

**STRUCTURAL DATA RECORD****Sufficiency Rating: 83.0****IDENTIFICATION**

Bridge ID: 1748N059	(2) District: 01	(3) County: 3
Inventory Route:	(B) Highway Type: 1	(4) Place Code: 77580
(A) On/Under: 1	(E) Direction: 0	(C) Service Lvl: 1
(D) Route No: 00095		6B) Critical: *
6A) Features Intersected: SR 4		11) Km. Point: 4.220 mi
(7) Facility Carried: I 95 NB		
(9) Location: SOUTH WILMINGTON VIADUCT		
16) Latitude: 39^44'26.24"	17) Longitude: 75^33'44.14"	
98) Border Bridge Code: NA	99) Border Br. Str. No.: NA	

**STRUCTURE TYPE AND MATERIAL**

43A) MAIN SPAN MATERIAL: 3	43B) DESIGN TYPE: 02
44A) APPR. SPAN MATERIAL: NA	44B) DESIGN TYPE: NA
45) Main Spans: 34	46) Approach Spans: 0
107) Deck Type: 1	108B) Membrane: 0
108A) Wearing Surface: 3	108C) Deck Protection: 0
Pier 1: 33	Pier 2: NA
Abut 1: 2	Abut 2: NA
Pier Ftg. 1: NA	Pier Ftg. 2: NA
Abut Ftg. 1: NA	Abut Ftg. 2: NA

**NAVIGATION DATA**

38) Navigational Control: N	39) Vertical Clearance: 0.0 ft	40) Horizontal Clearance: 0.0 ft
111) Pier Protection: !	116) Lift Br. Vert. Clr: 0.0 ft	

**AGE AND SERVICE**

19) Detour Length: 5 mi	27) Year Built: 1964	B) Under Bridge: 18
28) No. of Lanes:	A) On Bridge: 2	B) Under Bridge: 1
29) ADT: 45884	30) Year of ADT: 2011	
42) Type of Service:	A) On Bridge: 6	
106) Year Reconst.: 1980	109) % Truck ADT: 11	

**CLASSIFICATION**

12) Base Hwy. Network: 1	13A) LRS Inv. Rte: 0000000059	13B) LRS Subroute No.: 00
20) Toll Facility: 3	21) Maintenance: 1	22) Owner: 1
26) Functional Class: 11	37) Historical: 5	100) Defense Highway: 1
101) Parallel Str.: R	102) Direction: 1	103) Temp. Str.: 1
104) NHS: 1	105) Fed. Lands Highway: 0	110) Nat. Truck Network: 1
112) NBIS Length: Y		

**LOAD RATING AND POSTING**

31) Design Load: 6	41) Oper. Status: A	Rating Date: 1/1/1901
63) Oper. Rating Method: 1	64) Operating Rating: 75.9	70) Bridge Posting: 5
65) Inv. Rating Method: 1	66) Inv. Rating: 45.0	Rating Analysis Req'd: NA
Reason of Posting: NA	Date of Resolution: NA	T330: 0
S335: 0	S437: 0	
T435: 0	T540: 0	

**PROPOSED IMPROVEMENTS**

75) Type of Work: NA	76) Length of Imp.: NA
94) Bridge Cost: NA	95) Roadway Cost: NA
96) Total Cost: NA	97) Year of Cost Est.: NA
114) Future ADT: 48965	115) Year of Future ADT: 2031

**CONTRACT INFORMATION**

Contract 1: 6403004	Contract 2: 6908003	Contract 3: 7210006
Contract 4: 7809101	Contract 5: 7603020	Contract 6: -1

**INSPECTION RECORD**

90) Inspection Date: 3/28/2013  
 92A) FC Frequency: 24 months  
 92B) UW Frequency: NA  
 92C) SI Frequency: NA  
 Element Frequency: 24 months  
 UBIV Required: N  
 Boat: N

91) Frequency: 24 months  
 93A) FC Insp. Date: 3/28/2013  
 93B) UW Insp. Date: NA  
 93C) SI Date: NA  
 Elem. Insp. Date: 3/28/2013  
 UBIV Days: 20  
 Tidal: N

Next Inspection: 3/28/2015  
 Next FC Insp.: 3/28/2015  
 Next UW Insp.: NA  
 Next SI: NA  
 Next Elem Insp.: 3/28/2015  
 Inspection Zone: 99  
 GPS: N

**CONDITION**

58) Deck: 6  
 61) Channel: N  
 62) Culvert: N

59) Superstructure: 6  
 Paint Condition: 4  
 Paint Priority: 94.16

60) Substructure: 6

**APPRAISAL**

36) Traffic Sfty Feat.:  
 A) Bridge Rail: 0  
 D) Approach Rail Ends: N  
 67) Structure Evaluation: 6  
 71) Waterway Adequacy: N  
 113) Scour Critical Evaluation: N

B) Transition: 0  
 68) Deck Geometry: 6  
 72) Approach Rdwy Alignment: 8

C) Approach Rail: 1  
 69) Underclearance: 5  
 Scour Analysis Date: NA

**GEOMETRIC DATA**

32) Appr. Rdwy Width (w/ Shldrs): 38.00 ft  
 34) Skew: 99^ 0' 0"  
 48) Length Maximum Span: 149.00 ft  
 50) Curb or Sidewalk:  
 51) Width Curb to Curb: 38.00 ft  
 53) Minimum Vertical Clearance Over Bridge Roadway: 17.25 ft  
 54) Vertical Underclearance:  
 55) Lateral Underclearance:  
 56) Lateral Underclearance - Minimum Left: 4.00 ft

35) Structure Flared: 1  
 49) Structure Length: 2,346.00 ft  
 A) Left: 0.00 ft  
 52) Deck Width o/o: 42.20 ft

33) Median: 1  
 B) Right: 0.00 ft  
 B) Minimum: 15.32 ft  
 B) Minimum: 6.92 ft

**PAST INSPECTION**

Inspection Date: 3/28/2013 Type: 1

Inspector: PENNONI

**INSPECTION NOTES**

Inspected by Pennoni: S. Noble (TL) (I) (P) (U) /  
 C. Malkin (I) (P) (U) (R) / J. Quigley (I) (P) (U) /  
 N. Buttorff (I) (P) (U) / B. Marshall (I) (P) (U) /  
 L. Anderson (I) (P) / T. Potts (I) (P)  
 Maintenance Requests: Repair/replace hand  
 hole/junction box covers in parapet and light  
 poles. Seal cracks & repair spalls in  
 parapets. Flush scuppers/downspouts. Repair  
 broken/damaged soundwall panels. Drill weep  
 holes into the concrete box out for sign  
 structure at Span 43. Repair delaminations in  
 soffit over DART parking & patch soffit  
 spalls. Inspection Notes: Span 37: Light pole  
 on East Parapet is missing hand hole cover and  
 has 10" H x 7" W x 1" D spall at southwest  
 corner of pedestal. Span 41: Light pole on  
 East Parapet is missing fastener for the  
 handhole cover and 9" L x 7" H x 1 1/2" D  
 spall at northwest corner of pedestal. Span  
 43: Cantilever sign structure with minor  
 surface corrosion to the anchor bolt nuts.  
 Note: The concrete parapet box for sign  
 structure is retaining water 3 1/2-inches deep  
 and has corroding bolts (see Photo 29).  
 Missing cover plate for junction box with  
 exposed wires attached to Beam 4 at 2/3 span.  
 Span 44: Light pole on East Parapet has 8" L x  
 6" H delamination on the northwest corner with  
 up to 1/8" wide cracks on the north and west  
 sides. Span 51: Light pole pedestal exhibits a  
 7" H x 6" W x 3" D spall at the southwest  
 corner and is missing a hand hole cover. Span  
 54: Light pole attached to fascia of East  
 Parapet is missing a hand hole cover. Span 60:  
 Sign structure base with freckled and minor

surface corrosion at the bottom edge of the bottom flange. Elements 210 and 304 were removed from the Pontis data (no pier wall or open joint present on the structure). Under Record was added for Interstate 95 Southbound on-ramp that crosses under Spans 43 and 44 based on field observations (see clearance diagram).

#### BRIDGE NOTES

NBI DONE BY: JASON BAUER & DMJM NOTE: SCALE FACTORS ENTERED BY GRD ON 11/14/07, DO NOT CHANGE OR ERASE....

**PONTIS DATA**

Elements	ID	ENV	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	Comments
Concrete Deck - Protected w/ Rigid Overlay	22	4	(SF)	99006	0	99006	0	0	0	For Notes See MSPE Report
Drains/Downspouts/Scuppers	65	4	(EA)	27	22	0	5	0	0	For Notes See MSPE Report
Painted Steel Open Girder/Beam	107	3	(LF)	16784	13239	3273	272	0	0	For Notes See MSPE Report
Reinforced Concrete Column or Pile	205	3	(LF)	1504	1433	29	42	0	0	For Notes See MSPE Report
Reinforced Concrete Abutment	215	2	(LF)	75	59	16	0	0	0	For Notes See MSPE Report
Painted Steel Pier Cap	231	3	(LF)	43	19	11	13	0	0	For Notes See MSPE Report
Reinforced Concrete Pier Cap	234	3	(LF)	1469	1279	70	120	0	0	For Notes See MSPE Report
Strip Seal Expansion Joint	300	4	(LF)	1590	0	1590	0	0	0	For Notes See MSPE Report
Moveable Bearing (roller, sliding, etc.)	311	4	(EA)	232	186	29	17	0	0	For Notes See MSPE Report
Fixed Bearing	313	4	(EA)	232	229	3	0	0	0	For Notes See MSPE Report
Reinforced Conc Approach Slab w/ or w/o AC Ovly	321	4	(EA)	1	0	1	0	0	0	For Notes See MSPE Report
Bridge Railing - Reinforced Concrete	331	4	(LF)	4954	2310	1432	1001	211	0	For Notes See MSPE Report
Bridge Railing - Metal Coated	334	4	(LF)	1044	410	200	232	202	0	For Notes See MSPE Report
Steel Fatigue	356	1	(EA)	1	1	0	0	0	0	For Notes See MSPE Report
Deck Cracking	358	1	(EA)	1	1	0	0	0	0	For Notes See MSPE Report
Soffit (or Under Surface) of Concrete Deck or Slab	359	1	(EA)	1	0	0	1	0	0	For Notes See MSPE Report
Section Loss	363	1	(EA)	1	1	0	0	0	0	For Notes See MSPE Report
Painted Steel Diaphragm	381	3	(EA)	863	195	644	24	0	0	For Notes See MSPE Report
Reinforced Concrete Wingwalls	390	2	(LF)	24	24	0	0	0	0	For Notes See MSPE Report

**Total Elements:** 19

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 1

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 27N (Pier 26N to  
Pier 27N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	99006	0	99006	0	0	0	CS2: (99006 SF) Typical wear with exposed aggregate. Span 32: Area of fire damage in East shoulder (30 SF) (see Photo 19). Span 40: Area of fire damage up to 1-inch deep (20 SF).
65	4	Drainage	(EA)	1	0	0	1	0	0	CS3: (1 EA) Scupper clogged (see Photo 22), downspout with section intentionally removed at bottom.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed and debonded areas with active leakage in Bay 3.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	436	295	134	7	0	0	CS2: (134 LF) Localized areas of minor spot corrosion on bottom flanges or top flange edges. CS3: (7 LF) Beam 1 end at Pier 27N and random areas with exposed steel to the flanges at the corroded drain holes in the deck. The west edge of the top flange at Beam 1 exhibits painted pitting with flaking paint and active corrosion. The east bottom flange of Beam 1 exhibits flaking paint with exposed and corroded steel. CS4: (0 LF) The previously noted corrosion and section loss in Beam 1 at Pier 26N was not observed during the 2013 inspection.
331	4	Conc Bridge Railing	(LF)	145	142	2	1	0	0	CS2: (2 LF) The north end of the East Parapet exhibits a few horizontal 1/16-inch wide cracks. CS3: (1 LF) The top of the East Parapet at mid-span exhibits a 1-foot long hairline longitudinal crack with corrosion stains.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	7	13	0	0	0	CS2: (13 EA) Diaphragms with minor spot corrosion.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 27N exhibit flaked paint on bronze plates with minor spot corrosion.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 26N are heavily greased with NDO.
205	3	R/Conc Column	(LF)	75	75	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	42	0	0	0	0	NDO
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	1	1	0	0	0	0	CS1: (1 EA) Span 31: The previously noted 1/4-inch long cracks in the weld at the south end of the Beam 5 bottom flange cover plate were observed to be cracking in the paint during the 2013 inspection.
358	1	Deck Cracking SmFlag	(EA)	1	1	0	0	0	0	CS1: (1 EA) Deck soffit with hairline up to 1/16-inch wide transverse cracks. Random spans with hairline map and diagonal cracking.
										CS3: (1 EA) Corrosion stains from chairs and up to 1/16-inch wide transverse and diagonal cracks (some with efflorescence or moisture). Span 29: The south end of Bay 1 exhibits several diagonal cracks with corrosion and adjacent delamination (6' W x 18" L). Span 30: Delamination in West Overhang over Pier 30N. Span 31: 16" W x 1' L x 1" D spall with exposed corroded steel reinforcement in Bay 4 at mid-span. Bay 5 exhibits diagonal cracks with efflorescence and delaminations at both ends (1 SF each). Span 32: 16" diameter x 1"

359	1	Soffit Smart Flag	(EA)	1	0	0	1	0	0	D spall with exposed corroded steel reinforcement in Bay 5 at the south end. West Overhang with delaminations at the north (1 SF) and south (2 SF) ends. Span 37: Several areas of honeycombing in the deck underside and along beam haunches. Span 39: 3' L x 3' W area of honeycombing in Bay 5 at the north end. Honeycombing along the east haunch for Beams 3 and 4, 18" L x 9" W x 1 1/4" D spall with exposed corroded steel reinforcement in Bay 5 at the south end adjacent to the fascia beam haunch and honeycombing in Bay 2 at Beam 2 (3 SF). Span 40: Honeycombing in Bays 2 and 3. Span 41: 15" L x 6" W x 1" D spall with exposed corroded steel reinforcement in Bay 5 at the south end and 16" L x 6" W delamination. Span 42: 26" W x 22" L x 2" D spall with exposed corroded steel reinforcement in Bay 5 at the north end (see Photo 20). Span 47: 12" W x 3" L delamination in the West Overhang at Pier 46N and 2' L x 1' W delamination at the north end of Bay 5. Span 54: Bay 3 haunch at the joint exhibits a 7' L x full-width x 4" D spall with exposed corroded steel reinforcement (see Photo 21). Span 55: 17" W x 8" L x 1" D spall with exposed corroded steel reinforcement in Bay 1 at the northwest end. Bay 7 with area of honeycombing. Span 57: Spalls up to 7" W x 3" L x 1/2" D in the West Overhang at the Pier 56N joint. Span 60: 8" W x 3" L x 1/2" D spall in the East Overhang at south; 2' L x 2' W delamination with 12" L x 4" W x 1" D spall in Bay 8.
363	1	Section Loss SmFlag	(EA)	1	1	0	0	0	0	CS1: (1 EA) There is typical random areas of up to 1/4-inch deep painted over section loss/pitting found to the top of the bottom flanges and base of the webs along the length of the fascias, and the top flanges, webs and bottom flanges of the beam ends (see Photo 32). There are areas of previously arrested section loss exhibiting minor active corrosion and minor advancing of section loss.

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 2

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 28N (Pier 27N to  
Pier 28N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	0	0	1	0	0	CS3: (1 EA) Scupper clogged with vegetation growth. Downspout clogged at top elbow. Bottom section intentionally disconnected.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed and debonded areas with active leakage in Bay 1.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	443	309	130	4	0	0	CS2: (130 LF) Localized areas of spot and freckled corrosion on bottom flanges. Minor staining on the top flange edge of Beam 1 at Pier 28N with area of peeling paint and exposed primer on the stiffener. CS3: (4 LF) Beams 1 and 6 at both ends with exposed and corroded steel to the flanges.
331	4	Conc Bridge Railing	(LF)	148	60	61	27	0	0	CS2: (61 LF) 1/8-inch wide horizontal crack to face of both parapets. Exterior face of East Parapet with 40' L x 1/16" W longitudinal crack. CS3: (27 LF) East parapet at the south end exhibits 1' H x 1/16" W vertical cracks with corrosion stains. The exterior face of the East Parapet at the north end exhibits a hairline vertical crack with corrosion stains at the Pier 27N joint. The West Parapet exhibits a 18" L x 10" H x 2" D spall with exposed steel reinforcement at the Pier 28N joint. The West Parapet exhibits a horizontal crack with minor corrosion stains.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	5	15	0	0	0	CS2: (15 EA) Intermediate diaphragms with minor spot corrosion.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 28N with minor spot corrosion on the plate edges (more prominent at Bearing 1).
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 27N are heavily greased with NDO.
205	3	R/Conc Column	(LF)	64	64	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	41	0	1	0	0	CS3: (1 LF) South face below Bay 3 at bottom edge with hairline horizontal crack with corrosion stains.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 3

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 29N (Pier 28N to  
Pier 29N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	0	0	1	0	0	CS3: (1 EA) Scupper clogged with vegetation growth.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed (up to 1-inch) and debonded areas with active leakage in Bays 1 through 4. There are minor tears in the joint at the travel lanes.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	441	307	130	4	0	0	CS2: (130 LF) Random localized areas of spot or freckled corrosion on the bottom flanges. Top flanges with minor staining on the edges. CS3: (4 LF) Beams 1 and 6 at Pier 28N and Beam 6 at Pier 29N with exposed and corroded steel to the flanges and stiffeners.
331	4	Conc Bridge Railing	(LF)	147	82	23	42	0	0	CS2: (23 LF) East Parapet at the south end exhibits vertical crack with efflorescence. The West Parapet at both ends exhibits spalls up to 10" H x 5" W x 1 1/2" D at the base. Inside faces typically exhibit 1/16" to 1/8" horizontal cracks. CS3: (42 LF) 1/16" to 1/8" wide cracks, some with corrosion stains at the northeast end and a 1/8" wide horizontal crack on the exterior face of the East Parapet. The exterior faces of the East Parapet at the joints exhibits hairline vertical cracks with corrosion stains.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	0	20	0	0	0	CS2: (20 EA) Diaphragms with spot and freckled corrosion. Bay 1 end diaphragm at Pier 28N with kinked flange (no distress).
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 28N are heavily greased with NDO.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 29N are heavily greased with NDO.
205	3	R/Conc Column	(LF)	59	57	0	2	0	0	CS3: (2 LF) The south face of Column 2 at mid-height exhibits a 13 1/2" W x 14 1/2" H x 5 1/2" L x 1 1/2" D corner spall with exposed corroded steel reinforcement.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	37	2	3	0	0	CS2: (2 LF) South face at the west end exhibits a 1/16" to 1/8" painted over diagonal crack. CS3: (3 LF) 30" L x 8" H x 2" D spall with exposed corroded steel reinforcement debonded with minor section loss on the west face of Pedestal 6 (see Photo 34).
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0



# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 4

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 30N (Pier 29N to  
Pier 30N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed and debonded areas with evidence of leakage and ponding water on the pier cap below.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	439	338	98	3	0	0	CS2: (98 LF) Areas of random minor spot or freckled corrosion along the flanges. CS3: (3 LF) Ends of Beams 1 and 6 at Pier 30N with exposed and corroded steel to the flanges.
331	4	Conc Bridge Railing	(LF)	146	112	23	11	0	0	CS2: (23 LF) 1/16" cracks on interior face of East Parapet, north end and a section of the West Parapet. CS3: (11 LF) 1/8" wide crack with corrosion stains to exterior face of East Parapet. East Parapet at both ends with horizontal and vertical cracks (1/8" width) with corrosion stains.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	9	11	0	0	0	CS2: (11 EA) Intermediate diaphragms with spot or freckled corrosion.
311	4	Moveable Bearing	(EA)	6	5	1	0	0	0	CS1: (5 EA) Sliding plate bearings at Pier 30N with minor corrosion mostly on the plate edges and minor chipped paint. CS2: (1 EA) Moderate blistering corrosion and 1/8-inch wide rust laminations on the masonry plate of Bearing 6.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 29N are heavily greased with NDO.
205	3	R/Conc Column	(LF)	55	55	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	35	7	0	0	0	CS2: (7 LF) North and south faces below Bay 4 with full-height x up to 1/16" W diagonal cracks.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 5

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 31N (Pier 30N to  
Pier 31N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulders, depressed and debonded areas with evidence of leakage and ponding water on the pier cap below.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	438	309	116	13	0	0	CS2: (116 LF) Freckled or spot corrosion at random locations on the flanges. CS3: (13 LF) Ends of Beams 1 and 6 with corrosion to the edges of the flanges and Beam 5 at the south end with a few scrapes with exposed and corroded steel.
331	4	Conc Bridge Railing	(LF)	146	127	17	2	0	0	CS2: (17 LF) The exterior face of the East Parapet exhibits 1/16" to 1/8" longitudinal cracks (15 LF). The interior face of the East Parapet at 1/3-span exhibits a 1' H x 4" W x 1/2" D spall. 3' H x 6" W x full-depth (18" D) spall at the north end of the East Parapet. CS3: (2 LF) The West Parapet at the north end exhibits hairline map cracks with corrosion stains.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	2	17	1	0	0	CS2: (17 EA) Diaphragms with minor freckled corrosion. CS3: (1 EA) The Bay 1 south end diaphragm exhibits exposed steel (no active corrosion) on the bottom flange.
311	4	Moveable Bearing	(EA)	6	3	3	0	0	0	CS1: (3 EA) Sliding plate bearings at Pier 30N exhibit minor spot corrosion to the plate edges (some flaking paint on Bearings 1 through 5). CS2: (3 EA) Bearing 6 with moderate blistering corrosion with 1/4-inch rust laminations on the masonry plate. Bearings 2 and 3 have bent anchor bolts.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 31N are heavily greased with NDO.
205	3	R/Conc Column	(LF)	47	45	2	0	0	0	CS2: (2 LF) Column 1, northeast corner at 3/4-height exhibits an 18" H x 1/16" W vertical crack in the north and east faces with a 6" H x 2" W delamination in the east face.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	38	2	2	0	0	CS2: (2 LF) South face at West Overhang with 1/16" wide diagonal cracks. CS3: (2 LF) The south face of Pedestal 3 exhibits hairline horizontal cracks with corrosion stains. The west face of Pedestal 2 exhibits an 8" L x 6" H x 1/2" D spall with exposed corroded steel reinforcement.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 6

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 32N (Pier 31N to  
Pier 32N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulders, depressed (up to 1-inch) and debonded areas with evidence of leakage and ponding water on the pier cap below.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	438	289	144	5	0	0	Note: The beams have bolsters at the bearings. CS2: (144 LF) Minor freckled corrosion on the bottom flanges, cover plates and along the top flanges. CS3: (5 LF) Ends of Beams 1 and 6 with exposed and corroded steel along the top flanges.
331	4	Conc Bridge Railing	(LF)	146	88	0	58	0	0	CS3: (58 LF) 1/8" wide horizontal crack with adjacent delamination at the top edge on the exterior face of the West Parapet. Delamination with 1/8" wide vertical crack at the south end of the East Parapet. 10" H x 6" W x 3/4" D spall with exposed steel at mid-span at the interior face of the East Parapet. The exterior face of the East Parapet exhibits hairline cracks with minor corrosion stains.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	1	19	0	0	0	CS2: (19 EA) Diaphragms with minor freckled corrosion.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 32N with minor bleeding corrosion between the bronze and masonry plates. Flaked paint and minor surface corrosion on the plate edges and nuts.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 31N are heavily greased with NDO.
205	3	R/Conc Column	(LF)	37	37	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	40	2	0	0	0	CS2: (2 LF) The East Overhang underside edge exhibits a 3' L x 2' W delaminated patch with hairline map cracking.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 7

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 33N (Pier 32N to  
Pier 33N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed (up to 1-inch) and debonded areas with 6-inch long tear in the Right Lane.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	814	722	90	2	0	0	CS2: (90 LF) Localized minor spot corrosion on the flanges. The previously noted area of missing paint in Beam 1 at Pier 32N with exposed primer was not observed during the 2013 inspection. CS3: (2 LF) The fascia beam end top flanges at Pier 33N exhibit corrosion.
331	4	Conc Bridge Railing	(LF)	272	139	60	73	0	0	CS2: (60 LF) Typical 1/16" wide horizontal cracks along the interior faces of both parapets. CS3: (73 LF) The interior faces of both barriers exhibit hairline horizontal cracks with corrosion stains. 1/8" wide horizontal cracks (some with corrosion stains) along the exterior face of the West Parapet with a 1/8" wide longitudinal crack at the top. The interior face of the East Parapet exhibits 1/16" vertical and horizontal cracks with corrosion stains on the north end.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	35	7	27	1	0	0	CS2: (27 EA) Diaphragms with minor spot corrosion. CS3: (1 EA) The bottom flange of the first diaphragm from Pier 33N in Bay 5 exhibits an area of exposed and corroded steel.
311	4	Moveable Bearing	(EA)	6	5	1	0	0	0	CS1: (5 EA) Sliding plate bearings at Pier 32N exhibit flaking paint with minor surface corrosion on the plates and nuts. CS2: (1 EA) Bearing 6 exhibits minor blistering corrosion on the masonry plate.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 33N with NDO.
205	3	R/Conc Column	(LF)	35	35	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	39	3	0	0	0	Note: The patch at the center of the north face exhibits hairline map cracking CS2: (3 LF) There are (3) diagonal cracks up to full-height x 1/16" W between Bays 2 and 4 at the south face.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 8

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 34N (Pier 33N to  
Pier 34N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed (up to 1/2-inch) and debonded areas.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	377	320	50	7	0	0	Note: Beams have bolsters at the bearings. CS2: (50 LF) Localized minor spot corrosion on the flanges. CS3: (7 LF) Scrape marks and exposed steel with minor corrosion at 1/3-span on Beams 2 and 3. Ends of fascias with exposed and corroded steel to the top flanges at piers.
331	4	Conc Bridge Railing	(LF)	126	104	10	12	0	0	Note: The East Parapet has a conduit cover missing 6 of 8 screws. CS2: (10 LF) West Parapet with 1/16" wide horizontal cracks. CS3: (12 LF) West Parapet with 1/16" wide horizontal cracks with corrosion stains.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	8	11	1	0	0	CS2: (11 EA) Minor freckled or spot corrosion. CS3: (1 EA) Bay 2 diaphragm at 1/3-span with scraped paint and minor corrosion to exposed steel.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 34N are heavily greased with NDO.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 33N are heavily greased with NDO.
205	3	R/Conc Column	(LF)	35	33	0	2	0	0	CS3: (2 LF) 22" H x 5" W x 5" L x 2" D corner spall with exposed corroded steel reinforcement at the northwest corner of Column 1.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	42	0	0	0	0	NDO
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 9

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 35N (Pier 34N to  
Pier 35N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed (up to 1-inch) and debonded areas.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	396	290	100	6	0	0	CS2: (100 LF) Random minor freckled corrosion on the flanges. CS3: (6 LF) Moderate corrosion along the top flanges of Beam 1 and 6 at the piers.
331	4	Conc Bridge Railing	(LF)	132	72	55	5	0	0	CS2: (55 LF) The exterior face at the south end of the West Parapet exhibits a 1' L x 10" H x 1" D spall at the base with a horizontal 1/16-inch wide crack. The inside face of the West Parapet exhibits 1/16-inch wide horizontal cracks. CS3: (5 LF) The exterior face of the East Parapet at the north end exhibits a vertical hairline crack with corrosion stains. The exterior face of the West Parapet exhibits 1/8-inch wide cracks with corrosion stains.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	12	8	0	0	0	CS2: (8 EA) Minor freckled corrosion.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 35N are heavily greased with minor spot corrosion.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 34N are heavily greased with minor spot corrosion.
205	3	R/Conc Column	(LF)	29	27	0	2	0	0	CS3: (2 LF) The south face of Column 2 exhibits six (6) shallow spalls up to 8" H x 20" W x 1/2" D with exposed corroded steel reinforcement.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	40	0	2	0	0	CS3 (2 LF): The north face at the top, below Bay 1 exhibits a 2' L x 1/16" W horizontal crack with corrosion stains.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 10

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 36N (Pier 35N to  
Pier 36N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	0	0	0	0	0	0	0
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed (up to 2-inches) and debonded areas with evidence of leakage.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	394	232	150	12	0	0	CS2: (150 LF) Beam 6 bottom flange on the west side is bent upward up to 3/4" along the north end. There are localized areas of minor spot corrosion. CS3: (12 LF) The previously noted corroded web seams in the east face of Beam 3 web at 3/4-span were not observed during the 2013 inspection. There are a few isolated areas on the beams with blistered painted and minor surface corrosion. The west edge of the Beam 6 bottom flange cover plate is kinked up to 1/4" at 1/3-span. The previously noted bent Beam 1 west top flange at the south end was not observed during the 2013 inspection.
331	4	Conc Bridge Railing	(LF)	131	56	65	10	0	0	CS2: (65 LF) The top of the West Parapet at the south end exhibits a delamination. There are 1/16" to 1/8" wide horizontal cracks along both faces of the West Parapet with adjacent delaminations on the exterior north end. CS3: (10 LF) 1/16" to 1/8" wide horizontal cracks to interior face of the West Parapet with corrosion stains. The interior face of the East Parapet exhibits a 6" diameter x 1 1/2" D spall with exposed corroded steel reinforcement at the 1/3-span and a 6" diameter x 3/4" D spall at the south end.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	8	12	0	0	0	CS2: (12 EA) Diaphragms exhibit minor spot corrosion. The top flanges of Bay 1 and 4 diaphragms at Pier 36N are kinked.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 35N are heavily greased. Bearings 5 and 6 exhibit minor surface corrosion to the masonry plates.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 36N are heavily greased with minor spot corrosion.
205	3	R/Conc Column	(LF)	29	28	1	0	0	0	CS2: (1 LF) The north face of Column 2 exhibits a 12" H x 6" W x 2" D spall.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	38	0	4	0	0	CS3: (4 LF) The east face of Pedestal 5 exhibits a 18" L x 5" H x 2" D spall / delamination and horizontal cracks with corrosion stains and the north face exhibits a 21" W x 4" L x 2" D spall / delamination. The east face of Pedestal 6 exhibits hairline horizontal cracks with corrosion stains.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 11

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 37N (Pier 36N to  
Pier 37N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Minor debris at the shoulder, depressed (1/2-inch) and debonded areas with evidence of active leakage.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	404	299	90	15	0	0	CS2: (90 LF) Localized minor spot corrosion on the flanges. CS3: (15 LF) Typical peeling paint with corrosion to the ends of the fascia beams. Peeling paint with exposed and corroded steel along the west edge of Beam 1 top flange near mid-span, and along the east and west top flange edges of Beam 6 at the north end. The previously noted peeling paint and corrosion at mid-span of Beam 6 at the west web and top flange was not observed during the 2013 inspection.
331	4	Conc Bridge Railing	(LF)	135	95	36	4	0	0	CS2: (36 LF) There are 1/16" to 1/8" wide horizontal cracks in the interior face of the West Parapet for half of the span. The north end of the East Parapet exhibits a vertical 1/16" wide crack. CS3: (4 LF) The interior face of the East Parapet exhibits a 10" H x 4" x 1 1/2" D spall with exposed corroded steel reinforcement adjacent to the junction box cover and 1/16" to 1/8" wide horizontal cracks with corrosion stains. The West Parapet at the south end exhibits a vertical crack with corrosion stains.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	8	12	0	0	0	CS2: (12 EA) Diaphragms exhibit minor spot corrosion. The top flanges of the end diaphragms in Bay 1 at the piers are slightly bent.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 37N are heavily greased with minor spot corrosion at the fascia bearings.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 36N are heavily greased with minor spot corrosion.
205	3	R/Conc Column	(LF)	25	25	0	0	0	0	Note: The south face of Column 2 exhibits a missing junction box cover plate with a bird's nest inside.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	42	0	0	0	0	NDO
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0



# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 12

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 38N (Pier 37N to  
Pier 38N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	0	0	0	0	0	0	0
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Minor debris at the shoulder, depressed (1/2-inch) and debonded areas with evidence of leakage.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	393	298	90	5	0	0	CS2: (90 LF) Localized minor spot corrosion on the flanges. CS3: (5 LF) Scrape with corroded steel in the underside of Beam 6 at the north end. Typical peeling paint with corrosion to the ends of the fascia beams.
331	4	Conc Bridge Railing	(LF)	131	69	53	9	0	0	CS2: (53 LF) 1/16" to 1/8" wide horizontal cracks in the West Parapet for 3/4 of the span length to both faces. The East Parapet exhibits 1/16" wide horizontal cracks at the north end. The interior face of the West Parapet at the south end exhibits an 18" L x 8" H x 1 1/2" D spall. CS3: (9 LF) Horizontal cracks with corrosion stains on the interior face of the West Parapet.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	6	14	0	0	0	CS2: (14 EA) Diaphragms exhibit minor spot corrosion.
311	4	Moveable Bearing	(EA)	6	0	0	6	0	0	CS3: (6 EA) Sliding plate bearings at Pier 37N are heavily greased and over contracted at 50 degrees Fahrenheit (appears to be as-built condition) with the north faces of the bronze plates overhanging the masonry plates. Bearings 1, 4, 5, and 6 are moving unevenly. Overhang Measurements: Bearing 1 = 1/2" (East), 3/4" (West); Bearing 2 = 1/2"; Bearing 3 = 5/8"; Bearing 4 = 1/2" (East), 5/8" (West); Bearing 5 = 7/8" (East), 5/8" (West); Bearing 6 = 3/4" (East), 5/8" (West).
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 38N are heavily greased with minor spot corrosion.
205	3	R/Conc Column	(LF)	23	23	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	41	1	0	0	0	CS2: (1 LF) The west face of Pedestal 6 exhibits a 22" L x 6" H x 3" D spall.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 13

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 39N (Pier 38N to  
Pier 39N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Minor debris at the shoulder, depressed (1-inch) and debonded areas.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	392	262	110	20	0	0	CS2: (110 LF) Areas of minor spot corrosion on bottom flanges. CS3: (20 LF) Typical peeling paint with corrosion to the ends of the fascia beams. Small area of peeling paint with corrosion to the west edge of the underside of the bottom flange of Beam 4 at the south end. The west edge and underside of the bottom flange cover plate exhibits random areas of peeling paint with corrosion.
331	4	Conc Bridge Railing	(LF)	131	35	81	15	0	0	CS2: (81 LF) The parapets exhibit 1/16-inch wide horizontal cracks throughout. There are two (2) 6" diameter x 1" D spalls from collision damage at the base of the West Parapet. CS3: (15 LF) The parapets exhibit 1/8" wide cracks with corrosion stains. The exterior face of the West Parapet exhibits 1/8" to 1/4" wide horizontal cracks.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	7	13	0	0	0	CS2: (13 EA) Diaphragms exhibit minor spot corrosion.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 39N are heavily greased with NDO.
313	4	Fixed Bearing	(EA)	6	5	1	0	0	0	CS1: (5 EA) Fixed bearings at Pier 38N are heavily greased. Bearing 6 exhibits 1/8-inch pack rust between the masonry plate and pedestal. CS2: (1 EA) Bearing 3 is missing the west anchor bolt nut.
205	3	R/Conc Column	(LF)	24	24	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	40	1	1	0	0	CS2: (1 LF) The west face of Pedestal 6 exhibits a 12" H x 4" L delamination. CS3: (1 LF) The east face of Pedestal 3 exhibits a 3" diameter x 1" D area of a spalled patch with exposed corroded steel reinforcement.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## *Bridge Management Section* *MultiSpan PONTIS Element Report for Span No. 14*

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 40N (Pier 39N to Pier 40N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	0	0	0	0	0	0	0
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed (1-inch) and debonded areas evidence of active leakage.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	393	331	50	12	0	0	CS2: (50 LF) Localized minor spot corrosion on the flanges. CS3: (12 LF) Peeling paint with corrosion along the west edge of the top flange of Beam 1 at mid-span and typical corrosion at the ends of the fascia beams.
331	4	Conc Bridge Railing	(LF)	131	72	30	29	0	0	CS2: (30 LF) The parapets typically exhibit 1/16-inch wide horizontal cracks. 8" W x 6" L x 1/4" D spall to the top of the East Parapet. The exterior face of the West Parapet exhibits 1/16" to 1/8" wide horizontal cracks. The interior face of the West Parapet exhibits a 6" H x 10" L x 1" D spall at the base with a 1/8" wide vertical crack at the south end. CS3: (29 LF) The northwest end of the West Parapet exhibits a 1/8" wide crack with corrosion stains. The top of the West Parapet at the south end exhibits a 1/8 to 1/4-inch wide longitudinal crack.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	10	10	0	0	0	CS2: (10 EA) Diaphragms exhibit minor spot corrosion.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 39N are heavily greased with NDO.
313	4	Fixed Bearing	(EA)	6	5	1	0	0	0	CS1: (5 EA) Fixed bearings at Pier 40N are heavily greased. CS2: (1 EA) Bearing 1 west anchor bolt nut is not snug against plate and is cross threaded on bolt.
205	3	R/Conc Column	(LF)	25	25	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	40	0	2	0	0	CS3: (2 LF) Horizontal cracks with corrosion stains at the east end of the north face and at the underside of the East Overhang.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 15

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 41N (Pier 40N to  
Pier 41N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Minor debris throughout, depressed (1/2-inch) and debonded areas.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	393	317	70	6	0	0	CS2: (70 LF) Localized minor spot corrosion on the flanges. CS3: (6 LF) Rusty seam in west face of Beam 5 web at mid-span. Typical peeling paint with corrosion to the ends of the fascia beams.
331	4	Conc Bridge Railing	(LF)	131	89	3	39	0	0	CS2: (3 LF) The interior face of the East Parapet exhibits a 3" diameter x 2" D spall at the north end. The interior face of the West Parapet exhibits a 1/8" wide vertical crack at the north end. CS3: (39 LF) The interior face of the East Parapet exhibits cracks with corrosion stains. The exterior face of the West Parapet at 1/3-span exhibits 1/8" to 1/4" wide horizontal cracks.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	10	10	0	0	0	CS2: (10 EA) Diaphragms exhibit minor spot corrosion.
311	4	Moveable Bearing	(EA)	6	4	2	0	0	0	CS1: (4 EA) Sliding plate bearings at Pier 41N are heavily greased. CS2: (2 EA) Bearing 1 exhibits 1/16-inch pack rust between the sliding plate and the masonry plate. Bearing 6 exhibits minor surface corrosion and 1/8-inch pack rust between the masonry plate and the pedestal.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 40N are heavily greased. The fascia bearings exhibit 1/8-inch pack rust between the masonry plate and the pedestal.
205	3	R/Conc Column	(LF)	27	27	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	40	0	2	0	0	CS3: (2 LF) The east face of Pedestal 4 exhibits a full-height x 8" L x 1" D spall with painted over steel that is beginning to corrode. 1/16" wide cracks with corrosion stains in the east face of Pedestal 6 with adjacent delamination.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 16

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 42N (Pier 41N to  
Pier 42N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Torn areas and filled with debris at the shoulder, depressed (1/2-inch) and debonded areas. Adjacent concrete with abrasions in the Left Shoulder and Left Lane.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	393	329	60	4	0	0	CS2: (60 LF) Localized minor spot corrosion on the flanges. CS3: (4 LF) Typical peeling paint with corrosion to the ends of the fascia beams.
331	4	Conc Bridge Railing	(LF)	131	51	41	39	0	0	CS2: (41 LF) The interior of the West Parapet exhibits a 10" diameter x 1" D spall at the base at 2/3-span. 1/16" wide horizontal cracks throughout both parapets. CS3: (39 LF) The interior face of the West Parapet exhibits cracks with corrosion stains. The exterior face of the West Parapet has a 1/8" to 1/4" wide longitudinal crack across the top. The interior face of the West Parapet at the south end exhibits a 1/8" to 1/4" wide vertical crack.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	5	15	0	0	0	CS2: (15 EA) Diaphragms exhibit minor spot corrosion. Bay 2 end diaphragm at Pier 41N has kinks in the top flange.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 41N are heavily greased with NDO.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 42N are heavily greased with NDO.
205	3	R/Conc Column	(LF)	29	29	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	42	0	0	0	0	Note: The pier cap exhibits hairline to 1/16-inch wide map cracking throughout.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 17

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 43N (Pier 42N to  
Pier 43N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Minor debris at the shoulder, depressed (1-inch), torn, and debonded areas.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	393	323	60	10	0	0	CS2: (60 LF) Localized minor spot corrosion on the flanges. CS3: (10 LF) Typical peeling paint with corrosion to the ends of the fascia beams. Isolated areas of peeling paint with corrosion along the west edge of the bottom flange of Beam 4.
331	4	Conc Bridge Railing	(LF)	131	15	106	10	0	0	CS2: (106 LF) The interior face of the East Parapet exhibits a 10" diameter x 1" D spall. The interior face of the West Parapet exhibits 1/16" wide horizontal cracks. The exterior face of the West Parapet exhibits 1/8-inch wide horizontal cracks (12 LF at north end; 6 LF at south end) CS3: (10 LF) The exterior face of the West Parapet exhibits a 1/16" to 3/16" wide horizontal with corrosion stains. The interior face of the East Parapet exhibits four (4) vertical cracks with corrosion stains, and three (3) spalls with exposed corroded steel reinforcement (6" H x 12" L x 3/4" D at north end; 3" H x 9" L x 3/4" D at the south end; 6" H x 12" L x 3/4" D at the south end with horizontal crack).
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	7	13	0	0	0	CS2: (13 EA) Diaphragms exhibit minor spot corrosion.
311	4	Moveable Bearing	(EA)	7	7	0	0	0	0	CS1: (7 EA) Sliding plate bearings at Pier 43N (6 total) are heavily greased with NDO. The pier cap bearing (1 total) at Column 2 is heavily greased with NDO.
313	4	Fixed Bearing	(EA)	7	7	0	0	0	0	CS1: (7 EA) Fixed bearings at Pier 42N (6 total) are heavily greased with NDO. The pier cap bearing at Pier 43N, Column 1 (1 total) exhibits minor surface corrosion.
205	3	R/Conc Column	(LF)	20	20	0	0	0	0	Note: The east and south faces of Column 1 exhibit full-height x full-width hairline map cracking that extends onto the top surface. The north face of Column 2 exhibits moderate vegetation growth.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	43	19	11	13	0	0	Note: The pier cap hatch is missing 1 of 6 bolts. CS2: (11 LF) Exterior - Minor freckled corrosion at the east and west ends of the north face and west end of the south face. Interior - Typical chalking along top flange welds, minor spots of corrosion to the top edge of the web plate or diaphragms. Diaphragms with minor freckled corrosion to the top edges. Top flange weld backer bars with corrosion dust. CS3: (13 LF) Exterior - There is exposed corroded steel behind the hatch at the west end (see Photo 38). Interior - Exposed steel with corrosion to the backer rod between Diaphragms 1 and 2, 6 and 7, 8 and 9, 9 and 10. There is corrosion to the welds at the diaphragm and east face between Diaphragms 4 and 5, at Diaphragm 2, at the west edge of Diaphragms 1 and 3. The area between Diaphragm 7 and 8 exhibits peeling paint and exposed steel with minor corrosion (see Photo 37) and a small area on

										the bottom flange (peeling paint; no corrosion). There is peeling paint at the east end plate at the northeast corner with exposed and corroded steel.
234	3	R/Conc Pier Cap	(LF)	0	0	0	0	0	0	0
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 18

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 44N (Pier 43N to  
Pier 44N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed (1-inch) and debonded areas.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	395	237	150	8	0	0	CS2: (150 LF) Localized minor spot corrosion on the flanges. CS3: (8 LF) The bottom flange of Beam 1 cover plate at 1/4-span exhibits moderate corrosion at the west edge. Typical peeling paint with corrosion to the ends of the fascia beams.
331	4	Conc Bridge Railing	(LF)	132	123	1	8	0	0	CS2: (1 LF) The West Parapet exhibits a 6" diameter x 1" D spall at the top edge at the south end. CS3: (8 LF) The exterior face of the West Parapet exhibits a 1/8" to 1/4" wide horizontal crack with corrosion stains.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	0	20	0	0	0	CS2: (20 EA) Diaphragms exhibit minor spot corrosion.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 43N are heavily greased with NDO.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 44N are heavily greased with NDO.
205	3	R/Conc Column	(LF)	35	30	5	0	0	0	CS2: (5 LF) 4" H x 3" W 1/2" D corner spall at the southeast of Column 1 at mid-height. Large delamination at the northwest corner of Column 1 over parked cars (41"H x 6" L into West face x 16" W into North face).
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	39	1	2	0	0	CS2: (1 LF) The west face of Pedestal 5 exhibits a 5-inch diameter delamination with a 1' L x 1/16" W horizontal crack. CS3: (2 LF) 3" diameter x 1/2" D spall with corrosion stains in the west face of Pedestal 6. 3" H x 6" L x 1" D spall with exposed corroded steel reinforcement in the east face of Pedestal 3.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0



# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 19

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 45N (Pier 44N to  
Pier 45N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	0	0	0	0	0	0	0
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed (2-inch) and debonded areas. There are several tears in the Right Lane.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	415	330	75	10	0	0	CS2: (75 LF) Localized minor spot corrosion on the flanges. CS3: (10 LF) Small localized areas of missing paint with severe corrosion to the exposed steel in the west edge of the bottom flange cover plate of Beam 4, adjacent to the electrical conduit. Rusty seam in west face of Beam 1 web at S. end. Typical peeling paint with rust to ends of fascia beams.
331	4	Conc Bridge Railing	(LF)	132	0	124	8	0	0	CS2: (124 LF) Typical horizontal cracks for the full length on the exterior face the East Parapet and partial length of the West Parapet. CS3: (8 LF) The exterior of the East Parapet exhibits 1/8" to 1/4" wide crack with corrosion stains.
334	4	Metal Rail Coated	(LF)	69	29	26	8	6	0	CS2: (26 LF) Areas of minor freckled corrosion, typical blistering around the fasteners and one (1) panel with a minor dent. CS3: (8 LF) Area of missing paint with exposed and corroded metal. CS4: (6 LF) Areas of random small clusters of corrosion with small holes through the panel.
381	3	Painted Steel Diaphr	(EA)	20	5	15	0	0	0	CS2: (15 EA) Diaphragms exhibit minor spot corrosion.
311	4	Moveable Bearing	(EA)	6	5	1	0	0	0	CS1: (5 EA) Sliding plate bearings at Pier 45N exhibit minor surface corrosion. Peeling paint at Bearings 1 and 5. CS2: (1 EA) Bearing 6 exhibits moderate surface corrosion to the plates with moderate blistering corrosion to the masonry plate.
313	4	Fixed Bearing	(EA)	6	5	1	0	0	0	CS1: (5 EA) Fixed bearings at Pier 44N are heavily greased. CS2: (1 EA) Bearing 6 exhibits moderate blistering corrosion to the masonry plate and 1/8-inch pack rust between the bearing plate and the pedestal.
205	3	R/Conc Column	(LF)	35	35	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	42	0	0	0	0	Note: The pier cap exhibits corrosion bleeding stains from the bearings and joint above.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 20

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 46N (Pier 45N to  
Pier 46N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed (1-inch) and debonded areas. There is a torn area at center of the joint.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	471	386	82	3	0	0	CS2: (82 LF) Localized minor spot corrosion on the bottom flanges. The beam ends with clusters of freckled rust on the bottom flanges. The Beam 5 east web at Pier 45N exhibits peeling paint with exposed primer. CS3: (3 LF) The ends of Beams 1 and 6 at Pier 46N exhibit corroded top flanges. The bottom flange of Beam 4 at Pier 46N exhibits an area of severe corrosion. The previously noted corrosion along the Beam 3 bottom flange was not observed during the 2013 inspection. The previously noted gouges in Beam 1 were not observed during the 2013 inspection.
331	4	Conc Bridge Railing	(LF)	157	108	15	4	30	0	CS2: (15 LF) 1/16" to 1/8" wide longitudinal crack in the exterior face of the West Parapet near the top. The south end of the exterior face of the West Parapet exhibits three (3) spalls up to 9" L x 3" H x 2" D. CS3: (4 LF) The East Parapet with hairline to 1/16" wide horizontal crack with corrosion stains. CS4: (30 LF) The exterior face of the West Parapet at the south end exhibits a 20' L x 1/8 to 1/2" wide horizontal crack at the top with delaminated concrete above the crack up to 6-inches high with lateral displacement up to 1/4-inch (loose concrete removed during 2013 inspection). The exterior face of the West Parapet at the north end exhibits a 16' L x 1/4 to 5/8" wide horizontal crack at the top with delaminated concrete above the crack up to 4-inches high and small spalls up to 13" L x 5" H x 3" D (see Photo 26) (loose concrete removed during the 2013 inspection).
334	4	Metal Rail Coated	(LF)	77	27	42	0	8	0	CS2: (42 LF) Few posts with blistering around the fasteners. Areas of missing paint with exposed metal. CS4: (8 LF) Random small clusters of corrosion with small holes through the panels and one (1) 6 1/2" L x 1 1/2" H hole (see Photo 30).
381	3	Painted Steel Diaphr	(EA)	25	4	20	1	0	0	CS2: (20 EA) Diaphragms exhibit minor spot corrosion. CS3: (1 EA) End diaphragm in Bay 5 at Pier 45N with scraped paint and minor corrosion to the exposed steel.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 45N exhibit minor paint chipping with minor spot corrosion.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 46N are heavily greased with NDO.
205	3	R/Conc Column	(LF)	54	50	0	4	0	0	CS3: (4 LF) The southwest corner of Column 2 has a 42" H x 10" L x 10" W x 2" D (see Photo 36) corner spall with exposed corroded steel reinforcement.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
										CS2: (7 LF) The northwest corner of Pedestal 3 exhibits a 32" W x 5" L x 10" H delamination with two (2) spalls up to 4" L x 2" H x 1/2" D. The northwest corner of Pedestal 4 exhibits a 20" W 9" H x 4" L delamination with a horizontal crack.

234	3	R/Conc Pier Cap	(LF)	42	25	7	10	0	0	Pedestal 5 with diagonal crack and adjacent 15" W x 8" H x 12" L delamination at southwest corner; southeast corner with 8" H x 6" W delamination that continues the full length of the east face with a hairline longitudinal crack; northeast corner exhibits a 1/16" wide diagonal crack with 5" W x 9" H delamination. CS3: (10 LF) The top surface below Bay 1 exhibits a 2' L crack with corrosion stains. The top of the south face below Bay 4 exhibits a 1' L x up to 1/8" W horizontal crack with corrosion stains. The north face below Bay 4 and Pedestal 5 exhibits a 1' L hairline horizontal crack with corrosion stains. The top surface and south face below Bay 5 exhibits a 27" L x 11" H x 31" W corner delamination and 16" H x 13" W x 3/4" D spall with exposed corroded steel. The east face of Pedestal 4 exhibits a 26" L x 9" H x 2" D spall with exposed corroded steel reinforcement. The south and east face of Pedestal 6 exhibit hairline horizontal cracks with corrosion stains.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 21

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 47N (Pier 46N to  
Pier 47N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed (1-inch) and debonded areas. The underside of the deck joint at the west end exhibits severe corrosion.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	443	324	101	18	0	0	CS2: (101 LF) Localized minor spot or freckled corrosion on the bottom flanges. Beams 1 through 3 exhibit random edge corrosion to the top and bottom flanges. Beam 6 west bearing stiffener at Pier 46N is bent at the top 4" H x 2" outward. CS3: (18 LF) The ends of Beams 1, 2, 3, and 6 at Pier 46N and Beam 1 at Pier 47N exhibit exposed and corroded steel to the top and bottom flanges. There are corroded scrapes on the top flanges of Beams 1 and 3. Exposed and corroded steel along the top flange edge of Beam 1 exterior and Beam 3 area of bottom flange at the conduit with blistering and dense freckled corrosion.
331	4	Conc Bridge Railing	(LF)	148	0	74	48	26	0	CS2: (74 LF) 1/16" to 1/8" wide longitudinal crack in the east face of the East Parapet near the top and a small section of the west face of the West Parapet. CS3: (48 LF) The top of the West Parapet exhibits a 1/8" to 1/4" wide crack with random corrosion stains. CS4: (26 LF) The top of south end of the West Parapet exterior face exhibits a 1/2" wide horizontal crack with up to 1/8" lateral displacement and areas of delaminations. The north end exhibits a 3/8" wide horizontal crack.
334	4	Metal Rail Coated	(LF)	78	29	8	34	7	0	CS2: (8 LF) The expansion plate at the joint is not flush and the exterior face of some panels exhibit small areas of blistering paint and surface corrosion. CS3: (34 LF) Missing paint with exposed metal to scattered areas (no active corrosion). CS4: (7 LF) Random small clusters of corrosion with small holes through the panel.
381	3	Painted Steel Diaphr	(EA)	20	3	17	0	0	0	CS2: (17 EA) Diaphragms exhibit minor spot corrosion.
311	4	Moveable Bearing	(EA)	6	3	3	0	0	0	CS1: (3 EA) The sliding plate bearings at Pier 47N exhibit some chipped paint and some minor spot corrosion. CS2: (3 EA) A few bearings have slightly bent anchor bolts and blistering corrosion to the masonry plates and anchor bolt nuts.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 46N are heavily greased and most sole plates sit atop of painted over pack rust.
205	3	R/Conc Column	(LF)	54	53	1	0	0	0	CS2: (1 LF) Column 2, north face at cap with 15" W x 7" H delamination.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	38	4	0	0	0	CS2: (4 LF) The north face above Column 1 exhibits a 33" L x 11" H delamination. The east face of Pedestal 4 exhibits a 7" H x 6" W delamination and a cracked repair.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0

358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 22

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 48N (Pier 47N to  
Pier 48N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder and minor debris throughout, depressed (1/2-inch) and debonded areas.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	444	337	87	20	0	0	CS2: (87 LF) Areas of minor spot or freckled corrosion, mostly at the ends. Minor corrosion to the fasteners through the ends of the web and minor scattered edge corrosion on the bottom flanges. CS3: (20 LF) The ends of Beams 1 and 6 at both piers exhibit severe corrosion to the top flanges. The previously noted scrapes and gouges to Beams 2 and 3 were not observed. The Beam 1 exterior top flange has areas of severe corrosion to the top flange edge along the full length.
331	4	Conc Bridge Railing	(LF)	148	36	40	52	20	0	CS2: (40 LF) The top of the exterior faces of the East and West Parapets exhibit 1/16" to 1/8" wide longitudinal cracks. There are random vertical hairline cracks in both parapets, mostly at the joints. CS3: (52 LF) The parapets interior faces exhibit 1/8" wide horizontal cracks with corrosion stains. The exterior face of the West Parapet exhibits 1/8" to 1/4" wide horizontal cracks along the top. CS4: (20 LF) The exterior face of the West Parapet exhibits a 3/8" to 1/2" wide horizontal crack at the top of the north end.
334	4	Metal Rail Coated	(LF)	74	26	6	36	6	0	CS2: (6 LF) There are a few spots with blistering paint around the fasteners and one panel with a small dent. There is a missing fastener at the second support. CS3: (36 LF) Numerous areas of missing paint with exposed metal (no active corrosion). CS4: (6 LF) There are random small clusters of severe corrosion with small holes through the panel.
381	3	Painted Steel Diaphr	(EA)	20	2	18	0	0	0	CS2: (18 EA) Diaphragms exhibit minor spot corrosion.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 47N exhibit chipped paint and minor spot corrosion with some blistering paint on the bearing plates and anchor bolt nuts. A few bearings have very slightly bent anchor bolts.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 48N are heavily greased with minor spot corrosion to the masonry plates.
205	3	R/Conc Column	(LF)	54	54	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	39	1	2	0	0	CS2: (1 LF) The cap underside below Beam 3 exhibits a 19" L x 21" W delamination with hairline map cracks. CS3: (2 LF) The east face of Pedestal 1 exhibits a 6" L x 2" H x 1/2" D spall with partially painted over steel reinforcement exhibiting minor corrosion. The north face of Pedestal 3 exhibits an 8" W x 7" H x 5/8" D and a 7" W x 3" H x 1/4" D spall with exposed corroded steel reinforcement.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0

358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 23

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 49N (Pier 48N to  
Pier 49N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed (2 1/2-inches) and debonded areas with evidence of leakage on the pier cap below. The joint material at the Left Lane and Left shoulder is missing.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	444	314	100	30	0	0	CS2: (100 LF) Areas of minor spot or freckled corrosion, mostly on the bottom flanges. Beam 1 top flange with edge corrosion and scattered freckled corrosion. Beams with minor corrosion to the fasteners at the north end webs. CS3: (30 LF) Random areas on the bottom flanges with paint scrapes with exposed and corroded steel (more prominent at Beams 1 and 4). The ends of Beams 1 and 6 at the piers exhibit corrosion to the flanges. Beam 1 exhibits areas of severe edge corrosion to the flanges at the north end.
331	4	Conc Bridge Railing	(LF)	148	88	30	30	0	0	CS2: (30 LF) The exterior faces of both parapets exhibit 1/16" to 1/8" wide horizontal cracks. The interior face of the East Parapet exhibits areas of minor delaminated patches. Both parapets have 1/16" wide horizontal cracks on the interior faces at the north end. The inside face of the East Parapet at the north end exhibits a 1/16" to 1/8" wide horizontal crack with adjacent delamination above. CS3: (30 LF) 1/8" to 1/4" wide cracks on the exterior face of the West Parapet.
334	4	Metal Rail Coated	(LF)	74	25	7	42	0	0	CS2: (7 LF) One panel with minor freckled corrosion. CS3: (42 LF) Areas of missing paint with exposed metal to interior and exterior faces.
381	3	Painted Steel Diaphr	(EA)	20	0	20	0	0	0	CS2: (20 EA) Diaphragms exhibit minor spot or freckled corrosion.
311	4	Moveable Bearing	(EA)	6	3	3	0	0	0	CS1: (3 EA) Sliding plate bearings at Pier 49N exhibit minor spot corrosion to the plate edges with flaking paint. CS2: (3 EA) Bearing 1 exhibits a bent anchor bolt. Bearings 4 and 6 exhibit nuts backed off up to 1/2-inch.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 48N are heavily greased with NDO.
205	3	R/Conc Column	(LF)	55	53	0	2	0	0	CS3: (2 LF) Column 1 at bottom southwest corner exhibits a vertical crack with corrosion stains and adjacent 21" H x 6" W delamination.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	32	6	4	0	0	CS2: (6 LF) The south face below Bay 4 exhibits a full-height x 1/16" W diagonal crack. CS3: (4 LF) The northwest corner of Pedestal 2 exhibits a 9" L x 8" H x 2 1/2" D spall with exposed corroded steel reinforcement. The south face below Bays 2 and 5 exhibits full height hairline vertical cracks with corrosion stains.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking	(EA)	0	0	0	0	0	0	0



		SmFlag								
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 24

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 50N (Pier 49N to  
Pier 50N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed (1/2-inch) and debonded areas.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	468	392	72	4	0	0	CS2: (72 LF) Localized areas of minor spot or freckled corrosion to the flanges, ends of beams, and fasteners at the south end of the webs. CS3: (4 LF) Beam 2 bottom flange at the south end exhibits scrapes to the flange edges with severe corrosion. The underside of the Beam 6 top flange exhibits exposed steel with severe corrosion.
331	4	Conc Bridge Railing	(LF)	156	78	0	74	4	0	CS1: (78 LF) Hairline horizontal cracks throughout length of both parapets. CS3: (74 LF) The exterior face of the West Parapet exhibits 1/8" to 1/4" wide cracks with scattered minor corrosion stains and adjacent 3-inch high delaminations above. The interior face of the West Parapet exhibits a 1/16" wide horizontal crack with corrosion stains. CS4: (4 LF) The exterior face of the West Parapet at the south end exhibits a 1/4" to 1/2" wide horizontal crack with corrosion stains and adjacent 3-inch high delamination above.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	24	4	20	0	0	0	CS2: (20 EA) Diaphragms exhibit minor spot or freckled corrosion. The sign structure support diaphragm exhibits exposed corroded steel.
311	4	Moveable Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Sliding plate bearings at Pier 49N exhibit spot corrosion to the plate edges and flaking paint and random minor blistering corrosion on the anchor bolt nuts and bearing plates. Some bolts very slightly bent.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 50N are heavily greased sitting atop a painted over layer of 1/4-inch pack rust.
205	3	R/Conc Column	(LF)	57	57	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	35	6	1	0	0	CS2: (6 LF) The top surface at the south side near Pedestal 4 exhibits a 42" L x 9" W delamination. The north face below Bay 2 exhibits a full-height x 1/16" W diagonal crack. CS3: (1 LF) The southeast corner of Pedestal 3 exhibits a 21" L x 13" H x 7" W corner spall with two (2) exposed steel reinforcement bars.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 25

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 51N (Pier 50N to  
Pier 51N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	42	0	42	0	0	0	CS2: (42 LF) Filled with debris at the shoulder, depressed (1 1/2-inches) and debonded areas with active leakage in Bay 4.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	414	371	40	3	0	0	CS2: (40 LF) Localized areas of minor spot or freckled corrosion on the flanges and beam ends. CS3: (3 LF) Ends of Beams 1 and 6 with severe corrosion along the top flange edges.
331	4	Conc Bridge Railing	(LF)	138	0	127	11	0	0	CS2: (127 LF) The exterior faces of both parapets exhibit up to 1/8" wide cracks at the tops. CS3: (11 LF) The interior faces of both parapets exhibit a few cracks up to 1/8" wide with corrosion stains. The south end of the East Parapet exhibits a hairline vertical crack with corrosion stains and adjacent 8" H x 3 1/2" W x 1 1/2" D spall at the junction box cover.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	24	9	14	1	0	0	CS2: (14 EA) Diaphragms exhibit minor spot or freckled corrosion. CS3: (1 EA) Bay 3 south end diaphragm exhibits chipped paint with exposed and corroded steel.
311	4	Moveable Bearing	(EA)	6	5	1	0	0	0	CS1: (5 EA) Sliding plate bearings at Pier 51N are heavily greased with spot corrosion to the bearing plates. CS2: (1 EA) Bearing 6 is contracted within limits at 60 degrees Fahrenheit and exhibits severe surface corrosion, pack rust, and the east anchor bolt nut has up to 90% painted over section loss. The sole plate is 1/4" above the bearing plate and rests on 3/8-inch pack rust.
313	4	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Fixed bearings at Pier 50N are heavily greased and typically sit atop a layer of 1/4" pack rust.
205	3	R/Conc Column	(LF)	45	45	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	42	41	0	1	0	0	CS3: (1 LF) The south face of Pedestal 2 exhibits an 8" diameter x 1/2" D spall with exposed corroded steel reinforcement.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 26

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 52N (Pier 51N to  
Pier 52N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	51	0	51	0	0	0	CS2: (51 LF) Numerous spalls around armoring. Partially filled with debris, with active leakage and ponding water on the pier cap below (see Photo 23). There are several cracks and tears in the material and armoring is pushed up in the gore area. There is keeper bar and joint material laying on the pier below.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	690	574	110	6	0	0	CS2: (110 LF) Localized areas of minor spot or freckled corrosion on the flanges and ends. Beam 8 at the south end exhibits flaking paint with exposed primer. The underside of the Beam 5 bottom flange at the south end exhibits severe spot corrosion. CS3: (6 LF) The top flanges of Beams 1, 6, 7, 8, 9, and 10 at the south end exhibit exposed and corroded steel.
331	4	Conc Bridge Railing	(LF)	138	25	0	63	50	0	CS3: (63 LF) The exterior faces of both parapets exhibit hairline to 1/8" wide horizontal cracks with corrosion stains and efflorescence. CS4: (50 LF) The exterior face of both parapets exhibit up to 1/2" wide horizontal cracks.
334	4	Metal Rail Coated	(LF)	70	12	20	10	28	0	CS2: (20 LF) Few panels with areas of minor corrosion staining. CS3: (10 LF) Areas of missing paint with exposed and corroded metal. CS4: (28 LF) Random small clusters of severe corrosion with small holes through the panel.
381	3	Painted Steel Diaphr	(EA)	36	0	32	4	0	0	CS2: (32 EA) Diaphragms exhibit minor spot or freckled corrosion. CS3: (4 EA) A few diaphragms have exposed and corroded steel.
311	4	Moveable Bearing	(EA)	10	9	1	0	0	0	CS1: (9 EA) Sliding plate bearings at Pier 51N are heavily greased with minor spot corrosion to the exposed plates. CS2: (1 EA) Bearing 6 is uplifted 1/4" above the bearing plate and rests on painted pack rust which is actively corroding.
313	4	Fixed Bearing	(EA)	10	10	0	0	0	0	CS1: (10 EA) Fixed bearings at Pier 52N are heavily greased with areas of minor spot corrosion to the exposed steel. Bearings exhibit up to 1/8-inch pack rust between the pedestal and masonry plate.
205	3	R/Conc Column	(LF)	63	61	2	0	0	0	CS2; (2 LF) Column 1 exhibits a 6" H x 2" W x 1" D spall in the northeast corner at the base. Column 2 exhibits a 12" H x 6" W x 2" D spall in the northeast corner at the base.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	51	46	0	5	0	0	CS1: (46 LF) The north and south faces exhibit random areas at the top with hairline map cracking. CS3: (5 LF) The east end of the south face exhibits a 32" W x 16" H delamination with corrosion stains and hairline map cracks. The south face of Pedestal 3 exhibits a 2' W x 7" H x 3" L x 1" D corner spall with exposed and corroded steel reinforcement (no undermining of the masonry plate).
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
		Steel Fatigue								

356	1	SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 27

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 53N (Pier 52N to  
Pier 53N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	0	0	0	0	0	0	0
300	4	Strip Seal Exp Joint	(LF)	55	0	55	0	0	0	CS2: (55 LF) Numerous spalls up to 6" W x 3" L x 1/2" D around armoring, joint is partially filled with debris, with active leakage to the pier cap below.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	621	551	70	0	0	0	CS2: (70 LF) The beam ends exhibit minor spot corrosion and freckled corrosion to the underside of the bottom flanges (more prominent at the south ends). There are random areas of freckled corrosion to underside of the top flanges and webs and small scattered areas of edge corrosion.
331	4	Conc Bridge Railing	(LF)	138	95	11	32	0	0	CS2: (11 LF) The top of the exterior face of the West Parapet exhibits a 1/16" wide longitudinal crack. The interior face of the West Parapet at the base of the south end exhibits a 10" H x 10" L x 2" D spall. CS3: (32 LF) The exterior face of the West Parapet exhibits 1/8" to 1/4" wide horizontal cracks. The interior face of the West Parapet exhibits a few hairline horizontal cracks with corrosion stains.
334	4	Metal Rail Coated	(LF)	70	14	16	13	27	0	CS2: (16 LF) East side with damaged third post. Few panels with corrosion stains and a small dent to the panel at the north end. CS3: (13 LF) Areas of missing paint with exposed metal (no active corrosion). CS4: (27 LF) Random small clusters of severe corrosion with small holes through the panel.
381	3	Painted Steel Diaphr	(EA)	36	7	25	4	0	0	CS2: (25 EA) Diaphragms exhibit minor spot corrosion. CS3: (4 EA) A few diaphragms exhibit blistering paint with exposed and corroded steel to the webs and flanges.
311	4	Moveable Bearing	(EA)	9	0	3	6	0	0	CS2: (3 EA) Sliding plate bearings at Pier 53N are heavily greased with active surface corrosion (severe at Bearing 5 through 7). Bearings 8 and 9 appear frozen with no evidence of movement. CS3: (6 EA) Bearings are over contracted at 43 degrees Fahrenheit with the south face of the bronze plate overhanging the masonry plate of Bearings 1 through 6. Bearings 1, 3, and 6 are moving unevenly. Overhang Measurements: Bearing 1 = 3/4" (East), 7/8" (West); Bearing 2 = 7/8"; Bearing 3 = 5/8" (East), 3/4" (West); Bearing 4 = 3/4"; Bearing 5 = 3/4"; Bearing 6 = 1 5/16" (East) (see Photo 33), 1 3/16" (West).
313	4	Fixed Bearing	(EA)	9	9	0	0	0	0	CS1: (9 EA) Fixed bearings at Pier 52N are heavily greased with areas of minor spot corrosion on the exposed plates and up to 1/8" pack rust.
205	3	R/Conc Column	(LF)	85	45	10	30	0	0	CS2: (10 LF) The south face of Column 3 at mid-height exhibits a 1' H x 3' W x 1/2' D spall with adjacent 10' H x 3' W delamination with hairline map cracking. CS3: (30 LF) The north face of Column 3 at the top exhibits a 1' H x 1' W area of 1/16 to 1/8" W map cracking with corrosion stains. The top of Column 2 at the southeast corner exhibits a 35" H x 8" W x 4" L x 1" D spall with corrosion stains. The south face of Column 2 at mid-height exhibits a 22" W x 6" H x 1" D spall with exposed corroded steel reinforcement adjacent to a repair with numerous hairline cracks with corrosion stains.

215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	55	20	0	35	0	0	CS3: (35 LF) The east face of Pedestal 2 exhibits hairline vertical cracks with a 40" L x 12" H corner spall with corrosion stains. The south face of Pedestal 3 exhibits a 23" W x 4" H x 4" D spall with exposed corroded steel reinforcement. The south face of Pedestals 5 and 6 exhibit horizontal / diagonal hairline cracks with corrosion stains. 1/16" to 1/8" wide horizontal cracks with corrosion stains at the top of the south face below Bays 1, 2 and 5. The top of the north face below Bays 1 and 2 exhibits 1/8" wide map cracks with corrosion stains and adjacent delaminations. The underside between Columns 1 and 2 exhibits three (3) spalls with exposed corroded steel reinforcement (14" W x 10" L x 1" D; 10" W x 8" L x 1" D; 9" W x 11" L x 1" D) (see Photo 35). The north face below Bay 8 exhibits a patch with cracks and corrosion stains and adjacent delaminations. The south face below Bay 8 exhibits a full-height x up to 1/8" W vertical crack with corrosion stains, efflorescence, and adjacent delaminations.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 28

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 54N (Pier 53N to  
Pier 54N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	0	0	0	0	0	0	0
300	4	Strip Seal Exp Joint	(LF)	54	0	54	0	0	0	CS2: (54 LF) Numerous spalls up to 2' W x 4" L x 1" D around the joint armoring, filled with debris partial width, debonded and torn areas with active leakage and ponding water on the pier cap below. There is joint material laying on the pier cap below.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	621	559	62	0	0	0	CS2: (62 LF) Few localized areas of minor spot or freckled corrosion on the flanges and flange edges. CS3: (0 LF) The previously noted areas of corrosion to the top flange of Beam 5 were not observed during the 2013 inspection.
331	4	Conc Bridge Railing	(LF)	138	69	34	35	0	0	CS2: (34 LF) The top of the exterior face of the West Parapet exhibits 1/16" wide longitudinal cracks. CS3: (35 LF) Some cracks in the West Parapet exhibit corrosion stains. The exterior face of the West Parapet exhibits a 1/8" to 3/16" wide horizontal crack near the top with adjacent 3" H delaminations above.
334	4	Metal Rail Coated	(LF)	70	16	6	18	30	0	CS2: (6 LF) East side with two (2) bent panels near mid-span and minor collision damage at the north end. CS3: (18 LF) Areas of missing paint with exposed metal (no corrosion) and blistering corrosion at some fasteners. CS4: (30 LF) Scattered areas of severe corrosion with small holes through the panels.
381	3	Painted Steel Diaphr	(EA)	36	3	28	5	0	0	CS2: (28 EA) Diaphragms exhibit minor spot corrosion. Minor dents in the top flanges of the Bay 4 end diaphragms at Pier 54N. CS3: (5 EA) End diaphragms at Pier 53N in Bays 4, 5, and 8, and the end diaphragms at Pier 54N in Bay 1, and a few interior diaphragms exhibit exposed and corroded steel.
311	4	Moveable Bearing	(EA)	9	0	4	5	0	0	CS2: (4 EA) Sliding plate bearings at Pier 53N are heavily greased with minor corrosion to the exposed plates and up to 1/2" pack rust between the masonry plates and sliding plates. Bearing 3 and 4 sliding plates are flush with the masonry plate. Bearings 8 and 9 with no evidence of movement. CS3: (5 EA) Bearings are over expanded at 40 degrees Fahrenheit (appears to be as-built condition) with the south face of the bronze plate overhanging the masonry plate of Bearings 1, 2, 5, 6, and 7. Bearings 1, 5, and 6 are moving unevenly. Overhang Measurements: Bearing 1 = 1/4" (East), 1/8" (West); Bearing 2 = 3/8"; Bearing 5 = 3/8" (East), 1/4" (West); Bearing 6 = 5/8" (East), 1/4" (West); Bearing 7 = 5/8".
313	4	Fixed Bearing	(EA)	9	9	0	0	0	0	CS1: (9 EA) Fixed bearings at Pier 54N are heavily greased and exhibit painted over pack rust up to 1/8" causing the sole plates to uplift from the masonry plates.
205	3	R/Conc Column	(LF)	87	85	2	0	0	0	CS2: (2 LF) The northwest corner at the base of Column 4 exhibits a 16" H x 4" W x 1" D spall.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
										CS3: (5 LF) The west face of Pedestal 5 exhibits an 8" L x 6" H delamination with 1/16" wide map cracking with corrosion



234	3	R/Conc Pier Cap	(LF)	54	49	0	5	0	0	stains. The north face at the east end exhibits three (3) rust stains. The north face below Beam 3 exhibits a 1/16" wide horizontal crack with corrosion stains and adjacent 3' W x 3" H delamination.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 29

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 55N (Pier 54N to  
Pier 55N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	0	0	0	0	0	0	0
300	4	Strip Seal Exp Joint	(LF)	51	0	51	0	0	0	CS2: (51 LF) Numerous spalls up to 2' W x 4" L x 1" D around the joint armoring. Joint material is missing and laying on the pier cap with evidence of leakage (see Photo 24).
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	552	498	50	4	0	0	CS2: (50 LF) Localized areas of minor spot or freckled corrosion on the flanges. The underside of the bottom flanges at Pier 54N exhibit freckled corrosion clusters. CS3: (4 LF) The ends of Beams 1 and 8 at the piers exhibit exposed and corroded steel to the flanges. The underside of the top flange at the north end of Beam 8 exhibits severe surface corrosion.
331	4	Conc Bridge Railing	(LF)	138	55	52	21	10	0	CS2: (52 LF) Horizontal 1/16" wide cracks throughout both parapets. The exterior face of the West Parapet exhibits a 1/16" to 1/8" wide horizontal crack at the top. The West Parapet exhibits a 6" diameter x 3/4" D spall at the base. The exterior face at the south end of the West Parapet exhibits a 1' L x 10" H x 6" D spall. CS3: (21 LF) The interior face of the East Parapet at the north joint exhibits a 10" H x 6" W x 5" D spall with exposed corroded steel reinforcement. The exterior face of the West Parapet exhibits a 3/16" wide horizontal crack near the top. CS4: (10 LF) The exterior face of the West Parapet exhibits a 5/16" wide horizontal crack near the top at the south end.
334	4	Metal Rail Coated	(LF)	70	13	10	16	31	0	CS2: (10 LF) Areas of minor corrosion and panel with dent. CS3: (16 LF) Areas of missing paint with exposed and corroded metal. CS4: (31 LF) Random small clusters of small holes through the panels.
381	3	Painted Steel Diaphr	(EA)	36	9	23	4	0	0	CS2: (23 EA) Diaphragms exhibit minor spot or freckled corrosion. Minor dents in the top flanges of the end diaphragms in Bays 3 and 4 at Pier 54N. CS3: (4 EA) Diaphragms with chipped paint and blistering corrosion on the edges with exposed and corroded steel. The bottom flange of the end diaphragm in Bay 3 at Pier 55N exhibits peeling paint with exposed steel.
311	4	Moveable Bearing	(EA)	8	5	3	0	0	0	CS1: (5 EA) Sliding plate bearings at Pier 55N are heavily greased and in expansion mode (appears to be as-built) at 32 degrees Fahrenheit. CS2: (3 EA) Bearings 3 and 8 are missing the west anchor bolt nuts and Bearing 6 is missing the east anchor bolt nut.
313	4	Fixed Bearing	(EA)	8	8	0	0	0	0	CS1: (8 EA) Fixed bearings at Pier 54N are heavily greased and exhibit painted over pack rust up to 1/8" causing the sole plates to uplift from the masonry plates.
205	3	R/Conc Column	(LF)	60	56	4	0	0	0	CS2: (4 LF) The northeast corner of Column 3 at mid-height exhibits 1/16" wide horizontal and vertical cracks. The southwest corner at mid-height exhibits 1/16" wide vertical cracks with adjacent 38" H x 5" L x 4" W delamination.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	51	0	21	30	0	0	See Additional Sheet
390	2	Reinf Conc	(LF)	0	0	0	0	0	0	0

		Wingwalls								
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 30

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 56N (Pier 55N to  
Pier 56N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	0	0	0	0	0	0	0
300	4	Strip Seal Exp Joint	(LF)	55	0	55	0	0	0	CS2: (55 LF) Filled with debris for the partial width, depressed (1-inch) and debonded areas with evidence of leakage.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	567	442	122	3	0	0	CS2: (122 LF) Minor freckled and spot corrosion on the bottom flanges and cover plates. Minor surface corrosion to the fasteners at the webs. CS3: (3 LF) The ends of Beams 1 and 8 exhibit corrosion along the outside of the top flanges.
331	4	Conc Bridge Railing	(LF)	162	19	81	51	11	0	CS2: (81 LF) The East and West Parapets exhibit up to 1/8" wide horizontal cracks. The interior face of the West Parapet at the south end exhibits a 12" H x 18" L x 2" D spall. CS3: (51 LF) The top of the West Parapet exhibits a 1/8" to 1/4" wide longitudinal crack. The interior face of the West Parapet exhibits a few horizontal hairline cracks with corrosion stains. CS4: (11 LF) The exterior face of the West Parapet at the south end exhibits a 3/8" W horizontal crack with adjacent 6" H delaminations above and a 3' L x full-height x 4" D spall with exposed corroded steel reinforcement (see Photo 27).
334	4	Metal Rail Coated	(LF)	81	37	8	11	25	0	CS2: (8 LF) Few small dents in panel and loose expansion plate at the north end. Few posts with blistering around fasteners. CS3: (11 LF) Random small areas of missing paint with exposed and corroded steel. CS4: (25 LF) Scattered clusters of small holes through the panels.
381	3	Painted Steel Diaphr	(EA)	35	0	34	1	0	0	CS2: (34 EA) Diaphragms with spot corrosion. CS3: (1 EA) The end diaphragm in Bay 6 at Pier 56N exhibits exposed and corroded steel.
311	4	Moveable Bearing	(EA)	8	8	0	0	0	0	CS1: (8 EA) Sliding plate bearings at Pier 55N exhibit surface corrosion on the plate edges, flaking paint, and minor blistering corrosion along the masonry plate. Some anchor bolt nuts with flaking paint with corrosion.
313	4	Fixed Bearing	(EA)	8	8	0	0	0	0	CS1: (8 EA) Fixed bearings at Pier 56N are heavily greased with NDO.
205	3	R/Conc Column	(LF)	56	54	2	0	0	0	CS2: (2 LF) Small corner spalls due to collision damage at the northeast corners of Column 1 and Column 2 and the southeast corner of Column 2.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	55	55	0	0	0	0	CS1: (54 LF) The east face of Pedestal 8 exhibits a 3' L x up to 1/16" W horizontal crack. The north face below Bay 7 exhibits a 3' H x 2' W area of hairline map cracking. CS3: (1 LF) The south face below Bay 7 exhibits a 4' W x 1/16" W horizontal crack with corrosion stains.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0

363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0	0
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# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 31

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 57N (Pier 56N to  
Pier 57N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	0	0	1	0	0	CS3: (1 EA) Downspout with corrosion at the top of the pipe. Scupper completely clogged and debris pushing grate upward. There is an abandoned downspout at Pier 57N at Bay 7 that is capped / not functional.
300	4	Strip Seal Exp Joint	(LF)	60	0	60	0	0	0	CS2: (60 LF) Filled with debris at the shoulder and minor debris throughout, depressed (1-inch) and debonded areas.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	648	520	120	8	0	0	CS2: (120 LF) Minor freckled or spot corrosion on the bottom flanges and exterior top flanges of Beams 1 and 8. Minor corrosion to the fasteners in the webs at the north end. Areas of corrosion to the bottom flanges at the light conduit. CS3: (8 LF) Exterior top flange edges of Beams 1 and 8 at ends exhibit corrosion. The bottom flange cover plate underside of Beam 1 at mid-span exhibits an area of exposed steel from previous rigging connections. Beam 8 interior top flange edge with corrosion at the south end.
331	4	Conc Bridge Railing	(LF)	162	44	10	78	30	0	CS2: (10 LF) The exterior face of the West Parapet exhibits 1/16" to 1/8" wide horizontal cracks. CS3: (78 LF) The top of the West Parapet exhibits a 1/8" to 1/4" wide longitudinal crack. The exterior face of the East Parapet exhibits a 40" L x 6" H x 5" D spall at the south end. Both parapets exhibit severe scaling. The interior face of the East Parapet exhibits horizontal hairline cracks with corrosion stains. CS4: (30 LF) The exterior face of the West Parapet exhibits 1/4" to 5/16" wide horizontal cracks across top with adjacent 6" H delaminations.
334	4	Metal Rail Coated	(LF)	81	45	10	14	12	0	CS2: (10 LF) Small blisters around some fasteners and a few small dents. CS3: (14 LF) Random small areas of missing paint with exposed and corroded metal. Exterior faces with areas of flaking paint with corroded metal. CS4: (12 LF) Scattered clusters of small holes through the panels.
381	3	Painted Steel Diaphr	(EA)	35	2	32	1	0	0	CS2: (32 EA) Diaphragms exhibit minor spot corrosion. The Bay 4 end diaphragm at Pier 56N has a slightly bent bottom flange. CS3: (1 EA) The end diaphragm in Bay 6 at Pier 56N exhibits exposed and corroded steel.
311	4	Moveable Bearing	(EA)	8	8	0	0	0	0	CS1: (8 EA) Sliding plate bearings at Pier 57N exhibit flaking paint and minor spot corrosion to the plate edges and minor blistering corrosion to the masonry plates and anchor bolt nuts.
313	4	Fixed Bearing	(EA)	8	8	0	0	0	0	CS1: (8 EA) Fixed bearings at Pier 56N are heavily greased with NDO.
205	3	R/Conc Column	(LF)	42	42	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	60	54	5	1	0	0	CS2: (5 LF) The south face of Pedestal 7 exhibits a 10" W x 7" H x 1" D spall. The top surface exhibits a 58" W x 17" L delamination that extends into the south face up to 18" H. CS3: (1 LF) The south face below Bay 7 exhibits a 2' L hairline horizontal crack with corrosion stains.
390	2	Reinf Conc	(LF)	0	0	0	0	0	0	0

		Wingwalls								
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 32

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 58N (Pier 57N to  
Pier 58N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	2	1	0	1	0	0	CS3: (1 EA) Scupper 100% clogged at the north end.
300	4	Strip Seal Exp Joint	(LF)	65	0	65	0	0	0	CS2: (65 LF) Filled with debris at the shoulder, depressed (1-inch) and debonded areas with evidence of leakage. There is failed joint material laying on top of the pier cap below.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	729	684	42	3	0	0	CS2: (42 LF) Localized areas of minor spot or freckled corrosion to the flanges. Minor corrosion to the fasteners in the webs at the south end. CS3: (3 LF) Both ends of Beam 9 and the north end of Beam 1 with exposed and corroded steel to the exterior top flange edges (see Photo 31).
331	4	Conc Bridge Railing	(LF)	162	84	3	75	0	0	CS2: (18 LF) The top of the exterior face of the West Parapet exhibits a 1/16" wide longitudinal crack. The base of the interior face of the East Parapet exhibits spalls / scaling up to 18" L x 12" H x 5" D. CS3: (75 LF) The exterior face of the West Parapet exhibits a 1/8" to 1/4" wide horizontal crack.
334	4	Metal Rail Coated	(LF)	81	44	6	17	14	0	CS2: (6 LF) Few posts with blistering corrosion around the fasteners and a few small dents. CS3: (17 LF) Exterior face with some flaking paint with corrosion. Interior faces with areas of missing paint with exposed and corroded metal. CS4: (14 LF) Scattered small clusters of holes through the panels.
381	3	Painted Steel Diaphr	(EA)	40	15	25	0	0	0	CS2: (25 EA) Diaphragms exhibit minor spot corrosion
311	4	Moveable Bearing	(EA)	9	7	2	0	0	0	CS1: (7 EA) Sliding plate bearings at Pier 57N exhibit minor spot corrosion. CS2: (2 EA) Beams 1 and 9 anchor bolt nuts exhibit moderate rust laminations with up to 1/16" section loss.
313	4	Fixed Bearing	(EA)	9	9	0	0	0	0	CS1: (9 EA) Fixed bearings at Pier 58N are heavily greased with painted over pack rust.
205	3	R/Conc Column	(LF)	42	42	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	65	61	1	3	0	0	CS2: (1 LF) The north face below Bay 1 exhibits a 19" H x 9" W delamination with vertical hairline cracks. CS3: (3 LF) The east face at the top exhibits a 20" L x 4" H delamination with corrosion stains. The north face of Pedestal 2 exhibits a 13" W x 8" H x 1/2" D spall with exposed and corroded steel reinforcement.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0



# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 33

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 59N (Pier 58N to  
Pier 59N)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper open and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	70	0	70	0	0	0	CS2: (70 LF) Filled with debris at the shoulder, depressed (1/2-inch) and debonded areas with evidence of leakage and ponding water on the pier cap below. There is joint material hanging down on the top of the pier cap below.
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	3	Paint Stl Opn Girder	(LF)	920	686	218	16	0	0	CS2: (218 LF) Localized areas of spot or freckled corrosion on the bottom flanges mostly at the ends or adjacent to cover plates. The Beam 5 west bearing stiffener at Pier 59N is bent 8" H x 1 3/4" outward toward the north. Minor corrosion to Beam 10 at Pier 59 N. CS3: (16 LF) The exterior top flange edge of Beam 1 exhibits a few corroded areas. Beams 2, 7, and 8 exhibit 2" diameter gouges on the bottom flange cover plates with exposed and corroded steel. More severe area of corrosion to the bottom flange and flange east edges at Beam 3. Beam 4 exhibits a few paint chips. Beam 9 adjacent to light conduit at the south end is corroded.
331	4	Conc Bridge Railing	(LF)	184	40	94	20	30	0	CS2: (94 LF) The interior face of the East Parapet exhibits vertical hairline cracks, minor scaling and minor base spalls. The East Parapet curb at the south end exhibits a 14" W x 7" H x 3" D spall, and areas of scaling. CS3: (20 LF) The top of the exterior face of the West Parapet exhibits a 1/8" to 1/4" wide horizontal crack. The interior face of the East Parapet at the south end at top exhibits a 20" W x 14" H x 10" D spall with exposed corroded steel reinforcement (see Photo 25). CS4: (30 LF) The exterior face of the West Parapet exhibits a 1/2" to 5/8" wide horizontal crack at the top with up to 1/8" lateral displacement and repair patches at the south end of the second section (see Photo 28). The first section at the south end exhibits a 1/4" to 1/2" wide horizontal crack with up to 1/4" lateral displacement.
334	4	Metal Rail Coated	(LF)	92	41	32	13	6	0	CS2: (32 LF) Panels with spot corrosion on the exterior face. A few minor dents and blistering corrosion on the posts around some fasteners. CS3: (13 LF) Areas of missing paint with exposed and corroded metal. CS4: (6 LF) Small scattered clusters of holes through the panels.
381	3	Painted Steel Diaphr	(EA)	45	7	38	0	0	0	CS2: (38 EA) Diaphragms exhibit minor spot or freckled corrosion.
311	4	Moveable Bearing	(EA)	10	10	0	0	0	0	CS1: (10 EA) Sliding plate bearings at Pier 59N exhibit minor spot corrosion on the plate edges, masonry plates, and anchor bolt nuts. The fascia bearings exhibit minor to moderate corrosion to the plate edges, masonry plates, and anchor bolt nuts.
313	4	Fixed Bearing	(EA)	10	10	0	0	0	0	CS1: (10 EA) Fixed bearings at Pier 58N are heavily greased with painted over pack rust up to 1/4" thick between the masonry plate and pedestal.
205	3	R/Conc Column	(LF)	42	42	0	0	0	0	NDO
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
										CS3: (4 LF) The west face of Pedestal 2

234	3	R/Conc Pier Cap	(LF)	70	66	0	4	0	0	exhibits a 16" L x 12" H x 1 1/2" D spall with exposed corroded steel reinforcement. The east face of Pedestal 3 exhibits a 1' L x 1/16" W horizontal crack with corrosion stains and adjacent 1' L x 4" H delamination. The south face below Bay 4 exhibits a 1' H x 1/16" W vertical crack with corrosion stains. The south face below Bay 8 exhibits a full-height x 1/16" W vertical crack with corrosion stains.
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0

# DELAWARE DEPARTMENT OF TRANSPORTATION

## Bridge Management Section MultiSpan PONTIS Element Report for Span No. 34

Bridge ID: 1748N059

Inspection Date: 3/28/2013

Description: Span 60N (Pier 59N to N.  
Abut.)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
22	4	P Conc Deck/Rigid Ov	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scupper and downspout with NDO.
300	4	Strip Seal Exp Joint	(LF)	79	0	79	0	0	0	CS2: (79 LF) Filled with debris at the shoulder, depressed (1 1/2-inches) and debonded areas.
321	4	R/Conc Approach Slab	(EA)	1	0	1	0	0	0	CS2: (1 EA) The approach slab exhibits random longitudinal and transverse hairline cracks, wear with exposed aggregate, spalls up to 18" W x 6" L x 1 1/4" D at the joint, and bituminous patches.
107	3	Paint Stl Opn Girder	(LF)	565	464	100	1	0	0	CS2: (100 LF) Localized areas of minor spot corrosion on the bottom flange cover plates and bottom flanges. CS3: (1 LF) The west web of Beam 3, 5-feet from the North Abutment, exhibits a 10-inch long area of peeling paint with corrosion.
331	4	Conc Bridge Railing	(LF)	113	38	70	5	0	0	CS2: (70 LF) The interior face of the East Parapet at the base exhibits hairline vertical cracks, scaling and spalls. The interior face of the East Parapet at the edge of the shoulder exhibits a minor delamination at the south joint. CS3: (5 LF) The interior face of the West Parapet exhibits hairline horizontal cracks at the north end with corrosion stains.
334	4	Metal Rail Coated	(LF)	57	52	3	0	2	0	CS2: (3 LF) Small areas of exposed primer (no corrosion). CS4: (2 LF) Small areas of holes through the panels.
381	3	Painted Steel Diaphr	(EA)	36	13	23	0	0	0	CS2: (23 EA) Diaphragms exhibit minor spot or freckled corrosion.
311	4	Moveable Bearing	(EA)	10	9	1	0	0	0	CS1: (9 EA) Sliding plate bearings at Pier 59N are heavily greased. CS2: (1 EA) Bearing 10 sole plate is uplifted 3/8" above the masonry plate at the east end.
313	4	Fixed Bearing	(EA)	10	10	0	0	0	0	CS1: (10 EA) Fixed bearings at the North Abutment are heavily greased with minor spot corrosion.
205	3	R/Conc Column	(LF)	0	0	0	0	0	0	0
215	2	R/Conc Abutment	(LF)	75	59	16	0	0	0	CS2: (16 LF) The backwall exhibits several delaminations at the top throughout. The backwall behind Beam 5 exhibits a full-height x 1/16" W vertical crack. The backwall in Bay 8 exhibits a delaminated patch.
231	3	Paint Stl Pier Cap	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	0	0	0	0	0	0	0
390	2	Reinf Conc Wingwalls	(LF)	24	24	0	0	0	0	NDO
356	1	Steel Fatigue SmFlag	(EA)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0
363	1	Section Loss SmFlag	(EA)	0	0	0	0	0	0	0





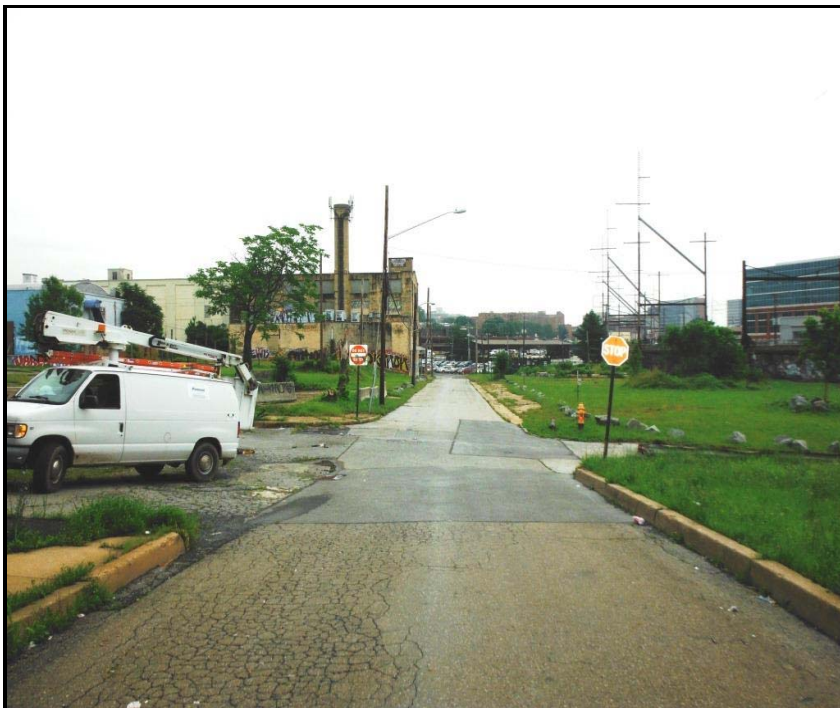
1. North Approach looking south onto the bridge.



2. East Elevation, looking north.



3. General view of underside, looking north (Span 56 shown).



4. Under record, Liberty St. (Span 30), looking east.



5. Under record, Liberty St. (Span 30), looking west.



6. Under record, Maryland Ave. (Span 33), looking east.





7. Under record, Maryland Ave. (Span 33), looking west.



8. Under record, Interstate 95 SB on-ramp (Span 44), looking east.





9. Under record, Interstate 95 SB on-ramp (Span 43), looking west.



10. Under record, Lancaster Pike (Span 46), lkg east. (Note: I-95 SB on-ramp)



11. Under record, Lancaster Pike (Span 46), lkg west. (Note: I-95 SB on-ramp)



12. Under record, 2nd St. (Span 50), looking east. (Note: I-95 NB on-ramp)



13. Under record, 2nd St. (Span 50), looking west.



14. Under record, 3rd St. (Span 56), looking east.





15. Under record, 3rd St. (Span 56), looking west.



16. Under record, 4th St. (Span 59), looking east.



17. Under record, 4th St. (Span 59), looking west.



18. General view of deck, looking north (Span 29 shown).





19. Span 32, East Shoulder, looking north - Fire damage.



20. Span 42, Bay 5 at N. end - 26" L x 22" W x 2" D spall w/ exp corr steel reinf.



21. Span 54, Bay 3 n. haunch - 7' L x FW x 4" D spall w/ exp corr steel reinf.



22. Span 27, East Shoulder - Typical clogged scupper.





23. Pier 52 strip seal joint - Typ debris, depressed & debonded material.



24. Pier 55 joint u/s - Joint material hanging down onto Pier 55 cap.





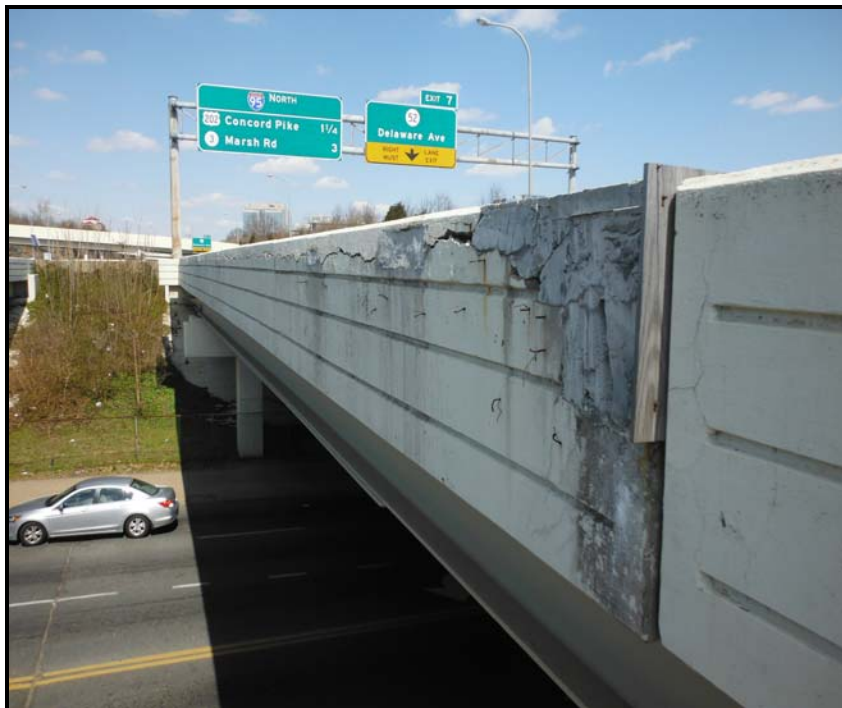
25. Sp 59, East Ppt - 20" L x 14" H x 10" D spall w/ exp corr steel reinf.



26. Span 46, W. Ppt ext face, n. end - Up to 5/8" W horizontal crack.



27. Sp 56, W. Ppt ext face, s. end - 3' L x FH x 4" D spall w/ exp corr steel reinf.



28. Sp 59, W Ppt ext face, s end - Patched delam/spalls w/ 5/8" W horiz crk.



29. Sp 43, E. Ppt conc box for sign struct. - Ponding water up to 3 1/2" D.



30. Sp 46, E. Ppt metal railing - 6 1/2" L x 1 1/2" H hole in panel.

**UNDER RECORD****For  
Bridge: 1748N059****IDENTIFICATION**

Bridge ID: 1748N059

Inventory Route:

(A) On/Under: A

(D) Route No: 00048

6A) Features Intersected: SR 4

16) Latitude: 39^44'26.24"

(2) District: 01

(B) Highway Type: 3

17) Longitude: 75^33'44.14"

(3) County: 3

(C) Service Lvl: 1

11) Mile Pt: 0.77 mi

6B) Critical:

**AGE AND SERVICE**

19) Detour Length: 5 mi

28) No. of Lanes:

29) ADT: 11832

27) Year Built: 1964

A) On Bridge: 5

30) Year of ADT: 2011

B) Under Bridge: 18

109) % Truck ADT: 6

**CLASSIFICATION**

20) Toll Facility: 3

26) Functional Class: 16

102) Direction: 2

110) Nat. Truck Network: 0

37) Historical: 5

103) Temp. Str.:

100) Defense Highway: 0

104) NHS: 0

**GEOMETRIC DATA**

10) Clearances - Vertical:: 17.7 ft

42) Type of Service:

43A) MAIN SPAN MATERIAL: 3

47) Inv. Route - Horiz.

Clearance: 55.8 ft

48) Length Maximum Span: 149.0 ft

A) On Bridge: 6

B) Under Bridge: 1

43B) DESIGN TYPE: 02

49) Structure Length: 2,346.0 ft

**UNDER RECORD SKETCH**

**UNDER RECORD****For  
Bridge: 1748N059****IDENTIFICATION**

Bridge ID: 1748N059

Inventory Route:

(A) On/Under: B

(D) Route No: 00048

6A) Features Intersected: SR 4

16) Latitude: 39°44'26.24"

(2) District: 01

(B) Highway Type: 3

17) Longitude: 75°33'44.14"

(3) County: 3

(C) Service Lvl: 1

11) Mile Pt: 9.15 mi

6B) Critical:

**AGE AND SERVICE**

19) Detour Length: 5 mi

28) No. of Lanes:

29) ADT: 24162

27) Year Built: 1964

A) On Bridge: 3

30) Year of ADT: 2011

B) Under Bridge: 18

109) % Truck ADT: 6

**CLASSIFICATION**

20) Toll Facility: 3

26) Functional Class: 14

102) Direction: 1

110) Nat. Truck Network: 0

37) Historical: 5

103) Temp. Str.:

100) Defense Highway: 0

104) NHS: 1

**GEOMETRIC DATA**

10) Clearances - Vertical:: 33.9 ft

42) Type of Service:

43A) MAIN SPAN MATERIAL: 3

47) Inv. Route - Horiz.

Clearance: 38.4 ft

48) Length Maximum Span: 149.0 ft

A) On Bridge: 6

B) Under Bridge: 1

43B) DESIGN TYPE: 02

49) Structure Length: 2,346.0 ft

**UNDER RECORD SKETCH**



**UNDER RECORD****For  
Bridge: 1748N059****IDENTIFICATION**

Bridge ID: 1748N059

Inventory Route:

(A) On/Under: C

(D) Route No: 00004

6A) Features Intersected: SR 4

16) Latitude: 39°44'26.24"

(2) District: 01

(B) Highway Type: 3

17) Longitude: 75°33'44.14"

(3) County: 3

(C) Service Lvl: 1

11) Mile Pt: 6.48 mi

6B) Critical:

**AGE AND SERVICE**

19) Detour Length: 5 mi

28) No. of Lanes:

29) ADT: 12033

27) Year Built: 1964

A) On Bridge: 4

30) Year of ADT: 2011

B) Under Bridge: 18

109) % Truck ADT: 11

**CLASSIFICATION**

20) Toll Facility: 3

26) Functional Class: 14

102) Direction: 2

110) Nat. Truck Network: 0

37) Historical: 5

103) Temp. Str.:

100) Defense Highway: 0

104) NHS: 1

**GEOMETRIC DATA**

10) Clearances - Vertical:: 23.0 ft

42) Type of Service:

43A) MAIN SPAN MATERIAL: 3

47) Inv. Route - Horiz.

Clearance: 42.2 ft

48) Length Maximum Span: 149.0 ft

A) On Bridge: 6

B) Under Bridge: 1

43B) DESIGN TYPE: 02

49) Structure Length: 2,346.0 ft

**UNDER RECORD SKETCH**

**UNDER RECORD****For  
Bridge: 1748N059****IDENTIFICATION**

Bridge ID: 1748N059

Inventory Route:

(A) On/Under: D

(D) Route No: 00000

6A) Features Intersected: SR 4

16) Latitude: 39°44'26.24"

(2) District: 01

(B) Highway Type: 5

17) Longitude: 75°33'44.14"

(3) County: 3

(C) Service Lvl: 1

11) Mile Pt: 0.50 mi

6B) Critical:

**AGE AND SERVICE**

19) Detour Length: 0 mi

28) No. of Lanes:

29) ADT: 180

27) Year Built: 1964

A) On Bridge: 1

30) Year of ADT: 2011

B) Under Bridge: 18

109) % Truck ADT: 5

**CLASSIFICATION**

20) Toll Facility: 3

26) Functional Class: 19

102) Direction: 1

110) Nat. Truck Network: 0

37) Historical: 5

103) Temp. Str.:

100) Defense Highway: 0

104) NHS: 0

**GEOMETRIC DATA**

10) Clearances - Vertical:: 23.5 ft

42) Type of Service:

43A) MAIN SPAN MATERIAL: 3

47) Inv. Route - Horiz.

Clearance: 15.0 ft

48) Length Maximum Span: 149.0 ft

A) On Bridge: 6

B) Under Bridge: 1

43B) DESIGN TYPE: 02

49) Structure Length: 2,346.0 ft

**UNDER RECORD SKETCH**

**UNDER RECORD****For  
Bridge: 1748N059****IDENTIFICATION**

Bridge ID: 1748N059

Inventory Route:

(A) On/Under: E

(D) Route No: 00000

6A) Features Intersected: SR 4

16) Latitude: 39^44'26.24"

(2) District: 01

(B) Highway Type: 5

17) Longitude: 75^33'44.14"

(3) County: 3

(C) Service Lvl: 1

11) Mile Pt: 0.45 mi

6B) Critical:

**AGE AND SERVICE**

19) Detour Length: 1 mi

28) No. of Lanes:

29) ADT: 100

27) Year Built: 1964

A) On Bridge: 2

30) Year of ADT: 2011

B) Under Bridge: 18

109) % Truck ADT: 5

**CLASSIFICATION**

20) Toll Facility: 3

26) Functional Class: 19

102) Direction: 2

110) Nat. Truck Network: 0

37) Historical: 5

103) Temp. Str.:

100) Defense Highway: 0

104) NHS: 0

**GEOMETRIC DATA**

10) Clearances - Vertical:: 34.3 ft

42) Type of Service:

43A) MAIN SPAN MATERIAL: 3

47) Inv. Route - Horiz.

Clearance: 20.0 ft

48) Length Maximum Span: 149.0 ft

A) On Bridge: 6

B) Under Bridge: 1

43B) DESIGN TYPE: 02

49) Structure Length: 2,346.0 ft

**UNDER RECORD SKETCH**



**UNDER RECORD****For  
Bridge: 1748N059****IDENTIFICATION**

Bridge ID: 1748N059

Inventory Route:

(A) On/Under: F

(D) Route No: 00048

6A) Features Intersected: SR 4

16) Latitude: 39°44'26.24"

(2) District: 01

(B) Highway Type: 3

17) Longitude: 75°33'44.14"

(3) County: 3

(C) Service Lvl: 1

11) Mile Pt: 7.81 mi

6B) Critical:

**AGE AND SERVICE**

19) Detour Length: 0 mi

28) No. of Lanes:

29) ADT: 9065

27) Year Built: 1964

A) On Bridge: 3

30) Year of ADT: 2011

B) Under Bridge: 18

109) % Truck ADT: 6

**CLASSIFICATION**

20) Toll Facility: 3

26) Functional Class: 14

102) Direction: 1

110) Nat. Truck Network: 0

37) Historical: 5

103) Temp. Str.:

100) Defense Highway: 0

104) NHS: 1

**GEOMETRIC DATA**

10) Clearances - Vertical:: 34.0 ft

42) Type of Service:

43A) MAIN SPAN MATERIAL: 3

47) Inv. Route - Horiz.

Clearance: 32.3 ft

48) Length Maximum Span: 149.0 ft

A) On Bridge: 6

B) Under Bridge: 1

43B) DESIGN TYPE: 02

49) Structure Length: 2,346.0 ft

**UNDER RECORD SKETCH**

**UNDER RECORD****For  
Bridge: 1748N059****IDENTIFICATION**

Bridge ID: 1748N059

Inventory Route:

(A) On/Under: G

(D) Route No: 00095

6A) Features Intersected: SR 4

16) Latitude: 39^44'26.24"

(2) District: 01

(B) Highway Type: 1

17) Longitude: 75^33'44.14"

(3) County: 3

(C) Service Lvl: 7

11) Mile Pt: 0.00 mi

6B) Critical:

**AGE AND SERVICE**

19) Detour Length: 0 mi

28) No. of Lanes:

29) ADT: 3272

27) Year Built: 1964

A) On Bridge: 1

30) Year of ADT: 2011

B) Under Bridge: 18

109) % Truck ADT: 0

**CLASSIFICATION**

20) Toll Facility: NA

26) Functional Class: NA

102) Direction: NA

110) Nat. Truck Network: NA

37) Historical: 5

103) Temp. Str.:

100) Defense Highway: NA

104) NHS: 0

**GEOMETRIC DATA**

10) Clearances - Vertical:: 15.3 ft

42) Type of Service:

43A) MAIN SPAN MATERIAL: 3

47) Inv. Route - Horiz.

Clearance: 12.2 ft

48) Length Maximum Span: 149.0 ft

A) On Bridge: 6

B) Under Bridge: 1

43B) DESIGN TYPE: 02

49) Structure Length: 2,346.0 ft

**UNDER RECORD SKETCH**

# Under Record Sketch Sheet

SPAN 30

I-95 OVER LIBERTY STREET

Bridge: 1 - 748N - 059

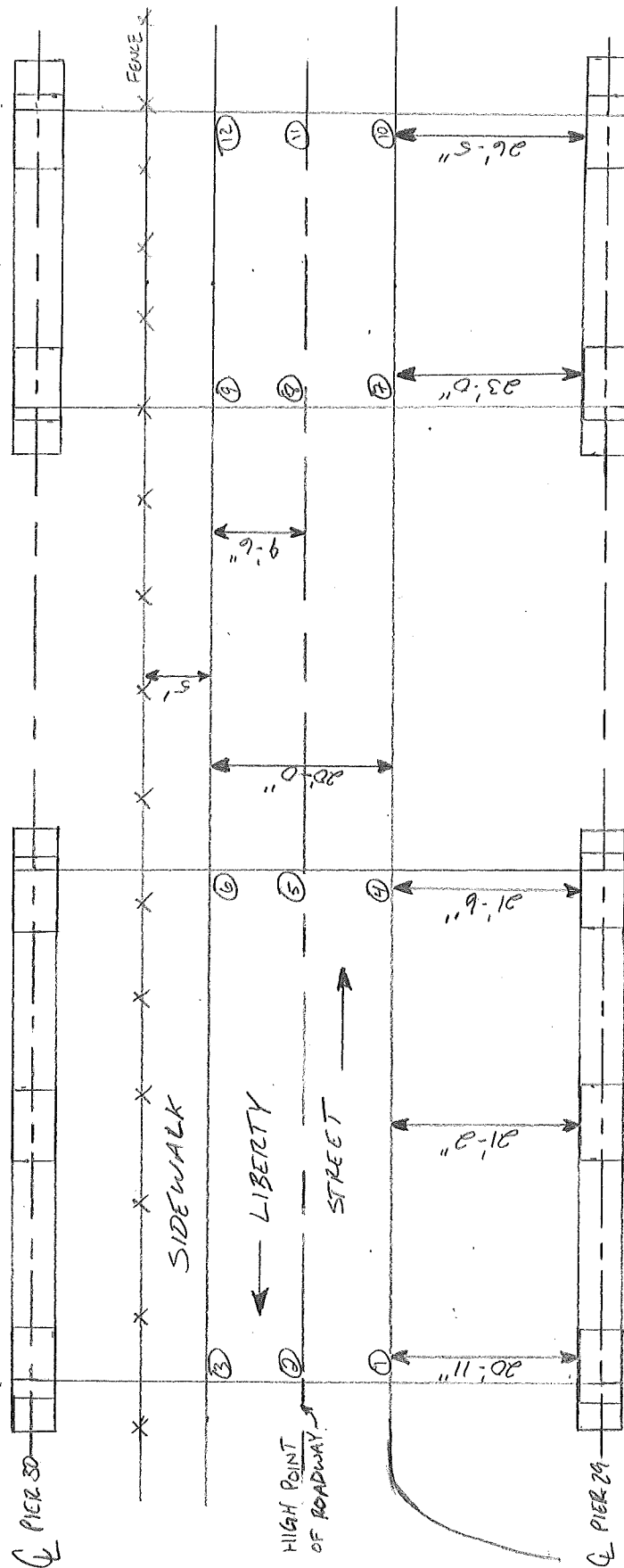
Inspected By: JZQ, SONI

Date: 4, 19, 2013

N

I-95SB

I-95NB



## VERTICAL CLEARANCES:

### SOUTHBOUND

- ① 31'-9"
- ② 31'-7"
- ③ 31'-10"
- ④ 33'-8"
- ⑤ 33'-6"
- ⑥ 33'-8"

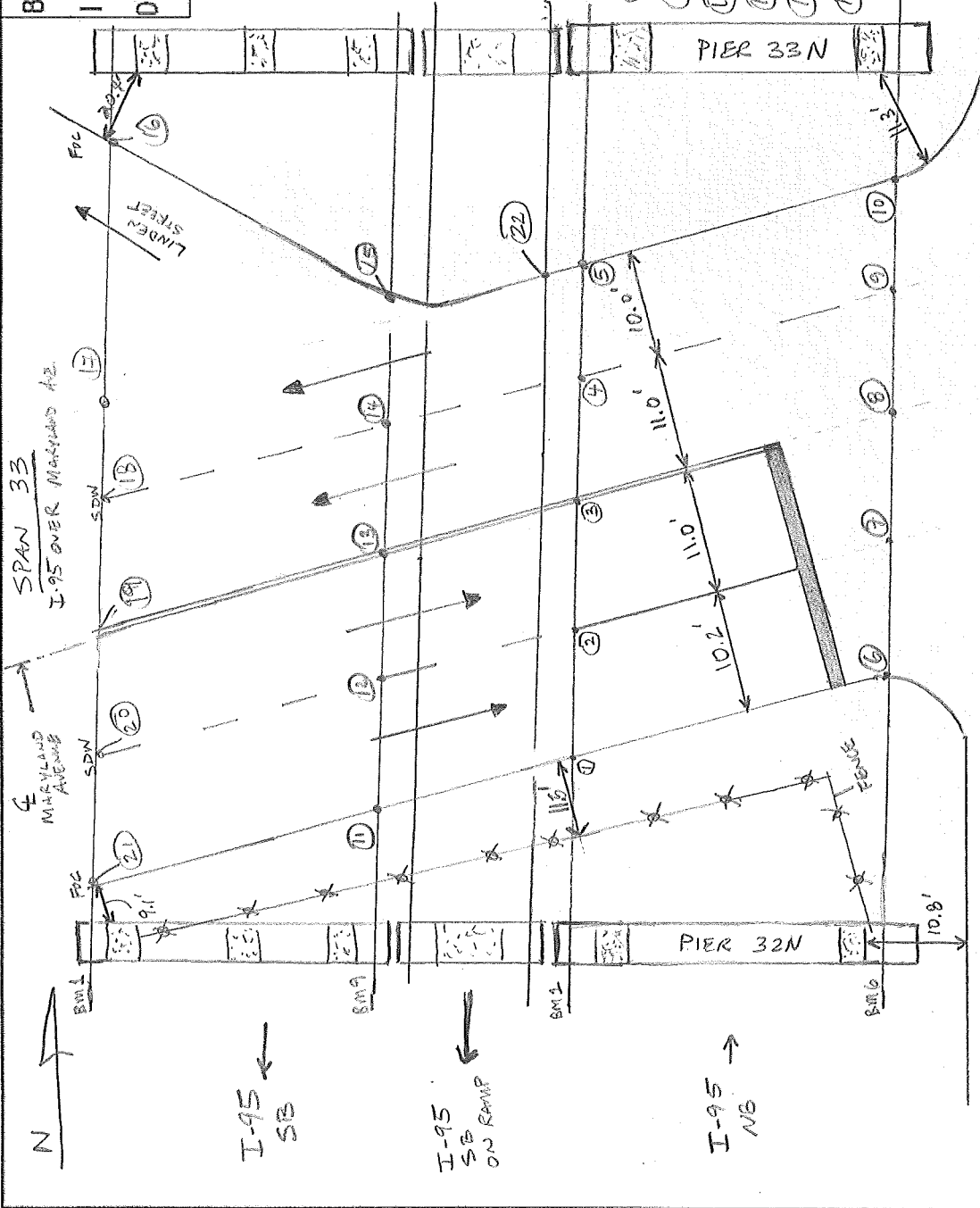
### NORTHBOUND

- ⑦ 34'-6"
- ⑧ 34'-4"
- ⑨ 34'-5"
- ⑩ 35'-1"
- ⑪ 34'-11"
- ⑫ 35'-1"

MIN LAT RT = 23'-0" (ITEM 55)  
 MIN LAT LT = 0 (ITEM 56)  
 MIN VT CLR = 34'-4" (ITEM 54)

# Under Record Sketch Sheet

Bridge: 1 . 748N . 059  
 Inspected By: SON, BSM,  
 Date: 4 , 16 , 2013



## VERTICAL CLEARANCES

### NORTHBOUND:

- |   |        |    |        |
|---|--------|----|--------|
| 1 | 23'-0" | 6  | 25'-0" |
| 2 | 23'-1" | 7  | 25'-1" |
| 3 | 23'-1" | 8  | 25'-1" |
| 4 | 23'-3" | 9  | 25'-2" |
| 5 | 23'-3" | 10 | 25'-4" |

### SOUTHBOUND:

- |    |        |    |         |
|----|--------|----|---------|
| 11 | 24'-9" | 16 | 23'-4"  |
| 12 | 24'-7" | 17 | 22'-11" |
| 13 | 24'-7" | 18 | 22'-11" |
| 14 | 25'-0" | 19 | 22'-11" |
| 15 | 25'-0" | 20 | 22'-11" |
| 16 | 23'-2" | 21 | 23'-0"  |

### ON-RAMP

- |    |        |
|----|--------|
| 22 | 22'-4" |
|----|--------|

## NOTES:

- ITEM 54: 23'-0" } F48N  
 ITEM 55: 11.3' }  
 ITEM 56: 0.0' }

# Under Record Sketch Sheet

SPANS 43 + 44

I-95 NB OVER I-95 SB ON-RAMP

MIN VT. CL. (STEM 54) = 15.32'  
MIN LAT R. (STEM 55) = 6'-11"  
MIN LAT L. (STEM 56) = 4'-0"

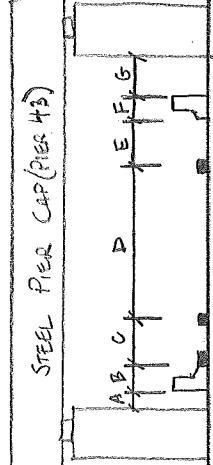
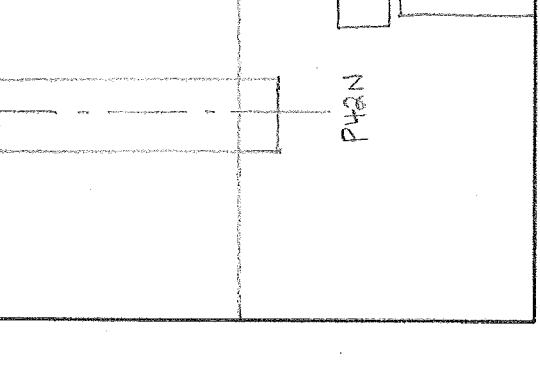
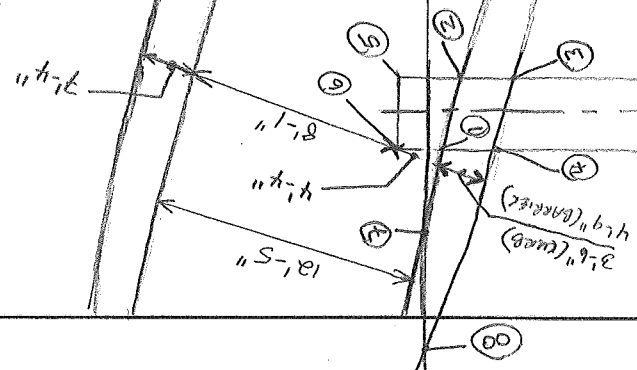
Bridge: 1 748N - 059

Inspected By: NWB, CWM

Date: 05 / 15 / 13

- |            |            |            |            |
|------------|------------|------------|------------|
| ① - 16.90' | ⑫ - 17.34' | ⑮ - 15.51' | ⑲ - 19.09' |
| ② - 16.75' | ⑬ - 22.05' | ⑯ - 15.32' | ⑲ - 17.89' |
| ③ - 16.58' | ⑭ - 22.20' | ⑰ - 15.34' | ⑳ - 17.37' |
| ④ - 16.58' | ⑱ - 15.50' | ⑱ - 15.45' | ㉑ - 21.15' |
| ⑤ - 17.30' | ⑲ - 15.50' | ㉒ - 15.41' | ㉒ - 20.40' |
|            | ㉓ - 15.54' | ㉓ - 19.42' |            |

- |            |            |            |            |
|------------|------------|------------|------------|
| ⑥ - 17.34' | ⑫ - 17.34' | ⑮ - 15.51' | ⑲ - 19.09' |
| ⑦ - 22.05' | ⑬ - 22.05' | ⑯ - 15.32' | ⑲ - 17.89' |
| ⑧ - 22.20' | ⑭ - 22.20' | ⑰ - 15.34' | ⑳ - 17.37' |
| ⑨ - 15.50' | ⑱ - 15.50' | ⑱ - 15.45' | ㉑ - 21.15' |
| ⑩ - 15.50' | ⑲ - 15.50' | ㉒ - 15.41' | ㉒ - 20.40' |
| ⑪ - 15.54' | ㉓ - 15.54' | ㉓ - 19.42' |            |



CONC CURBS (mountable)  
(15'W x 3.5'H) \*  
\* - BOTH VARY

# Under Record Sketch Sheet

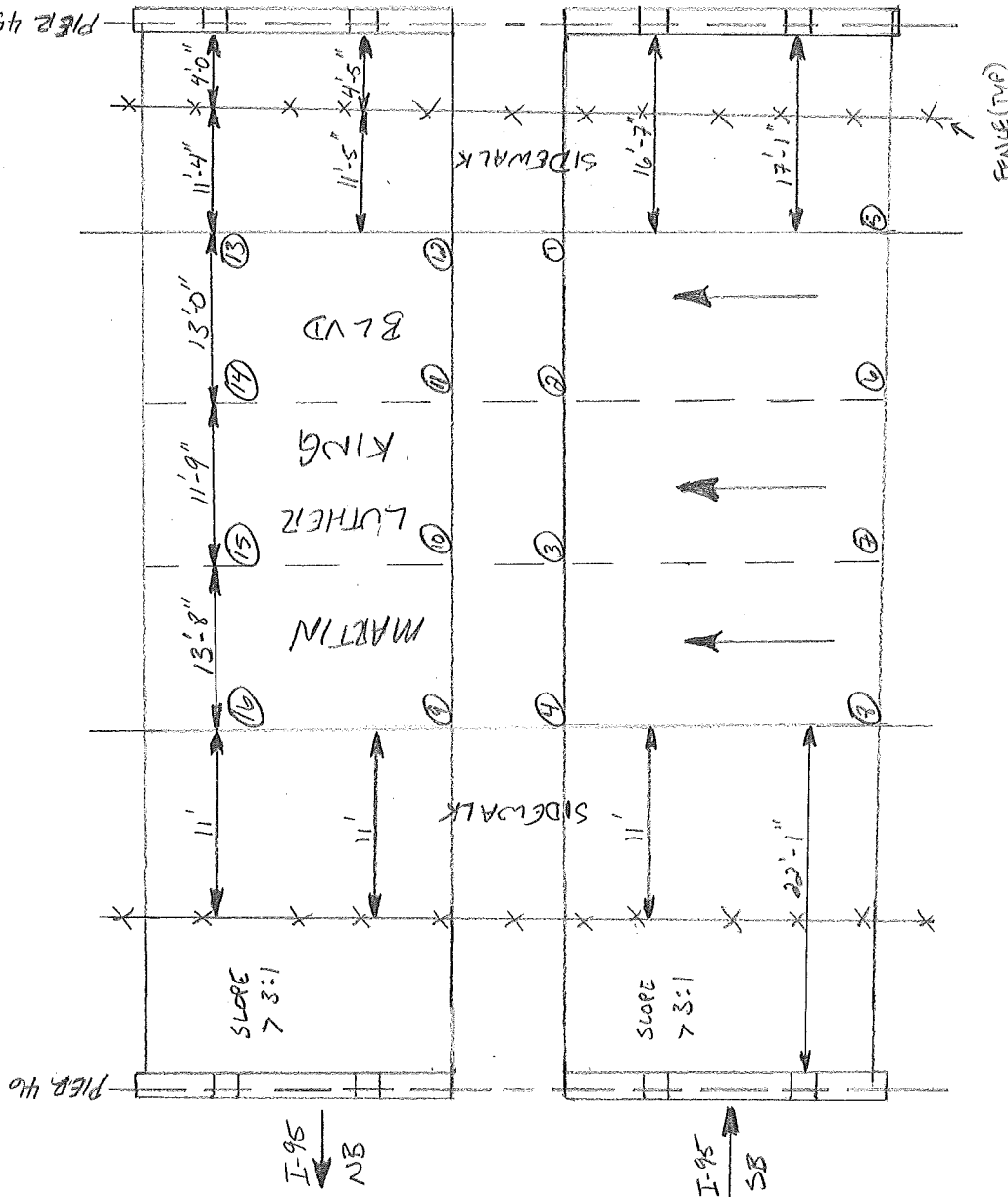
SPAN 46

I-95 over MLK BLVD / LANCASTER PIKE

Bridge: 1 - 748N - 059

Inspected By: JRG, SON,

Date: 4 / 17 / 2013



## VERTICAL CLEARANCES:

### SOUTHBOUND

- ① 33'-4<sup>7</sup>/<sub>8</sub>"
- ② 33'-4<sup>1</sup>/<sub>4</sub>"
- ③ 33'-8"
- ④ 33'-10"
- ⑤ 32'-3<sup>3</sup>/<sub>4</sub>"
- ⑥ 32'-2<sup>3</sup>/<sub>4</sub>"
- ⑦ 32'-5"
- ⑧ 32'-4"

### NORTHBOUND

- ⑨ 34'-7"
- ⑩ 34'-5"
- ⑪ 33'-11<sup>7</sup>/<sub>8</sub>"
- ⑫ 33'-11<sup>1</sup>/<sub>4</sub>"
- ⑬ 34'-3<sup>5</sup>/<sub>8</sub>"
- ⑭ 34'-3<sup>1</sup>/<sub>2</sub>"
- ⑮ 34'-10"
- ⑯ 35'-1"

## NOTES:

Item 54 = 33'-11<sup>1</sup>/<sub>4</sub>"  
 Item 55 = 15'-4"  
 Item 56 = 11'-0"

FENCE (TYP)

1748N

# Under Record Sketch Sheet

SPAN 50

I-95 OVER W. 2ND STREET

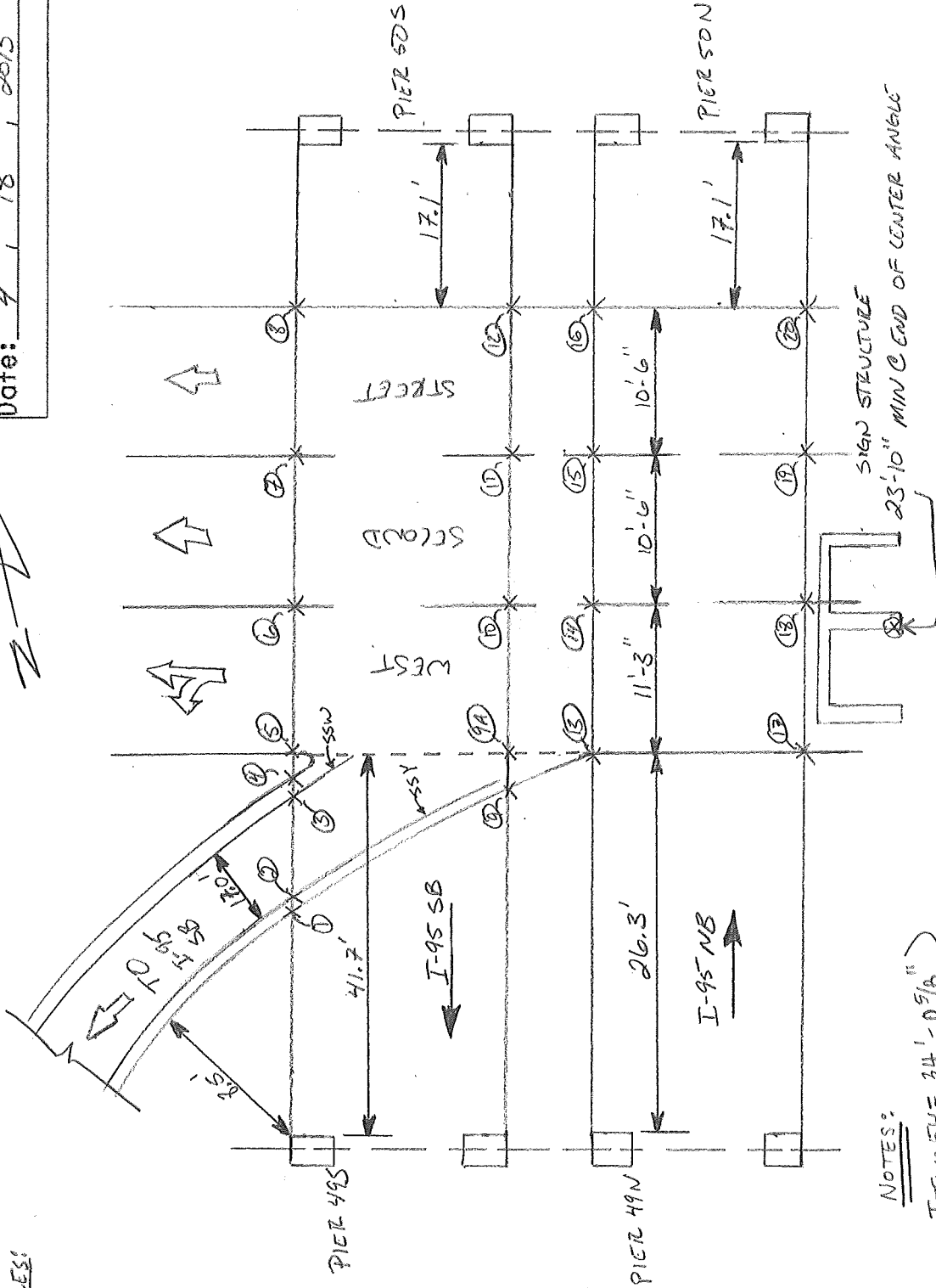
Bridge: 1 - 748N - 059

Inspected By: SON, JZQ, I

Date: 4 / 18 / 2013

## VERTICAL CLEARANCES:

- 1 30'-8"
- 2 30'-9"
- 3 30'-3"
- 4 30'-3"
- 5 30'-2"
- 6 30'-0"
- 7 29'-11 3/4"
- 8 30'-2 5/8"
- 9 30'-8 1/2"
- 10 32'-8"
- 11 32'-7"
- 12 32'-6 3/8"
- 13 32'-11"
- 14 34'-0 5/8"
- 15 33'-11 5/8"
- 16 34'-5 1/8"
- 17 35'-2 1/4"
- 18 35'-0 3/4"
- 19 35'-3"
- 20 35'-7 7/8"



## NOTES:

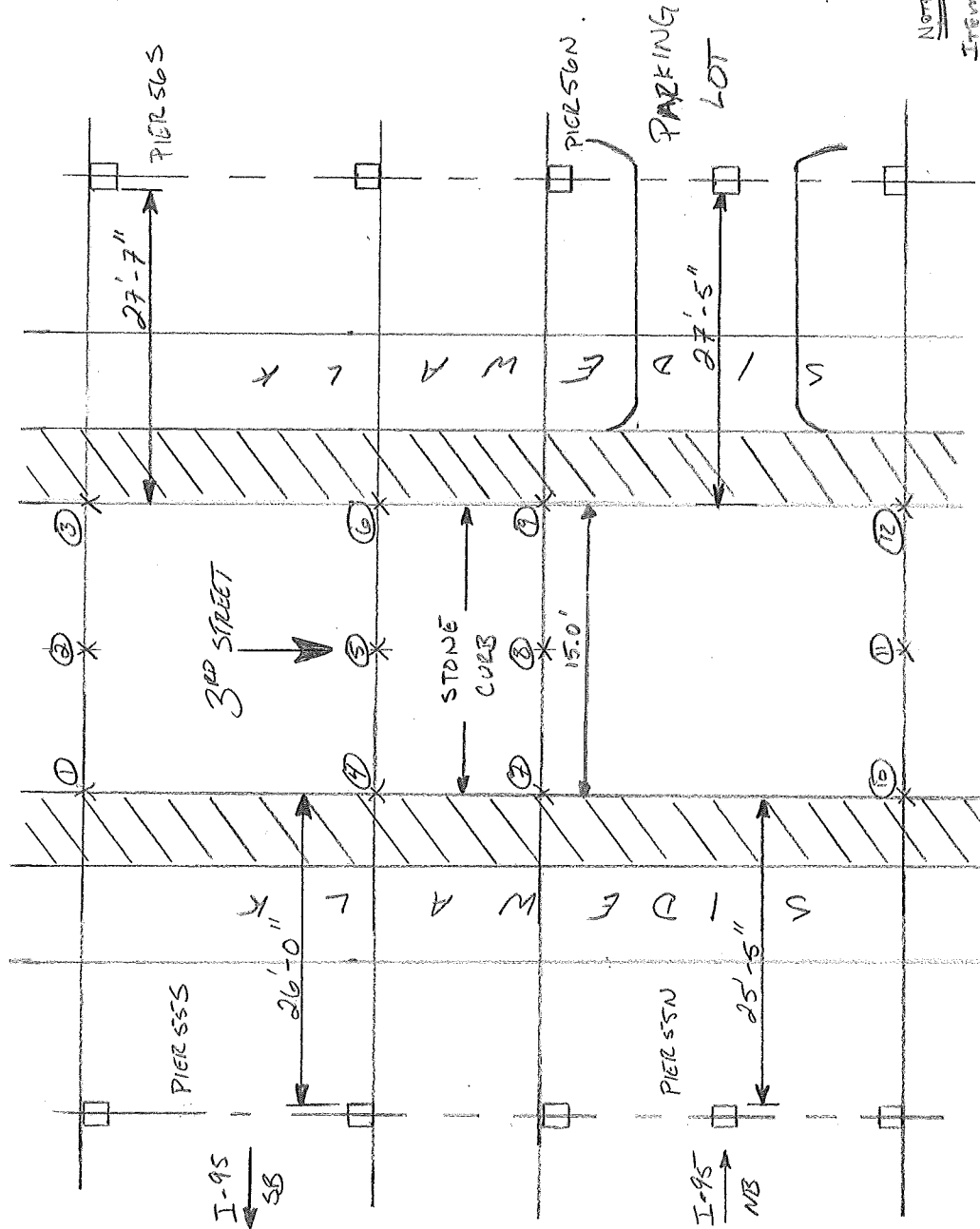
- Item 54 = 34'-0 5/8" } 1748N  
 Item 55 = 17.1'  
 Item 56 = 26.3'

SPAN 56  
I-95 OVER 3RD STREET

Bridge: 1 - 748N - 059

Inspected By: CWM, SON,

Date: 4, 1, 2013



NOTES:

Item 54 = 23' - 6 1/2" }  
Item 55 = 25' - 5" } 11-14-11  
Item 56 = 27' - 5" }



# Under Record Sketch Sheet

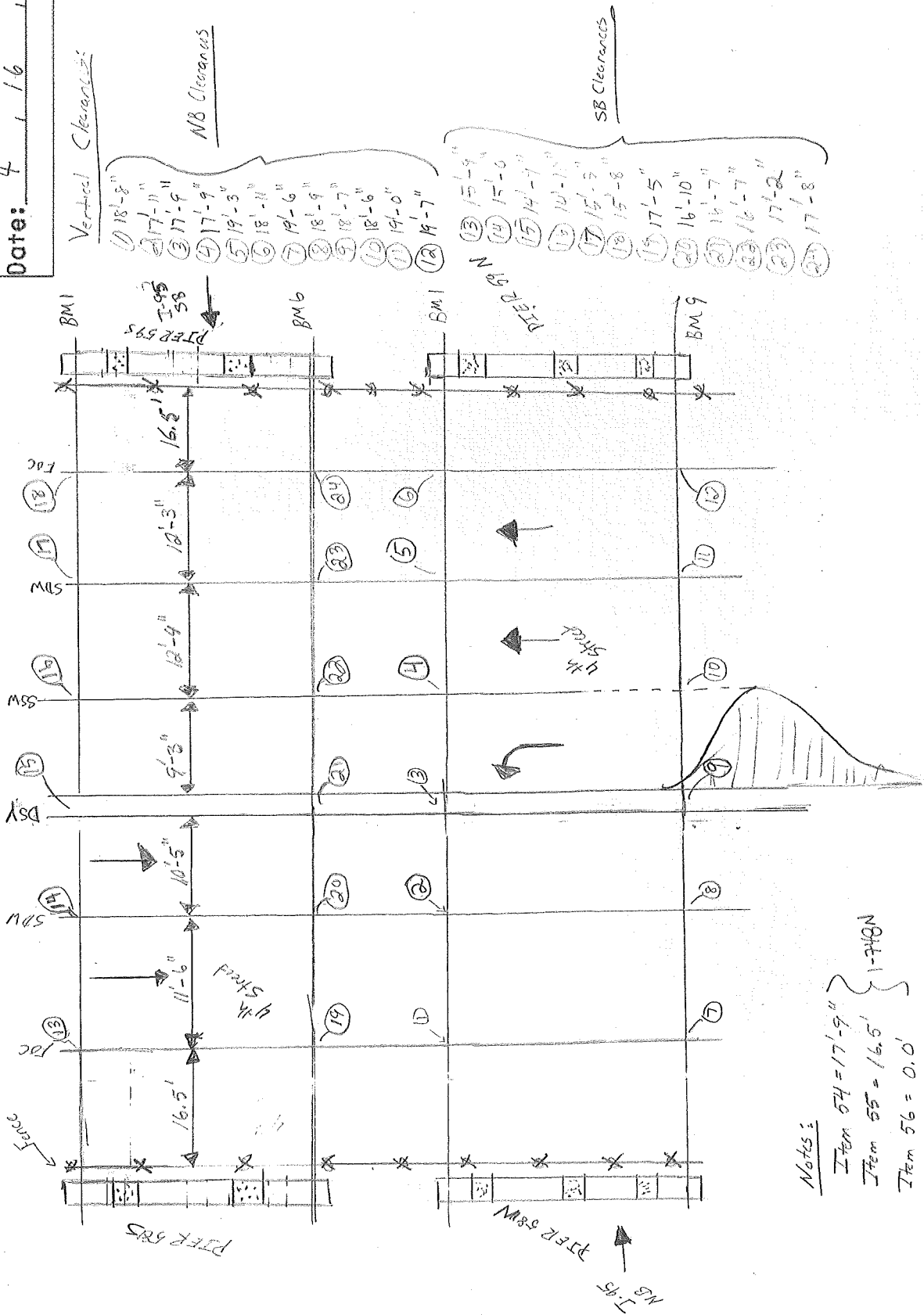
Bridge: / -748N - 059

Inspected By: SON, BSM,

Date: 4, 16, 2013

Span 59

I-95 over 4th Street



Notes:

Item 54 = 17'-9"  
Item 55 = 16.5'  
Item 56 = 0.0'