STRUCTURE NO. 03819

INTERSTATE-95 NB

over

THAMES RV,RR,LOCAL ROADS

NEW LONDON

Underwater Only Inspection

on

10/7/2009

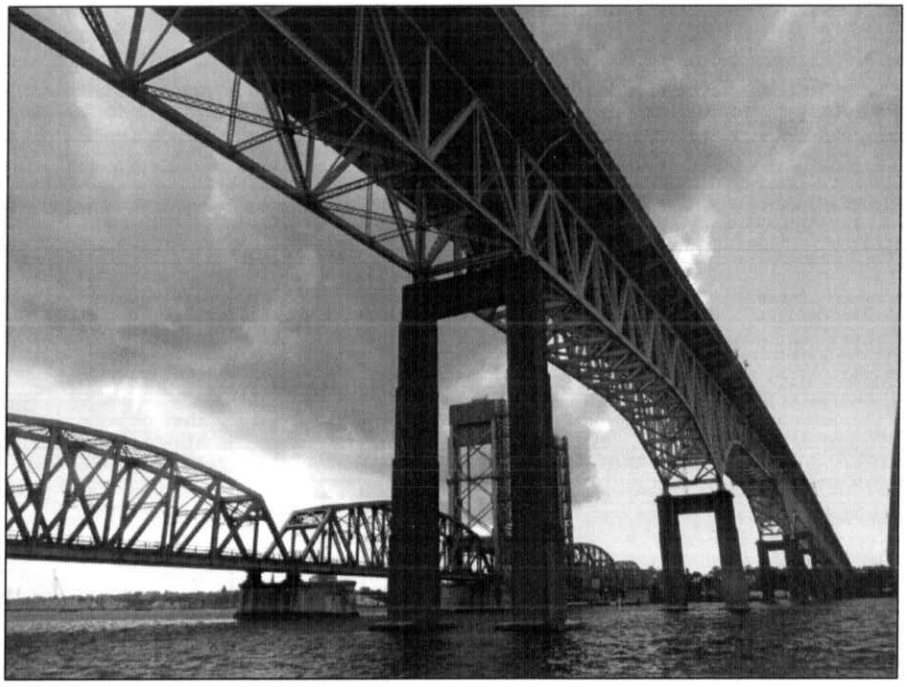
Inspected by McLaren - 51

for Area 10

TEAM:	Forwarded to TE3	Sandra Dumas	Date	12/2/2009
TE3:	Reviewed by TE3	Sandra Dumas	Date	1/12/2010
	BMM Required	No		
	Town Bridge	No		
	Rating <= 5 (Items 58,59,60 or 62)	No		
	Forwarded to Supervisor	Sandra Dumas	Date	1/13/2010
	Forwarded to "To Be Copied Drawer"	☑	Date	5/8/2010
	Date BRI-19 Entered	1/13/2010		
SUPERVISOR:	Reviewed by Supervisor	Sandra Dumas	Date	5/8/2010
SUPPORT:	Date Copies Made	BMM No		
	Scanned By:	Date Scanned	PDF Box No	

NBI: Yes

UNDERWATER INSPECTION



BRIDGE NO. 03819
I-95 NORTHBOUND OVER THAMES RIVER & LOCAL ROADS
NEW LONDON, CONNECTICUT
OCTOBER 8, 2009

BRIDGE SAFETY INSPECTION

STATE PROJECT NO. 170-2868

RECEIVED
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BRIDGE SAFETY & EVALUATION

CONNECTICUT DEPARTMENT OF TRANSPORTATION

STATE OF CONNECTICUT
GEORGE F. ASSIS
24536
LICENSED
PROFESSIONAL ENGINEER

Prepared by

McLaren ENGINEERING GROUP
45 Barberry Lane, Meriden, CT 06457
100 Snake Hill Road, West Nyack, NY 10994

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

INSPECTION REPORT TRANSMITTAL FORM
FORM BRI-27, REV. 9/97

Structure No. 03819 Town New london

Inspectors McLaren Engineering (D. Korkosz, J. St. Denis, S. Molison) Date 10/08/09

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LOOSE FORMS (not bound in report)	No. of Sheets Enclosed
Maintenance Memo	--
Flagging Memos	--
BRI-11, Seismic Screening Data Sheet	--
BRI-12, Fracture Critical Inspection Data Sheet	--
BRI-19, HWY Bridge SI&A Form	2
BRI-25, Under Entry SI&A Form	--
BRI-39, RR Bridge SI&A Form	--
BRI-49, Sign Structure SI&A Form	--
PONTIS Element Data Collection Form	2
Plan Sheets:	Check here if already on file: ☐

Bound Report Pages	Sheet Numbers
Title Cover Sheet	1
Table of Contents	2
Location Map	3
Executive Summary	4
BRI-59, Underwater Inspection Form	5
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Quantities & Cost Estimate	--
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Back-up Material	11 sheets

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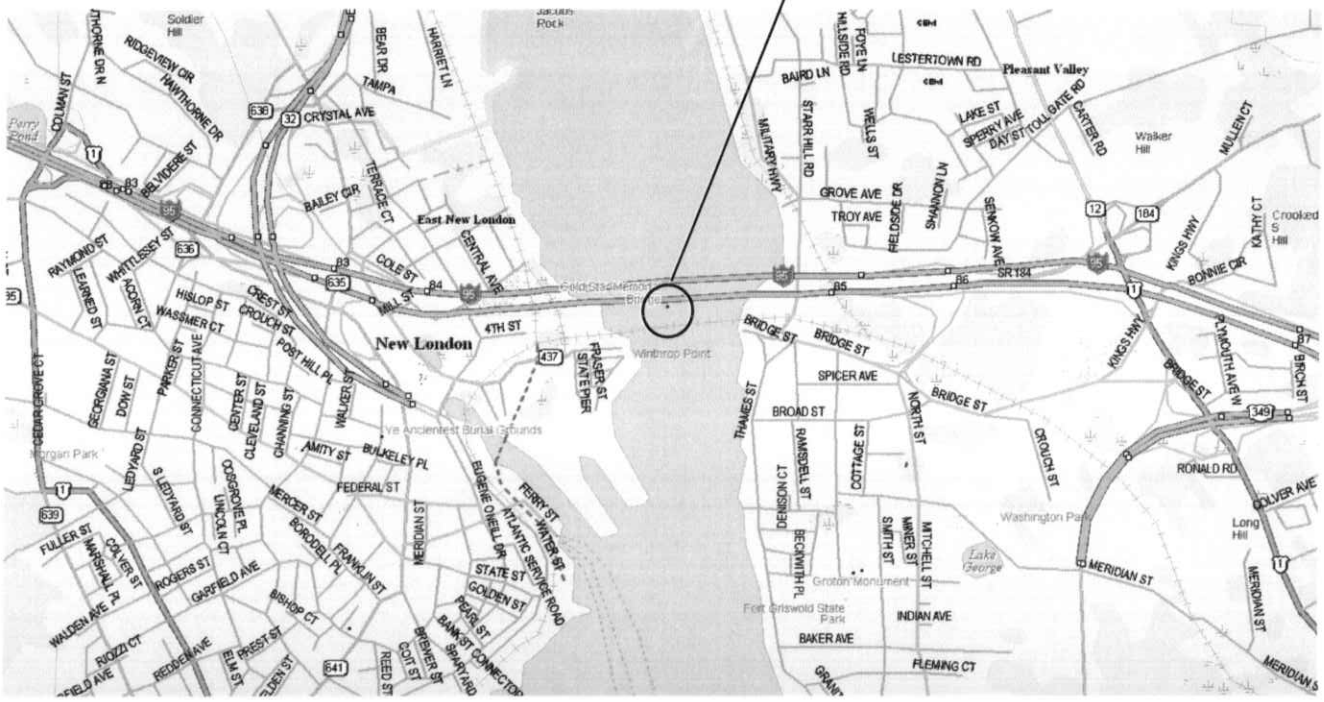
BRIDGE SAFETY & EVALUATION

General Map

BRIDGE # 03819



Bridge Location Plan

EXECUTIVE SUMMARY

10/08/09

Bridge No. 03819 carries Interstate 95 Northbound over the Thames River and local roads in New London, Connecticut. This twenty seven-span bridge was constructed in 1943 and rehabilitated in 1975. The structure is 5931 feet long by 83.8 feet wide. The superstructure consists of a steel trusses supported by concrete abutments and piers on steel piled footing. According to information on file at ConnDOT, this structure has an inventory rating capacity of 28.7 tons.

The October 8, 2009 underwater inspection resulted in the following observed deficiencies and repair recommendations:

Substructure:

The substructure is in satisfactory condition (Overall rating = 6) due to the following:

1) The footing at piers 27 and 28 are exposed up to 11.4 ft high at the West face of Pier 27. In addition, the footing at pier 27 exhibits intermittent chamfer spalls up to 1 ft wide along the West face. No undermining was noted during this inspection.
2) Pier 25 exhibits spalls up to 2″ deep and intermittent honeycombing up to 2″ deep at the concrete portion.
3) Pier 26 exhibits areas of moderate to severe scale up to 7″ deep, areas of honeycombing up to 4″ deep, and spalls/voids/delamination up to 5″ deep at the concrete portion. The granite portion exhibits missing/broken stone, vertical crack 1/16″ wide and missing mortar up to 60% with up to 5″ penetration.
4) Pier 27 exhibits spall 2″ deep at the concrete portion; missing mortar up to 20% and corner void 8″ deep at the granite facing.
5) Pier 28 exhibits spall 4″ deep at the concrete facing; missing mortar up to 25% up to 1 ft penetration and cracked stone at the granite facing.
6) All piers exhibit areas of failing repair at the corners of granite facing.

Channel and Channel Protection:

The channel and channel protection are in satisfactory condition (Overall rating = 6) due to the following:

1) The channel bottom exhibits aggradation up to 5.8′ at the West face of Pier 27 and localized scour areas since the 2007 inspection. However, the footing at Piers 27 and 28 remain exposed up to 11.4 ft high at the West face of Pier 27. No undermining was noted. Monitor this situation at subsequent inspections.
2) The streambed composition consists of silt, sand and shells with up to 1.5 ft penetration, and is susceptible to change based on its composition.

5/26

Connecticut Department of Transportation
UNDERWATER INSPECTION
BRI-59 Form

Bridge No: 03819 **Date Inspected:** 10/8/2009

Job Number: 170-2868 **Client:** Connecticut D.O.T.
Route: 00095 **Mile point:** 93.59 **City:** NEW LONDON
FeatureCrossed: THAMES RV,RR,LOCAL RDS **State:** CT
Inspector: Dan Korkosz **Assistants:** J. St. Denis, S. Molison
Time Arrived: 8:00 AM 2 days **Time Departed:** 2:00 PM
Time In Water: 8:30 AM **Time Out of Water:** 1:30 PM
Type of Inspection: Routine
Year built: 1943 **Total Length:** 5931 **No. Spans:** 27
Bridge Type: Steel Deck Truss
Total Number of Piers: 34 **Piers in the Water:** 4 (Piers 25 - 28)
Type of Piers: Reinforced Concrete with stone facing
Abutments: Not in the water
Bottom Composition: Sand, silt and shells with penetrations from 1.0' to 1.5'
Previous U/W Insp: 4/17/2007
Marine Growth: Heavy barnacles, oysters and soft marine growth ✓
Max. Water Depth: 46'
Max. Depth at Pier: 46'
Current Strength: 0.8 fps
U/W Visibility: 4.0'
Type of Water: Salt
Access to Bridge: Boat
Remarks: Inspected on 10/07/09 and 10/08/09. ✓

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CONNECTICUT - DOT
BRIDGE SAFETY & EVALUATION

Inspection Equipment

Number of Boats: 1 **RR Protection:** No
Boat Size: 21 **Equipment Comments:**
Dive Station: Yes

Inspected by: _____ **Date:** 11/25/09
Inspected by: _____ **Date:** 11/25/09
D.O.T. reviewed by: _____ **Date:** 1/12/10

Bridge Number **03819**

Inspected By: Dan Korkosz & John St. Denis

Sufficiency Rating 54.05

Previous Inspection Date 6/11/2007

BS&E Received ☐ Data Entry By: Dal

Copies Made ☐ Data Entry Date: 1/13/10

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BRIDGE SAFETY & EVALUATION

STRUCTURE EVALUATION

SHEET 1 OF 2 FORM BRI-19 REV 10/00

SHEET 1 OF 2

90) Inspection Date	Inspection Team	91) Frequency	Class:
	23	24	03

Indepth Insp	Deck Survey	Access	Flagman
8/22/2001	1/1/1900	99	

CRITICAL FEATURE INSPECTIONS

	Type	Frequency	Team	Date
Fracture:	G	24	20	6/11/2007
Uwater:		24 24	19 51	4/17/2007
Special:	A	24	20	11/5/2008

10/8/09

RED FLAG

IDENTIFICATION

Bridge Name GOLD STAR

Town Name NEW LONDON Town Code 52350

5) Inventory Route:

A) Record Type 1 D) Route Number 00095

B) Signing Prefix 1 Interstate High E) Directional Suffix 1 North

C) Level of Service 1 Mainline

6) Feature Intersected THAMES RV,RR,LOCAL ROADS

7) Facility Carried: INTERSTATE-95 NB

9) Location 1.04 MI S OF N JCT US1 EB

11) Milepoint 93.59 Miles

16) Latitude 41deg 21 min 36.00 sec deg min . sec

17) Longitude 72deg 6 min 6.00 sec deg min . sec

98) Border Bridge:

A) State Code B) Percent Responsibility %

C) Border Town Name

99) Border Bridge Structure No

STRUCTURE TYPE AND MATERIAL

43) Structure Type, Main:

A) Material 4 Steel continuous B) Design Type 9 Truss - Deck

44) Structure Type, Approach:

A) Material 3 Steel B) Design Type 3 Girder and Floorbea

45) Number of Spans, Main Unit 11

46) Number of Approach Spans 16

107) Deck Structure Type 4 Closed Grating

108) Wearing Surface/Protective System:

A) Type of Wearing Surface 6 Bituminous

B) Type of Membrane 2 Preformed Fabric

C) Type of Deck Protection 9 Other

AGE AND SERVICE

27) Year Built 1943 106) Year Reconstructed 1975

42) Type of Service:

A) On 1 Highway B) Under 8 HIGHWAY-WATER

28) Number of Lanes:

A) On 5 B) Under 12

29) Average Daily Traffic 59800 Half ADT?: -Yes

109) Percent Truck 9%

30) Year of ADT 2007

19) Bypass, Detour Length 1miles

GEOMETRIC DATA

48) Length of Max Span 540ft

49) Structure Length 5931ft

50) Curb or Sidewalk Widths:

A) Left 0.0ft . B) Right 0.0ft . ft

51) Brg Rdwy width,curb-curb 80.0ft . ft

52) Deck Width, Out-Out 83.8ft . ft

32) Approach Roadway Width 80ft ft

33) Bridge Median 0 No Median

Deck Area 506615 sqft sqft

34) Skew Angle 99deg

35) Structure Flared 1

10)Inv. Rte. Min. Vert Clearance 20ft 9in ft in

47) Log Inv. Rte. Total Horiz Clr.: 80.0ft . ft

47) RLog Inv. Rte. Total Horiz. Clr.: ft . ft

53) Min Vert Clearance Over Bridge 17ft 10in ft in

54) Min Vert Under Clearance H Ref 21ft 8in Ref ft in

55) Min Lat Under Clearance on Right H Ref 1.0ft Ref . ft

56) Min Lat Under Clearance on Left 0.0ft . ft

BRIDGE COMMENTS

Special Inspection 11/5/08 - Rocker Bearings at Piers 23 & 30, Gusset Plate inspection by Haks Engineers - sad.

STRUCTURE EVALUATION

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

SHEET 2 OF 2

Bridge Number	03819	NBIS Length
Town Name	NEW LONDON	Yes 5931
Facility Carried	INTERSTATE-95 NB	
Feature Crossed	THAMES RV,RR,LOCAL ROADS	

Inspected By: Dan Korkosz & John St. Denis

CLASSIFICATION

112) NBIS Bridge Length	Yes	
104) Highway System	1	On System
26) Functional Class	11	Urban Principal Arterial - Interstate
100) Defense Highway	1	Defense Highway
101) Parallel Structure	R	Right structure of parallel bridges
102) Direction of Traffic	1	1-way traffic
103) Temporary Structure		
110) Designated National Network	1	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

WATERWAY

DrainageBasinCode	3000			
38) Navigation Control	1	Navigation control on waterway		
39) Navigation Vert Clr.	135		40) Navigation Horiz Clr.	200
116) Vert-Lift Brg Nav Min				
111) Pier Abutment Protection	1	Navigation protection not required		

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.	Advertised

POSTED SIGNS & UTILITIES

Other Posted Signs 1	3	Directional & Route information signs		
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-TrailerTruck		tons	Actual P.L. 3S2 Truck	tons
Rec. P.L. Semi-TrailerTruck		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		ft in
Posted Vert UnderClearance		ft in		ft in
Posted Speed Limit	55	mph		mph
Utility				

LOAD RATING AND POSTING

31) Design Load	5	Evaluation Code	L	
63) Operating Rating Type	1	Year of Evaluation	1999	
64) Operating Rating	47.8	70) Bridge Posting	5	
65) Inventory Rating Type	1	41) Structure Status	A	A
66) Inventory Rating	28.7			

CONDITION

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

APPRAISALS

		Rating	By
67) Structure Evaluation	4		
68) Deck Geometry	7		
69) Under Clear Vert & Horiz	3		
71) Waterway Adequacy	8	8	DK
72) Approach Rdwy Alignment	8		
113) Scour Critical	5		

Items 58 Thru 72 Checked By: George Avin BRD

36) Traffic Safety Features:

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

OTHER FEATURES

Fence Required	No		Barrel Ladder	Yes	
Fence Present	Yes		Stand Pipes	No	
Fence Height	8.0 ft	ft	Cat Walks	Yes	
Fence Type	5	Other	Movable Inspection System	No	
Fence Material	1	Aluminum	Loose Concrete Checked?	Yes	
Fence Top Type	1	Vertical			

INSPECTION COMMENTS

Proposed Next Indepth Insp Year	2011
Senior	Ned Statchen
Supervisor	Sandra Dumas

REVIEWED BY: George Avin Date 11/25/09

6/26

Connecticut Department of Transportation

UNDERWATER INSPECTION

BRI-58 Form

Bridge No: 03819

Inspection Date: 10/8/2009

Town: NEW LONDON

Route Carried: 00095

Feature Crossed: AMES RV,RR,LOCAL RDS

ITEM	RATING	REMARKS
60. SUBSTRUCTURE	6	Footing of Piers 27 and 28 are exposed up to 11.4' H.
ABUTMENT 1:	N	Dry
STEM		
FOOTING		
EROSION		
SETTLEMENT		
SCOUR		
WINGWALLS		
General remarks:		
ABUTMENT 2:	N	Dry
STEM		
FOOTING		
EROSION		
SETTLEMENT		
SCOUR		
WINGWALLS		
General remarks:		
PIER NO. 25	6	
PILES	N	Not visible.
STEM	6	Corner spalls up to 1.5' H x 4" W x 2" D and intermittent honeycombing with up to 2" penetration at the concrete portion of the pier. Areas of failing repairs at the corners of granite facing (Sheets 12 & 13).
FOOTING	N	No visible.
SCOUR	7	Aggradation up to 3.0' at the East face with minor localized scour since the 2007 inspection (Sheets 12 & 13).
SETTLEMENT	8	
General remarks:		
PIER NO. 26	6	
PILES	N	Not visible.
STEM	6	Moderate to severe scale 11' W x 2.5' H x 7" D at the West face, areas of honeycombing up to 4" deep, and spalls/voids/delamination up to 15' W x 2.5' H x 5" D at the concrete portion. Missing/broken stone and a vertical crack 3' L x up to 1/16" W at the West quadrant of the South column, missing mortar up to 60% with up to 5" penetration and areas of failed repair at the corners of the granite facing (Sheets 14 & 15).

7/26

Connecticut Department of Transportation

UNDERWATER INSPECTION

BRI-58 Form

Bridge No: 03819
Inspection Date: 10/8/2009

Town: NEW LONDON
Route Carried: 00095
Feature Crossed: AMES RV,RR,LOCAL RDS

ITEM	*RATING*	*REMARKS*
FOOTING	N	Mudline between the sheetpiling and footing covers the footing (Sheets 14 & 15).
SCOUR	7	Aggradation up to 2.8' with minor localized scour since the 2007 inspection (Sheets 14 & 15).
SETTLEMENT	8	
General remarks:		
PIER NO. 27	6	
PILES	N	Not visible.
STEM	6	Spall 6" dia. X 2" D at the concrete portion of the West quadrant at the South column. Missing mortar up to 20% and areas of failed repair at the corners of the granite facing. Void 1.5' H x 4" W x 8" D at the Northeast corner of North column stone facing (Sheets 16 & 17).
FOOTING	6	Intermittent chamfer spalls up to 1' wide with adjacent honeycombing along the West face.
SCOUR	6	Aggradation up to 5.8' at Southwest corner with minor localized scour since the 2007 inspection. However, the footing remains completely exposed up to 11.4' H at the West face (Sheets 16 & 17).
SETTLEMENT	8	
General remarks:		
PIER NO. 28	6	
PILES	N	Not visible.
STEM	6	Spall 5" x 4" W x 4" D at the concrete portion of the West face. Missing mortar up to 25% with up to 1' penetration, cracked stone at the South quadrant of the south column and areas of failing repair at the corners of granite facing (Sheets 18 & 19).
FOOTING	7	
SCOUR	6	Aggradation up to 2.9' at the East face since the 2007 inspection. However, the footing remains partially exposed up to 2.9' at both ends (Sheets 18 & 19).
SETTLEMENT	8	
General remarks:		

61. CHANNEL& CHANNEL PROTECTION:

	6	
CHANNEL SCOUR	6	Mudline elevations display aggradation up to 5.8' at the Northwest corner of Pier 27 with some localized scour since the 2007 inspection (Sheets 9 thru 19).
EMBANKMENT EROSION	8	
DEBRIS	8	
VEGETATION	8	
CHANNEL CHANGE	6	Mudline elevations displays aggradation up to 5.8' at the Northwest corner of Pier 27 with some localized scour since the 2007 inspection (Sheets 9 thru 19).
FENDER SYSTEM	N	
SPUR DIKES & JETTIE	N	

Connecticut Department of Transportation

UNDERWATER INSPECTION

BRI-58 Form

Bridge No: 03819

Inspection Date: 10/8/2009

Town: NEW LONDON

Route Carried: 00095

Feature Crossed: AMES RV,RR,LOCAL RDS

ITEM	RATING	REMARKS
RIP RAP	N	
General remarks:		

Inspected by: [signature] for D. Korkoog Date: 11/25/09

Inspected by: [signature] Date: 11/25/09

D.O.T. reviewed by: Sandra A Dumas Date: 1/12/10

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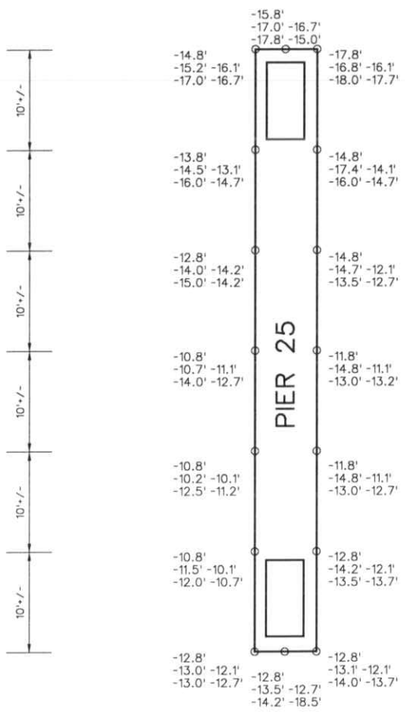
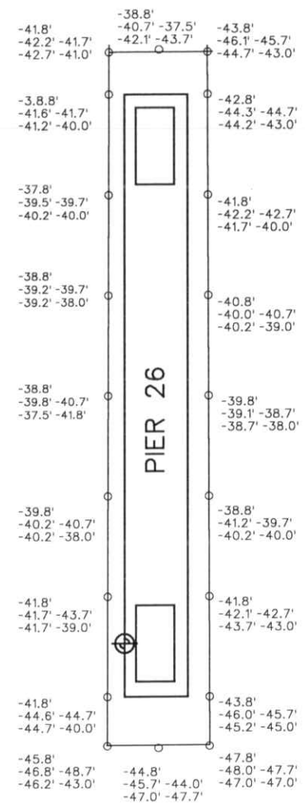
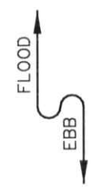
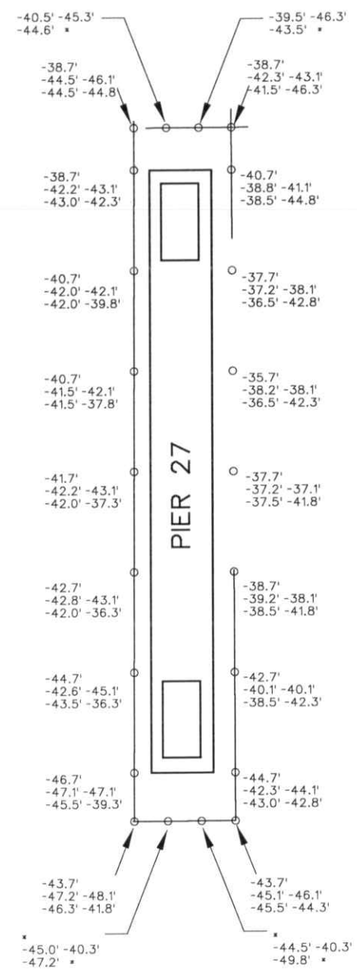
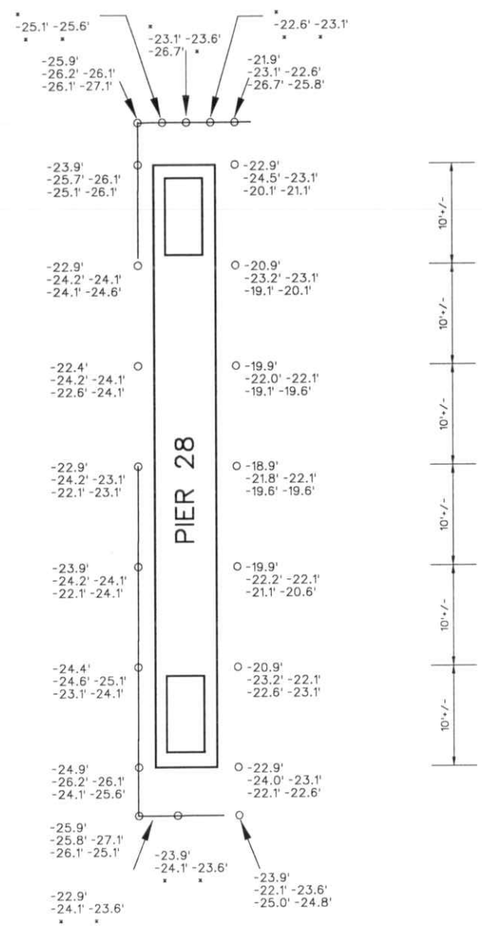










NOTES

PIER 26 - SILT, SAND AND SHELLS ARE FLUSH WITH THE TOP OF THE SHEETPILE INSIDE THE COFFERDAM.

⊖——⊖ EXPOSED SHEET PILING

LEGEND FOR BOTTOM ELEVATIONS

OCT, 2009 → -0.0'
APR, 2007 → -0.0' -0.0' ← SEP, 2005
MAY, 2004 → -0.0' -0.0' ← AUG, 2001

* INDICATES NO INFORMATION

PLAN

N.T.S.

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER 26 AT SOUTHWEST CORNER.

▽ PIER 25, W.S. ELEV. -1.8'
-2.2' -3.1'
-5.5' -2.7'

▽ PIER 26, W.S. ELEV. -1.8'
-2.2' -3.7'
-5.7' -3.0'

▽ PIER 27, W.S. ELEV. -1.7'
-2.2' -3.1'
-4.5' -5.0'

▽ PIER 28, W.S. ELEV. -3.9'
-2.2' -4.1'
-4.1' -3.1'

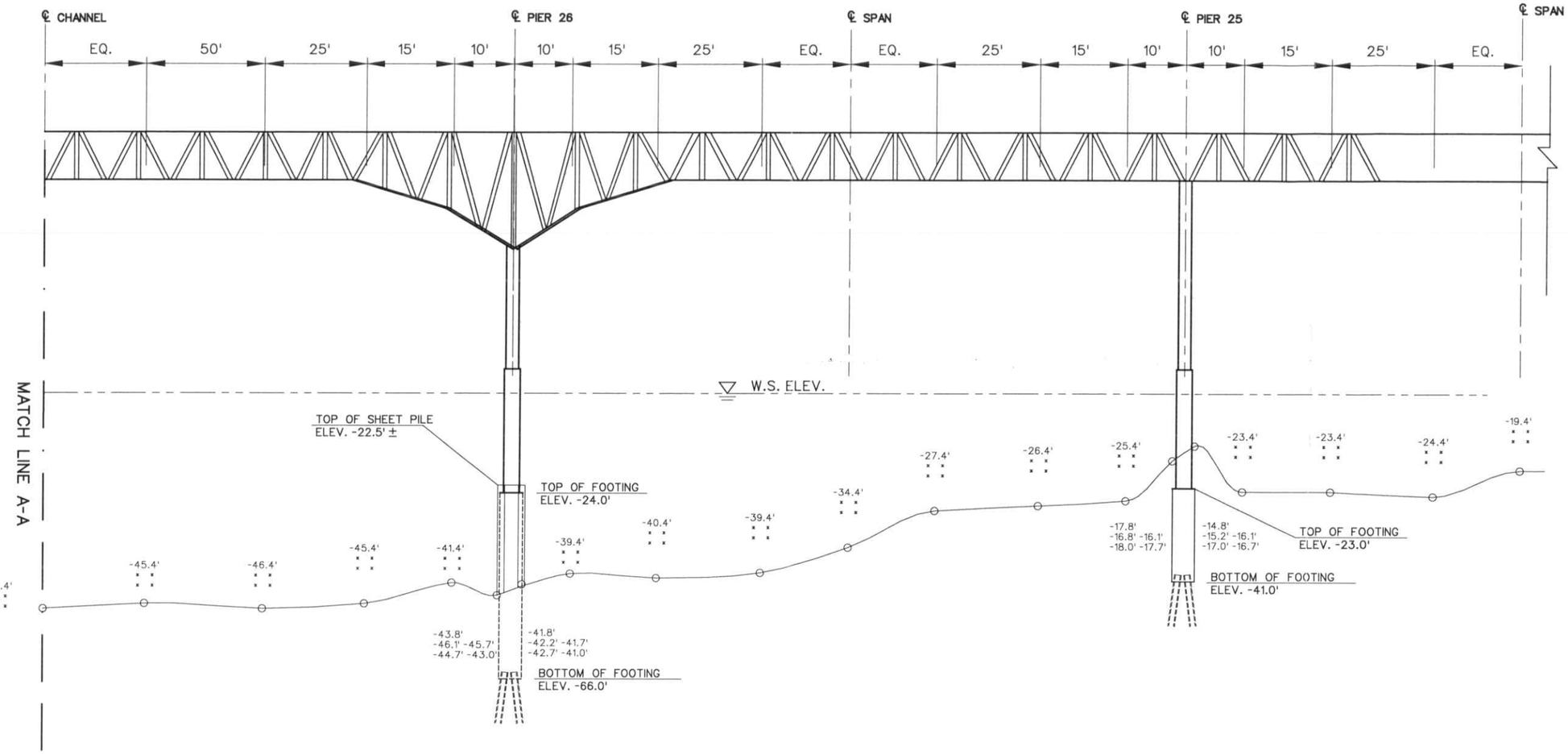
McLaren ENGINEERING GROUP
E-mail: mgmclaren@mgmclaren.com
100 Snake Hill Road, West Nyack, NY 10994
Tel. (845) 353-6400 Fax. (845) 353-6509

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON CONNECTICUT

PLAN

INSPECTED BY: DSK REVISED BY: JGI	SCALE: AS SHOWN	DATE OF INSPECTION 10 / 08 / 2009	DRAWING NO. 03819A



NOTES: FOR PILE CONDITIONS

- ALL EXPOSED SHEETPILING HAS HEAVY CORROSION.
- SCOUR ACTIVITY HAS EXPOSED THE FOOTING ON PIER 27 AND 28.
- THE PLANS INDICATE THAT THE PIERS ARE FOUNDED ON STEEL "H" PILES.

UPSTREAM PROFILE NORTH ELEVATION

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

OCT, 2009 → -0.0'
APR, 2007 → -0.0' -0.0' ← SEP, 2005
MAY, 2004 → -0.0' -0.0' ← AUG, 2001

× INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

——— OCT, 2009

LEGEND FOR SYMBOLS

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▽ PIER 25, W.S. ELEV. -1.8'
-2.2' -3.1'
-5.5' -2.7'

▽ PIER 26, W.S. ELEV. -1.8'
-2.2' -3.7'
-5.7' -3.0'

▽ PIER 27, W.S. ELEV. -1.7'
-2.2' -3.1'
-4.5' -5.0'

▽ PIER 28, W.S. ELEV. -3.9'
-2.2' -4.1'
-4.1' -3.1'

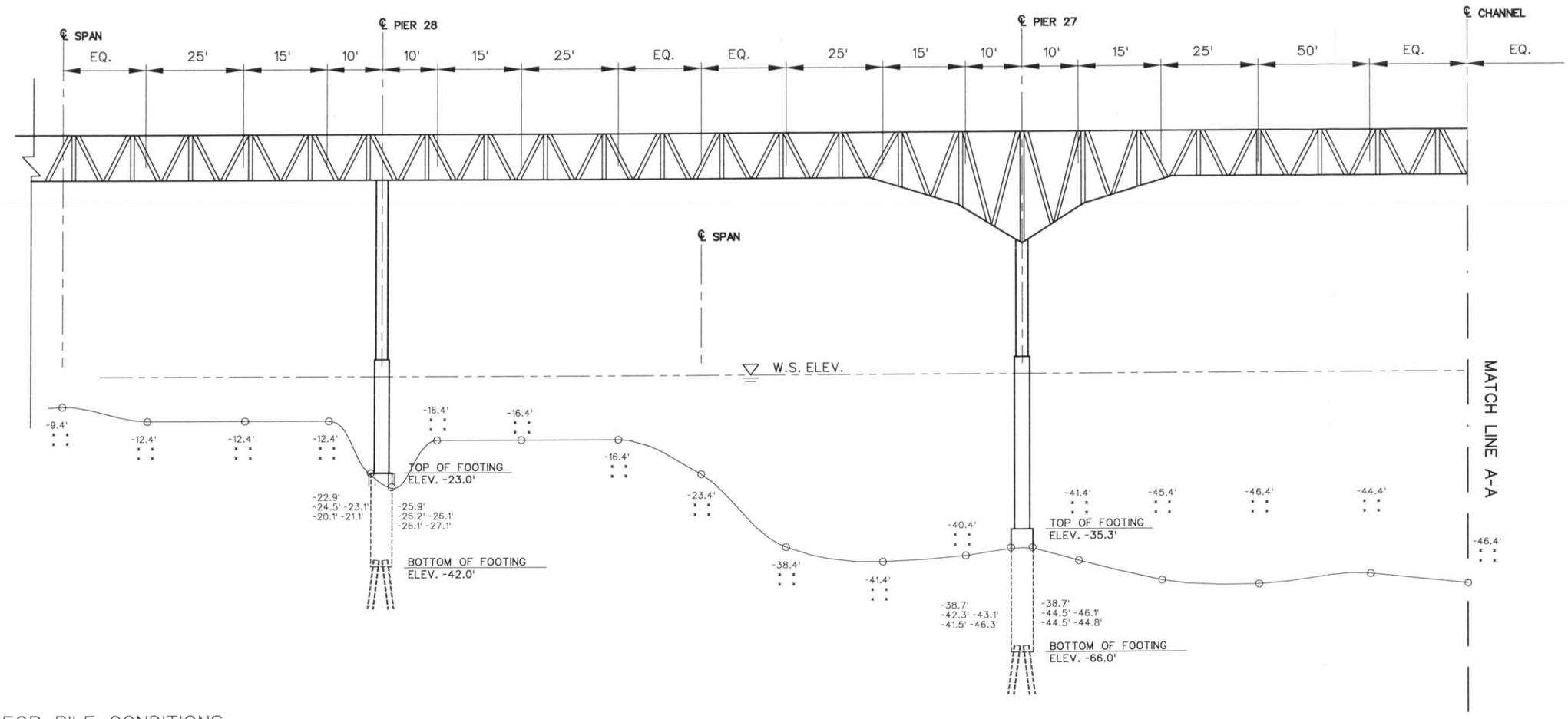
McLaren ENGINEERING GROUP
E-mail: mgmclaren@mgmclaren.com
100 Snake Hill Road, West Nyack, NY 10994
Tel. (845) 353-6400 Fax. (845) 353-6509

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON CONNECTICUT

UPSTREAM PROFILE (NORTH ELEVATION)

INSPECTED BY: DSK REVISED BY: JGI	SCALE: AS SHOWN	DATE OF INSPECTION 10 / 08 / 2009	DRAWING NO. 03819B



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UPSTREAM PROFILE NORTH ELEVATION

N.T.S.

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LEGEND FOR MUDLINE ELEVATIONS

——— OCT, 2009

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER 26 AT SOUTHWEST CORNER.

▽ PIER 25, W.S. ELEV. -1.8'
-2.2' -3.1'
-5.5' -2.7'

▽ PIER 26, W.S. ELEV. -1.8'
-2.2' -3.7'
-5.7' -3.0'

▽ PIER 27, W.S. ELEV. -1.7'
-2.2' -3.1'
-4.5' -5.0'

▽ PIER 28, W.S. ELEV. -3.9'
-2.2' -4.1'
-4.1' -3.1'

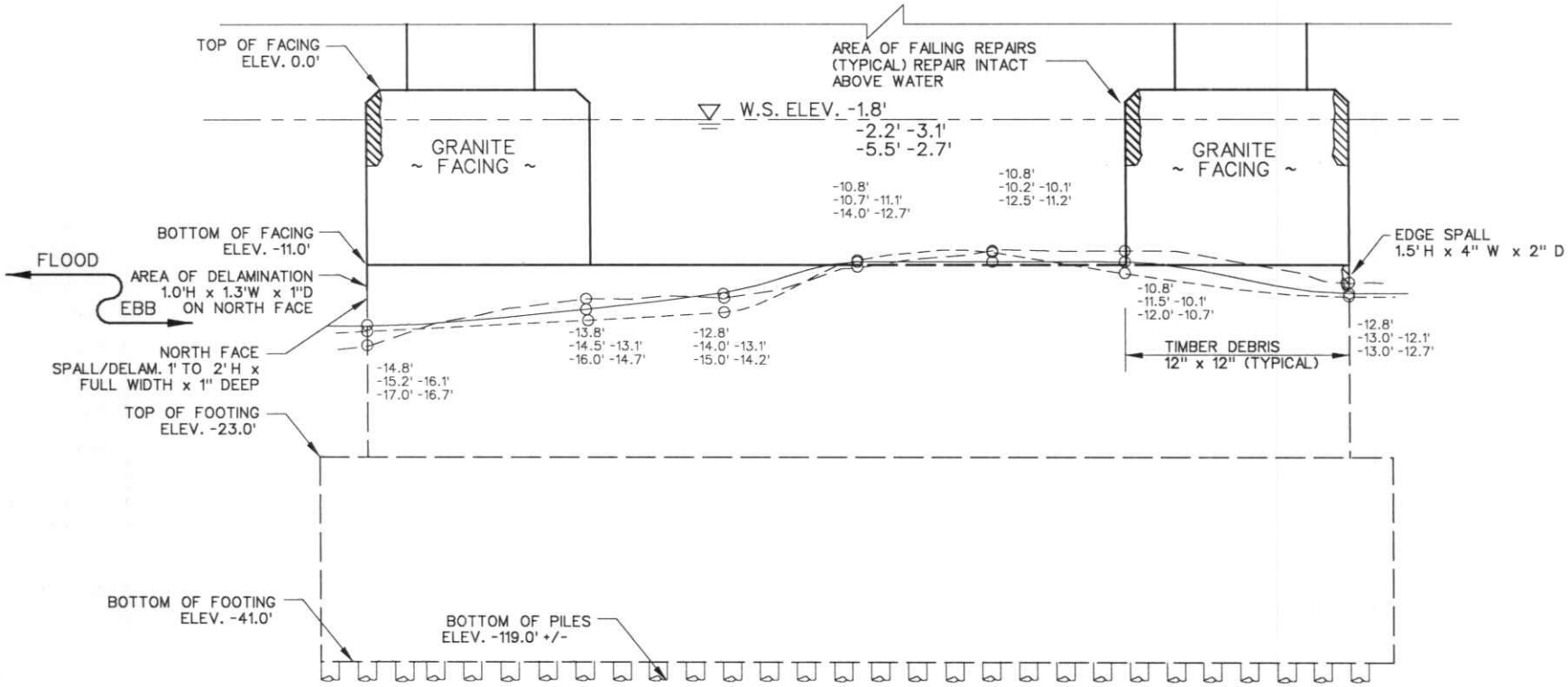
McLaren ENGINEERING GROUP
E-mail: mgmclaren@mgmclaren.com
100 Snake Hill Road, West Nyack, NY 10994
Tel. (845) 353-6400 Fax. (845) 353-6509

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON CONNECTICUT

UPSTREAM PROFILE (NORTH ELEVATION)

INSPECTED BY: DSK REVISED BY: JGI	SCALE: AS SHOWN	DATE OF INSPECTION 10 / 08 / 2009	DRAWING NO. 03819C



NOTES:

1. INTERMITTENT AREAS OF HONEYCOMBING UP TO 2" DEEP.
2. TOP OF PILE ELEVATION -31.0'.
3. PILE LENGTH 88' +/-.
4. ORIGINAL MUDLINE EL. -21.0' (1940).

PIER 25 WEST ELEVATION

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

OCT, 2009 → -0.0'

APR, 2007 → -0.0' -0.0' ← SEP, 2005

MAY, 2004 → -0.0' -0.0' ← AUG, 2001

* INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

——————— OCT, 2009

– – – – – – – – – APR, 2007

— — — — — — SEP, 2005

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER 26 AT SOUTHWEST CORNER.

▽ W.S. ELEV. -1.8'
-2.2' -3.1'
-5.5' -2.7'

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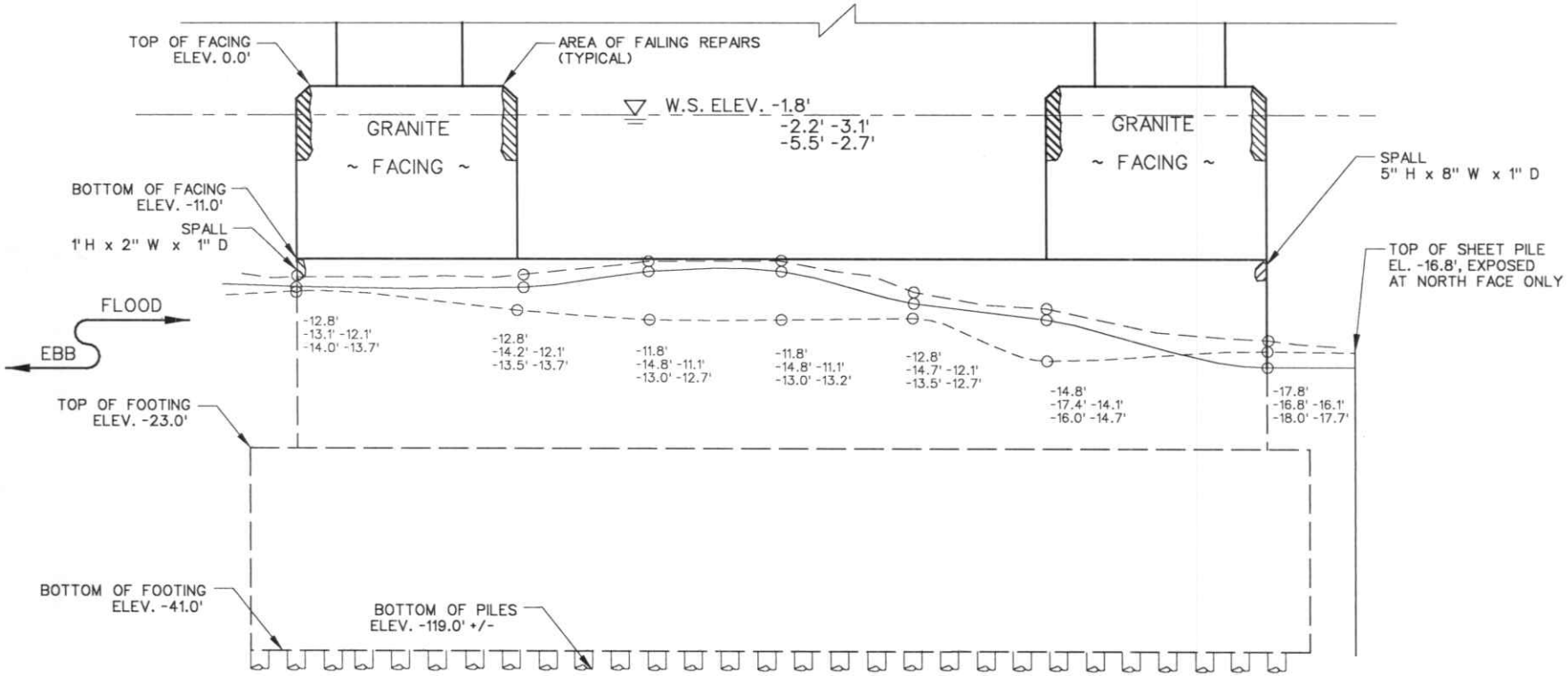
E-mail: mgmclaren@mgmclaren.com
100 Snake Hill Road, West Nyack, NY 10994
Tel. (845) 353-6400 Fax. (845) 353-6509

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON CONNECTICUT

PIER 25 (WEST ELEVATION)

INSPECTED BY: DSK REVISED BY: JGI	SCALE: AS SHOWN	DATE OF INSPECTION 10 / 08 / 2009	DRAWING NO. 03819D



PIER 25 EAST ELEVATION

N.T.S.

NOTES:

1. INTERMITTENT AREAS OF HONEYCOMBING, UP TO 2" DEEP OBSERVED ON THE THE EAST FACE OF THE STEM WALL.
2. TOP OF PILE ELEVATION -31.0'.
3. PILE LENGTH 88' +/-.
4. ORIGINAL MUDLINE EL. -21.0' (1940).

LEGEND FOR BOTTOM ELEVATIONS

OCT, 2009 → -0.0'
APR, 2007 → -0.0' -0.0' ← SEP, 2005
MAY, 2004 → -0.0' -0.0' ← AUG, 2001

* INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

OCT, 2009
APR, 2007
SEP, 2005

LEGEND FOR SYMBOLS

DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER 26 AT SOUTHWEST CORNER.

W.S. ELEV. -1.8'
-2.2' -3.1'
-5.5' -2.7'

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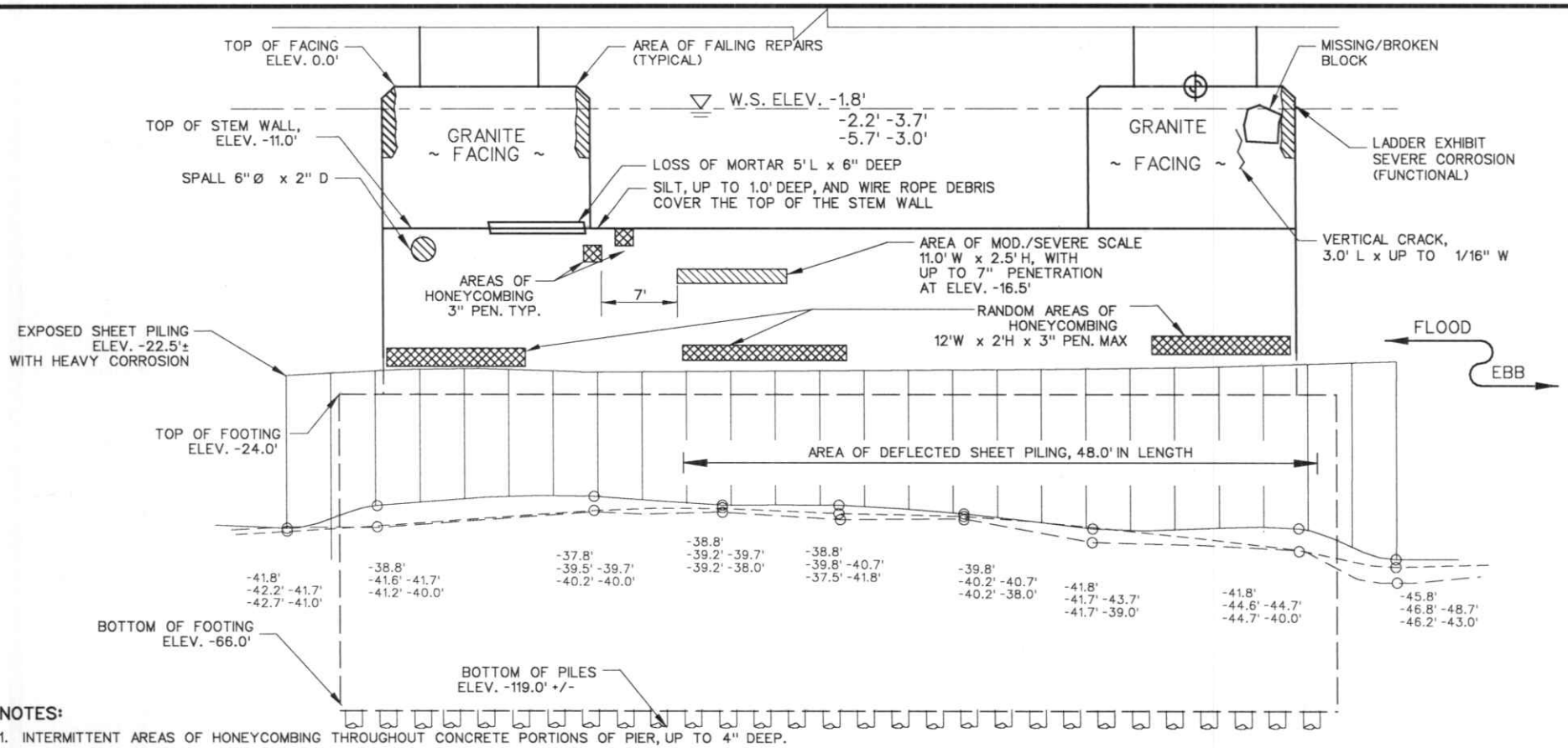
100 Snake Hill Road, West Nyack, NY 10994
Tel. (845) 353-6400 Fax. (845) 353-6509

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON CONNECTICUT

PIER 25 EAST ELEVATION

INSPECTED BY: DSK REVISED BY: JGI	SCALE: AS SHOWN	DATE OF INSPECTION 10 / 08 / 2009	DRAWING NO. 03819E



NOTES:

1. INTERMITTENT AREAS OF HONEYCOMBING THROUGHOUT CONCRETE PORTIONS OF PIER, UP TO 4" DEEP.
2. LOOSE AND MISSING MORTAR (60%) WITH UP TO 5" PEN. WAS OBSERVED AT THE CORNERS OF THE GRANITE FACING ON BOTH COLUMNS, BETWEEN THE TOP OF THE FACING AND THE MEAN LOW TIDE MARK.
3. MUDLINE INSIDE SHEETING IS LEVEL WITH TOP OF SHEETING.
4. THE FOUNDATION IS PILE SUPPORTED (HP 14 x 89).

PIER 26 WEST ELEVATION

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

OCT, 2009 → -0.0'

APR, 2007 → -0.0' -0.0' ← SEP, 2005

MAY, 2004 → -0.0' -0.0' ← AUG, 2001

* INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

OCT, 2009

APR, 2007

SEP, 2005

LEGEND FOR SYMBOLS

DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER 26 AT SOUTHWEST CORNER.

W.S. ELEV. -1.8'
-2.2' -3.7'
-5.7' -3.0'

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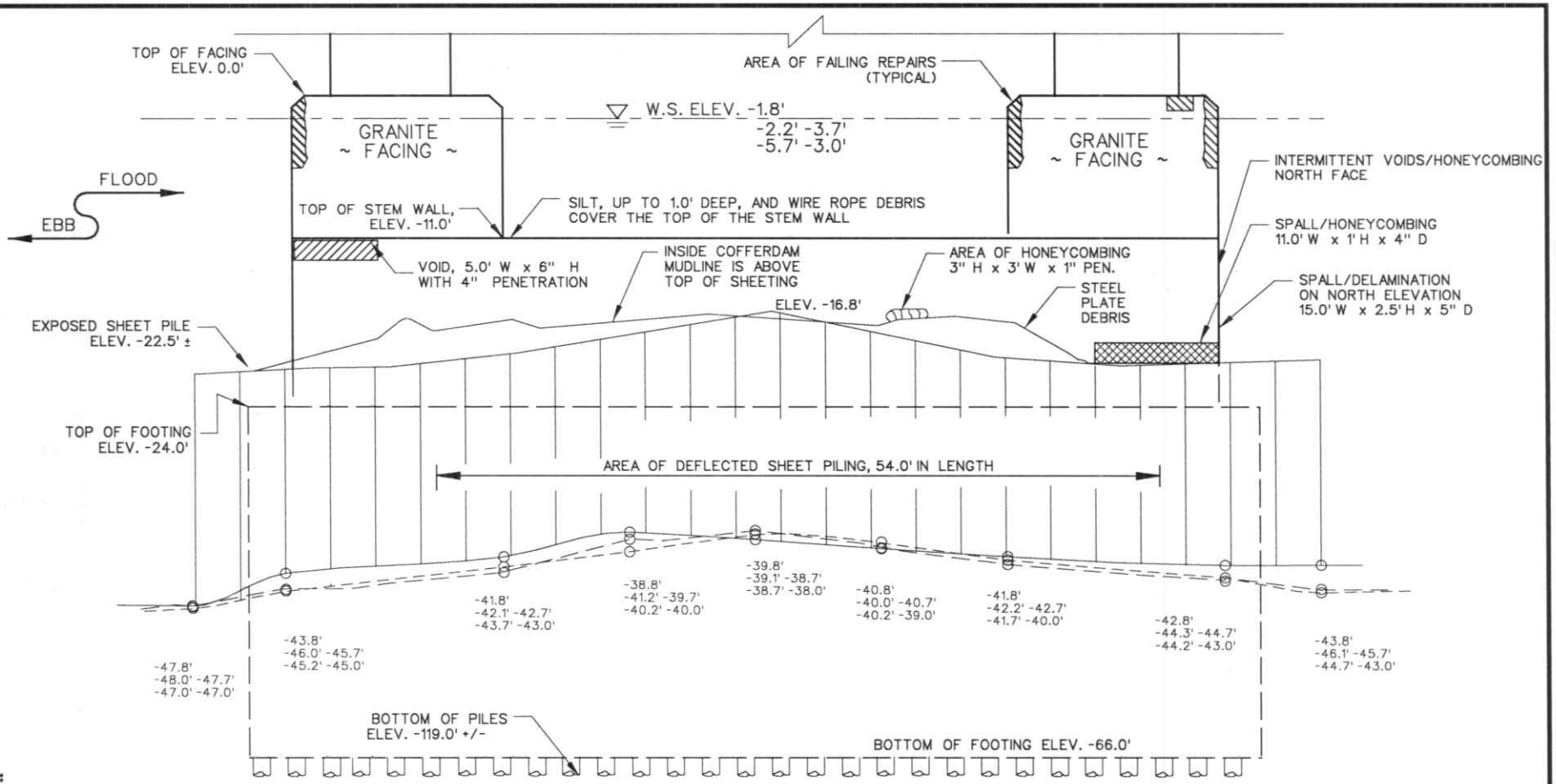
E-mail: mgmclaren@mgmclaren.com
100 Snake Hill Road, West Nyack, NY 10994
Tel. (845) 353-6400 Fax. (845) 353-6509

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON CONNECTICUT

PIER 26 WEST ELEVATION

INSPECTED BY: DSK REVISED BY: JGI	SCALE: AS SHOWN	DATE OF INSPECTION 10 / 08 / 2009	DRAWING NO. 03819F



NOTES:

1. LOOSE AND MISSING MORTAR, UP TO 10%, WAS OBSERVED AT THE CORNERS OF THE GRANITE FACING ON BOTH COLUMNS, BETWEEN THE TOP OF THE FACING AND THE MEAN LOW TIDE MARK.
2. INTERMITTENT HONEYCOMBING UP TO 4" DEEP.
3. THE FOUNDATION IS PILE SUPPORTED (HP 14 x 89).

PIER 26 EAST ELEVATION

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

OCT, 2009 → -0.0'

APR, 2007 → -0.0' -0.0' ← SEP, 2005

MAY, 2004 → -0.0' -0.0' ← AUG, 2001

* INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

——————— OCT, 2009

– – – – – – – – – APR, 2007

— — — — — — · SEP, 2005

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER 26 AT SOUTHWEST CORNER.

▽ W.S. ELEV. -1.8'
-2.2' -3.7'
-5.7' -3.0'

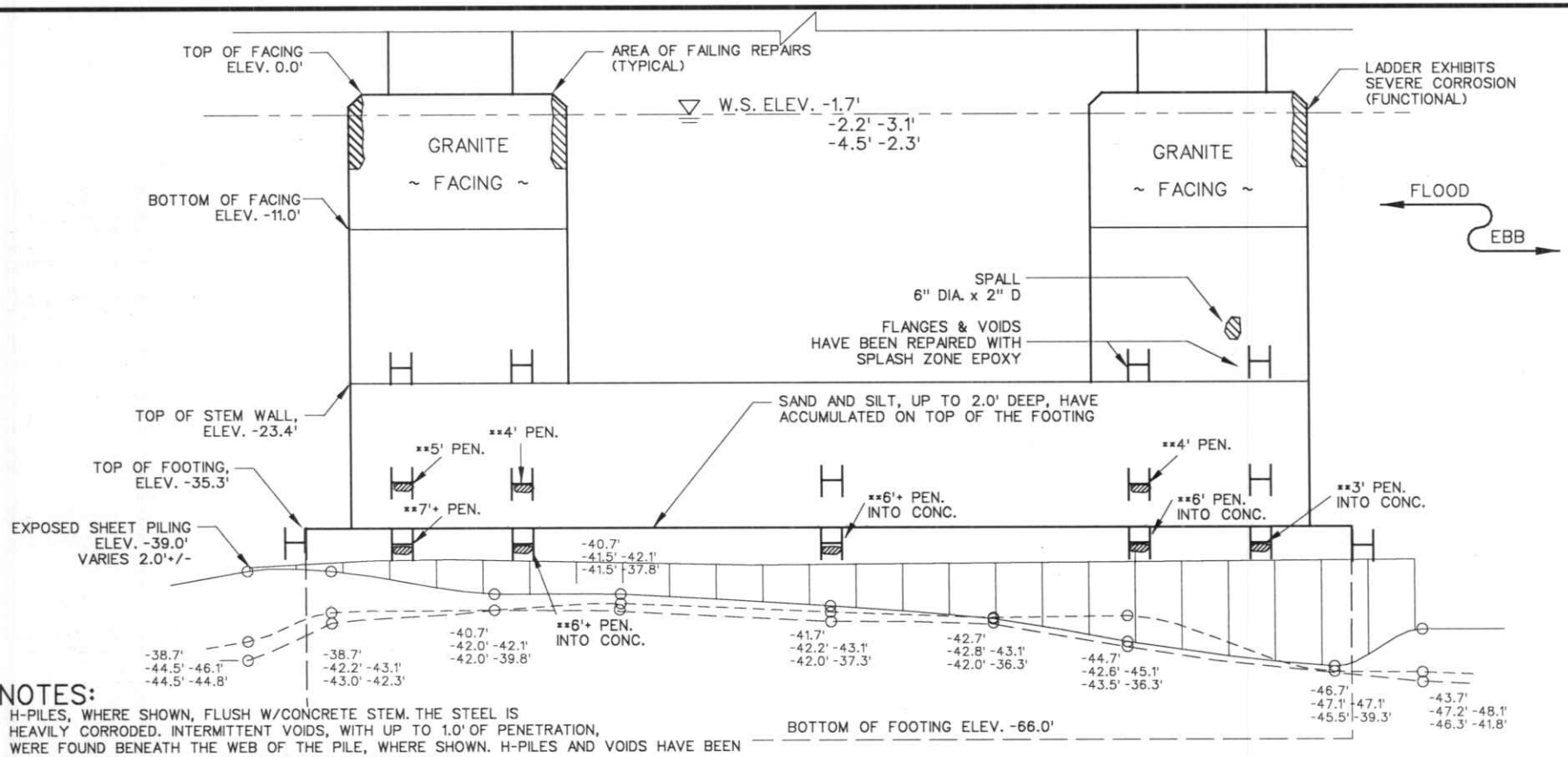
McLaren ENGINEERING GROUP
E-mail: mgmclaren@mgmclaren.com
100 Snake Hill Road, West Nyack, NY 10994
Tel. (845) 353-6400 Fax. (845) 353-6509

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON CONNECTICUT

PIER 26 EAST ELEVATION

INSPECTED BY: DSK REVISED BY: JGI	SCALE: AS SHOWN	DATE OF INSPECTION 10 / 08 / 2009	DRAWING NO. 03819G



NOTES:

1. H-PILES, WHERE SHOWN, FLUSH W/CONCRETE STEM. THE STEEL IS HEAVILY CORRODED. INTERMITTENT VOIDS, WITH UP TO 1.0' OF PENETRATION, WERE FOUND BENEATH THE WEB OF THE PILE, WHERE SHOWN. H-PILES AND VOIDS HAVE BEEN COVERED WITH EPOXY. DIVER COULD NOT LOCATE H-PILES.
2. LOOSE AND MISSING MORTAR, UP TO 20%, WAS OBSERVED AT THE CORNERS OF THE GRANITE FACING ON BOTH COLUMNS, BETWEEN THE TOP OF THE FACING AND THE MEAN LOW TIDE MARK.
3. INTERMITTENT CHAMFER SPALLS, UP TO 1.0' WIDE, ALONG THE WEST FACE OF THE FOOTING. INTERMITTENT HONEYCOMBING ADJACENT TO CHAMFER SPALLS.
4. MEDIUM MARINE GROWTH ON PIER.

PIER 27 WEST ELEVATION

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

OCT, 2009 → -0.0'

APR, 2007 → -0.0' -0.0' ← SEP, 2005

MAY, 2004 → -0.0' -0.0' ← AUG, 2001

LEGEND FOR MUDLINE ELEVATIONS

——————— OCT, 2009

– – – – – – – – APR, 2007

— — — — — — SEP, 2005

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER 26 AT SOUTHWEST CORNER.

▽ W.S. ELEV. -1.7'
-2.2' -3.1'
-4.5' -2.3'

* INDICATES NO INFORMATION

** INDICATES DEFICIENCY REPORTED IN 2004 INSPECTION THAT COULD NOT BE CONFIRMED DUE TO MEDIUM MARINE GROWTH.

H-PILE FLUSH WITH THE STRUCTURE, WITH A VOID BENEATH THE WEB WHERE SHOWN

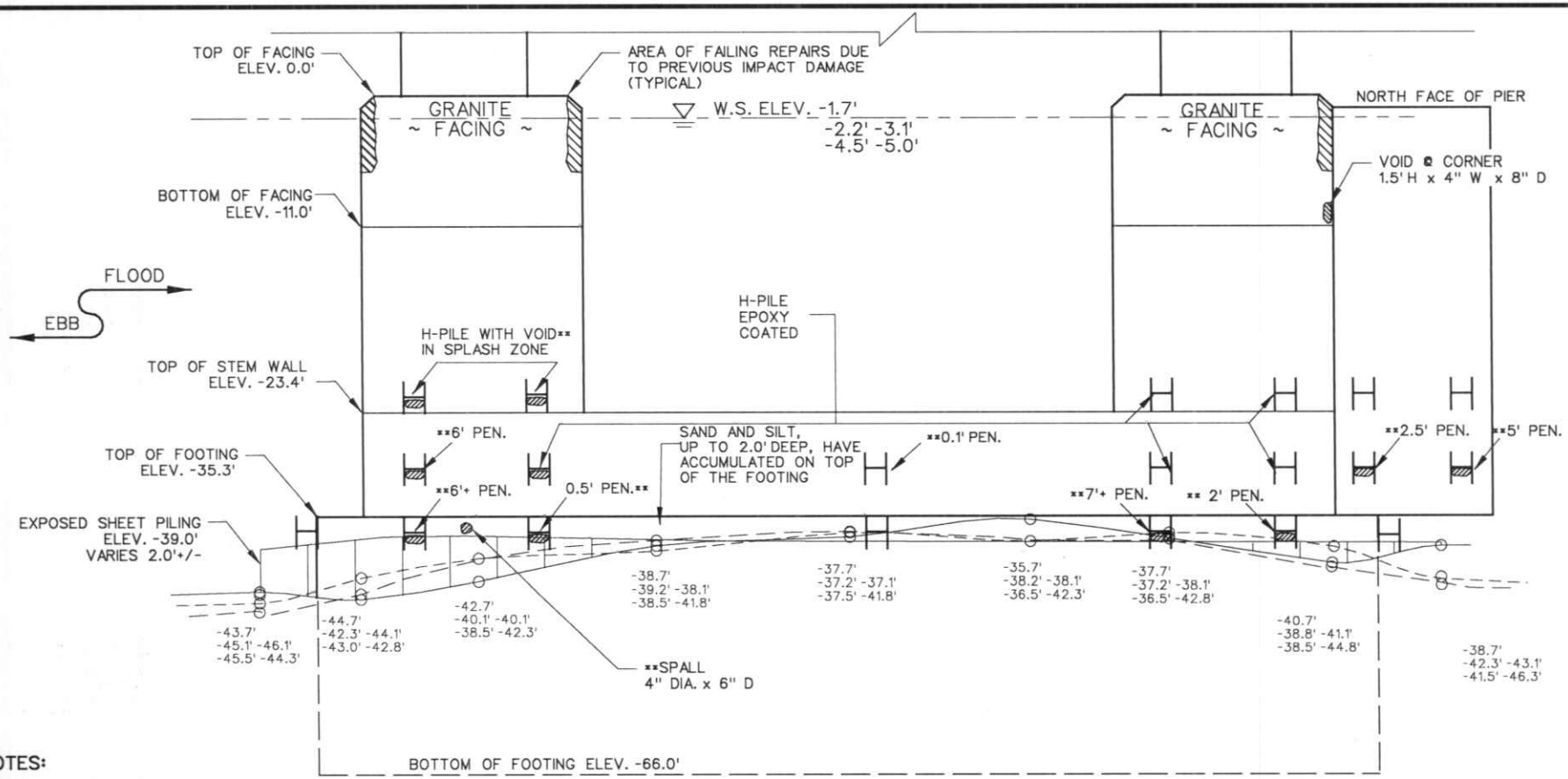
McLaren ENGINEERING GROUP
E-mail: mgmclaren@mgmclaren.com
100 Snake Hill Road, West Nyack, NY 10994
Tel. (845) 353-6400 Fax. (845) 353-6509

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON CONNECTICUT

PIER 27 WEST ELEVATION

INSPECTED BY: DSK REVISED BY: JGI	SCALE: AS SHOWN	DATE OF INSPECTION 10 / 08 / 2009	DRAWING NO. 03819H



PIER 27 EAST ELEVATION

N.T.S.

NOTES:

1. H-PILES, WHERE SHOWN, FLUSH WITH CONCRETE STEM. THE STEEL IS HEAVILY CORRODED. INTERMITTENT VOIDS, WITH UP TO 2.0' OF PENETRATION, WERE FOUND BENEATH THE WEB OF THE PILE, WHERE SHOWN. H-PILES AND VOIDS HAVE BEEN COVERED WITH EPOXY. DIVER COULD NOT LOCATE H-PILES.
2. LOOSE AND MISSING MORTAR, UP TO 20%, WAS OBSERVED AT THE CORNERS OF THE GRANITE FACING ON BOTH COLUMNS, BETWEEN THE TOP OF THE FACING AND THE MEAN LOW TIDE MARK.

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER 26 AT SOUTHWEST CORNER.

▽ W.S. ELEV. -1.7'
-2.2' -3.1'
-4.5' -5.0'

LEGEND FOR BOTTOM ELEVATIONS

OCT, 2009 → -0.0'
APR, 2007 → -0.0' -0.0' ← SEP, 2005
MAY, 2004 → -0.0' -0.0' ← AUG, 2001

LEGEND FOR MUDLINE ELEVATIONS

——— OCT, 2009
– – – – APR, 2007
— · — · SEP, 2005

* INDICATES NO INFORMATION

** INDICATES DEFICIENCY REPORTED IN 2004 INSPECTION THAT COULD NOT BE CONFIRMED DUE TO HEAVY MARINE GROWTH.

H-PILE FLUSH WITH THE STRUCTURE, WITH A VOID BENEATH THE WEB WHERE SHOWN

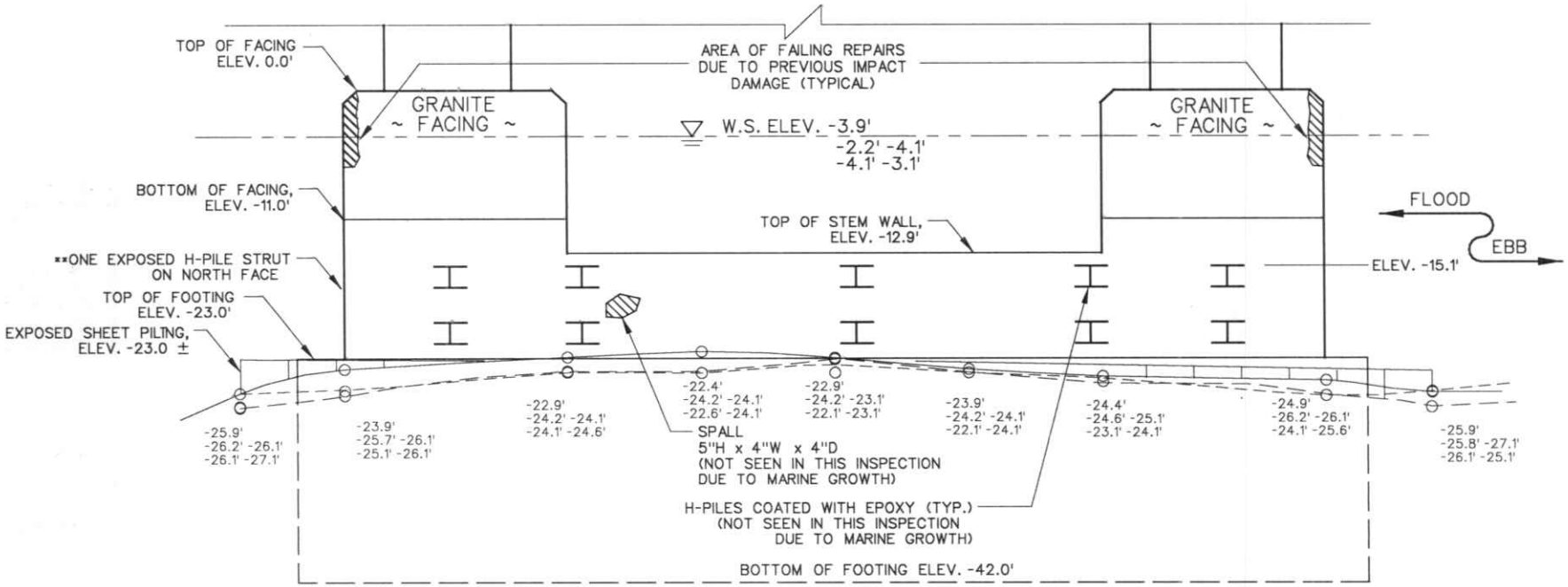
McLaren ENGINEERING GROUP
E-mail: mgmclaren@mgmclaren.com
100 Snake Hill Road, West Nyack, NY 10994
Tel. (845) 353-6400 Fax. (845) 353-6509

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON CONNECTICUT

PIER 27 EAST ELEVATION

INSPECTED BY: DSK REVISED BY: JGI	SCALE: AS SHOWN	DATE OF INSPECTION 10 / 08 / 2009	DRAWING NO. 03819I



PIER 28 WEST ELEVATION

N.T.S.

NOTES:

1. H-PILES, WHERE SHOWN, FLUSH WITH CONCRETE STEM. THE STEEL IS HEAVILY CORRODED. INTERMITTENT VOIDS, WITH UP TO 2.0' OF PENETRATION, WERE FOUND BENEATH THE WEB OF PILE, WERE SHOWN. H-PILES AND VOIDS HAVE BEEN FILLED WITH EPOXY. DIVER COULD NOT LOCATE H-PILES.
2. LOOSE AND MISSING MORTAR, UP TO 25%, WAS OBSERVED AT THE CORNERS OF THE GRANITE FACING ON BOTH COLUMNS, BETWEEN THE TOP OF THE FACING AND THE MEAN LOW TIDE MARK. REPAIRS TO THE MORTAR WERE ALSO FAILING AT THE TIME OF THE INSPECTION.
3. SHEETPILE IS EXPOSED. GENERAL ELEVATION OF TOP OF SHEET PILE IS -23.0'. HOWEVER, IT VARIES 2.0'+/- IN ELEVATION THROUGHOUT THE PIER.

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER 26 AT SOUTHWEST CORNER.

▽ W.S. ELEV. -3.9'
-2.2' -4.1'
-4.1' -3.1'

LEGEND FOR BOTTOM ELEVATIONS

OCT, 2009 → -0.0'
APR, 2007 → -0.0' -0.0' ← SEP, 2005
MAY, 2004 → -0.0' -0.0' ← AUG, 2001

LEGEND FOR MUDLINE ELEVATIONS

——————— OCT, 2009
– – – – – – – – – APR, 2007
— — — — — — SEP, 2005

* INDICATES NO INFORMATION

** - NOT FOUND BY DIVER

H-PILE FLUSH WITH THE STRUCTURE, WITH A VOID BENEATH THE WEB WHERE SHOWN

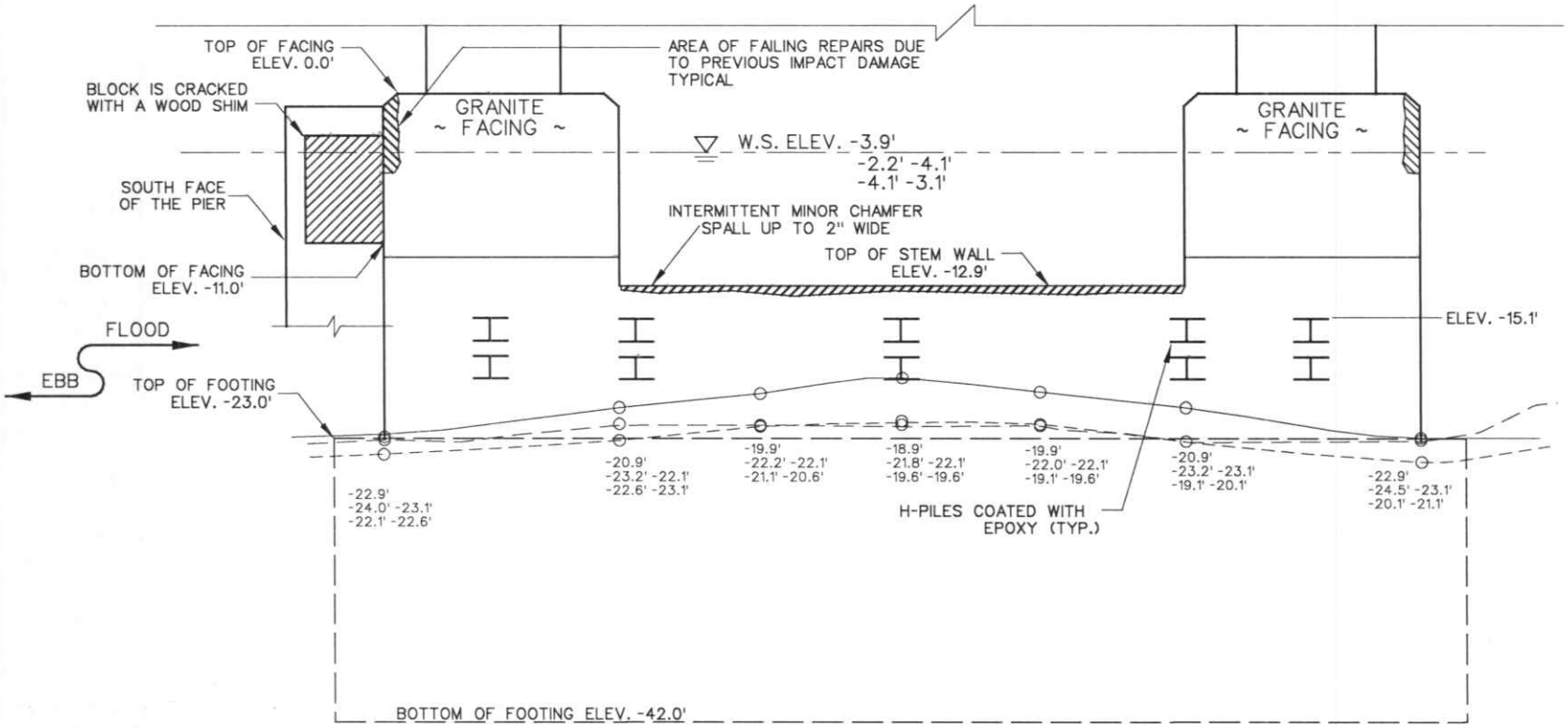
McLaren ENGINEERING GROUP
E-mail: mgmclaren@mgmclaren.com
100 Snake Hill Road, West Nyack, NY 10994
Tel. (845) 353-6400 Fax. (845) 353-6509

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON CONNECTICUT

PIER 28 WEST ELEVATION

INSPECTED BY: DSK REVISED BY: JGI	SCALE: AS SHOWN	DATE OF INSPECTION 10 / 08 / 2009	DRAWING NO. 03819J



PIER 28 EAST ELEVATION

N.T.S.

NOTES:

1. H-PILES, WHERE SHOWN, FLUSH WITH CONCRETE STEM. THE STEEL HAS BEEN COATED WITH AN EPOXY REPAIR.
2. LOOSE AND MISSING MORTAR, UP TO 25% WITH 1.0' PENETRATION, WAS OBSERVED AT THE CORNERS OF THE GRANITE FACING ON BOTH COLUMNS, BETWEEN THE TOP OF THE FACING AND THE MEAN LOW TIDE MARK.
3. MEDIUM MARINE GROWTH ON THE PIER.

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER 26 AT SOUTHWEST CORNER.

▽ W.S. ELEV. -3.9'
-2.2' -4.1'
-4.1' -3.1'

LEGEND FOR BOTTOM ELEVATIONS

OCT, 2009 → -0.0'
APR, 2007 → -0.0' -0.0' ← SEP, 2005
MAY, 2004 → -0.0' -0.0' ← AUG, 2001

* INDICATES NO INFORMATION

H-PILE FLUSH WITH THE STRUCTURE, WITH A VOID BENEATH THE WEB WHERE SHOWN

LEGEND FOR MUDLINE ELEVATIONS

——————— OCT, 2009
– – – – – – – – – APR, 2007
— — — — — — SEP, 2005

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E-mail: mgmclaren@mgmclaren.com
100 Snake Hill Road, West Nyack, NY 10994
Tel. (845) 353-6400 Fax. (845) 353-6509

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON CONNECTICUT

PIER 28 EAST ELEVATION

INSPECTED BY: DSK REVISED BY: JGI	SCALE: AS SHOWN	DATE OF INSPECTION 10 / 08 / 2009	DRAWING NO. 03819K

Bridge No.	03819	**Inspected by:**	Dan Korkosz
Town:	New London	**Inspected by:**	John St. Denis
Feature Carried:	Interstate-95 Northbound	**Date Inspected:**	10/08/09
Feature Crossed:	Thames River & Local Roads	**Project No.:**	170-2868

03819	
Photo # 1: Bridge Identification Number.	**Photo # 2: Downstream (South) channel.**

Bridge No.	03819	**Inspected by:**	Dan Korkosz
Town:	New London	**Inspected by:**	John St. Denis
Feature Carried:	Interstate-95 Northbound	**Date Inspected:**	10/08/09
Feature Crossed:	Thames River & Local Roads	**Project No.:**	170-2868

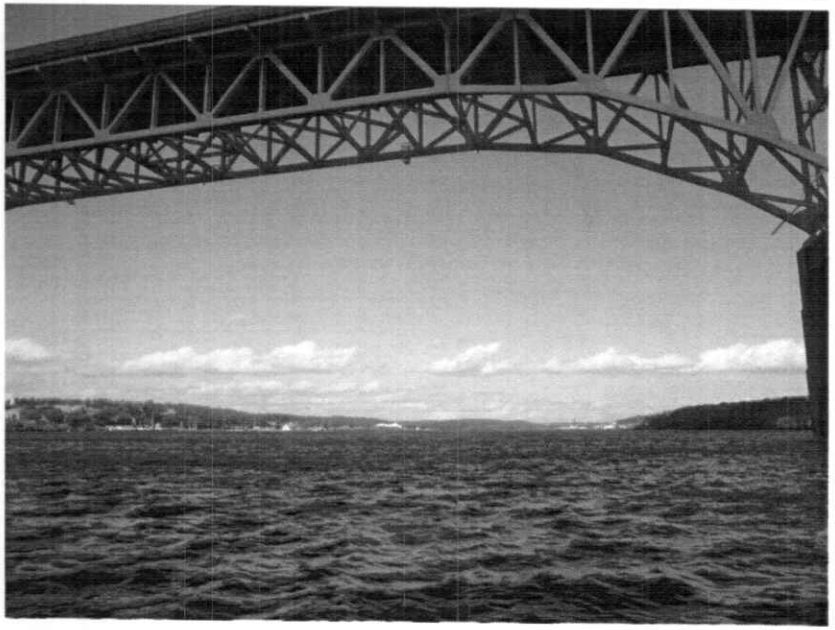

Photo # 3: Upstream (North) channel.

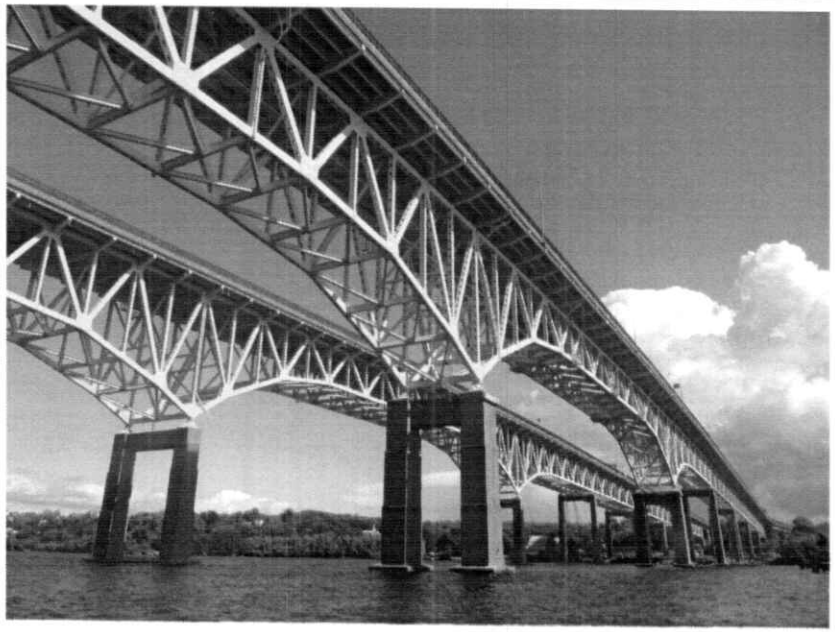

Photo # 4: Downstream (South) Elevation.

Bridge No.	03819	**Inspected by:**	Dan Korkosz
Town:	New London	**Inspected by:**	John St. Denis
Feature Carried:	Interstate-95 Northbound	**Date Inspected:**	10/08/09
Feature Crossed:	Thames River & Local Roads	**Project No.:**	170-2868

Photo # 5: Upstream (North) Elevation.

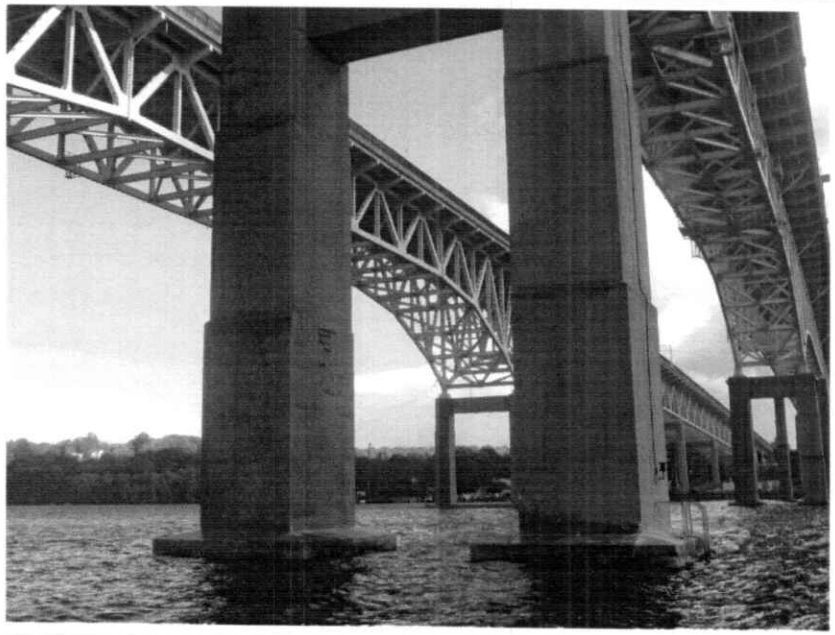

Photo # 6: Pier 25, West face.

Bridge No.	03819	**Inspected by:**	Dan Korkosz
Town:	New London	**Inspected by:**	John St. Denis
Feature Carried:	Interstate-95 Northbound	**Date Inspected:**	10/08/09
Feature Crossed:	Thames River & Local Roads	**Project No.:**	170-2868

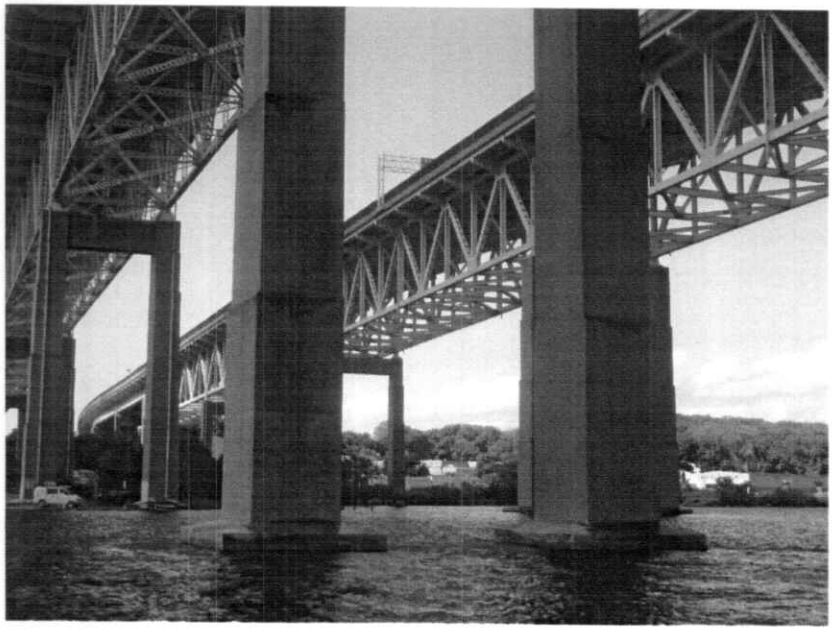

Photo # 7: Pier 25, East face.

Photo # 8: Pier 26, West face.

Bridge No.	03819	**Inspected by:**	Dan Korkosz
Town:	New London	**Inspected by:**	John St. Denis
Feature Carried:	Interstate-95 Northbound	**Date Inspected:**	10/08/09
Feature Crossed:	Thames River & Local Roads	**Project No.:**	170-2868

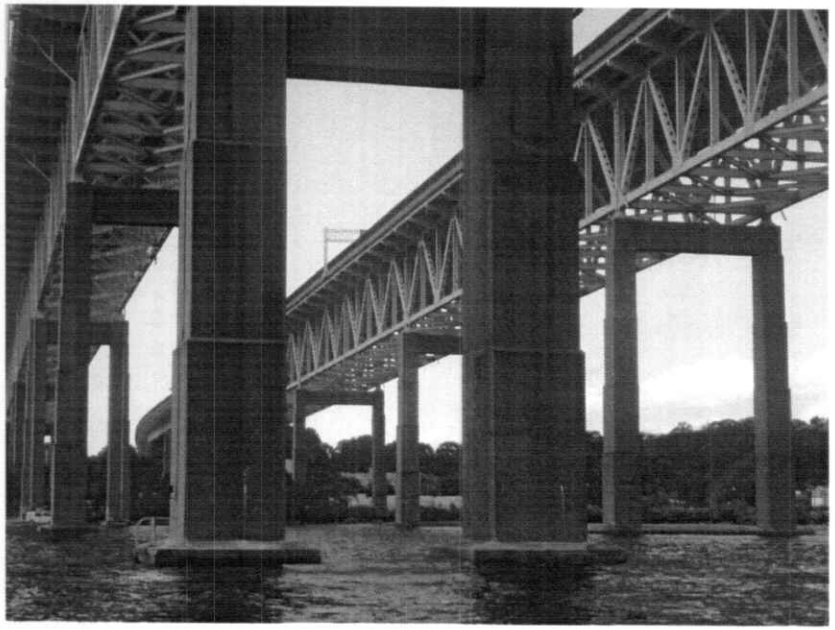

Photo # 9: Pier 26, East face.

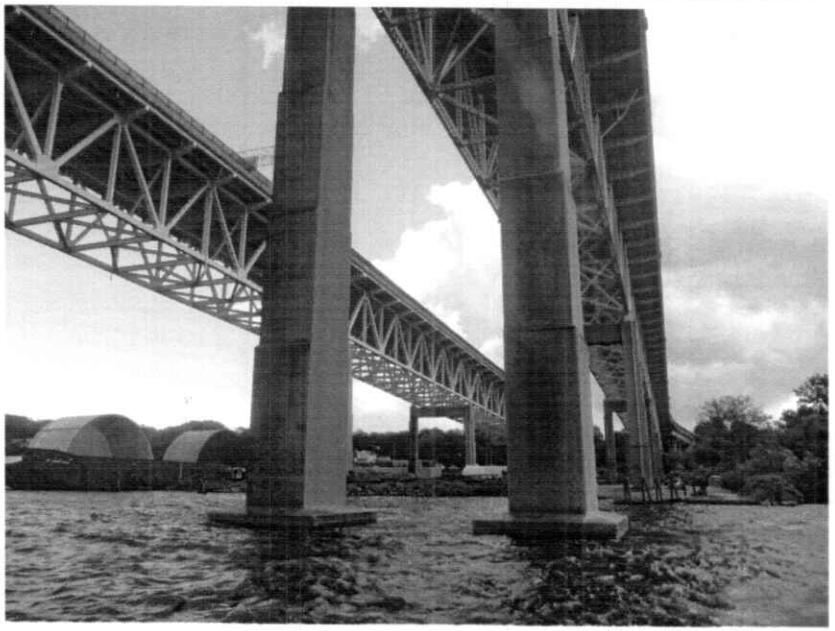

Photo # 10: Pier 27, West face.

Bridge No.	03819	**Inspected by:**	Dan Korkosz
Town:	New London	**Inspected by:**	John St. Denis
Feature Carried:	Interstate-95 Northbound	**Date Inspected:**	10/08/09
Feature Crossed:	Thames River & Local Roads	**Project No.:**	170-2868

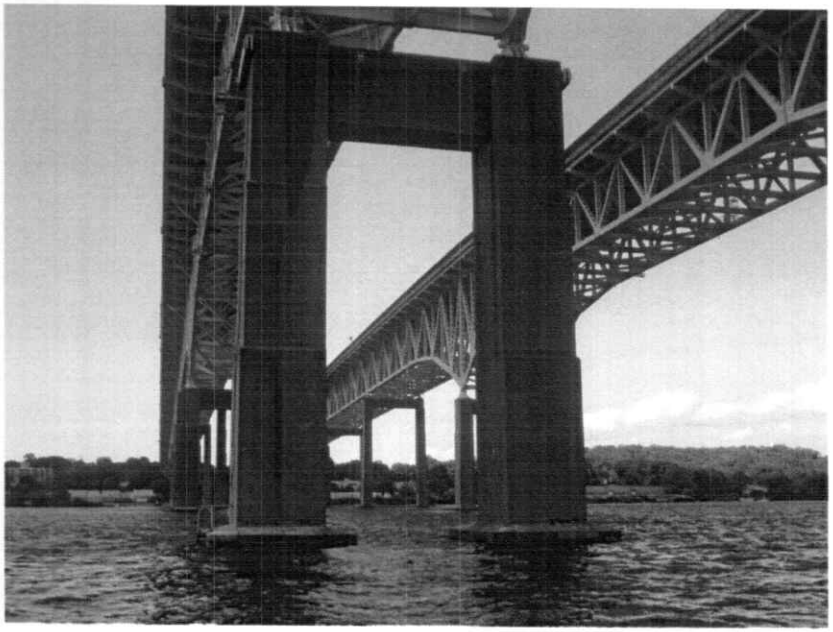

Photo # 11: Pier 27, East face.

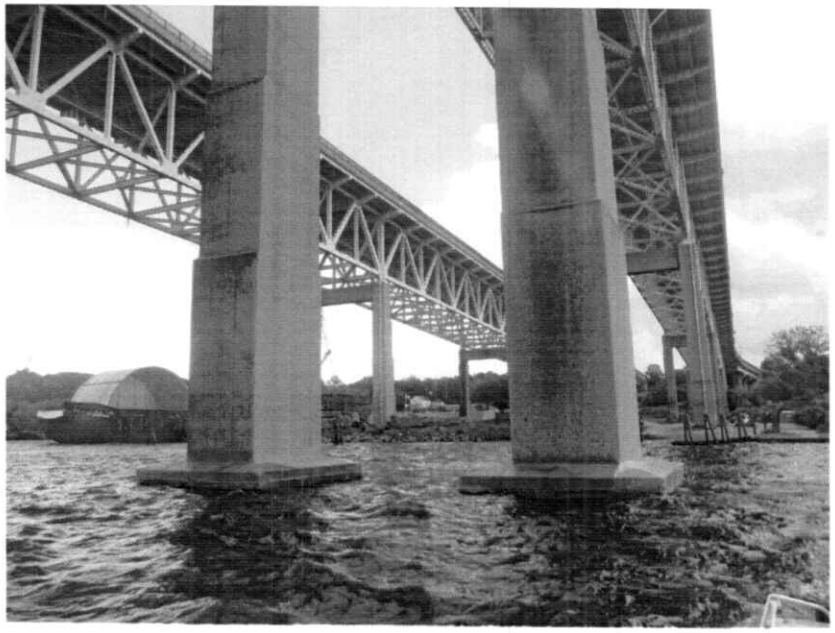

Photo # 12: Pier 28, West face.

Bridge No.	03819	**Inspected by:**	Dan Korkosz
Town:	New London	**Inspected by:**	John St. Denis
Feature Carried:	Interstate-95 Northbound	**Date Inspected:**	10/08/09
Feature Crossed:	Thames River & Local Roads	**Project No.:**	170-2868

Photo # 13: Pier 28, East face.

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M.G. McLAREN P.C.

BRIDGE # 03819

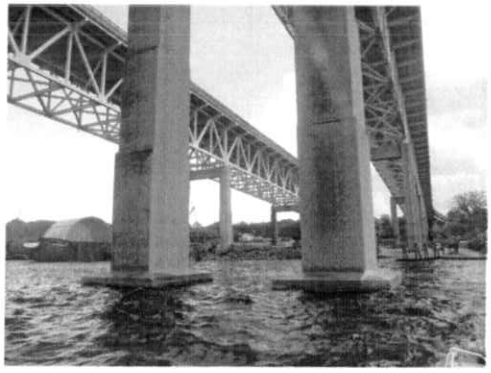
ADDITIONAL FIELD NOTES

(BACK-UP MATERIAL)

DATE: 10/08/09

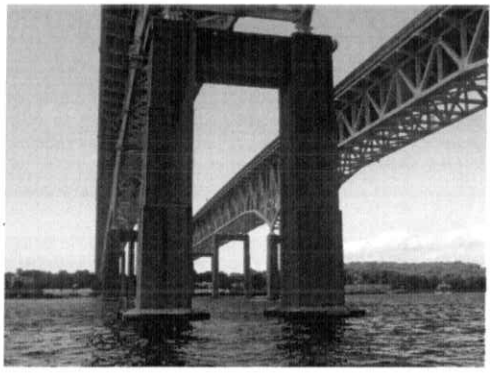
1 – Upstream (North) Elevation.

2 – Pier 28, East face.



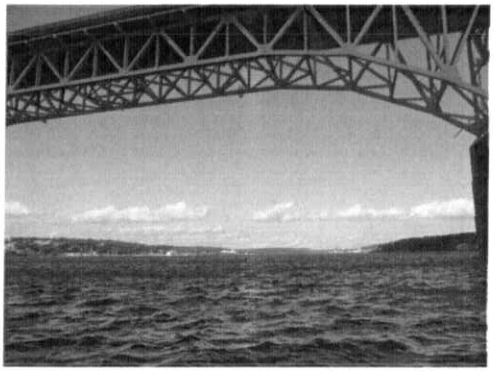
3 – Pier 28, West face.

4 – Pier 27, West face.



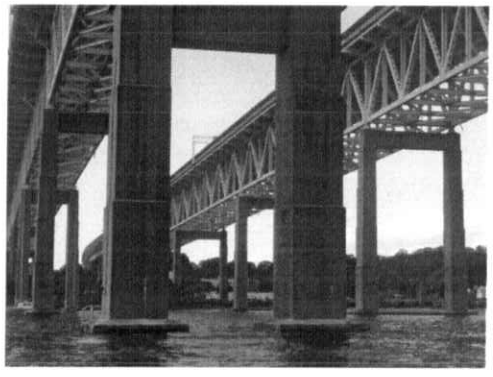
5 – Pier 27, East face.

6 – Downstream (South) channel.



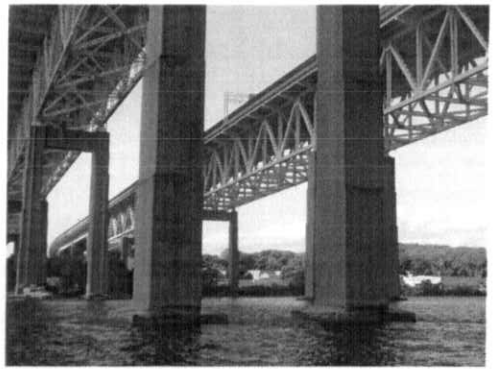
7 – Upstream (North) channel.

8 – Pier 26, West face.

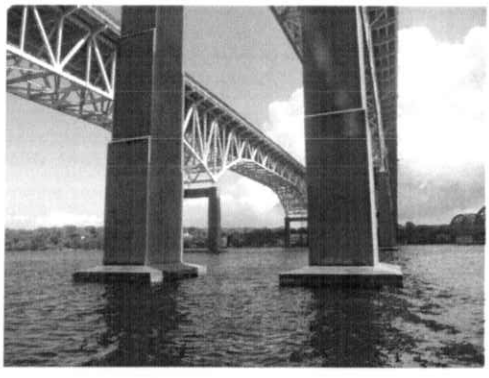


9 – Pier 26, East face.

10 – Pier 25, West face.



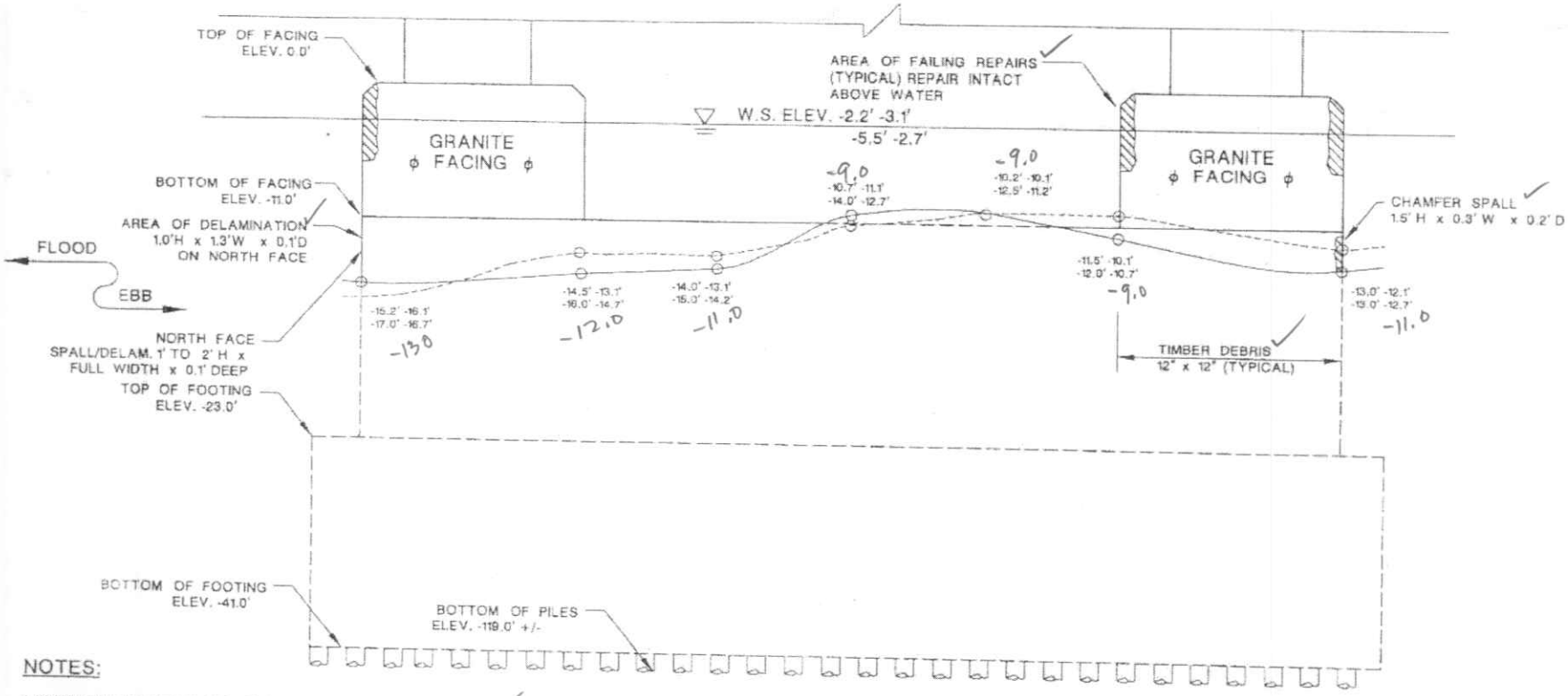
11 – Pier 25, East face.



12 – Pier 24, West face.

13 – Pier 24, East face.

14 – Downstream (South) Elevation.



NOTES:

1. INTERMITTENT AREAS OF HONEYCOMBING UP TO 0.2' DEEP.
2. TOP OF PILE ELEVATION -31.0'.
3. PILE LENGTH 88' +/-.
4. ORIGINAL MUDLINE EL. -21.0' (1940).

PIER NO. 25 WEST ELEVATION

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

APR, 2007 — SEP, 2005
-0.0' -0.0'
MAY, 2004 — -0.0' -0.0' — AUG, 2001

LEGEND FOR MUDLINE ELEVATIONS

APR, 2007
SEP, 2005

LEGEND FOR SYMBOLS

DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER NO. 26 (SOUTHWEST CORNER).

W.S. ELEV. -2.2' -3.1' -1.8
-5.5' -2.7'

* INDICATES NO INFORMATION

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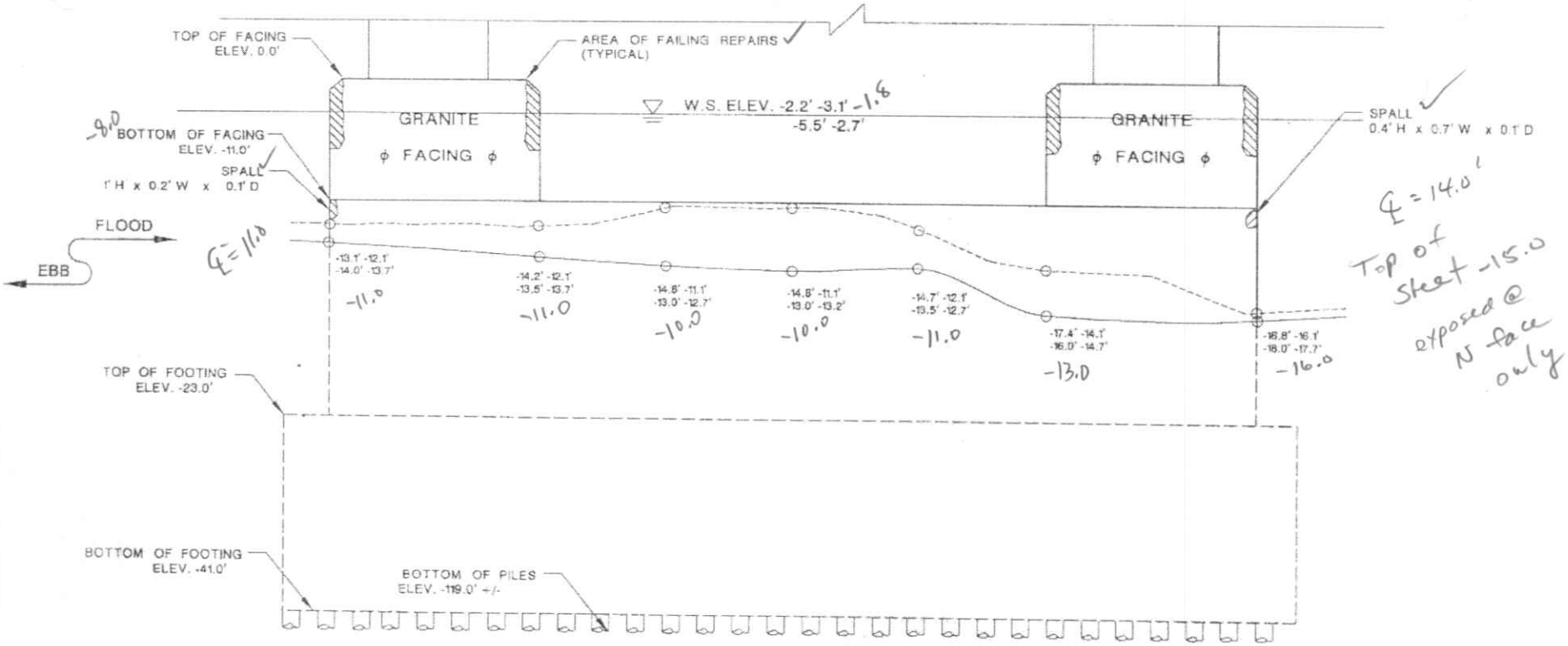
www.collinsengr.com

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON — CONNECTICUT

PIER NO. 25 (WEST ELEVATION)

INSPECTED BY: BQ REVISED BY: TG	SCALE: AS SHOWN	DATE OF INSPECTION 04 / 18 / 2007	DRAWING NO. 03819C



NOTES:

1. INTERMITTENT AREAS OF HONEYCOMBING, UP TO 0.2' DEEP OBSERVED ON THE THE EAST FACE OF THE STEM WALL.
2. TOP OF PILE ELEVATION -31.0'.
3. PILE LENGTH 88' +/-.
4. ORIGINAL MUDLINE EL. -21.0' (1940).

PIER NO. 25 EAST ELEVATION

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

APR, 2007 — -0.0' -0.0' — SEP, 2005

MAY, 2004 — -0.0' -0.0' — AUG, 2001

* INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

APR, 2007

SEP, 2005

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER NO. 26 SOUTHWEST CORNER.

▽ W.S. ELEV. -2.2' -3.1' -1.8
-5.5' -2.7'

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CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON — CONNECTICUT

PIER NO. 25 EAST ELEVATION

INSPECTED BY: BQ REVISED BY: TG	SCALE: AS SHOWN	DATE OF INSPECTION 04 / 18 / 2007	DRAWING NO. 03819D

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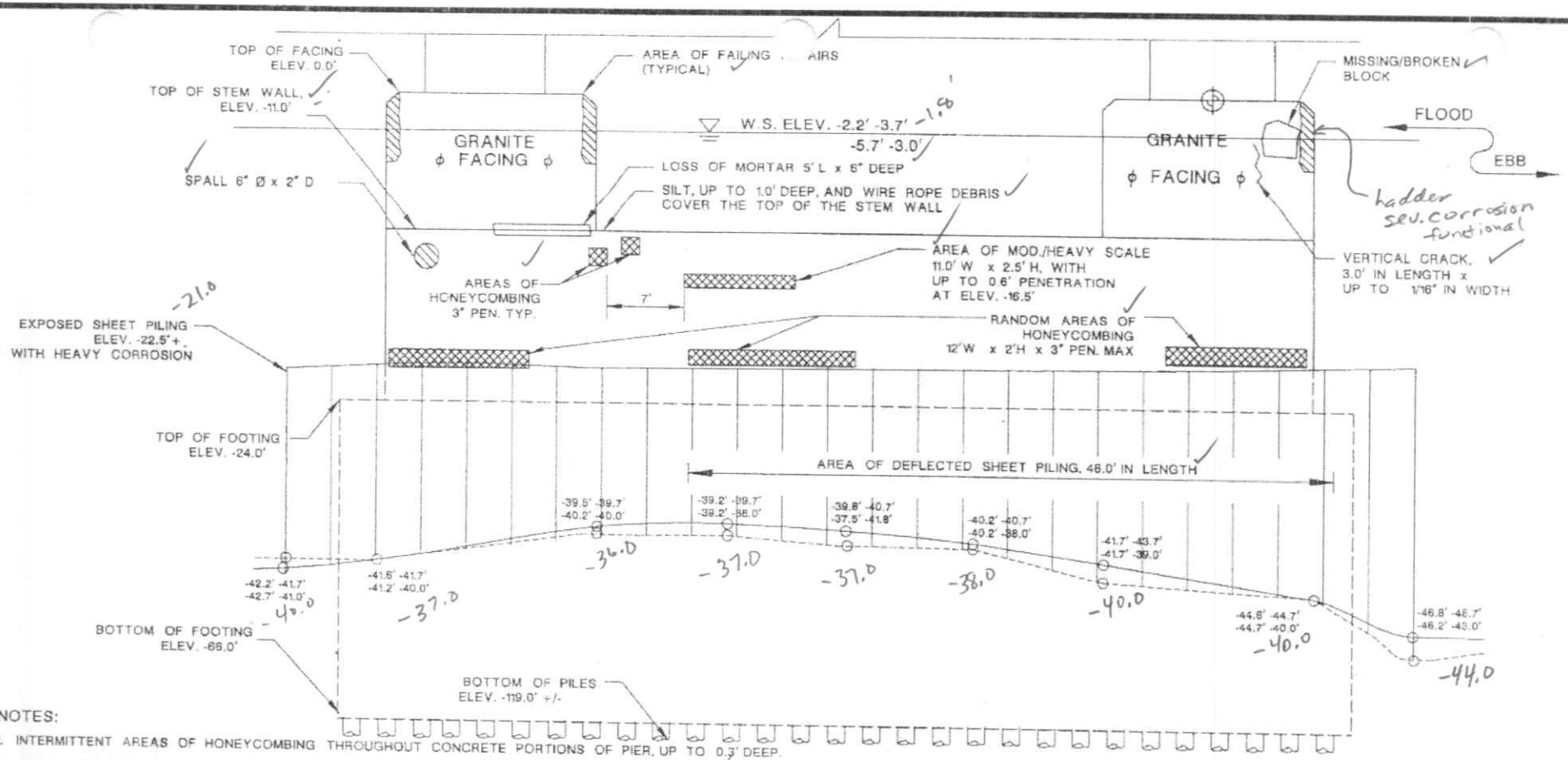

NOTES:

1. INTERMITTENT AREAS OF HONEYCOMBING THROUGHOUT CONCRETE PORTIONS OF PIER, UP TO 0.3' DEEP.
2. LOOSE AND MISSING MORTAR (60%) WITH UP TO 0.4' PEN. WAS OBSERVED AT THE CORNERS OF THE GRANITE FACING ON BOTH COLUMNS, BETWEEN THE TOP OF THE FACING AND THE MEAN LOW TIDE MARK.
3. MUDLINE INSIDE SHEETING IS LEVEL WITH TOP OF SHEETING.
4. THE FOUNDATION IS PILE SUPPORTED (HP 14 x 89).

PIER NO. 26 WEST ELEVATION

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

APR, 2007 — -0.0' -0.0' — SEP, 2005

MAY, 2004 — -0.0' -0.0' — AUG, 2001

* INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

APR, 2007

SEP, 2005

LEGEND FOR SYMBOLS

ϕ DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER NO. 26 SOUTHWEST CORNER.

W.S. ELEV. -2.2' -3.7' -1.8
-5.7' -3.0'

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CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON — CONNECTICUT

PIER NO. 26 WEST ELEVATION

INSPECTED BY: BQ REVISED BY: TG	SCALE: AS SHOWN	DATE OF INSPECTION 04 / 18 / 2007	DRAWING NO. 03819E

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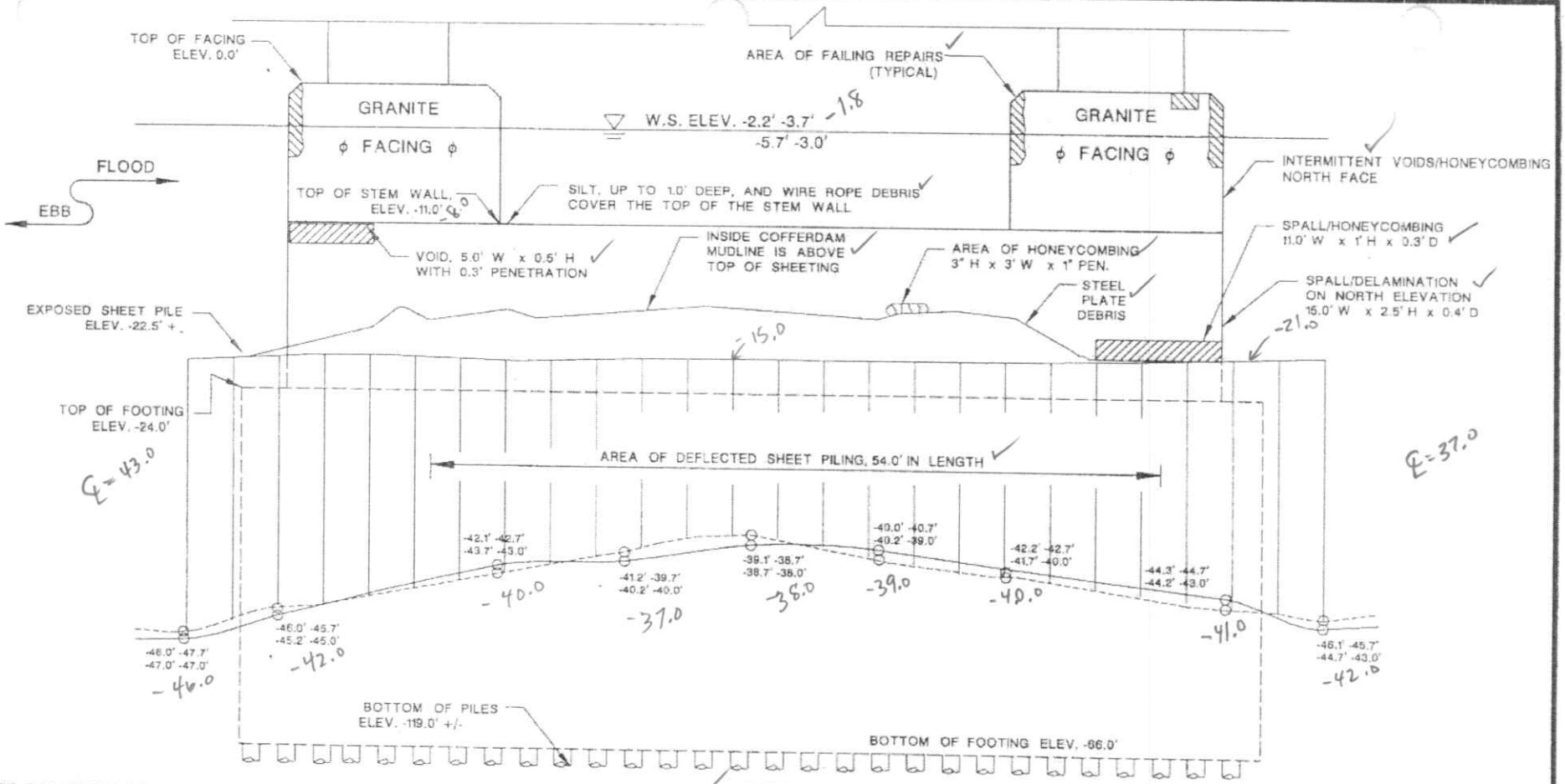

PIER NO. 26 EAST ELEVATION

N.T.S.

NOTES:

1. LOOSE AND MISSING MORTAR, UP TO 10%, WAS OBSERVED AT THE CORNERS OF THE GRANITE FACING ON BOTH COLUMNS, BETWEEN THE TOP OF THE FACING AND THE MEAN LOW TIDE MARK.
2. INTERMITTENT HONEYCOMBING UP TO 0.3' DEEP.
3. THE FOUNDATION IS PILE SUPPORTED (HP 14 x 89).

LEGEND FOR BOTTOM ELEVATIONS

APR, 2007 — -0.0' -0.0' — SEP, 2005

MAY, 2004 — -0.0' -0.0' — AUG, 2001

* INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

APR, 2007

SEP, 2005

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER NO. 26 SOUTHWEST CORNER.

▽ W.S. ELEV. -2.2' -3.7' -1.8
-5.7' -3.0'

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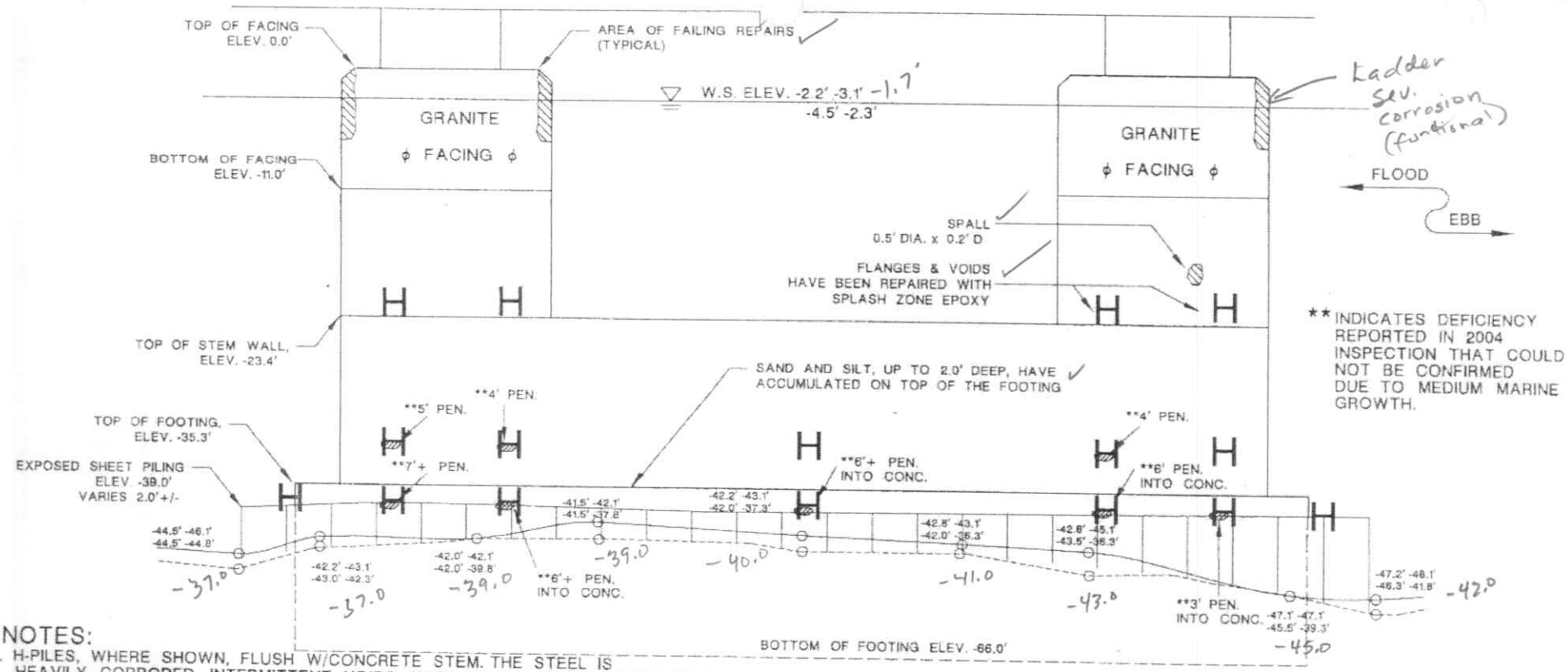
BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON — CONNECTICUT

PIER NO. 26 EAST ELEVATION

INSPECTED BY: BQ REVISED BY: TG	SCALE: AS SHOWN	DATE OF INSPECTION 04 / 16 / 2007	DRAWING NO. 03819F



NOTES:

1. H-PILES, WHERE SHOWN, FLUSH W/CONCRETE STEM. THE STEEL IS HEAVILY CORRODED. INTERMITTENT VOIDS, WITH UP TO 1.0' OF PENETRATION, WERE FOUND BENEATH THE WEB OF THE PILE, WHERE SHOWN. H-PILES AND VOIDS HAVE BEEN COVERED WITH EPOXY. DIVER COULD NOT LOCATE H-PILES.
2. LOOSE AND MISSING MORTAR, UP TO 20%, WAS OBSERVED AT THE CORNERS OF THE GRANITE FACING ON BOTH COLUMNS, BETWEEN THE TOP OF THE FACING AND THE MEAN LOW TIDE MARK.
3. INTERMITTENT CHAMFER SPALLING, UP TO 1.0' IN WIDTH, ALONG THE WEST FACE OF THE FOOTING. INTERMITTENT HONEYCOMBING ADJACENT TO CHAMFER SPALLING.
4. MEDIUM MARINE GROWTH ON PIER.

LEGEND FOR BOTTOM ELEVATIONS

APR, 2007 — -0.0' -0.0' — SEP, 2005

MAY, 2004 — -0.0' -0.0' — AUG, 2001

* INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

APR, 2007

SEP, 2005

PIER NO. 27 WEST ELEVATION

N.T.S.

LEGEND FOR SYMBOLS

DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER NO. 26 SOUTHWEST CORNER.

W.S. ELEV. -2.2' -3.1' -1.7'
-4.5' -2.3'

H H-PILE FLUSH WITH THE STRUCTURE, WITH A VOID BENEATH THE WEB WHERE SHOWN

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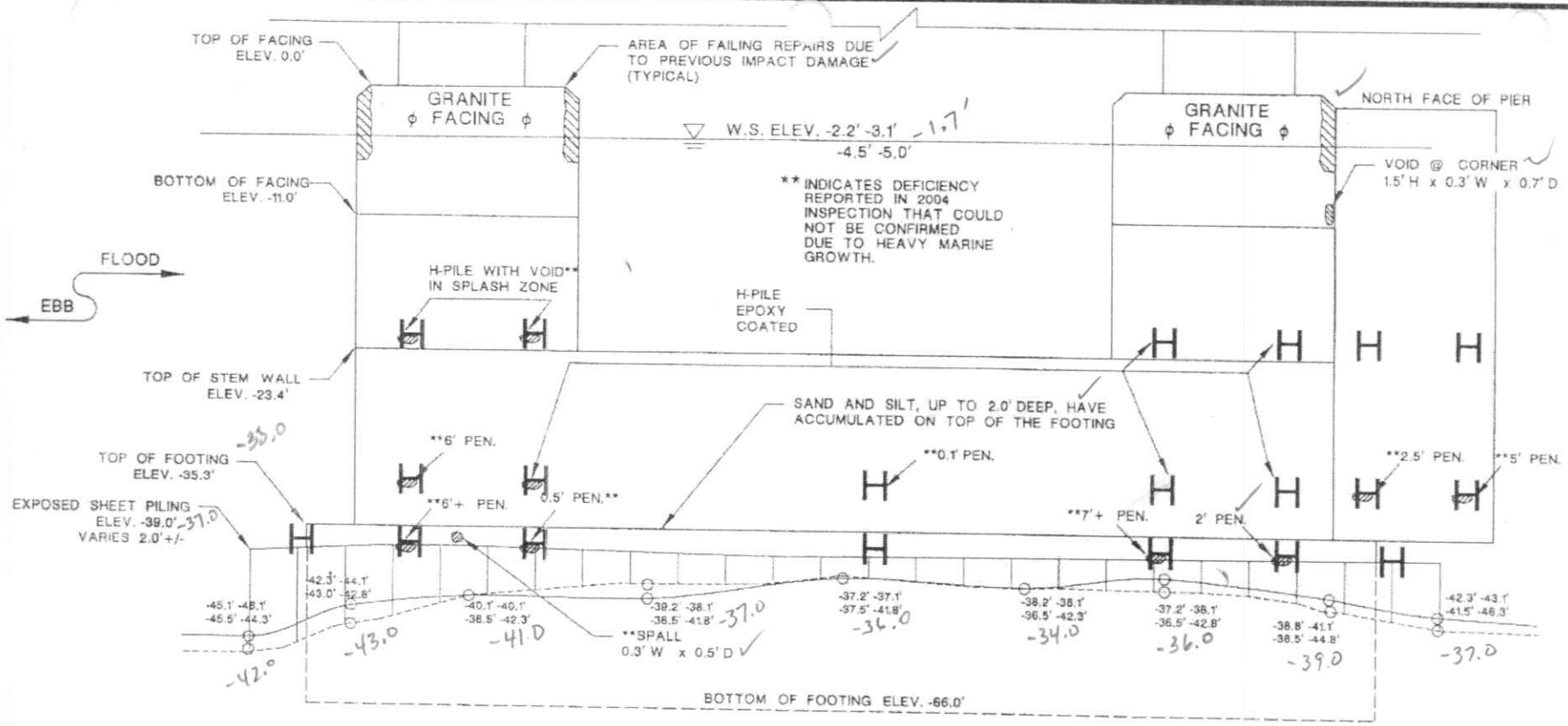
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON — CONNECTICUT

PIER NO. 27 WEST ELEVATION

INSPECTED BY: BQ REVISED BY: TG	SCALE: AS SHOWN	DATE OF INSPECTION 04 / 18 / 2007	DRAWING NO. 03819G



NOTES:

1. H-PILES, WHERE SHOWN, FLUSH WITH CONCRETE STEM. THE STEEL IS HEAVILY CORRODED. INTERMITTENT VOIDS, WITH UP TO 2.0' OF PENETRATION, WERE FOUND BENEATH THE WEB OF THE PILE, WHERE SHOWN. H-PILES AND VOIDS HAVE BEEN COVERED WITH EPOXY. DIVER COULD NOT LOCATE H-PILES.
2. LOOSE AND MISSING MORTAR, UP TO 20%, WAS OBSERVED AT THE CORNERS OF THE GRANITE FACING ON BOTH COLUMNS, BETWEEN THE TOP OF THE FACING AND THE MEAN LOW TIDE MARK.

PIER NO. 27 EAST ELEVATION

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

APR, 2007 — -0.0' -0.0' — SEP, 2005

MAY, 2004 — -0.0' -0.0' — AUG, 2001

* INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

APR, 2007

SEP, 2005

LEGEND FOR SYMBOLS

DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER NO. 26 SOUTHWEST CORNER.

W.S. ELEV. -2.2' -3.1' -1.7'
-4.5' -5.0'

H-PILE FLUSH WITH THE STRUCTURE, WITH A VOID BENEATH THE WEB WHERE SHOWN

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I-95 (NORTHBOUND) OVER THAMES RIVER
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PIER NO. 27 EAST ELEVATION

INSPECTED BY: BQ REVISED BY: TG	SCALE: AS SHOWN	DATE OF INSPECTION 04 / 18 / 2007	DRAWING NO. 03819H

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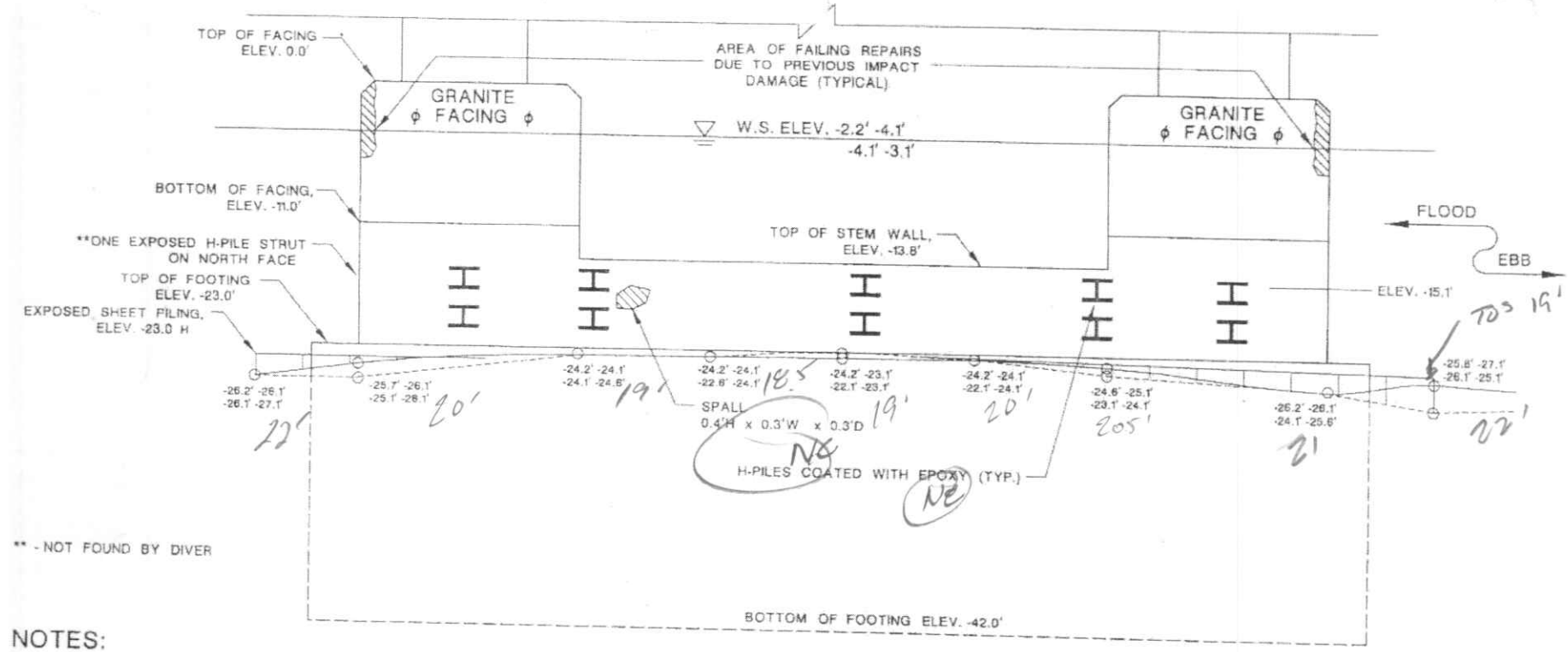

** - NOT FOUND BY DIVER

NOTES:

1. H-PILES, WHERE SHOWN, FLUSH WITH CONCRETE STEM. THE STEEL IS HEAVILY CORRODED. INTERMITTENT VOIDS, WITH UP TO 2.0' OF PENETRATION, WERE FOUND BENEATH THE WEB OF PILE, WERE SHOWN. H-PILES AND VOIDS HAVE BEEN FILLED WITH EPOXY. DIVER COULD NOT LOCATE H-PILES.
2. LOOSE AND MISSING MORTAR, UP TO 25%, WAS OBSERVED AT THE CORNERS OF THE GRANITE FACING ON BOTH COLUMNS, BETWEEN THE TOP OF THE FACING AND THE MEAN LOW TIDE MARK. REPAIRS TO THE MORTAR WERE ALSO FAILING AT THE TIME OF THE INSPECTION.
3. SHEETPILE IS EXPOSED. GENERAL ELEVATION OF TOP OF SHEET PILE IS -23.0'. HOWEVER, IT VARIES 2.0'+/- IN ELEVATION THROUGHOUT THE PIER.

LEGEND FOR BOTTOM ELEVATIONS

APR, 2007 — SEP, 2005
-0.0' -0.0'
MAY, 2004 → -0.0' -0.0' ← AUG, 2001

LEGEND FOR MUDLINE ELEVATIONS

APR, 2007
SEP, 2005

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER NO. 26 SOUTHWEST CORNER.

▽ W.S. ELEV. -2.2' -4.1' -4.1' -3.1' 3.9'

H-PILE FLUSH WITH THE STRUCTURE, WITH A VOID BENEATH THE WEB WHERE SHOWN

PIER NO. 28 WEST ELEVATION

N.T.S.

* INDICATES NO INFORMATION

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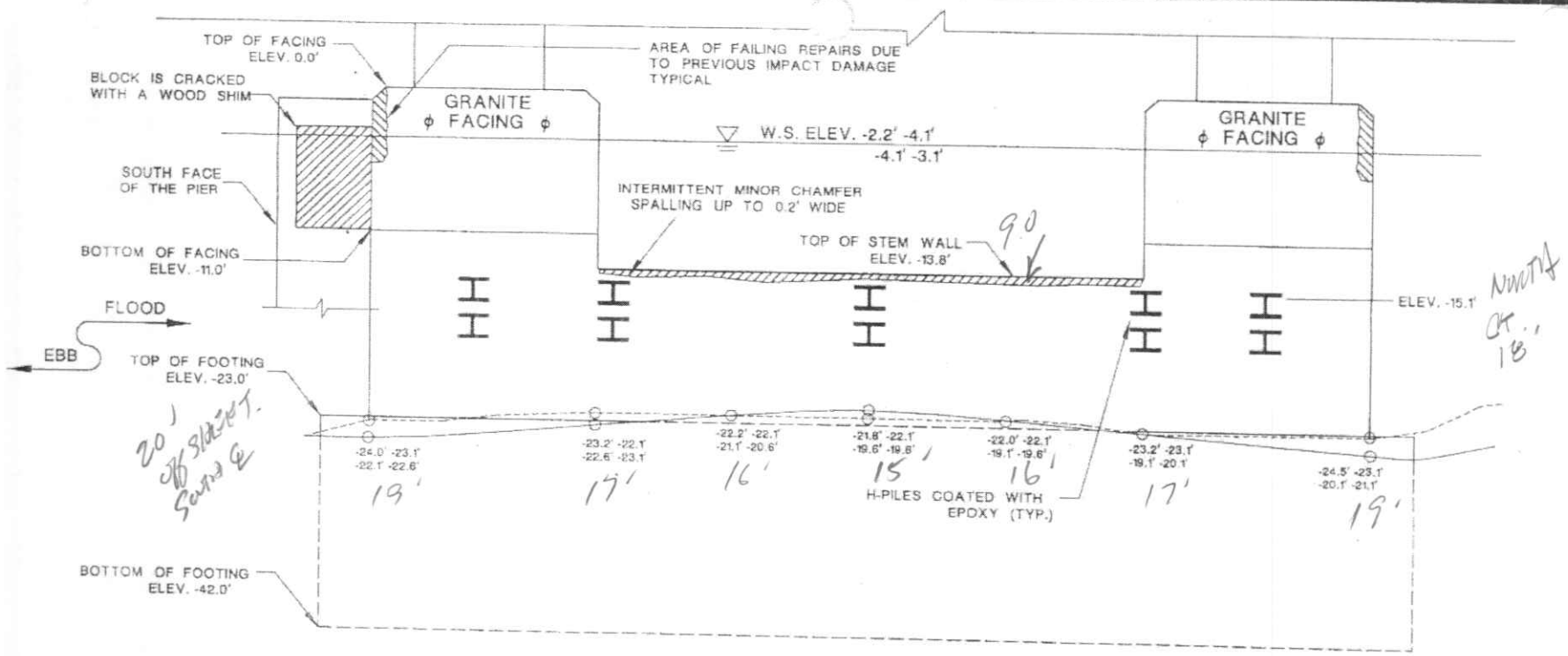
CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 03819
I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON — CONNECTICUT

PIER NO. 28 WEST ELEVATION

INSPECTED BY: BO REVISED BY: TG	SCALE: AS SHOWN	DATE OF INSPECTION 04 / 18 / 2007	DRAWING NO. 03819I



NOTES:

1. H-PILES, WHERE SHOWN, FLUSH WITH CONCRETE STEM. THE STEEL HAS BEEN COATED WITH AN EPOXY REPAIR.
2. LOOSE AND MISSING MORTAR, UP TO 25% WITH 1.0' PENETRATION, WAS OBSERVED AT THE CORNERS OF THE GRANITE FACING ON BOTH COLUMNS, BETWEEN THE TOP OF THE FACING AND THE MEAN LOW TIDE MARK.
3. MEDIUM MARINE GROWTH ON THE PIER.

LEGEND FOR BOTTOM ELEVATIONS

APR, 2007 — -0.0' -0.0' — SEP, 2005

MAY, 2004 — -0.0' -0.0' — AUG, 2001

* INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

APR, 2007

SEP, 2005

PIER NO. 28 EAST ELEVATION

N.T.S.

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM TOP OF THE STONE FACING PIER NO. 26 SOUTHWEST CORNER.

▽ W.S. ELEV. -2.2' -4.1' -4.1' -3.1' 3.9'

H H-PILE FLUSH WITH THE STRUCTURE, WITH A VOID BENEATH THE WEB WHERE SHOWN

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I-95 (NORTHBOUND) OVER THAMES RIVER
NEW LONDON — CONNECTICUT

PIER NO. 28 EAST ELEVATION

INSPECTED BY: BO REVISED BY: TG	SCALE: AS SHOWN	DATE OF INSPECTION 04 / 18 / 2007	DRAWING NO. 03819J

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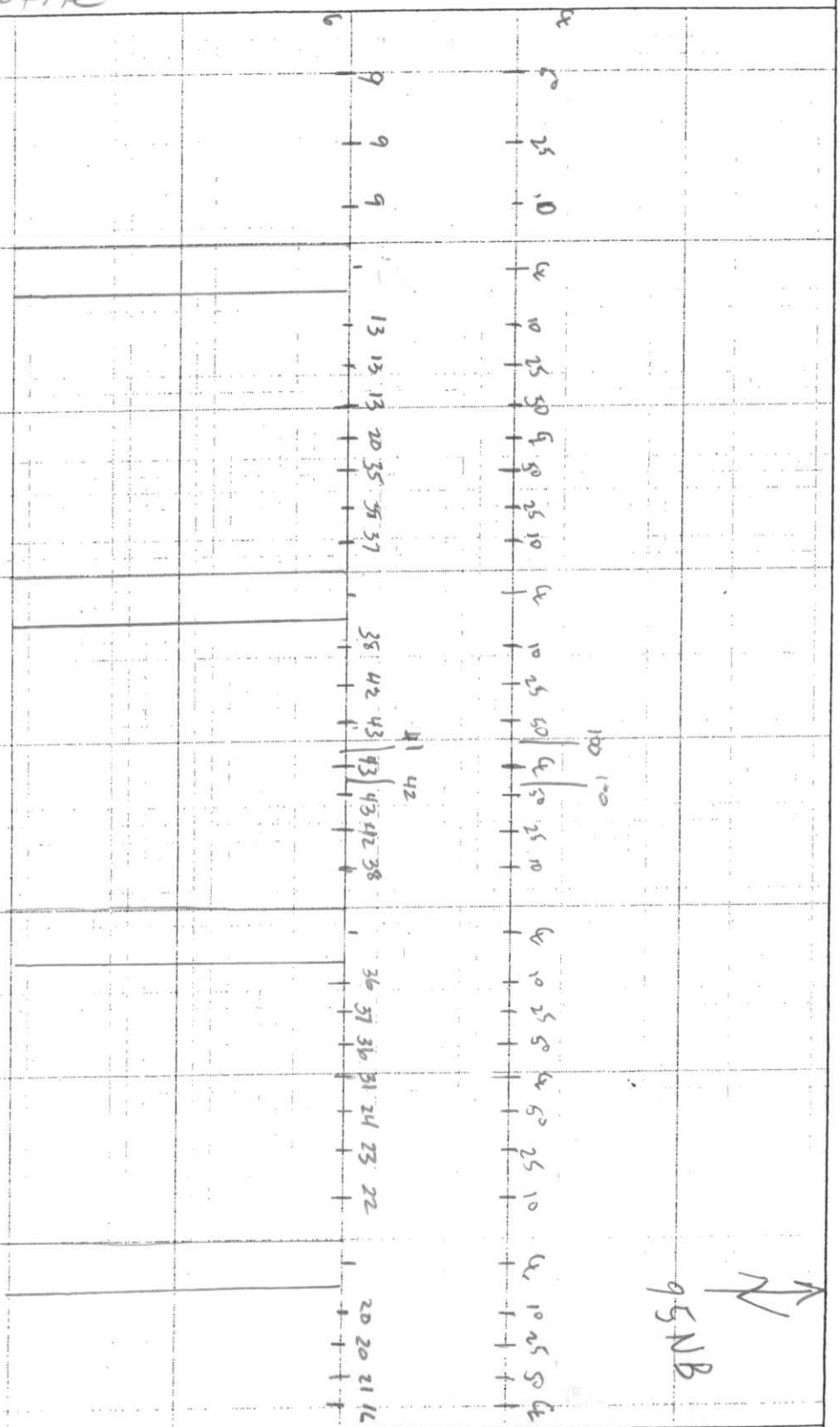
SUPPLEMENTAL SHEET

☑ FIELD ORIGINAL ☐ TRANSCRIBED BY: ____	BRIDGE NO. 03819	DATE: 10/8/09
	CREW: DSK, JSD, SRM	SHEET OF

DESCRIPTION: Upstream Profile


8
5 25 10
6
9 9 9
1
13 13 13 20 35 34 37
1
38 42 43 43 43 42 38
1
36 37 36 31 24 23 22
1
20 20 21 16
10 25 50 ℄ 50 25 10
10 25 50 ℄ 50 25 10
10 25 50 ℄ 50 25 10
10 25 50 ℄ 50 25 10
10 25 50 ℄
10 25 50 ℄
10 25 50 ℄

Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 03819 | Agency ID: 03819 | Sufficiency Rating: 86.0

IDENTIFICATION

State 1: 09 Connecticut | Struc Num 8: 03819
Facility Carried 7: INTERSTATE-95 NB | Location 9: 1.04 MI S OF N JCT US1 EB
Rte.(On/Under)5A: Route On Structure | Rte. Signing Prefix 5B: 1 Interstate Hwy
Level of Service 5C: 1 Mainline | Rte. Number 5D: 00095
Directional Suffix 5E: 1 North | % Responsibility : 0
SHD District 2: 02 | County Code 3: New London
Place Code 4: NEW LONDON | Mile Post 11: 93.590 mi
Feature Intersected 6: THAMES RV,RR,LOCAL ROADS
Latitude 16: 41d 21' 00" | Longitude 17: 072d 06' 06"
Border Bridge Code 98: Unknown (P)
Border Bridge Number 99: NA

INSPECTION

Frequency 91: 24 months | Inspection Date 90: 8/22/2001 | Next Inspection: 10/08/2011
FC Frequency 92A: 24 months | FC Inspection Date 93A: 10/8/2009 | Next FC Inspection: 10/8/2011
UW Frequency 92B: 24 months | UW Inspection Date 93B: 10/8/2009 | Next UW Inspection: 10/8/2011
SI Frequency 92C: 02 months | SI Date 93C: 6/9/1997 | Next SI: 8/9/1997
Element Frequency: 24 months | Element Inspection Date: 10/08/2009 | Next Elem. Insp. Due: 10/08/2011

CLASSIFICATION

Defense Highway 100: 1 STRAHNET hwy | Parallel Structure 101: Right of || bridge
Direction of Traffic 102: 1 1-way traffic | Temporary Structure 103: Unknown (NBI)
Highway System 104: 1 On the NHS | NBIS Length 112: Long Enough
Toll Facility 20: 3 On free road | Functional Class 26: 11 Urban Interstate
Historical Significance 37: 5 Not eligible for NRHP
Owner 22: 01 01
Custodian 21: 01 01

STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 16 | Number of Spans Main Unit 45: 11
Main Span Material/Design 43A/B:
4 Steel Continuous 09
Approach Span Material/Design 44A/B:
3 Steel 03
Deck Type 107: 4 Closed Grating
Wearing Surface 108A: 6 Bituminous
Membrane 108B: 2 Preformed Fabric
Deck Protection 108C: 9 Other

CONDITION

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

LOAD RATING AND POSTING

Inventory Rating Method 65: 1 LF Load Factor | Operating Rating Method 63: 1 LF Load Factor
Inventory Rating 66: HS15.9 | Operating Rating 64: HS26.6
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: 1943 | Year Reconstructed 106: 1975
Type of Service on 42A: 1 Highway
Type of Service under 42B: 8 Hwy-waterway-RR
Lanes on 28A: 5 | Lanes Under 28B: 12 | Detour Length 19: 1.2 mi
ADT 29: 59,800 | Truck ADT 109: 9 % | Year of ADT 30: 2007

APPRAISAL

Bridge Rail 36A: 0 Substandard | Approach Rail 36C: 1 Meets Standards
Transition 36B: 1 Meets Standards | Approach Rail Ends 36D: 1 Meets Standards
Str. Evaluation 67: ~~6~~ 4 | Deck Geometry 68: 6 Equal Min Criteria
Underclearance, Vertical and Horizontal 69: 3 Intolerable - Correct
Waterway Adequacy 71: 8 Equal Desirable | Approach Alignment 72: 8 Equal Desirable Crit
Scour Critical 113: 5 Stable w/in footing

GEOMETRIC DATA

Length Max Span 48: 540.0 ft | Structure Length 49: 5,931.1 ft
Curb/Sdwlk Wdth L 50A: 0.0 ft | Curb/Sidewalk Width R 50B: 0.0 ft
Width Curb to Curb 51: 80.1 ft | Width Out to Out 52: 83.8 ft
Approach Roadway Width 32: 80.1 ft (w/ shoulders) | Median 33: 0 No median
Deck Area: 506,615. sq. ft
Skew 34: 99.00 ° | Structure Flared 35: 1 Yes, flared
Minimum Vertical Clearance Over Bridge 53: 17.1 ft
Minimum Vertical Underclearance Reference 54A: H Hwy beneath struct
Minimum Vertical Underclearance 54B: 21.7 ft
Minimum Lateral Underclearance Reference R 55A: H Hwy beneath struct
Minimum Lateral Undrclearance R 55: 1.0 ft
Minimum Lateral Undrclearance 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 Improvment 76: 0.3 ft
Total Cost 96: $ 2,000 | Future ADT 114: 30,250
Year of Cost Estimate 97: 2000 | Year of Future ADT 115: 2021

NAVIGATION DATA

Navigation Control 38: 1 Permit Required
Vertical Clearance 39: 134.8 ft | Horizontal Clearance 40: 200.1 ft
Pier Protection 111: 1 Not Required | Lift Bridge Vertical Clearance 116: 0.0 ft

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	14/3	P Conc Deck/AC Ovly	(SF)	104,367	0 %	0	100 %	104,367	0 %	0	0 %	0	0 %	0
0	29/3	Steel Deck/Conc Grid	(SF)	397,823	0 %	0	100 %	397,823	0 %	0	0 %	0	0 %	0
0	107/3	Paint Stl Opn Girder	(LF)	4,902	96 %	4,702	0 %	0	4 %	200	0 %	0	0 %	0
0	113/3	Paint Stl Stringer	(LF)	79,065	99 %	78,274	1 %	791	0 %	0	0 %	0	0 %	0
0	131/3	Paint Stl Deck Truss	(LF)	7,490	97 %	7,290	3 %	200	0 %	0	0 %	0	0 %	0
0	152/3	Paint Stl Floor Beam	(LF)	18,074	98 %	17,713	2 %	361	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	161/3	Paint Stl Pin/Hanger	(EA)	4	100 %	4	0 %	0	0 %	0	0 %	0	0 %	0
0	202/3	Paint Stl Column	(EA)	8	100 %	8	0 %	0	0 %	0	0 %	0	0 %	0
0	205/3	R/Conc Column	(EA)	63	78 %	49	16 %	10	6 %	4	0 %	0	0 %	0
0	215/3	R/Conc Abutment	(LF)	223	93 %	207	7 %	16	0 %	0	0 %	0	0 %	0
0	234/3	R/Conc Cap	(LF)	1,375	94 %	1,286	1 %	7	6 %	82	0 %	0	0 %	0
0	300/3	Strip Seal Exp Joint	(LF)	663	62 %	413	35 %	230	3 %	20	0 %	0	0 %	0
0	303/3	Assembly Joint/Seal	(LF)	413	100 %	413	0 %	0	0 %	0	0 %	0	0 %	0
0	305/3	Asphaltic Plug Joint	(LF)	1,112	67 %	744	17 %	184	17 %	184	0 %	0	0 %	0
0	311/3	Moveable Bearing	(EA)	58	90 %	52	10 %	6	0 %	0	0 %	0	0 %	0
0	313/3	Fixed Bearing	(EA)	40	100 %	40	0 %	0	0 %	0	0 %	0	0 %	0
0	321/3	R/Conc Approach Slab	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
0	331/3	Conc Bridge Railing	(LF)	12,418	99 %	12,277	0 %	0	1 %	141	0 %	0	0 %	0
0	357/3	Pack Rust Smart Flag	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
0	359/3	Soffit Smart Flag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0
0	363/3	Section Loss SmFlag	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
0	370/3	deck drainage system	(LF)	3,999	50 %	1,998	40 %	1,601	10 %	400	0 %	0	0 %	0
0	371/3	Free Fall Pipes, Scu	(EA)	18	28 %	5	72 %	13	0 %	0	0 %	0	0 %	0