

STRUCTURAL DATA RECORD**Sufficiency Rating: 84.0****IDENTIFICATION**

Bridge ID: 1758H057 (2) District: 01 (3) County: 3
 Inventory Route: (4) Place Code: 77580
 (A) On/Under: 1 (B) Highway Type: 1 (C) Service Lvl: 7
 (D) Route No: 00095 (E) Direction: 0
 6A) Features Intersected: MONROE ST & MADISON ST 6B) Critical: *
 (7) Facility Carried: MLK BLVD 11) Km. Point: 0.010 mi
 (9) Location: WILMINGTON
 16) Latitude: 39^44'27.58" 17) Longitude: 75^33'34.24"
 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: 7 46) Approach Spans: 0
 107) Deck Type: 1 108B) Membrane: 0 108C) Deck Protection: 1
 108A) Wearing Surface: 1
 Pier 1: 33 Pier 2: NA Pier Ftg. 1: B Pier Ftg. 2: NA
 Abut 1: 1 Abut 2: NA Abut Ftg. 1: B 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: 0 mi 27) Year Built: 1976
 28) No. of Lanes: A) On Bridge: 2 B) Under Bridge: 4
 29) ADT: 5045 30) Year of ADT: 2011
 42) Type of Service: A) On Bridge: 1 B) Under Bridge: 1
 106) Year Reconst.: -4 109) % Truck ADT: 12

CLASSIFICATION

12) Base Hwy. Network: 0 13A) LRS Inv. Rte: NA 13B) LRS Subroute No.: NA
 20) Toll Facility: 3 21) Maintenance: 1 22) Owner: 1
 26) Functional Class: 11 37) Historical: 5 100) Defense Highway: 1
 101) Parallel Str.: N 102) Direction: 1 103) Temp. Str.:
 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: 11/5/2010
 63) Oper. Rating Method: 3 64) Operating Rating: 88.6
 65) Inv. Rating Method: 3 66) Inv. Rating: 68.3 70) Bridge Posting: 5
 Reason of Posting: NA Date of Resolution: NA Rating Analysis Req'd: NA
 S335: 0 S437: 0 T330: 0
 T435: 0 T540: 0

PROPOSED IMPROVEMENTS

75) Type of Work: 31 76) Length of Imp.: NA
 94) Bridge Cost: 800000 95) Roadway Cost: 200000
 96) Total Cost: 1000000 97) Year of Cost Est.: 2005
 114) Future ADT: 6330 115) Year of Future ADT: 2030

CONTRACT INFORMATION

Contract 1: 7603020 Contract 2: -1 Contract 3: -1
 Contract 4: -1 Contract 5: -1 Contract 6: -1

INSPECTION RECORD

90) Inspection Date: 1/31/2012	91) Frequency: 24 months	Next Inspection: 1/31/2014
92A) FC Frequency: NA	93A) FC. Insp. Date: NA	Next FC Insp.: NA
92B) UW Frequency: NA	93B) UW Insp. Date: NA	Next UW Insp.: NA
92C) SI Frequency: NA	93C) SI Date: NA	Next SI: NA
Element Frequency: 24 months	Elem. Insp. Date: 1/31/2012	Next Elem Insp.: 1/31/2014
UBIV Required: N	UBIV Days: 01	Inspection Zone: 99
Boat: N	Tidal: N	GPS: Y

CONDITION

58) Deck: 6	59) Superstructure: 6	60) Substructure: 5
61) Channel: N	Paint Condition: 8	
62) Culvert: N	Paint Priority: 96.93	

APPRAISAL

36) Traffic Sfty Feat.:		
A) Bridge Rail: 1	B) Transition: 0	C) Approach Rail: 1
D) Approach Rail Ends: 0		
67) Structure Evaluation: 5	68) Deck Geometry: 9	69) Underclearance: 4
71) Waterway Adequacy: N	72) Approach Rdwy Alignment: 8	
113) Scour Critical Evaluation: N		Scour Analysis Date: NA

GEOMETRIC DATA

32) Appr. Rdwy Width (w/ Shldrs): 39.00 ft		33) Median: 0
34) Skew: 0^ 0' 0"	35) Structure Flared: 1	
48) Length Maximum Span: 86.61 ft	49) Structure Length: 594.49 ft	
50) Curb or Sidewalk:	A) Left: 0.00 ft	B) Right: 0.00 ft
51) Width Curb to Curb: 39.00 ft	52) Deck Width o/o: 41.70 ft	
53) Minimum Vertical Clearance Over Bridge Roadway: 18.45 ft		
54) Vertical Underclearance:	A) Reference: H	B) Minimum: 14.33 ft
55) Lateral Underclearance:	A) Reference: H	B) Minimum: 4.00 ft
56) Lateral Underclearance - Minimum Left: 6.00 ft		

PAST INSPECTION

Inspection Date: 1/31/2012	Type: 1	Inspector: Pontis
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INSPECTION NOTES

INSPECTED BY: AECOM: D. Raffensperger (TL)/D. Helmstetter
 Inspection Notes: Span 1: Light pole base on N. parapet is missing cover. Span 2: O/head sign strc. end steel I-beams attached to both fascias & 1st interior beams w/ NDN. Span 3: Light pole attached to N. face of N. parapet is missing cover. Span 5: Light pole base on N. parapet is missing cover. Span 7: Light pole attached to fascia of N. face of N. parapet w/ missing cover. Maintenance Items: 11100.2 - Clean/Flush Scuppers/Downstputing (3 EA) 11104.1 - Repair/Reseal Abutment Backwall (1 CY) 11100.1 - Clean/Flush Deck (1 SY) 11100.5 - Spot Paint Superstructure (1 EA) 11110.7 - Reseal Deck Joints (Liquid only) (72 LF) 11100.8 - Repair/Reseal Deck Joints (364 LF) 11102.7 - Repair Bridge Rail (6 LF) 11104.2 - Repair Abutment (1 CY) Repair Conrete Pier Caps and Columns. Replace missing cover plates for light pole bases Upgrade guardrail to meet current specifications

BRIDGE NOTES

NBI DONE BY: JASON BAUER & DMJMNOTE: SCALE FACTORS ENTERED BY GRD ON 06/06/07, DO NOT CHANGE OR ERASE....

PONTIS DATA

Elements	ID	ENV	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	Comments
Concrete Deck - Protected w/ Coated Bars	26	4	(SF)	32905	32905	0	0	0	0	For Notes See MSPE Report
Drains/Downspouts/Scuppers	65	2	(EA)	3	0	1	2	0	0	For Notes See MSPE Report
Painted Steel Open Girder/Beam	107	4	(LF)	3901	3603	147	151	0	0	For Notes See MSPE Report
Reinforced Concrete Column or Pile	205	3	(LF)	319	222	52	45	0	0	For Notes See MSPE Report
Reinforced Concrete Abutment	215	2	(LF)	43	10	20	13	0	0	For Notes See MSPE Report
Reinforced Concrete Pier Cap	234	3	(LF)	339	18	105	216	0	0	For Notes See MSPE Report
Strip Seal Expansion Joint	300	4	(LF)	364	0	364	0	0	0	For Notes See MSPE Report
Pourable Joint Seal	301	4	(LF)	72	0	0	72	0	0	For Notes See MSPE Report
Elastomeric Bearing	310	4	(EA)	46	25	21	0	0	0	For Notes See MSPE Report
Fixed Bearing	313	3	(EA)	46	37	9	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)	1201	1171	7	23	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	1	0	0	0	For Notes See MSPE Report
Traffic Impact	362	1	(EA)	1	0	1	0	0	0	For Notes See MSPE Report
Painted Steel Diaphragm	381	3	(EA)	195	121	53	21	0	0	For Notes See MSPE Report
Reinforced Concrete Wingwalls	390	2	(LF)	23	19	4	0	0	0	For Notes See MSPE Report

Total Elements: 17

DELAWARE DEPARTMENT OF TRANSPORTATION

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

Bridge ID: 1758H057

Inspection Date: 1/31/2012

Description: Span over DART parking lot

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
26	4	Conc Deck/Coatd Bars	(SF)	32905	32905	0	0	0	0	NDN - Accum of dirt and debris in shoulders (Photo 8).
65	2	Drainage	(EA)	1	0	0	1	0	0	CS3: (1 EA) The drain and downspout are completely clogged.
300	4	Strip Seal Exp Joint	(LF)	124	0	124	0	0	0	CS2: (124 LF) Seals @ Pier 1 & 2 are sunken in both lanes, filled w/ debris and some tears. Evidence of leakage. Numerous small shallow spalls along in deck along joints. Keeper bars fallen out and are atop cap.
301	4	Pourable Joint Seal	(LF)	0	0	0	0	0	0	0
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	4	Paint Stl Opn Girder	(LF)	784	647	26	111	0	0	CS2: (26 LF) The beams have light freckled rust @ the ends. CS3: (111 LF) Few beams w/ exp & rusted steel at the end.
331	4	Conc Bridge Railing	(LF)	175	170	1	4	0	0	CS2: (1 LF) Small spall in outside face of S. barrier. CS3: (4 LF) Few cr's w/ rust and open spall w/ exp steel (15"h x 6"w) on the outside face of the S. barrier at Pier 2.
381	3	Painted Steel Diaphr	(EA)	40	25	8	7	0	0	CS2: (8 EA) Several end diaph's have light freckled rust. CS3: (7 EA) Several end diaph's w/ exp & rusted steel.
310	4	Elastomeric Bearing	(EA)	9	0	9	0	0	0	CS2: (9 EA) The Pier 1 bearings have delam steel w/ rusted base metal. Brgs 2, 3, 4, 5, 6 & 7 w/ sole plate touching guide bars on one side and Brg 1 w/ sole plate o/hanging guide bars along E. side by 1/2" to 3/4", Brg 5 by 1.25 inches and Brg 4 o/hangs by 5/8 inches.
313	3	Fixed Bearing	(EA)	9	0	9	0	0	0	CS2: (9 EA) The Pier 2 bearings have light spot rust w/ some peeling paint. Heavier rust with blistering to Brg 1.
205	3	R/Conc Column	(LF)	150	133	10	7	0	0	CS2: (10 LF) Pier 1, center column, E. face w/ delam (22"w x 19"h) @ the base, Pier 2, N. col, SW corner w/ open/incip spall con't down from cap (14" x 14"); S. col, Pier 2, E. face @ bott w/ open/incip spall (40"h x 10"w) and center col w/ unsound and cracked patch at the top E. face (2' x 2'). CS3: (7 LF) Pier 1, S. col w/ vert cr's w/ rust and assoc delams (24"h x 4"w) on N. & W. faces. Pier 2, top of center col w/ spall w/ exp steel (60"h x 10"w x 5"dp) w/ assoc delam on W. face.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	125	0	45	80	0	0	CS2: (45 LF) 1/16" to 1/8" wide cracks thruout Piers 1 & 2, some w/ efflo, some w/ assoc delams or open spalls. Pier 1 w/ delam/unsound patch to E. face below BM 1 (22"w x 26"h), delams w/ assoc 1/16" to 1/8" wide cracks on S. o/hang u/side (21"l x 4"w) and delams on W. face under BM 1 (18" diam) and (20"w x 6"h) along top under BM 2, Bay 4 @ top (24"l x 4"h), Bay 6 @ top (24"l x 4"h). Pier 2 w/ delams, some w/ assoc cracks found in W. face under BM 2 (12"w x 10"h), Bay 4 (12" diam) and (6'w x 12"h), Bay 5 (8"h x 44"w) @ top and (31"w x 8"h x 9"dp) @ bott, Bay 6 (46"w x 12"h) and (46"w x 24"h), Bay 8 (25"w x 4"h) and (18" diam) w/ assoc spall (14"h x 3"w) then E. face @ bott in Bay 2 (53"w x 6"h) and Bay 4 (53"w x 4"h) and mdht (4'w x 12"h). Large unsound patch (4' x 4') under Bay 1, W. face of Pier 2. CS3: (80 LF) HL cracks w/ rust stains thruout piers 1 & 2 (Photo 16). Pier 1 w/ spall w/ exp steel and assoc. delams @ bott E. edge of N. o/hang (54"l x 21"w x 4"h) (Photo 14) and W. face under BM 8 (28" x 24" x 2"dp). Pier 1, Bay 2

										<p>w/ 1/8" wide horiz cr w/ assoc delams (20"l x 20"w x 3"h) and (32"l x 16w x 3"h) on the W. face and u/side as well as S. o/hang u/side w/ assoc spall (18"w x 3"l) and unsound patch (24" x 6"h x 6"w) (Photo 18) and E. face (42"l). Pier 1, bott W. face btwn Col's 3 & 4 w/ cracked and unsound patch w/ rust (28"l x 8"w x 6"h) and E. face under BM 9 w/ cracks w/ rust w/ assoc delam (34"l x 28"h) and spall (20"w x 12"h x 2"dp). Pier 2 w/ Cracks, up to 1/4" wide, some w/ rust along top of cap or seat w/ assoc delams on W. face Bay 1 (72"w x 25"h), Bay 2 (66"w x 44"h x 25"l) w/ assoc unsound patch (52"w x 24"h), Bay 3 (5'w x 2'l x 41"h) & Bay 7 (66"w x 26"h x 4"dp) and E. face delams w/ assoc cracks w/ rust found @ bott in Bay 5 (6'w x 4"h) and mdht Bay 3 (14"h x 10"w), Bay 5 (19"h x 15"w) and Bay 6 (6'w x 12"h). W. face spall w/ exp steel that extends into u/side of Bay 4 (58"w x 8"h x 4"dp) and under Bay 5 spall w/ exp steel (28"l x 7"</p>
390	2	Reinf Conc Wingwalls	(LF)	0	0	0	0	0	0	0
358	1	Deck Cracking SmFlag	(EA)	1	1	0	0	0	0	CS1: (1 EA) Random fine trans cracks thruout all spans, mostly in shoulders.
359	1	Soffit Smart Flag	(EA)	1	0	1	0	0	0	CS2: (1 EA) Random HL trans cracks thruout, some w/ efflo or rust, some propagate into soffit from parapet. Span 1 @ pier 2, N & S sides w/ spall w/ exp & rusted steel. Span 2 w/ spall w/ exp steel to S. side o/hang @ pier 3 and Bay 1 over Pier 3 w/ spall w/ exp steel. Span 5 @ Pier 5, Bay 1 w/ spall w/ exp steel w/ minor losses.
362	1	Traf Impact SmFlag	(EA)	1	0	1	0	0	0	CS2: (1 EA) Span 6, BM 2 scrape marks w/ assoc. missing paint to bottom flange.

DELAWARE DEPARTMENT OF TRANSPORTATION

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

Bridge ID: 1758H057

Inspection Date: 1/31/2012

Description: Span over Monroe Street

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
26	4	Conc Deck/Coatd Bars	(SF)	0	0	0	0	0	0	0
65	2	Drainage	(EA)	1	0	1	0	0	0	CS2: (1 EA) Pan is filled w/ debris but pipe is open.
300	4	Strip Seal Exp Joint	(LF)	43	0	43	0	0	0	CS2: (43 LF) Seal not water tight @ a few locations and debris thruout. Joint filler hanging down in Bays 3 and keeper bars hanging in Bay 1. Small edge spalls adjacent to joint.
301	4	Pourable Joint Seal	(LF)	0	0	0	0	0	0	0
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	4	Paint Stl Opn Girder	(LF)	609	571	23	15	0	0	CS2: (23 LF) Light spot rust @ ends of beams below joints. CS3: (15 LF) Beam ends w/ spots of exp & rusted metal.
331	4	Conc Bridge Railing	(LF)	175	166	2	7	0	0	CS2: (1 LF) Incip spall (6" x 6") @ Pier 2 on the S. barrier. CS3: (7 LF) N. rail w/ large spall w/ exp steel in base @ W. end (16"l x 10"h x 3"dp) and few fine cracks w/ rust.
381	3	Painted Steel Diaphr	(EA)	30	15	10	5	0	0	CS2: (10 EA) Several end diaph's have light surface rust. CS3: (5 LF) End diaph's w/ some exp & rusted base metal.
310	4	Elastomeric Bearing	(EA)	7	7	0	0	0	0	CS1: (7 EA) The bearings have light spot rust w/ some peeling paint, blisters or delam steel w/ exp & rusted base metal. Brgs 2, 3, 4 & 7 w/ sole plate touching guide bars on one side.
313	3	Fixed Bearing	(EA)	7	7	0	0	0	0	CS1: (7 EA) The bearings have light spot rust w/ some peeling paint w/ areas of exp & rusted base metal, blistering or some delam steel.
205	3	R/Conc Column	(LF)	58	43	7	8	0	0	CS2: (7 LF) S. col w/ delams on E. face (38" w x 24"h) & assoc spall (12" diam) @ top, N. face (12" h x 12" w), and an unsound patch @ N. corner of E. face (24" h x 3" w); and N. col w/ open/incip. spall on E. face (19" h x 11" w) @ bott. CS3: (8 LF) Cr's w/ rust on E. face of N. col (1 LF) and N. face of S. col (1 LF) and spall w/ exp steel and assoc delam on E. face of S. col (21" w x 43" h x 1.75" dp) and Center col w/ spall w/ exp steel on S. face (12" h x 8" w x 1/4" dp) and E. face @ bott (6" h x 10" w). Spall w/ exp steel (7" w x 6" h) on N. face of N. col adj to NW corner.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	45	7	24	14	0	0	CS2: (24 LF) 1/16" to 1/8" cracks, some w/ efflo thruout. Top of cap w/ up to 1/8" wide trans/horiz cr's w/ assoc delams on E. face Bay 1 (31" w x 4" l x 5" h) and Bay 4 (6" w x 29" l x 24" h) and W. face w/ delam (26" diam) under Bay 3. Other delams or open/incip spalls found on W. face Bay 2 (18" h x 16" w) and (2' x 2') and E. face of Bay 1 (4 LF) and Bay 3 (12" w x 24" h). CS3: (14 LF) Many cracks w/ rust stains. One 1/8" wide crack w/ assoc delam in W. face of Bay 4 (Photo 17). N. end @ u/side w/ spall w/ exp steel (15" diam) (Photo 12). E. face @ bott Bay 3 w/ up to 1/8" wide cr w/ rust and assoc spall (18" w x 4" h) and Bay 5 crack w/ rust and delam (18" w x 12" h).
390	2	Reinf Conc Wingwalls	(LF)	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
362	1	Traf Impact 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: 1758H057

Inspection Date: 1/31/2012

Description: Span over DART Bus Lot

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
26	4	Conc Deck/Coatd Bars	(SF)	0	0	0	0	0	0	0
65	2	Drainage	(EA)	1	0	0	1	0	0	CS3: (1 EA) Drain inlet is clogged.
300	4	Strip Seal Exp Joint	(LF)	40	0	40	0	0	0	CS2: (40 LF) Joint is sunken in lanes, random small tears or heaved sections, not water tight and edge spalls in deck along joint. Keeper bars have fallen out and are atop pier.
301	4	Pourable Joint Seal	(LF)	0	0	0	0	0	0	0
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	4	Paint Stl Opn Girder	(LF)	520	492	19	9	0	0	CS2: (19 LF) Very light surface rust @ ends of beams below the joints. CS3: (9 LF) Ends of BMS w/ areas of exp & rusted steel.
331	4	Conc Bridge Railing	(LF)	175	170	3	2	0	0	CS2: (3 LF) Small spall (1 SF) to outboard face of N. parapet @ Pier 4. Shallow spall to outboard face of S. parapet (2'1 x 7"h). CS3: (2 LF) Few fine cracks w/ rust.
381	3	Painted Steel Diaphr	(EA)	25	15	10	0	0	0	CS2: (10 EA) Several end diaph's have light surface rust.
310	4	Elastomeric Bearing	(EA)	6	0	6	0	0	0	CS2: (6 EA) Bearings @ Pier 3 have light spot rust and blistering w/ areas of missing paint w/ rusted base metal. Brgs 1, 2, 3 & 4 w/ sole plate against the guide bars on one side.
313	3	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Bearings have light surface rust and minor paint peeling.
205	3	R/Conc Column	(LF)	34	8	7	19	0	0	CS2: (7 LF) N. col, E. face @ bott w/ open/incip spall (13" x 21"), S. col delams @ top of W. face (16" x 9"), (53"h x 12"w) and (16"w x 19"h) and random delams thruout the W. face. CS3: (19 LF) N. col, E. face @ top w/ crack w/ rust w/ assoc. delam and spall (38"w x 69"h) and S. face w/ delam/ spall w/ exp steel (48"h x 13"w x 1/2"dp). S. col, W. face w/ crack w/ rust and assoc delam and spalls (106"h x 25"w) and corner spall w/ exp steel @ SW corner (7'h x 5"w x 2"l).
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	46	0	11	35	0	0	CS2: (11 LF) 1/16" to 1/8" wide trans cracks from BM 4 to 6 @ E. side w/ assoc delam in seat in Bay 5 (6"l x 3"w) and under BM 5 (25"w x 25"h). Typ. cr's w/ assoc delams, unsound patches or open/incip spalls on E. face Bay 2 @ bott (8'w x 10"h), Bay 3 @ top (66"w x 41"h), BM 6 (76"w x 3'h) then W. side @ BM 1 (50"w x 27"h), Bay 3 (24"h x 13"w), Bay 4 (14"h x 36"w) @ top and (100"w x 8"h) @ bott and Bay 5 @ top (48"w x 44"h). CS3: (35 LF) Several cr's w/ rust thruout; Cr's @ top of cap or seat (1/8" wide) some w/ rust and assoc delams found on E. face Bay 2 (34"w x 21"h) and west side Bay 2 (6'w x 28"l x 24"h); Bay 4 (6'w x 28"l) and Bay 5 (6'w x 34"l). Cr's (1/8" wide) w/ assoc open/incip spalls found on E. face @ S. end (4 LF) and under BM 4 (41"h x 12"w) then W. side Bay 2 spall w/ exp steel (60"w x 7"h x 5"l). U/side of cap under BMs 2 & 5 w/ 1/8" cr's w/ rust and assoc delams. N. o/hang u/side w/ large unsound patch w/ cr's w/ rust (5'1 x 2'w) and assoc spall w/ exp steel (1 SF). W. side seat/cap w/ 3/16" wide trans crack full width of Bay or cap w/ assoc delams in Bay 1 (6'w x 37"l x 12"h) on W. face and (48"h x 130"w) on east face and Bay 3 (6'w x 25"l). 3/16" wide longit. crack along ped 3 (1 LF) w/ rust and trans crack under BM 2 (3 LF).
		Reinf Conc								

390	2	Wingwalls	(LF)	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
362	1	Traf Impact 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: 1758H057

Inspection Date: 1/31/2012

Description: Span over DART
maintenance building/parking lot

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
26	4	Conc Deck/Coatd Bars	(SF)	0	0	0	0	0	0	0
65	2	Drainage	(EA)	0	0	0	0	0	0	0
300	4	Strip Seal Exp Joint	(LF)	40	0	40	0	0	0	CS2: (40 LF) Joint has small tears thruout, spalls along its edges, sunken in both lanes and mod. debris thruout (Photo 11). Piece of sponge mat'l in Bays 4 & 5 and keeper bars hanging from Pier 5 deck joint in Bays 4 & 5.
301	4	Pourable Joint Seal	(LF)	0	0	0	0	0	0	0
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	4	Paint Stl Opn Girder	(LF)	497	471	21	5	0	0	CS2: (21 LF) Localized light surface rust @ ends of beams. CS3: (5 LF) Some beams w/ area of exp & rusted base metal @ Pier 3 & 4 (Photo 13).
331	4	Conc Bridge Railing	(LF)	166	155	1	10	0	0	CS2: (1 LF) Small spall @ base of N. parapet @ Pier 4. CS3: (10 LF) Few cr's w/ rust in base of parapet.
381	3	Painted Steel Diaphr	(EA)	25	15	5	5	0	0	CS2: (5 EA) Many end diaph's w/ light surface rust. CS3: (5 EA) Bays @ Pier 4 w/ chipped paint w/ exp & rusted base metal.
310	4	Elastomeric Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) The bearings have light spot rust and peeling paint, some delam steel, blistering & debris.
313	3	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) The bearings have light spot rust and peeling paint.
205	3	R/Conc Column	(LF)	34	15	17	2	0	0	CS2: (17 LF) S. col w/ delam @ SE corner w/ cr's (full ht x 12"l on S. face x 6"w on E. face). N. Col w/ cracks w/ assoc incip spalls in corners at SW (16"h) and SE (2'h). CS3: (2 LF) Spall w/ exp steel @ top of W. face (19"h x 13"w x 1-1/4"dp).
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	41	0	8	33	0	0	CS2: (8 LF) Random cr's, some w/ efflo thruout. Delams, some w/ assoc (1/16" to 1/8") cr's thruout faces and u/side @ W. face Bay 1 (17"w x 8"h), Bay 2 (24"h x 9"w) (Photo 15), Bay 4 (34"l x 3"h x 2"dp), Bay 5 (30" x 30") and (52" x 3" x 3") then E. face Bay 2 (12" diam), Bay 4 (17"h x 19"w) and Bay 5 (18" x 27"). Open/incip spalls in E. face Bay 4 (48"w x 11"h x 16"l) and W. face Bay 3 (15"w x 22"h) and (22"w x 42"h). Trans cr's (1/16" to 1/8") in seats or ped's, W. face in Bay 2. S. o/hang, E. face w/ large delam w/ assoc spalls under BM 6 (8" x 2"). Spall in u/side @ Bay 4 (14" x 16"). CS3: (33 LF) Cr's w/ rust thruout. Trans cr's in the seat or ped's (1/8" to 1/4" wide) on W. face of Ped's 2 & 5. Up to 1/4" wide cr w/ large delam area in seat or top of cap @ E. face of Bay 5 (78"w x 12"h) and W. face Bay 3 (60"w x 37"l). Cr's (1/8" to 1/4"), some w/ efflo or rust w/ assoc delam, some con't into the u/side on W. face of Bay 1 (36"w x 8"h) and (34"w x 9"h) and E. face in Bay 1 (46"h x 54"w). Bay 3 u/side of cap w/ 3/16" wide crack w/ rust and assoc delam (50"w x 12"l x 8"h).
390	2	Reinf Conc Wingwalls	(LF)	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
362	1	Traf Impact 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: 1758H057

Inspection Date: 1/31/2012

Description: Span over DART
maintenance building/parking

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
26	4	Conc Deck/Coatd Bars	(SF)	0	0	0	0	0	0	0
65	2	Drainage	(EA)	0	0	0	0	0	0	0
300	4	Strip Seal Exp Joint	(LF)	39	0	39	0	0	0	CS2: (39 LF) Random small tears thruout, not water tight and joint filler sunken and broken keeper bars hanging down. Minor spalls along adj. deck edges and mod. debris thruout. Metalwork corroded from leaking joint and some backer rod installed.
301	4	Pourable Joint Seal	(LF)	0	0	0	0	0	0	0
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	4	Paint Stl Opn Girder	(LF)	497	480	17	0	0	0	CS2: (17 LF) Light freckled rust & spot rust @ ends of the beams.
331	4	Conc Bridge Railing	(LF)	166	166	0	0	0	0	NDN
381	3	Painted Steel Diaphr	(EA)	25	17	4	4	0	0	CS2: (4 EA) Some end diaph's w/ light freckled rust. CS3: (4 EA) Some end diaph's w/ chp'd paint & exp and rusted steel.
310	4	Elastomeric Bearing	(EA)	6	0	6	0	0	0	CS2: (6 EA) Pier 5 Bearings contracted @ 40 degrees. Localized peeling paint & light spot rust, blistering w/ some exp & rusted base and delam steel areas.
313	3	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Pier 6 Bearings with light spot rust, some chp'd paint and minor blistering.
205	3	R/Conc Column	(LF)	23	7	9	7	0	0	CS2: (9 LF) 1/16" wide vert crack w/ assoc. delam (2'h x 1'w) and delam repair (2'h x 6" w) in bottom of W. face of S. col. N. col, S. face w/ delam (19" h x 18" w). S. col, E. face w/ delam @ top (4'h x 2' w). CS3: (7 LF) S. Col, S. face @ bott w/ spall w/ exp steel (4" diam). N.Col w/ vert crack w/ rust (6 LF) along SW corner w/ assoc open/incip spall (7" w x 18" l).
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	41	0	6	35	0	0	CS2: (6 LF) Cracks (trans & longit) in & across seats. Delams found on E. face at Bay 1 (46" w x 15" h) and (13" w x 26" h), Bay 3 (18" w x 12" h), Bay 4 delam repair, Bay 5 delam patches (2' x 1') and (3' w x 3' h) then on W. face in Bay 2 (42" h x 28" w) and Bay 3 (24" w x 12" h). Cr's in seats w/ assoc. delams on E. face in Bay 2 (9" h x 15" l) and W. face in Bay 2 (61" w x 29" h). Spall on N. o/hang u/side (12" diam). CS3: (35 LF) Random Cr's w/ rust (up to 1/8" wide). Wide cr's w/ assoc delams on u/side in Bay 3 (13" l x 38" w); E. face in Bays 3 & 4 (72" w x 12" l x 23" h) and W. face in Bay 1 (30" x 30"), Bay 4 (5" h x 10" w) w/ cr (4 LF) and Bay 5 (2' x 1') and (70" w x 28" h). Spalls w/ exp steel and assoc cr's on W. face in Bay 2 @ bott (46" w x 11" h).
390	2	Reinf Conc Wingwalls	(LF)	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
362	1	Traf Impact 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: 1758H057

Inspection Date: 1/31/2012

Description: Span over Madison Street

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
26	4	Conc Deck/Coatd Bars	(SF)	0	0	0	0	0	0	0
65	2	Drainage	(EA)	0	0	0	0	0	0	0
300	4	Strip Seal Exp Joint	(LF)	39	0	39	0	0	0	CS2: (39 LF) Deck is spalled around joint. Not water tight and filled w/ debris thruout. The u/side has some broken keeper bars. Backer rod installed, but joint still leaking.
301	4	Pourable Joint Seal	(LF)	0	0	0	0	0	0	0
321	4	R/Conc Approach Slab	(EA)	0	0	0	0	0	0	0
107	4	Paint Stl Opn Girder	(LF)	497	455	32	10	0	0	CS2: (32 LF) Light freckled or spot rust @ ends of beams. CS3: (10 LF) Scrape marks to u/side of bottom flange to BM 2 w/ exp. base metal and some rust.
331	4	Conc Bridge Railing	(LF)	166	166	0	0	0	0	NDN
381	3	Painted Steel Diaphr	(EA)	25	15	10	0	0	0	CS2: (10 EA) Some end diaph's w/ light freckled rust.
310	4	Elastomeric Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Bearings w/ light spot rust & some peeling paint, minor blistering with some delam steel areas.
313	3	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Bearings are greased except brg 6 and brg 1 w/ blistering rust on N. face and brgs 2 thru 6 w/ light freckled rust to exp areas of plates.
205	3	R/Conc Column	(LF)	20	16	2	2	0	0	CS2: (2 LF) Delam (24" x 9") on S. face of N. col near top. CS3: (2 LF) Open/incip spall w/ rust (24" x 9") on W. face of S. col.
215	2	R/Conc Abutment	(LF)	0	0	0	0	0	0	0
234	3	R/Conc Pier Cap	(LF)	41	11	11	19	0	0	CS2: (11 LF) Few HL to fine random vert & horiz cracks, open/incip. spall to W. face in Bay 2 (12"h x 15"w) and E. face w/ delams in Bay 2 (49"w x 14"h) w/ assoc. 1/16" wide cracks. Delam seat @ BM 3 (12"w x 18"l) and Bay 4 (2 @ 12" diam). CS3: (19 LF) Vert & horiz cr's w/ rust in Bays 1 & 3, W. face Bays 2 & 5 w/ spall w/ exp steel (12" diam and 23"w x 28"h), Bay 3 w/ wide horiz cr w/ rust (5 LF) along bott edge of W. face w/ assoc deep corner spall w/ exp steel (16"w x 6"h x 6"dp) and top of cap in Bay 4 w/ wide trans crack w/ rust and assoc. delam (4'w x 12"l), E. face w/ spall w/ exp steel @ BM 5 and in Bay 5 (14"w x 19"h x 1"dp).
390	2	Reinf Conc Wingwalls	(LF)	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
362	1	Traf Impact 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: 1758H057

Inspection Date: 1/31/2012

Description: Span ends @ abutment

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
26	4	Conc Deck/Coatd Bars	(SF)	0	0	0	0	0	0	0
65	2	Drainage	(EA)	0	0	0	0	0	0	0
300	4	Strip Seal Exp Joint	(LF)	39	0	39	0	0	0	CS2: (39 LF) Seal is filled w/ debris and there are minor deck spalls along its edges. Area of seal is torn & bulged up @ S. end (2 LF). Evidence that joint leaks, keeper bars on seat.
301	4	Pourable Joint Seal	(LF)	72	0	0	72	0	0	CS3: (72 LF) Seal is missing for half the length, filled w/ debris and there are adhesion failures along its edges. Large, deep spall in S. & N. ends of abut header w/ assoc delams and edge spalling on each edge and a few HL long. cracks (Photo 10).
321	4	R/Conc Approach Slab	(EA)	1	0	1	0	0	0	CS2: (1 EA) Slab has settled up to 1" along joint w/ bitum aprch rdwy causing a bump and edge spalling/scale. Moderate wear and multiple HL to fine cracks and pattern cracking thruout.
107	4	Paint Stl Opn Girder	(LF)	497	487	9	1	0	0	CS2: (9 LF) Ends of BMs @ pier, BM 1 @ abut w/ light freckled or spot rust. CS3: (1 LF) Peeling paint w/ exp & rusted base metal to bott flange to BM 1.
331	4	Conc Bridge Railing	(LF)	178	178	0	0	0	0	NDN
381	3	Painted Steel Diaphr	(EA)	25	19	6	0	0	0	CS2: (6 EA) Light freckled rust to some end diaph's.
310	4	Elastomeric Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Bearings are greased w/ freckled rust to exposed areas of plates.
313	3	Fixed Bearing	(EA)	6	6	0	0	0	0	CS1: (6 EA) Bearings are greased w/ freckled rust to exposed areas of plates. Brgs 1 & 2 w/ blistering rust to plates.
205	3	R/Conc Column	(LF)	0	0	0	0	0	0	0
215	2	R/Conc Abutment	(LF)	43	10	20	13	0	0	CS2: (20 LF) Backwall w/ numerous HL to fine horiz. diag. & vert. cracks. Stem w/ few 1/32" to 1/16" vert, diag & horiz. cracks, some extend into the seat or bearing pedestal. CS3: (13 LF) Backwall w/ one 1/8" horiz. crack behind beam 6 along bottom. Stem w/ few 1/8"--3/16" vert. & horiz. cracks (Photo 19), some extend into seat or bearing pedestal. Rust stains along entire backwall.
234	3	R/Conc Pier Cap	(LF)	0	0	0	0	0	0	0
390	2	Reinf Conc Wingwalls	(LF)	23	19	4	0	0	0	CS2: (4 LF) 3/16" wide vert./diag crack in N. wing w/ efflo. 1/16" wide diag cr in S. wingwall. Spall w/ assoc delam (6"w x 9"h) in bott corner of S. wing.
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
362	1	Traf Impact SmFlag	(EA)	0	0	0	0	0	0	0



1. East Approach, looking West



2. South Elevation, looking West



3. General view of the underside, Span 2, looking East



4. Under Record, Span 2 over Monroe Street, looking North



5. Under Record, Span 2 over Monroe Street, Looking South



6. Under Record, Span 6 over Madison Street, looking North



7. Under Record, Span 6 over Madison Street, looking South



8. Accumulation of dirt and debris along the North shoulder of Span 7, looking East



9. Clogged scupper in the South shoulder of Span 3



10. Large and deep spall, filled with dirt, in the West Abutment header in the South shoulder



11. General view of Pier 4 deck joint, looking North



12. Spall with exposed steel in the base of the North barrier, Span 2 at Pier 2



13. Area of blistering and rusted steel to the bottom flange of Beam 1, Span 4 at Pier 4



14. Spall with exposed steel and associated delaminations, Pier 1, North overhang, looking South



15. Large spall along the top west edge of Pier 4 under Bay 2, looking Southeast



16. Cracks with rust and spalls in the East face of Pier 1, South overhang



17. Typical wide cracks along the top edge of Pier 2 cap



18. Large corner spall with exposed steel in the West face of South column at Pier2



19. 3/16" wide vertical crack in East Abutment below Bay 5

UNDER RECORD

For Bridge: 1758H057

IDENTIFICATION

Bridge ID: 1758H057 (2) District: 01 (3) County: 3
Inventory Route: (A) On/Under: 2 (B) Highway Type: 5 (C) Service Lvl: 1
(D) Route No: 00000 11) Mile Pt: 0.22 mi
6A) Features Intersected: MONROE ST & MADISON ST 6B) Critical:
16) Latitude: 39^44'27.58" 17) Longitude: 75^33'34.24"

AGE AND SERVICE

19) Detour Length: 0 mi 27) Year Built: 1976
28) No. of Lanes: A) On Bridge: 2 B) Under Bridge: 4
29) ADT: 100 30) Year of ADT: 2011 109) % Truck ADT: 5

CLASSIFICATION

20) Toll Facility: 3 37) Historical: 5 100) Defense Highway: 0
26) Functional Class: 19 103) Temp. Str.: 104) NHS: 0
102) Direction: 2
110) Nat. Truck Network: 0

GEOMETRIC DATA

10) Clearances - Vertical:: 23.2 ft
42) Type of Service: A) On Bridge: 1 B) Under Bridge: 1
43A) MAIN SPAN MATERIAL: 3 43B) DESIGN TYPE: 02
47) Inv. Route - Horiz.
Clearance: 24.0 ft
48) Length Maximum Span: 86.6 ft 49) Structure Length: 594.5 ft

UNDER RECORD SKETCH

UNDER RECORD**For
Bridge: 1758H057****IDENTIFICATION**

Bridge ID: 1758H057 (2) District: 01 (3) County: 3
 Inventory Route: (A) On/Under: B (B) Highway Type: 5 (C) Service Lvl: 1
 (D) Route No: 00000 11) Mile Pt: 0.00 mi
 6A) Features Intersected: MONROE ST & MADISON ST 6B) Critical:
 16) Latitude: 39^44'27.58" 17) Longitude: 75^33'34.24"

AGE AND SERVICE

19) Detour Length: 0 mi 27) Year Built: 1976
 28) No. of Lanes: A) On Bridge: 21 B) Under Bridge: 4
 29) ADT: 22467 30) Year of ADT: 2011 109) % Truck ADT: 6

CLASSIFICATION

20) Toll Facility: 3 37) Historical: 5 100) Defense Highway: 0
 26) Functional Class: 19 103) Temp. Str.: 104) NHS: 0
 102) Direction: 2
 110) Nat. Truck Network: 0

GEOMETRIC DATA

10) Clearances - Vertical:: 14.5 ft
 42) Type of Service: A) On Bridge: 1 B) Under Bridge: 1
 43A) MAIN SPAN MATERIAL: 3 43B) DESIGN TYPE: 02
 47) Inv. Route - Horiz.
 Clearance: 328.1 ft
 48) Length Maximum Span: 86.6 ft 49) Structure Length: 594.5 ft

UNDER RECORD SKETCH

AECOM

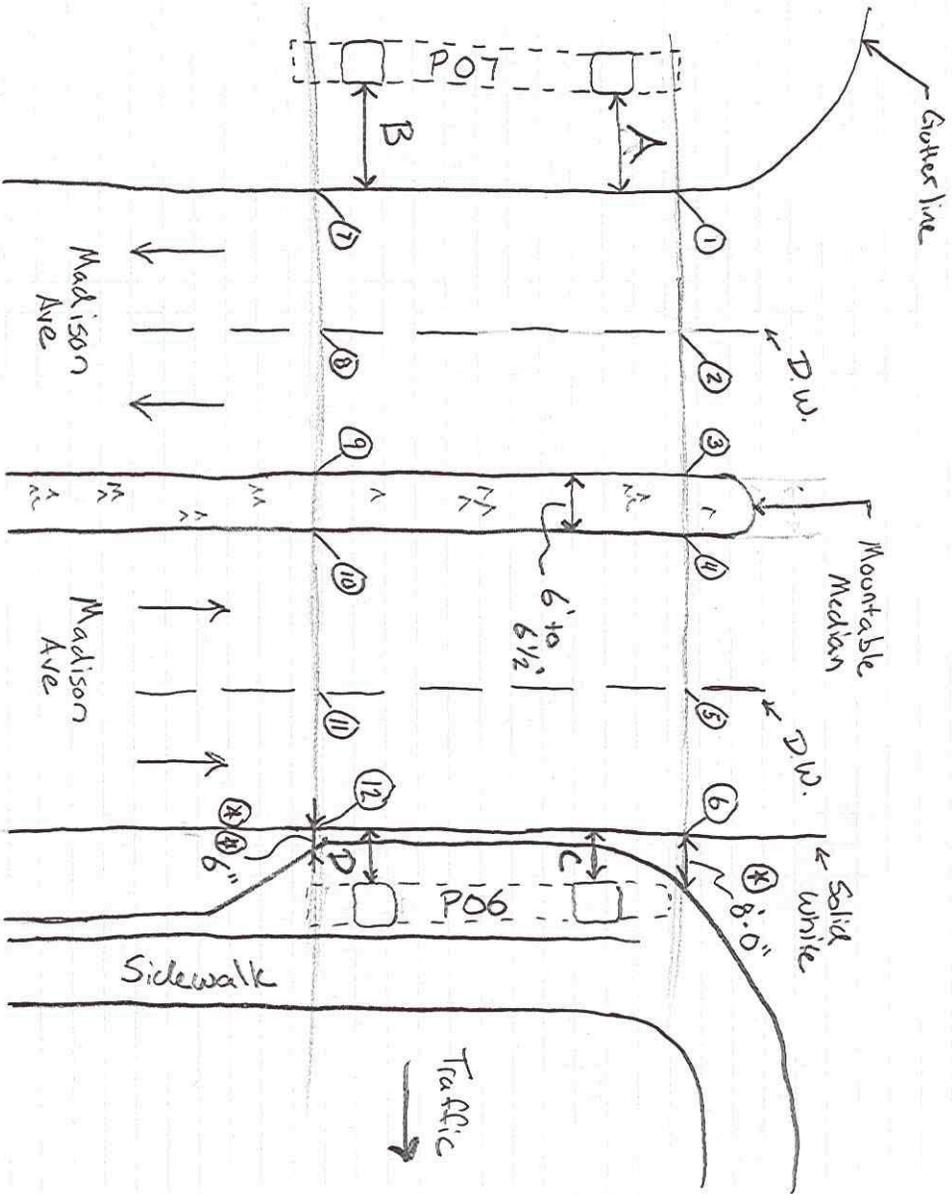
SUBJECT
MLK Blvd
OVER
Monroe & Madison Sts

SHEET NO. _____ OF _____
JOB NO. _____
BY: DLR DATE: 1/26/10
BY: DSH DATE: 1/31/12

BMS NO. 1758 H 057

AECOM No. 2012-30

DISTRICT D&DOT



Vertical Measurements:

- ① 16'-1 3/8"
- ② 16'-2 1/8"
- ③ 16'-4 1/8"
- ④ 16'-5 1/2"
- ⑤ 16'-8 1/2"
- ⑥ 17'-0 3/4"
- ⑦ 14'-4 1/2"
- ⑧ 14'-6 3/4"
- ⑨ 14'-7"
- ⑩ 14'-9 3/4"
- ⑪ 15'-2 3/4"
- ⑫ 15'-7"

Horiz. Measurement:

- Ⓐ 13'
- Ⓑ 20'
- Ⓒ 4.5'
- Ⓓ 4.0'
- SHDR Ⓚ = 8'-0"
- SHDR Ⓛ = 6"

Transportation

AECOM

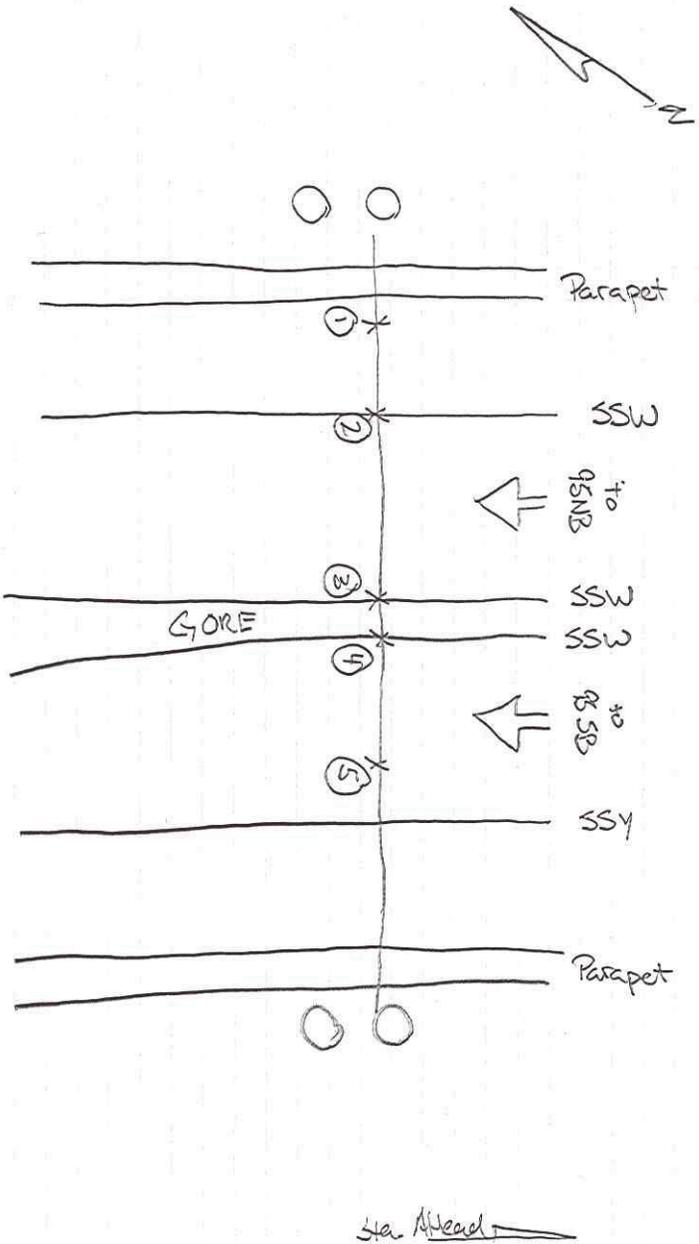
SUBJECT
Overhead Sign Structure
 OVER
East End; Span 2

SHEET NO. _____ OF _____
 JOB NO. _____
 BY: DJ/DH DATE: 2/7/12
 BY: _____ DATE: _____

BMS NO. 1758 H 057

AECOM No. 2012-30

DISTRICT DelDOT



- ① 19.18'
- ② 19.05'
- ③ 18.53'

- * ④ 18.45' (Min)
- ⑤ 18.60'

Measurements ① & ⑤ are
 taken to the sign edges.

Sta. Ahead →

AECOM

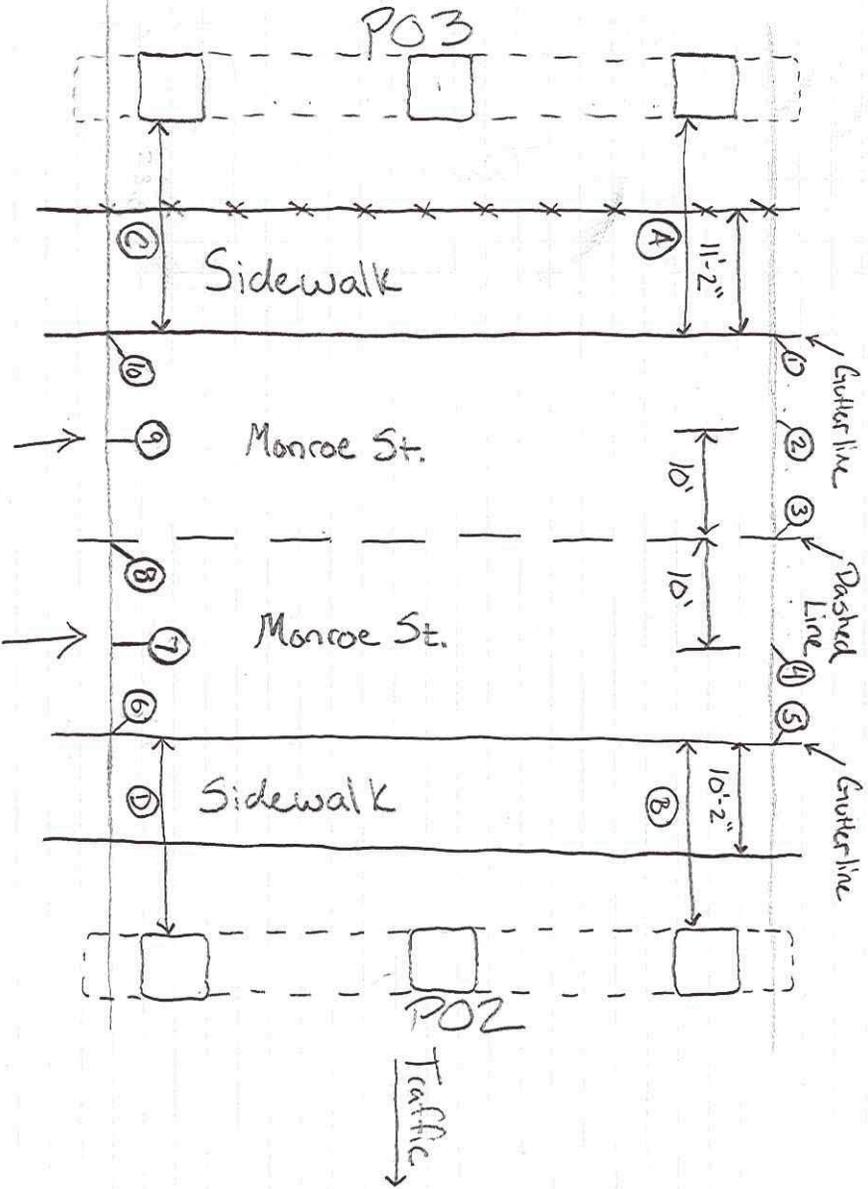
SUBJECT
MLK Blvd
 OVER
Monroe & Madison St.

SHEET NO. _____ OF _____
 JOB NO. _____
 BY: DLR DATE: 1/26/10
 BY: DJA DATE: 1/31/12

BMS NO. 1758 A 051

AECOM No. 2012-30

DISTRICT 21/DT



Vertical Clearances:

- ① 24'-11 5/8"
- ② 24'-7 1/4"
- ③ 24'-5 1/4"
- ④ 24'-7 7/8"
- ⑤ 25'-0 5/8"
- ⑥ 23'-9 1/2"
- ⑦ 23'-2 1/8"
- ⑧ 22'-10 7/8"
- ⑨ 23'-2 5/8"
- ⑩ 23'-6 7/8"

Horizontal Clearances

- Ⓐ 23.6'
- Ⓑ 25.6'
- Ⓒ 25.8'
- Ⓓ 23.6'