

Bridge Inspection Report (English Units)

Bridge Key: 00000000002000 Agency ID: 020001 Sufficiency Rating: 79.1

<p style="text-align: center;">IDENTIFICATION</p> <p>State 1: 44 Rhode Island Struc Num 8: 00000000002000 Facility Carried 7: I-195 EB Location 9: 1.0 Mi E of JCT I-95&195 Rte.(On/Under)5A: Route On Structure Rte. Signing Prefix 5B: 1 Interstate Hwy Level of Service 5C: 1 Mainline Rte. Number 5D: 00195 Directional Suffix 5E: 2 East % Responsibility : NA SHD District 2: District 3 County Code 3: Providence Place Code 4: East Providence Mile Post 11: 0.000 mi Feature intersected 6: SEEKONK RVR & STS Latitude 16: 41d 49' 08" Longitude 17: 071d 23' 13" Border Bridge Code 98: Not Applicable (P) Border Bridge Number 99: NA</p>	<p style="text-align: center;">INSPECTION</p> <p>Frequency 91: 24 months Inspection Date 90: 6/26/2013 Next Inspection: 06/26/2015 FC Frequency 92A: NA FC Inspection Date 93A: NA Next FC Inspection: NA UW Frequency 92B: 60 months UW Inspection Date 93B: 7/2/2009 Next UW Inspection: 7/2/2014 SI Frequency 92C: NA SI Date 93C: NA Next SI: NA Element Frequency: 24 months Element Inspection Date: 06/26/2013 Next Elem. Insp. Due: 06/26/2015</p>
<p style="text-align: center;">STRUCTURE TYPE AND MATERIALS</p> <p>Number of Approach Spans 46: 0 Number of Spans Main Unit 45: 14 Main Span Material/Design 43A/B: 4 Steel Continuous 02 Stringer/Girder Deck Type 107: 1 Concrete-Cast-in-Place Wearing Surface 108A: 1 Monolithic Concrete Membranes 108B: 0 None Deck Protection 108C: 1 Epoxy Coated Reinforc</p>	<p style="text-align: center;">CLASSIFICATION</p> <p>Defense Highway 100: 1 On Interstate STRAHNE Parallel Structure 101: Right of bridge Direction of Traffic 102: 1 1-way traffic Temporary Structure 103: Not Applicable (P) Highway System 104: 1 On the NHS NBIS Length 112: Long Enough Toll Facility 20: 3 On free road Functional Class 28: 11 Urban Interstate Historical Significance 37: 5 Not eligible for NRHP Owner 22: 01 01 State Highway Agency Custodian 21: 01 01 State Highway Agency</p>
<p style="text-align: center;">AGE AND SERVICE</p> <p>Year Built 27: 1930 Year Reconstructed 106: 2008 Type of Service under 42A: 1 Highway Type of Service under 42B: 6 Highway-waterway Lanes on 28A: 5 Lanes Under 28B: 6 Detour Length 19: 10.8 mi ADT 29: 72,100 Truck ADT 109: 10 % Year of ADT 30: 2008</p>	<p style="text-align: center;">CONDITION</p> <p>Deck 58: 8 Very Good Super 59: 8 Very Good Sub 60: 6 Satisfactory Culvert 62: N N/A (NB1) Channel/Channel Protection 61: 7 Minor Damage</p>
<p style="text-align: center;">GEOMETRIC DATA</p> <p>Length Max Span 48: 160.4 ft Structure Length 49: 1,670.8 ft Curb/Sdwk Width L 50A: 0.0 ft Curb/Sidewalk Width R 50B: 0.0 ft Width Curb to Curb 51: 68.0 ft Width Out to Out 52: 71.5 ft Approach Roadway Width 32: 68.0 ft Median 33: 0 No median (w/ shoulders) Deck Area: 119,461.5 sq. ft Skew 34: 0.00 ° Structure Flared 35: 1 Yes, flared Minimum Vertical Clearance Over Bridge 53: 17.0 ft Minimum Vertical Underclearance Reference 54A: H Hwy beneath struct Minimum Vertical Underclearance 54B: 20.8 ft Minimum Lateral Underclearance Reference R 55A: H Hwy beneath struct Minimum Lateral Underclearance R 55: 14.5 ft Minimum Lateral Underclearance L 56: 0.0 ft</p>	<p style="text-align: center;">LOAD RATING AND POSTING</p> <p>Inventory Rating Method 65: 3 LRFR Load & Res. Operating Rating Method 63: 3 LRFR Load & Res. F. Inventory Rating 66: HS16.7 Operating Rating 64: HS22.2 Design Load 31: 0 Unknown Posting 70: 5 At/Above Legal Loads Posting status 41: A Open, no restriction</p>
<p style="text-align: center;">APPRAISAL</p> <p>Bridge Rail 36A: 1 Meets Standards Approach Rail 36C: 1 Meets Standards Transition 36B: 1 Meets Standards Approach Rail Ends 36D: 1 Meets Standards Str. Evaluation 67: 6 Deck Geometry 68: 4 Tolerable Underclearance, Vertical and Horizontal 69: 9 Above Desirable Waterway Adequacy 71: 9 Above Desirable Approach Alignment 72: 6 Equal Min Criteria Scour Critical 113: 3 SC - Unstable</p>	<p style="text-align: center;">PROPOSED IMPROVEMENTS</p> <p>Bridge Cost 94: \$ 82,878,000 Type of Work 75: 35 Rehabilitate-gen. Roadway Cost 95: \$ 8,287,800 Length of Improvement 76: 1,863.8 ft Total Cost 96: \$ 124,317,000 Future ADT 114: 80,000 Year of Cost Estimate 97: 2007 Year of Future ADT 115: 2030</p>
<p style="text-align: center;">NAVIGATION DATA</p> <p>Navigation Control 38: 1 Permit Required Vertical Clearance 39: 41.0 ft Horizontal Clearance 40: 98.1 ft Pier Protection 111: 2 In-Place, Functioning Lift Bridge Vertical Clearance 116:</p>	

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	26/3	Conc Deck/Coatd Bars	(SF)	119,494	100 %	119,494	0 %	0	0 %	0	0 %	0	0 %	0
0	60/3	Scupper	(EA)	26	0 %	0	100 %	26	0 %	0	0 %	0	0 %	0
0	106/3	Unpnt Stl Opn Girder	(LF)	16,674	100 %	16,674	0 %	0	0 %	0	0 %	0	0 %	0
0	205/3	R/Conc Column	(EA)	39	100 %	39	0 %	0	0 %	0	0 %	0	0 %	0
0	210/3	R/Conc Pier Wall	(LF)	587	95 %	558	5 %	29	0 %	0	0 %	0	0 %	0
0	213/3	R/Conc Return Wall	(LF)	70	100 %	70	0 %	0	0 %	0	0 %	0	0 %	0

Bridge Inspection Report (English Units)

Str Unit	Elem/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	214/3	R/Conc Wingwall	(LF)	0	100 %	0	0 %	0	0 %	0	0 %	0	0 %	0
0	215/3	R/Conc Abutment	(LF)	171	95 %	162	5 %	5	0 %	0	0 %	0	0 %	0
0	218/3	Backwall, All Types	(LF)	171	99 %	169	1 %	2	0 %	0	0 %	0	0 %	0
0	234/3	R/Conc Cap	(LF)	920	100 %	920	0 %	0	0 %	0	0 %	0	0 %	0
0	300/3	Strip Seat Exp Joint	(LF)	68	100 %	68	0 %	0	0 %	0	0 %	0	0 %	0
0	301/3	Pourable Joint Seal	(LF)	161	100 %	161	0 %	0	0 %	0	0 %	0	0 %	0
0	303/3	Assembly Joint/Seal	(LF)	220	100 %	220	0 %	0	0 %	0	0 %	0	0 %	0
0	316/3	Isolation Bearing	(EA)	172	100 %	172	0 %	0	0 %	0	0 %	0	0 %	0
0	321/3	R/Conc Approach Slab	(EA)	2	100 %	2	0 %	0	0 %	0	0 %	0	0 %	0
0	335/3	Guardrail, Vehicular	(LF)	200	100 %	200	0 %	0	0 %	0	0 %	0	0 %	0
0	336/3	Conc Bridge Parapet	(LF)	3,318	100 %	3,318	0 %	0	0 %	0	0 %	0	0 %	0
0	359/3	Soffit Smart Flag	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
0	360/3	Settlement SmFlag	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
0	368/3	Graffiti Smart Flag	sq.ft	300	0 %	0	90 %	720	10 %	80	0 %	0	0 %	0
0	370/3	Steel Diaphragms	(EA)	805	100 %	804	0 %	1	0 %	0	0 %	0	0 %	0
0	374/3	Loose or Missing Bol	each	63	0 %	63	0 %	0	0 %	0	0 %	0	0 %	0

Str Unit	Elem/Env	Description	Element Notes
0	26/3	Concrete Deck -	The bare concrete deck surface exhibits small chips, isolated cracks and scrape marks throughout. There is light sand, debris and transverse hairline cracks throughout the length of the bridge in the right lane and shoulder. See photos 10 & 11. There is a ± 4" wide patch along the construction joint in the right lane for the full length of the bridge. Previously noted areas of scaling in span 12 right two lanes have been repaired with patches since the previous inspection. See photo 12. In span 14 the four mainline through lanes have light scale throughout and a 4" diameter possible core bore hole which has been patched with rubber material. See photo 13.
0	60/3	Scupper, all Types	The scupper grates are typically partially clogged with debris and vegetation growth. See photo 14. The south scuppers at piers 5, 6, 7 & 11 are 100% clogged. See photo 15. The scupper grates in the left lane are in the wheel line and make a loud banging noise heard below when traffic passes over. The PVC drain pipes are clear and in good condition.

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Element Notes
0	106/3	Unpainted Steel Open	<p>The superstructure consist of ten (10) continuous welded weathering steel plate girders with two additional partial length rolled sections attached to the south side of girder G10 in span 14. See photos 16, 17 & 18. The girder ends at the deck joints are painted (abutments and piers 4 and 9). There are steel drip plates welded to the top of the bottom flanges near the piers with no deficiencies.</p> <p>The girders have uniform normal surface rust, random areas of minor pigeon debris, isolated areas of light laminated rust and random areas of spotty orange rust on the top flanges throughout. See photos 19, 20 & 21. The bottom flanges of the fascia girders typically have light surface rust, areas of laminated rust with negligible loss and random areas of concrete debris. Girders G1, G2 and G3 have negative camber in span 11. See photo 22. Girder 10 in span 1 has a rolling defect on the south bottom flange 11' from pier 1, 5" long x 1/8" deep. There are bolted field splices in all spans except span 1. The following deficiencies were found at the bolted field splices:</p> <p>Span 7, girder G7, west bolted field splice bottom flange has three missing bolts and the east bolted field splice bottom flange has one bolt with one short thread. See photos 23 & 24.</p> <p>Span 8, girder G7, east bolted field splice bottom flange, north side, there is a 1/8" gap between the top plate and the bottom flange.</p> <p>Span 9, girder G1, bottom flange, north side, one bolt is smaller size than all other bolts. See photo 25.</p> <p>Span 14, girder G1, east bolted field splice on the web above the north bottom flange plate there is 62" long x 1 1/2" high laminated rust with negligible loss. See photo 26.</p>
0	205/3	Reinforced Conc Column	<p>There are 3 reinforced concrete columns at each of the 13 piers. See photo 27. The columns have random areas of concrete discoloration, graffiti and painted over graffiti. See photo 28.</p>

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Element Notes
0	210/3	Reinforced Conc Pier	<p>Typical all pier walls:</p> <p>Pier column 1 is supported on an independent 7' diameter drilled shaft. Columns 2 and 3 are supported on the original bridge pier wall/foundation. See photos 27 & 28. The original pier walls under columns 2 and 3 have a stone masonry veneer. There are scattered areas of missing mortar between the veneer stones and random vertical hairline cracks at the pier bases. See photo 29. There are areas of heavy graffiti typically at the piers in land areas. See attached "Element 210 Additional Pontis Notes.doc" file for more notes on the pier walls.</p>
0	213/3	Reinforced Conc Return	<p>Retaining walls only exist at the southwest and northeast corners of the bridge due to continuous abutments between bridge 020001, bridge 070001 and the remaining portion of the original bridge. The southwest retaining wall has light to moderate leakage and rust stains, painted over graffiti full length x 3' high and an 8' long diagonal hairline crack. See photo 40. The northeast retaining wall is an architectural concrete finish with vertical hairline cracks typically extending from weep holes in the retaining wall up to 10' high and light vegetation growth along the bottom of the retaining wall. See photo 41.</p>
0	214/3	Reinforced Conc	<p>Item previously miscoded. See item 213 "Reinforced Concrete Return Wall" above.</p>

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Element Notes
0	215/3	Reinforced Conc	<p>The west abutment #1 is continuous with bridge 070001 and the east abutment #2 is continuous with the remaining portion of the original bridge. Both abutments have scattered areas of light rust/leakage staining. The pedestals at both abutments typically have hollow/dull sounding corners up to 1' long x 2' wide with hairline cracks between the bottom of the pedestal and abutment seat.</p> <p>West Abutment #1: There are scattered vertical and diagonal hairline cracks, most have been ground out and sealed, two areas of light graffiti at the north and south end of the abutment. See photos 42 & 43. The lower portion of the abutment has anti-graffiti paint. There is a 20' long horizontal hairline crack with efflorescence and leakage stains under bays H & I. See photo 44. There are random areas of hairline map cracking along the top 10' of the stem. There is a cable left on the top of the seat from construction. The south corner along the top of the stem of the stem adjacent to the southwest retaining wall there is an 8' high x 1' wide hollow area with perimeter cracks with efflorescence.</p> <p>East Abutment #2: There are random cracks with efflorescence, some of which have been previously repaired. See photos 45 & 46. The north corner along the top of the stem adjacent to the northeast retaining wall has a 9' high x 1' wide hollow area with a perimeter crack and adjacent 3' high x 10" wide x up to 8" deep spall. See photo 47.</p>
0	218/3	Back Wall, All Types	<p>The abutment backwalls have minor leakage stains and random full height hairline cracks with and without efflorescence. See photo 48. There is a 2' wide x 7" high x up to 1' deep spall and full height hairline crack at the top of the north end of the east abutment. See photo 49.</p>

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Element Notes
0	234/3	Reinforced Conc Cap	The reinforced concrete caps have random full height hairline cracks with and without efflorescence, minor concrete discoloration, light honeycombing and minor debris on top at random locations. See photo 50. Pier 1 has a 6" wide x 3" high x 1/2" deep chip on the west side between columns 1 and 2. The east face of pier 13 has a 6" diameter x 3/4" deep spall. See photo 51. There are steel cables left from construction on top of pier caps 7 and 8, on pier 7 the cable is attached to bearing 7 anchor bolt. See photo 52. Isolated bearing pedestals have minor rust stains and light honeycombing. Isolated diagonal hairline cracks were found on piers 9, 12 and 13 and reverse crescent shaped hairline cracks were found on piers 6 and 8. See photo 53.
0	300/3	Strip Seal Expansion	The strip seal expansion joint over the west abutment exhibits light to moderate sand debris along the full length especially in the shoulders. See photos 54 & 55. The strip seal expansion joint over the east abutment exhibits light debris in the travel lanes and moderate debris over the shoulder. See photo 56. The seal is settled at random locations along the joints. There are galvanized steel parapet joint plates that have random scrapes.
0	301/3	Pourable Joint Seal	There are pourable seals at both approach slab joints (just sealant at the west approach and a sawed & sealed joint with a header at the east approach slab). See photos 54, 55 & 57. The joints were found to be in good condition. Previously noted debris was not found.
0	303/3	Assembly Joint/Seal	There are modular expansion joints at the deck joints over piers 4 and 9 and the east abutment #2. There are galvanized steel parapet joint plates at all joints with no notable deficiencies. Piers 4 and 9 deck joints have moderate to heavy sand accumulation in the joint at the right shoulder and right lane and light to moderate sand accumulation in the joints in the remaining lanes. See photos 58 & 59. Pier 4 joint has four areas of the seal squeezing up, up to 1" high in the right shoulder and random areas of the seal depressed up to 1". See photo 60.

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Element Notes
0	316/3	Isolation Bearing	There are isolation bearings at all of the piers and both abutments. The bearings have minor gaps up to 1/2", (typically 1/4"), under the masonry plates along the edges of random bearings. There are random missing anchor bolt washers throughout the bridge. The fascia girder bearings have light rust staining. There are random 1/16" gaps between the bottom flange and the sole plate. There are missing/loose anchor bolts/nuts throughout the bridge; see attached "Element 316 Additional Pontis Notes.doc" file for detailed description of these areas.
0	321/3	Reinforced Conc	The west approach slab is not visible and therefore its condition is based on the bituminous concrete pavement, the bituminous concrete overlay has cracks, sealed and unsealed, along the stage construction paving seam in the right lane. See photo 69. The grooved bare concrete pavement at the east approach has minor scrapes and gouges and longitudinal hairline cracks in the off ramp lane. See photo 70.
0	335/3	Guardrail, Vehicular	The west approach has temporary precast concrete barriers on the south side with no notable deficiencies. The east approach has an extension of the concrete bridge parapets with isolated hairline cracks with isolated efflorescence.
0	336/3	Reinforced Conc Bridge	The reinforced concrete parapets have isolated vertical hairline cracks, some extending across top of parapet, with isolated efflorescence and random scrapes throughout (primarily in span 3). See photos 71 & 72. The inside face of the south parapet has light graffiti in spans 7 and 10. The north parapet in span 7 near pier 7 has two gouges from impact 1' long x 2" high x 1" deep.

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Element Notes
0	359/3	Soffit of Concrete Deck	The underside of the reinforced concrete deck has stay-in-place (SIP) forms except in bay 7 and at the fascias. The stay-in-place forms have no notable deficiencies. The exposed concrete deck has less than 2% total deterioration with shrinkage cracks, isolated transverse hairline cracks with and without efflorescence and areas of moderate scaling up to 15" x 15". See photos 73 & 74. The longitudinal construction joint in bay 7 has random areas of minor leakage through the joint with light efflorescence staining throughout. See photo 75. There are 1½" diameter anchor bolt holes spaced ± 4' apart adjacent to the construction joint with some anchors still hanging from the deck.
0	360/3	Settlement	There is a full height to 1/16" wide crack on both sides between columns 2 and 3 with two previously installed settlement gauges missing on the east side and one broken (detached from pier at south side) and one painted over on west side. See photo 38. The previously measured west side settlement of counterclockwise rotation of the north half of the wall (1mm vertical x 20mm horizontal), could not be verified this inspection due to top gauge painted over and bottom gauge south side detached from pier. See photo 36. There is a full height 1/8" to 1/2" wide vertical crack (repaired with epoxy) on the east face between Bridge 020001 and the original bridge to the south which is missing a settlement gauge mentioned in the previous inspection report.
0	368/3	Graffiti Smart Flag	There is graffiti on the west abutment and moderate to heavy graffiti at piers 1-3, 7, 9 and 10-13. See photos 28, 31-39. Total substructure surface area covered in graffiti is approximately 800 sq. ft. There is also light graffiti along the inside face of the south parapet in spans 4, 7 and 10.

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Element Notes
0	370/3	Steel Diaphragms	<p>Interior diaphragms are welded steel angle cross frames. See photo 76. End diaphragms at piers and abutments at welded plate girders designed for jacking for bearing repair. Diaphragms in span 14 between girders B1 and B2 are rolled steel sections. All diaphragms have bolted girder connections. The weathering steel diaphragms have normal uniform rust throughout. The end diaphragms below the deck joints are painted. The end diaphragms at pier 4 have isolated minor leakage stains. Random nuts and bolts at the end diaphragms at pier 9 and west abutment are not painted. See photo 77.</p> <p>The end diaphragm connections at pier 9 span 10 between girders G7 and G8 have 30 bolts per connection that are not fully engaged, each bolt is approximately 1/2" unthreaded and most are loose. See photo 78. There is a 1/2" gap between stiffener and diaphragm at the north side and an 11/16" at the south side.</p>
0	374/3	Loose or Missing Bolts	

BRIDGE NOTES

Equipment Used: 40' Lift truck, 80' Manlift and Bucket boat.
 Traffic Control: Lane restrictions on Gano St, Water St, Waterfront Dr and shoulder closures on I-195 EB with local police and state police details.

Vertical Clearance: The minimum vertical clearance for Gano St. (span 1) and Water St. (span 14) is greater than 25'. The minimum vertical clearance for Waterfront Dr (span 14) is 20'-10". Minimum vertical clearance of 26'-1" is posted on G10 in span 1 over Gano Street and 27'-2" posted on G10 in span 14 over Water Street. See photo 79.

See attached "020001_Additional Bridge Notes.doc" file for detailed description of these areas.

Bridge Inspection Report (English Units)

PAST INSPECTION

Inspection Date: 06/26/2013

Type: 1 Regular NBI

Inspector: PONTIS

Pontis User Key: PONTIS - -1 -1

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

Routine Inspection by AI Engineers, Inc. Started on 6/26/2013
Crew: AT, LP, AP
Weather: Varied cloudy to rainy and 71°F to 85°F.

The bridge is logged from west to east with girder 1 on the north fascia. Span 14 has two additional partial length girders at the south fascia lettered B-1 & B-2 from north to south. Based on the results of this inspection the bridge overall rating has decreased from good (rated 7) to satisfactory condition (rated 6). The condition ratings for the deck (item 58, rated 8), superstructure (item 59, rated 7), and channel (item 61, rated 7) remain unchanged. The condition rating for the substructure (item 60) has decreased from good (rated 7) to satisfactory (rated 6) due to the piers.

Structure Notes Continued:

Sign Structure: There is a full span overhead sign structure mounted to the top of the concrete parapets over pier 13 with no notable deficiencies.

Channel: The Seekonk River is tidal and flows under spans 4-10. See Underwater Inspection Report.

Bridge Inspection Report (English Units)

PAST INSPECTION

Inspection Date: 08/03/2011 Type: 1 Regular NBI
Inspector: SWATROUS Pontis User Key: SYS --1 -1

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

Routine Inspection by Michael Baker Engineering, Inc. on 7/18/11-7/20/11, 7/27/11-7/29/11, 8/1/11 & 8/3/11.

Crew: SW, YS, BH, BS

Weather: Varied cloudy to sunny and 70°F to 90°F.

The bridge is logged from west to east with girder 1 on the north fascia. Span 14 has two additional partial length girders at the south fascia lettered B-1 & B-2 from north to south. Based on the results of this inspection the bridge overall is in good condition (rated 7) and the condition ratings for the deck (item 58, rated 8), superstructure (item 59, rated 7), substructure (item 60, rated 7) and channel (item 61, rated 7) remain unchanged.

Structure Notes Continued:

Sign Structure: There is a full span overhead sign structure mounted to the top of the concrete parapets over pier 13 with no notable deficiencies (photo 76).

Channel: The Seekonk River is tidal and flows under spans 4-10. See Underwater Inspection Report (photos 77 & 78).

Span 7 Fender System and Navigation Lights: There is a timber fender system composed of piles and walers which extend along the east side of pier 6 and the west side of pier 7 (photos 79 & 80). The fender system continues through the original bridge to the south and through bridge 070001 to the north. The piles and walers have light to moderate marine growth in the tidal zone with minor checks, splits and cracks. The top waler has random chips up to 1' long x 3" high x 1" deep. There is a 3½' long split in the 2nd whaler from the top below girder 1 (photo 81). The dolphins have moderate to heavy algae/marine growth and a few have moderate splits in the tidal zone (photo 82). Both fender system walkways have six 'red' navigation lights each, with a utility conduit and junction box, all attached to the top surface (photo 80). There is a 'green' navigation light at the south fascia girder of the original portion of the bridge and the north fascia girder of bridge 070001 (photo 79). All navigation lights were off at the time of inspection.

Bridge Inspection Report (English Units)

Bridge Inspection Report (English Units)

PAST INSPECTION

Inspection Date: 08/07/2009

Type: 1 Regular NBI

Inspector: PONTIS

Pontis User Key: PONTIS - -1 -1

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

Dates: 07/01/09, 07/02/09, 07/20/09 - 07/22/09 & 08/07/09.

Inspected by TranSystems

Crew Chief: Russell Bruno

Team Members: Efrain Grajeda, Bernie Sulikowski, Kevin Isu, Christian Diaz, Christian Gomez

Weather Conditions: Varied from Showers, 65°F to Clear, 90°F

Equipment Used: 30' Lift Truck, 40' Manlift and Spudbarge with 66' Manlift

Traffic Control: Lane restrictions on Gano Street and Water Street. Shoulder closure on I-195 Eastbound with TMA and police assistance.

NBI Rating: The overall structure condition rating is 7 - Good. The ratings for the Deck (Item 58), Superstructure (Item 59), Substructure (Item 60) and Channel (Item 61) were found to be 8 - Very Good, 8 - Very Good, 7 - Good and 7 - Minor Damage respectively.

Deflection and Vibration: There was no vibration or deflection noted.

Vertical Clearance: The minimum measured vertical underclearance for span 1 (over Gano Street) and span 14 (over Water Street) is greater than 25'. Posted 26'-1" on G-10, span 1 and 27'-2" on G-10 span 14.

Utilities: (3) underside luminaires with (3) junction boxes & rigid metal conduit mounted on the east side of Pier 6 cap & west side of Pier 7 cap in the navigation channel; the rigid metal conduit also runs along the east side of column 3 (Pier 6) along the west side of column 3 (Pier 7). The lights were off at the time of the inspection; no notable deficiencies (Photo 30).

(3) underside luminaires in span 14 at Water Street also there is a rigid metal conduit with junction box attached to deck underside in bay 7 (Photo 23) with no visible deficiencies.

(19) aluminum light poles mounted to the top of the parapets along both sides of the bridge (Photos 5 & 11). (1) Light pole has a broken anchor bolt cover, at the south parapet over Pier 9 (Photo 62). The lights were off during daytime inspection.

Curbs: Sloped face reinforced concrete curbs along both sides of the bridge show isolated vertical hairline cracks (Photo 61).

Bridge Inspection Report (English Units)

Sidewalks: N/A

PAST INSPECTION

Inspection Date: 07/07/2009

Type: D UW-Contract SCUBA

Inspector: PONTIS

Pontis User Key: PONTIS - -1 -1

Scope:

NBI:

Other:

Element:

Underwater:

Fracture Critical:

INSPECTION NOTES

See Sub-Aqueous Report 2009

Bridge Inspection Report (English Units)

PAST INSPECTION

Inspection Date: 02/16/2007

Type: 5 Other

Inspector: LPERKINS

Pontis User Key: APECKHAM - ANI

Scope:

NBI:

Other:

Element:

Underwater:

Fracture Critical:

INSPECTION NOTES

< none >

Bridge Inspection Report (English Units)

PAST INSPECTION

Inspection Date: 10/07/2002 Type: 1 Regular NBI

Inspector: TOM Pontis User Key: 3

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

TOM inspection comments -
Structure 000000000002000 -
Date 10/07/2002 -
Previous comments > TARASANKO inspection comments -
Structure 000000000002000 -
Date 8/31/99 -
Previous comments > CRISCIONE inspection comments -
Structure 000000000002000 -
Date 5/11/98 -
Previous comments > (none)

Bridge Inspection Report (English Units)

PAST INSPECTION

Inspection Date: 08/31/1999 Type: 1 Regular NBI

Inspector: TARASANKO Pontis User Key: 5

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

TARASANKO inspection comments -
Structure 000000000002000 -
Date 8/31/99 -
Previous comments > CRISCIONE inspection comments -
Structure 000000000002000 -
Date 5/11/98 -
Previous comments > (none)

PAST INSPECTION

Inspection Date: 05/11/1998 Type: 1 Regular NBI

Inspector: CRISCIONE Pontis User Key: CRISCIONE - DA\

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

CRISCIONE inspection comments -
Structure 000000000002000 -
Date 5/11/98 -
Previous comments > (none)

Bridge Inspection Report (English Units)

PAST INSPECTION

Inspection Date: 04/26/1997 Type: 1 Regular NBI

Inspector: TOM Pontis User Key: 3

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

TOM inspection comments -
Structure 000000000002000 -
Date 4/26/97 -
Previous comments > CRISCIONE inspection comments -
Structure 000000000002000 -
Date 5/11/98 -
Previous comments > (none)

INSPECTOR WORK CANDIDATES