

# STRUCTURE NO. 04211

SOUTH PARK AVENUE  
over  
MILL RIVER  
EASTON

12 MONTH Routine & Special Inspection

on  
4/10/2014

Inspected by Team 7  
for Area 7

<b>TEAM:</b>	Forwarded to TE3 Parviz Mirzaee	Date 5/8/14
<b>TE3:</b>	Reviewed by TE3 PARVIZ MIRZAAEE	Date 6/6/2014
	BMM Required	NO
	Town Bridge	YES
	Rating <= 5 (Items 58, 59, 60 or 62)	YES
	Rating Change 2 or More Values	NO
	Forwarded to Supervisor TED. LAPIERRE	Date 6/27/2014
	Forwarded to "To Be Copied Drawer" <input type="checkbox"/>	Date
	Date BRI-19 Entered	6/25/2014
<b>SUPERVISOR:</b>	Reviewed by Supervisor TDL	Date 7/30/14
<b>SUPPORT:</b>	Date Copies Made 08/15/14	BMM No Town Letter
	Scanned By: DAS	Date Scanned 08/15/14 PDF Box No

NBI: Yes

NHS: No

<b>Structure No.</b>	<input type="text" value="04211"/>	<b>Town</b>	<input type="text" value="Easton"/>
<b>Inspection Date</b>	<input type="text" value="4/9/2014"/>	<b>Inspectors</b>	<input type="text" value="Team 7"/>

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PONTIS Element Data Collection Form	<input type="text" value="2"/>
Plan Sheets <input type="checkbox"/> Already on File	<input type="text"/>

### **Bound Report Pages**

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Executive Summary	<input type="text"/>
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### **Forms**

BRI-18 Bridge Inspection Report Form	<input type="text" value="9"/>
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### **Comments:**

Bridge Number **04211**

STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION  
BRIDGE SAFETY & EVALUATION

Inspected By: P. Sharron & J. Chavez

STRUCTURE EVALUATION

Sufficiency Rating **58.68**  
Previous Inspection Date **4/16/2012**

SHEET 1 OF 35 (INSP. REPORT)

BS&E Received   
Copies Made   
Data Entry By: PM  
Data Entry Date: 6/25/2014

IDENTIFICATION

Bridge Name EASTON  
Town Name EASTON Town Code 23890  
Inventory Route: 1  
A) Record Type 5 City Street 0  
B) Signing Prefix 0 Directional Suffix 0 NA  
C) Level of Service 0  
D) Route Number 00000  
E) Directional Suffix 0 NA

Feature Intersected MILL RIVER  
Facility Carried SOUTH PARK AVENUE  
Location 150' NO BUCK HILL RD. JCT

Milepoint 1.33 Miles  
Latitude 41deg 14 min 30.00 sec  
Longitude 73deg 15 min 12.00 sec

Border Bridge: A) State Code          B) Percent Responsibility          %  
C) Border Town Name         

STRUCTURE TYPE AND MATERIAL

Structure Type, Main: A) Material 3 Steel B) Design Type 2 Stringer/Multi-beam or Girder  
Structure Type, Approach: A) Material 0 Other B) Design Type 0 Other  
Number of Spans, Main Unit 1  
Number of Approach Spans 0  
Deck Structure Type 1 Concrete Cast-in-Place  
Wearing Surface/Protective System: A) Type of Wearing Surface 6 Bituminous  
B) Type of Membrane 0 None  
C) Type of Deck Protection 0 None

90) Inspection Date 04/10/14 Inspection Team 7 91) Frequency Class: 01  
In-depth Insp 5/8/2008 Deck Survey 1/1/1900 12 Access 24 Flagman 0  
Type Z Frequency 12 Team 7 Date 4/8/2013 4/10/14  
Fracture:          Uwater:          Special: Z

CRITICAL FEATURE INSPECTIONS

AGE AND SERVICE

27) Year Built 1933 106) Year Reconstructed           
42) Type of Service: 1 Highway          B) Under 5 WATERWAY           
28) Number of Lanes: 2 A) On          B) Under           
29) Average Daily Traffic 1900 Half ADT?: No  
109) Percent Truck 4%  
30) Year of ADT 2010  
19) Bypass, Detour Length 1 miles

GEOMETRIC DATA

48) Length of Max Span 31ft  
49) Structure Length 38ft  
50) Curb or Sidewalk Widths: A) Left 0.0ft B) Right 0.0ft  
51) Brg Rdwy width, curb-curb 27.7ft  
52) Deck Width, Out-Out 28.2ft  
32) Approach Roadway Width 29ft  
33) Bridge Median 0 No Median 1071 sqft  
34) Skew Angle 16deg  
35) Structure Flared 0  
10) Inv. Rte. Min. Vert Clearance 99ft  
47) Log Inv. Rte. Total Horiz Clr.: 27.7ft  
47) RLog Inv. Rte. Total Horiz. Clr.: ft  
53) Min Vert Clearance Over Bridge 99ft  
54) Min Vert Under Clearance N Ref 0in  
55) Min Lat Under Clearance on Right N Ref 99.9ft  
56) Min Lat Under Clearance on Left 0.0ft

BRIDGE COMMENTS

Special Z: monitor abutment No. 2, pedestal No. 5.

RED FLAG

# STRUCTURE EVALUATION

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

SHEET 2 OF 33

Inspected By: P. Shaveron & J. Chavez

Bridge Number	<b>04211</b>	NBIS Length
Town Name	<b>EASTON</b>	Yes <b>38</b>
Facility Carried	<b>SOUTH PARK AVENUE</b>	
Feature Crossed	<b>MILL RIVER</b>	

### CLASSIFICATION

11) NBIS Bridge Length	
104) Highway System	
26) Functional Class	
100) Defense Highway	
101) Parallel Structure	
102) Direction of Traffic	
103) Temporary Structure	
10) Designated National Network	
20) Toll	
21) Maintain	
22) Owner	
Report Class	
37) Historical Significance	

### WATERWAY

7108	
0	No navigation control on waterway
40	Navigation Horiz Cir.
0	
11)	Pier Abutment Protection

### PROPOSED IMPROVEMENTS

5A)	Type of Work Proposed	
5B)	Work Done By	
6)	Length of Struct. Improvement	
4)	Bridge Improvement Cost	
5)	Roadway Improvement Cost	
6)	Total Project Cost	
7)	Year of Improvement	
14)	Future ADT	
115)	Year Future ADT	

### POSTED SIGNS & UTILITIES

0	Blank	
0	Blank	
	Actual P.L. 4Axle Truck	
	Rec. P.L. 4Axle Truck	
	Actual P.L. 3S2 Truck	
	Rec. P.L. 3S2 Truck	
	Actual P.L. All Vehicles	
	ft	
	ft	
25	mph	
1	Gas	

### LOAD RATING AND POSTING

31)	Design Load	5
63)	Operating Rating Type	1
64)	Operating Rating	90.8
65)	Inventory Rating Type	1
66)	Inventory Rating	54.5

### CONDITION

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

### APPRAISALS

67)	Structure Evaluation	4
68)	Deck Geometry	4
69)	Under Clear Vert & Horiz	N
71)	Waterway Adequacy	9
72)	Approach Rdwy Alignment	7
113)	Scour Critical	4

Items 58 Thru 72 Checked By:

36)	Traffic Safety Features:	
A)	Bridge Railings	0
B)	Transitions	0
C)	Approach Guardrail	0
D)	Approach Guardrail End	0

### OTHER FEATURES

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

### INSPECTION COMMENTS

Proposed Next Indepth Insp Year 2018

Senior Parviz Mirzaee

Supervisor Theodore Lapierr

REVIEWED BY: Jay Mjgan Date 6/6/2014

## Connecticut Department of Transportation

### Bridge Inspection Report BRI-18

Bridge #: 04211

Inspection Date: 4/10/2014

Inspection Type:	Routine	Previous Inspection Date:	4/16/2012	Snooper Required:	No
Inspection Performed By:	Team 7	Feature Carried:	SOUTH PARK AVENUE	Snooper Used:	No
Town:	EASTON	Feature Intersected:	MILL RIVER	Year Built:	1933
Location:	150' NO BUCK HILL RD. JCT	Main Design:	Stringer/Multi-beam or Girder	Year Rebuilt:	-
Main Material:	Steel				

**Visits**

**Inspectors:**

Visit Date:	Temp:	Start Time:	End Time:	Inspector:	Task:
4/10/2014	55	10:45:00 AM	1:45:00 PM	J. Chavez	Inspector
				P. Sharron	Lead Inspector

DECK: INSPECTED WEST TO EAST. Overall Rating: 5

Rating

OVERLAY:	7	NEWER MACADAMIZED OVERLAY. NO KNOWN MEMBRANE. BITUMINOUS DOES NOT EXTEND TO DECK EDGE. (1) GOUGE IN THE OVERLAY 18 INCHES BY 1/4 INCH DEEP. SAND AT THE CURBLINES.
DECK-STR. CONDITION:	5	THE DECK U-SIDE SHOWS FORM PANEL LINES, SHRINKAGE WITH CURING CRACKING, LIGHT HONEYCOMBING, SHALLOW EXPOSED WIRES, LATENT CRACKING, DISCOLORATION, DAMPNESS, TRANSVERSE CRACKING WITH AND WITHOUT EFFLORESCENCE, AND FLAKING CONCRETE. MAP HAIRLINE CRACKS WITH AND WITHOUT EFFLORESCENCE. THE MOST CONCENTRATED CONDITIONS ARE NOTED ALONG THE TWO SOUTHERLY SIDE BAYS.  THE SLAB EDGE ALONG THE NORTHWESTERLY CORNER, SHOWS ABOUT 6 SQUARE FEET OF SEVERE SCALING TO THE SLAB EDGE. (NOT VISIBLE DUE TO WOODEN FORMS IN PLACE)  THE TOTAL AREA OF CONTAMINATION WITH DETERIORATION IS ABOUT 20 PERCENT. <span style="margin-left: 40px;">P23</span> SEE PHOTO # 15.
CURBS:	N	-
MEDIAN:	N	-

<b>SIDEWALKS:</b>	N	.
<b>PARAPET:</b>	N	THERE ARE TEMPORARY JERSEY BARRIER ALONG THE SOUTHEAST RAIL.
<b>RAILING:</b>	6	<p>BOTH BRIDGE RAILS ARE COMPOSED OF H-POSTS, WITH A CHANNEL CAP, AND A SINGLE METAL BEAM RAIL.</p> <p>ALL SURFACES SHOW AREAS OF WORN PAINT, WITH SPOTTY LIGHT RUSTING.</p> <p>THE HEAVIER RUST CONDITIONS ARE NOTED TO THE LOWER RAIL POSTS, AND STEEL STAND-OFFS, ALONG THE FASCIA STRINGERS.</p> <p>SOME PRIMER EXPOSED. THE NORTH RAIL IS DENTED. THERE ARE PERFORATIONS LOCATED ON THE NORTHWEST TERMINAL END 9" X 2"</p> <p>ALSO PERFORATIONS AT THE SOUTHWEST END TERMINAL. SEE PHOTO # 5.</p> <p>SOUTHWEST END IS ALSO DAMAGED.</p>
<b>PAINT:</b>	N	-
<b>FENCE:</b>	N	-
<b>DRAINS:</b>	N	.
<b>LIGHTING STANDARD:</b>	N	.
<b>UTILITIES TYPE/SIZE:</b>	8	<p>THERE IS A 6 INCH DIAMETER, WRAPPED GAS MAIN, SUPPORTED FROM THE NORTHERLY BRIDGE RAILING.</p> <p>NORTHWEST END HAS A CRACKED AND SPLIT CASING FROM PACK RUST.</p>
<b>CONSTR JOINTS:</b>	N	-
<b>EXPANSION JOINTS:</b>	N	NO FORMAL EXPANSION JOINTS ARE NOTED ALONG THE ENDS OF THIS STRUCTURE.

59. SUPERSTRUCTURE: -

Overall Rating: 6

Rating

<b>BEARING DEVICES:</b>	6	<p>DUAL, STEEL PLATE BEARINGS, ARE NOTED OVER EACH ABUTMENT.</p> <p>THE WESTERLY PLATES APPEAR TO SHOW ELONGATED SLOTS, AND APPEAR TO BE THE EXPANSION SET.</p> <p>ALL ARE IN A NEUTRAL POSITION.</p> <p>ALL INTERIOR BEARINGS SHOW AREAS OF LIGHT, SPOTTY RUSTING.</p> <p>THE SOUTHERLY FASCIA BEARINGS BOTH SHOW MODERATE RUSTING.</p> <p>BEARING #5 AT ABUTMENT #1 HAS HEAVY RUST.</p> <p>BEARING 5, OVER THE EASTERLY ABUTMENT, MAY BE THREATENED, DUE TO THE SEVERLY DETERIORATED CONCRETE, OF THE ABUTMENT, JUST BELOW THE BEARING DEVICE. NO UNDERMINING. SEE PHOTO # 19.</p>
<b>STRINGERS:</b>	N	-
<b>GIRDERS:</b>	6	<p>THE SUPERSTRUCTURE IS COMPOSED OF 5, ROLLED STRINGERS.</p> <p>ALL SHOW AREAS OF LIGHT TO MODERATE RUSTING, WITH FADED AND WORN PAINT.</p> <p>THE OUTSIDE FASCIA END OF STRINGER 5 AT ABUTMENT #2 END SHOWS MODERATE TO HEAVY RUSTING, WITH LAMINAR SHEETS, OF THE LAST 6 LINEAR FEET OF THE UPPER FLANGE.</p> <p>THE LOWER FLANGE IN THE SAME AREA SHOWS LIGHT TO MODERATE RUSTING WITH SOME LAMINAR RUST AND MINOR REDUCED SECTION.</p> <p>THE LOWER FLANGE SHOWS APPROXIMATELY 1/16 INCH SECTION LOSS.</p> <p>THE ORIGINAL FLANGE THICKNESS IS 5/8 INCH, REDUCED TO 9/16 INCH.</p> <p>THIS AREA IS LOCATED APROXIMATELY 42 INCHES FROM THE BEAM END.</p> <p>THE MEASURED AREA OF SECTION LOSS IS APPROXIMATELY 18 INCHES LONG.</p>
<b>FLOOR BEAMS:</b>	N	-
<b>TRUSSES-GENERAL:</b>	N	-
<b>TRUSSES-PORTALS:</b>	N	-
<b>TRUSSES-BRACING:</b>	N	-
<b>PAINT:</b>	5	-
<b>RUST:</b>	6	-
<b>MACHINERY MOV</b>	N	-

SPAN:		
RIVETS & BOLTS:	N	-
WELDS - CRACKS:	8	-
TIMBER DECAY:	N	-
CONCRETE CRACKING:	N	-
COLLISION DAMAGE:	8	-
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:	4	<p>BOTH ABUTMENTS ARE THE FULL HEIGHT, CONVENTIONAL SHAPED TYPE.                  BOTH SHOW FORM PANEL LINES, SHRINKAGE WITH CURING CRACKING, LIGHT HONEYCOMBING, SHALLOW WIRES, A LIGHT SCALE BAND ALONG THE BASE OF EACH, AND SOME PAST STAINING.</p> <p>THE SOUTHERLY END, OF THE EASTERLY ABUTMENT, SHOWS ABOUT 32 SQUARE FEET OF SEVERLY DETERIORATED, AND HOLLOW CONCRETE, WHICH CONTINUES INTO THE WINGWALL UP TO 8 INCHES DEEP.                  SEE PHOTO # 17.</p> <p>THE BEARING DEVICE IN THIS AREA IS THREATENED.                  SEE PHOTO # 18.</p> <p>THE NORTHERLY CHEEKWALL OF THE SAME ABUTMENT SHOWS ABOUT 6 SQUARE FEET OF SEVERE SCALING, TO VARIOUS PORTIONS OF THE CHEEKWALL.                  SEE PHOTO # 16.</p> <p>THE WESTERLY ABUTMENT SHOWS A 1 SQUARE FOOT SPALL, OF THE CONSTRUCTION JOINT, ADJACENT TO THE WATERLINE.</p>
ABUTMENTS-BACKWALL:	7	<p>THE BACKWALLS SHOW FORM PANEL LINES, SHRINKAGE WITH CURING CRACKING, LIGHT HONEYCOMBING, SOME LIGHT SCALING, STAINS FROM PAST LEAKAGE, AND LATENT CRACKING.</p>
ABUTMENTS-FOOTINGS:	6	<p>THE SOUTH END OF THE WEST ABUTMENT FOOTING IS EXPOSED FOR APPROXIMATELY 20 LINEAR FEET.                  THE VERTICAL FACE IS EXPOSED APPROXIMATELY 2- 4 INCHES HIGH AT RANDOM LOCATIONS.</p>
ABUTMENTS-SETTLEMENT:	8	-

<b>ABUTMENTS- WINGWALLS:</b>	4	<p>THE SOUTHEASTERLY WINGWALL IS PAST NOTED AS BEING (**UNDER REPAIR**). IT IS HEAVILY DETERIORATED THRU OUT, AND IT ALSO APPEARS THAT SOME PAST DEMOLITION WORK MAY HAVE BEEN STARTED, BUT HAS NOT CONTINUED ANY FARTHER, AT THIS POINT IN TIME. 119 SQ.FT. OF DETERIORATION. THERE IS A HAZARD OF REBAR STICKING OUT 33 INCHES FROM THE WINGWALL. SEE PHOTO # 12.</p> <p>THE SOUTHWESTERLY WING SHOWS ABOUT 6 SQUARE FEET OF SEVERE SCALING , 4 INCHES DEEP, ALONG THE FREE END OF THE WING, AND ABOUT 2 SQUARE FEET ALONG THE CAP, NEAR THE STRUCTURE. SEE PHOTO # 11.</p> <p>THE NORTHEASTERLY WING SHOWS APPROXIMATELY 75 SQUARE FEET MAP HAIRLINE CRACKS WITH EFFLORESCENCE, AREAS OF MEDIUM- HEAVY SCALE ALONG THE CAP. SEE PHOTO # 21</p> <p>TOP OF THE NORTHWEST WINGWALL SHOWS A SHALLOW SPALL ON THE CAP ADJACENT TO THE RAILBASE APPROXIMATELY 2 SQUARE FEET BY 3 INCHES DEEP.</p>
<b>PIERS/BENTS- CAPS:</b>	N	-
<b>PIERS/BENTS-PILE BENT:</b>	N	-
<b>PIERS/BENTS- COLUMNS:</b>	N	-
<b>PIERS/BENTS- FOOTING:</b>	N	-
<b>PIERS/BENTS- SETTLMT:</b>	N	-
<b>EROSION-SCOUR:</b>	6	REFER TO THE FOOTING DESCRIPTION, ALONG THE WESTERLY ABUTMENT.
<b>CONCRETE CRACK-SPALL:</b>	5	-
<b>STEEL CORROSION:</b>	N	-
<b>PAINT:</b>	N	-
<b>TIMBER DECAY:</b>	N	-
<b>COLLISION DAMAGE:</b>	8	-
<b>DEBRIS:</b>	7	LIGHT DEBRIS IS NOTED ALONG BOTH ABUTMENT SEATS.

**61. CHANNEL &  
CHANNEL  
PROTECTION:**

**Overall Rating:**

6

Rating

**CHANNEL SCOUR:**

6	<p>THE AVERAGE WATER DEPTH ALONG THE INLET IS ABOUT 6-15 INCHES.</p> <p>THERE IS A NARROW BAND OF SCOUR ALONG THE CENTER OF THE CHANNEL, EXTENDING OVER TO THE WESTERLY ABUTMENT WITH THE EXPOSED FOOTING.</p>
---	--

		WATER DEPTHS ABOUT 11-16 INCHES DEEP. THE CHANNEL DEPTHS DOWNSTREAM FROM THE STRUCTURE RANGE FROM 1.5 FEET DEEP.
<b>EMBANKMENT EROSION:</b>	6	THERE IS EROSION ALONG THE WATERLINE OF THE SOUTHWESTERLY END WITH UNDERCUTTING OF THE EMBANKMENT. SOME EROSION UPSTREAM.  SOME TREES LEANING UP AND DOWNSTREAM.
<b>DEBRIS:</b>	6	THERE IS A SILT BUILD UP ALONG THE EASTERLY ABUTMENT, UP TO 8 FEET WIDE, AND UP TO 1 FOOT DEEP. NARROW ISLANDS ALONG THE EASTERLY SIDE UNDER THE STRUCTURE.
<b>VEGETATION:</b>	6	ALL BANKS ARE WELL VEGETATED, AND OVERHANG THE CHANNEL. LIGHT TO MODERATE ENCROACHMENT, IS NOTED ALONG BOTH INLET BANKS, AS WELL AS THE SOUTHEASTERLY.
<b>CHANNEL CHANGE:</b>	7	SLIGHTLY NARROWED AT THE INLET.
<b>FENDER SYSTEM:</b>	N	FREEBOARD THIS INSPECTION WAS 9 FEET 6 INCHES. DATUM LOCATED AT THE NORTHWEST.
<b>SPUR, DIKES &amp; JETTIES:</b>	N	-
<b>RIP RAP:</b>	N	NO RIP-RAP IS NOTED ALONG THE CHANNEL.

62. CULVERTS & RETAINING WALL:

-

Overall Rating:

N

65. APPROACH CONDITION

-

Overall Rating:

5

Rating

<b>APPROACH SLAB:</b>	N	-
<b>RELIEF JOINTS:</b>	N	-
<b>APPROACH GUIDE RAIL:</b>	N	NO APPROACH RAIL SYSTEM AT THE STRUCTURE.  SEE PHOTO #4.  THERE ARE SOME SINGLE TIMBER POSTS ALONG THE APPROACH SHOULDERS, WITH NO CABLES. TEMPORARY BARRIER AT THE SOUTHEAST. SEE PHOTOS # 1 & 2.
<b>APPROACH PAVEMENT:</b>	7	MACADAMIZED APPROACH ROADWAYS- RANDOM TRANSVERSE, LONGITUDINAL, AND RANDOM CRACKS, AREAS OF LIGHT TIRE WEAR. SEE PHOTO # 8. WEST END SHOWS A 6 FEET BY 6 FEET DEPRESSED BITUMINOUS PATCH. SEE PHOTO # 6.
<b>APPROACH EMBANKMENT:</b>	5	LIGHT EROSION, FROM ROADWAY RUN-OFF, IS NOTED BEHIND THE SOUTHEASTERLY WINGWALL.

	<p>**EROSION AND WINGWALL ARE STILL CONSIDERED UNDER REPAIR @ THIS TIME**. ALSO MINOR EROSION ALSO BEHIND SOUTHWEST WING. BACK OF THE SOUTHEAST WINGWALL IS EXPOSED 8 FEET LONG BY 2 FEET HIGH.</p>
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**TRAFFIC SAFETY FEATURES**

	Rating	
<b>BRIDGE RAILINGS:</b>	Last Inspection: 0 Current: 0	SEE PHOTO # 3.
<b>TRANSITIONS:</b>	Last Inspection: 0 Current: 0	-
<b>APPROACH GUARDRAILS:</b>	Last Inspection: 0 Current: 0	-
<b>APPR. GUARDRAIL ENDS:</b>	Last Inspection: 0 Current: 0	-

**66. LOAD POSTING**

	- Posted Loading -	
<b>SINGLE UNIT (TONS):</b>	Last Inspection: - Current: -	-
<b>SEMI TRAILER (TONS):</b>	Last Inspection: - Current: -	-
<b>4 AXLE (TONS):</b>	Last Inspection: - Current: -	-
<b>3S2 (TONS):</b>	Last Inspection: - Current: -	-
<b>ADVANCE WARNING (Y/N):</b>	-	-
<b>LEGIBILITY:</b>	-	-
<b>VISIBILITY/LOCATION:</b>	-	-

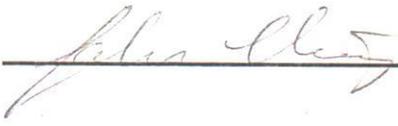
**67.  
MISCELLANEOUS**

Rating

<b>MIN. VERT. UNDERCLEARANCE:</b>	Last Inspection: - 0' 0" Current: <del>17' 7"</del> <i>Q25</i>
<b>POSTED CLR. UNDER BRIDGE:</b>	Last Inspection: - ' -" Current: -' -"
<b>POSTED CLR. ON BRIDGE:</b>	Last Inspection: - ' -" Current: -' -"
<b>ADVANCED WARNING (YES/NO):</b>	No
<b>SPEED LIMIT (IF ANY):</b>	Last Inspection: - - Current: -
<b>CHARACTER OF TRAFFIC:</b>	THE TRAFFIC VOLUME WAS LIGHT, TO MODERATE DURING THE INSPECTION, WITH MOSTLY ALL LOCAL TYPES NOTED.

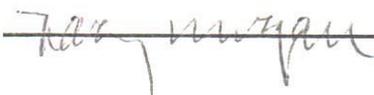
<b>ADDITIONAL NOTES:</b>	THE BRIDGE NUMBER OR CHANNEL NAME ARE NOT POSTED AT THIS STRUCTURE.
<b>ADDITIONAL COMMENTS:</b>	INSPECTOR MARK SIVERIO AND DAVE SHUTE VISITED BRIDGE SITE.

Inspectors' Signatures:

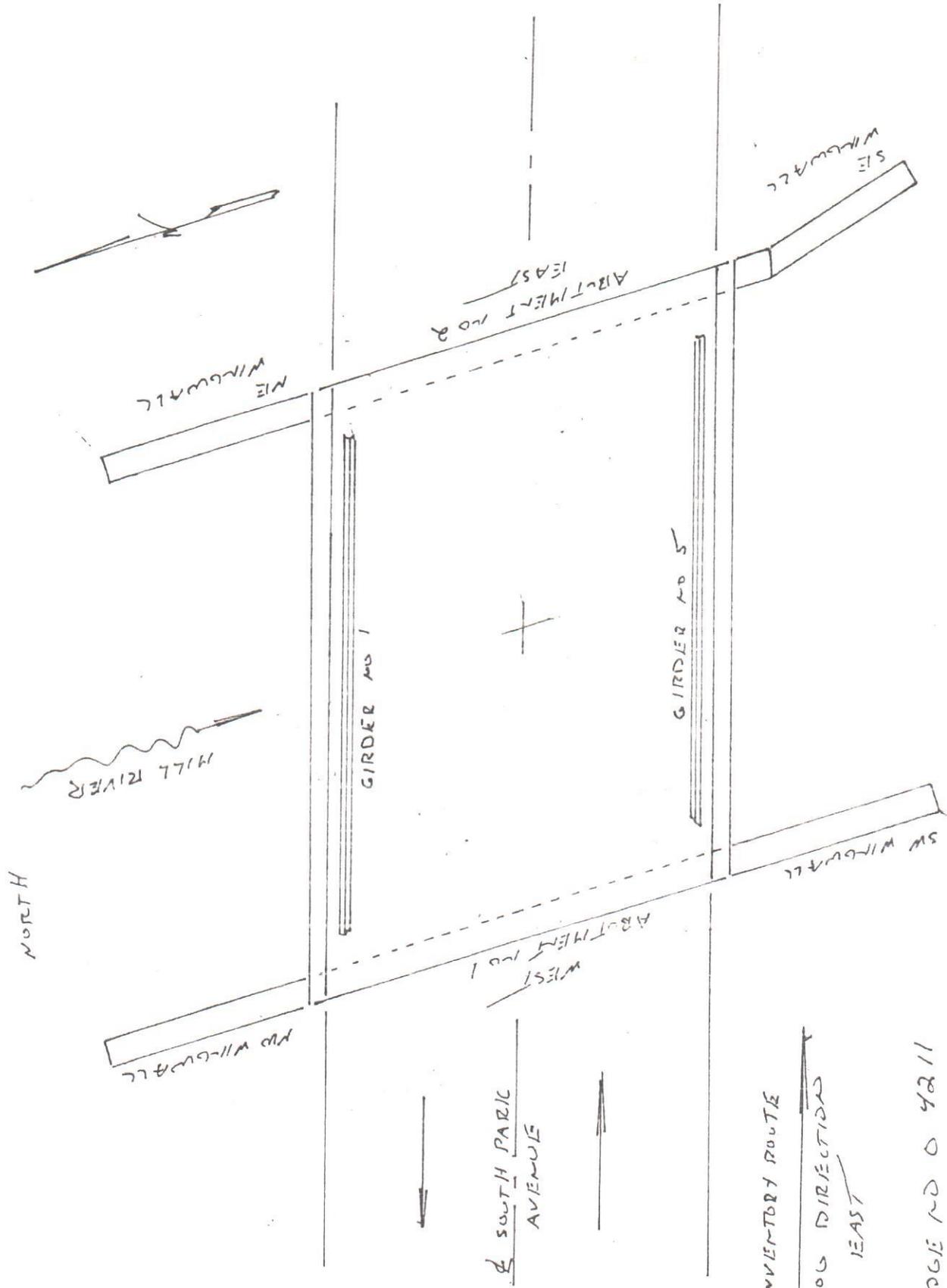
1)		Date: <u>4/23/14</u>
2)		Date: <u>4/23/14</u>
3)	_____	Date: ---/---/---
4)	_____	Date: ---/---/---

P.E. Signature: \_\_\_\_\_ Date: ---/---/---

P.E. #: \_\_\_\_\_ Date: ---/---/---

Reviewed by:  conndot Date: 5/6/2014





NORTH

SOUTH

SOUTH PARK AVENUE

INVENTORY ROUTE  
LOS DIRECTIONS EAST

BRIDGE NO 0 4211

EAST OF SOUTH PARK AVENUE

QUICK MILL RIVER

ROAD VIEWS - NOT TO SCALE

~~1-5~~  
1-2000

Bridge # ... 4211 Date ... 12/10/02 Prepared by ... PS checked by \_\_\_\_\_

**CONCRETE DETERIORATION WORKSHEET**  
Form BPL-10 Rev. 2001

Deterioration By Span - In Square Feet											
Span Number											
Deterioration Type	X	1	2	3							Total
Spalled and Delaminated Areas	Top										0
	Bot										0
Scale (Moderate to Severe Only)	Top										0
	Bot										0
Cracks with Efflorescence (Use 6" width x length)	Bot	5									5
Cracks w/o Efflo (Use 3" width x Length)	Top										0
	Bot	2.5									2.5
Map Cracking w/Efflorescence (Use full Area)	Bot	20.7									20.7
Map Cracking w/o Efflo (Use 50% of Area)	Top										0
	Bot	5									5
Honeycombed Areas (only areas more than 1 1/2" deep)	Bot										0
Totals	Top	0	0	0	0	0					0
	Bot	219.5	0	0	0	0					219.5
Span Area		1071									1071
% Spalled and Delaminated on top		0.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!					0.0%
% Deterioration on Bottom		20.5%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!					20.5%

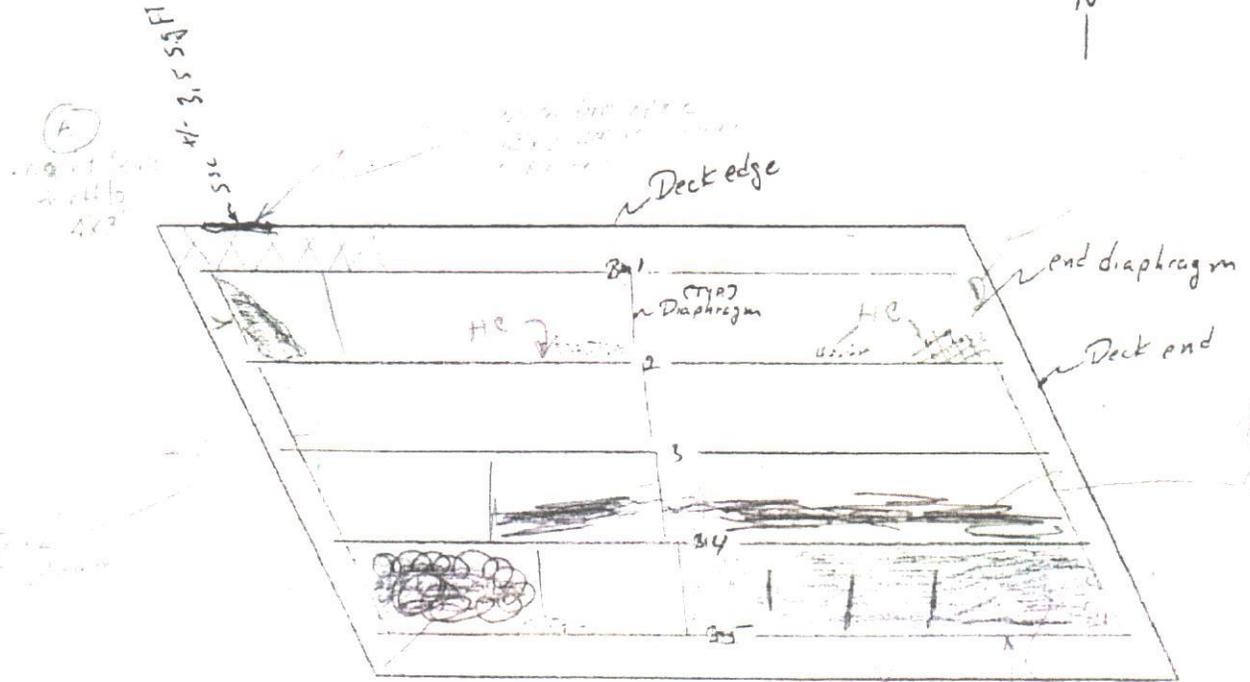
Note: 17

4.10.14	N/C	JM7
NO.	DATE	DESCRIPTION
REVISIONS		

3/11 13/35

DATE PREPARED 5-8-08	PREPARED BY Team 15	State of Connecticut Department of Transportation Bureau of Engineering & Highway Operations DES-003 REV 1-93 (302-06-0225) COMPUTATION SHEET	ORGANIZATION UNIT NO. 3000	WORK ORDER NO. 1.1
DATE CHECKED	CHECKED BY			SHEET NO. 1/1

SUBJECT  
BR #4211 South Park Ave. - Mill River, Easton  
Framing Plan, Deck U.S. Side Condition  
"In-Depth"  
N.T.S. Scale



(A) = Shaded area = latent cracks, discolored, and flaking concrete with traces of efflorescence.  
 (B) = honey comb } = approx 15% of U.S. side.

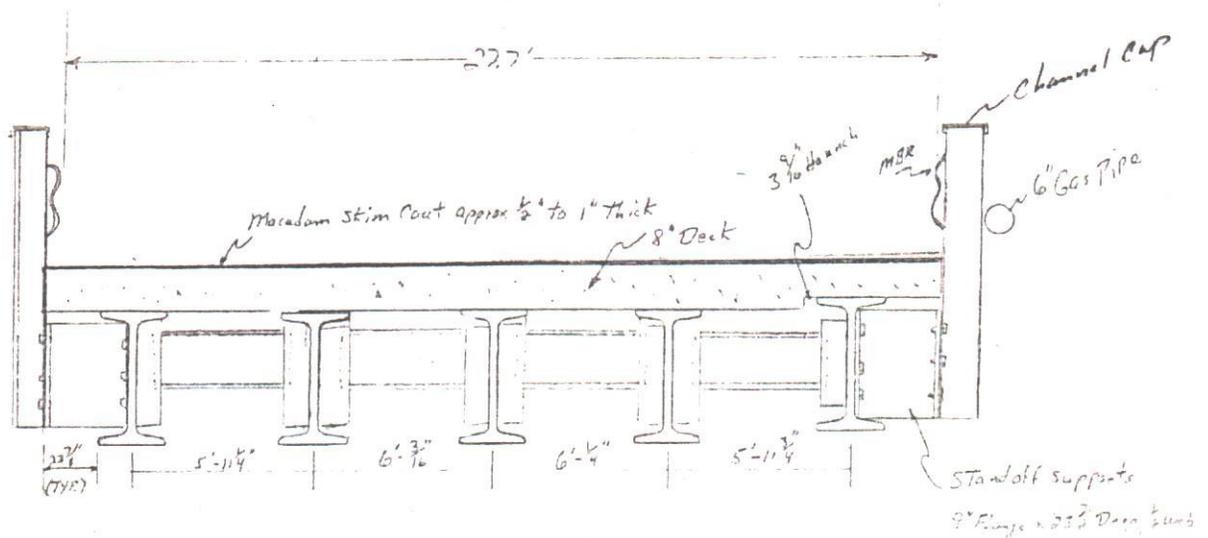
N.T.S.

4.10.14	NC TM 7	
NO.	DATE	DESCRIPTION
REVISIONS		

DATE PREPARED	PREPARED BY <i>Team 15</i>	State of Connecticut Department of Transportation Bureau of Engineering & Highway Operations DES-003 REV 1-93 (302-06-0225)	ORGANIZATION UNIT NO <i>"In-Depth"</i>	WORK ORDER NO
DATE CHECKED <i>5-8-08</i>	CHECKED BY	COMPUTATION SHEET		SHEET NO <i>10/17</i>

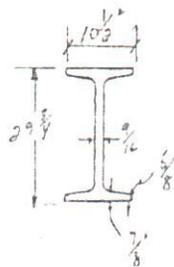
SUBJECT  
*BR#4211 South Park AVE. - MILL RIVER, EASTON*

*Cross section U.T.S.*



*Looking West*

*TYP. STRINGERS*



*Rail Posts; standard 6" W H-Posts 6'-8" long*





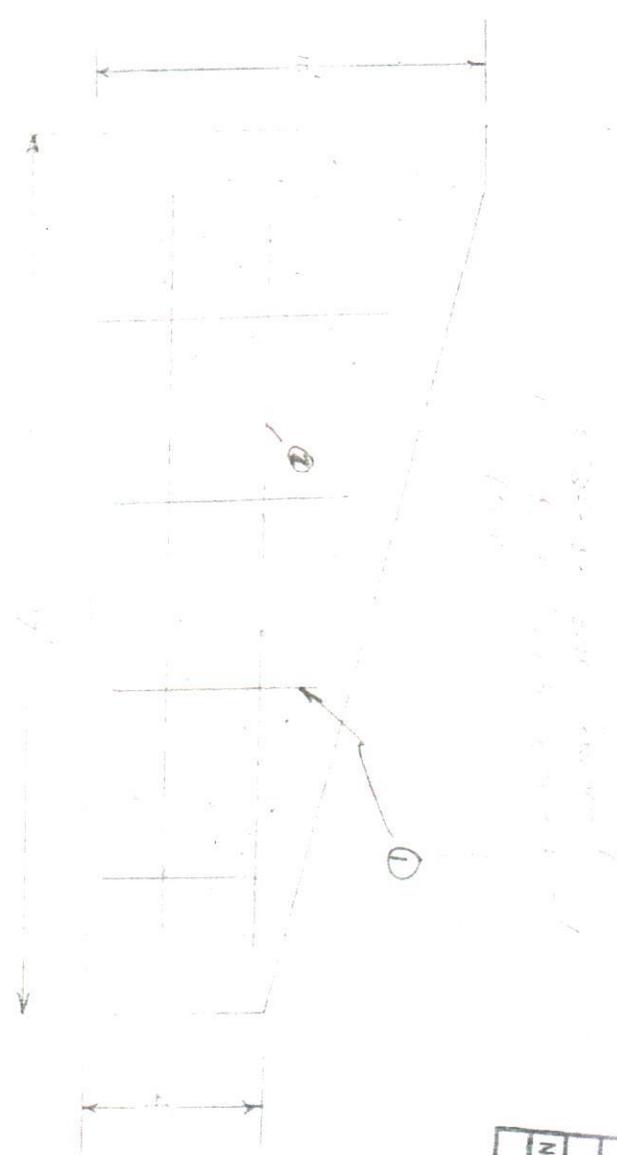




Be the one responsible for the work. It is your job to make sure the work is done right.

~~2/12~~

18/5



REVISIONS		DESCRIPTION	DATE	NO.
1	4.16.0			
2	7.10.14	N/C		

- ① Numerous Vertical Rebars sticking out of cap up to 33" high.
- ② Horizontal bar sticking out

# FIELD NOTES

BRIDGE NO. 04211

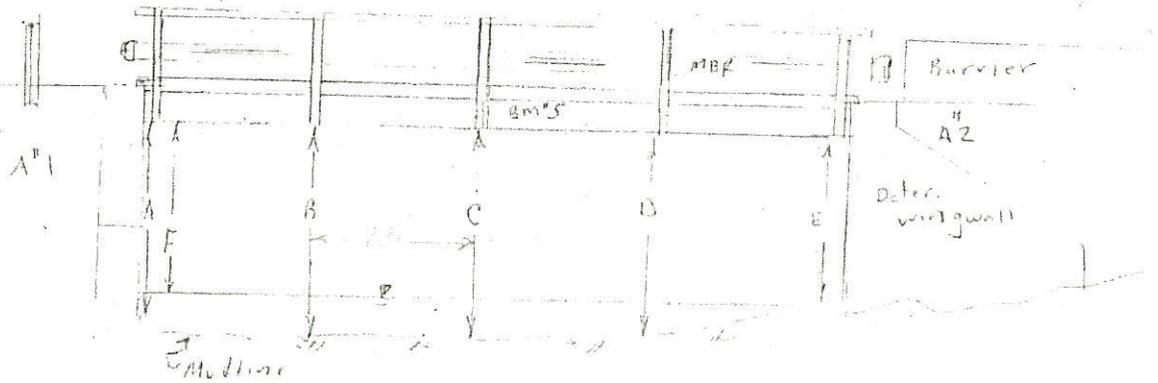
DATE: 2-24-06

CREW: P & M

SHEET ~~1/1~~

04211 South Park Ave over Mill River, Canton

Timber Posts



most Restrictive Freeboard (south end)

Flow  
outlet Elev

DATE	2-24-06	4-16-12	4-10-14		
A	10'-1"	9'-1 1/2"	9'-3"		
B	10'-6"	9'-8"	9'-8"		
C	9'-9"	9'-11 1/2"	9'-9"		
D	8'-11"	10'-3"	10'-4"		
E	8'-9"	10'-5"	10'-5"		
F	8'-7"	9'-6 1/2"	9'-6"		

Freeboard

F: Freeboard

F: 8'-7"

Datum = inside of beam 5 & A1

NOT TO SCALE

13/18 19/4

# FIELD NOTES

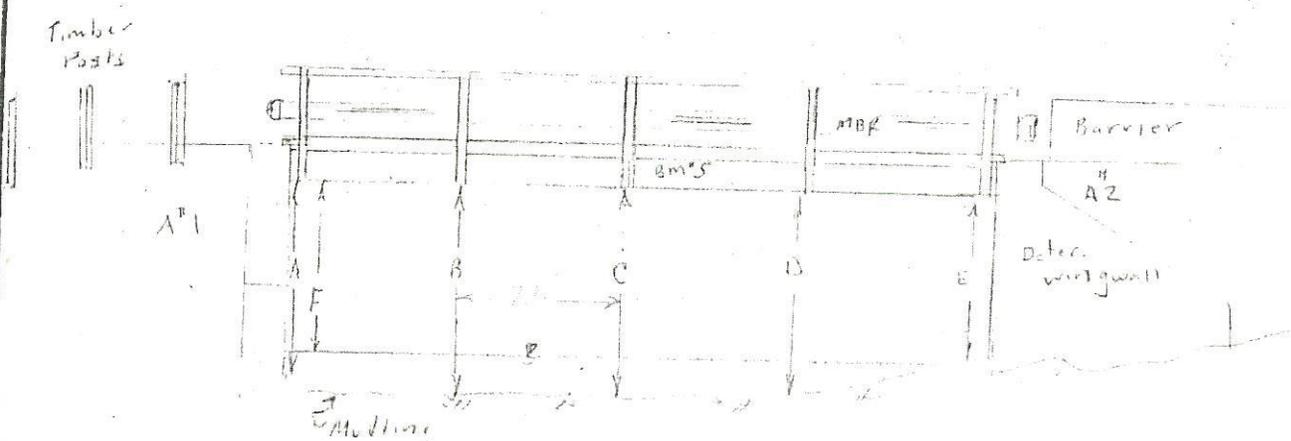
BRIDGE NO. 04211

DATE: 2-24-06

CREW: P & M

SHEET ~~1/1~~

04211 South Park Ave over Mill River, Canton



most Restrictive Freeboard (south end)

Outlet Elev

DATE	2-24-06	4-16-12	4-10-14		
A	10'-1"	9'-1 1/2"	9'-3"		
B	10'-6"	9'-8"	9'-8"		
C	9'-9"	9'-11 1/2"	9'-9"		
D	8'-11"	10'-3"	10'-4"		
E	8'-9"	10'-5"	10'-5"		
Freeboard F	8'-7"	9'-6 1/2"	9'-6"		

F: Freeboard

F: 8'-7"

Datum = inside of beam's & A^1

NOT TO SCALE

13/18 19/4

# FIELD NOTES



BRIDGE No. 4211

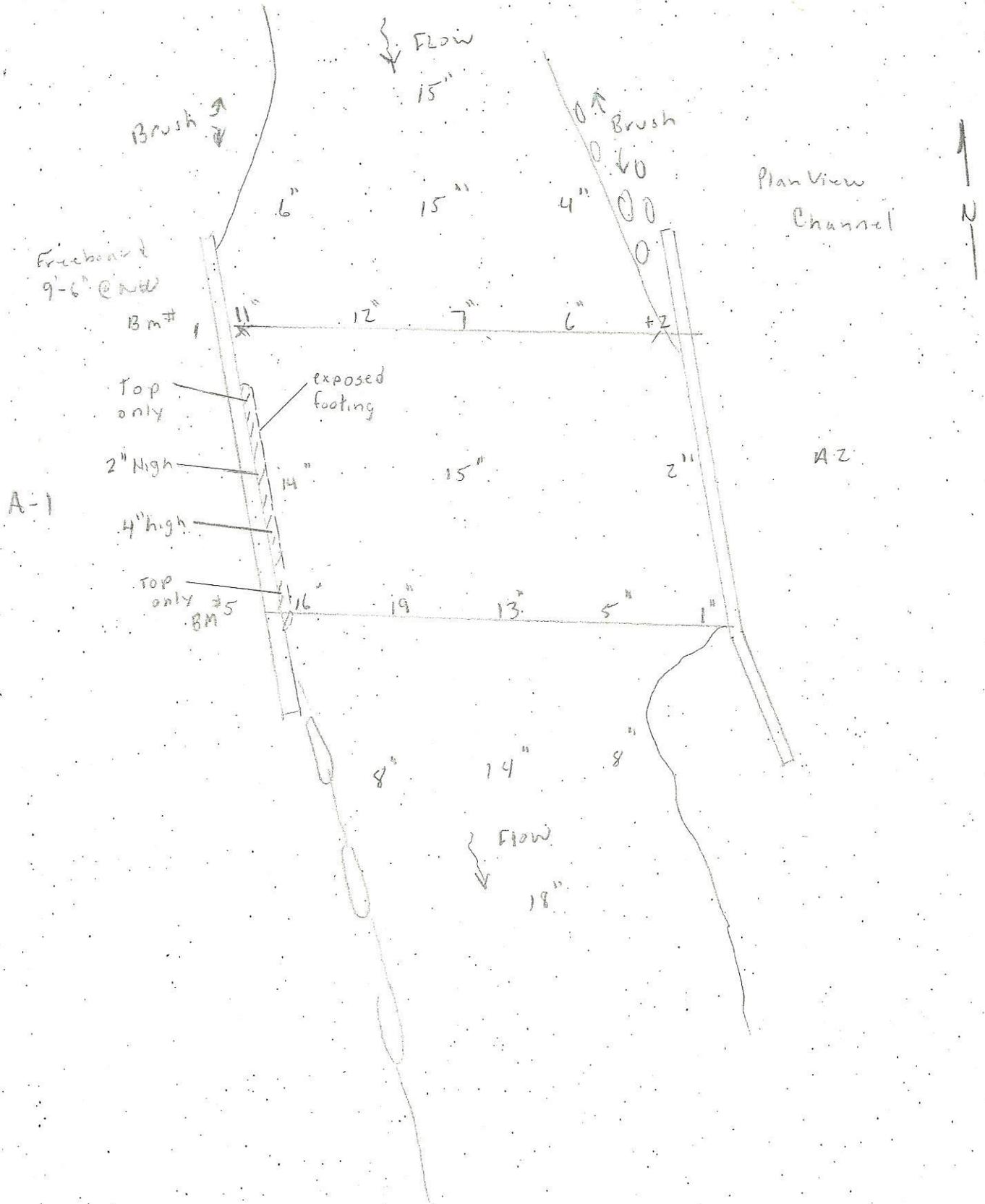
DATE. 4-9-14

TEAM #

7

SHEET.

DESCRIPTION: Bridge #04211 South Park Ave - Mill River, Easton.



Connecticut Department of Transportation  
Fracture Critical Members/Fatigue Prone Details  
Inspection Data Sheet

Bridge No. 0 4211

Town: Easton

Facility Carried: South Park Avenue

Feature Intersected: Mill River

Fracture Critical Inspection Date:

Fracture Critical Inspection Frequency:     months

Fracture Critical Type Code:

Reference to Bridge Plans: No Bridge Plans Available

Member/Detail Type Code: H - Highly Fatigue Prone Details in Tension Areas

Fracture Critical: No

Fatigue Prone: Yes

Fatigue Category: C & C'

Steel Type: Unknown Steel

Year 1905 to 1936 - Fy 30.0 ksi

Description: Diaphragm\Girder Web & Flange Connections - Fillet weld -

Bridge No.	04211	Inspected by:	PATRICK A.SHARRON
Town:	EASTON	Inspected by:	JOHN CHAVEZ
Feature Carried:	SOUTH PARK AVENUE	Date Inspected:	4 / 10 / 2014
Feature Crossed:	MILL RIVER	Project No.:	

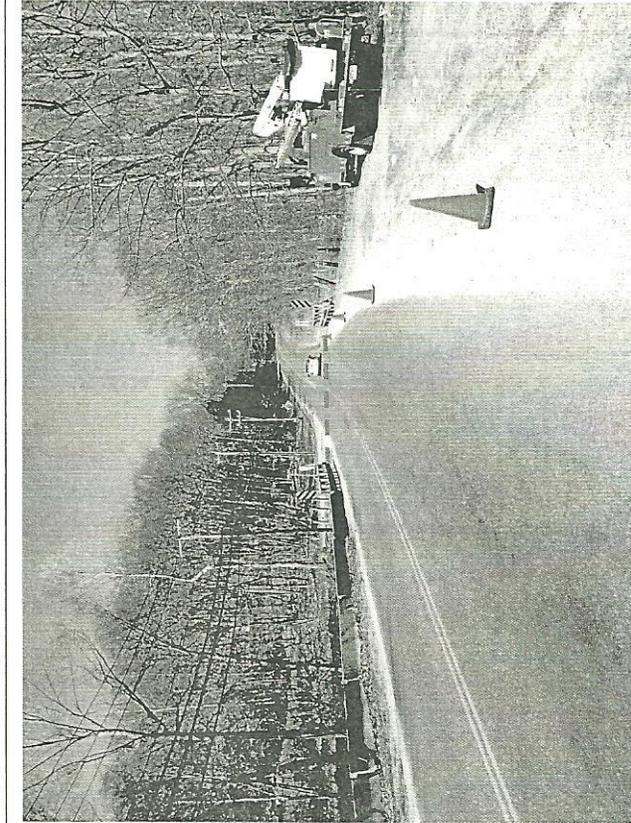


Photo # 1: View looking west bound.

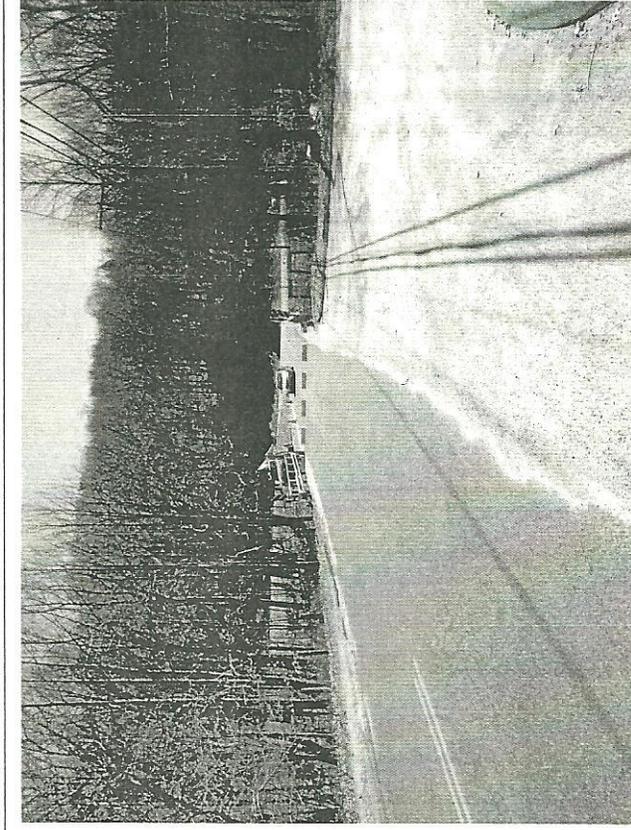


Photo # 2: View looking east bound.

Bridge No.	04211	Inspected by:	PATRICK A. SHARRON
Town:	EASTON	Inspected by:	JOHN CHAVEZ
Feature Carried:	SOUTH PARK AVENUE	Date Inspected:	4 / 10 / 2014
Feature Crossed:	MILL RIVER	Project No.:	

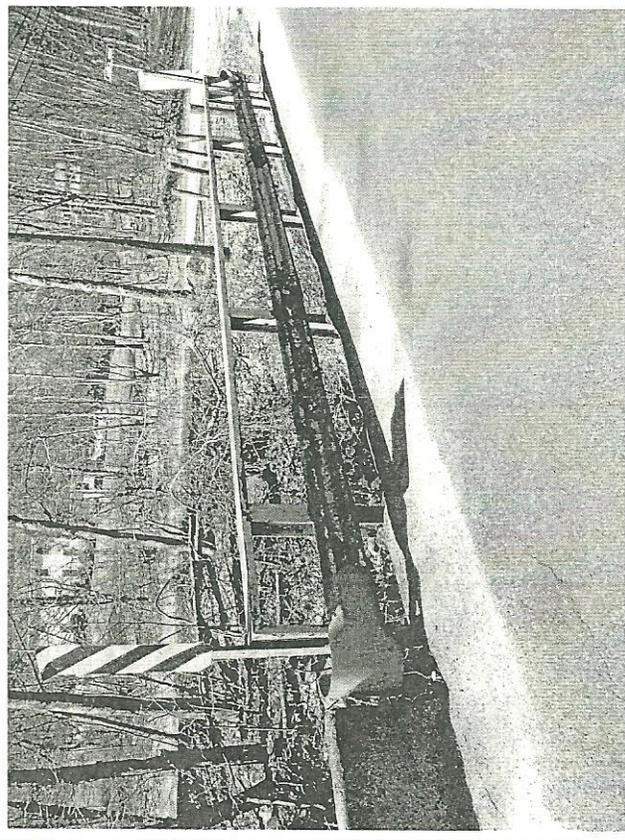


Photo # 3: View of south railing.

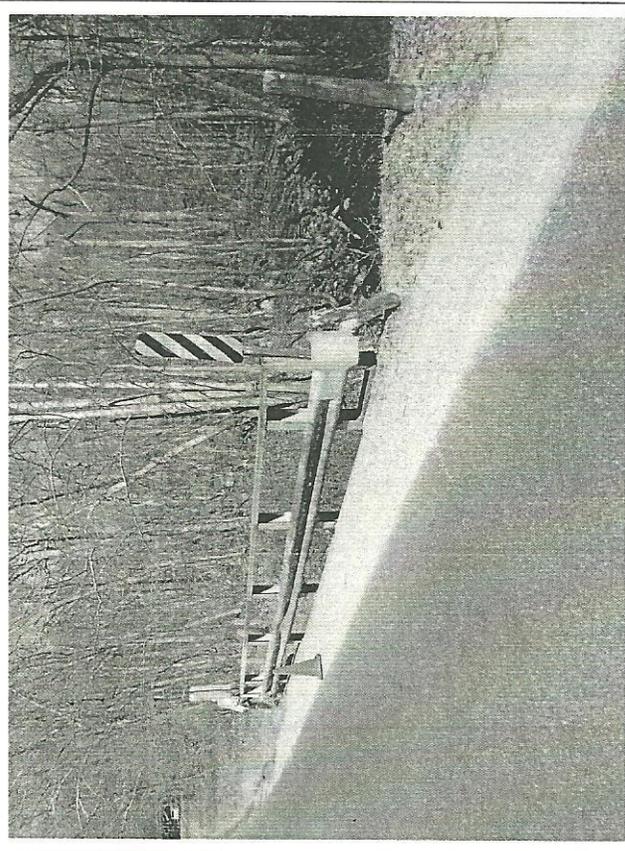
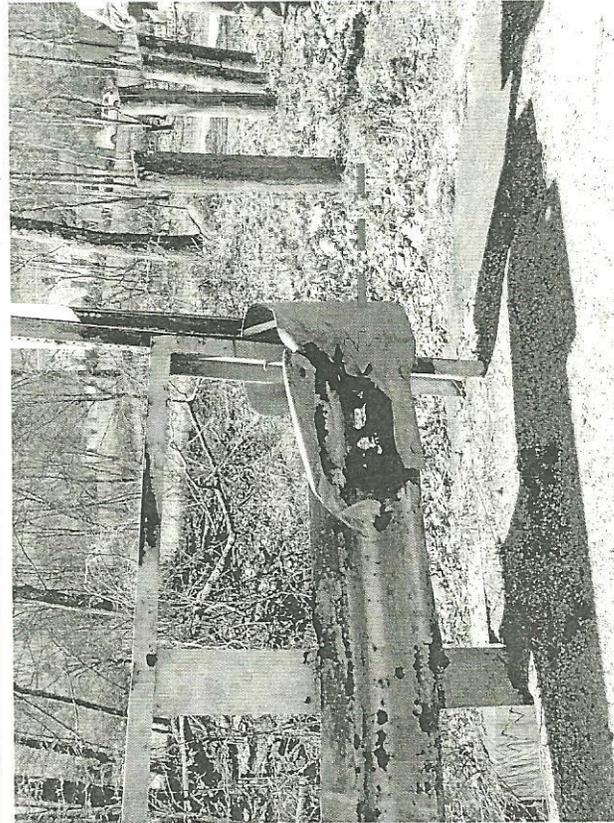
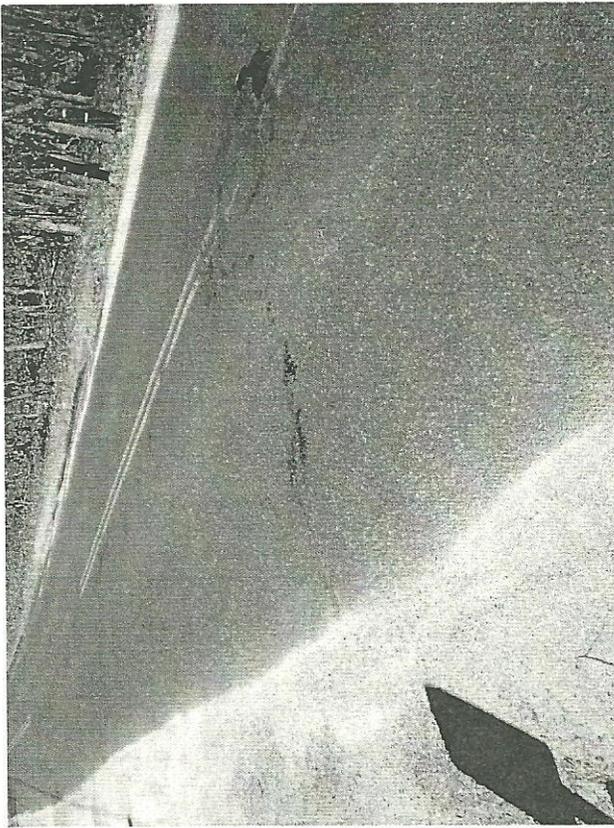


Photo # 4: View of north railing.

Bridge No.	04211	Inspected by:	PATRICK A. SHARRON
Town:	EASTON	Inspected by:	JOHN CHAVEZ
Feature Carried:	SOUTH PARK AVENUE	Date Inspected:	4 / 10 / 2014
Feature Crossed:	MILL RIVER	Project No.:	



**Photo # 5: View of M.B.R at southwest corner exhibits collision damage with a large tear.**



**Photo # 6: View of west approach.**

Bridge No.	04211	Inspected by:	PATRICK A.SHARRON
Town:	EASTON	Inspected by:	JOHN CHAVEZ
Feature Carried:	SOUTH PARK AVENUE	Date Inspected:	4 / 10 / 2014
Feature Crossed:	MILL RIVER	Project No.:	

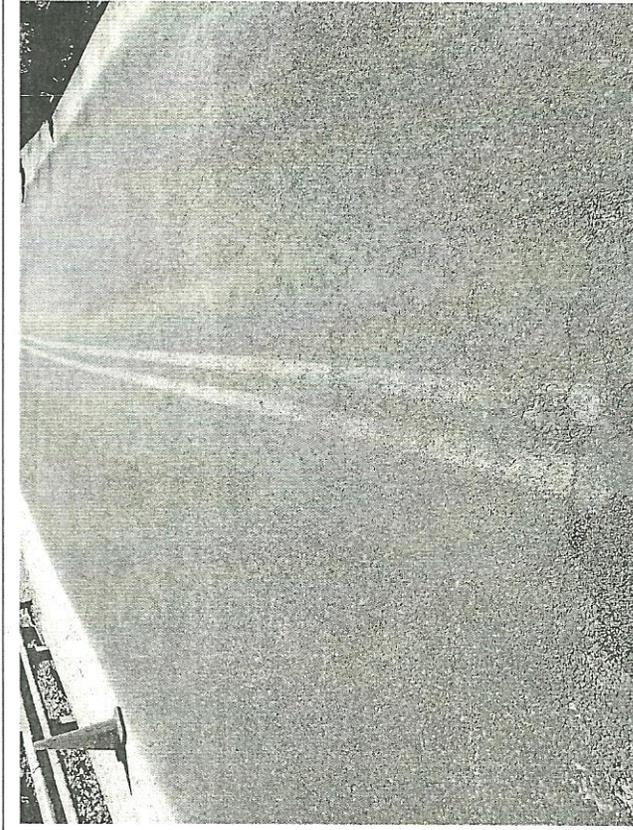


Photo # 7: View of wearing surface.

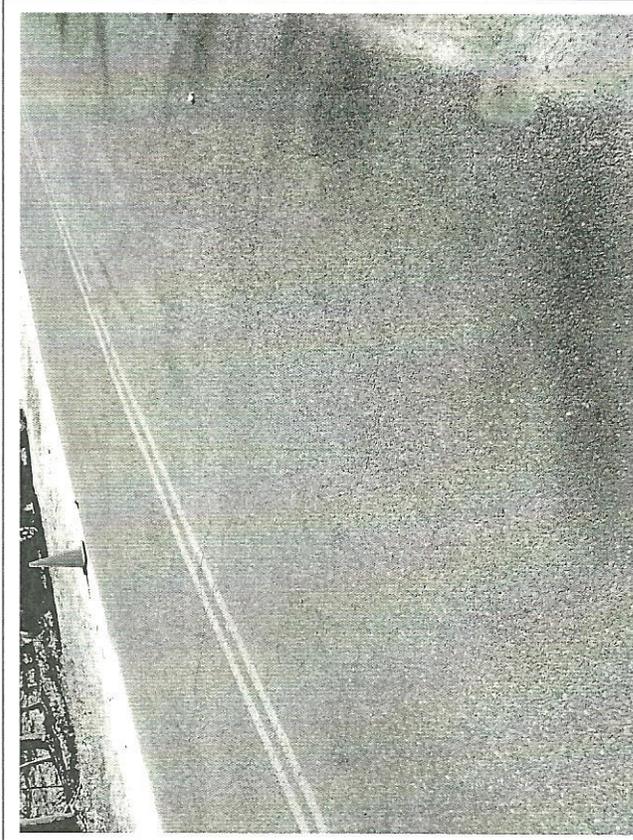


Photo # 8: View of east approach.

Bridge No.:	04211	Inspected by:	PATRICK A. SHARRON
Town:	EASTON	Inspected by:	JOHN CHAVEZ
Feature Carried:	SOUTH PARK AVENUE	Date Inspected:	4 / 10 / 2014
Feature Crossed:	MILL RIVER	Project No.:	

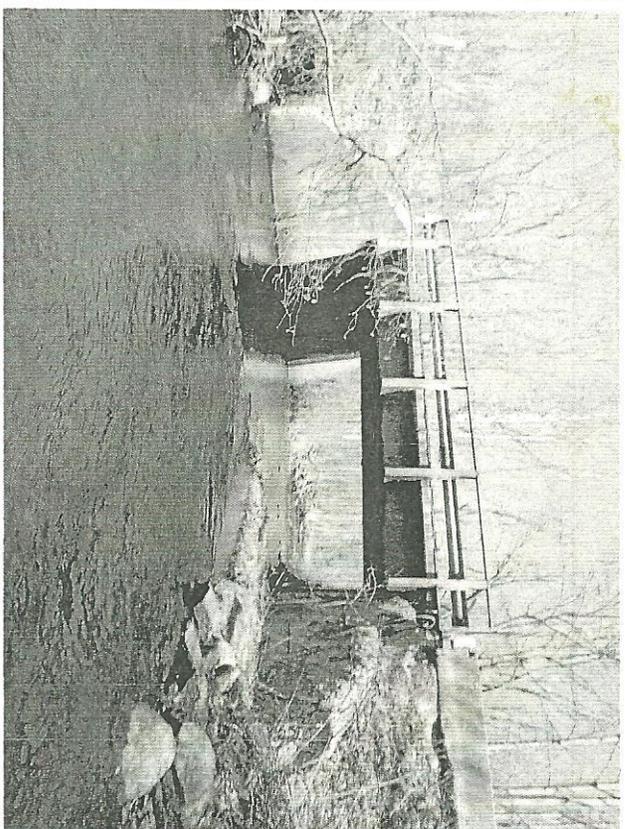


Photo # 9: View of south elevation (outlet end).

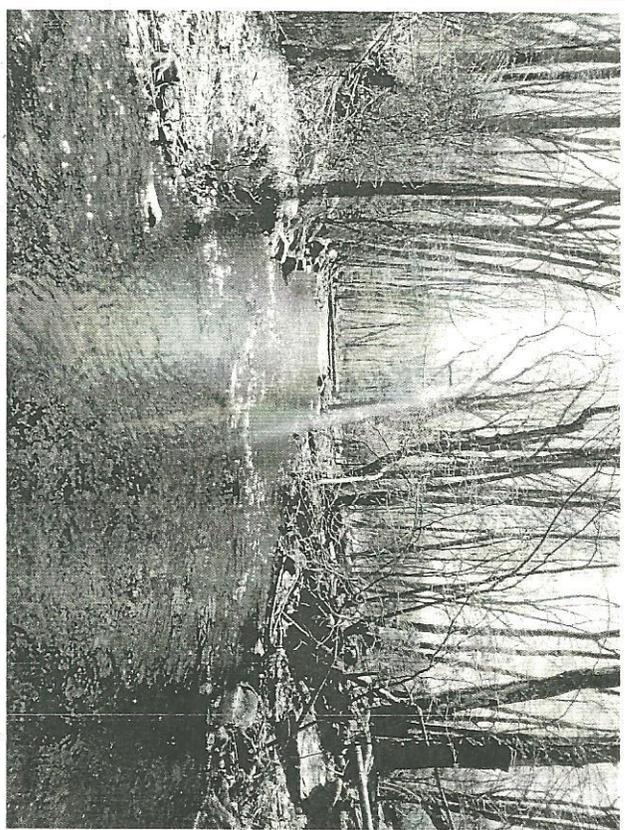


Photo # 10: View looking down river.

2965

Bridge No.	04211	Inspected by:	PATRICK A. SHARRON
Town:	EASTON	Inspected by:	JOHN CHAVEZ
Feature Carried:	SOUTH PARK AVENUE	Date Inspected:	4 / 10 / 2014
Feature Crossed:	MILL RIVER	Project No.:	

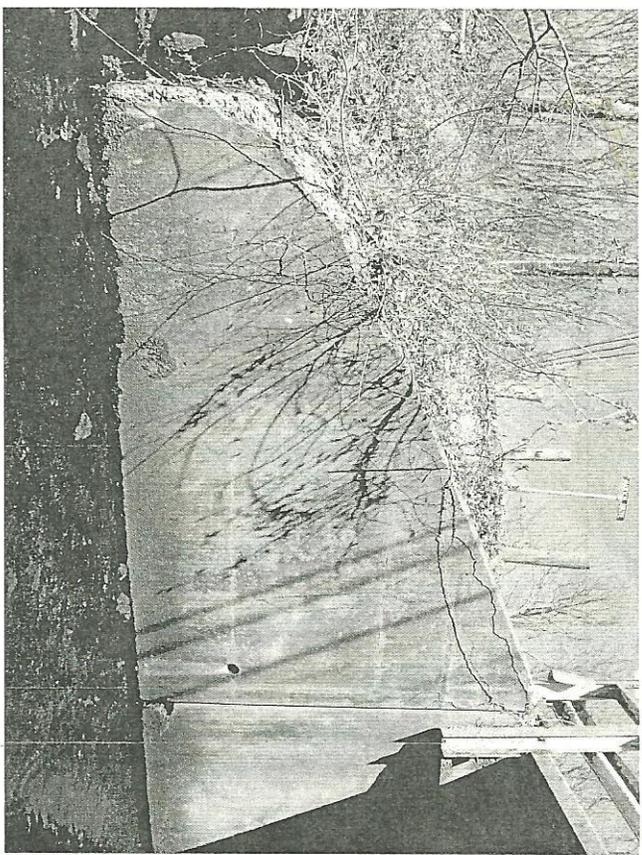


Photo # 11: View of southwest wing.

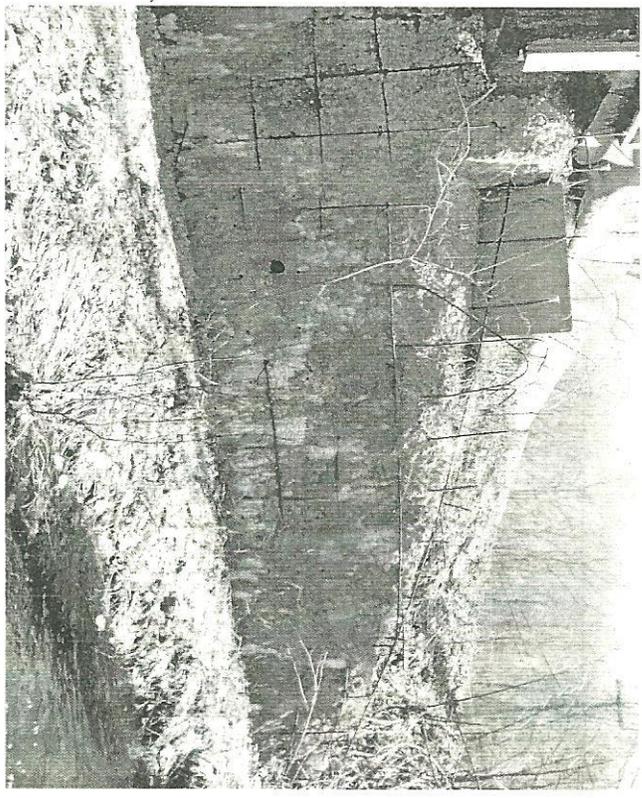


Photo # 12: View of southeast wing.

Bridge No.	04211	Inspected by:	PATRICK A.SHARRON
Town:	EASTON	Inspected by:	JOHN CHAVEZ
Feature Carried:	SOUTH PARK AVENUE	Date Inspected:	4 / 10 / 2014
Feature Crossed:	MILL RIVER	Project No.:	

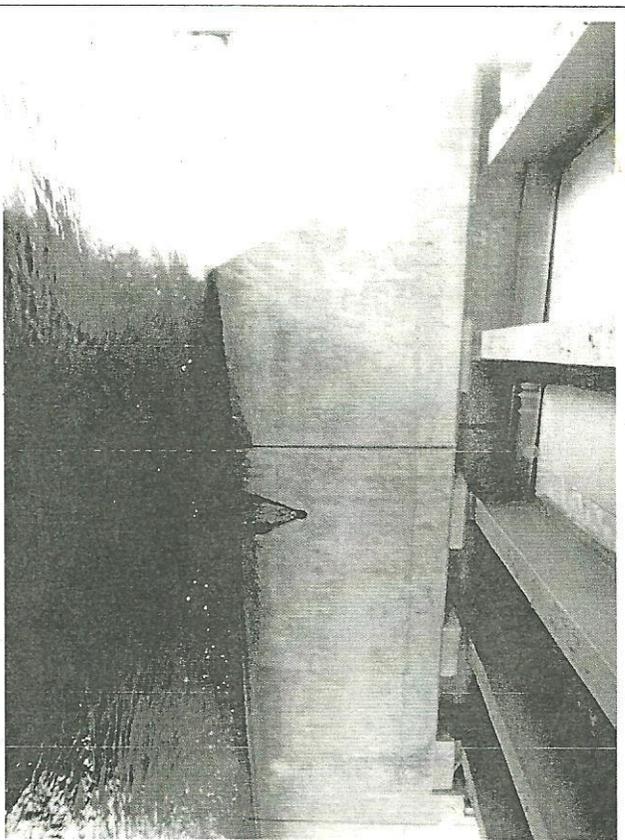


Photo # 13: View of west abutment.

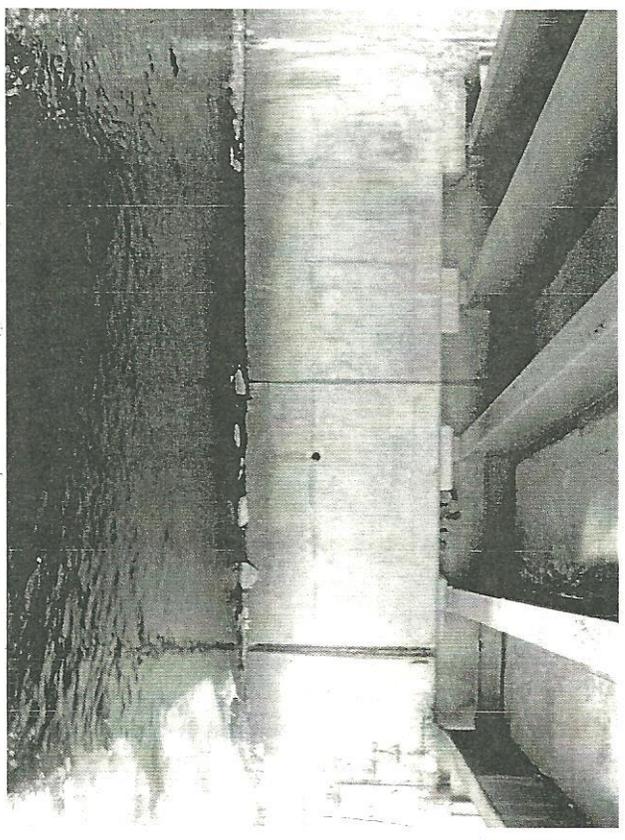


Photo # 14: View of east abutment.

1965

Bridge No.	04211	Inspected by:	PATRICK A.SHARRON
Town:	EASTON	Inspected by:	JOHN CHAVEZ
Feature Carried:	SOUTH PARK AVENUE	Date Inspected:	4 / 10 / 2014
Feature Crossed:	MILL RIVER	Project No.:	

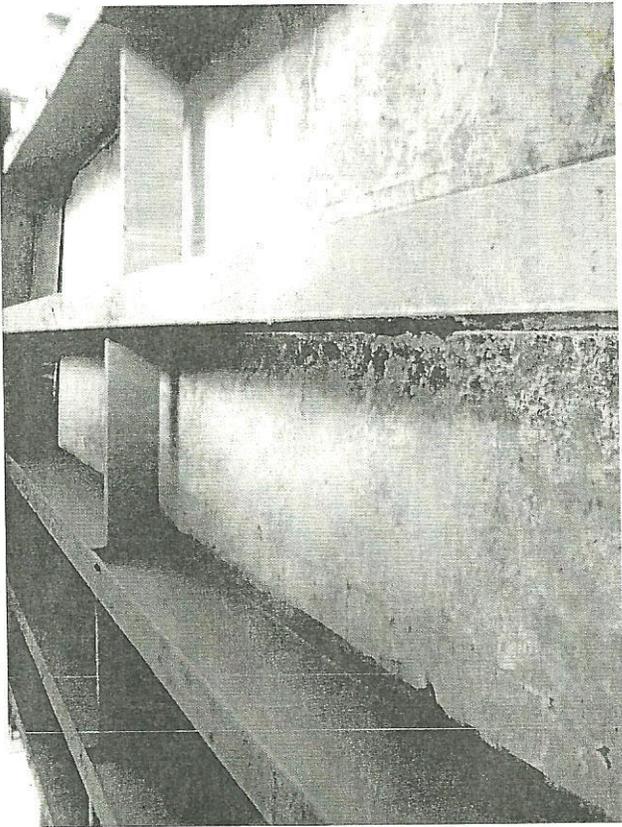


Photo # 15: View of deck underside.

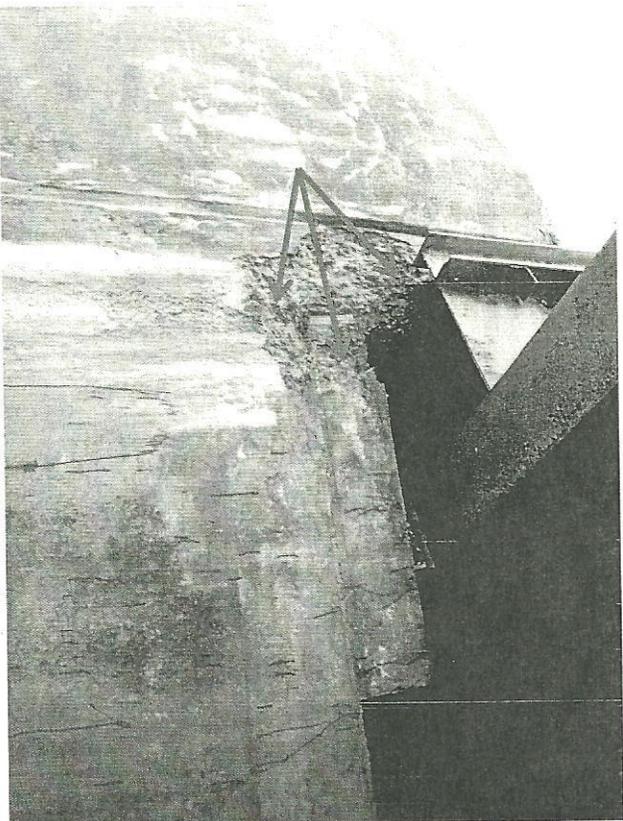


Photo # 16: View of cheek wall, bearing pedestal & abutment, exhibits severe scaling at northeast corner of east abutment.

2/15

Bridge No.:	04211	Inspected by:	PATRICK A.SHARRON
Town:	EASTON	Inspected by:	JOHN CHAVEZ
Feature Carried:	SOUTH PARK AVENUE	Date Inspected:	4 / 10 / 2014
Feature Crossed:	MILL RIVER	Project No.:	



Photo # 17: View of cheek wall, bearing pedestal -5 & abutment, exhibits chip out concrete & severe scaling at southeast corner of east abutment.

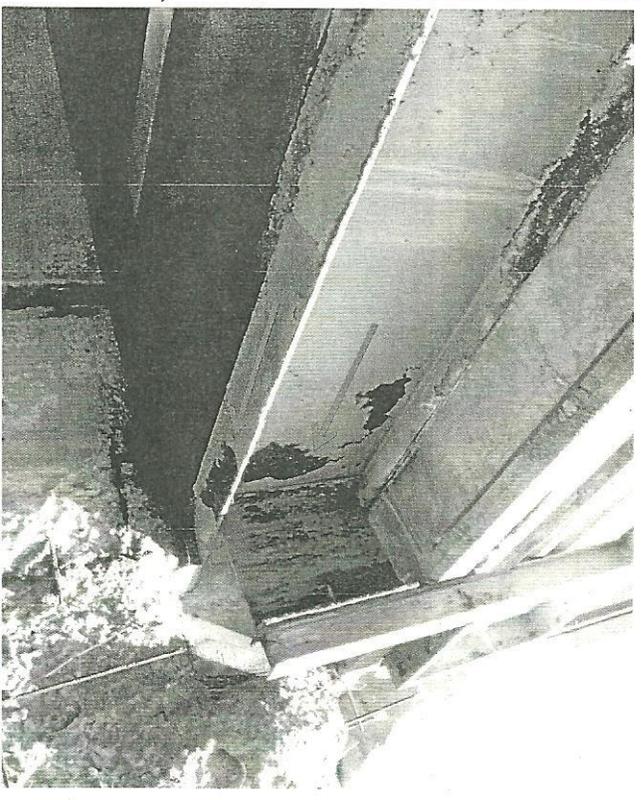


Photo # 18: View of laminar rust at web & flange, fascia beam-5 south side.

Bridge No.	04211	Inspected by:	PATRICK A. SHARRON
Town:	EASTON	Inspected by:	JOHN CHAVEZ
Feature Carried:	SOUTH PARK AVENUE	Date Inspected:	4 / 10 / 2014
Feature Crossed:	MILL RIVER	Project No.:	

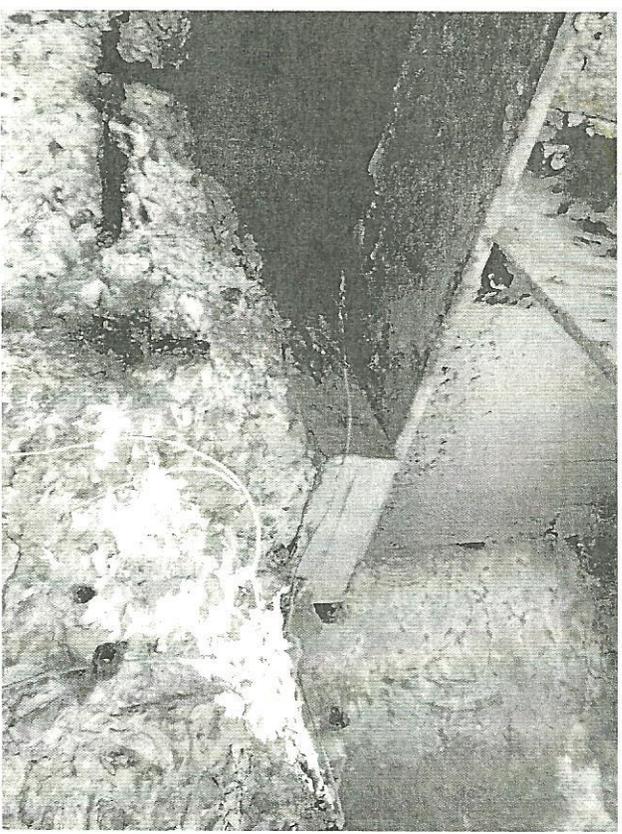


Photo # 19: Typical view of expansion bearing-5 east abutment.

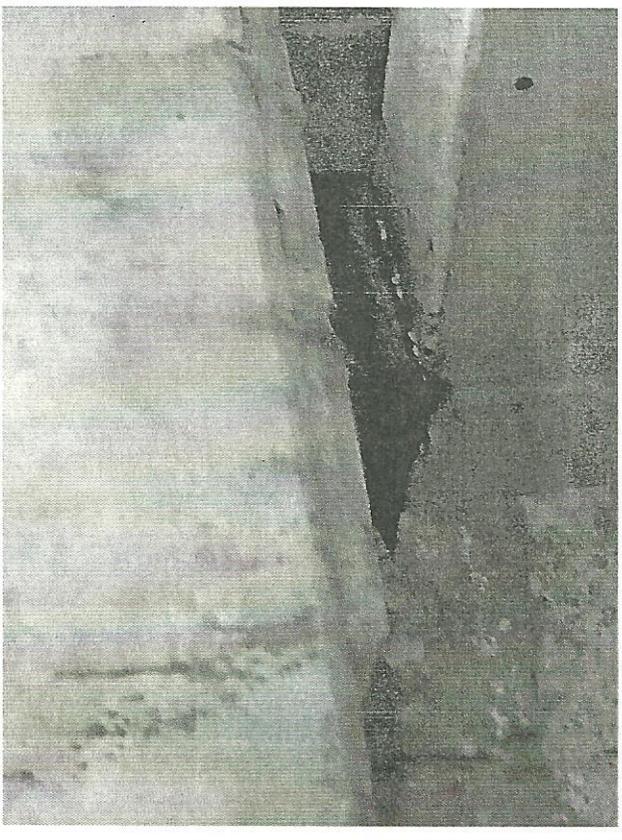


Photo # 20: View of heavy rust bearing-5 west abutment.

3/35

Bridge No.	04211	Inspected by:	PATRICK A.SHARRON
Town:	EASTON	Inspected by:	JOHN CHAVEZ
Feature Carried:	SOUTH PARK AVENUE	Date Inspected:	4 / 10 / 2014
Feature Crossed:	MILL RIVER	Project No.:	

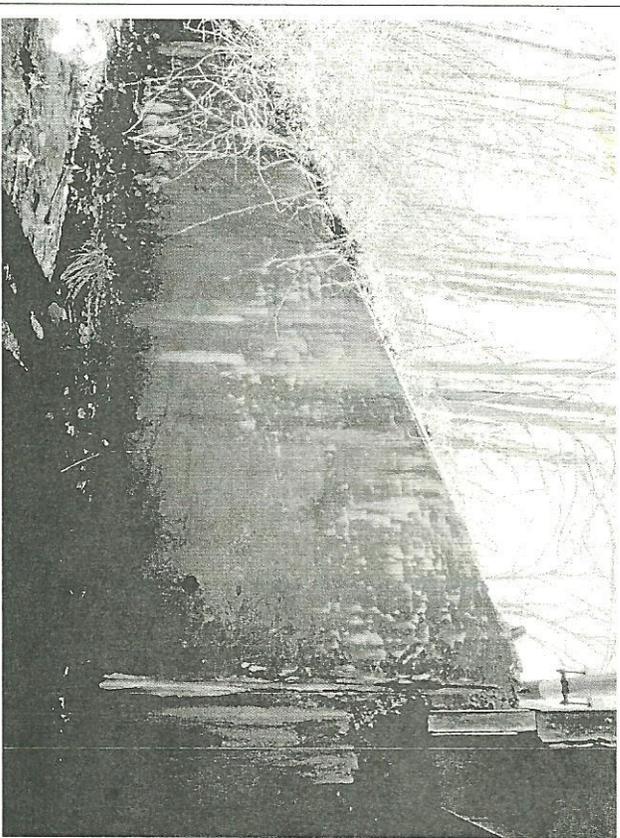


Photo # 21: View of northeast wing wall.

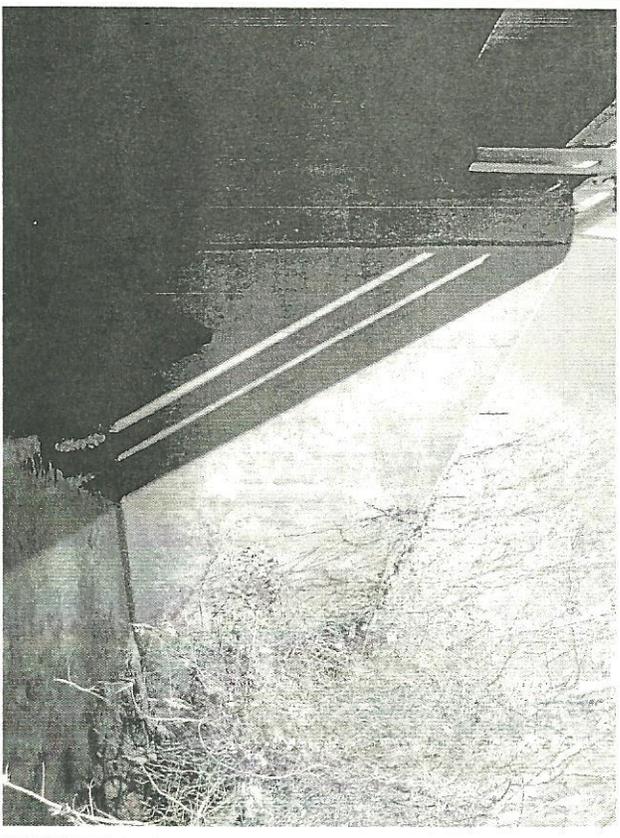


Photo # 22: View of northwest wing wall.

3435

Bridge No.	04211	Inspected by:	PATRICK A. SHARRON
Town:	EASTON	Inspected by:	JOHN CHAVEZ
Feature Carried:	SOUTH PARK AVENUE	Date Inspected:	4 / 10 / 2014
Feature Crossed:	MILL RIVER	Project No.:	

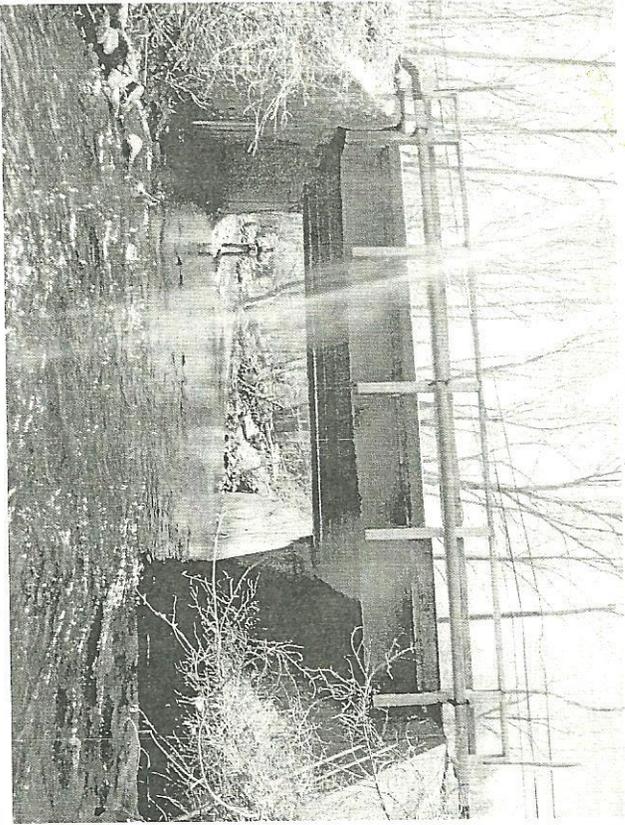


Photo # 23: View of north elevation (inlet end).

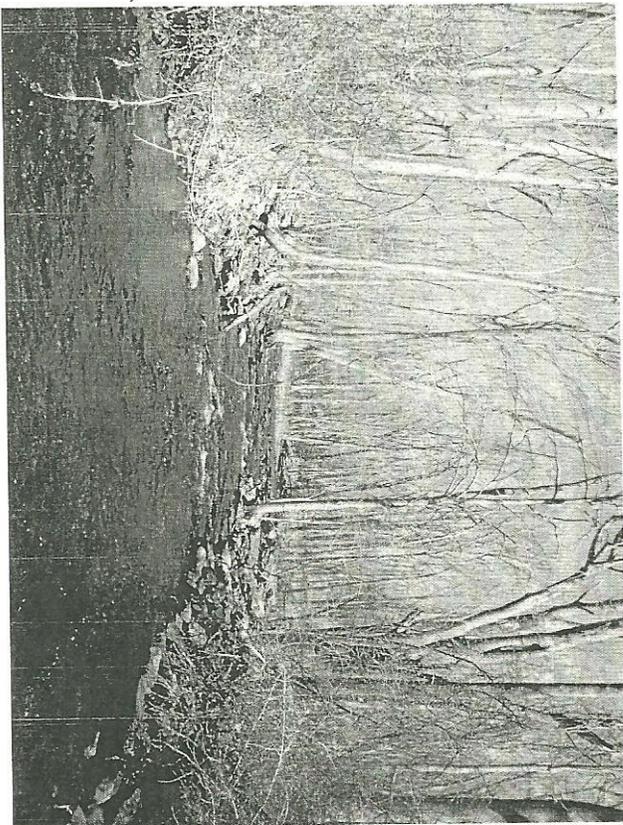


Photo # 24: View looking up river.

03/15

Your Agency Name

Your Office Name  
Your Department Name

### Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 04211	Agency ID: 04211	SR: 58.0	SD/FO: SD
-------------------	------------------	----------	-----------

IDENTIFICATION			
State 1:	09 Connecticut	Struc Num 8:	04211
Facility Carried 7:	SOUTH PARK AVENUE	Location 9:	150' NO BUCK HILL RD. JCT
Rte.(On/Under) 5A:	Route On Structure	Rte. Signing Prefix 5B:	5 City Street
Level of Service 5C:	0 None of the below	Route Number 5D:	00000
Directional Suffix 5E:	0 N/A (NBI)	% Responsibility:	0.00
SHD District 2:	03	County Code 3:	Fairfield
Place Code 4:	EASTON	Mile Post 11:	1.330 mi
Feature Intersected 6:	MILL RIVER		
Latitude 16:	41° 14' 30"	Longitude 17:	073° 15' 12"
Border Bridge Code 98	Unknown (P)		
Border Bridge Number 99	NA		

INSPECTION			
Frequency 91:	24 months	Inspection Date 90:	4/10/2014
FC Frequency 92A:	NA	FC Inspection Date 93A:	NA
UW Frequency 92B:	NA	UW Inspection Date 93B:	NA
SI Frequency 92C:	NA	SI Date 93C:	4/10/2014
Element Frequency:	12 months	Element Insp. Date:	4/16/2012
		Next Inspection:	4/10/2016
		Next FC Inspection:	NA
		Next UW Inspection:	NA
		Next SI:	NA
		Next Elem. Insp.:	4/10/2015

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:	Not Applicable (P)
Highway System 104:	0 Not on NHS	NBIS Length 112:	Long Enough
Toll Facility 20:	3 On free road	Functional Class 26:	17 Urban Collector
Defense Hwy 110:	0 Not a STRAHNET hwy	Historical Significance 37	5 Not eligible for NRHP
Owner 22:	03 Town/Township Hwy Agency		
Custodian 21:	03 Town/Township Hwy Agency		

STRUCTURE TYPE AND MATERIALS			
Number of Approach Spans 46	0	Number of Spans Main Unit 45:	1
3 Steel		02 Stringer/Girder	
Deck Type 107:	1 Concrete-Cast-in-Place		
Wearing Surface 108A:	6 Bituminous		
Membrane 108B:	0 None		
Deck protection 108C	None		

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

AGE AND SERVICE			
Year Built 27:	1933	Year Reconstructed 106:	-1
Type of Service on 42A:	1 Highway		
Type of Service under 42B:	5 Waterway		
Lanes on 28A:	2	Lanes under 28B:	0
ADT 29:	1,900	Truck ADT 109:	4%
		Year of ADT 30:	2010
		Detour Length 19:	1.0 mi

LOAD RATING AND POSTING			
Inventory Rating Method 65:	1 LF Load Factor	Operating Rating Method 63:	1 LF Load Factor
Inventory Rating 66:	HS30.2	Operating Rating 64:	HS50.4
Design Load 31:	4 M 18 (H 20)	Posting 70:	5 At/Above Legal Loads
Posting Status 41:	A Open, no restriction		

GEOMETRIC DATA			
Length Max Span 48:	31.00 ft	Structure Length 49:	38.00 ft
Curb/Sdwk Width L 50A:	0.00 ft	Curb/Sidewalk Width R 50B:	0.00 ft
Width Curb to Curb 51:	27.70 ft	Width Out to Out 52:	28.20 ft
Approach Roadway width 32: (w/ shoulders)	29.00 ft	Median 33:	0 No median
Deck Area:	1,071.00 sq. ft		
Skew 34:	16.00°	Structure Flared 35:	0 No flare
Vertical Clearance 10	99.90 ft	Horizontal Clearance 47:	27.70 ft
Minimum Vertical Clearance Over Bridge 53:	328.05 ft		
Minimum Vertical Underclearance Reference 54A:	N Feature not hwy or RR		
Minimum Vertical Underclearance 54B:	0.00 ft		
Minimum Lateral Underclearance Reference R 55A:	N Feature not hwy or RR		
Minimum Lateral Underclearance R 55:	327.76 ft		
Minimum Lateral Underclearance L 56:	0.00 ft		

APPRAISAL			
Bridge Rail 36A:	0 Substandard	Approach Rail 36C:	0 Substandard
Transition 36B:	0 Substandard	Approach Rail Ends 36D:	0 Substandard
Str Evaluation 67:	4 Minimum Tolerable	Deck Geometry 68:	4 Tolerable
Underclearance, Vertical and Horizontal 69:	N Not applicable (NBI)		
Waterway Adequacy 71:	9 Above Desirable	Approach Alignment 72:	7 Above Min Criteria
Scour Critical 113:	4 Stable, needs action		

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:	500
Year of Cost Estimate 97	2000	Year of Future ADT 115:	2029

NAVIGATION DATA			
Navigation Control 38	Permit Not Required		
Vertical Clearance 39	0.0 ft	Horizontal Clearance 40:	0.0 ft
Pier Protection 111:	Not Applicable (P)	Lift Bridge Vertical Clearance 116	0.0 ft

39/35

Br 4211 South Park Avenue to Mill River, Easton - 4/10/14.

