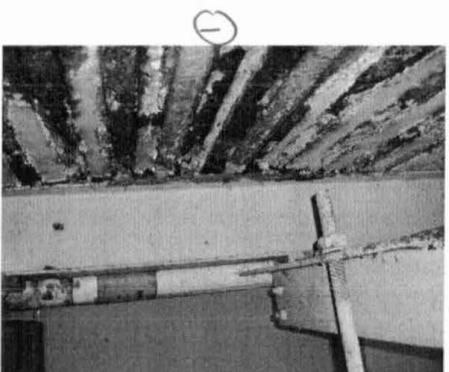
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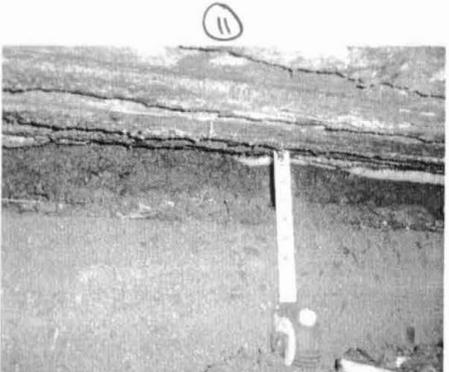
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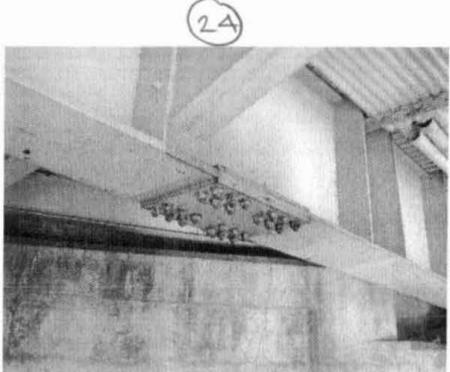
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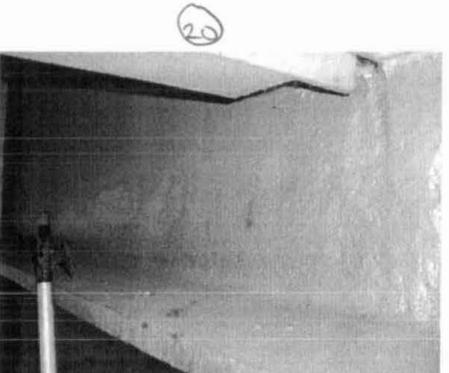
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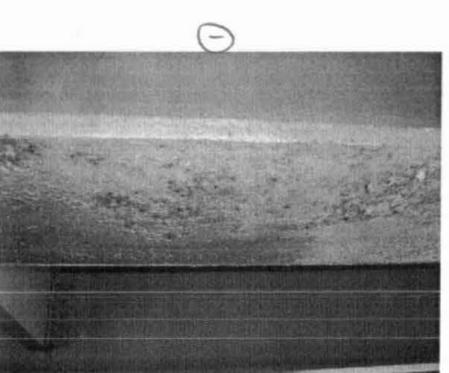
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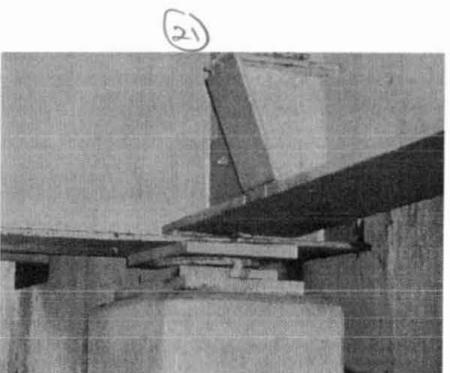
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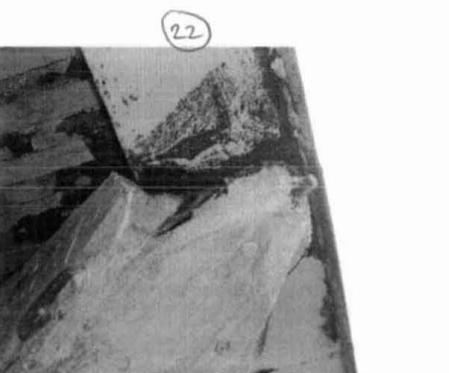
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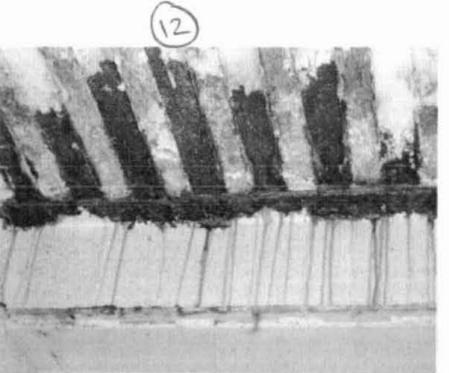
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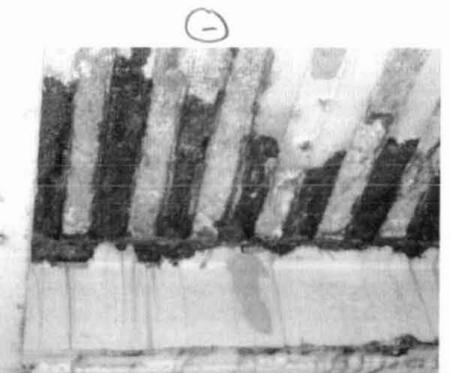
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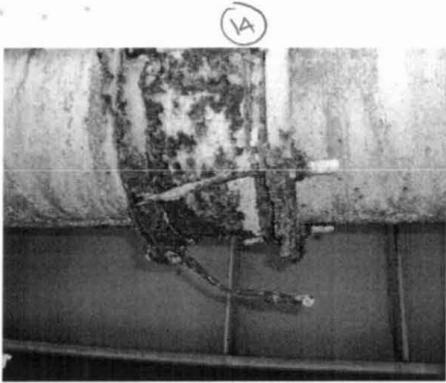
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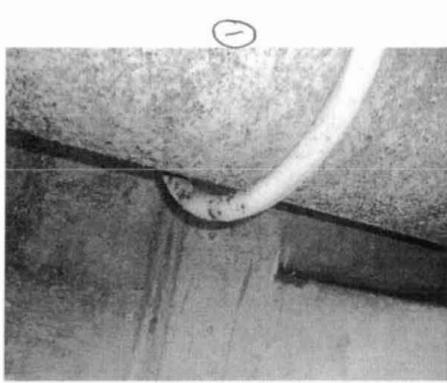
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P1010048.JPG 48



P1010049.JPG 49



P1010050.JPG 50



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10/23/1906



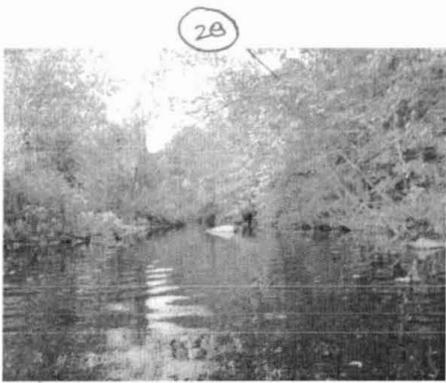
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10/23/1906



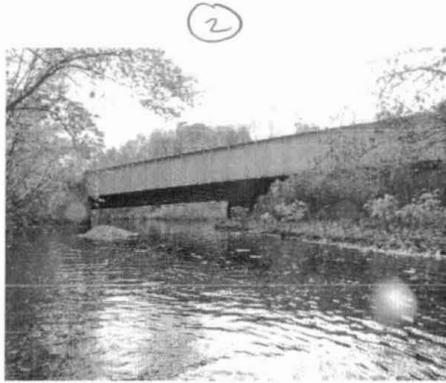
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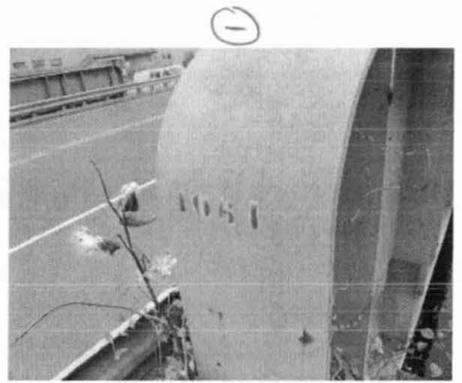
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10/23/1906



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10/23/1906



ZBIN 01061 006.jpg 56
10/23/1906



ZBIN 01061 007.jpg 57
10/23/1906

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Subject: BMM No. 01-282
Bridge No. 01061
Rte. 67 over Little River
Seymour

m e m o r a n d u m

date: 7/1/01

to: Mr. Louis R. Malerba
Trans. Maintenance Administrator
Bureau of Engineering
and Highway Operations

from: James P. Loersch
Manager of Bridge Safety
and Evaluation
Bureau of Engineering
and Highway Operations

This memorandum is a follow up to a telephone conversation on June 6, 2001 between Mary Mears, of your staff and Keith DeBishop, of this office, concerning the following deficiency and recommendation for the subject structure:

- The east concrete header has a spall of 7 ft. x 1 ft. x 1 1/2 in. deep.

Persons under your jurisdiction were directed to repair the header at the above-stated location. We are aware that this item was considered Priority B and was completed on June 7, 2001.

If you have any questions concerning this matter, please contact Mr. Ahmad A. Sarshory at ext. 3168.

R. Keith DeBishop/esk
cc: James F. Byrnes, Jr. - Charles F. Roman
Walter H. Coughlin
Joseph J. Obara
James P. Loersch-Ahmad A. Sarshory-R. Keith DeBishop
Joseph E. Chilstrom, FHWA

V010 → NO HEADERS → A. Plug joints

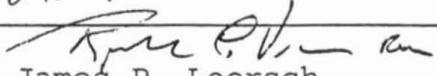
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Subject: BMM No. 01-113
Bridge No. 01061
Rte. 67 over Little River
Seymour

m e m o r a n d u m

date: 2/20/01

to: Mr. Louis R. Malerba
Trans. Maintenance Administrator
Bureau of Engineering
and Highway Operations

from: 
James P. Loersch
Manager of Bridge Safety
and Evaluation
Bureau of Engineering
and Highway Operations

Attached are two copies of our most recent inspection report for the subject structure which indicates the location of the following deficiency:

- The southwest approach sidewalk is settled 1 1/2 in. causing an uneven transition for pedestrians.

Please direct persons under your jurisdiction to:

- Repair the sidewalk at the above stated location.

All repairs shall be performed utilizing appropriate approved materials and tried and proven methods unless otherwise specified.

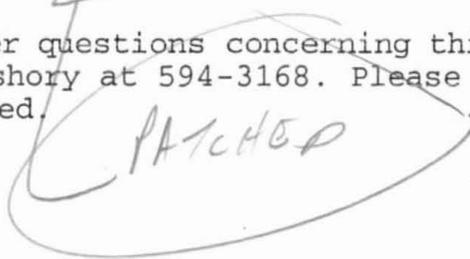
The above item should be considered Priority C. There are also other deficiencies which are considered routine maintenance that should be corrected.

If you have any further questions concerning this repair, please contact Mr. Ahmad A. Sarshory at 594-3168. Please notify me when this work has been completed.

Attachments

R. Keith DeBishop/esk
cc: Walter H. Coughlin
Joseph J. Obara

James P. Loersch - Ahmad A. Sarshory - R. Keith DeBishop


PATCHED

AS

Connecticut Department of Transportation
UNDERWATER INSPECTION

BRI-59 Form

Bridge No: 01061

Date Inspected: ~~9/17/03~~ 10/23/06

Job Number:

Client: Connecticut D.O.T.

Route: 000067

Mile point: 26.00

City: SEYMOUR

Feature Crossed: LITTLE RIVER

State: CT

Inspector: John Bogue Dan Kurkosz

Assistants: G. Carlson, P. Haefner

B. Fischer

Time Arrived: ~~11:00 AM~~ 11:45 AM

Time Departed: 2:00 PM 4:30 PM

M. Orlovski

Time In Water: 11:50 AM 12:30 PM

Time Out of Water: 1:40 PM 3:00 PM

Type of Inspection: Underwater

Year built: 1950

Total Length: 000110

No. Spans: 1

Bridge Type: Steel built-up plate girder

Total Number of Piers: 0

Piers in the Water: 0

Type of Piers: N/A

Abutments: R.C.

Bottom Composition: Sand and silt with up to 4.0' penetration into the streambed. ✓

Previous U/W Insp: 5/1/01 9/17/03

Marine Growth: Light algae ✓

Max. Water Depth: 4.8' 5.4'

Max. Depth at Pier: 4.8' 5.4'

Current Strength: Negligible ✓

U/W Visibility: 2' 5'

Type of Water: Fresh ✓

Access to Bridge: Shore ✓

Remarks:

Inspection Equipment

Number of Boats: 0

RR Protection: No

Boat Size: 0

Equipment Comments:

Dive Station: Yes

Inspected by:

[Signature]

Date:

10/08/03

Inspected by:

[Signature]

Date:

10/08/03

D.O.T. reviewed by:

[Signature]

Date:

10/31/03

Connecticut Department of Transportation
UNDERWATER INSPECTION

BRI-58 Form

Bridge No: **01061**
 Inspection Date **9/17/03**

Town: **SEYMOUR**
 Route Carried: **00067**
 Feature Crossed: **LITTLE RIVER**

ITEM	RATING	REMARKS
60. SUBSTRUCTUR	6	Medium scaling, minor spalling one area with exposed reinforcing steel, and vertical cracks, up to 1/4" wide observed in the abutment stems. ✓
ABUTMENT 1:	6	West Abutment: Medium scaling, one spall, 0.8'H x 0.6'W x 0.1'D with exposed reinforcing steel, and one 3/16" wide vertical crack was observed in the stem.
STEM	6	Medium scaling, one spall, 0.8'H x 0.6'W x 0.1'D with exposed reinforcing steel, and one 3/16" wide vertical crack was observed in the stem. ✓
FOOTING	N	Not visible. ✓
EROSION	7	Minor erosion noted.
SETTLEMENT	6	One 3/16" wide vertical crack observed in the abutment stem. <i>7/4" up to 1" at backwall</i>
SCOUR	7	Minor local scour.
WINGWALLS	6	Light to medium scaling observed at the water surface. ✓
General remarks:		
ABUTMENT 2:	6	East Abutment: Medium scaling, one spall, 1.2'H x 0.4'W x 0.3'D, and two vertical cracks, up to 1/4" wide was observed in the stem. ✓
STEM	6	Medium scaling, one spall, 1.2'H x 0.4'W x 0.3'D, and two vertical cracks, up to 1/4" wide was observed in the stem. ✓
FOOTING	6	The footing is exposed, 6.0'L x up to 0.8' vertically, at the Northeast end of the abutment. <i>20' length 0.6 high</i>
EROSION	6	Minor erosion found at the Southeast corner.
SETTLEMENT	6	Two vertical cracks, up to 1/4" wide observed in the stem. ✓
SCOUR	6	The footing is exposed, 6.0'L x up to 0.8' vertically, at the Northeast end of the abutment. <i>20' x 0.6'</i>
WINGWALLS	6	Light to medium scaling found at the water surface. ✓
General remarks:		
61. CHANNEL & CHANNEL PROTECTION:		
	6	The footing is exposed, 6.0'L x up to 0.8' vertically, at the Northeast end of the East Abutment. <i>20' x 0.6'</i>
CHANNEL SCOUR	6	The footing is exposed, 6.0'L x up to 0.8' vertically, at the Northeast end of the East Abutment.
EMBANKMENT EROSIO	7	Minor embankment erosion noted. ✓
DEBRIS	<i>7/6</i>	<i>Shopping carts</i>
VEGETATION	7	Minor vegetation growth found North and South of the structure.
CHANNEL CHANGE	6	Minor channel change observed directly upstream of the structure.
FENDER SYSTEM	N	
SPUR DIKES & JETTIE	N	
RIP RAP	7	Riprap is located at the end of the Northeast wingwall. ✓
General remarks:		<i>Channel is full of manmade debris most notably shopping carts.</i>

Connecticut Department of Transportation
UNDERWATER INSPECTION

BRI-58 Form

Bridge No: 01061
Inspection Date 9/17/03

Town: SEYMOUR
Route Carried: 000067
Feature Crossed: LITTLE RIVER

ITEM	RATING	REMARKS
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Inspected by: *h + cl*

Date: 10/08/03

Inspected by: *Paul Boyle*

Date: 10/08/03

D.O.T. reviewed by: *RZ De Bishop*

Date: 10/31/03



LEGEND FOR BOTTOM ELEVATIONS

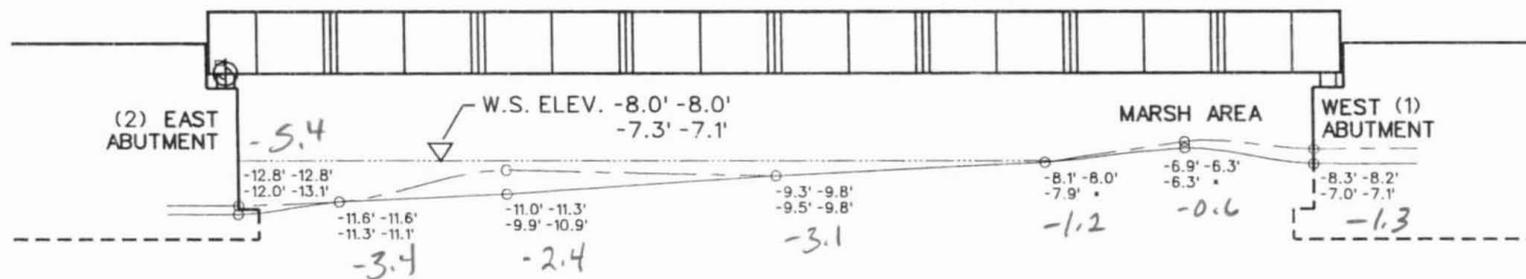
- SEP, 2003 →
- MAR, 2001 →
- DEC, 1998 →
- OCT, 1995 →
- INDICATES NO INFORMATION

LEGEND FOR SYMBOLS

- ⊕ DATUM ELEV. 0.0 TAKEN FROM BEARING SEAT AT THE NORTHEAST CORNER.
- ▽ W.S. ELEV. -8.0 -8.0 / -7.3 -7.1 / 8.3

PLAN
N.T.S.

 <p>ENGINEERS PLANNERS ECONOMISTS</p>	<p>135 COLLEGE STREET P.O. BOX 9412 NEW HAVEN, CT. 06534-0412 PHONE: 203-865-2191 FAX: 203-624-0484</p>	<p>CONNECTICUT DEPARTMENT OF TRANSPORTATION</p> <p>BRIDGE NO. 01061 ROUTE 67 OVER LITTLE RIVER</p> <p>SEYMOUR CONNECTICUT</p>		
	<p>PLAN</p>		<p>INSPECTED BY: JB REVISED BY: AP</p>	
		<p>SCALE: AS SHOWN</p>	<p>DATE OF INSPECTION: 09 / 17 / 03</p>	<p>DRAWING NO. 01061A</p>



NORTH ELEVATION (UPSTREAM PROFILE)

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

SEP, 2003 → -0.0' - 0.0' ← MAR, 2001
 DEC, 1998 → -0.0' - 0.0' ← OCT, 1995

• INDICATES NO INFORMATION

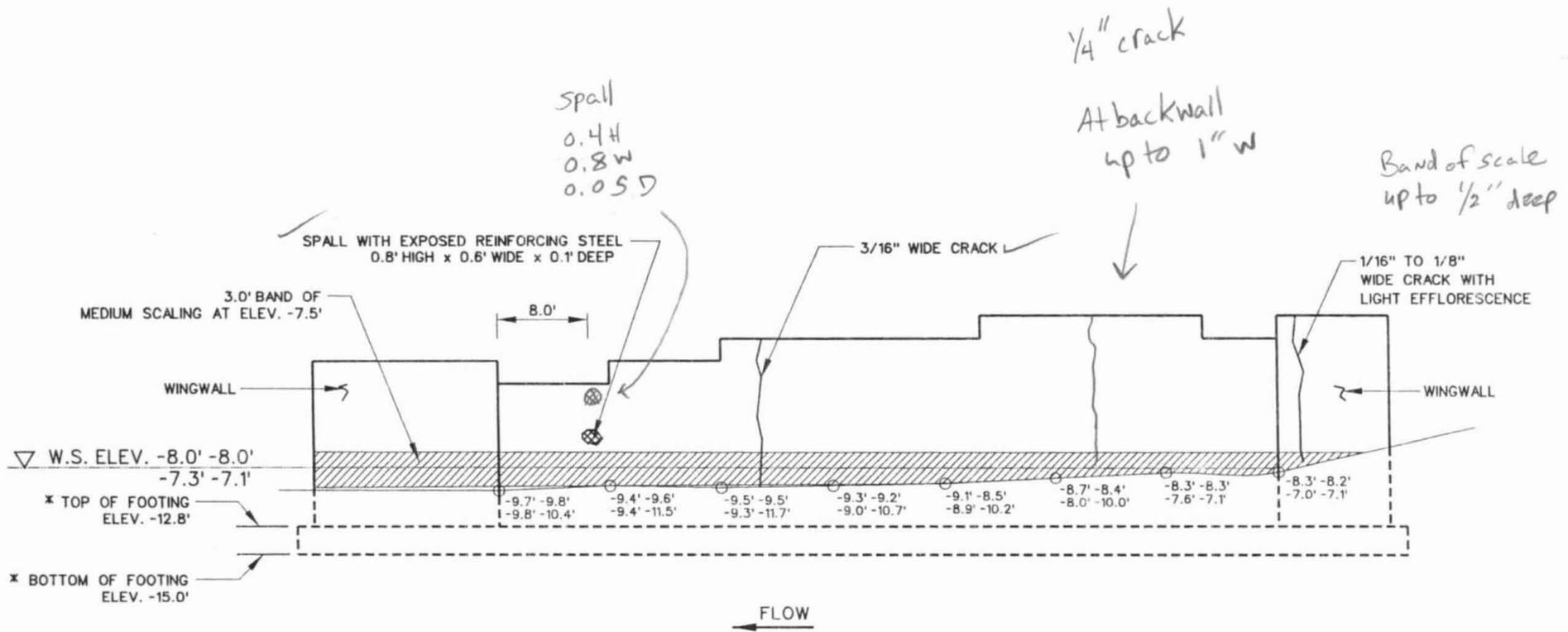
LEGEND FOR MUDLINE ELEVATIONS

— SEP, 2003
 - - - MAR, 2001
 — DEC, 1998
 - - - OCT, 1995

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM BEARING SEAT AT THE NORTHEAST CORNER.
 ▽ W.S. ELEV. -8.0 -8.0 / 8.3
 -7.3 -7.1

 <p>ENGINEERS PLANNERS ECONOMISTS</p> <p>Wilbur Smith Associates</p>	<p>135 College Street P.O. Box 9412 New Haven, CT. 06534-0412 Phone: 203-865-2191 Fax: 203-624-0484</p>	<p>CONNECTICUT DEPARTMENT OF TRANSPORTATION</p>	
		<p>BRIDGE NO. 01061 ROUTE 67 OVER LITTLE RIVER</p>	
<p>SEYMOUR CONNECTICUT</p>		<p>NORTH ELEVATION (UPSTREAM PROFILE)</p>	
<p>INSPECTED BY: JB REVISED BY: AP</p>	<p>SCALE: AS SHOWN</p>	<p>DATE OF INSPECTION 09 / 17 / 03</p>	<p>DRAWING NO. 01061B</p>



NOTES:

FOOTING ELEVATIONS OBTAINED FROM PREVIOUS UNDERWATER REPORT AND FIELD MEASUREMENTS.

WEST(1) ABUTMENT ELEVATION

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

SEP, 2003 MAR, 2001
-0.0' - 0.0'
DEC, 1998 -0.0' - 0.0' OCT, 1995

* INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

SEP, 2003

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM BEARING SEAT AT THE NORTHEAST CORNER.

▽ W.S. ELEV. -8.0 -8.0
-7.3 -7.1

18.3

Wilbur Smith Associates
ENGINEERS
PLANNERS
ECONOMISTS

135 College Street
P.O. Box 9412
New Haven, CT. 06534-0412
Phone: 203-865-2191
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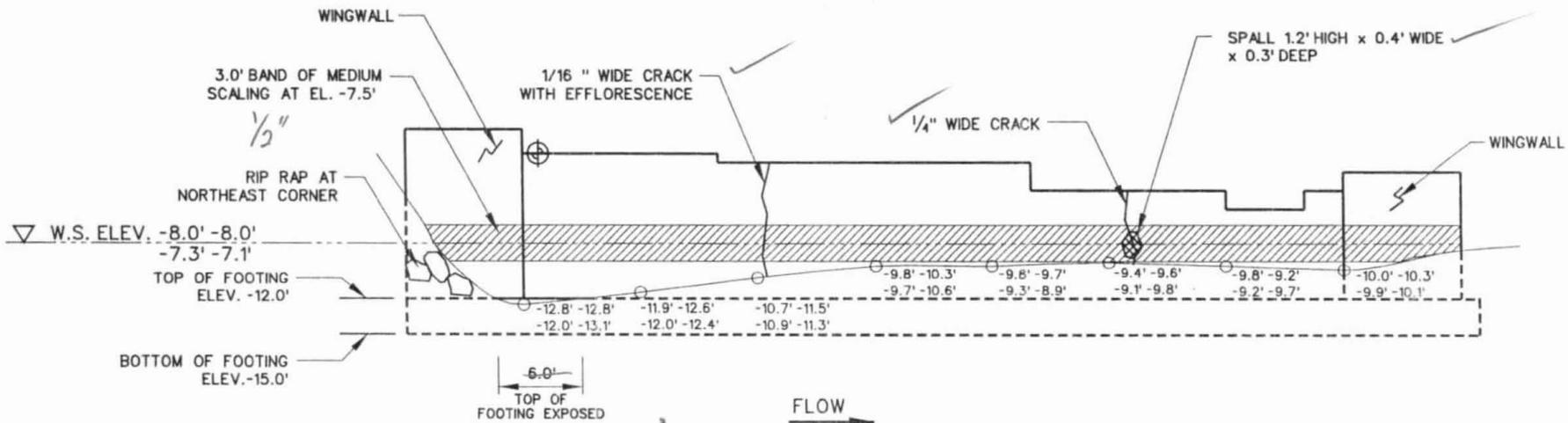
CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 01061
ROUTE 67 OVER LITTLE RIVER

SEYMOUR CONNECTICUT

WEST ABUTMENT ELEVATION

INSPECTED BY: JB	SCALE: AS SHOWN	DATE OF INSPECTION: 09 / 17 / 03	DRAWING NO. 01061C
REVISED BY: AP			



EAST(2) ABUTMENT ELEVATION

N.T.S.

NOTES:

FOOTING ELEVATIONS OBTAINED FROM PREVIOUS UNDERWATER REPORT AND FIELD MEASUREMENTS

Footing exposed 20' in length

LEGEND FOR BOTTOM ELEVATIONS

SEP, 2003 → -0.0' -0.0' → MAR, 2001
 DEC, 1998 → -0.0' -0.0' → OCT, 1995

* INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

SEP, 2003

LEGEND FOR SYMBOLS

- ⊕ DATUM ELEV. 0.0 TAKEN FROM BEARING SEAT AT THE NORTHEAST CORNER.
- ▽ W.S. ELEV. -8.0 -8.0 -7.3 -7.1

ENGINEERS
PLANNERS
ECONOMISTS

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CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 01061
 ROUTE 67 OVER LITTLE RIVER

SEYMOUR

CONNECTICUT

EAST ABUTMENT ELEVATION

INSPECTED BY: JB
 REVISED BY: AP

SCALE:
 AS SHOWN

DATE OF INSPECTION
 09 / 17 / 03

DRAWING NO. 01061D