JTA Skyway 2019 Routine Inspection of Bridge Structures



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Final Report

EXECUTIVE SUMMARY

This JTA Skyway 2019 Inspection Report includes a summary of findings made during the routine inspection of the Skyway bridge structures. This project was performed under a Task Work Order for the JTA Skyway Modernization Program for which RS&H is the prime consultant and FIT Engineering is a subconsultant. The structural inspection was performed between January 29th and March 11th, 2019 and took 29 field days with a crew of 2-4 inspectors.

The body of this report is divided into sections. Each section summarizes the condition of a Skyway component and highlights both typical and significant deficiencies along with repair and maintenance recommendations. The bulk of the data is located in the Appendices. Appendix D contains comprehensive tables detailing individual deficiencies and their locations.

The Skyway infrastructure is generally in "Fair" condition with a number of significant deficiencies as noted in the body of the report. It is important that JTA perform regular maintenance to ensure safe operation and maximize the remaining service life. Items indicated to be performed in the short-term should be completed as soon as possible and those indicated as mid/long-term should be included in a maintenance plan within the next 5 years. Several of these recommendations could be performed as part of the anticipated conversion of the Skyway. However, if the conversion is delayed, JTA should consider performing these items as soon as feasible.

Opinion of probable costs are presented for the maintenance recommendations that are summarized within the relevant sections of the report. These are order of magnitude costs which are for planning purposes and designated as short-term (0 to 2 years) or mid/long-term (2-5 years). Cost estimates are based on historical cost information where applicable. All assumptions made are detailed in the report. Further refined estimates should be prepared as plans are developed to address deficient areas.

The Recommendations and Estimates Section in the report includes a detailed maintenance recommendations summary for each deficiency included in the 2019 Bridge Inspection report. The probable cost for the short-term repairs is approximately \$860,000 and the mid/long term items which include concrete repairs, superstructure painting, and joint repairs is approximately \$11,350,000.

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INTRODUCTION

This document is a report of the findings made during the 2019 routine inspection of the JTA Skyway (Skyway) bridge components. This project was performed under a Task Work Order for the JTA Skyway Modernization Program for which RS&H is the prime consultant and FIT Engineering is a subconsultant. The body of this report is divided into sections. Each section summarizes the condition of a Skyway component and highlights both typical and significant deficiencies along with repair and maintenance recommendations. The bulk of the data is located in the Appendices. Appendix D contains comprehensive tables detailing individual deficiencies and their locations.

The inspection took 29 field days between 1/29/2019 and 3/11/2019 with a crew of 2-4 inspectors as follows:

- 2 inspectors for the inspections on top of the deck
- 3 inspectors for the inspections of the concrete spans
- 4 inspectors for the inspections of the steel box beam spans

Access Methods

The top of the deck was inspected on foot over six Sundays while the system was shut down. The superstructure (beams) and substructure (piers) were inspected with the use of a bucket truck and with traffic control performed by ACME Barricades where lane closures were needed. The interiors of the steel box beams were inspected handson, full length, by gaining access through hatches located at the ends of the beams. These boxes are considered permit required confined spaces; gas monitors, radios, and confined space permits were used. The exteriors of the boxes were inspected from the piers with the bucket truck and through binoculars where necessary. Rope access, aerial drone, and a telescopic pole were used at isolated locations that could not be accessed otherwise.



Bucket Truck Use to Inspected Concrete Beams along Bay Street

Access was limited within the Balfour Beatty construction zone for the JRTC (first few spans of the Starter Line). Within the construction zone, we used binoculars to inspect the structure from underneath and we had direct access to most of the top of deck except in Span 4 where the guideways were covered with plywood.

DESCRIPTION OF THE SKYWAY INFRASTRUCTURE

The guideway was built in five sections beginning in the mid 1980's and is located in the heart of downtown Jacksonville. See the map in Figure 1 below. Plan & Elevation sheets for each section are provided in Appendix A and a tabulated span layout is presented in Appendix B.

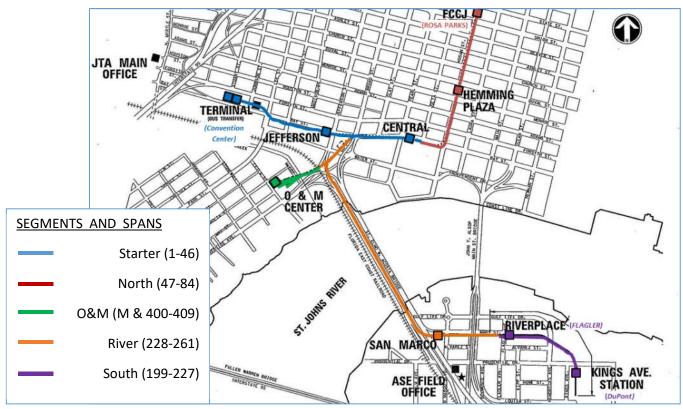


Figure 1. Guideway Map

The system consists of two elevated parallel guideways that carry monorail style trains which ride on a concrete guidebeam. The superstructure type varies throughout the system, but is mostly composed of prestressed concrete tee beams for the shorter spans and steel box girders for the longer spans and most of the curved spans. A summary of the superstructure elements is given in the table below.

Summary of Guideway Superstructure Elements										
Superstructure Type	# of Spans	Avg. Span	Max Span	Total Length						
		Length	Length	(along BL)						
Double Tee – Prestressed Concrete	215	69	94	14,848						
Double Tee – Reinforced Concrete	9	65	83	587						
Double Tee – PT Stems (curved stems)	6	81	92	484						
Pile Supported Slab	1	332	332	332						
Slab on Grade (O&M Spurs)	4	27	28	106						
Steel Box Girders	89	108	150	9,628						
Acosta Bridge	10	329	650	3,290						
Totals	334			29,275						

The most common substructure unit is a reinforced concrete cap on a concrete column. There are pier caps on the north side of the river that are post tensioned and there are a few steel pier cross girders, but because they sit above the bearings, they are considered part of the superstructure, not the substructure.

NOMENCLATURE

The span and pier identifications used in this report are taken directly from the As-Built Plan & Elevation drawings, provided in Appendix A. In describing the locations of deficiencies, everything is based on the direction of stationing, regardless of cardinal directions and regardless of span or pier identification. Looking toward the forward station, locations are described using "left", "right", "rear" and "front". This method provides a measure of consistency as the skyway changes direction. See Figure 2 below for examples.

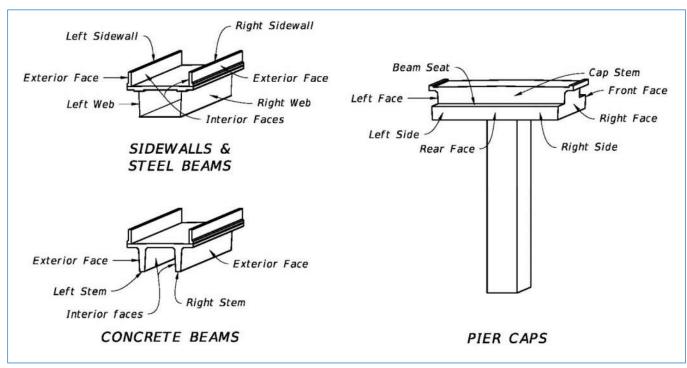


Figure 2. Skyway Element Nomenclature

ELEMENT QUANTITIES AND CONDITION STATE SUMMARIES

The field inspection and data gathering were based on the AASHTO Manual for Bridge Element Inspection as adopted and augmented by FDOT. In short, this process entails dividing the structure into component elements. Each of these elements is then individually inspected and evaluated according to a national set of condition state standards — uniquely developed for each specific element with regard to the element's material and expected deterioration and failure modes. This type of inspection results in a more detailed, consistent, and methodical bridge inspection; and one that can be tracked and monitored, cycle after cycle.

The tables below provide summaries of the element quantities and associated defect quantities that were found during the inspection. The tables show each parent element and the associated defect (or child) elements. For example, Element 12- Reinforced Concrete Deck is a parent element. The sub-rows, Delaminations / Spall / Patch; Exposed Rebar; Efflorescence; and Cracking, are all defects associated with the parent element. The defect quantities are divided into condition state, and rolled up into the total quantities for the parent element.

See Appendix C for a guide to what each condition state represents. Note that the tables below only pertain to the "bridge elements" and therefore do not include all elements that were inspected, like the drainage system for example. See the rest of this report of a comprehensive assessment of all inspected elements.

Deck Elements

No.	Element	Element / Defect Element	Total	Unit	Element Condition State				
INO.	Element	Element / Defect Element		Ullit	CS1 - Good	CS2 - Fair	CS 3 - Poor	CS4 - Severe	
12	R/C Dec	k (Steel Spans)			106,800	493	188	-	
	1080	Delamination / Spall / Patch	107,481	SF	-	71	188	-	
	1120	Efflorescence	107,481	SF	-	198	-	-	
	1130	Cracking			-	224	-	-	
15	Tee Beam Top Flange – P/T				167,730	865	68	-	
	1080	Delamination / Spall / Patch			-	101	28	-	
	1090	Exposed Rebar	168,663	SF		1	2		
	1110	Cracking			-	276	38	-	
	1120	Efflorescence			-	487	-	-	
38	Concret	e Slab (O&M Spurs, PSS)	9,459	SF	9,457	=	2	-	
	1080	Delamination / Spall / Patch	3,439	3F	-	=	2	-	
321	Approac	h Slabs (At O&M Center)	638	SF	628	=	10	-	
	1080	Delamination / Spall / Patch	036	2 F	-	=	10	-	

Sidewalls

No. El	Flement	Element / Defect Element		Unit	Element Condition State				
INO.	No. Element / Defect Element	Total	CS1 - Good		CS2 - Fair	CS 3 - Poor	CS4 - Severe		
331	R/C Side	walls			55,627	1,035	59	-	
	1080	Delamination / Spall / Patch	56,721 FT		=	432	59	-	
	1090	Exposed Rebar		FT	-	- 329	-	-	
	1120	Efflorescence			-	262	-	-	
	1130	Cracking			-	12	-	-	

Guidebeam

No	No. Element / Defect Element		Total	Unit	Element Condition State				
140.			Total	Offic	CS1 - Good	CS2 - Fair	CS 3 - Poor	CS4 - Severe	
105	R/C Guidebeam				29,162	87	26	-	
	1080	Delamination / Spall / Patch			-	17	24	-	
	1090	Exposed Rebar	29,275	29,275	LF	-	2	-	-
	1120	Efflorescence			29,275	LF	-	38	-
	1130	Cracking			-	27	2	-	
	1190	Abrasion / Wear			-	3	-	-	

Expansion Joints

No.	Element / Defect Element		Total	Unit	Element Condition State					
INO.	No. Liement / Defect Liement	/ Defect Element	Total	Onit	CS1 - Good	CS2 - Fair	CS 3 - Poor	CS4 - Severe		
302	Deck Co	mpression Seal			286	505	284	1,034		
	2320	Seal Adhesion	2,109				-	118	91	1,010
	2330	Seal Damage		09 FT	=	ı	3	24		
	2350	Debris			=	380	186	-		
	2360	Adjacent Deck or Header			=	7	4	-		
305	Guidebe	am Finger Joint			96	177	7	-		
	2350	Adjacent Deck or Header	280	FT	=	50	5	-		
	2360	Metal Deterioration or Damage			-	127	2	-		

Bearings

No.	Flomont	Element / Defect Element		Unit	Element Condition State					
INO.	Element				CS1 - Good	CS2 - Fair	CS 3 - Poor	CS4 - Severe		
310	Bearings	Bearings - Elastomeric			83	38	33	-		
	1000	Corrosion			-	14	2	-		
	1020	Connection	154	EA	-	9	29	-		
	2230	Bulging, Splitting, or Tearing			-	4	-	-		
	2240	Loss of Bearing Area			-	11	2	-		
311	Bearings – Sliding Plate				4	46	82	-		
	1000	Corrosion	132	e EA	-	38	29	-		
	1020	Connection	132		LA	LA	-	2	50	-
	2240	Loss of Bearing Area			-	6	3	-		
313	Bearings	– Fixed (Rotation Only)			-	8	-	-		
	1000	Corrosion	8	EA	-	3	-	-		
	1020	Connection			-	5	-	-		
314	Bearings	- Pot			42	30	2	-		
	1000	Corrosion	74		-	6	2	-		
	1020	Connection	74	74 EA	-	20	-	-		
	2240	Loss of Bearing Area			-	4	-	-		

Superstructure

No.	Element / Defect Element		Total	Unit	Element Condition State				
140.			Total		CS1 - Good	CS2 - Fair	CS 3 - Poor	CS4 - Severe	
102	Steel Bo	Steel Box Beams and Pier Cross Girders		FT	8,248	1,487	36	-	
	1000	Corrosion	9,771	FI	-	1,487	36	-	
8516	Steel Pro	otective System, Paint (Exterior)			-	-	156,319	17	
	3410	Chalking	156,336	SF	-	-	154,616	-	
	3420	Peeling / Bubbling / Cracking	130,330	31	-	ī	1	-	
	3440	Effectiveness			-	-	1,702	17	
8516	Steel Pro	otective System, Paint (Interior)		56,336 SF	-	154,790	1,526	20	
	3410	Chalking	156 226		-	149,984	-	-	
	3420	Peeling / Bubbling / Cracking	130,330		-	4,806	-	-	
	3440	Effectiveness			-	-	1,526	20	
109	Tee Bea	ms - Prestressed			14,398	714	221	-	
	1080	Delamination / Spall / Patch			-	107	20	-	
	1090	Exposed Rebar	15,333	FT	-	7	-	-	
	1110	Cracking			-	599	201	-	
	1120	Efflorescence			-	1	-	-	
110	Tee Bea	ms - Reinforced Concrete			201	198	188	-	
	1080	Delamination / Spall / Patch	587	FT	-	32	3	-	
	1090	Exposed Rebar	367	F!	-	11	-	-	
	1120	Efflorescence			-	1	-	-	

Substructure

No.	Element / Defect Element		Total	Unit	Element Condition State				
NO.			TOtal	Offic	CS1 - Good	CS2 - Fair	CS 3 - Poor	CS4 - Severe	
205	Column - Reinforced Concrete				190	33	11	-	
	1080	Delamination / Spall / Patch			-	24	10	=	
	1090	Exposed Rebar	234	EA	-	2	-	-	
	1120	Efflorescence			-	4	-	=	
	1130	Cracking			-	3	1	-	
220	R/C Pile	Cap (M1(s), M2, M3 and M4)	102	FT	102	-	-	=	
226	Prestres	sed Concrete Pile	8	EA	8	-	-	=	
233	Pier Cap	- Prestressed Concrete			431	127	8	-	
	1080	Delamination / Spall / Patch			-	13	4	-	
	1090	Exposed Rebar	566	FT	-	16	-	-	
	1110	Cracking			-	94	4	-	
	1120	Efflorescence			-	4	-	-	
234	Pier Cap	- Reinforced Concrete			3,622	181	30	-	
	1080	Delamination / Spall / Patch			-	51	30	-	
	1090	Exposed Rebar	3,833	FT	-	12	-	-	
	1120	Efflorescence			-	110	-	-	
	1130	Cracking			-	8	-	-	
8475	Retainin	g Wall (PSS Span in CSX Lot)			687	19	5	-	
	1080	Delamination / Spall / Patch	711	FT	-	-	5	-	
	1120	Efflorescence			-	19	-	-	

NON-STRUCTURAL CONCERNS

Deck Drainage System

Description

Components of the deck drainage system are located at almost every pier. For piers in which the top surface of the pier cap is flush with the deck riding surface (most common), the drainage system is composed of 4 in. PVC pipes cast within the pier cap and column. At locations where the pier cap is not flush with the top of deck (where the steel box girder is continuous over the pier), the pipe either runs down through the box and into the column or is affixed to the outside of the structure. See Figure 3 for typical deck drainage details.

Most of the deck scuppers are topped with 4 in. atrium grates, but there are a few flat floor drain grates in the system as well.

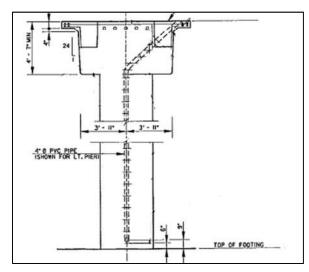


Figure 3. Typical Deck Drainage Details

Drainage Problems Which Can Be Corrected with Proper Maintenance

The lack of rain water drainage is a significant problem throughout the Skyway system, and for the most part this is a result of inadequate maintenance. It was evident during the 2019 inspection that some maintenance has been performed, but the number of drainage related issues has increased since the last inspection. Since thorough cleaning is not occurring regularly, debris and soil accumulate around the scupper atrium grates which protrude up from the deck and that prevents water from draining. See the Pier 247L and Span 6N photos below. The few floor drain grates in the system are located underneath the guidebeams within transverse tunnels cut into in the pedestals. These tunnels are filled with up to 4 inches of sand and debris; see the Pier 236R photo below.







It is apparent that maintenance crews have broken or removed many of the grates since the last inspection - atrium grates are missing at 18 piers and are broken at 37 piers. 80% of these instances have occurred since the previous inspection. It is possible that this was done on purpose to provide for easier flow of water through the grates, but that also allows the debris to go down and clog the pipes. Significantly clogged drains were noted at 25 piers and at many of these, the pipes were filled with water to the top of the deck, resulting in standing water on the deck. It should be noted that much of the deck inspections in 2019 were done during or right after rain events. See the photos below.



Pier 219R: Broken Atrium Grate and Drain Pipe Clogged and Filled with Water



Span 244R: Missing Atrium Grate and Drain Pipe Clogged and Filled with Water

As previously noted, there are numerous locations around the system in which water ponds on the deck surface. This is primarily due to the accumulation of soil and debris around the deck drains and transverse pipes, preventing the normal flow of water. During the inspection, inspectors used hand tools to clear around many of the drains and watched the water gush through, only to see it stop as debris quickly clogged up the grate again. As an example, a thru-deck drain with an inverted atrium grate in the right deck overhang of Span 205L (near the Kings Avenue Station) was filled with debris and not conveying water. Inspectors removed the



Span 205L: Water Draining from Deck after Debris Removal

debris and the water drained immediately. The photo above shows the water draining after debris removal (it was not raining at the time).

Access riser pipes are present at the bases of many of the pier columns. Nine of the riser pipes in the South and River lines have broken caps. One of the riser pipes for the pile supported slab span (Span 253) was filled to the top with water indicating a blockage in the system. This location is accessible from the CSX parking lot of Water Street.



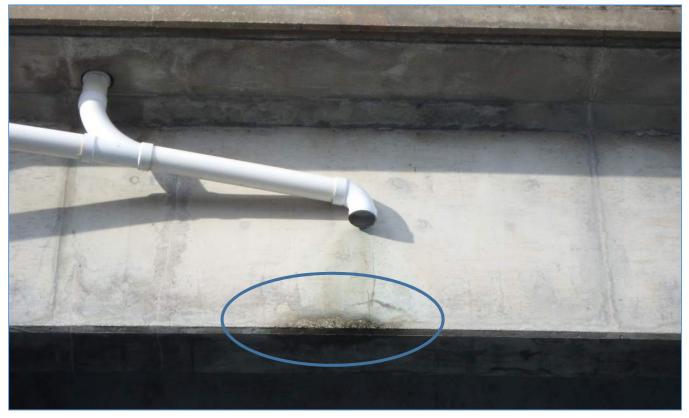


Pier 261R: Broken Riser Pipe Cap

Span 253R: Riser Pipe Filled with Water

In the right overhang of Span 409R, water is dripping from the first drain pipe downspout from the pier onto Water Street. It appears that the hole in the deck is larger than the pipe and the water is dripping between the two.

In the crossover span just before Central Station, the drain pipe beneath the left overhang is dripping water onto the beam stem. The water is infiltrating cracks and causing minor abrasion. See the photo below.



Span 42S Cross: Drain in Need of a Downspout

Drainage Problems Which Will Require Rehabilitation Solutions

There are several locations in the system in which water ponds at a low spot on the deck and there is no apparent means to convey the water off the deck. In the Starter Line, there is trash, wet debris and standing water throughout many of the spans. In some cases, this is due to the debris preventing the water from reaching the nearest drain, but in many cases, there is no nearby means of drainage. The photo to the right shows standing water, trash and debris between the sidewall and guidebeam pedestal in Span 2N. There are no drains at Pier 2 or 3N. The nearest drain is located at Pier 5.



Span 2N: Trash, Debris and Standing Water

Another example is at Pier 242. This pier carries a curved section of steel box girders and is superelevated, with the low side on the right. Figure 4 shows that the drainage scuppers are located on the inside deck of each guideway section, which is on the high side of the super for the Right Guideway. Water ponds on the low side. See the photo below.

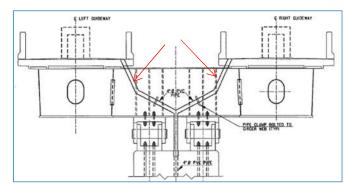


Figure 4. Pier 242 Drainage Details



Pier 242R: Guideway, Looking Back Showing Standing Water on the Low Side and Scupper on High Side

A third example is the Right Guideway at the San Marco Station. In Span 240R there is standing water for the full length of span on the left side of the guidebeam only. There is a series of metal conduits that cross the guideway transversely, about 5 ft. from Pier 240. The conduits sit almost right on top of the deck (1/8in. max gap, filled with debris) and so water cannot get to Pier 240 to drain. See the photo to the right.



Pier 240R: Standing Water Blocked by Conduits



Erosion Between Slab-on-Grade Spans at the O&M Center

Shown in the photo to the left is an area of erosion between two slab-on-grade finger spans at the O&M Facility. Concrete was poured between the slabs in an effort to stop the erosion, but that just moved the affected area further back. This area is between M1B2 and M1B3 and measures 4' L x 18" W x 1' D and has narrow voids up to 2' deep below the poured slab. This represents an increase since the last inspection. A similar area of erosion is present between M1B2 and M1B3.

There is a significant amount of standing water inside the guidebeam in Span 2N. The top of the beam has a 6.5" x 3.25" hole that allows water to enter, but the hollow guidebeam sits on a solid pedestal, so there is no means for the water to drain. See the photo to the right.



Span 2N: Water Inside Guidebeam

For a complete list of drainage related deficiencies noted during the 2019 routine inspection, refer to Appendix D-1.

Recommendations

- Drain the water from inside the guidebeam in Span 2N.
- Install a downspout at the end of the drain pipe in Span 42S Cross.
- Investigate and repair the water dripping from the right overhang of Span 409R onto Water Street (EB) from the first deck downspout past Pier 409R.
- Thoroughly remove the soil and debris from the top of the deck, especially at the scupper locations. This should be done on a regular basis.
- Repair/replace the deck drain grates listed in Appendix D-1 that are broken, inverted or missing. Consider replacing with grates that are flush with the deck to make cleaning around the drains easier.
- Repair/replace the damaged riser pipes and/or caps at ground level in the South and River lines listed in Appendix D-1.
- Clean out clogged drain pipes listed in Appendix D-1.
- Repair the eroded areas between the slab-on-grade spans at the O&M facility. Provide a means to convey the stormwater and prevent further erosion.
- Inventory the locations with water ponding issues that cannot be alleviated with the maintenance solutions listed above. At each location, investigate an engineered solution. Perhaps this entails piping through the guidebeam pedestal or coring through the deck and installing additional means of conveyance.

Electrical

This project did not include an inspection of the mechanical and electrical components of the Skyway, but there were some structural defects noted that pertain to the electrical system. Many of the electrical conduits, straps and bracket that sit on the deck have heavy to severe corrosion and section loss due to standing water and debris accumulation on the deck. Conduits at San Marco Station have the most significant deterioration, with 100% section loss and exposed wires. See the photos below.



Pier 239L: Heavy Surface Corrosion on Conduits



Span 238L: Conduit with 100% Loss Exposing Wires

There are other locations throughout the system in which components exhibit surface corrosion which are not related to the standing water and debris accumulation on the deck. Below are six examples.



Heavy Corrosion on Electrical Cabinet Legs in Span 409R



Surface Corrosion on Cable Tray Top in Span 29N



Broken Pipe Hanger Due To Surface Corrosion in Span 1N



Corrosion on Nuts for Cable Tray Brackets, Starter Line



Heavy Corrosion and Bent Bolt for the Traffic Light in Span 55L



Surface Corrosion on Traffic Signal Pole Anchor Bolts in Span M2

The cable trays that are attached to the inside faces of the sidewalls have isolated areas in need of repair. For instance, in Span 43N, there are four (previously 3) broken attachment brackets which are causing 45' (previously 30') of the tray to sag downward. See the photos below. There are also locations with missing straps and covers.





Span 43N Cable Tray with Four Broken Attachment Brackets

Many of the piers in the North Line have electrical outlets attached to the columns that are missing one or both of the hinged weather covers. There is an outlet cutout on Pier 52 that is missing cover plate. There is active water dripping from the light connections and the electrical outlet attached to the column at Pier 76. See the photos below.



Pier 76: Overview of Water Leakage from Electrical Components

Pier 76: Close-up of Water Leakage from Electrical Outlet

There are multiple locations in the system in which the ground wire attached to one of the metal components is detached. See the photo to the right.



Span 78L: Detached Emergency Walkway Ground Wire

For a complete list of deficiencies noted during the 2019 routine inspection, refer to Appendix D-2.

Recommendations

- Remove soil and debris accumulation at transverse conduits on the deck.
- Replace conduit, brackets and straps on top of the deck with severe section loss.
- Repair electrical cable tray defects listed in Appendix D-2 including missing straps, missing covers and broken or missing sidewall brackets.
- Investigate and mitigate the cause of the water leaking from the electrical outlet and light connections on the column of Pier 76.
- Remove the corrosion and repaint the bases of the electrical control cabinets throughout the system.
- Replace the nuts for the cable tray support brackets in the Starter Line with galvanized or stainless nuts. Also replace the nuts and washers for the electrical control cabinet support brackets in Span 409L.
- Apply a galvanic spray to the following components with corrosion: Straps and covers of the cable trays, power rail attachment brackets, conduit straps over the Acosta bridge, and emergency walkway grounding cable attachments.
- Replace broken and severely corroded pipe hangers in Span 1N, Exterior.
- Tighten the nuts for the traffic light attachment in Span 55L over Hogan Street and clean and coat the nuts and bolts to prevent further corrosion.
- Install proper outdoor electrical outlet covers and plates where missing on the pier columns in the North Line.
- Repair detached and severed ground wires throughout the system.
- Elevate the transverse conduits off the deck to prevent debris entrapment and subsequent occurrence of standing water.

Vegetation Encroachment

Behind the O&M building, much of the vegetation previously noted as encroaching the structure has been trimmed back. For example, the vines growing on the Pier 403 column have been cut; See the photo below.

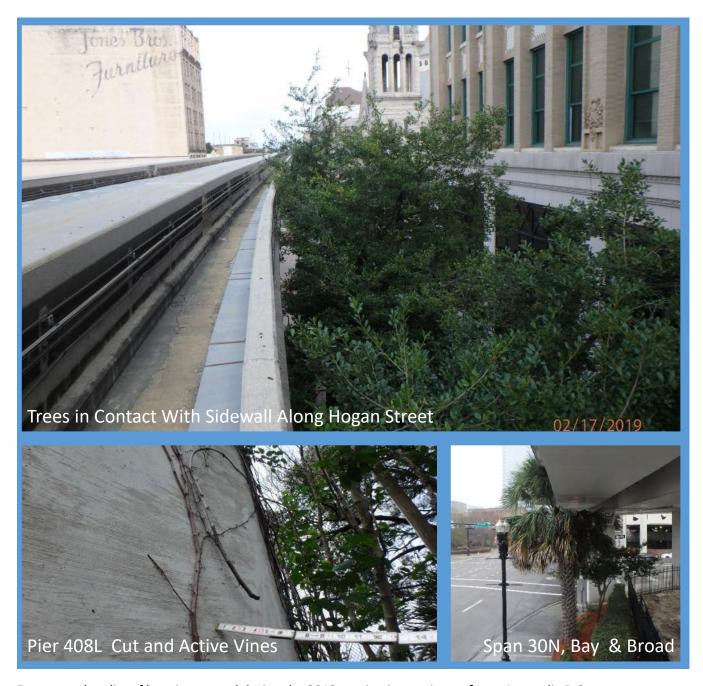


Pier 403: Cut Vines Growing on the Column

There are, however, numerous locations around the system in which the vegetation is still encroaching the structure. Many landscaping trees are growing underneath and beside the guideways on Bay Street, Hogan Street, Mary Street and at Kings Avenue Station. Most of these trees have been trimmed previously but are again in contact with the beams and sidewalls. There is a large palm tree growing beneath the steel beam of Span 30N.

Vines are growing up the column of Pier 406R and are attached to the box beam bearings, deck overhangs of Spans 405 and 406 and climbing over the left sidewall. Vines are also growing up Piers 401 and 408L. Many were previously cut, but new ones are growing up as well. Vines are also growing over the slope protection under Span M2 behind the O&M building.

Small palm plants are growing through the joint between the sidewalls and deck second pour at isolated locations throughout the Acosta Bridge spans.



For a complete list of locations noted during the 2019 routine inspection, refer to Appendix D-3.

Recommendations

- Remove the large palm tree growing below and in contact with the steel box beam in Span 30N.
- Continue to trim the vegetation growing beneath and around the spans leading from the O&M facility.
- Remove the vines growing on Piers 401, 406R, 408L and on the slope protection beneath Span M2.
- Landscaping trees in contact with the guideway beams or sidewalls should be trimmed back or removed as necessary.
- Remove the palm plants growing between the sidewall and deck over the Acosta Bridge spans.

DECK ELEMENTS

Emergency Walkway

Description

The galvanized emergency walkway is present everywhere throughout the system except at the stations, where passengers can exit directly onto the station platforms. The walkways are attached to the sidewalls in two different configurations. Where the guideways are adjacent to one another, a common walkway is present, supported by sidewalls on both guideways. Where they are separated, each guideway has an independent walkway supported on brackets anchored to one of the sidewall. See Figure 5.

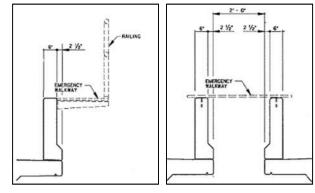


Figure 5. Typical Emergency Walkway Details

Condition

The emergency walkway components are in satisfactory to good condition. There is light to moderate surface discoloration and corrosion on the emergency walkway grating, plates, clips and bolts, and the railing at various locations throughout the system. Numerous brackets supporting the cantilevered type walkways have moderate to heavy surface corrosion at the connection to the sidewalls. See Figure 6 below.







Figure 6. Typical Emergency Walkway Surface Discoloration and Corrosion Locations

Handrails and Posts

A number of these components have been painted in the past and since the previous inspection, the cover plates located at Piers 25N and 32 have been coated; See the photo below.



Coated Emergency Walkway Grating Expansion Cover Plate at Pier 32

At the Acosta Bridge Piers R-1 and R-6, the grating cover plates are not wide enough to fully cover the expansion joint gaps produced by the bridge deck contraction. See the photo below.



Pier R-1 LT, Emergency Walkway Joint Expanded Beyond Expansion Plate

For a complete list of deficiencies noted during the 2019 routine inspection, refer to Appendix D-4.

Recommendations:

- Install new (wider) cover plates at the four Acosta Bridge expansion joints located at Piers R-1 and R-6.
- Apply a galvanic coating to the grating, grating plates, clips, and bolts, and railing with moderate surface discoloration and surface corrosion.
- At the cantilevered walkway support brackets with moderate to heavy surface corrosion, clean the brackets with a wire brush and apply a galvanic coating.

Expansion Joints

Description

There are three sets of expansion joints at most expansion piers. Because the top of pier cap is level with the top of deck (or tee beam top flange), an expansion joint is needed at each deck/cap interface, one for the back span and one for the forward span. These deck joints have compression seals. The third expansion joint location is at the centerline of the pier and this is where all of the components above the deck have a joint. This includes the sidewalls, the guidebeam, guidebeam pedestal and for the older lines, the second pour and running surfaces.

The guidebeam expansion joint is composed of sliding steel plates on the top surface and steel finger joints on the sides of the guidebeam.

Because the joints in the elements *above* the deck do not line up with the joints *in* the deck, neoprene pad bond breakers are present between the pier cap and the above deck elements, so that the elements above the deck can slide back and forth with the expansion and contraction of the decks themselves. This arrangement has caused deterioration of the guidebeam pedestals; see the Guidebeam section of this report for more information. Figure 7 below shows the expansion joint configurations at a typical pier.

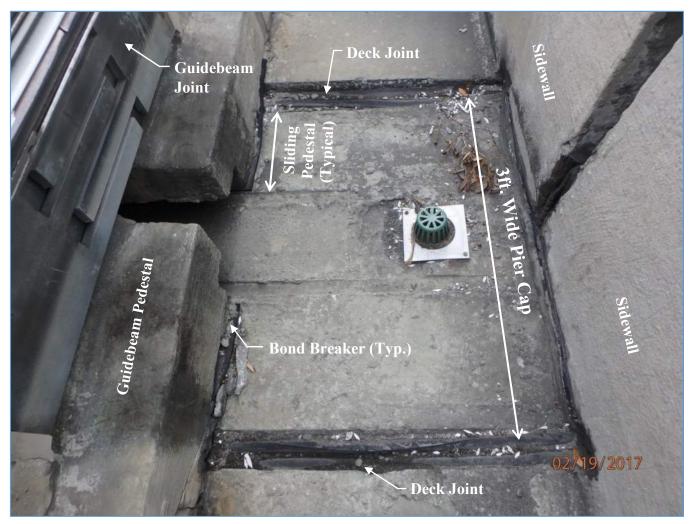
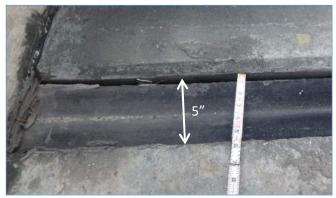


Figure 7. Typical Expansion Joint Configuration (Photo taken during the 2017 inspection)

Condition - Deck Expansion Joints

The deck expansion joints are in poor to severe condition overall; many have failed altogether. Several of the deck joints are filled with soil and debris. Of the 187 compression seals in the system, 116 were found with full depth adhesion loss, most for nearly the full length of the joint and 12 more have partial adhesion failures. At 38 locations, there are gaps noted from 1/8" to 3/4" wide between the seal and either the deck or pier cap. At Pier 81L, the compression seal is hanging down and at Pier 52A for the rear span, the seal is missing altogether (was likely never installed). These defects are significant as the failure of the joints permits water to fall through and onto the beam seat below, accelerating the deterioration of the beams and bearings. Also, failed deck joints in the vicinity of the stations results wet tile, causing a slipping hazard. This was noted at (but not limited to) Central Station and San Marco Station. See the photos below.



Pier 232R: Joint Width Exceeds Seal Capacity



Pier 205R: Typical Seal Adhesion Failure



Pier 81L: Joint Seal Hanging Down



Pier 44S: Wet station tile due to failed deck joint

The top of pier cap and top of deck elevations were designed to be even, but at 29 joint locations, there is an elevation difference, noted between 1/4" to 2-1/4". In nearly all cases, the top of cap is lower than the top of adjacent deck. See the photo to the right.



Pier 258L: 1-1/4" Elevation Difference Between Top of Deck and Top of Pier

Condition - Guidebeam Expansion Joints

There are 99 guidebeam expansion joints in the system. These joints are in fair condition overall with no significant changes from the previous inspection. Vertical offsets of the top sliding plates were noted at fourteen locations. The largest elevation difference was found at Pier 210L. See the photo below.



Pier 210L: 1/2" Elevation Difference Between Guidebeam Sliding Plates

There are multiple locations in which the concrete closure pours (pourbacks) on either side of the joints, have spalling, delaminations, patches or cracking. Delaminations and spalls were noted at 48 of the 99 joints. See the photo below.



Pier 29N: Spalling and Delaminations on Forward Pourback

Light to moderate surface corrosion was noted on the sliding plates at 51 of the guidebeam joints; no section loss was noted at these locations. At Piers R-1L and 78R, one of the tack welds for the top sliding plates is cracked, but the plates are still secure. See the photos below.



Pier 250L: Surface corrosion on the sliding plates



Pier R-1: Tack Weld Crack

At the Acosta Bridge Piers R-1 and R-6, the joints are expanded beyond their maximum limits, with measured openings between 4-1/4" to 5" at around 68 degrees, rendering the side fingers with little surface area to slide against. Retrofit steel plates have been installed behind the fingers at both R-6 guidebeam joints to provide additional sliding surface. On the left side, 1 of 8 plates has fallen off and the fingers have only 7/8" of remaining embedded pate surface to slide against. On the right side, 2 of 8 embedded plates have fallen off and the two remaining retrofit plates attached at the lower set of fingers have cracked welds and are not secure. At Piers 78L and R-6L, one of the fingers is broken off. See the photos below.



Pier R-6L: 7/8" Available Sliding Surface



Pier R-6R: Retrofit Plate Tack Weld Crack



Pier 78L: Missing Finger on the Right Side of the Guidebeam

For a complete list of joint deficiencies noted during the 2019 routine inspection, refer to Appendix D-5.

Recommendations – Deck Joints

Remove the soil and debris within and around the joints.

The best repair solution for the failed compression seal deck joints throughout the system will depend on the design of the future system – namely if the guidebeam will stay in place or be removed.

If the guidebeam is intended to remain and there will be no vehicle contact with the joints, then the most economical solution will be to apply a neoprene seal over the existing failed joints. This has already been done at piers near Hemming Plaza Station; See the photo below.



Pier 62L: Joint Covered With Neoprene Seal (Photo from 2017)

This solution is not feasible however, if the future design calls for a vehicle to run directly on top of the deck. If that becomes the case, then the existing compression seals should be removed and replaced once the guidebeam, pedestals, and second pours are removed.

Additionally, if it is decided that a vehicle will run directly on top of the deck, then the locations with uneven deck/pier cap interfaces will also need to be addressed.

Recommendations – Guidebeam Expansion Joints

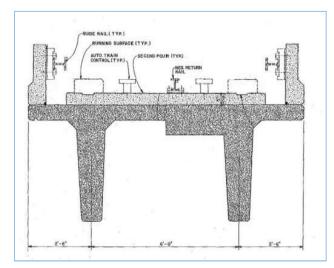
- Pier R-6: Reinstall the fallen retrofit expansion extension plates and repair the unsecured ones.
- Patch the spalls in the concrete pourbacks; locations are listed in Appendix D-5.
- Apply a corrosion inhibitor to areas on the steel plates and fingers with surface corrosion that do not come in contact with the train tires.
- In the long term if the guidebeam is to remain, an engineered solution to retrofit the joints should be investigated due to the deterioration of the pedestals (see the Guidebeam section of this report). Perhaps this could involve replacing the single joint with two that coincide with the deck joints. Another option would be to retrofit the current configuration by replacing the bond breakers with thin sliding plate bearings.

Deck and Tee Beam Top Flange

Description

Both the Starter and North lines were built prior to the conversion to the current bombardier trains and guidebeam system. The decks along these lines had to be retrofitted to accommodate the new system.

The figures below show the older and newer typical sections. In the old configuration, there was a 5" thick concrete second pour on top of the deck, with two 6 %" x 14" running surfaces, automatic train control rails, a negative return rail, and guide rails connected to the sidewalls. In the current system, there is a guidebeam on a pedestal that runs along the center of the guideway with low voltage and high voltage power rails attached to the sides of the guidebeam (not shown in the figure).



2'-6'

Figure 8: Old Typical Section

Figure 9: Current Typical Section

Condition

In the Starter and North Lines, most of the top surfaces of the decks and tee beam top flanges cannot be seen due to the presence of the second pour. Throughout these lines, the train control rails and portions of the running surfaces and second pour have been removed, leaving roughened surfaces. See the photo below.



Typical Deck Top in the Starter and North Lines Showing Removal of Relic Riding Surface (Photo from 2017)

Defects found in what remains of the old running surfaces are considered irrelevant and not addressed in this report as those elements are relics of the previous design and not structurally significant. Similarly, defects in the second pour that are a result of deliberate concrete removal during the system modification (such as rough surfaces and exposed tops of rebar dowels) are not addressed in this report. Defects in the second pour not necessarily pertaining to the modification are noted herein as it does serve the structural purpose of supporting the guidebeam pedestal.

In Spans 6N and 7N (Starter Line), the second pour was saw cut on both sides of the guidebeam and the portions to the exterior of the cut were removed. This work damaged/removed the top of the deck up to 1-3/4" deep x 12" wide, full length of both spans. See the photo below.



In the South, River and O&M Lines, the top surface of the deck was finished with a roughened strip down the centerline for bonding of the guidebeam pedestal. This is visible where the pedestal is present in segments and the guidebeam spans between segments. See the photo below.



Typical Roughened Deck Top in the South Line

There is soil and debris build-up on top of the deck surface throughout the system; see the photo below. This debris traps moisture and results in drainage problems and corroded metal conduits. More information on these issues is presented in the Drainage and Electrical sections of this report.



Span 20S: Wet Debris Accumulation, Right Side of Second Pour

In the Starter and North Lines, the second pour exhibits heavy cracking, fractures and delaminating at a number of pier locaions. This is caused by the joint in the second pour not coinciding with the joints in the deck as described in the Expansion Joint section of this report. In the South and River Lines, a number of the lift point patches for the tee beams have delaminations and failures, some exposing the lifting steel. See the photos below.



Second Pour Delaminations Above Pier 38



Span 231R: Lift Point Patch Failure

Spalling and delaminations are also present at isolated locations throughout the system on the undersides of the CIP decks and the undersides of the tee beam top flanges.

The undersides of the CIP deck overhangs at the switches exhibit cracks with efflorescence; this is heaviest in the switch area around Span 8 (Starter Line). Here there is heavy efflorescence dripping and moisture leaching between the main deck and the overhang extensions. See the photo to the right. Efflorescence is also common within the PT blockout on the undersides of the tee beam flanges.



Span 8N: Heavy Efflorescence and Moisture Leaching in Deck Overhang

The top surfaces of the cast-in-place decks of the steel box spans exhibit transverse cracking, typically spaced three to five feet apart, although spaced closer together at some locations, especially over continuous piers. The cracks are mostly hairline but some were measured up to 1/32" wide. See the photos below.



Span 234L: Transverse Deck Cracking



Span 241R: Closeup of Transverse Deck Crack

For a complete list of deck related deficiencies noted during the 2019 routine inspection, refer to Appendix D-6.

Recommendations

- Remove the debris and any loose concrete from on top of the deck.
- Patch all deck and tee beam top flange spalls listed in Appendix D-6 with depths 1in. or greater. Second pour spalls that do not affect the bearing of the guidebeam pedestals can be ignored.

Sidewalls

Description

The sidewalls are the concrete barrier walls that run along both sides of each guideway. These walls were cast in place and made integral with the decks by reinforcement cast within the tee beam flanges or within the deck above the steel boxes. See Figure 10 for typical details. There is a decorative treatment on the exterior faces of the outboard sidewalls in the North Line (Spans 47-84).

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Figure 10. Sidewall Details

Condition

The sidewalls are in good condition overall, with no significant changes from the previous inspection. Vertical cracking of the sidewalls is prevalent throughout the system. Many of these cracks are reflective on both sides

and cross over the top of the walls. For the most part, the sidewall cracking in the system is considered insignificant for traditionally reinforced concrete, meaning cracks with widths less than 1/16in. (0.06) wide. At isolated locations, there are vertical or random cracks with light to moderate efflorescence. See the photo below.



Span 211L: Random Cracking on the Interior Face of the Left Sidewall with Efflorescence

Spalls and popouts with exposed steel due to insufficient concrete cover of the reinforcement is common on the vertical faces of the sidewalls. These deficiencies were noted over approximately 320 linear feet, scattered throughout the system. Many of these locations have been painted by JTA maintenance crews or coated with galvanic spray by inspectors. See the photo below.



Span 55L: Interior Face of Left Sidewall with Insufficient Reinforcement Cover Spalls

There are four locations in the system where the top surface of the sidewall exhibits delaminations and spall/delaminations extending for 20ft. or more. This was noted in Span 203 Cross (South), 225L (South), 253R (River) and Span M5 (O&M). Other defects were noted at various locations, such as the atypical cracking and larger than typical spalls. At the JRTC construction site, the left sidewall (and tee beam top flange) of Span 5N is cutout for 25in. due to a clearance conflict with a new building column. Some of the longitudinal reinforcing bars were cut, but some remain; it is presumed that this will be repaired as part of the building construction. See the photos below.



Span 19S: Delamination, Top of Left Sidewall



Span 5N: Sidewall Cutout at the JRTC Due to Conflict with Adjacent Building Column

For a complete list of sidewalls deficiencies noted during the 2019 routine inspection, refer to Appendix D-7.

Recommendations

- For the spalls listed in Appendix D-7 with exposed rebar, coat the rebar with a galvanizing spray.
- Patch all spalls listed in Appendix D-7 with depths 1in. or greater.
- Seal all cracks listed in Appendix D-7 with widths 0.03in. or greater.

Guidebeam

Description

The guidebeam is a hollow concrete beam that sits on a longitudinal pedestal and runs on top of the deck; it is the riding surface of the skyway passanger trains. Power rails are attached along both sides of the guidbebeam. One side is the low voltage side carrying the signal loop, grounding bus rail and 120 volt bus rail. The other side is the high voltage side carrying three bus rails for 3 phase 480 volt power. See Figure 11 for a typical section of the guidebeam itself (power rails not shown).

Switches are located strategically throughout the system to allow for guidebeam directional changes. There are cross-over switches that allow the trains to transfer from one track to its parallel counterpart and there are switches to facilitate the merging between the O&M Line and the River Line and the merging between the River Line and the Starter Line.

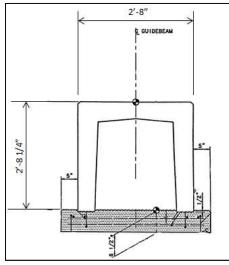


Figure 11. Typical Guidebeam

At the switches, the guidebeams, referred to as as switchbeams, rotate on tracks to make the crossover or merge connection. Because of this rotation and beam curvature, the switchbeams are built of painted steel shells, rather than concrete.

Condition

The Skyway guidebeams are in satisfactory condition overall, with no significant changes from the previous The beams exhibit cracking typical of inspection. conventionally reinforced concrete members. There are hairline (less than 0.01" wide) vertical and transverse cracks spaced three or more feet apart that run up the sides and across the top of the member. Likewise, hairline longitudinal cracks are present on the top face at the centerline of the beam, throughout the system. These types of cracks are typical for reinforced concrete in "good" condition. There are isolated locations throughout the system in which the cracking is wider and/or more densely spaced. These locations are noted in Appendix D-8. The worst cracking in the guidebeams is present in Span 253, which is a 334' pile supported slab section of the River Line that is on a tight curve. See the photo to the right.



Span 253: Vertical/Transverse Cracking in Guidebeam

Efflorescence (white crystalline deposits that migrate through the concrete to the surface) is present at several cracks and construction joints on the guidebeams and guidebeam pedestals throughout the system.

As described in the Deck Joint section of this report, there are thee joints at most expansion piers – the deck joint at the rear face of the pier, the deck joint at the forward face of the pier and the guidebeam joint which is above the center of the pier. This configuration requires that the end 18 inches of the guidebeam and pedestal to slide back and forth with the expansion and contraction of the decks. Even though a neoprene bond breaker is present between the top of the pier cap and the guidebeam pedestal, this configuration has led to significant cracking, delaminations and spalling of the pedestals. Isolated spalls and failed or delaminated patches are also present on the top edges of the guidebeams. See the photos below.







Span R-2L: Failed Patch on Left Side of Guidebeam

The paint on the steel guidebeams and switchbeams is in poor condition. The paint is very chalky, which is accelerated by direct UV degradation. There is surface corrosion at isolated locations on beams and on many of the switchbeam baseplates, mechanism support brackets, and hardware. Spot painting is evident, but there are locations where corrosion is active and causing significant section loss. See the photos below.



Span 8S: Surface Corrosion on Steel Guidebeam



Span 233L: Section Loss on Bolts and Motor Bracket

At isolated locations, the concrete pedestals for the switchbeams have wide cracks emanating from the anchor bolts, and fractures and spalls around the perimeter. See the photo on the following page.



Span 31S: Switchbeam Pedestal Fractures and Spalls

For a complete list of guidebeam deficiencies noted during the 2019 routine inspection, refer to Appendix D-8.

Recommendations

- At the expansion joints, remove all unsecure pedestal concrete and thoroughly clean out the joint areas.
- Patch all spalls listed in Appendix D-8 that are on the top edges of the guidebeam.
- At the switchbeam locations, remove active corrosion and recoat areas of failed paint on the beams and mechanism support plates, brackets and bolts.
- Develop a plan to re-paint the steel guidebeams and switchbeams.

SUPERSTRUCTURE ELEMENTS

Concrete Tee Beams

Description

Over 50% of the Skyway is supported with prestressed concrete tee beams. The beams are typically grouped in three or four span units made continuous over the piers by post tensioning tendons that run through the beam top flanges and through the pier caps. See Figures 12 and 13 below. There are also a six tee beam spans with post tensioned curved stems and nine spans that are cast-in-place concrete beams, mostly associated with the crossover spans.

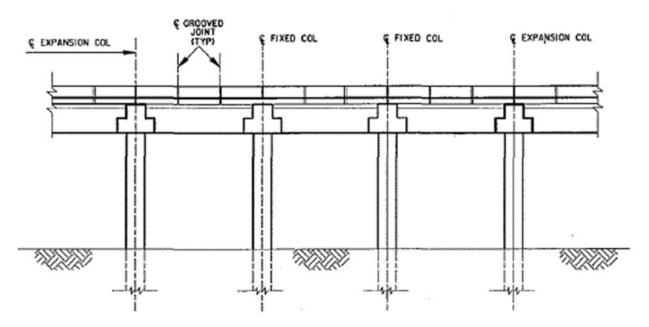


Figure 12. Typical Tee Beam Unit Elevation – 3 Continuous Spans

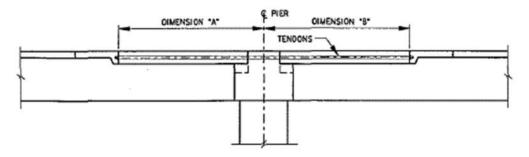


Figure 13. Typical Tendon Layout Through Fixed Piers

Condition

The primary issue of concern with the tee beams is the shear cracking of the stems at the dapped ends. The cracks are diagonal and radial in orientation and are prominent at the expansion ends. See Figure 14 below.

In beam design, regions of a beam with complex variation in strain are called D-Regions (for disturbed or discontinuity). These regions include areas with abrupt changes in geometry or locations of concentrated forces. The behavior of these regions and associated combined stress states are highly complex and the design is typically based on empirical approaches and common detailing practices.

The dapped end of a beam is a classic case of a D-Region. Because of the reinforcing complexities and the tendency for cracking, the FDOT no longer permits the design of dapped beam ends (See section 4.1.6 of the FDOT Structures Design Guidelines which can be found online).

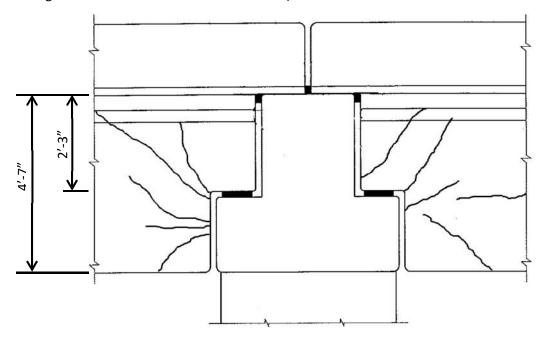


Figure 14. Typical Crack Location and Orientation at Tee Beam Ends

This type of shear and radial cracking is present in nearly all stem ends at expansion piers and to a lesser degree, in the stem ends at continuous piers. Some of the cracks are up to 5 feet in length and many extend into the top flange. Also, many of the stem cracks are reflective on both faces of the stem indicating that the crack fully extends through the stem at these locations, most notably those that originate directly from the notched corner of the beam stem.

According to the AASHTO National Bridge Element Manual, cracks in prestressed concrete:

- Less than 0.004 inches wide are considered "insignificant" or "good"
- Ranging from 0.004 to 0.01 inches wide are considered "moderate" and result in a condition of "fair"
- Greater than 0.01 inches wide are considered "wide" and result in a condition of "poor"

Insignificant cracking as defined above, is present on many of the prestressed beams. These are manifested as fine surface "shrinkage" map and random cracks throughout the lengths of the beams and/or fine surface radial cracks within the end 10' of the beams. Not every instance of this insignificant cracking is documented in the appendices of this report, as these are considered normal.

There are 780 locations of significant visible cracks in the beam stems; visible meaning not covered by CFRP wraps and locations meaning specific areas such as the left face of the left stem of a particular beam at a particular pier. Note that at each location, there is often more than one crack. Of the 780 locations noted, most of the cracks are considered moderate, meaning hairline to 0.01" wide. Approximately 20% of the locations have wide cracks, resulting in "poor" beam conditions. Of these 780 locations, 10% are new cracks, meaning that they were not

noted in the previous report, approximately 8% of the cracks have increased from the previous inspection, meaning that the cracks either grew in length and/or width. There are two beam ends where cracks were measured up to 0.025" wide for the initial 3 inches of the crack length. These are at the expansion ends of Span 17N, and 46N. See the photos below.



Span 12N: Shear Cracking up to 0.02" Wide on Left Stem End at Pier 12



Span 12N: Close-up of Shear Crack in Left Stem at Pier 12

Carbon Fiber Reinforced Polymer (CFRP) wraps have been utilized to strengthen 130 beam stem ends at many of the expansion piers. The lengths of the wraps range between 10 and 20 feet. See Appendix F for the locations of the wraps. A number of these wraps in the North Line are only half height and do not extend above the dapped end notch, where cracking is still present and visible.

Nearly all of the CFRP wraps have small bulges at isolated locations. These bulges are mostly solid and are likely filled with hardened resin. There are a few locations in the system in which the bulges are delaminated and feel soft, spongy or hollow. The beam with the most delaminations is Span 47R, a cast-in-place beam with 24 delaminated blisters on the exterior face of the right stem, up to 5" x 2". See the photo below.



Span 47R: Delaminated Blisters on CFRP Wrap, Right Stem at Pier 47R

There is one location in which the wrap is failing altogether (material failure) and that is at Span 227L. The CFRP on the exterior face of the left stem is cracked and popping off 3'-4" L x 12" H, 12 feet from Pier 228 and 2'-6" L x 10" H adjacent to the pier. Also the wrap is delaminated nearly completely over the rear 6 feet with peeled and cracked areas. There are numerous delaminations on both left and right stems. Attempts to repair these locations with epoxy injection have been ineffective. See the photo on the following page.



Span 227L: CFRP Failure in at Pier 228

Other common deficiencies noted on the stems were spalling and delamination of the concrete, most of which are located along the bottom edges of the stems. There were no exposed prestressed tendons noted other than end exposure at spalls located on the front or rear face of the stem above an expansion pier. The photos below illustrate the worst cases of each deficiency type.



Span 75R: Looking Up at 10-1/2" x 9" x 1-1/2" Spall, Left Stem Near Pier 76R



Span 47R: 24" x 14" Delamination, Right Stem Near Pier 48R

Fifteen spans in the system have cast-in-place concrete tee beams. These beams typically exhibit the same shear and radial cracking at the dapped ends as the prestressed beams, but in addition, they have cracking throughout

the full beam lengths. In general, the cracking is flexural in nature within the middle 1/2 to 1/3 and shear orientated at the ends. Cracks are noted between 0.01"-0.02" wide and wrap under the bottom of the stem, extending up on both faces. A portion of the cracks in three of the spans (42S, 42 S-Cross and 47R) have been surface or epoxy sealed. See the photos below.



Span 203R – Typical Unsealed Flexural Crack in Cast-In-Place Beam Stems



Span 42S – Cross: Typical Sealed Flexural Cracking in Beam Stems

According to the FDOT Field Guide, for cracks in conventionally reinforced concrete in non-aggressive environments:

- Less than 1/16" (0.06) wide are considered "narrow" and result in a condition of "good"
- Ranging from 1/16" to 3/16" (0.06-0.19) wide are considered "moderate" and result in a condition of "fair".
- Greater than 3/16" (0.19) wide are considered "wide" and result in a condition of "poor".

Based on the crack widths measured in the conventionally reinforced spans during the 2019 routine inspection, all cracks are considered "narrow".

For a complete list of tee beam deficiencies noted during the 2019 routine inspection, refer to Appendix D-9.

Recommendations

- Replace the failing CFRP wraps in Span 227L at Pier 228.
- Consider installing CFRP wraps on prestressed beams with crack widths greater than 0.02"; the expansion end of Span 17N, left stem, and Span 46N, right stem.
- Patch all spalls listed in Appendix D-9 with depths 1 in. or greater.
- Seal all cracks listed in Appendix D-9 with widths 0.016 in. or greater.
- Continue to monitor cracks during routine inspections for increased widths and propagation. If further cracking is noted, consider performing more comprehensive analysis to better determine the design strength of the beam ends. This necessity is especially true if it is determined that the system shall continue to function as-is for the long term or if it is determined that the system will be upgraded with a new operational system which will require the spans to carry additional dead and/or live load. Should either of these scenarios play out, it is likely that measures will have to be taken to ensure the continued safety and serviceability of the system. This could be managed in two ways. One is to strengthen and add capacity to the beams themselves and another is to provide additional bearing surface at the piers. A more detailed discussion on these topics was provided in the *Guideway Infrastructure Assessment Report* submitted in 2014 as part of an overall assessment lead by Lea+Elliott.

Steel Box Girders and Pier Cross Girders

Description

89 of the 334 spans are carried on steel box girders; representing nearly 30% of the superstructure. Steel boxes are used at most curved sections and at the long span tangent sections of the Guideway. The average steel box span length is 108 feet, which is longer than the maximum double tee concrete span length. The boxes are roughly seven feet wide by four feet tall and have internal cross frame diaphragms spaced about every ten feet with upper lateral bracing framed between them. See Figure 15.

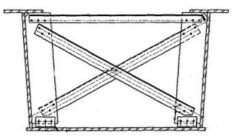


Figure 15. Typical Steel Box

Steel cross girders are utilized at Piers 241 and 242, on the south approach to the Acosta Bridge, and at Piers 9, 10, 11, 30, and 31 along Bay Street in the Starter Line. Figure 16 below shows the basic configurations of these elements. These members may be construed as pier caps, but because they sit above the bearings rather than supporting the bearings, these members are actually part of the superstructure.

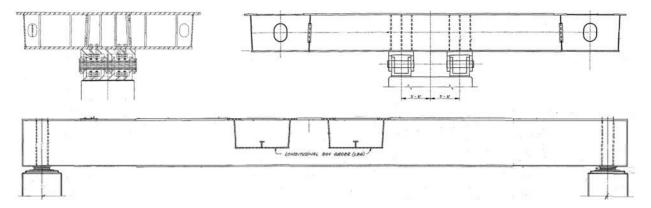


Figure 16. Steel Box Cross Girder Variations

Condition - Exterior

The steel beams are in good condition overall with no significant structural deficiencies found during the inspection.

The coating system however, is reaching the end of it's service life. Acording to the FHWA Steel Bridge Design Handbook Vol. 19, 3-coat, zinc-rich primer paint systems data suggest performance of 25 years in less aggressive, non-marine environments. With the system being built between the late 80's and late 90's, the current coating system is as much as 30 years old. The exterior surface coating is breaking down and is very chalky. See the photo to the right.



Very Chalky Paint Exterior – Typical Throughout

Active surface corrosion is present at isolated locations throughout the system. This condition has worsened since the previous inspection. Of the 160 field notes regarding corrosion on the exterior faces of the beams, 78 have a disposition of "new" or "increase". One common location for corrosion is on the undersides of the top flanges adjacent to expansion piers due to water draining through failed deck joints. For example, on Span 236L at Pier 237L (San Marco Station) there is a 20" x 3" area of moderate to heavy surface corrosion on the underside of the right top flange, with 6 square inches of up to 1/16" pitting. See the photos below.



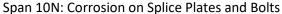


Span 236L: Surface Corrosion on RT Top Flange

Span 236L: Closeup of Corrosion and Section Loss

The other common location for corrosion is on the splice plates and bolts. Nearly all beam splices in the system have light to moderate corrosion on the bolts and in many locations, also on the plates. The front face of the Pier 10 cross girder exhibits 5 SF of peeling paint with heavy surface corrosion and pitting up to 1/32" deep. See the photos below.







Pier 10N: Corrosion on Cross Girder

Bubbling and peeling paint exposing primer was noted on the exterior facess of the boxes in the Starter Line at isolated locations; this condition has increased from the previous inspection. The top coat of paint on the beams in the River and O&M lines is very thin and the primer coat can be seen through the top coat in many locations.

Condition - Interior

A number of spans near the river have a significant amount of bird droppings, nesting materials, organic debris, and dead bird carcasses. There were no live birds found inside the spans; all access hatches and exterior portal holes are closed. However, the organic debris left behind is significant, noted up to 2" deep in some locations. See the photo below. This debris is hazardous to inspectors, corrosive to the steel, and prevents proper inspection of the bottom welds.



Span R6 LT: Organic Debris up to 2" Deep

The interior faces of the Starter Line boxes and pier cross girders (Spans 6-11 and 29-31) have a substantial amount of peeling paint, exposing primer. This interior coating failure was not found elsewhere in the system. See the photos below.



Span 31S: Peeling Paint Exposing Primer



Pier 10 Cross Girder

Light to moderate surface corrosion was noted at isolated locations in the interiors of the boxes, most commonly at the splices, on the bracing bolts and members and on the top flange and bearing stiffeners near expansion ends of beams. These condition have increased since the previous inspection. The only location noted with significant section loss caused by the corrosion is the bottom flange splice bolts in Span 52A LT. These bolts have up to 20% section loss; previously noted as 15%. See the photos below.







Span 52A LT, Bay 1 Splice (Up to 20% Loss on Nuts)

Additional box girder deficiencies include:

- Pinhole flaws in the welds
- Thin top coat / Missing top coat
- Small gouges in the flanges and webs
- Bracing bolts not fully seated
- Slight warps and bulges in the webs
- Minor bends/deformations of the interior bracing members
- Build-up of concrete deck overpour on the bottom flange, up to 1" (rendering some welds uninspectable)
- Surface corrosion and efflorescence on the SIP forms

For a complete list of box beam deficiencies noted during the 2019 routine inspection, refer to Appendix D-10. For a breakdown of the coating failure modes and locations, see Appendix D-11.

Recommendations

- Clean and paint the front face of the Pier 10 Cross Girder at the north column.
- Clean out the insides of the boxes that have organic debris. This material is hazardous and will need to be performed by a specialty contractor that can safely remove the organics, likely with vacuum tubes.
- Clean and spot paint the exteriors and interiors of the boxes at locations in which the corrosion is considered moderate or heavy.
- Develop a plan for a full coating replacement of the exteriors of all boxes and cross girders and re-painting of the top coat on the interior faces of the spans in the Starter Line.
- Replace the splice bolts in Span 52A LT with significant section loss.

Bearings

There are six types of bearings for the varying superstructures found within the guideway system. Descriptions of each type and associated deficiencies are presented below. The only substantial change since the previous inspection is a significant increase in corrosion of the sliding plate type bearings caused by failed deck joints allowing water to drain onto the bearing seat and the bearings (See Bearing Type 4 below).

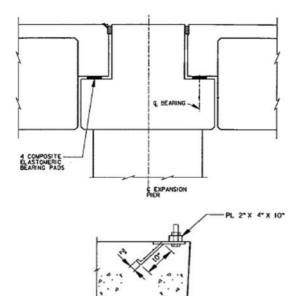
1) Elastomeric Bearing Pad with Pier Mounted Keeper Plate

LOCATIONS:

Expansion ends of prestressed tee beams units

DEFICIENCIES:

- Corrosion on keeper plate and/or shim plate
- Keeper plate missing bolts, washers, have loose nuts or is all together missing (typically due to close proximity of beam stem)
- Gap between beam stem and shim plate
- Uneven bearing surface
- Gap between bearing pad and beam
- Overcompressed bearing pad
- Overhanging elastomeric bearing pad
- Missing Bearing Pad at Pier 62R



Keeper Plate Elevation



Keeper Plate with Corrosion



Keeper Plate not Installed



Missing Pad at Pier 62R



Span M2: Up to 1" Gap for 15" Between Beam and Bearing Pad at Pier M3

2) Elastomeric Bearing Pad with Embedded Bearing Plate and Anchor Bolts

LOCATIONS:

- Tee beam expansion end at Piers 47 Right (special cast-in-place concrete section)
- Tee beam fixed end at Pier 52 (slightly different than drawing shown)
- Tee beam expansion end at Pier 240 (21' long beams)

ELEVATION

DEFICIENCIES:

- Anchor bolt nuts not fully engaged
- Surface corrosion on anchor bolts



Span 239L at Pier 240L: Surface Corrosion on Bearing Plate Anchor Bolt

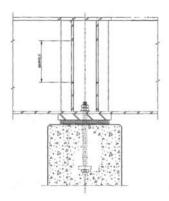
3) Elastomeric Bearing Pads for Steel Boxes

LOCATIONS:

Fixed Piers 7N and 7S (center piers for units composed of two continuous short spans)

DEFICIENCIES:

- Elastomeric pads overhang pedestal up to 1/2"
- Light surface corrosion on underside of sole plates

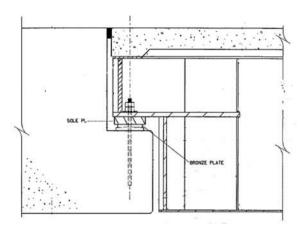


4) Sliding Plate Bearings

LOCATIONS: Expansion ends of steel box units

DEFICIENCIES:

- Anchor bolt nuts not fully engaged
- Missing jam nuts
- Surface corrosion on sole plate and/or masonry plate (INCREASE since previous inspection)
- Gaps between plates
- Bird debris on and around the anchor bolts
- At Pier R6, the right anchor bolt for the left bearing is loose and can be rotated 1/2".









Span 257R at Pier 258R: 1/4" Gap; no right bearing



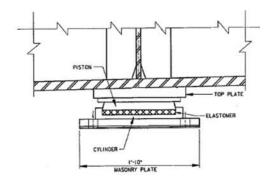
Span 29N at Pier 29N: Heavy Surface and Laminating Corrosion on Bearing Plates

5) Pot Bearings

LOCATIONS: Most fixed piers for continuous steel boxes.

DEFICIENCIES:

- Peeling paint
- Surface corrosion
- Loose anchor bolt nuts
- Gap between masonry plate and top of cap





03/04/2019

Pier 10: Surface Corrosion on Bearing Plate

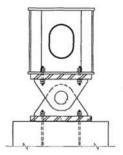
Pier 256L: Loose Bearing Anchor Bolt Nuts

6) Rocker Bearings

LOCATIONS: Fixed piers with continuous steel boxes and cross beams: Piers 9, 11, 30, 31, 241, and 242

DEFICIENCIES:

- Loose anchor bolt nuts
- Minor surface corrosion
- Gouge/fabrication gaps in casting



For a complete list of bearing deficiencies noted during the 2019 routine inspection, refer to Appendix D-12.

Recommendations:

- Replace the missing center elastomeric bearing pad at Pier 62R.
- Clean and paint sliding plate bearings with surface corrosion.
- Tighten all loose anchor bolt nuts (pot and sliding plate) and install jam nuts where missing (sliding plate).
- Clean and coat all anchor bolts noted with corrosion.

SUBSTRUCTURE ELEMENTS

There are 222 individual substructure units in the system, as follows:

- 205 piers
- 6 Acosta Bridge piers (6 per bridge, maintained by the FDOT)
- 7 bents associated with the first three spans of the O&M approach
- 2 end bents and 2 walls for Span 253, which is a pile supported slab span

Condition - Caps

The piers are in fair to good condition. Hairline cracking is prevelent throughout, on both the pier caps and the pier columns. There are three types of pier cap cracks that recur quite often throughout the system.

Figure 17 to the right shows the side view of the vast majority of the piers in the the system. The caps are inverted-tees with beam seat ledges that the dapped ends of the beams bear on. Throughout the skyway system, there are numerous pier caps with cracking on the left and right faces similar to that drawn in Figure 17. These cracks extend downward from the rear and forward beam seat corners and are present at both expansion and fixed piers. The cracks at the expansion piers are typically more prevalent, longer, and wider. See the photo below.

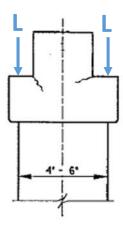


Figure 17. Pier Side View



Pier 240, Right Face of Cap: Typical Beam Seat Corner Cracks

Another prevalent crack type found throughout the system is flexural cracking on piers with hamerhead or "T"

style pier caps. This configuration is quite common. See Figure 18.

There are variations in the shapes, depending on whether the pier is carrying concrete or steel beams, or is expansion or continuous, but the forces in the cap are similar and result in negative moment in the cap over the centerline of the column. See the photo below.

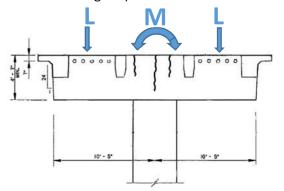


Figure 18. Pier Rear/Front View



Typical Negative Moment Crack, Full Depth of Cap, Rear Face of Pier 208

The exception to this crack commonality with the "T" shaped piers is in the Starter Section. The "T" shaped caps in this section are similar but were designed with transverse post-tensioning and as a result, do not have the same negative moment cracking in the rear and front faces.

There are two common deficiencies associated with the post-tension pier caps in the starter line and they have to do with the precast covers attached to the left and right faces of the caps over the PT duct blockouts. Caulk, applied around the perimeter of the covers, is failing at a number of locations and there are gaps typically 1/4in.

wide between the tops of the covers and the pier caps. Also, efflorescence is leaching out from the bottom of many of the covers. See the photos below.





Pier 20N: Efflorescence Leaching from PT Cover

Pier 14N: 3/8" Gap at Top of PT Cover and Failed Caulk

The third common crack location is not associated with a particular pier type, but rather a pier detail, namely the 90° re-entrant corners on the rear and front faces of the pier caps. See Figure 19. This detail is present at locations in which the cap transitions from rectangular section to inverted-tee section.

This detail occurs on multiple pier types including both one and two column piers. See the photo below.

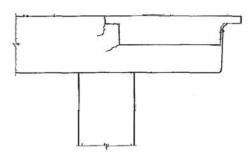
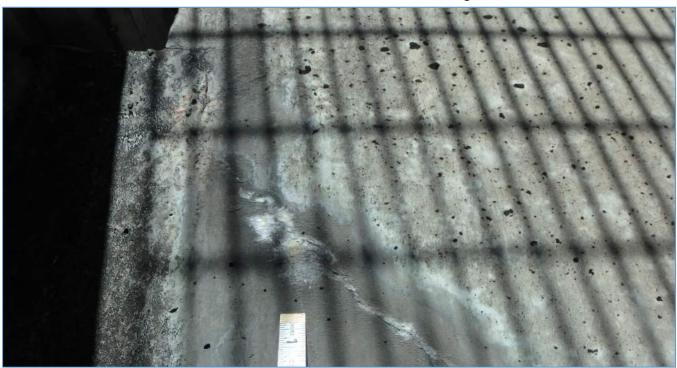


Figure 19. Pier Rear/Front View



Pier 62: Diagonal Crack Extending Downward From the Left Beam Seat Corner

The worst substructure cracking in the system is located on the pier caps and load bearing struts at the San Marco Station; Piers 237 thru 240. Numerous shear, flexure and shrinkage cracks are present on the caps and the struts, noted up to 0.04" wide. The major design difference between these piers and those elsewhere throughout the system (including at other stations), is the unsupported length of caps. For nearly the same depth of section, these caps (and struts) are spanning much longer distances. Elsewhere in the system, the maximum cap length between column centerlines is about 35ft. At the San Marco Station, the cap and strut lengths range between 47ft. and 57ft. See the photos below.



Pier 238: Diagonal Shear Cracks on Strut at RT Column



Pier 238: Flexure/Shear Cracks Across Cap at RT Column



Pier 240: Diagonal Shear Cracks on the Front Face near the LT Column

A number of spalls and delaminations were noted on the pier caps. There are three locations with significant delaminations on the pier caps. All three are located below bearing elements for steel box girders. These are possibly the result of the bearing anchor bolts being cast too close to the face of the cap and when the steel beams expand and contract, they pull and push on the anchor bolts, which in-turn could cause the concrete to delaminate. These conditions have not worsened since the 2017 inspection. See the photos below.

The locations in which large delaminations are noted at the bearings are:

- 1. 3'-0" x 1'-7" on the rear face of Pier 235, below the left span, left bearing (A portion of this area has been previously patched, but the patch is also delaminated.)
- 2. 2'-9" x 1'-1" on the rear face of Pier 258L, below the right bearing
- 3. 4'-0" x 4" X 3" on the rear face of Pier 258R, below the left bearing, extending 2" below masonry plate.





Pier 258L: Large Delamination Below the Right Bearing, Rear Face

Water staining and organic growth (green or black algae, mold, or mildew) are common on the expansion pier caps and to a lesser extent, on the columns. This is a result of failed deck joints permitting rain water to drip onto the caps. Bird nests and debris are present on many of the beam seats. See the photos below.







Pier 44: Wet Debris and Nesting Material on Cap

Condition - Columns

The pier columns are in good condition overall with mostly minor spalls and hairline cracking. These column cracks are mostly vertical in orientation although there are loctions in which the cracks are horizonal or map/random. Hairline cracks are common on the columns in the River Line with map cracking prevalent on the San Marco Station pier columns.

The most significant cracking was found on columns of cantilever piers in which the cap extends to one side and the column is offset underneath. These are flexure cracks that are manifested horizontally across the back side, which is the tension side of the column.



Pier 25N: Horizontal Flexure Cracking in Column with Cantilever Cap

A number of the columns along Hogan Street have brick surrounding the base for aesthetics. Caulking between the column and the brick has failed.

Condition - Walls

In general, the walls surrounding the pile supported slab span are in good condition. Minor structural defects exist such as cracking along cold joints, map cracking of the end bent cheek walls, and spalling up to 8"x6"x1" on the rustications of the wall faces. There is no exposed steel or rust staining to indicate rebar corrosion. The transverse wall faces are stained from runoff through the expansion joints.

Condition - Bents

The bents near the O&M building are also in good condition. The only deficiency noted was hairline cracking on the faces of the caps and some efflorescence. Again, there is no exposed steel or rust staining to indicate rebar corrosion.

For a complete list of deficiencies noted during the 2019 routine inspection, refer to Appendix D-13.

Recommendations

- Although not a structural issue, it is recommended to remove the moderate to heavy staining and algae growth from the pier caps and columns.
- Remove debris and bird nest from on top of the pier cap bearing seats.
- Seal the gaps around the PT Cap blockouts in the Starter line.
- Seal the gaps between the brick and column at the bases of the Hogan Street piers.
- Patch all spalls listed in Appendix D-13 with depths 1 in. or greater.
- Seal all cracks listed in Appendix D-13 with widths 0.02 in. or greater.
- Monitor the large pier cap delaminations associated with steel box beam bearings for growth or spalling (no changes noted since 2017).
- Consider an engineered repair of the pier cap delamination at Pier 258R.

ACOSTA BRIDGE SECTION

Along the five main spans of the Acosta Bridge, the Guideway runs on top of the Acosta Bridge deck that was constructed by FDOT. The only portions constructed by JTA were the second pour and the guidebeam. See the plans excerpt below.

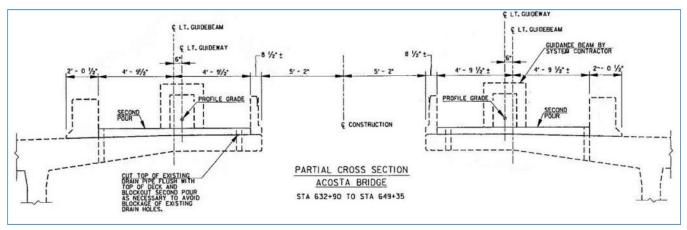


Figure 20: Excerpt from the River Crossing As Built Plans (1994)

At Acosta Bridge Piers R1 and R6, pedestals were constructed on the existing piers to support the approaching guideway superstructure. At Pier R1, a section of the existing pier pedestal was removed and a new pedestal was constructed, measuring 7.6' tall x 8.7' wide x 2.5' thick. The new pedestal is connected to the existing pier with two rows of horizontal dowels with 9" embedment, spaced at 18" and vertical dowels with 12" embedment, spaced at 12". See the photo below. At Pier R6, the existing pedestal was not removed, so the newly constructed pedestal is less than 1' tall.



Acosta Bridge Pier R1 Supporting Guideway Superstructure (Photo from the 2017 Inspection)

Condition

These areas were not inspected hands-on, but rather with an aerial drone. Measurements given below are either estimates or taken from the most recent FDOT inspection report (2018). There has not been a significant change in the deterioration since the last inspection.

At Pier R1 Left, there is spalling along the vertical interface between the Guideway pedestal and the Acosta Bridge pedestal. On the front face, the spall is full height (7.6') and is approximately 15" wide and 5" deep at the top, exposing two horizontal dowels and two vertical rebar. See the photo below.



Acosta Bridge Pier R1 LT: Overview of Pedestal Spalling on Front Face

The Guideway pedestals were constructed with a top elevation 5" above the Acosta Bridge pedestal. There is a 7" wide lip that overhangs the Acosta Bridge pedestal as shown in the photo below. This lip is cracked, full width of the pedestal. The left \sim 3" of the masonry plate for the left bearing (which is 25" x 9") sits on top of this lip.



Close-up of Acosta Bridge Pier R1 Left, Front Face

The rear face of the pedestal at Pier R1 Left also has spalling along the interface, with the worst of the spalling occurring on the Acosta Bridge side, exposing two pieces of rebar. A section of the pedestal lip, measuring $7'' \times 5'' \times 3''$ has also spalled off. See the photo below.



Acosta Bridge Pier R1 Left, Rear Face

The condition at Pier R-1 Right is better. The rear face exhibits a crack along the interface and there is spalling along the interface on the front face up to $36'' \times 2'' \times 2''$, including a section of the pedestal lip measuring $7'' \times 6'' \times 4''$ which has also spalled off. See the photo below.



Acosta Bridge Pier R1 Right, Front Face

No significant deficiencies were noted on the pedestals at Pier R-6. The rest of the Guideway components on the Acosta Bridge section, including the bearings, guidebeam, sidewalls, etc. are all addressed within their respective element section in this report.

Appendix E contains excerpts from the most recent and available FDOT Acosta Bridge inspection reports (inspection date 8/14/2018) that pertain to the Guideway connection to the bridge piers.

RECOMMENDATIONS AND ESTIMATES

INTRODUCTION

This section summarizes recommendations and includes opinion of probable cost based on the findings made during the 2019 routine inspection. Please refer to the individual sections of the report for specifics related to the condition of various structural components. Details are included for both typical and significant deficiencies along with repair and maintenance recommendations. Additional back up data is in the Appendices. Appendix D contains comprehensive tables detailing individual deficiencies and their locations.

Opinion of probable cost for maintenance items cited in this inspection report are shown in the table below. While some of the items require immediate attention within the next 2 years (Short Term), others can be taken care of in the future along with the Skyway conversion within the next 5 years (Mid/Long Term). It is strongly recommended that all items be reviewed and understood by the Skyway personnel. Assumptions on unit costs and quantities are used for each recommendation to create the estimate summarized in the table below. The estimates are order of magnitude and are for planning purposed only and more detailed estimates should be prepared as maintenance and repair plans are developed.

The summary table includes a reference to each recommendation number, the maintenance item, and order of magnitude estimate for each category. The table also indicates which items should be completed in the Short Term (S) and which items are Mid/Long (M) Term recommendations.

The items included in Short Term are recommended to be performed as soon as funding permits within the next 2 years and with the Mid/Long Term items to be programmed and included as part of a maintenance plan within the next 5 years. Plans for implementation of the mid/long-term items should be considered as part of the anticipated Skyway conversion plan. However, if the conversion is delayed, consideration should be given to performing all of the recommended maintenance items including the mid/long-term repairs regardless of the timing of conversion. A thorough understanding of the scope and extent of the potential conversion, as well as the timing of its implementation, is paramount in prioritizing the mid/long-term maintenance items.

Inspection Report Recommendations and Opinion of Probable Cost

2019 Biennial Inspection of the JTA Skyway Inspection Report Recommendations and Opinion of Probable Cost

mspection Report Recommendation			Maintena			
ltem		Short Term		Mid/Long Term		Total
NON-STRUCTURAL CONCERNS					.,	
Deck Drainage System		\$	58,250	\$	186,950	\$ 245,200
Electrical		\$	34,000	\$	17,000	\$ 51,000
Vegetation Encroachment		\$	26,200	\$	-	\$ 26,200
	Subtotal	\$	118,450	\$	203,950	\$ 322,400
DECK ELEMENTS						
Emergency Walkway		\$	8,000	\$	312,000	\$ 320,000
Deck Joints		\$	-	\$	40,000	\$ 40,000
Guidebeam Expansion Joints		\$	76,100	\$	-	\$ 76,100
Deck and Tee Beam Top Flange		\$	50,000	\$	-	\$ 50,000
Sidewalls		\$	103,000	\$	-	\$ 103,000
Guidebeam		\$	54,500	\$	14,600	\$ 69,100
	Subtotal	\$	291,600	\$	366,600	\$ 658,200
SUPERSTRUCTURE ELEMENTS						
Concrete Tee Beams		\$	197,550	\$	-	\$ 197,550
Steel Box Girders and Pier Cross Girders		\$	-	\$	8,014,650	\$ 8,014,650
Bearings		\$	32,600	\$	5,300	\$ 37,900
	Subtotal	\$	230,150	\$	8,019,950	\$ 8,250,100
SUBSTRUCTURE ELEMENTS						
Substructure Elements		\$	26,200	\$	128,250	\$ 154,450
	Subtotal	\$	26,200	\$	128,250	\$ 154,450
	Total	\$	666,400	\$	8,718,750	\$ 9,385,150
Co	ntingency		30%		30%	30%
G	rand Total	\$	870,000	\$	11,340,000	\$ 12,210,000

NON-STRUCTURAL RELATED CONCERNS

Deck Drainage System

Number	Item	Term
DDS-1	Drain the water from inside the guidebeam in Span 2N. Drain and Cap.	М
DDS-2	Install a downspout at the end of the drain pipe in Span 42S Cross.	М
DDS-3	Investigate and repair the water dripping from the right overhang of Span 409R onto Water Street (EB) from the first deck downspout past Pier 409R.	М
DDS-4	Thoroughly remove the soil and debris from the top of the deck, especially at the scupper locations. This should be done on a regular basis.	S
DDS-5	Repair/replace the deck drain grates listed in Appendix D-1 that are broken, inverted or missing. Consider replacing with grates that are flush with the deck to make cleaning around the drains easier.	М
DDS-6	Repair/replace the damaged riser pipes and/or caps at ground level in the South and River lines listed in Appendix D-1.	М
DDS-7	Clean out clogged drain pipes listed in Appendix D-1.	S
DDS-8	Repair the eroded areas between the slab-on-grade spans at the O&M facility. Provide a means to convey the stormwater and prevent further erosion.	М
DDS-9	Inventory the locations with water ponding issues that cannot be alleviated with the maintenance solutions listed above. At each location, investigate an engineered solution. Perhaps this entails piping through the guidebeam pedestal or coring through the deck and installing additional means of conveyance.	М

Electrical

Number	Item	Term
E-1	Remove soil and debris accumulation at transverse conduits on the deck.	S
E-2	Replace conduit, brackets and straps on top of the deck with severe section loss.	S
E-3	Repair electrical cable tray defects listed in Appendix D-2 including missing straps, missing covers and broken or missing sidewall brackets.	S
E-4	Investigate and mitigate the cause of the active water leaking from the electrical outlet and light connections on the column of Pier 76.	S
E-5	Remove the corrosion and repaint the bases of the electrical control cabinets throughout the system.	S
E-6	Replace the nuts for the cable tray support brackets in the Starter Line with galvanized or stainless nuts. Also replace the nuts and washers for the electrical control cabinet support brackets in Span 409L.	M
E-7	Apply a galvanic spray to the following components with corrosion: Straps and covers of the cable trays, power rail attachment brackets, conduit straps over the Acosta bridge, and emergency walkway grounding cable attachments.	M
E-8	Replace broken and severely corroded pipe hangers in Span 1N, Exterior.	S
E-9	Tighten the nuts for the traffic light attachment in Span 55L over Hogan Street and clean and coat the nuts and bolts to prevent further corrosion.	S
E-10	Install proper outdoor electrical outlet covers and plates where missing on the pier columns in the North Line.	S
E-11	Repair detached and severed ground wires throughout the system.	S
E-12	Elevate the transverse conduits off the deck to prevent debris entrapment and subsequent occurrence of standing water.	М

A number of maintenance Items in the above recommendations are classified as general electrical maintenance needs that occur throughout the infrastructure system.

Vegetation Encroachment

Number	Item	Term
V-1	Remove the large palm tree growing below and in contact with the steel box beam in Span 30N.	S
V-2	Continue to trim the vegetation growing beneath and around the spans leading from the O&M facility.	М
V-3	Remove the vines growing on Piers 401, 406R, 408L and on the slope protection beneath Span M2.	S
V-4	Landscaping trees in contact with the guideway beams or sidewalls should be trimmed back or removed as necessary.	S
V-5	Remove the palm plants growing between the sidewall and deck over the Acosta Bridge spans.	S

DECK ELEMENTS

Emergency Walkway

Number	Item	Term
EW-1	Install new (wider) cover plates at the four Acosta Bridge expansion joints located at Piers	c
E AA-T	R-1 and R-6.	3
EVA/ 2	Apply a galvanic coating to the grating, grating plates, clips, and bolts, and railing with	
EW-2	moderate surface discoloration and surface corrosion.	М
EW-3	At the cantilevered walkway support brackets with moderate to heavy surface corrosion,	М
	clean the brackets with a wire brush and apply a galvanic coating.	IVI

Expansion Joints

Deck Joints

Number	Item	Term
DJ-1	Remove the soil and debris within and around the joints.	S
DJ-2	If the guidebeam is intended to remain and there will be no vehicle contact with the joints, then the most economical solution will be to apply a neoprene seal over the existing failed joints. This has already been done at piers near Hemming Plaza Station. The best repair solution for the failed compression seal deck joints throughout the system will depend on the design of the future system — namely if the guidebeam will stay in place or be removed. Additionally, if it is decided that a vehicle will run directly on top of the deck, then the locations with uneven deck/pier cap interfaces will also need to be addressed.	М

Guidebeam Expansion Joints

Number	Item	Term
GEJ-1	Pier R-6: Reinstall the fallen retrofit expansion extension plates and repair the unsecured	c
GEJ-1	ones.	3
GEJ-2	Patch the spalls in the concrete pourbacks; locations are listed in Appendix D-5.	S
GEJ-3	Apply a corrosion inhibitor to areas on the steel plates and fingers with surface corrosion	S
GEJ-2	that do not come in contact with the train tires.	
	In the long term if the guidebeam is to remain, an engineered solution to retrofit the joints	
	should be investigated due to the deterioration of the pedestals (see the Guidebeam	
GEJ-4	section of this report). Perhaps this could involve replacing the single joint with two that	М
	coincide with the deck joints. Another option would be to retrofit the current	
	configuration by replacing the bond breakers with thin sliding plate bearings.	

Deck and Tee Beam Top Flange

Number	Item	Term
TF-1	Remove the debris and any loose concrete from on top of the deck.	S
TF-2	Patch all deck and tee beam top flange spalls listed in Appendix D-6 with depths 1 in. or greater. Second pour spalls that do not affect the bearing of the guidebeam pedestals can be ignored.	S

Sidewalls

Number	Item	Term
S-1	For the spalls listed in Appendix D-7 with exposed rebar, coat the rebar with a galvanizing spray.	S
S-2	Patch all spalls listed in Appendix D-7 with depths 1in. or greater.	S
S-3	Seal all cracks listed in Appendix D-7 with widths 0.03in. or greater.	S

Guidebeam

Number	Item	Term
G-1	At the expansion joints, remove all unsecure pedestal concrete and thoroughly clean out	М
G-1	the joint areas.	
G-2	Patch all spalls listed in Appendix D-8 that are on the top edges of the guidebeam.	S
6.3	At the switchbeam locations, remove active corrosion and recoat areas of failed paint on	S
G-3	the beams and mechanism support plates, brackets and bolts.	
G-4	Develop a plan to re-paint the steel guidebeams and switchbeams.	М

SUPERSTRUCTURE ELEMENTS

Concrete Tee Beams

Number	Item	Term
CTB-1	Replace the failing CFRP wraps in Span 227L at Pier 228.	S
CTB-2	Consider installing CFRP wraps on prestressed beams with crack widths greater than 0.02"; the expansion end of Span 17N, left stem, and Span 46N, right stem.	S
CTB-3	Patch all spalls listed in Appendix D-9 with depths 1in. or greater.	S
CTB-4	Seal all cracks listed in Appendix D-9 with widths 0.016in. or greater.	S
CTB-5	Continue to monitor cracks during routine inspections for increased widths and propagation. If further cracking is noted, consider performing more comprehensive analysis to better determine the design strength of the beam ends. This necessity is especially true if it is determined that the system shall continue to function as-is for the long term or if it is determined that the system will be upgraded with a new operational system which will require the spans to carry additional dead and/or live load. Should either of these scenarios play out, it is likely that measures will have to be taken to ensure the continued safety and serviceability of the system. This could be managed in two ways. One is to strengthen and add capacity to the beams themselves and another is to provide additional bearing surface at the piers. A more detailed discussion on these topics was provided in the Guideway Infrastructure Assessment Report submitted in 2014 as part of an overall assessment lead by Lea+Elliott.	М

Steel Box Girders and Pier Crossheads

Number	Item	Term
SB-1	Clean and paint the front face of the Pier 10 Cross Girder at the north column.	М
SB-2	Clean out the insides of the boxes that have organic debris. This material is hazardous and will need to be performed by a specialty contractor that can safely remove the organics, likely with vacuum tubes.	М
SB-3	Clean and spot paint the exteriors and interiors of the boxes at locations in which the corrosion is considered moderate or heavy.	М
SB-4	Develop a plan for a full coating replacement of the exteriors of all boxes and cross girders and re-painting of the top coat on the interior faces of the spans in the Starter Line.	М
SB-5	Replace the splice bolts in Span 52A LT with significant section loss.	М

Bearings

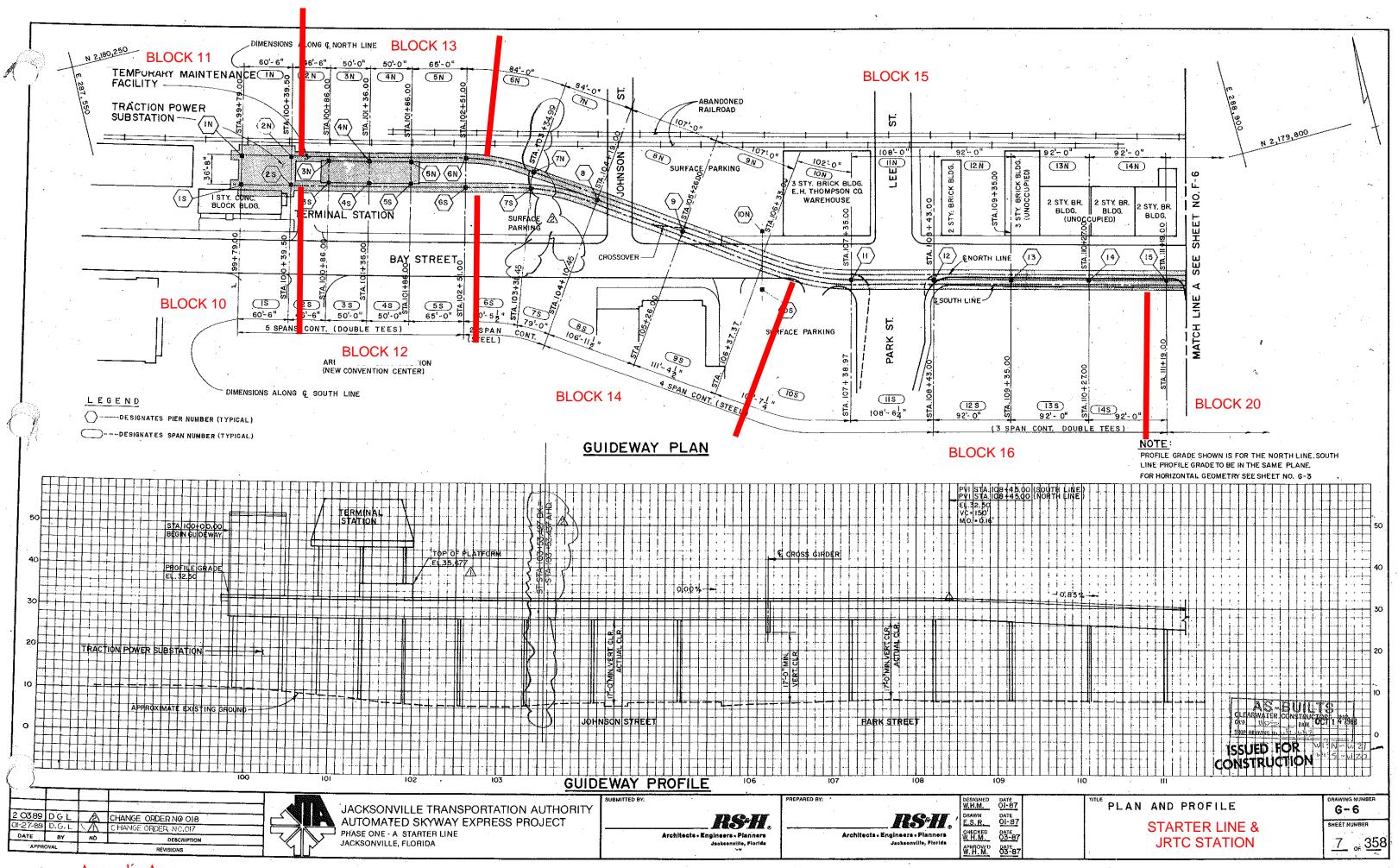
Number	Item	Term
B-1	Replace the missing center elastomeric bearing pad at Pier 62R.	М
B-2	Clean and paint sliding plate bearings with surface corrosion.	S
B-3	Tighten all loose anchor bolt nuts (pot and sliding plate) and install jam nuts where missing (sliding plate).	М
B-4	Clean and coat all anchor bolts noted with corrosion.	S

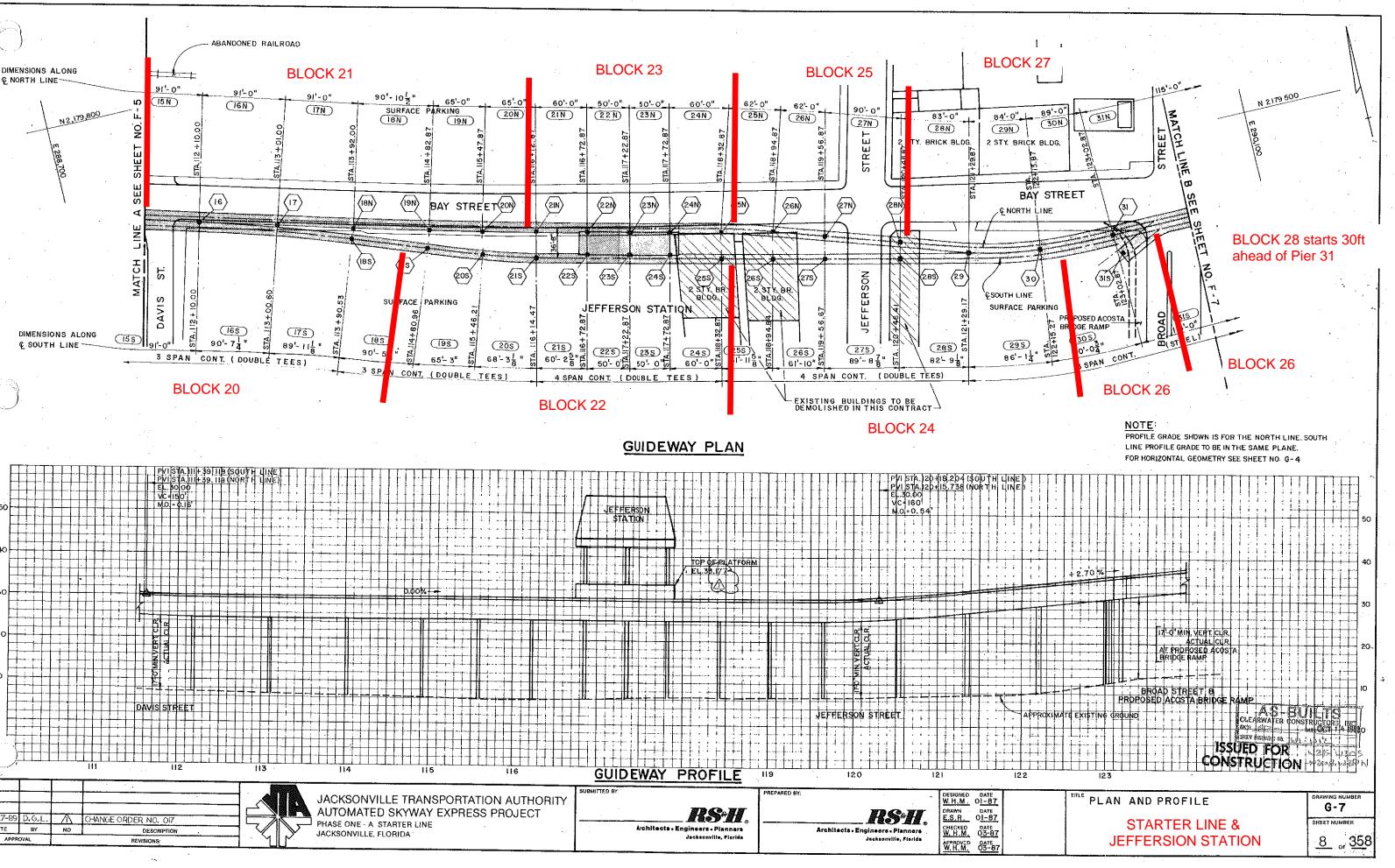
SUBSTRUCTURE ELEMENTS

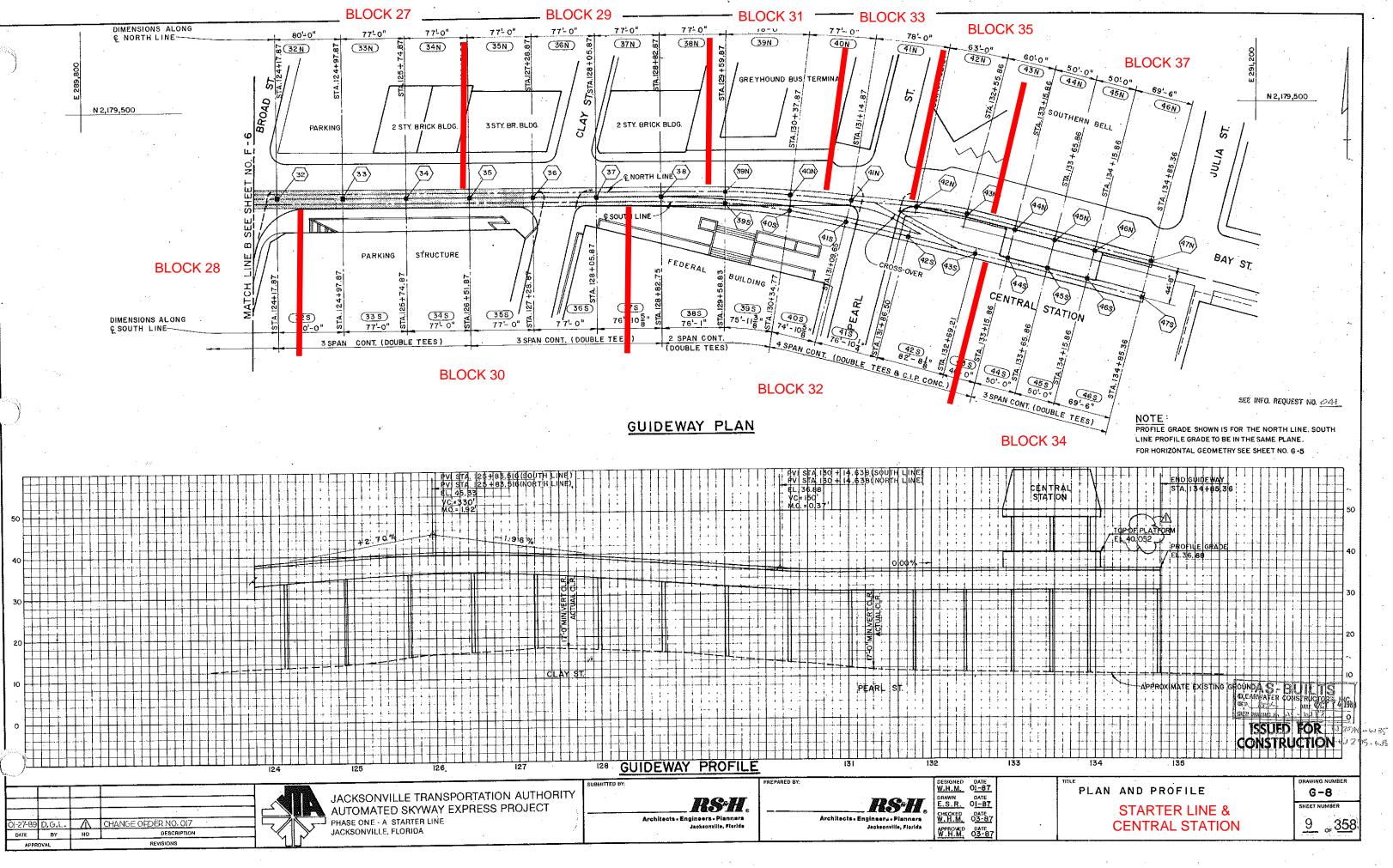
Number	Item	Term		
SUB-1	Although not a structural issue, it is recommended to remove the moderate to heavy			
	staining and algae growth from the pier caps and columns.	М		
SUB-2	Remove debris and bird nest from on top of the pier cap bearing seats.			
SUB-3	Seal the gaps around the PT Cap blockouts in the Starter line.	М		
SUB-4	Seal the gaps between the brick and column at the bases of the Hogan Street piers.	М		
SUB-5	Patch all spalls listed in Appendix D-13 with depths 1in. or greater.	S		
SUB-6	Seal all cracks listed in Appendix D-13 with widths 0.02in. or greater.	S		
SUB-7	Monitor the large pier cap delamination associated with steel box beam bearings for			
	growth or spalling (no changes noted since 2017).	M		
SUB-8	Consider an engineered repair of the pier cap delamination at Pier 258R. (0.33 CF)	М		

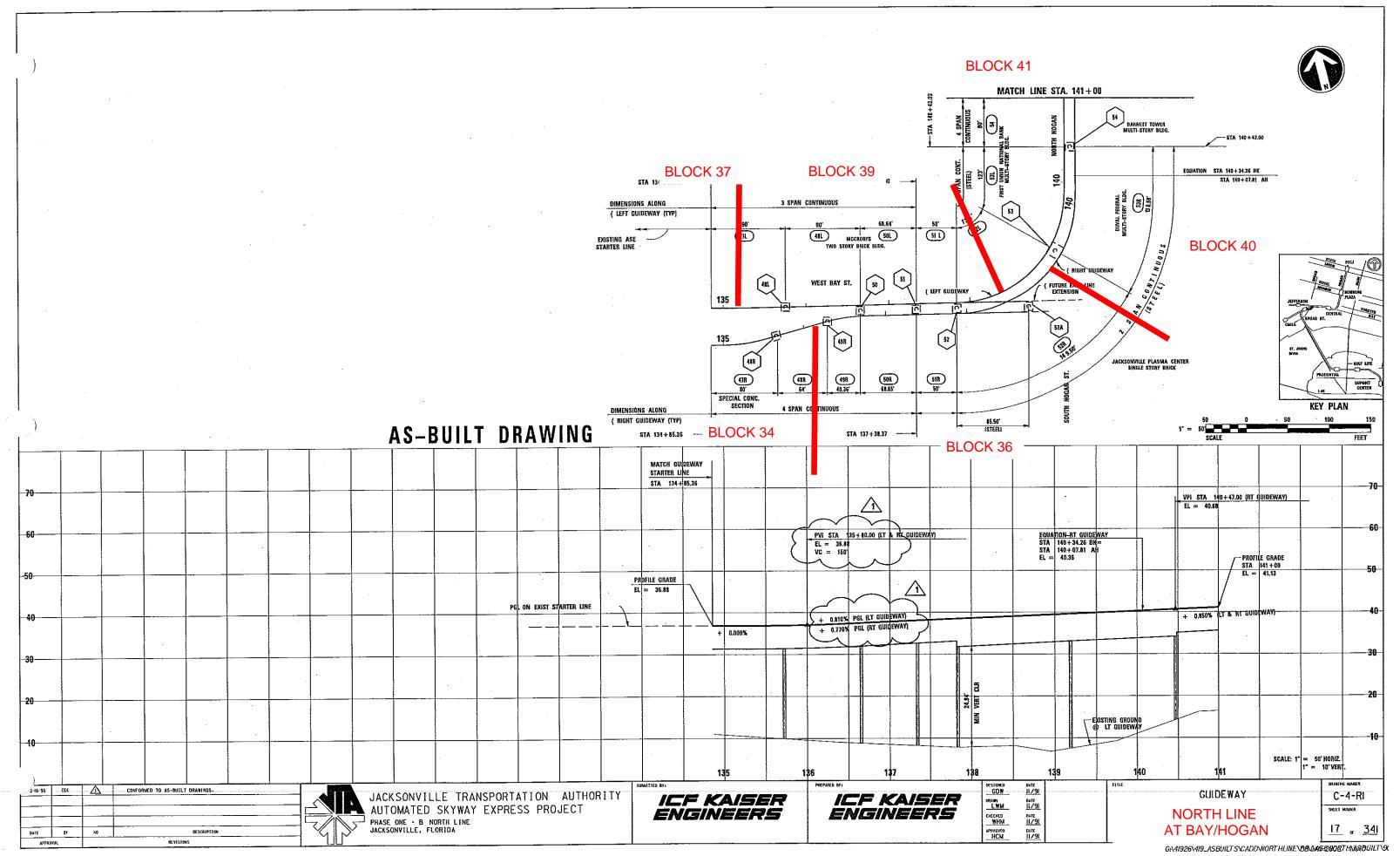
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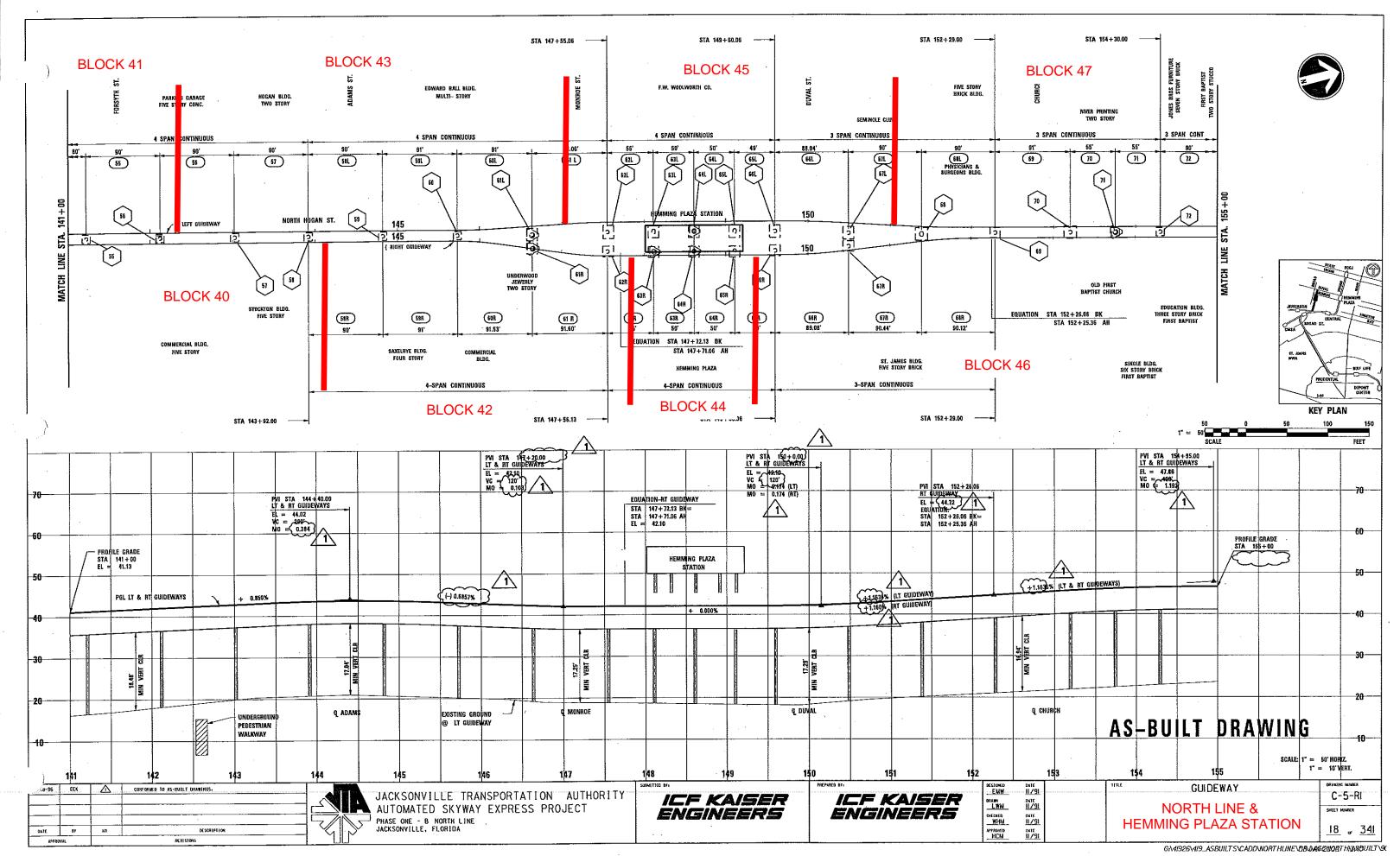
Skyway Plan & Elevation Sheets with Estimated Block Locations

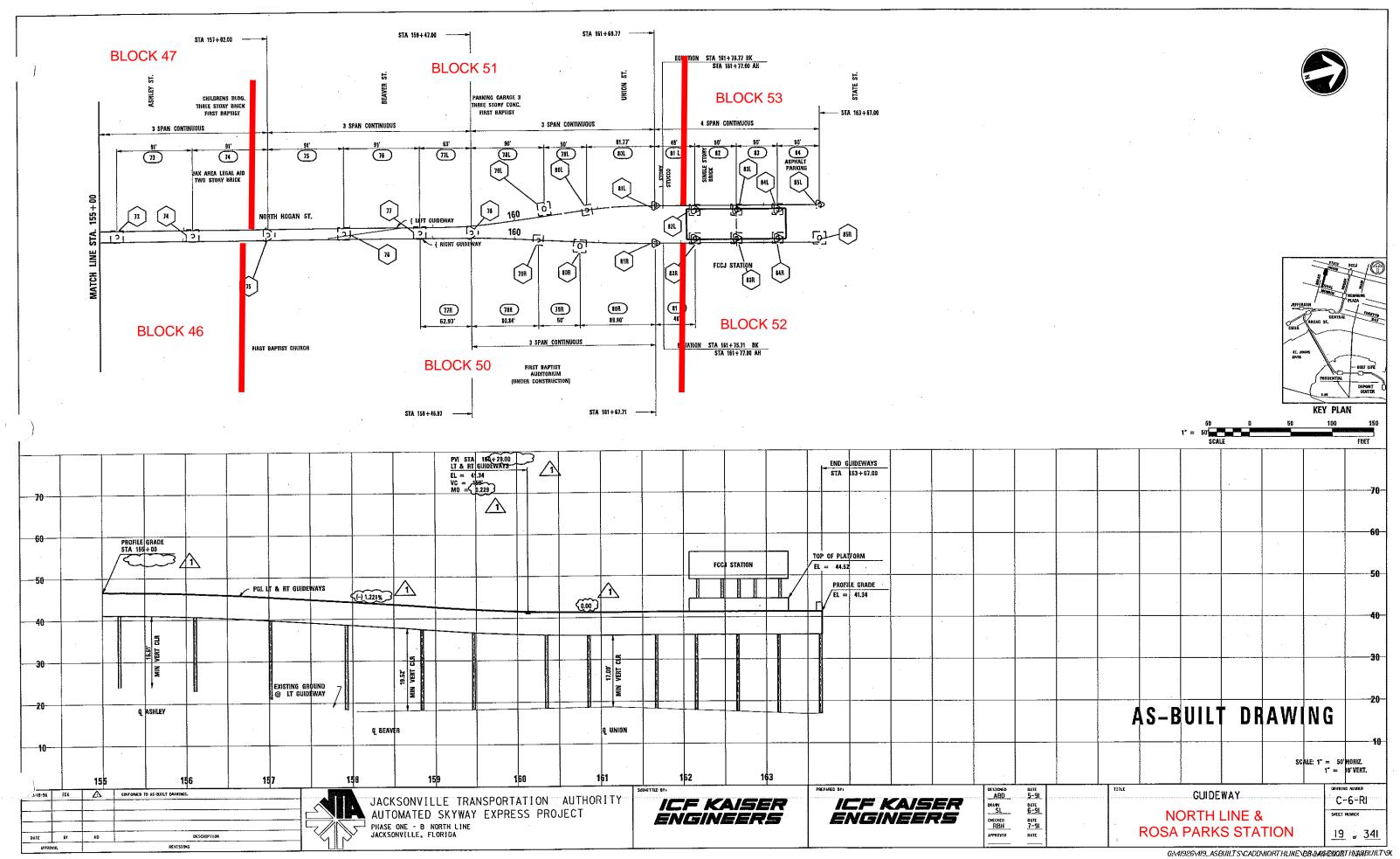


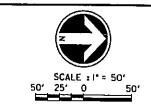


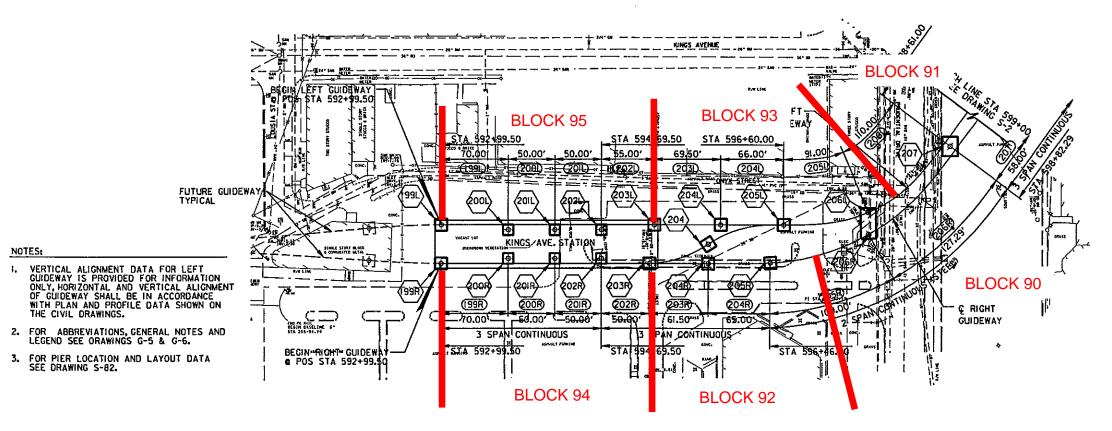


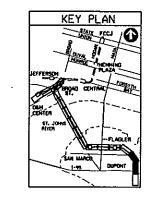


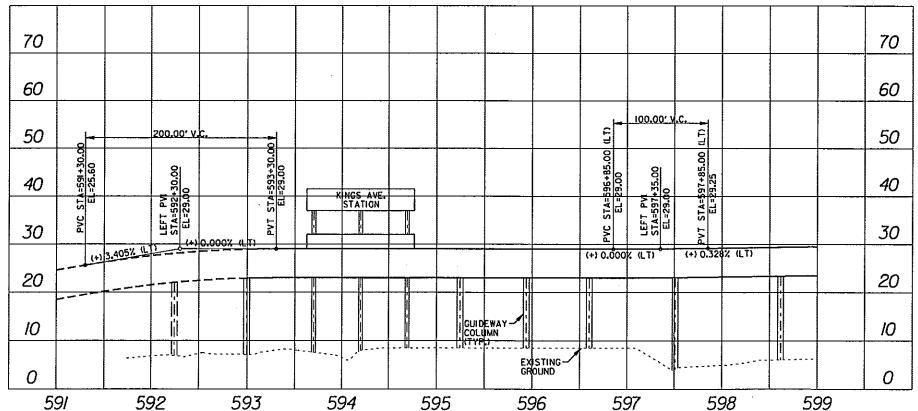












AS BUILT DRAWING

DATE BY HIS OCSCRIPTION

APPROVAL REVISIONS

JACKSONVILLE TRANSPORTATION AUTHORITY
AUTOMATED SKYWAY EXPRESS PROJECT
PHASE ONE - B KINGS AVE. STATION EXTENSION
JACKSONVILLE, FLORIDA

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ENGINEERING & CONSTRUCTION GROUP

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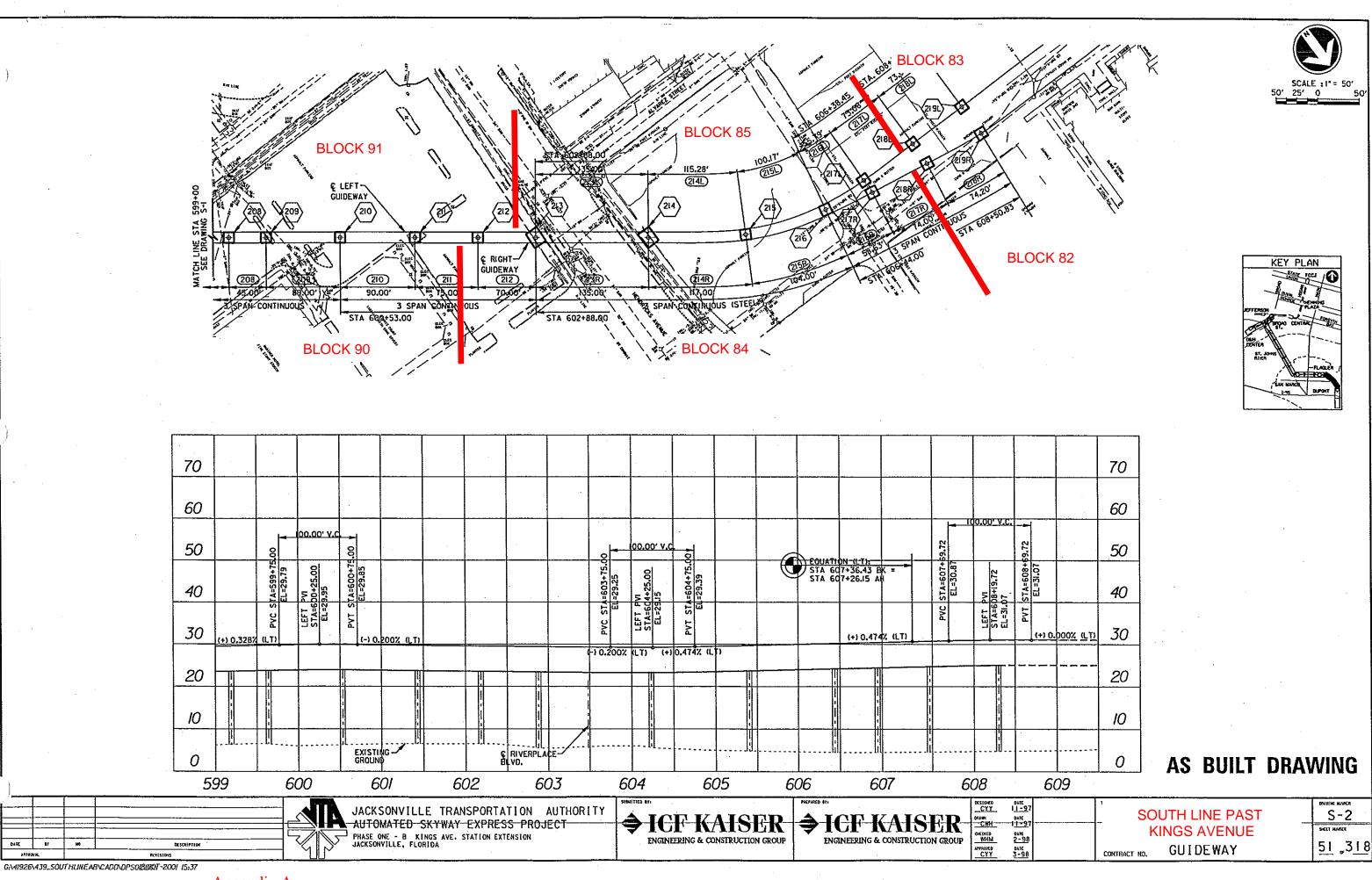
ORGEN 2-99

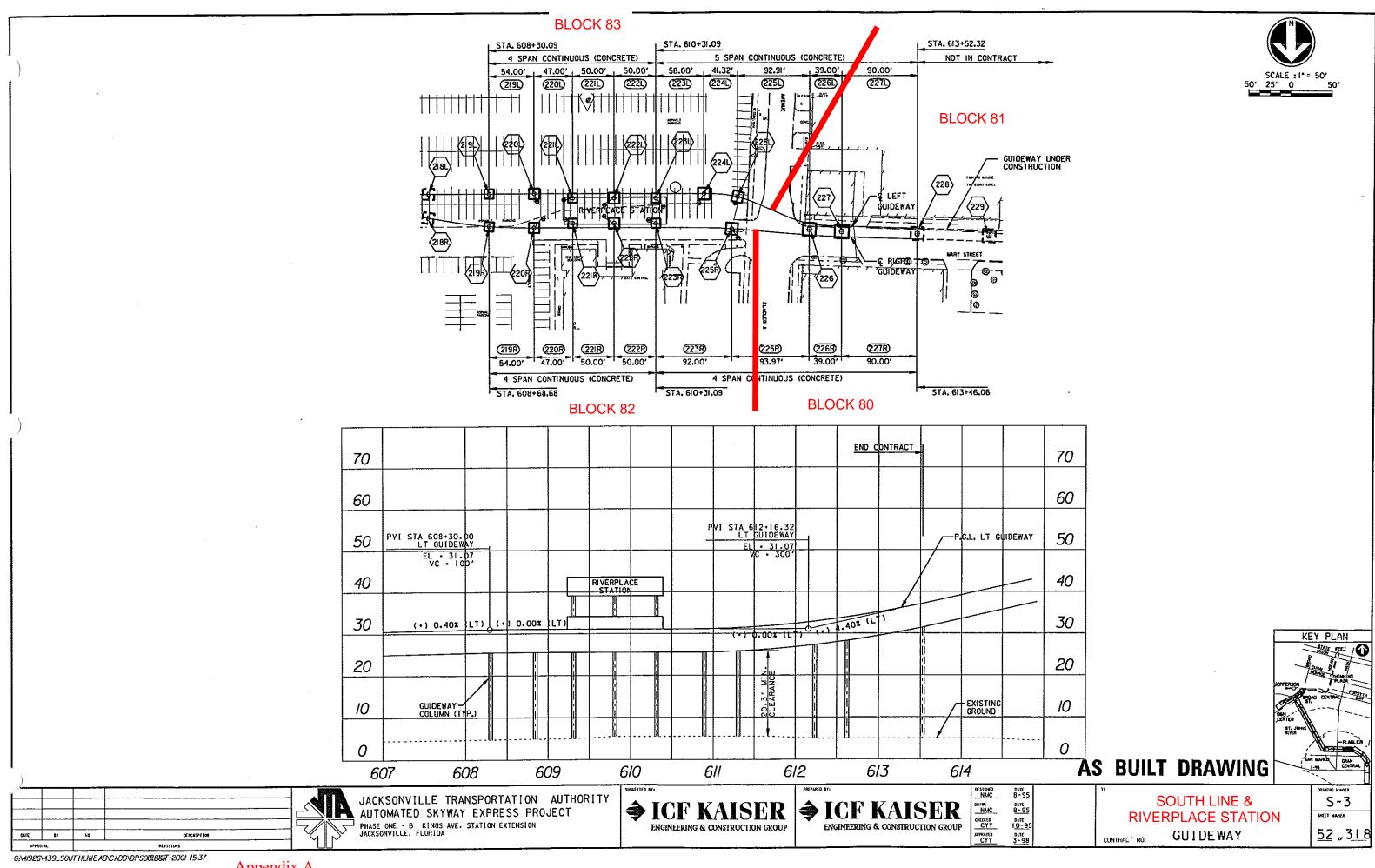
APPROVED DATE
CYY 3-98

SOUTH LINE & KINGS AVE. STATION

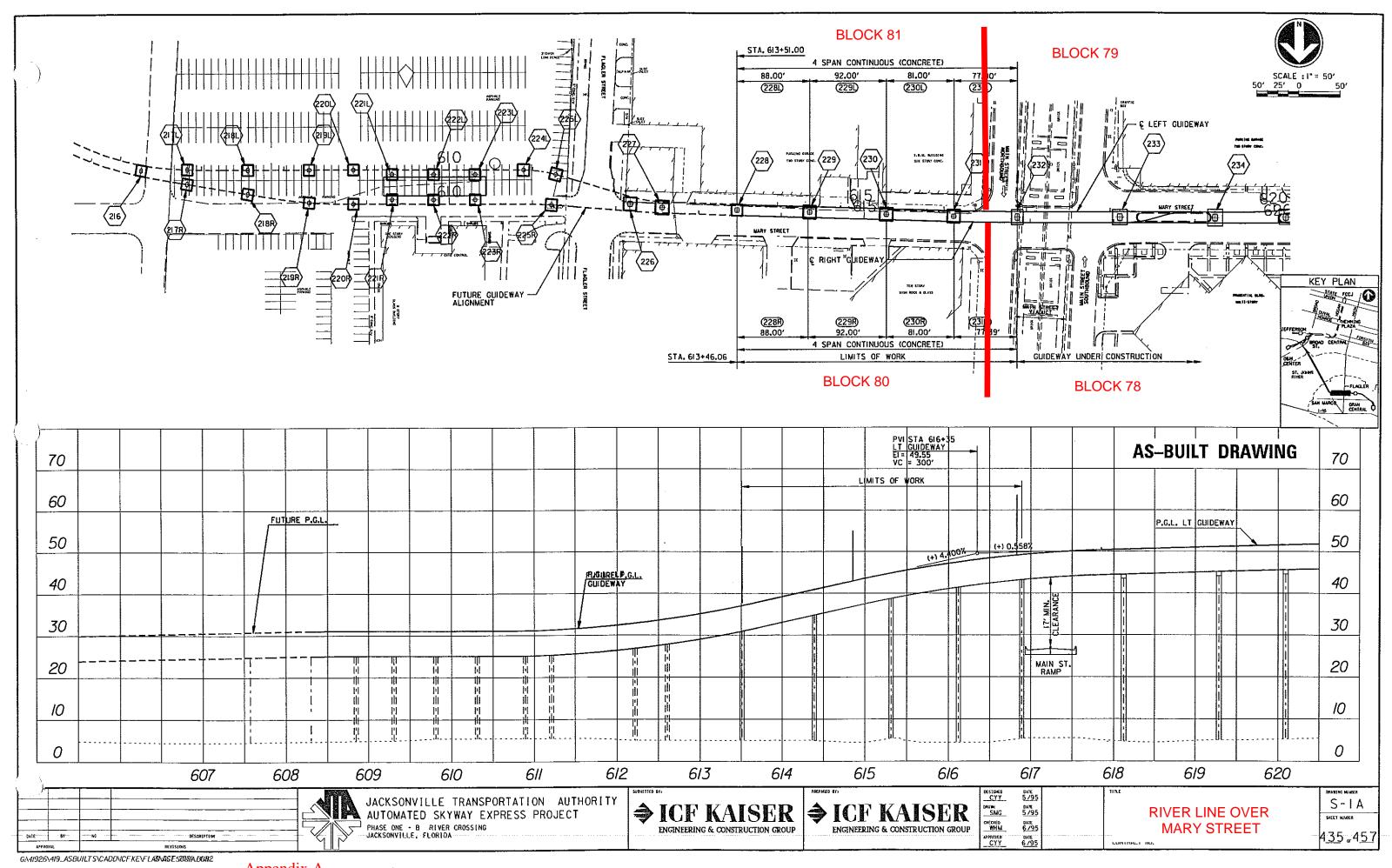
KINGS AVE. STATION

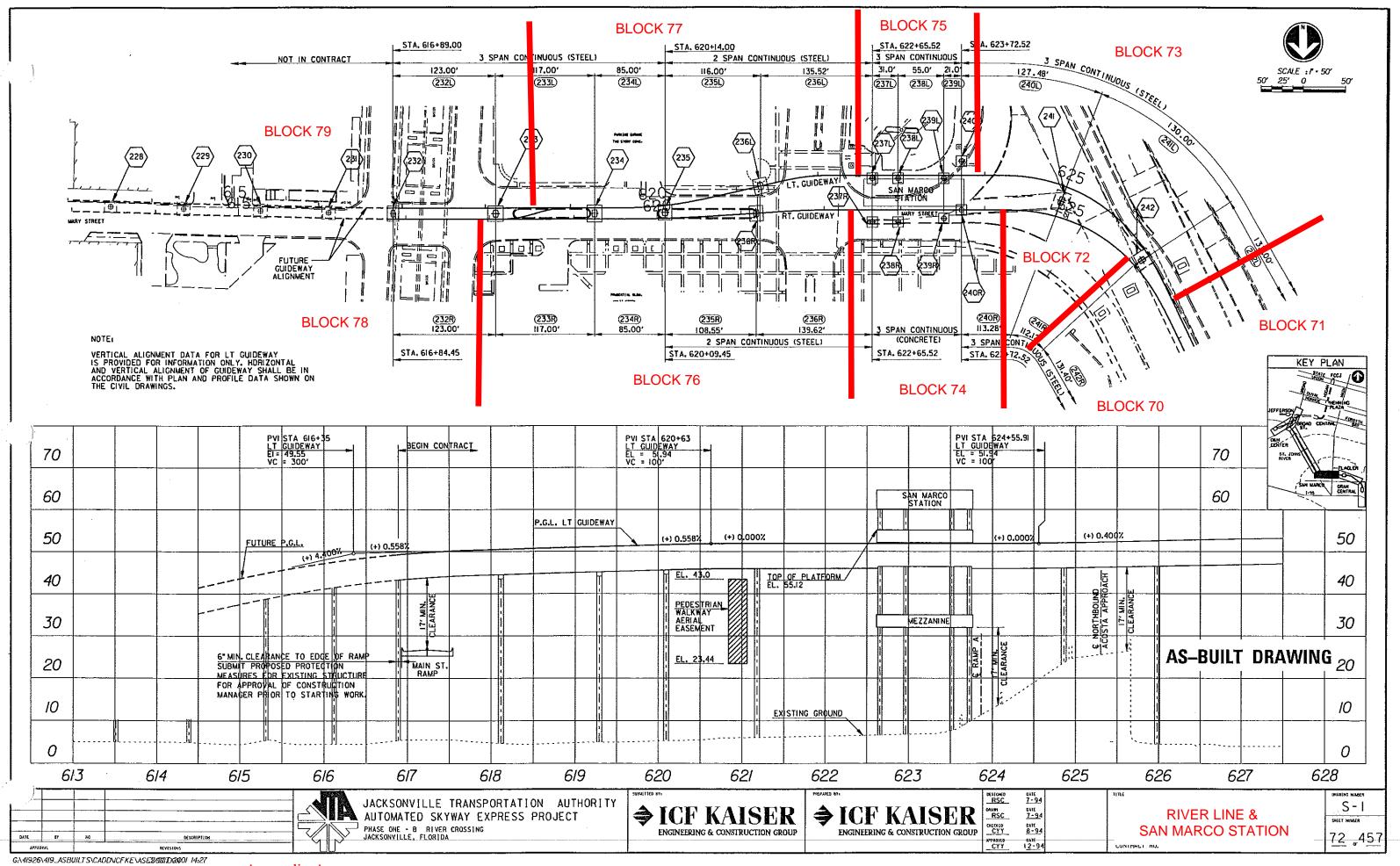
S-1 SPEET HUMBER

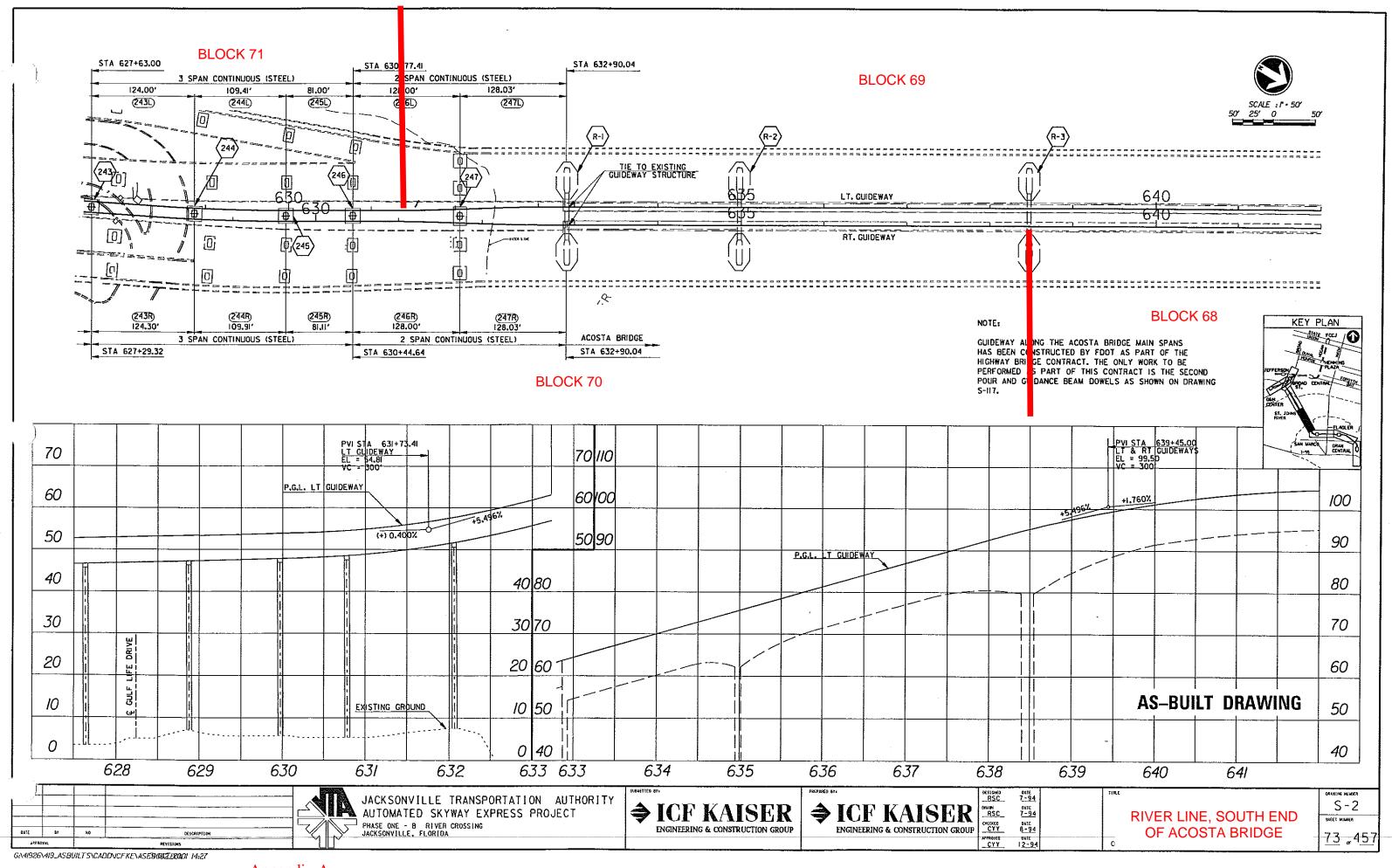


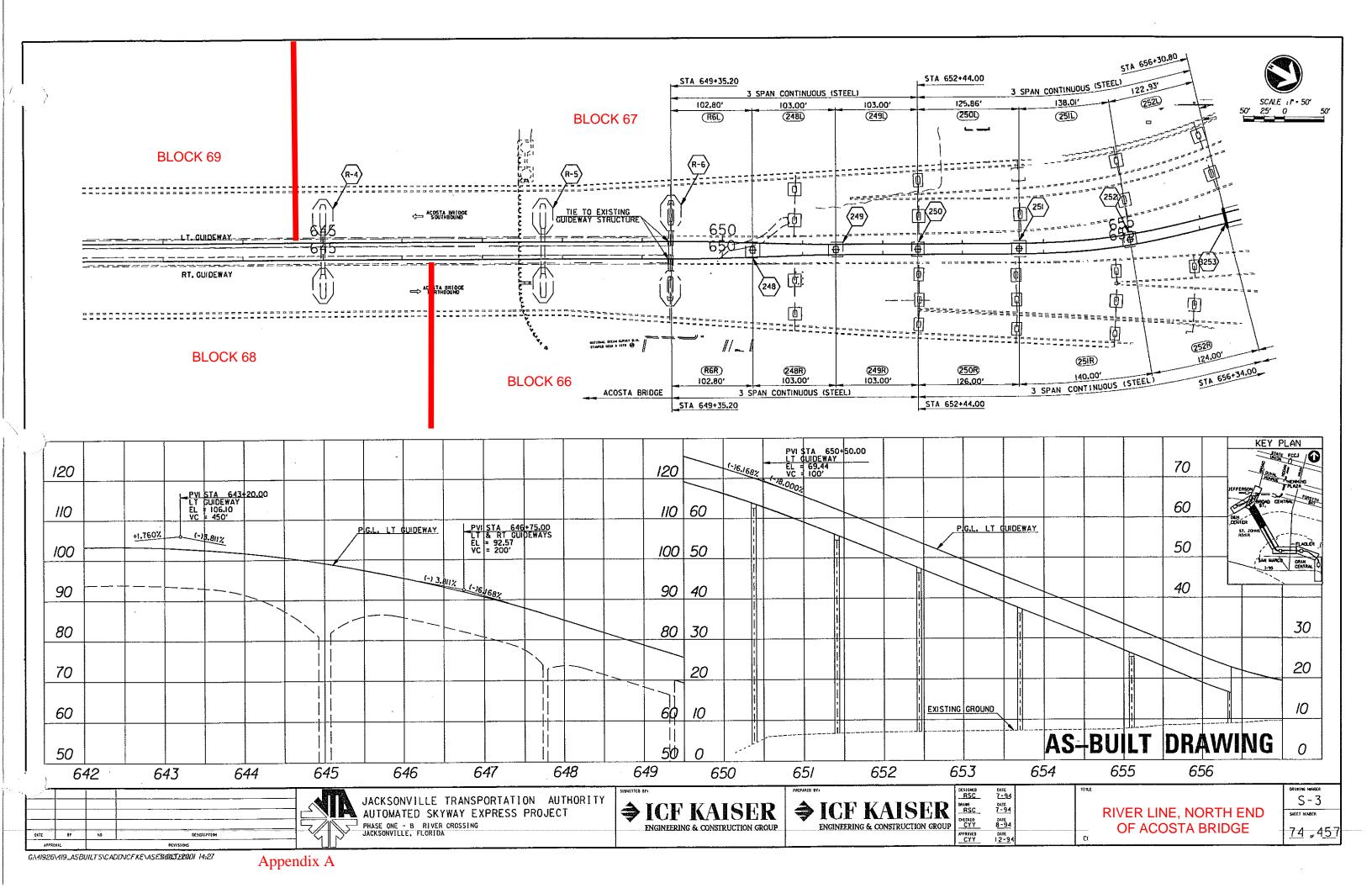


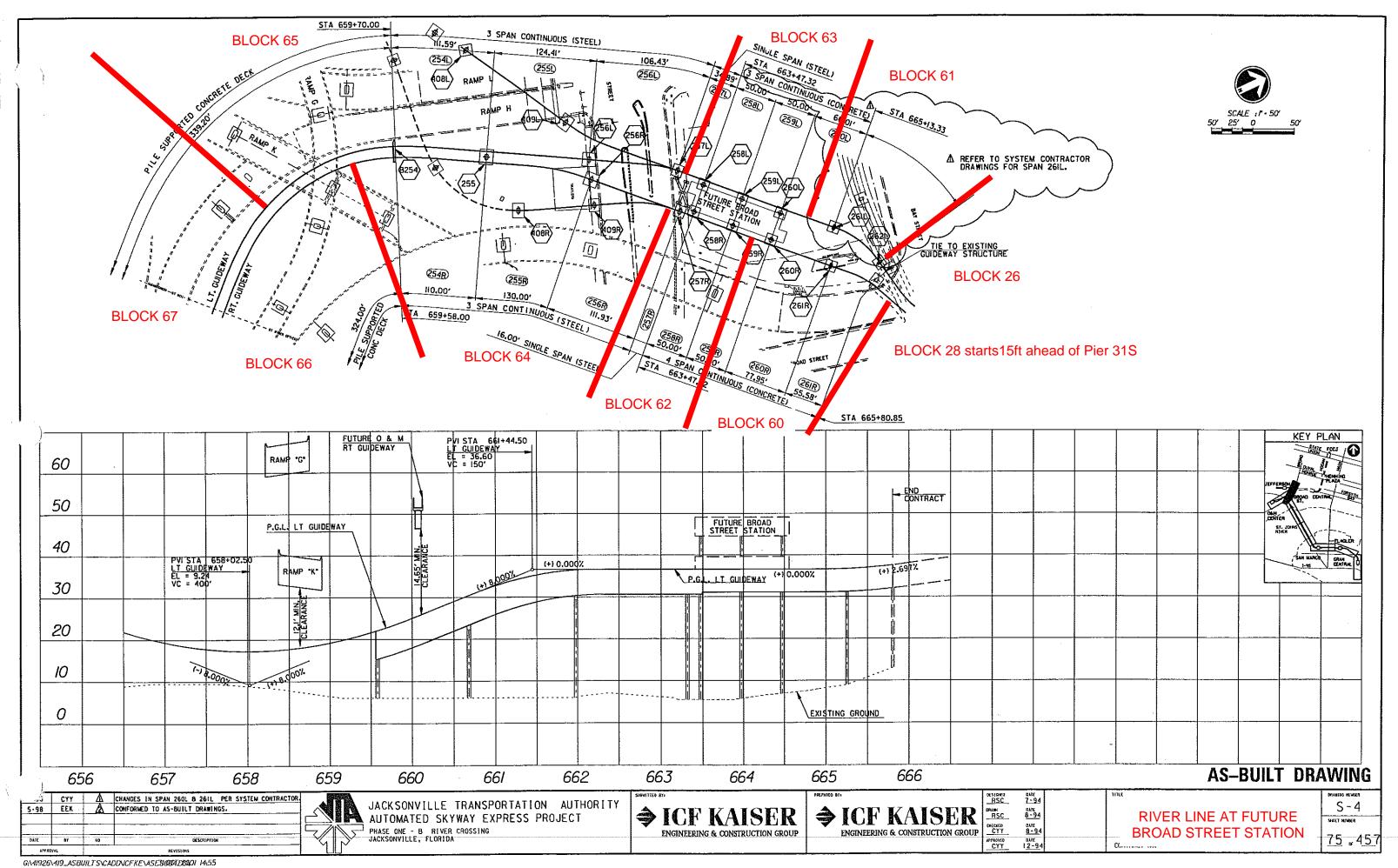
Appendix A

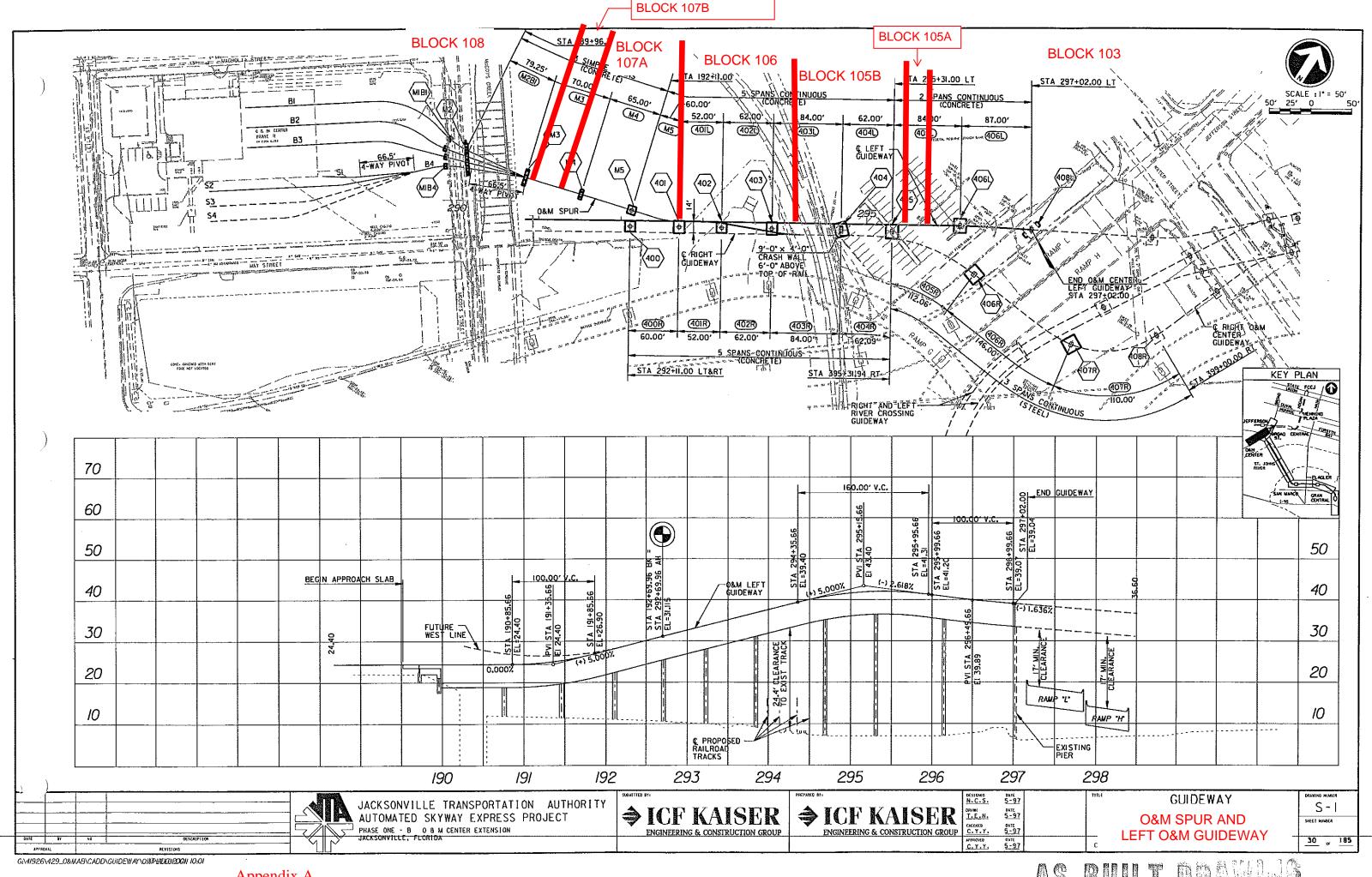


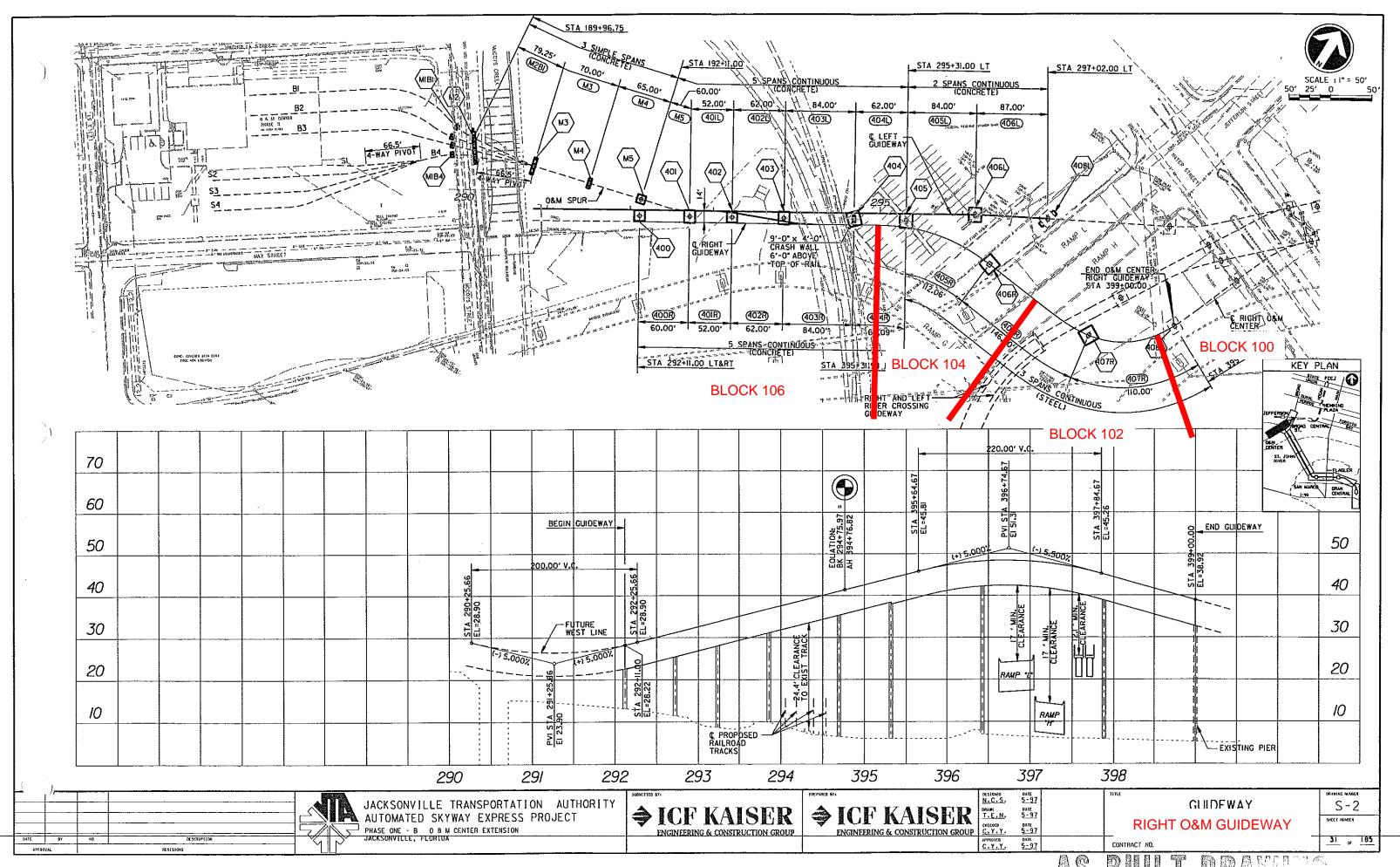


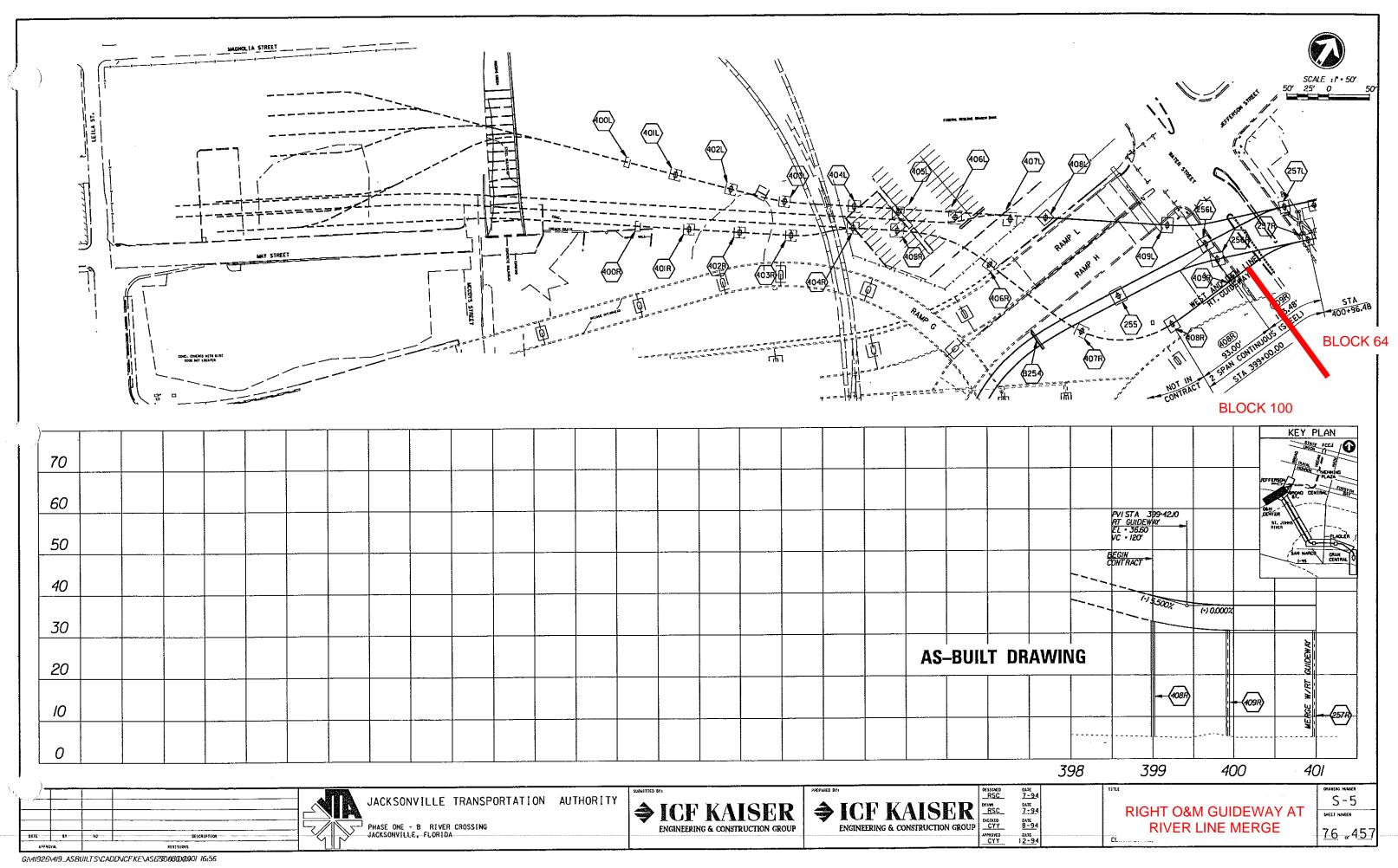


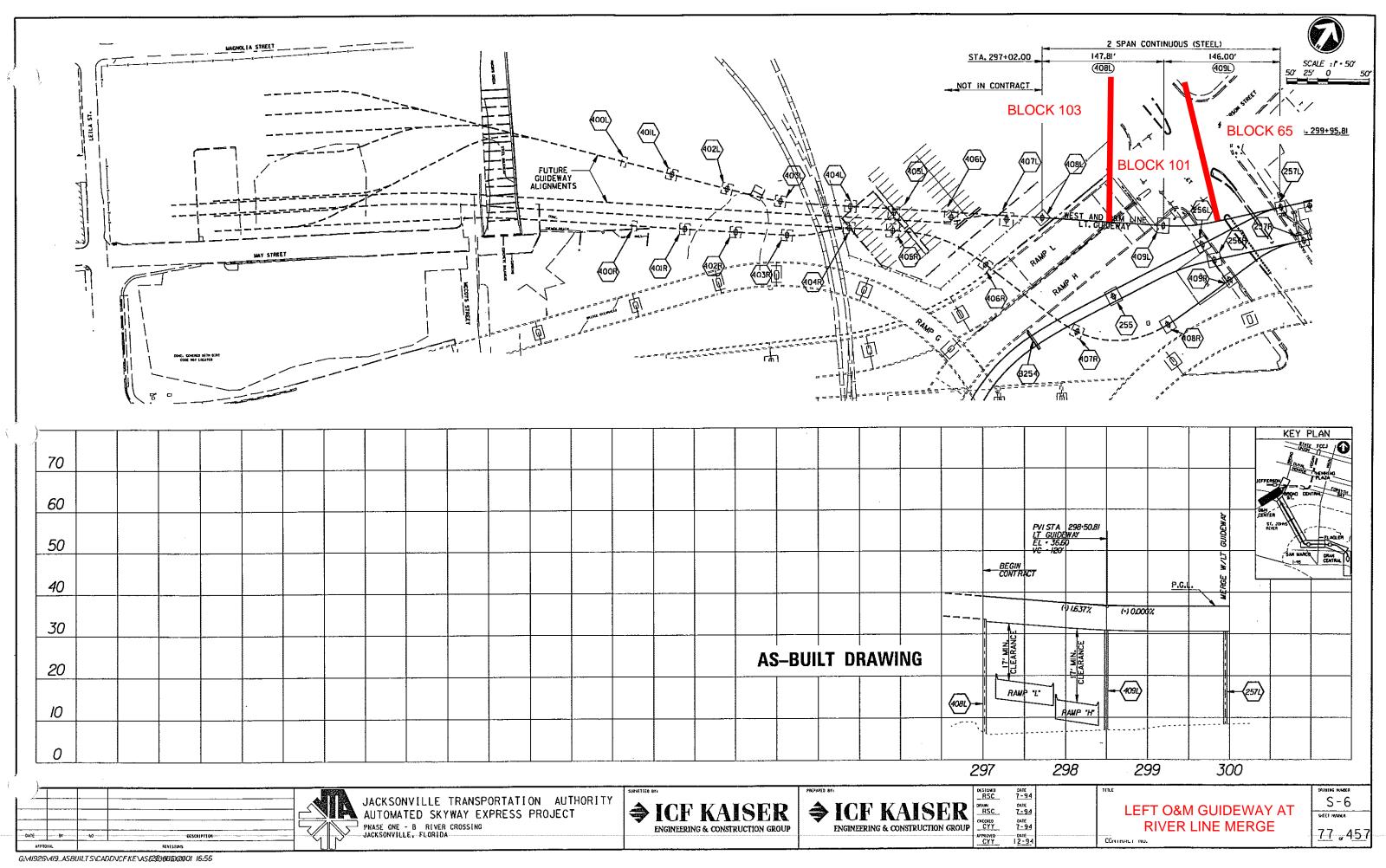










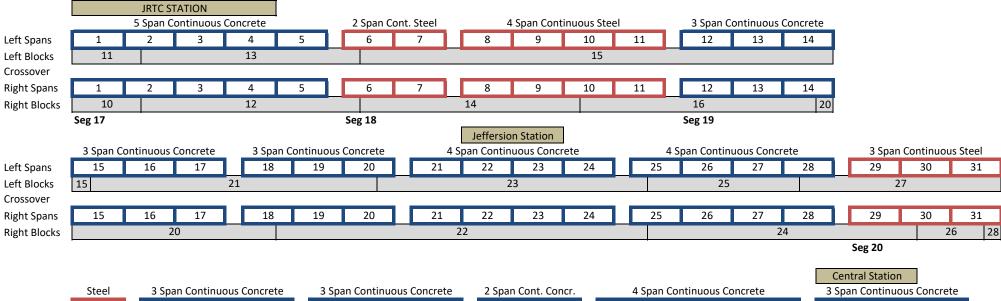


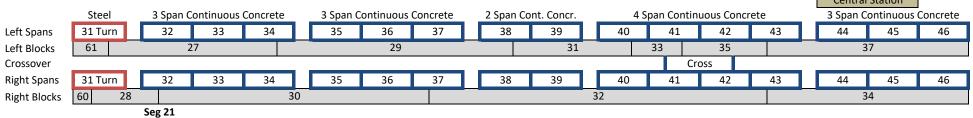
APPENDIX B

JTA Skyway Span Layout

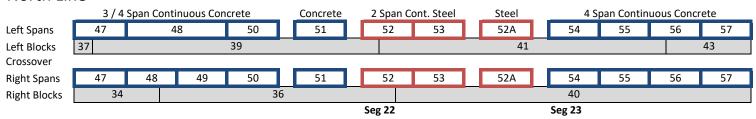


Starter Line



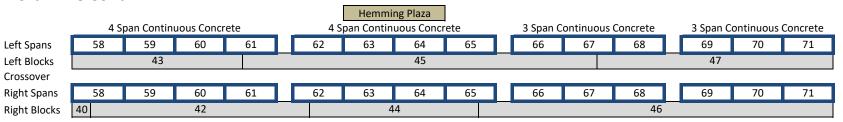


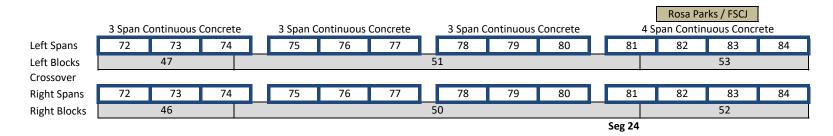
North Line



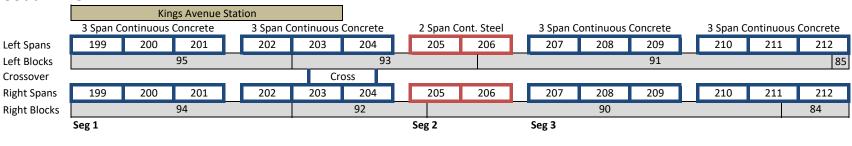


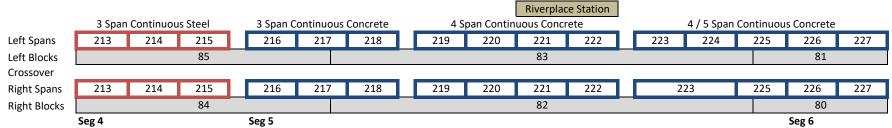
North Line Cont.





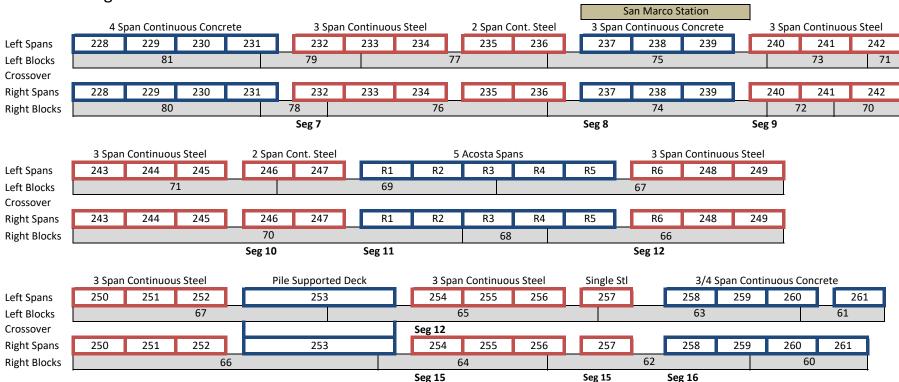
South Line



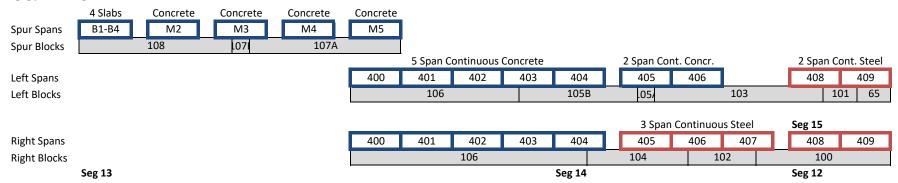




River Crossing



O&M Line



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Applicable FHWA/FDOT Bridge Elements and Element Defects



STEEL & METAL ELEMENTS

Cat.	Element No.	Element Description	Units	Element No.	Element Description	Units
DECK	28	Steel Deck with Open Grid	Sq Ft	30	Steel Deck Corrugated / Ortho. / Etc.	Sq Ft
DE	29	Steel Deck with Concrete Filled Grid	Sq Ft			
RAIL						
	102	Closed Web/Box Girder	FT	147	Main Cables	FT
84	107	Open Girder/Beam	FT	148	Secondary Cables	FT
SUPER	113	Stringer	FT	152	Floor Beam	FT
S	120	Truss	FT	161	Pin and/or Pin & Hanger Assembly	EA
	141	Arch	FT	162	Gusset Plate	EA
	202	Column	EA	231	Pier Cap	FT
SUB	207	Tower	FT	8386	Fender/Dolphin System	FT
วร	219	Abutment	FT	8474	Wingwall/Retaining Wall	FT
	225	Pile (visible for inspection)	EA			
CULV	240	Steel Culvert	FT			

_	refects below are listed in order of predominance according to the FDOT Field Guide						
No.	Description	CS 1 - Good	CS 2 - Fair	CS 3 - Poor	CS 4 - Severe		
6000	Scour (Sub. and Culv. only; not Pier Cap)	None.	Exists within tolerable limits or has been arrested with effective countermeasures.	Exceeds tolerable limits but is less than the critic limits determined by scour evaluation and does not warrant a structural review.			
4000	Settlement (Sub. and Culv. only; not Pier Cap)	None.	Exists within tolerable limits or arrested with no observed structural distress.	Exceeds tolerable limits but does not warrant structural review.	The condition warrants a		
1900	Distortion (Not Deck)	None.	Distortion not requiring mitigation or mitigated distortion.	Distortion that requires mitigation that has not been addressed but does not warrant structural review.	structural review to determine the effect on strength or serviceability of the element or the bridge;		
1010	Cracking	None.	Crack that has self-arrested or has been arrested with effective arrest holes, doubling plates, or similar.	Identified crack that is not arrested but does not warrant structural review.	OR a structural review has been completed and the defects impact strength or serviceability of the element		
1020	Connection	Connection is in place and functioning as intended.	Loose fasteners or pack rust without distortion is present but the connection is in place and functioning as intended.	Missing bolts or rivets, broken welds or fasteners; or pack rust with distortion but does not warrant a structural review.	or bridge.		
1000	Corrosion	None.	Freckled rust. Corrosion of the steel has initiated.	Section loss is evident or pack rust is present but does not warrant structural review.			
7000	Damage	Not applicable.	•	ge. The specific damage caused by the dition State under the appropriate mat	•		

NOTE:

For metal railing with concrete posts, blocking, or curbs, Elements 1080, 1090, 1120 and 1130 are also applicable. For Steel Deck wit hConcrete Filled Grid, Element 1080 is also applicable

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STEEL PROTECTIVE SYSTEMS

Cat.	Element No.	Element Description	Units
z	515	Steel Protective Coating Parent Element	Sq Ft
PROTECTION	8516	Paint on Steel	Sq Ft
JEC	8517	Weathering Steel Patina	Sq Ft
Ď	8518	Galvanized or Metalized Steel	Sq Ft
	8519	Other Steel Protective Coatings	Sq Ft

Defects below are listed in order of predominance according to the FDOT Field Guide

No.	Description	CS 1 - Good	CS 2 - Fair	CS 3 - Poor	CS 4 - Severe	
3440	Effectiveness	Fully effective.	Substantially effective.	Limited effectiveness.	Failed; no protection of the underlying metal.	
3420	Peeling / Bubbling / Cracking	None.	Finish coats only.	Finish and primer coats.	Exposure of bare metal.	
3410	Chalking	None.	Surface dulling.	Loss of pigment.	Not applicable.	
3430	Oxide Film Degradation Color / Texture Adherence (Weathering Steel only)	Yellow-orange or light brown from early development. Chocolate-brown to purple-brown for fully developed. Tightly adhered, capable of withstanding hammer or vigorous wire brushing.	Granular texture.	Small flakes, less than 1/2- in. diameter.	Dark black color. Large flakes, 1/2-in. diameter or greater or laminar sheets or nodules.	
7000	Damage	Not applicable.	This element has impact damage. The specific damage caused by the impact has been captured in the applicable Condition State under the appropriate material defect entry.			

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REINFORCED CONCRETE ELEMENTS

Cat.	Element No.	Element Description	Units	Element No.	Element Description	Units
? / 8.	12	Reinforced Concrete Deck	Sq Ft	8098	Concrete on Precast Deck Panels	Sq Ft
DECK / APPR. SLAB	16	Reinforced Concrete Top Flange	Sq Ft		(Child of Element 12)	
DI A S	38	Reinforced Concrete Slab	Sq Ft			
APPR. SLAB	321	Reinforced Concrete Approach Slab	Sq Ft			
RAIL	331	Reinforced Concrete Bridge Railing	FT			
84	105	Closed Web / Box Girder	FT	144	Arch	FT
SUPER	110	Open Girder / Beam	FT	155	Floor Beam	FT
SI	116	Stringer	FT			
	205	Column	EA	234	Pier Cap	FT
	210	Pier Wall	FT	8298	Pile Jacket	EA
SUB	215	Abutment	FT	8388	Fender/Dolphin System	FT
0)	220	Pile Cap/Footing (visible for inspection)	EA	8394	Abutment Slope Protection	Sq Ft
	227	Pile	EA	8475	Wingwall/Retaining Wall	FT
CULV	241	Reinforced Concrete Culvert	FT			

			rding to the FDOT Field Guide	OC 2 P	00.4.6
No.	Description	CS 1 - Good	CS 2 - Fair	CS 3 - Poor	CS 4 - Severe
6000	Scour (Sub. and Culv. only; not Pier Cap)	None.	Exists within tolerable limits or has been arrested with effective countermeasures.	Exceeds tolerable limits but is less than the critic limits determined by scour evaluation and does not warrant a structural review.	
4000	Settlement (Appr. Slab, Sub. and Culv. only; not Pier Cap)	None.	Exists within tolerable limits or arrested with no observed structural distress.	Exceeds tolerable limits but does not warrant structural review.	
1900	Distortion (Culvert Only)	None.	Distortion not requiring mitigation or mitigated distortion.	Distortion that requires mitigation that has not been addressed but does not warrant structural review.	The condition warrants a
1090	Exposed Rebar	None.	Present without measurable section loss.	Present with measurable section loss but does not warrant structural review.	structural review to determine the effect on strength or serviceability
1130	Cracking	Insignificant Cracks Non-Aggr.: W < 0.06 in. (1/16) Aggr. W < 0.012 in. (1/83) or sealed moderate width cracks.	Unsealed Moderate Cracks Non-Aggr.: W = 0.06-0.19 in. (1/16-3/16) Aggr.: W = 0.012-0.05 in. (1/83-1/20) or moderate pattern or map cracking (spacing 6-12 in)	Wide Cracks Non-Aggr.: W > 0.19 in. (3/16) Aggr. W > 0.05 in. (1/20) or heavy pattern or map cracking (spacing < 6 in.)	of the element or the bridge; OR a structural review has been completed and the defects impact strength or serviceability of the element or bridge.
1080	Delamination / Spall / Patched Areas	None.	Delaminated. Spall 1 in. or less deep or less than 6 in. diameter. Patched area that is sound.	Spall greater than 1 in. deep or 6 in. or greater in diameter. Patched area that is unsound or showing distress. Does not warrant structural review.	
1120	Efflorescence / Rust Staining (Not for Appr. Slab)	None.	Surface white without build-up or leaching without rust staining.	Heavy build-up with rust staining.	
1190	Abrasion / Wear (Deck, Appr. Slab, Arch, & Sub; not Pier Cap or Fend./Dolp.)	None.	Abrasion or wearing has exposed course aggregate but the aggregate remains secure in the concrete.	Coarse aggregate is loose or has popped out of the concrete matrix due to abrasion or wear.	
7000	Damage	Not applicable.		The specific damage caused by the ir n State under the appropriate mater	

Appendix C Page 3 of 6

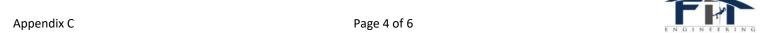




PRESTRESSED CONCRETE ELEMENTS

Cat.	Element No.	Element Description	Units	Element No.	Element Description	Units
DECK	13	Prestressed Concrete Deck	Sq Ft	8097	P/S - R/C (Hybrid) Slab	Sq Ft
DE	15	Prestressed Concrete Top Flange	Sq Ft	8099	P/S Concrete Slab (Sonovoid)	Sq Ft
APPR. SLAB	320	Prestressed Concrete Approach Slab	Sq Ft			
<u>~</u>	104	Closed Web / Box Girder	FT	143	Arch	FT
SUPER	109	Open Girder / Beam	FT	154	Floor Beam	FT
SI	115	Stringer	FT			
	204	Column	EA	8207	Hollow Core Pile (Child of 226)	EA
SUB	226	Pile	EA	8387	Fender/Dolphin Systems	FT
	233	Pier Cap	FT			
CULV	245	Prestressed Concrete Culvert	FT			

Defects	below are listed in orde	er of predominance accord	ding to the FDOT Field Guide		
No.	Description	CS 1 - Good	CS 2 - Fair	CS 3 - Poor	CS 4 - Severe
				Exceeds tolerable limits but is	
			Frieto mithio tolonoblo lincito on	less than the critic limits	
	C		Exists within tolerable limits or	determined by scour evaluation	
6000	Scour (Sub. and Culv. Only)	None.	has been arrested with effective countermeasures.	and does not warrant a structural review.	
6000	(Sub. and Culv. Only)	none.	effective countermeasures.	review.	
	6 111		Exists within tolerable limits or		
	Settlement		arrested with no observed	Exceeds tolerable limits but does	
4000	(Appr. Slab, Sub. and Culv. only; not Pier Cap)	None.	structural distress.	not warrant structural review.	
1000	omy, not her cupy	Worle:	Structural distress.	not warrant structural review.	
				Distortion that requires	
			Distortion not requiring	mitigation that has not been	
	Distortion		mitigation or mitigated	addressed but does not warrant	
1900	(Culvert Only)	None.	distortion.	structural review.	
				Present with section loss but	The condition warrants a
				does not warrant structural	structural review to
1100	Exposed Prestressing	None.	Present without section loss.	review.	determine the effect on
				Present with measurable section	strength or serviceability
			Present without measurable	loss but does not warrant	of the element or the
1090	Exposed Rebar	None.	section loss.	structural review.	bridge; OR a structural
		Insignificant Cracks	Unsealed Moderate Cracks		review has been
		Width < 0.004 in.	Width = 0.004-0.010 in.	Wide Cracks	completed and the defects
		or sealed moderate width	or moderate pattern or map	Width > 0.01 in.	impact strength or
		cracks.	cracking	or heavy pattern or map cracking	serviceability of the
1110	Cracking		(spacing 6-12 in)	(spacing < 6 in.)	element or bridge.
				Spall greater than 1 in. deep or	
			Delaminated. Spall 1 in. or less	greater than 6 in. diameter.	
			deep or less than 6 in.	Patched area that is unsound or	
	Delamination / Spall		diameter. Patched area that is	showing distress. Does not	
1080	/ Patched Areas	None.	sound.	warrant structural review.	
	Efflorescence / Rust		Surface white without build-up		
	Staining		or leaching without rust		
1120	(Not for Appr. Slab)	None.	staining.	Heavy build-up with rust staining.	
	Abrasion / Wear		Abrasion or wear has exposed		
	(Deck, Appr. Slab, Arch, &		course aggregate but the	Coarse aggregate is loose or has	
	Sub; not Pier Cap or		aggregate remains secure in	popped out of the concrete	
1190	Fend./Dolp.)	None.	the concrete.	matrix due to abrasion or wear.	
			This element has impact dar	mage. The specific damage caused	by the impact has been
7000	Damage	Not applicable.	captured in the applicable Co	ondition State under the appropriat	e material defect entry.

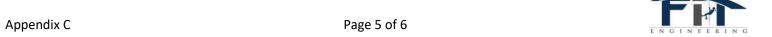




DECK JOINTS

Cat.	Element No.	Element Description	Units
	300	Strip Seal Expansion Joint	FT
	301	Pourable Joint Seal	FT
2	302	Compression Joint Seal	FT
JOINTS	303	Assembly Joint with Seal	FT
2	304	Open Expansion Joint	FT
	305	Assembly Joint without Seal	FT
	306	Other Joint	FT

	Defects below are listed in order of predominance according to the FDOT Field Guide							
No.	Description	CS 1 - Good	CS 2 - Fair	CS 3 - Poor	CS 4 - Severe			
2330	Seal Damage (Joints with Seals)	None.	Seal abrasion without punctures.	Punctured or ripped or partially pulled out.	Punctured completely through, pulled out, or missing.			
2320	Seal Adhesion (Joints with Seals)	Fully adhered.	Adhered for more than 50% of the joint height.	Adhered 50% or less of joint height but still some adhesion.	Complete loss of adhesion.			
2310	Leakage (Joints with Seals)	None.	Minimal. Minor dripping through the joint.	Moderate. More than a drip and less than free flow of water.	Free flow of water through the joint.			
2350	Debris Impaction	No debris to a shallow cover of loose debris may be evident but does not affect the performance of the joint.	Partially filled with hard-packed material but still allowing free movement.	Completely filled and impacts joint movement.	Completely filled and prevents joint movement.			
2370	Metal Damage (Not for Pourable Compression, or Open)	None.	Freckled rust; metal has no cracks or impact damage, Connection may be loose but functioning as intended.	Section loss, missing or broken fasteners, cracking of the metal, or impact damage but joint still functioning.	Metal cracking, section loss, damage, or connection failure that prevents the joint from functioning as intended.			
2360	Adjacent Deck or Header	Sound. No spall, delamination, or unsound patch.	Edge delamination or spall less than 1 in. deep or less than 6 in. diameter. Patched area that is sound.	Spall greater than 1 in. deep or greater than 6 in. diameter. Exposed rebar. Delamination or unsound patched area that makes the joint loose.	Spall, delamination, unsound patched area, or loose joint anchor that prevents the joint from functioning as intended.			
2340	Seal Cracking (Joints with Seals)	None.	Surface crack.	Crack that partially penetrates the seal.	Crack that fully penetrates the seal.			
7000	Damage	Not applicable.	This element has impact damage. The specific damage caused by the impact has been captured in the applicable Condition State under the appropriate material defect entry.					





BEARINGS

Cat.	Element No.	Element Description	Units
	310	Elastomeric Bearing	EA
٠.	311	Movable Bearing (roller, rocker, sliding, etc.)	EA
BEARINGS	312	Enclosed / Concealed Bearing	EA
8	313	Fixed Bearing (rotation only)	EA
BE∕	314	Pot Bearing	EA
	315	Disk Bearing (hard plate disc)	EA
	316	Other Bearing	EA

Defects below are listed in order of predominance according to the FDOT Field Guide

No.	Description	CS 1 - Good	CS 2 - Fair	CS 3 - Poor	CS 4 - Severe
2240	Loss of Bearing Area	None.	Less than 10%.	10% or more but does not warrant structural review.	
<u>1020</u> 2220	Connection	Connection is in place and functioning as intended.	Loose fasteners or pack rust without distortion is present but the connection is in place and functioning as intended.	Missing bolts, rivets, or fasteners; broken welds; or pack rust with distortion but does not warrant a structural review.	The condition warrants a
	Alignment	Lateral and vertical alignment is as expected for the temperature conditions	Tolerable lateral or vertical alignment that is inconsistent with the temperature conditions.	Approaching the limits of lateral or vertical alignment for the bearing but does not warrant a structural review.	structural review to determine the effect on strength or serviceability of the element or the bridge; OR a structural
2230	Bulging, Splitting, or Tearing (Elastomeric & Pot Only)	None.	Bulging less than 15% of the thickness.	Bulging 15% or more of the thickness. Splitting or tearing. Bulging's surfaces are not parallel. Does not warrant structural review.	review has been completed and the defects impact strength or serviceability of the element or bridge.
2210	Movement	Free to move.	Minor restriction.	Restricted but not warranting structural review	
1000	Corrosion	None.	Freckled rust. Corrosion of the steel has initiated.	Section loss is evident or pack rust is present but does not warrant structural review.	
7000	Damage	Not applicable.		nage. The specific damage caused ondition State under the appropriate	· ·

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APPENDIX D

Field Inspection Notes



Line	Block	Pier	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
Starter	13	2	N	Above	Span 2N - 2' of standing water inside guidebeam, evident in a hole 6.5"x3.25". Cannot tell how big the cavity is. Need to drain and cap.	no change	J8-7
Starter	12	3	S	Above	Span 2S - Trash, debris and standing water throughout, primarily to the right of the guidebeam. Debris is preventing water from draining.	new	
Starter	12	3	S	Above	Span 3S - Trash, debris and standing water throughout, primarily to the right of the guidebeam Debris is preventing water from draining.	new	
Starter	13	3	N	Above	Span 2N - Trash, wet debris and standing water throughout. No means of drainage at Pier 2 or Pier 3N.	no change	J8-6,8 R8-16
Starter	13	3	N	Above	Span 3N - Trash, wet debris and standing water throughout. No means of drainage at Pier 3N or Pier 4N.	no change	
Starter	13	5	N	Above	Span 4N and 5N - Trash, wet debris and standing water between left sidewall and second pour. Nearest drain is located near right sidewall at Pier 5 (per plans).	no change	
Starter	13	6	N	Above	Span 6N - Up to 2-1/2" of standing water, both sides of the guidebeam. Heavy mud and debris accumulation. No means of drainage at Piers 6N and 7N	new	J8-20
Starter	14	7	S	Above	Span 7N - Up to 1/2" of standing water and debris on both sides of the second pour	new	
Starter	15	7	N	Above	Span 7N - Up to 1/2" of standing water due to debris blockage.	new	
Starter	14	8	S	Above	Standing water and debris throughout the span after a rain event. Right deck overhang is a low area; drain located left of guidebeam at Pier 8. Drain is covered with wet debris.	Increase	S23-3
Starter	15	8	N	Above	Scupper is missing grate and pipe has debris inside.	No change	R23-2
Starter	14	10	S	Above	Standing water between Piers 9 and 11, but dry at both. Design profile grade is 0%, but Pier 10 must be lower elevation. No means for drainage. 2019: A drainage hole was cut into the deck, midspan Span 9. Standing water still present in Span 9 due to debris and recent rain event. Up to 4" of standing water throughout Span 10, left of guidebeam.	no change	
Starter	15	10	N	Above	Span 9N - Standing water along the left sidewall for 50' before Pier 10. No means for drainage at Pier 10.	no change	R23-9
Starter	15	10	N	Above	Span 10N - Standing water up to 4", full length of Span 10. No means for drainage at Pier 10 or Pier 11	no change	R23-13
Starter	16	12	S	Above	Scupper is missing grate and pipe is clogged and filled with water.	no change	S23-9
Starter	15	12	N	Above	Scupper is missing grate and pipe is clogged and filled with water.	no change	
Starter	20	16	S	Above	Scupper is missing grate and pipe is clogged. Standing water 2" deep, full length of Span 16 and for 20ft. in Span 15.	new	S23-16

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Line	Block	Pier	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
Starter	20	17	S	Above	Broken atrium grate with heavy debris accumulation surrounding, blocking proper drainage	new	
Starter	22	19	S	Above	Heavy debris accumulation surrounding, blocking proper drainage. Up to 2" of standing water in Span 19 and in forward half of Span 18	new	
Starter	21	19	N	Above	Moderate debris accumulation around the drainage scupper, preventing flow.	no change	R23-22
Starter	21	20	N	Above	Standing water and debris for 50' around Pier 20N. No means of drainge at the pier.	no change	
Starter	22	22	S	Above	Up to 1" standing water full length of Spans 21 22, and 23. No means of drainage at Piers 22 and 23	new	
Starter	23	22	N	Above	Standing water and debris for 15' around Pier 22N. No means of drainge at the pier.	no change	
Starter	23	23	N	Above	One inch of standing water present. No means of drainge at the pier.	no change	
Starter	22	24	S	Above	Scupper atrium grate is inverted and full of debris.	no change	
Starter	23	24	N	Above	Scupper atrium grate is broken and the drain is clogged with debris.	Increase	R23-26
Starter	24	26	S	Above	Heavy debris accumulation surrounding, blocking proper drainage. Up to 2" of standing water in Span 26 and in forward half of Span 25	new	
Starter	32	42	S	Below	The drain pipe beneath the left overhang of Span 42 S-Cross is dripping onto the beam stem. The water is infiltrating cracks and causing minor abrasion.	new	J11-9
Starter	34	45	R	Above	Scupper atrium grate is missing.	new	
Starter	37	45	N	Above	All of Span 45N and half of Spans 44N and 46N have standing water on the right side. Could not verify presence of drain at Pier 45N as shown in the plans. No drain present at Pier 46N.	no change	
North	39	48	N	Above	Scupper atrium grate is missing.	New	
North	41	55	L	Above	Scupper atrium grate is missing and drain is filled with debris.	New	
North	42	62	R	Above	Scupper atrium grate is broken	new	R14-1
North	45	62	L	Above	Scupper atrium grate is missing.	new	
North	44	63	R	Above	Scupper atrium grate is broken	new	
North	45	63	L	Above	Scupper atrium grate is broken.	new	
North	44	65	R	Above	Scupper atrium grate is missing.	no change	R14-2



Line	Block	Pier	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
North	47	69	L	Above	Atrium grate is installed upside down, 15' from Pier 69	New	
North	50	75	R	Above	Scupper atrium grate is upside down.	new	R14-4
North	50	76	R	Above	Span 75R - Up to 1" of standing water behind the first switch beam pedestal, located 10' from Pier 76R. No means of drainage.	no change	
North	51	76	L	Above	Standing water on left side of guideway over Pier 77 without a means of drainage.	New	
North	50	81	R	Above	Scupper atrium grate is broken and drain is filled with debris.	new	R14-5
North	53	84	L	Above	Atrium grate is broken and drain is clogged with debris.	no change	
South	94	199	R	Above	Moderate debris accumulation on the deck in Span 199R causing standing water and corroding the metal conduit straps.	no change	R5-7
South	95	200	L	Above	Minor standing water to the left of the guidebeam in Span 200L. Perhaps a low spot; scupper on right side.	no change	
South	94	200	R	Above	Moderate debris accumulation around the drainage scupper.	New	R5-6
South	95	200	L	Above	Typical debris throughout	new	R5-75
South	95	200	L	Above	Missing atrium grate and flange is bent	new	
South	95	202	L	Above	Heavy debris buildup around scupper, preventing drainage	new	
South	92	203	R	Above	Standing water in the forward switchbeam area of Block 94 causing corrosion on pedestal anchor bolts.	new	R5-12,13
South	93	203	L	Above	Heavy debris buildup around scupper, preventing drainage	new	R5-72
South	93	204	L	Above	Scupper atrium grate is inverted and full of debris.	no change	
South	93	204	Mid	Above	Atrium grate installed upside down, holding debris	new	R5-19
South	92	204	R	Above	Grate is broken and flange is not seated	new	R5-21
South	93	205	L	Above	Scupper atrium grates are inverted and full of debris. Photo showing drainage with some debris removal	new	R5-71
South	90	206	R	Above	drain pipe is completely filled with water to the deck top	new	R5-26
South	93	206	L	Above	Missing atrium grate flange	new	
South	90	211	R	Above	Broken atrium grate	new	R5-34



Line	Block	Pier	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
South	84	212	R	Above	Broken atrium grate	new	
South	84	213	R	Above	Broken atrium grate	new	
South	85	213	-	Below	Riser pipe is broken at the top, but still functional.	new	S15-5
South	85	213	L	Above	Broken atrium grate	new	
South	85	214	-	Below	Riser pipe is cracked and cap is broken.	no change	S15-10
South	84	214	R	Above	Missing atrium grate	new	R5-41
South	85	214	L	Above	Missing atrium grate and flange	new	
South	84	215	R	Above	Broken atrium grate	new	
South	85	215	L	Above	Broken atrium grate	new	
South	84	216	R	Above	Broken atrium grate	new	
South	84	217	R	Above	Broken atrium grate	new	
South	85	217	L	Above	Broken atrium grate	new	
South	82	218	R	Above	Broken atrium grate	new	
South	82	218	R	Below	Riser pipe access cap installed upside down.	no change	R2-1
South	82	219	R	Above	Broken atrium grate and downspout is filled with water	new	R5-48
South	82	220	R	Above	Downspout is filled with water, clogged at the top	new	R5-53, J10-1
South	83	220	L	Above	Missing atrium grate and broken flange bolt	new	R5-55
South	82	221	R	Above	Broken atrium grate	new	
South	83	221	L	Above	Broken atrium grate flange bolts	new	
South	82	222	R	Above	Broken atrium grate, downspout is clogged at the top	new	S10-1
South	82	223	R	Above	Broken atrium grate	new	
South	83	223	L	Above	Broken atrium grate	new	

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Line	Block	Pier	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
South	83	224	L	Above	Up to 1" of wet debris over Pier 224L. No drain at this pier.	no change	S10-42
South	82	225	R	Above	Broken atrium grate	new	
South	83	225	L	Above	Broken atrium grate	new	
South	80	226	R	Above	Broken atrium grate	new	
South	80	227	R	Above	No drain per design at Pier 227, slopes down toward 226. NSD	new	
River	81	228	-	Below	Riser pipe is broken.	no change	R3-1
River	80	228	R	Above	Broken atrium grate	new	
River	80	229	R	Above	No drain per design at Pier 229, slopes down toward 228. NSD	new	
River	80	230	R	Above	Broken atrium grate	new	
River	80	231	R	Above	No drain per design at Pier 231, slopes down toward 230. NSD	new	
River	78	232	R	Above	Broken atrium grate	new	
River	76	233	R	Above	Broken atrium grate	new	
River	76	235	R	Above	No drain per design at Pier 235, slopes down toward 234. NSD	new	
River	77	236	L	Above	Floor drain grate, located under the guidebeam, is buried under 4" of debris.	no change	
River	77	236	L	Above	Standing water full length of span, but dry at the piers indicating a sag in the span.	no change	
River	76	236	R	Above	Floor drain grate which is located under the guidebeam, is buried under 4" of soil and debris.	no change	J10-21
River	74	237	R	Above	Down spout is clogged with debris; water to near the top (cap present)	new	J10-22
River	74	238	R	Above	Standing water in the last 20' of Span 327. No means for drainage at Pier 238.	DNS	
River	74	238	R	Above	Standing water full length of span. No means for drainage at Pier 238 or 239.	DNS	
River	74	239	R	Above	Wet debris in span. No means for drainage at Pier 239	no change	S10-21



Line	Block	Pier	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
River	74	240	R	Above	Standing water full length of span, left of guidebeam only, stopped by debris under transverse metal conduit, 5' from Pier 240. Water cannot get to Pier 240 to drain. when debris is removed water pours down into forward joint failure and onto station floor.	no change	S10-22
River	73	242	L	Above	120' of standing water in Span 242L due to debris accumulation at Pier 242. Atrium grate is lodged upside down inside, clogging drain.	no change	S10-33
River	70	242	R	Above	20' x 2" max of standing water on the right side of guidebeam. Deck is superelevated downward toward right and the drain is on the left side. Through hole under guidebeam is clear. Drain pipe is clear.	no change	S10-23-25
River	73	242	-	Below	PVC conduit downspout for the right beam is not connected at the pier cap joint.	new	S27-12
River	70	244	R	Above	40' of standing water due to clogged drain at 244R	Increase	S10-26
River	71	245	L	Above	Broken atrium grate and flange and moderate debris accumulation around scupper	new	S10-32
River	71	245	L	Above	Broken atrium grate and light debris accumulation around scupper	new	
River	70	245	R	Above	Heavy debris accumulation around the drainage scupper, restricting flow.	no change	S10-27
River	69	247	L	Above	Large sand accumulation up to 4" preventing water from draining.	no change	S10-30
River	70	247	R	Above	Heavy debris accumulation around the drainage scupper, restricting flow. Also, the cross drain in the guidebeam slopes up from right to left causing standing water on the right side, drain on left.	no change	J10-28, S10- 28
River	67	248	L	Above	Heavy sand and debris accumulation around the drainage scupper.	no change	S28-30
River	66	248	R	Above	Moderate debris accumulation around the drainage scupper.	no change	R28-11
River	66	249	R	Above	Moderate debris accumulation around the drainage scupper.	no change	
River	67	249	L	Above	Heavy sand and debris accumulation around the drainage scupper.	new	
River	67	251	L	Above	Moderate sand and debris accumulation around the drainage scupper.	no change	
River	66	251	R	Above	Moderate debris accumulation around the drainage scupper.	no change	
River	67	252	L	Above	Moderate sand and debris accumulation around the drainage scupper.	no change	
River	66	252	R	Above	Moderate debris accumulation around the drainage scupper.	no change	
River	67	253	L	Above	Span 253L, moderate debris accumulation around the 2nd scupper, right side.	no change	



Line	Block	Pier	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
River	66	253	R	Above	Span 253R, wet debris accumulation for 100' in the middle of the span (low section).	no change	R28-24
River	66	253	R	Above	Span 253R, 1st drain pipe, right side has debris inside	Decrease (atrium grate has been installed)	R28-20
River	66	253	R	Above	Span 253R, 2nd scupper, left side has a broken atrium grate.	New	R28-25
River	66	253	R	Above	Span 253R, 2nd scupper, right side has a missing atrium grate and the drain is clogged with debris.	Increase (prev. noted as broken)	
River	66	253	R	Above	Span 253R, 3rd drain pipe, right side has debris inside.	no change	
River	67	253	L	Above	Standing water up to 2" deep in the middle 85ft.	new	
River	66	253	R	Above	Span 253R, 3rd drain pipe, left side has a broken atrium grate.	New	
River	66	253	R	Below	Riser pipe cap is off and pipe is filled with water	new	S29-9
River	65	255	L	Above	Moderate debris accumulation around the drainage scupper.	no change	
River	64	255	R	Above	Scupper drain grate is missing. There is heavy debris accumulation around the drain and the pipe is clogged with debris.	no change	
River	65	256	L	Above	Span 256L, 2 drains along the left barrier are missing atrium grates. On the right side, one is missing and two are inverted	new	
River	65	256	L	Below	Riser pipe cap is broken.	no change	
River	65	256	L	Above	17" L x 4" H fracture in flow dam with 9" of exposed rebar	no change	S19-28
River	64	256	R	Above	Drain is under the guidebeam and is filled with soil and debris. There is a minor amount of standing water	new	R19-18
River	64	256	R	Above	Midspan drain on left side has heavy soil buildup, right side drain 2pft from Pier 257 is also clogged	new	S19-19
River	65	257	L	Below	Drainage conduit hangers in Span 256 have heavy surface corrosion	new	S24-1
River	62	257	R	Below	Drainage conduit hangers in Span 256 have heavy surface corrosion	new	
River	62	258	R	Above	Drain is filled to the deck with water, clog in system	new	S19-20
River	63	258	L	Below	Riser pipe is broken but the cap is secured	no change	R9-1
River	62	259	R	Below	Trash inside riser pipe	new	R9-2

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Line	Block	Pier	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
River	63	259	L	Below	Riser pipe cap is broken	new	R9-3
River	63	259	L	Above	Standing water on deck top, full length in Spans 259L and half of Spans 258L and 260L. No means of drainage at Pier 259L, drain at Pier260L had debris accumulation blocking drainage	Increase	
River	60	260	R	Above	Standing water on deck top, full length in Spans 259R and half of Spans 258R and 260R. No means of drainage at Pier 259R, drain at Pier 260R is clogged and completely filled with water	Increase	S19-22
River	60	261	R	Below	Riser pipe cap is broken, there is a 3" diameter hole in the cap	new	R9-4
O&M	108	M1	-	Above	Area of erosion 4' L x 1.5' W x 1' D between M1B2 and M1B3 with narrow voids up to 2ft deep.	Increase	S19-3-5
O&M	108	M1	-	Above	Area of erosion 3.5' L x 14" W x 9" D between M1B3 and M1B4.	no change	R19-2,3
O&M	107A	M5	-	Above	Atrium grate is inverted and filled with debris	new	S19-9
O&M	106	401	L	Above	Atrium grates are inverted.	new	
O&M	106	401	R	Above	Atrium grates are inverted.	new	
O&M	106	403	R	Above	Atrium grates are inverted.	new	
O&M	105B	404	L	Above	Debris accumulation around the drainage scupper, standing water up to 3" deep x 6ft. back	increase	
O&M	104	405	R	Above	Drain grate is located under the guidebeam and is covered with soil and the neoprene bond breaking pad for the guidebeam pedestal.	no change	S19-12
O&M	103	406	L	Above	Scupper atrium grate is removed.	Increase (previously inverted)	
O&M	102	407	R	Above	Floor drain grate which is located under the guidebeam, is buried under 2" of soil and debris. There is standing water up to 4" x 6ft. due to the clogged drain	Increase	S19-15
0&M	100	409	R	Below	Span 409R, water is dripping from the first drain pipe downspout onto Water Street	new	S24-4
O&M	101	409	L	Above	Floor drain grate which is located under the guidebeam, is buried under 3" of soil and debris. Standing water on both sides of the guidebeam, 4" x 25'	increase (prev. noted as evidence of standing water)	S19-29-30
O&M	100	409	R	Inside	Span 408R (Bay 9) – The PVC pipe has a bend restricting the flow of water at Pier 409R.	no change	J29-14



Line	Block	Pier	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
O&M	100	409	R	Above	There is standing water on the left side of the guidebeam, for 3pft. near the river junction without obvious means of drainage	new	S19-17
O&M	100	409	R	Anove	Floor drain grate which is located under the guidebeam, is buried under 4" of soil and debris. There is standing water up to 4" x 6ft. due to the clogged drain	increase	

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Line	Block	Span	Side	Above / Below	Location	2019 Inspection Note	2017 Note Disposition	2019 Photo
Starter	11	1	N	Below	Throughout	One water pipe hanger is broken at Pier 2N due to section loss from corrosion. Similar corrosion and loss is present on other brackets in this span.	no change	J8-1
Starter	13	2	N	Below	Throughout	Heavy surface corrosion on cable tray anchor bolts	new	J8-2
Starter	13	2	N	Above	Throughout	Electrical conduit anchor brackets exhibit heavy surface corrosion. A number of conduit clips exhibit light to moderate corrosion bleeding through previous coating	new	J8-9
Starter	13	3	N	Below	Throughout	Heavy surface corrosion on cable tray anchor bolts	new	
Starter	13	4	N	Below	Throughout	Heavy surface corrosion on cable tray anchor bolts	new	
Starter	15	6	N	Below	Throughout	Heavy surface corrosion on cable tray anchor bolts	new	
Starter	15	7	N	Below	Throughout	Heavy surface corrosion on cable tray anchor bolts	new	S17-15-16
Starter	15	9	N	Above	Pier 9	Moderate to heavy corrosion on electrical conduit on right side of guidebeam.	New	R23-6
Starter	15	10	N	Above	Midspan	Electrical conduit tray exhibits surface corrosion up to 1'-6" L \times 8" W.	no change	R23-12
Starter	21	18	N	Below	Throughout	Cable tray anchor bolts have corrosion bleeding through paint coating	new	J7-1
Starter	21	20	N	Above	15' from Pier 20	Electrical tray is missing a cover strap.	New	R23-24
Starter	24	24	N	Below	Midspan	One cable tray support bracket has two bolts with moderate corrosion	new	
Starter	24	24	N	Above	Throughout	Light corrosion on the cable tray straps in Spans 24 through 53	New	R23-30
Starter	25	25	N	Below	Throughout	Cable tray anchor bolts and nuts have significant corrosion	new	
Starter	24	25	S	Above	Throughout	Light surface corrosion on cable tray straps and cover, typical throughout starter line spans	new	S23-29
Starter	25	26	N	Below	Throughout	Cable tray anchor bolt nuts have significant corrosion, also a small number of bolts.	no change	J6-6,7
Starter	25	26	N	Below	Throughout	Street lights are touching the north beam	no change	J6-2,3
Starter	25	27	N	Below	Throughout	Cable tray anchor bolts and nuts have moderate corrosion	new	J7-15
Starter	25	27	N	Below	Pier 27N	Conduit body type LB missing the cover under left overhang.	no change	J7-13
Starter	27	29	N	Above	Throughout	Isolated areas of light to moderate corrosion on the cable tray in Spans 29 through 32	no change	R23-33

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Line	Block	Span	Side	Above / Below	Location	2019 Inspection Note	2017 Note Disposition	2019 Photo
Starter	32	41	S	Above	Pier 42	Conduits straps exhibit moderate corrosion	new	
Starter	35	41	N	Above	Pier 42	Electrical conduit tray exhibits moderate surface corrosion up to 2'L x 6" W.	no change	R23-37
Starter	32	42	S	Above	Throughout	Conduits exhibit heavy to severe corrosion with up to 100% section loss in the switching area due to ponding.	no change	S23-45-47
Starter	35	42	L	Above		Four (4) attachment brackets in Span 42 and another in Span 43 for	increase (prev. 3 brackets for 30'j	R23-38, 39
Starter	37	45	L	Above	10' from Pier 46	Cable tray cover strap is missing.	New	
Starter	37	46	L	Above	Pier 46	Cable tray cover strap is missing.	New	
North	34	48	R	Below	Pier 48 R	The electrical outlet in the left face, 6' from the cap is missing both hinged weather covers.	no change	R12-4-5
North	36	49	R	Above		Electrical conduit tray exhibits moderate surface corrosion up to 8" L \times 6" W.	no change	
North	39	50	L	Below	I Pier 5()	The electrical outlet in the left face, 6' from the cap is missing one hinged weather cover.	new	R12-6
North	36	51	R	Below	Pier 51	Electrical conduit at the right sidewall is separated, exposing wires	No Change	J11-27
North	39	51	-	Below	Pier 51	The electrical outlet in the left face, 6' from the cap is missing both hinged weather covers.	no change	
North	36	51	R	Above	Throughout	Light surface corrosion on cable tray straps	new	
North	39	52	-	Below	Pier 52	The electrical outlet in the left face, 6' from the cap is missing both hinged weather covers.	no change	
North	39	52	-	Below	Pier 52	There is an electrical access cutout on the front face of the column without a cover exposing wires, near the mounted lights.	new	S17-29
North	36	52	R	Above	Throughout	Light surface corrosion on cable tray straps	new	
North	36	52	R	Above	Midspan	Two electrical tray covers are missing one strap each	new	
North	41	53	-	Below	Pier 53	The electrical outlet in the left face, 6' from the cap is missing one hinged weather cover.	no change	
North	41	55	L	Below		The traffic light attachment over Hogan St. exhibits surface corrosion and the nuts are not fully engaged.	no change	R20-4
North	41	55	-	Below	Pier 55	The electrical outlet in the left face, 6' from the cap is missing one hinged weather cover.	new	
North	40	56	R	Above		Electrical conduit tray exhibits moderate surface corrosion up to 6 " L x 6 " W.	No change	J14-4

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Line	Block	Span	Side	Above / Below	Location	2019 Inspection Note	2017 Note Disposition	2019 Photo
North	41	56	-	Below	Pier 56	The electrical outlet in the left face, 3' from the cap is missing both hinged weather covers.	no change	R20-5
North	40	57	R	Above	25' from Pier 58	Ground wire not connected.	New	J14-8
North	43	57	-	Below	Pier 57	The electrical outlet in the left face, 2' from the cap is missing one hinged weather cover.	no change	R20-9
North	40	58	R	Above	17' from Pier 58	Ground wire not connected at guidebeam.	New	
North	40	58	R	Above	17' from Pier 58	Ground wire severed near sidewall.	New	J14-9
North	42	58	R	Above	20' from Pier 59	Ground wire not connected at guidebeam.	New	
North	43	58	-	Below	Pier 58	The electrical outlet in the left face, 2' from the cap is missing both hinged weather covers.	no change	
North	43	59	-	Below	Pier 59	The electrical outlet in the left face, 2' from the cap is missing both hinged weather covers.	no change	
North	43	60	-	Below	Pier 60	The electrical outlet in the left face, 2' from the cap is missing both hinged weather covers.	no change	
North	45	61	L	Above	Midspan	Conduit coupling has 100% section loss.	New	
North	43	61	L	Below	Pier 61L	The electrical outlet in the left face, 2' from the cap is missing both hinged weather covers.	no change	
North	44	62	R	Above	Throughout	Conduit brackets have up to 100% section loss and the conduits have areas of heavy corrosion.	new	
North	45	62	L	Below	Pier 62L	The electrical outlet in the left face, 2' from the cap is missing both hinged weather covers.	new	
North	44	63	R	Above	Throughout	Conduit brackets have up to 100% section loss and the conduits have areas of heavy corrosion.	new	
North	45	63	L	Above	Throughout	Corrosion and up to 100% section loss on the conduits and couplings.	New	
North	44	64	R	Above	Throughout	Conduit brackets have up to 100% section loss and the conduits have areas of heavy corrosion.	new	
North	45	64	L	Above		Moderate to heavy corrosion along the bottom of the conduit.	New	
North	44	65	R	Below	Pier 65R	The electrical outlet in the right face, 2' from the cap is missing one hinged weather cover.	no change	
North	45	67	L	Below	Pier 67L	The electrical outlet in the left face, 2' from the cap is missing one hinged weather cover.	no change	

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Line	Block	Span	Side	Above / Below	Location	2019 Inspection Note	2017 Note Disposition	2019 Photo
North	47	68	L	Below	Pier 68R	The electrical outlet in the left face, 2' from the cap is missing one hinged weather cover.	no change	
North	46	72	R	Above	25' from Pier 72	Electrical tray cover clamp is missing.	New	
North	46	73	R	Above	15' from Pier 73	Ground wire not connected at guidebeam.	New	
North	50	75	R	Above	25' from Pier 75	Ground wire not connected at guidebeam.	New	
North	51	75	-	Below	Pier 75	The electrical outlet in the left face, 2' from the cap is missing both hinged weather covers.	increase	
North	51	76	L	Above	Pier 77	2 conduits with moderate to heavy corrosion and up to 100% section loss.	New	J14-26
North	51	76	-	Below	Pier 76	The electrical outlet in the left face, 2' from the cap is missing one hinged weather cover.	no change	
North	51	76	-	Below	Pier 76	There is active water dripping from the light connections and the electrical outlet.	new	R21-10,11
North	51	77	L	Above	10' from Pier 78	Ground cable is severed at right sidewall	No change	
North	51	78	L	Above	20' from Pier 79L	Ground cable is not attached to emergency walkway.	no change	R14-7
North	51	80	L	Above	Pier 80	Electrical conduit coupling exhibits up to 100% section loss and conduit has moderate corrosion.	New	
North	51	80	L	Below	Pier 80	The electrical outlet in the left face, 2' from the cap is missing one cover.	no change	
North	52	81	R	Above	6' from Pier 82	Electrical tray cover clamp is broken.	new	J14-18
North	53	82	L	Above	Throughout	Electrical conduit couplings exhibit up to 100% section loss.	New	
South	94	199	R	Above	Throughout	Metal conduit straps are corroded through.	no change	R5-7
South	94	201	R	Above	Throughout	Three conduit support brackets have completely corroded through on the right side.	increase	
South	94	201	R	Above	15ft. from Pier 201	Electrical cable tray is missing one strap and the cover cannot be secured.	new	
South	95	201	L	Above		Conduit channel brackets and straps have 100% section loss; missing. Another to the rear is just missing the strap.	new	R5-74
South	94	202	R	Above	Throughout	Nine conduit support brackets exhibit corrosion (typical throughout system) and minor section loss on the right side.	new	

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Line	Block	Span	Side	Above / Below	Location	2019 Inspection Note	2017 Note Disposition	2019 Photo
South	94	202	R	Above	Near Pier 202R	Electrical control cabinet has heavy surface and laminating corrosion at the base.	new	R5-10
South	92	203	R	Above	Throughout	Numerous conduit support brackets exhibit corrosion and nine are completed corroded through.	new	
South	92	203	R	Above	Near Plate 4	One conduit at the right end of Plate 4 has a detached ground wire	new	R5-16
South	93	203	L	Above	Near Pier 204L	Electrical control cabinet has peeling paint and moderate surface corrosion on the door hinges and front face and heavy surface orrosion on the supports.	no change	
South	92	204	R	Above	Near Pier 204R	Electrical control cabinet support bracket, nuts and washers have heavy surface corrosion, both cabinets.	no change	
South	93	205	L	Above	Throughout	Light surface corrosion on the power rail attachment bracket welds.	no change	R5-66
South	90	206	R	Above	Near Pier 207	Moderate surface corrosion on one power rail attachment bracket.	no change	
South	91	211	L	Above		Electrical cable tray is missing one strap and the cover cannot be secured.	new	
South	90	211	R	Above	Pier 211	One broken (corroded through)conduit bracket	new	
South	91	211	-	Below	Pier 211	Corrosion on the ground wire from the walkway to the barrier wall. This is a typical condition.	new	J1-15
South	84	212	R	Above	Pier 212	One broken (corroded through)conduit bracket	new	
South	85	212	L	Above	25' from Pier 213	Conduit bracket and strap with 100% section loss	new	
South	84	213	R	Above	20ft from Pier 213	Electrical cable tray is missing one strap and the cover cannot be secured.	new	R5-39
South	85	213	L	Above	30' from Pier 214	Conduit bracket and strap with 100% section loss	new	
South	84	214	R	Above	25ft. from Pier 214	One broken (corroded through)conduit bracket	new	
South	82	219	R	Above	Pier 219R	Light surface corrosion on the camera mounting post straps	no change	R5-56
South	83	219	L	Above	Throughout	Photo of typical ground rail attachment bolt corrosion	new	R5-58
South	83	220	L	Above	Near Pier 221L	Electrical control cabinet has heavy surface corrosion on the supports and the door hinges.	no change	R5-54
South	82	220	R	Above	Throughout	Surface corrosion and heavy section loss on transverse conduits and brackets due to standing water and debris accumulation on the	new	J10-2
South	82	220	R	Above	Pier 220	Heavy corrosion and section loss on conduit brackets and straps	new	R5-52

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Line	Block	Span	Side	Above / Below	Location	2019 Inspection Note	2017 Note Disposition	2019 Photo
South	82	221	R	Above	15ft. from Pier 221	Broken ground	new	J10-4
South	82	221	R	Above	Throughout	Surface corrosion and up to 100% section loss on transverse conduits and brackets due to standing water and debris accumulation on the deck.	increase	J10-5
South	83	221	L	Above	Throughout	Severe section loss on transverse conduits and brackets due to standing water and debris accumulation on the deck.	new	
South	82	222	R	Above	Throughout	Surface corrosion and up to 100% section loss on transverse conduits and brackets due to standing water and debris accumulation on the deck.	new	
South	82	223	R	Above	Throughout	Surface corrosion and moderate section loss on transverse conduits and brackets due to standing water and debris accumulation on the deck.	new	
South	82	223	R	Above	10' from Pier 223R	Surface and laminating corrosion on the electrical cabinet supports	new	S10-3
South	82	223	R	Above	10' from Pier 223R	On the exterior face of the left sidewall, the bracket for the "Power Disconnect Box" exhibits a 1/2" gap between the bracket and the sidewall at the top.	no change	S10-2
South	83	223	L	Above	Throughout	Severe section loss on transverse conduits and brackets due to standing water and debris accumulation on the deck.	no change	
River	78	232	R	Above	Throughout	Surface corrosion on transverse conduits and brackets	new	
River	79	232	L	Above		Electrical cable tray has one loose bracket for the attachment to the left sidewall causing the tray to sag 1-1/4" over 15'	new	J10-37-38
River	76	235	R	Above	15ft. from Pier 235	Cable tray cover is missing one strap	new	J10-19
River	76	235	R	Above	Throughout	Cable tray cover straps exhibit light surface corrosion, typical in River line	new	J10-20
River	75	237	L	Above	Throughout	Severe section loss on transverse conduits and brackets due to standing water and debris accumulation on the deck.	no change	
River	74	237	R	Above	Throughout	Severe section loss on transverse conduits and brackets due to standing water and debris accumulation on the deck.	no change	S10-19
River	75	238	L	Above	Throughout	100% section loss on transverse conduits and brackets with exposed wires due to standing water and debris accumulation on the deck.	no change	S10-37
River	74	238	R	Above	Throughout	Severe section loss on transverse conduits and brackets with exposed wires due to standing water and debris accumulation on	no change	
River	75	239	L	Above		Electrical cable tray has one missing bracket for the attachment to the left sidewall causing the tray to sag 3" over 25'	no change	J10-31-33

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Line	Block	Span	Side	Above / Below	Location	2019 Inspection Note	2017 Note Disposition	2019 Photo
River	74	239	R	Above	Pier 239R	Surface corrosion and minor section loss on transverse conduits and brackets due to standing water and debris accumulation on the	no change	S10-21
River	75	239	L	Above	Throughout	Surface corrosion and section loss on transverse conduits due to standing water and debris accumulation on the deck.	new	S10-36
River	73	240	L	Above	Throughout	Surface corrosion and section loss on transverse conduits and brackets due to standing water and debris accumulation on the	no change	
River	74	240	R	Above	240R	Surface corrosion and section loss on transverse conduits and brackets due to standing water and debris accumulation on the	no change	
River	70	242	R	Above	Pier 242	Surface corrosion and section loss on transverse conduits and brackets due to standing water and debris accumulation on the	no change	
River	71	245	L	Below	4' from Pier 246	Fiberglass conduit with a disconnected joint hanging from the underside of the right overhang, 4' from Pier 246.	No change	
River	69	246	L	Below	247	Fiberglass conduit with a disconnected joint hanging from the underside of the right overhang, 30' from Pier 247.	no change	
River	69	247	L	Above	Throughout	Heavy surface corrosion on electrical conduit straps and brackets attached to the inside face of the left barrier, no significant section loss. Typical on Acosta Bridge and approach spans.	no change	J10-30
River	70	R2	R	Above	30' from Pier	Electrical tray is missing a strap for the top.	New	
River	68	R3	R	Above	Midspan	Electrical tray is missing a strap for the top.	New	R28-4
River	68	R3	R	Above	Throughout	Light to moderate corrosion on the tee couplers and conduit.	New	R28-8, 9
River	67	R5	L	Above	Throughout	Heavy surface corrosion on electrical conduit brackets attached to the inside face of the left barrier, no significant section loss. Typical on Acosta Bridge and approach spans.	no change	J28-6
River	67	249	L	Above		An electrical conduit is broken at a flexible conduit joint, exposing wires.	no change	
River	65	254	L	Above	20' from Pier 255	Cable tray cover is missing a strap.	New	
River	64	254	R	Above	Pier 254	Light surface corrosion on one power rail attachment bracket weld.	No change	R28-28
River	62	256	R	Above	257	Conduit bracket attachment bolts are corroded away and one cable tray cover has one missing strap.	new	R19-19
River	63	258	L	Above	Throughout	Heavy surface corrosion on transverse conduits due to standing water	new	
River	62	259	R	Above	I Throughout	Heavy corrosion and section loss on transverse conduits due to standing water.	new	R19-20
River	63	259	L	Above	Midspan	Cable tray cover is missing one strap	new	



Line	Block	Span	Side	Above / Below	Location	2019 Inspection Note	2017 Note Disposition	2019 Photo
River	63	260	L	Above	Throughout	Heavy surface corrosion on transverse conduits due to standing water	new	
O&M	108	M2	-	Above		Traffic signal column anchor bolts and leveling nuts have light to moderate surface corrosion below the base plates.	no change	R19-4
O&M	108	M2	-	Above	Throughout	Electrical cable tray supports exhibit light to moderate corrosion.	no change	S19-7
O&M	107B	M3	-	Above	Throughout	Electrical cable tray supports exhibit light to moderate corrosion.	no change	
O&M	107B	M3	-	Above	Right side	Electrical cabinet supports exhibit heavy surface and laminating corrosion.	new	R19-8
O&M	107B	M3	-	Above	Throughout	Transverse conduit straps exhibit light to moderate corrosion, Typical this segment.	new	R19-6
O&M	107A	M4	-	Above	Throughout	Electrical cable tray supports exhibit light to moderate corrosion.	no change	
0&M	107A	M5	-	Above	M5	Electrical cable tray cover is missing for 2' Also one strap is missing on adjacent over	new	S19-8
0&M	106	401	L	Above	20ft. from Pier 401	Two cable tray covers missing one strap, two covers are missing two straps, and one cover is bent inward, 1-1/2" over 20".	new	R19-25-26
0&M	105B	403	L	Above	30ft. from Pier 404	Cable tray cover is missing one strap	new	
O&M	105B	405	L	Above	20ft. from Pier 405	Cable tray cover is missing one strap	new	
O&M	65	409	L	Above		washers have heavy surface corrosion	increase	
O&M	100	409	R	Above		Electrical control cabinet bases have heavy surface and laminating corrosion with section loss. Sidewall connection bolt nuts and washers have heavy surface corrosion	increase	S19-16

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Line	Block	Span	Side	2019 Inspection Note	2017 Note Disposition	2019 Photo
Starter	25	26	N	Tree in contact with column at Pier 26	new	R7-2,3
Starter	27	30	N	Large palm tree growing underneath the span and in contact with the box beam, 15' from Pier 31.	no change	S16-34
Starter	29	35	L	Trees growing underneath the span and in contact with the beam.	new	R25-19
North	39	48	L	Trees growing underneath the span and in contact with the beam stems.	no change	J12-22
North	46	67	R	Trees growing underneath the span and in contact with the beam stems.	no change	
North	46	68	R	Trees in contact with the beam stems and exterior side of the right sidewall.	new	J14-14, 15, R21-2
North	46	70	R	Trees in contact with the exterior side of the right sidewall.	new	
North	47	71	L	Trees in contact with the exterior side of the right stem.	new	R21-6
North	46	72	R	3 trees in contact with the exterior side of the right sidewall.	new	
North	46	74	R	Trees in contact with the exterior side of the right sidewall.	Increase	
North	50	75	R	Trees in contact with the exterior side of the right sidewall.	new	
North	51	79	L	Trees are growing underneath and encroaching the exterior side of the left sidewall.	no change	
South	94	199	R	Trees encroaching the exterior side of the right sidewall.	no change	J1-18
South	92	204	R	Trees encroaching the left beams, exterior side of the left sidewall and emergency walkway.	increase	R3-2,3,4
South	90	205	R	Trees encroaching the left beams, exterior side of the left sidewall and emergency walkway.	new	R3-2,3,4
River	81	228	L	Trees growing underneath the span and in contact with the beam stems.	no change	J3-13, 23
River	69	R1	L	Palm vegetation growing at isolated locations in joints between sidewalls and deck	new	
River	69	R2	L	Palm vegetation growing at isolated locations in joint between right sidewall and deck	no change	
River	69	R3	L	Palm vegetation growing at isolated locations in joints between sidewalls and deck	no change	
River	68	R3	R	Palm vegetation growing at isolated locations in joint between right sidewall and deck	no change	
River	67	R4	L	Palm vegetation growing at isolated locations in joints between sidewalls and deck	no change	
River	67	R5	L	Palm vegetation growing at isolated locations in joint between left sidewall and deck	no change	R28-31

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Line	Block	Span	Side	2019 Inspection Note	2017 Note Disposition	2019 Photo
O&M	108	M2	Both	Slope protection is covered with vines	new	J4-8
0&M	108	M2	Both	Trees and bushes encroaching the exterior sides of the beams, sidewalls, and bent cap.	no change	J4-6,7
0&M	106	400	Both	Bushes, cut branches, and small trees throughout the span underside, makes access difficult	new	J4-21, 22
0&M	106	401	Both	Bushes, cut branches, and small trees throughout the span underside, makes access difficult	new	
O&M	106	401	-	Vines attached to the pier column and cap.	no change	J4-27
O&M	104	405	R	Vines attached to the left overhang.	new	J24-20
O&M	104	406	R	Vines are attached to the column of Pier 406R, box beam bearings, overhangs of Spans 405 and 406 and climbing over the left sidewall. These were previously cut, but new ones are growing up as well.	increase	S19-13, R24-22
0&M	103	408	L	Vines are attached to the column. These were previously cut, but new ones are growing up as well.	new	R24-23

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Line	Block	Span	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
Starter	11	1	N	Below	Several support brackets exhibit light surface corrosion at the exterior sidewall connection.	no change	
Starter	10	1	S	Above	Light surface corrosion on the handrail	new	
Starter	12	2	S	Below	Two support brackets exhibit moderate surface corrosion at the exterior sidewall connection.	no change	
Starter	13	5	N	Above	Light surface corrosion on the handrail	new	
Starter	12	5	S	Above	Light surface corrosion on the handrail	new	
Starter	15	6	N	Above	Light surface corrosion on the handrail	new	
Starter	14	6	S	Above	Light surface corrosion on the handrail	new	R8-19
Starter	15	7	N	Above	Light surface corrosion on the handrail	new	
Starter	14	7	S	Above	Light surface corrosion on the handrail	new	
Starter	15	9	-	Above	Light to moderate discoloration on grating indicating breakdown of galvanization. Clips have been painted.	no change	S23-5-6, 12- 14 R23-14
Starter	15	10	-	Above	Light to moderate discoloration on grating indicating breakdown of galvanization. Clips have been painted.	no change	
Starter	15	11	-	Above	Light to moderate discoloration on grating indicating breakdown of galvanization. Clips have been painted.	no change	
Starter	15	12	-	Above	Light to moderate discoloration on grating indicating breakdown of galvanization. Clips have been painted.	no change	
Starter	15	13	-	Above	Light to moderate discoloration on grating indicating breakdown of galvanization. Clips have been painted.	no change	
Starter	15	14	-	Above	Light to moderate discoloration on grating indicating breakdown of galvanization. Clips have been painted.	no change	
Starter	21	15	-	Above	Light to moderate discoloration on grating indicating breakdown of galvanization. Clips have been painted.	no change	
Starter	21	16	-	Above	Light to moderate discoloration on grating indicating breakdown of galvanization. Clips have been painted.	no change	
Starter	21	17	-	Above	Light to moderate discoloration on grating indicating breakdown of galvanization. Clips have been painted.	no change	
Starter	21	18	-	Above	Railing paint between rear of Pier 18 and Jefferson Station is very chalky.	no change	S23-21
Starter	22	19	S	Above	Isolated areas of light surface corrosion on handrail.	new	

Appendix D-4 EMERGENCY WALKWAY Page 1 of 6



Line	Block	Span	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
Starter	22	20	S	Above	Light surface corrosion on handrail.	new	
Starter	22	24	S	Above	Light surface corrosion on handrail.	no change	
Starter	23	24	N	Above	Spans 24N thru 28N: Light surface corrosion on grating clips, handrails and grate	increase	R23-27, 28, 29
Starter	24	25	S	Above	Light surface corrosion on handrail and on cover plate at Pier 25	no change	S23-27,28
Starter	24	26	S	Above	Light surface corrosion on handrail.	no change	
Starter	24	27	S	Below	Support bracket anchor bolts have light surface corrosion	new	
Starter	24	28	S	Above	Light surface corrosion on handrail.	no change	
Starter	27	29	-	Above	Moderate discoloration on expansion cover plate over Pier 29, indicating breakdown of galvanization.	no change	R23-32
Starter	26	31	S	Above	Light surface corrosion on grating and cover plates at the river line merge	new	
Starter	27	32	-	Above	Moderate discoloration and light corrosion on grating clips between Pier 32 and Central Station.	no change	S23-34
Starter	29	35	-	Above	Moderate discoloration on expansion cover plate over Pier 35, indicating breakdown of galvanization.	no change	
Starter	29	38	1	Above	Moderate discoloration on expansion cover plate over Pier 38, indicating breakdown of galvanization.	no change	S23-36
Starter	32	38	S	Below	Support plate attached to the left sidewall at Pier 38 has one missing bolt.	no change	
Starter	32	39	S	Above	Light surface corrosion on handrail.	new	
Starter	32	40	S	Above	Light surface corrosion on handrail.	new	
Starter	32	41	S	Above	Light surface corrosion on handrail.	new	
North	34	47	R	Below	Several support brackets exhibit moderate surface corrosion at the sidewall connection.	new	
North	39	47	L	Below	Several support brackets exhibit moderate surface corrosion at the sidewall connection.	no change	J12-20-21
North	39	48	L	Below	Several support brackets exhibit moderate surface corrosion at the sidewall connection.	no change	
North	43	60	L	Below	Two support brackets exhibit moderate surface corrosion at the sidewall connection.	no change	R14-8

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Line	Block	Span	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
North	45	61	L	Below	Seven support brackets exhibit moderate surface corrosion at the sidewall connection.	no change	
North	45	62	L	Below	Four support brackets exhibit moderate surface corrosion at the sidewall connection.	new	
North	44	62	R	Below	One support bracket exhibits moderate surface corrosion at the sidewall connection.	new	
North	45	66	L	Below	One support bracket exhibit moderate surface corrosion at the sidewall connection.	new	
North	46	66	R	Below	Three support brackets exhibit moderate surface corrosion at the sidewall connection.	new	
South	94	199	R	Below	Three support brackets exhibit light surface corrosion at the sidewall connection.	no change	J1-19
South	93	203	Cross	Below	One support bracket exhibits light surface corrosion at the sidewall connection.	new	
South	93	203	Cross	Above	One isolated location of moderate surface corrosion on railing.	no change	R5-17
South	90	205	R	Above	Light discoloration on grating throughout the span indicating initial breakdown of galvanization.	no change	R5-24
South	91	206	L	Above	Isolated areas of light surface corrosion on handrail.	no change	
South	90	206	R	Above	Isolated areas of light surface corrosion on handrail.	no change	
South	91	206	L	Above	Light surface corrosion in grating repair near midspan	new	R5-27
South	90	209	R	Above	Isolated locations of moderate to heavy surface corrosion on grating clip bolts.	no change	R5-33
South	90	210	R	Above	Isolated locations of moderate to heavy surface corrosion on grating clip bolts.	new	
South	84	215	R	Above	Grating is bent downward 1" over a length of 1.5' near midspan	no change	R5-45
South	85	217	L	Above	Isolated areas of light surface corrosion on handrail.	no change	
South	85	217	L	Below	Three support brackets exhibit moderate surface corrosion at the sidewall connection.	decrease	
South	84	217	R	Above	Isolated areas of light surface corrosion on handrail.	no change	
South	84	217	R	Below	At numerous support brackets, the anchor bolts are too short to fully engage the nuts.	no change	J2-2
South	84	217	R	Below	Four support brackets exhibit moderate surface corrosion at the sidewall connection.	no change	J2-3

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Line	Block	Span	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
South	83	218	L	Above	Isolated areas of light surface corrosion on handrail.	no change	
South	83	218	L	Below	Two support brackets exhibit moderate surface corrosion at the sidewall connection.	no change	
South	82	218	R	Above	Isolated areas of light surface corrosion on handrail.	no change	
South	82	218	R	Below	Four support brackets exhibit moderate surface corrosion at the sidewall connection.	no change	
South	83	219	L	Below	One support bracket exhibits moderate surface corrosion at the sidewall connection.	no change	
South	82	219	R	Above	Isolated areas of light surface corrosion on handrail.	no change	R5-51
South	83	220	L	Above	Isolated locations of moderate surface corrosion on grating and clip bolts.	no change	
South	82	223	R	Below	One support bracket exhibits moderate surface corrosion at the sidewall connection.	no change	
South	83	223	L	Below	Two support brackets exhibit moderate surface corrosion at the sidewall connection.	no change	
South	81	225	L	Below	Two support brackets exhibit moderate surface corrosion at the sidewall connection.	new	
South	80	225	R	Below	Three support brackets exhibit moderate surface corrosion at the sidewall connection.	increase	
South	80	225	R	Above	Isolated areas of light surface corrosion on handrail.	new	
River	80	229	R	Above	Typical light corrosion on grating clips in the River line	new	S10-9
River	79	232	L	Below	Four support brackets exhibit moderate surface corrosion at the sidewall connection.	no change	
River	76	235	R	Below	Several support brackets exhibit moderate surface corrosion at the sidewall connection.	no change	
River	77	235	L	Above	light surface corrosion on the walkway grating	new	S10-39
River	72	240	R	Above	Isolated areas of light surface corrosion on handrail.	new	
River	72	241	R	Above	Isolated areas of light surface corrosion on handrail.	new	
River	73	241	L	Below	Two support brackets exhibit moderate surface corrosion at the sidewall connection.	new	
River	70	242	R	Above	Isolated areas of light surface corrosion on handrail.	no change	

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Line	Block	Span	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
River	69	R1	L	Above	Walkway joint has expanded beyond the length of the expansion plates at Pier R1. (1-3/8" measured at 66 degrees)	no change	S28-21
River	70	R1	R	Above	Walkway joint has expanded beyond the length of the expansion plates at Pier R1.	no change	R28-1
River	70	R1	R	Above	The handrail exhibits light surface corrosion throughout.	New	R28-2
River	70	R1	R	Above	The walkway grate exhibits light surface corrosion throughout Spans R1 through R6.	New	R28-3
River	67	R5	L	Above	Isolated area of moderate surface corrosion on 3rd railing post from the end of the walkway.	no change	S28-35
River	66	R5	R	Above	The handrail exhibits light surface corrosion throughout.	New	
River	67	R6	L	Above	Walkway joint has expanded beyond the length of the expansion plates at Pier R6. (1/8" measured at 66 degrees)	no change	
River	67	R6	L	Above	Isolated areas of light surface corrosion on handrail.	no change	
River	66	R6	R	Above	Walkway joint has expanded beyond the length of the expansion plates at Pier R6. (1-1/4" measured at 66 degrees)	no change	
River	66	R6	R	Above	Isolated areas of light surface corrosion on handrail.	new	
River	66	248	R	Below	One support bracket exhibits moderate surface corrosion at the sidewall connection.	no change	
River	67	248	L	Above	Grating clips have light to moderate surface corrosion	new	S28-31
River	66	248	R	Above	The walkway grate exhibits light surface corrosion throughout Spans 248 through 252.	New	
River	67	249	L	Above	Grates and clips have light to moderate surface corrosion	new	
River	67	250	L	Above	Grates and clips have light to moderate surface corrosion	new	
River	66	250	R	Above	Random catwalk grate members are bent along the right edge.	New	R28-15
River	67	251	L	Above	Grates and clips have light to moderate surface corrosion	new	
River	67	252	L	Above	Grates and clips have light to moderate surface corrosion	new	
River	65	256	L	Above	Light surface corrosion on handrails throughout	new	S19-18
River	63	258	L	Above	Light surface corrosion on handrails throughout	no change	
River	63	258	L	Above	Light surface corrosion on handrails throughout	new	

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Line	Block	Span	Side	Above / Below	2019 Inspection Note	2017 Note Disposition	2019 Photo
River	63	258	L	Above	Light surface corrosion on handrails throughout	new	
River	63	258	L	Above	Light surface corrosion on handrails throughout	new	
River	60	260	R	Above	Light surface corrosion on handrail	new	
O&M	107B	М3	R	Below	Several support brackets exhibit moderate surface corrosion at the sidewall connection.	new	R19-7
O&M	107B	M3	R	Below	Several support brackets exhibit moderate surface corrosion at the sidewall connection.	new	
O&M	107A	M4	-	Above	Moderate surface corrosion at the bottom of the last post, right side.	no change	
O&M	107A	M4	-	Above	Moderate surface corrosion on the outside face of the bottom rail between Posts 2 and 3, right side.	no change	R19-10
O&M	106	404	R	Above	Light surface corrosion on handrail	new	
O&M	102	407	R	Below	Several support brackets exhibit moderate surface corrosion at the sidewall connection.	no change	
O&M	100	408	R	Below	Several support brackets exhibit moderate surface corrosion at the sidewall connection.	no change	
O&M	100	409	R	Below	Several cabinet support bracket fasteners exhibit moderate surface corrosion at the sidewall connection.	no change	S24-6

Appendix D-4 EMERGENCY WALKWAY Page 6 of 6



					Joint	Additional Notes	2019	Me	asurem	nents	Meta	l Damage	Se	eal Adhe	sion	Se	al Dama	ige	C	ebris	Deck H	Header
Line	Block	Pier	Side	Location	Type	(Other Than Captured in	Photo	L	w	Temp.	Surf.	SL, Crack,	<50%	>50%	100%	Abras.	Punct.	Missing	Partial	Complete	< 1" D or	>1" D or
Ctartor	12	6	S	Rear	Comp.	Defect Quantities) 1/2" gap between compression		11.0	2.25	75	Corr.	Break	Ht	Ht	Loss 11		/Rip		Fill	Fill	< 6" Dia.	> 6" Dia.
Starter	12	0	3	Real	Comp.	seal and deck. Forward pourback has a		11.0	2.25	75					11							
Starter	12	6	S	Center	Finger	delamination 6"x4.5" between plates.		2.8	1.75	75											0.5	
Starter	12	6	S	Forward	Comp.			11.0	2.5	75										10		
Starter	13	6	N	Rear	Comp.	1/2" gap between compression seal and deck.		11.0	2.25	71					11							
Starter	13	6	N	Center	Finger	Rear pourback has one delamination, 7"x4".		2.8	1.75	71											1.5	
Starter	13	6	N	Forward	Comp.			11.0	2.75	71					11							
Starter	14	8	S	Rear	Comp.			11.0	2.5	66				10								
Starter	14	8	S	Center	Finger	Rear pourback has one delamination, 5"x5" between plates. Forward pourback has 2 delaminations, 5"x3.5" and 5"x5" between plates.	S23-1	2.8	1.75	66	2.8										1	
Starter	14	8	S	Forward	Comp.			11.0	2.25	66					11							
Starter	15	8	N	Rear	Comp.	1/2" gap between compression seal and deck. Joint header spall, right side, 1'x4.5"x1.5". Seal has failed and fallen through joint at left side of guide beam.	R23-1, 5	11.0	2.25	66					11							
Starter	15	8	N	Center	Finger	Light surface corrosion on top of plates.		2.8	2.125	66	2.8											
Starter	15	8	N	Forward	Comp.			11.0	2.25	66					11							
Starter	16	12	S	Rear	Comp.			11.0	2.25	70					11							
Starter	16	12	S	Center	Finger	Both pourbacks have hairline map cracking throughout.		2.8	1.75	70												
Starter	16	12	S	Forward	Comp.	1/2" gap between compression seal and cap.	S23-10	11.0	2.25	70					11							
Starter	15	12	N	Rear	Comp.			11.0	2.5	70					11							
Starter	15	12	N	Center	Finger	Rear pourback has a delamination, 10"x2" 1/8" elevation difference between sliding plates. Light corrosion on the top plates.	R23-15	2.8	1.75	70	2.8										1	
Starter	15	12	N	Forward	Comp.			11.0	2	70					11							
Starter	20	15	S	Rear	Comp.			11.0	2.25	70					11							<u></u>



						Additional Notes		Me	easuren	nents	Meta	al Damage	l s	eal Adhe	sion	Se	eal Dama	19e	l 1	Debris	Deck F	Header
Line	Block	Pier	Side	Location	Joint Type	(Other Than Captured in	2019 Photo	L	w	Temp.	Surf.	SL, Crack,	<50%		100%	Abras.	Punct.	Missing	Partial		< 1" D or	>1" D or
					1,700	Defect Quantities) Rear pourback has a	1 11010	_	•••	Temp.	Corr.	Break	Ht	Ht	Loss	Abias.	/Rip	IVIISSIIIG	Fill	Fill	< 6" Dia.	> 6" Dia.
Starter	20	15	S	Center	Finger	delamination, 11"x3".		2.8	2	70	2										1	
Starter	20	15	S	Forward	Comp.			11.0	2.25	70					11							
Starter	15	15	N	Rear	Comp.	Up to 3/8" gap between the deck and the expansion seal.		11.0	2.25	70					11							
Starter	15	15	N	Center	Finger	Right face of the forward pourback has a 3" L x 3" W x 1/2" D spall and a 6"x3" delamination 1/8" elevation difference between sliding plates. Light corrosion on the top plates.		2.8	2	70	2.8										1	
Starter	15	15	N	Forward	Comp.	Up to 1/4" gap between the deck and the expansion seal.		11.0	2.5	70					11							
Starter	20	18	S	Rear	Comp.			11.0	2.25	70					11							
Starter	20	18	S	Center	Finger	Rear pourback has 2 delaminations, 12"x3" and 3"x2". Forward pourback has an area of cracking and delamination. 11"x5".		2.8	1.875	70	1										2	
Starter	20	18	S	Forward	Comp.			11.0	2	70					11							
Starter	21	18	N	Rear	Comp.	Joint seal has adhesion failure and is rotated 90°.	R23-21	11.0	1.75	70					11							
Starter	21	18	N	Center	Finger	Forward pourback has a 13"x2.5" delamination in the top and a 7"x3" delamination on the right side.		2.8	1.75	70	1.8										1	
Starter	21	18	N	Forward	Comp.	The expansion seal has adhesion failure and has dropped up to 2" in the joint to the right of the guidebeam.	R23-20	11.0	2	70					11							
Starter	22	21	S	Rear	Comp.			11.0	2.5	72					11							
Starter	22	21	S	Center	Finger	The forward pourback has scaling with exposed aggregate.	S23-24	2.8	1.75	72	2.8										1	
Starter	22	21	S	Forward	Comp.	1/4" gap between compression seal and deck.		11.0	2.5	72					11							l



						Additional Notes		Me	asuren	nents	Meta	l Damage	S	eal Adhe	sion	Se	al Dama	age		Debris	Deck I	Header
Line	Block	Pier	Side	Location	Joint Type	(Other Than Captured in	2019 Photo		W	Temp.	Surf.	SL, Crack,	<50%		100%	Abras.	Punct.	Missing	Partial		< 1" D or	>1" D or
_				_		Defect Quantities)				•	Corr.	Break	Ht	Ht	Loss	Abi as.	/Rip	Wilsonig	Fill	Fill	< 6" Dia.	> 6" Dia.
Starter	23	21	N	Rear	Comp.	Light corrosion on the top		11.0	2	72					11							
Starter	23	21	N	Center	Finger	plates.		2.8	1.75	72	2											
Starter	23	21	N	Forward	Comp.			11.0	2	72					11							
Starter	22	25	S	Rear	Comp.	1/4" gap between compression seal and deck.		11.0	2.25	72					11							
Starter	22	25	S	Center	Finger	Forward pourback has a delamination 13.5"x4" and a spall 4"x3"x3/4" between the plates.		2.8	2	72											1.5	
Starter	22	25	S	Forward	Comp.			11.0	2.25	72					11							
Starter	23	25	N	Rear	Comp.			11.0	1.5	72					11							
Starter	23	25	N	Center	Finger	Light surface corrosion on top of plates.		2.8	2	72	2.8											
Starter	23	25	N	Forward	Comp.			11.0	3	72					11							
Starter	24	29	S	Rear	Comp.	1/2" gap between compression seal and deck.		11.0	2.75	72					11							
Starter	24	29	S	Center	Finger	Rear pourback has a delamination, 13"x2" and 4"x2" on the right face Forward pourback has a delamination. 8"x4"		2.8	1.75	72	2.8										2	
Starter	24	29	S	Forward	Comp.			11.0	2.5	72									10			
Starter	27	29	N	Rear	Comp.	1/4" gap between compression seal and deck.		11.0	2.25	72					11							
Starter	27	29	N	Center	Finger	No joint membrane is present between left sidewalls. Forward pourback has a spall and delamination on top 14"x7"x4" H on side.	R23-31	2.8	1.875	72	1.8										1	
Starter	27	29	N	Forward	Comp.			11.0	2.25	72					11							
Starter	60	31	S	Rear	Comp.	3/4" elevation difference between cap and span, right side of guidebeam		11.0	2.75	81									10			
Starter	60	31	S	Center	Finger	side of guideseum		2.8	1.5	81												
Starter	60	31	S	Forward	Comp.	2-1/4" elevation difference between cap and span, right side of guidebeam.	R19-21	11.0	2.25	81			1						9			
Starter	28	32	S	Rear	Comp.			11.0	2.25	72									10			
Starter	28	32	S	Center	Finger			2.8	1.75	72	2.8											



						Additional Notes		Me	asurem	nents	Meta	l Damage	S	eal Adhe	sion	Se	eal Dama	age.	Г	Debris	Deck I	Header
Line	Block	Pier	Side	Location	Joint Type	(Other Than Captured in	2019 Photo	L	W	Temp.	Surf.	SL, Crack,	<50%		100%	Abras.	Punct.	Missing	Partial		< 1" D or	>1" D or
Starter	28	32	S	Forward	Comp.	Defect Quantities) Compression seal is debonded and overcompressed in the right side.	Tiloto	11.0	2.5	72	Corr.	Break	Ht	Ht	Loss 11	Aut as.	/Rip	IVIISSIIIE	Fill	Fill	< 6" Dia.	> 6" Dia.
Starter	27	32	N	Rear	Comp.			11.0	2.25	72									10			
Starter	27	32	N	Center	Finger	Rear pourback has a delamination 5"x6" between plates. Light corrosion on top of the plates.		2.8	1.75	72	1.8										1	
Starter	27	32	N	Forward	Comp.	1/4" gap between compression seal and deck.		11.0	2.5	72					11							
Starter	30	35	S	Rear	Comp.			11.0	2.25	72					11							
Starter	30	35	S	Center	Finger	Rear pourback has a delamination 4.5"x4" between plates. Forward pourback has a delamination 4.5"x5" between plates.		2.8	2	72											1	
Starter	30	35	S	Forward	Comp.	1/4" gap between compression seal and deck. Header spall measuring 6" L x 3" W x 1/4" D		11.0	2	72					11							
Starter	29	35	N	Rear	Comp.	Compression joint seal has settled 1 1/2" at north end		11.0	2	72					11							
Starter	29	35	N	Center	Finger	Light surface corrosion on top of plates. Rear pourback has an 11" x 1 1/2" delamination on the top left side.		2.8	1.875	72	1.5											
Starter	29	35	N	Forward	Comp.	3/8" gap between compression seal and deck.		11.0	2.75	72					11							
Starter	32	38	S	Rear	Comp.	3/8" gap between compression seal and deck.		11.0	2.25	73					11							
Starter	32	38	S	Center	Finger			2.8	1.875	73	2.8											
Starter	32	38	S	Forward	Comp.	1/2" gap between compression seal and deck. Seal has settled 1"		11.0	2	73					11							
Starter	29	38	N	Rear	Comp.	Up to 1/4" gap between the compression seal and the deck.		11.0	1.75	73					11							
Starter	29	38	N	Center	Finger	Right face of rear pourback has a delamination 10"X1.5"		2.8	2	73											1	
Starter	29	38	N	Forward	Comp.			11.0	4	73					11							



					1	Additional Notes	2010	Me	easurem	nents	Meta	I Damage	Se	eal Adhe	sion	Se	al Dama	ige		Debris	Deck H	leader
Line	Block	Pier	Side	Location	Joint Type	(Other Than Captured in	2019 Photo	L	w	Temp.	Surf.	SL, Crack,	<50%	>50%	100%	Abras.	Punct.	Missing	Partial	Complete	< 1" D or	>1" D or
Starter	32	40	S	Rear		Defect Quantities) 1/2" gap between compression seal and deck. Seal has settled 1"		11.0	2.5	73	Corr.	Break	Ht	Ht	Loss 11		/Rip	0	Fill	Fill	< 6" Dia.	> 6" Dia.
Starter	32	40	S	Center	Finger	Random cracking throughout rear pourback		2.8	2.125	73												
Starter	32	40	S	Forward	Comp.	rear pourback		11.0	2	73					11							
Starter	31	40	N	Rear	Comp.			11.0	2.5	73					11					2		
Starter	31	40	N	Center	Finger	Light surface corrosion on top of plates.		2.8	2	73	2.8											
Starter	31	40	N	Forward	Comp.	1/8" gap between compression seal and deck. Seal has settled 1"		11.0	2	73					11							
Starter	34	44	S	Rear	Comp.	Seal has settled 3" and is falling on the right end. Water is flowing through the failed joint onto the station tile, causing a slipping hazard.	J11-10	11.0	2	73					11							
Starter	34	44	S	Center	Finger	Rear pourback has a delamination 2'-2" x 8".	S23-48	2.8	1.75	73											2	
Starter	34	44	S	Forward	Comp.			11.0	2	73			5							6		
Starter	37	44	N	Rear	Comp.			11.0	2	73					11							
Starter	37	44	N	Center	Finger			2.8	1.875	73												
Starter	37	44	N	Forward	Comp.	Seal has settled 1" at the south end. There is a 3/4 elevation difference at the joint.	R23-40	11.0	2	73										10		
North	34	47	S	Rear	Comp.	1/4" gap between compression seal and deck. Seal has settled 1"		11.0	2.25	75					11							
North	34	47	S	Center	Finger	Rear pourback has a delamination 10" x 4" and hairline cracking throughout		2.8	1.75	75												
North	34	47	S	Forward	Comp.			11.0	2.25	75			5	5								
North	37	47	N	Rear	Comp.	1/4" gap between compression seal and deck. Seal has settled 1/2"		11.0	2.75	75					11							
North	37	47	N	Center	Finger	Light surface corrosion on top of plates. Up to 1/8" elevation difference between the plates.		2.8	2	75	2.8											
North	37	47	N	Forward	Comp.	Seal is overcompressed for 2' at the right end.		11.0	2	75									8			_
North	36	51	R	Rear	Comp.			11.0	2.5	77			5							5		



					Joint	Additional Notes	2019	Me	easuren	nents	Meta	l Damage	Se	eal Adhe	sion	Se	al Dama	ige		ebris	Deck I	leader
Line	Block	Pier	Side	Location	Type	(Other Than Captured in Defect Quantities)	Photo	L	w	Temp.	Surf.	SL, Crack,	<50%		100%	Abras.	Punct.	Missing	Partial	Complete	< 1" D or	>1" D or
North	36	51	R	Center	Finger	Defect Quantities)		2.8	2	77	Corr.	Break	Ht	Ht	Loss		/Rip		Fill	Fill	< 6" Dia.	> 6" Dia.
													_							-		
North	36	51	R	Forward	Comp.	Seal is overcompressed Seal is overcompressed for 2'		11.0	2	77			5							3		
North	39	51	L	Rear	Comp.	at the left end.		11.0	2.25	77									10			
North	39	51	L	Center	Finger	Rear pourback has a 6" x 4" delamination between the plates. The forward pourback has a 5" x 5" delamination between the plates. There is light surface corrosion on top of the plates.		2.8	1.875	77	1											
North	39	51	L	Forward	Comp.	Joint is overcompressed for 5'		11.0	1	77									5			
North	36	52	R	Rear	Comp.			11.0	2.75	77			10									
North	36	52	R	Center	Finger	Rear pourback has a delamination 10" x 3".		2.8	2	77											1	
North	36	52	R	Forward	Comp.	Compression seal does not extend all the way to the overhang.		11.0	2	77			10									
North	39	52	L	Rear	Comp.			11.0	1.75	79				5						5		
North	39	52	L	Center	Finger	Light surface corrosion on top of plates.		2.8	2.125	79	2											
North	39	52	L	Forward	Comp.	Up to 1 3/4" elevation difference.		11.0	1.75	79					2					9		
North	41	52A	Both	Rear	Comp.	Compression seal is missing.		11.0										24				
North	41	54	L	Rear	Comp.	Joint is overcompressed, full length		11.0	2	75			1									
North	41	54	L	Center	Finger	Forward pourback has a 7" x 5" delamination.		2.8	1.875	75	2.8											
North	41	54	L	Forward	Comp.	1/4" gap between compression seal and deck.		11.0	2.25	75					11							
North	40	54	R	Rear	Comp.			11.0	2.5	76										10		
North	40	54	R	Center	Finger	Isolated areas of light surface corrosion on top plates		2.8	2	76	2											
North	40	54	R	Forward	Comp.	1/2" gap (prev. 1/8" gap) between compression seal and deck.	J14-1	11.0	2	76					11							
North	43	58	L	Rear	Comp.	Seal is approx. 3" short on the left end.	J14-29	11.0	2.5	75				1					10			
North	43	58	L	Center	Finger			2.8	1.875	75												



					Latina	Additional Notes	2019	Me	asuren	nents	Meta	l Damage	S	eal Adhe	sion	Se	al Dama	age	[Debris	Deck H	leader
Line	Block	Pier	Side	Location	Joint Type	(Other Than Captured in Defect Quantities)	Photo	L	w	Temp.	Surf. Corr.	SL, Crack, Break	<50% Ht	>50% Ht	100% Loss	Abras.	Punct. /Rip	Missing	Partial Fill	Complete Fill	< 1" D or < 6" Dia.	>1" D or > 6" Dia.
North	43	58	L	Forward	Comp.	1/4" gap between compression seal and deck. Seal is approx. 3" short on the left end.		11.0	2.75	75					11							
North	40	58	R	Rear	Comp.			11.0	2.75	68			11									
North	40	58	R	Center	Finger	Isolated areas of light surface corrosion on top plates		2.8	2.25	68	2.8											
North	40	58	R	Forward	Comp.	1/2" gap (prev. 1/4" gap) between compression seal and deck. Header spall 8" L x 4" W x 1" D, 1' from the right end.	J14-7	11.0	3	68					10							1
North	45	62	L	Rear	Comp.	Neoprene gland has been installed over the joint.		11.0	3	75									2			
North	45	62	L	Center	Finger			2.8	2	75												
North	45	62	L	Forward	Comp.	Neoprene gland has been installed over the joint.		11.0	DNS	75									2			
North	42	62	R	Rear	Comp.	Neoprene gland has been installed over the joint.		11.0	3	70									10			
North	42	62	R	Center	Finger	Forward pourback has a delamination 5" x 4".		2.8	2.25	70												
North	42	62	R	Forward	Comp.	Neoprene gland has been installed over the joint.		11.0	DNS	70												
North	45	66	L	Rear	Comp.	Neoprene gland has been installed over the joint.		11.0	3	75									2			
North	45	66	L	Center	Finger	Delamination 15" x 7" in the forward pourback.		2.8	1.5	75												
North	45	66	L	Forward	Comp.	Neoprene gland has been installed over the joint.		11.0	4	75									2			
North	46	66	R	Rear	Comp.	Neoprene gland has been installed over the joint.		11.0	3	70									2			
North	46	66	R	Center	Finger	Rear pour back has a delamination 24" x 7". Forward pourback has a delamination 19" x 6.5". Isolated areas of light corrosion.	J14-13	2.8	1.625	70											2	
North	46	66	R	Forward	Comp.	Neoprene gland has been installed over the joint.		11.0	3	70									2			
North	47	69	L	Rear	Comp.	1/2" gap between compression seal and deck.		11.0	2.5	74					11							
North	47	69	L	Center	Finger			2.8	1.875	74						_						
North	47	69	L	Forward	Comp.			11.0	2.5	74				11						5		
North	46	69	R	Rear	Comp.	1/2" gap between compression seal and deck.		11.0	2.75	70					11						_	_



					Joint	Additional Notes	2019	Me	asurem	ents	Meta	l Damage	S	eal Adhe	sion	Se	al Dama	age		Debris	Deck H	Header
Line	Block	Pier	Side	Location	Туре	(Other Than Captured in Defect Quantities)	Photo	L	w	Temp.	Surf. Corr.	SL, Crack, Break	<50% Ht	>50% Ht	100% Loss	Abras.	Punct.	Missing	Partial Fill	Complete Fill	< 1" D or < 6" Dia.	>1" D or > 6" Dia.
North	46	69	R	Center	Finger	Rear pourback has a 6" x 5" x 1/2" spall. Forward pourback has a 15" x 7" delamination.		2.8	2	70	2	Dieak	п	nı	LUSS		/Rip		FIII	FIII	CO Dia.	76 Dia.
North	46	69	R	Forward	Comp.			11.0	2.75	70			5						5			
North	47	72	L	Rear	Comp.	1/2" gap between compression seal and deck.		11.0	2.75	74					11							
North	47	72	L	Center	Finger	3/16" elevation difference between sliding plates.		2.8	1.875	74	2.8											
North	47	72	L	Forward	Comp.			11.0	3	74					11							
North	46	72	R	Rear	Comp.	1/2" gap between compression seal and deck.		11.0	3.25	72					11							
North	46	72	R	Center	Finger	Both pourbacks have cracking, spalling and delaminations. Largest area is 10" L x 6" wide x 1" deep. CAT		2.8	2	72											1	
North	46	72	R	Forward	Comp.			11.0	3	72					11							
North	51	75	L	Rear	Comp.			11.0	3.5	74				11								
North	51	75	L	Center	Finger	Rear pourback has 2 delaminations, up to 7"x2". Isolated areas of light surface corrosion on the top plates.		2.8	1.5	74	2										1	
North	51	75	L	Forward	Comp.			11.0	2	74				11								
North	50	75	R	Rear	Comp.			11.0	1.5	73			5						5			
North	50	75	R	Center	Finger	Rear pourback has a spall on the left side, 6" L x 1 3/4" W x 1" D. Forward pourback has a spall, 12" L x 5" W x 1" D. Isolated areas of light surface corrosion.		2.8	2	73	2.8											1
North	50	75	R	Forward	Comp.	1/2" gap between compression seal and deck.		11.0	3.375	73					11							
North	51	78	L	Rear	Comp.			11.0	2	74				5	5	_						
North	51	78	L	Center	Finger	Right side of guidebeam joint is missing one finger	J14-27	2.8	1.75	74		1										
North	51	78	L	Forward	Comp.			11.0	2.5	74				5	5							
North	50	78	R	Rear	Comp.			11.0	2.75	73					11							
North	50	78	R	Center	Finger	Tack weld on the top face at the right rear sliding plate has a hairline crack.	J14-16	2.8	1.875	73												



					Joint	Additional Notes	2019	Me	easurem	nents	Meta	l Damage	Se	eal Adhe	sion	Se	al Dama	ige	[Debris	Deck I	Header
Line	Block	Pier	Side	Location	Type	(Other Than Captured in Defect Quantities)	Photo	L	w	Temp.	Surf. Corr.	SL, Crack, Break	<50% Ht	>50% Ht	100% Loss	Abras.	Punct. /Rip	Missing	Partial Fill	Complete Fill	< 1" D or < 6" Dia.	>1" D or > 6" Dia.
North	50	78	R	Forward	Comp.			11.0	3.5	73			5						5			
North	51	81	L	Rear	Comp.			11.0	2.25	74										10		
North	51	81	L	Center	Finger	Delamination 11" x 2.5" on the left forward pourback.		2.8	1.625	74												
North	51	81	L	Forward	Comp.	Compression seal has fallen down on the right side	R14-6, R22-13	11.0	1.5	74					6							
North	50	81	R	Rear	Comp.			11.0	3.5	73					11							
North	50	81	R	Center	Finger	Top surface of plates exhibit isolated areas of light surface corrosion		2.8	2	73	2											
North	50	81	R	Forward	Comp.			11.0	1.75	73			5	5								
North	51	85	L	Rear	Comp.			11.0	2.25	74					3							
North	52	85	R	Rear	Comp.			11.0	1.75	73										10		
South	95	199	L	Forward	Comp.	3/4" elevation difference between cap and span.		11.0	3	61										10		
South	94	199	R	Forward	Comp.			11.0	3.5	55			2						2		2	
South	95	202	L	Rear	Comp.	1" elevation difference between cap and span. Right side covered with sealant		11.0	2	60												
South	95	202	L	Center	Finger			2.8	2	60												
South	95	202	L	Forward	Comp.	1" elevation difference between cap and span. Right side covered with sealant; damaged	R5-73	11.0	3.25	60					2		3					
South	94	202	R	Rear	Comp.	Sealant applied over joint. Cap elevation is 3/4" below span.		11.0	1.75	56												
South	94	202	R	Center	Finger			2.8	1.875	56												
South	94	202	R	Forward	Comp.	Sealant applied over joint. Cap elevation is 1" avg. below span.	R5-9	11.0	2	56												
South	93	205	L	Rear	Comp.			11.0	2.25	61			1		1				8			
South	93	205	L	Center	Finger	3/16" elevation difference between sliding plates. Forward pourback has a 1/8" crack at the construction joint, both sides.	R5-67	2.8	2	61											2	
South	93	205	L	Forward	Comp.			11.0	2.5	61			1		5				4			



					Joint	Additional Notes	2019	Me	asuren	nents	Meta	l Damage	S	eal Adhe	esion	Se	al Dama	ige		ebris	Deck I	Header
Line	Block	Pier	Side	Location	Туре	(Other Than Captured in Defect Quantities)	Photo	L	w	Temp.	Surf. Corr.	SL, Crack, Break	<50% Ht	>50% Ht	100% Loss	Abras.	Punct. /Rip	Missing	Partial Fill	Complete Fill	< 1" D or < 6" Dia.	>1" D or > 6" Dia.
South	92	205	R	Rear	Comp.	Cap elevation is 1" below span.		11.0	2.5	55					6							
South	92	205	R	Center	Finger	Typical fretting corrosion from sliding plate contact		2.8	2	55												
South	92	205	R	Forward	Comp.	Cap elevation is 1" below span.	R5-22	11.0	2.5	55					5							
South	91	207	L	Rear	Comp.			11.0	3	61					3				4		1	
South	91	207	L	Center	Finger	Rear pourback has a 3ft x 5in. spall/delamination in the top face. Forward pourback has cracks throughout		2.8	2	61											3	
South	91	207	L	Forward	Comp.			11.0	2	61				1					10			
South	90	207	R	Rear	Comp.	1-1/4" elevation difference between cap and span.	R5-28, 29	11.0	2.25	55					11							
South	90	207	R	Center	Finger	Rear pourback has map cracking within a delamination 10"x2" on the right side.		2.8	1.875	55											1	
South	90	207	R	Forward	Comp.			11.0	2.25	55			1		2				2			
South	91	210	L	Rear	Comp.			11.0	2.75	60					4					5	1	
South	91	210	L	Center	Finger	1/2" elevation difference between right sliding plates. Forward right pourback has a spall/delamination 14" x 3". Inside weld for the far right plate is cracked.	R5-63, 64	2.8	2.25	60												
South	91	210	L	Forward	Comp.			11.0	2.25	60					10							
South	90	210	R	Rear	Comp.			11.0	1.75	55			2		3							
South	90	210	R	Center	Finger			2.8	2.5	55												
South	90	210	R	Forward	Comp.			11.0	3.25	55					8							
South	85	213	L	Rear	Comp.			11.0	2.75	60				1	2				1			
South	85	213	L	Center	Finger	1/4" elevation difference between sliding plates. Forward pourback has a 9" x 2" delamination, top right side		2.8	2.25	60											1	
South	85	213	L	Forward	Comp.			11.0	2	60					10							
South	84	213	R	Rear	Comp.			11.0	2	56					4				2			



						Additional Notes	2012	Me	easuren	nents	Meta	l Damage	S	eal Adhe	sion	Se	al Dama	ige		Debris	Deck H	leader
Line	Block	Pier	Side	Location	Joint Type	(Other Than Captured in	2019 Photo	L	w	Temp.	Surf.	SL, Crack,	<50%		100%	Abras.	Punct.	Missing	Partial	Complete	< 1" D or	>1" D or
					.,,,,	Defect Quantities)	111000	•	VV	remp.	Corr.	Break	Ht	Ht	Loss	Abias.	/Rip	IVIISSIIIE	Fill	Fill	< 6" Dia.	> 6" Dia.
						1/4" elevation difference between sliding plates.																
						Rear pourback has hairline																
South	84	213	R	Center	Finger	map cracking throughout.	R5-35, 36	2.8	2.5	56											1	
						Forward pourback has a																
						delamination 13"L x 2" W x 1"																
						O on the right face 3/8" gap between seal and																
South	84	213	R	Forward	Comp.	deck	R5-37	11.0	2.5	56					10							
South	85	216	L	Rear	Comp.	Left side covered with sealant		11.0	2.25	57					2							
						Top face of rear pourback is																
						delaminated/spalled, 3ft. x 6".																
South	85	216	L	Center	Finger	Left side is delaminated	R5-59	2.8	2.125	57											2	
						12"x6". and 16"x6". Right side																
South	85	216	L	Forward	Comp.	has a spall, 6" x 6" x 1".		11.0	2.75	57					5							
300111	- 65	210	_	Forward	Comp.	1/4" elevation difference		11.0	2.73	37					3							
South	84	216	R	Rear	Comp.	between cap and span.		11.0	2.5	57					6					4		
South	84	216	R	Center	Finger	3/16" elevation difference		2.8	1.875	57												
						between sliding plates. 1" elevation difference																
South	84	216	R	Forward	Comp.	between cap and span.		11.0	2.5	57									10			
South	83	219	L	Rear	Comp.			11.0	2.75	57					10							
South	83	219	L	Center	Finger			2.8	2	57												
						1/4" elevation difference																
South	83	219	L	Forward	Comp.	between cap and span.	R5-57	11.0	2.75	57					10							
						1/2" gap between compression seal and deck.																
6 11	00	240	_			1" elevation difference		44.0	2.5										40			
South	82	219	R	Rear	Comp.	between cap and span.		11.0	2.5	57									10			
						1/4" elevation difference																
South	82	219	R	Center	Finger	between sliding plates. Forward pourback has a spall,		2.8	2	57											1	1
						18" L x 5" W x 1.25" D																
South	82	219	R	Forward	Comp.	3/4" elevation difference		11.0	2.5	57					4				6			1
554111					- сор.	between cap and span.			2.5						· ·				Ů			
South	83	223	L	Rear	Comp.	1/2" elevation difference between cap and span.		11.0	2.75	66									10			
						Rear pourback has two							1									
South	83	223	L	Center	Finger	delaminations, 7"x4.5" and	J10-41	2.8	2	66											2	
—						13"x6" 3/4" elevation difference																
South	83	223	L	Forward	Comp.	between cap and span.		11.0	3	66										10		
South	82	223	R	Rear	Comp.	3/4" elevation difference		11.0	1	60									6			
Journ	02	223	11	iteai	comp.	between cap and span.		11.0		00									Ŭ			



					Joint	Additional Notes	2019	Me	asurem	nents	Meta	l Damage	Se	eal Adhe	sion	Se	al Dama	ige	C	Debris	Deck I	Header
Line	Block	Pier	Side	Location	Type	(Other Than Captured in	Photo	L	w	Temp.	Surf.	SL, Crack,	<50%	>50%	100%	Abras.	Punct.	Missing	Partial	Complete	< 1" D or	>1" D or
South	82	223	R	Center	Finger	Defect Quantities)		2.8	2.125	60	Corr.	Break	Ht	Ht	Loss		/Rip		Fill	Fill	< 6" Dia.	> 6" Dia.
	82	223				1/2" elevation difference		11.0	3	60					11							
South			R	Forward	Comp.	between cap and span. 1/8" gap between compression																
River	81	228	L	Rear	Comp.	seal and deck.		11.0	3	64					5					5		
River	81	228	L	Center	Finger			2.8	2	64	2.8											
River	81	228	L	Forward	Comp.	3/4" elevation difference between cap and span.		11.0	1.5	64					2				8			
River	80	228	R	Rear	Comp.	Joint is covered with sealant. Sealant has intermittent punctures and rips		11.0	3.25	63					3				3			
River	80	228	R	Center	Finger	Heavy efflorescence leaching from the bottom of the forward pourback, both sides	J10-8	2.8	2.125	63												
River	80	228	R	Forward	Comp.	1-1/4" elevation difference between cap and span. Joint is covered with sealant. Sealant has intermittent punctures and rips	S10-7,8	11.0	2.25	63					5				1			
River	79	232	L	Rear	Comp.			11.0	4	64									10			
River	79	232	L	Center	Finger			2.8	1.5	64	2.8											
River	79	232	L	Forward	Comp.			11.0	2	64					11							
River	78	232	R	Rear	Comp.	3/4" gap between compression seal and deck.	S10-13	11.0	5	63					11							
River	78	232	R	Center	Finger	J/8" elevation difference between sliding plates. Forward pourback has delamination 7" x 5"	J10-13	2.8	2	63	2.8											
River	78	232	R	Forward	Comp.			11.0	2	63					11							
River	77	235	L	Center	Comp.	1/2" gap between compression seal and deck.		11.0	2.25	66					11							
River	77	235	L	Center	Finger			2.8	2.25	66	2.8											
River	76	235	R	Center	Finger	1/8" elevation difference between sliding plates. Light to moderate surface corrosion on top of the sliding plates	J10-18	2.8	2.5	64	2.8											
River	76	235	R	Center	Comp.	Up to 3/4" gap between compression seal and deck.	S10-17	11.0	2.5	64					11							
River	75	237	L	Rear	Comp.	Joint is filled with a mastic sealant		11.0	2.5	66					1				9			



					l	Additional Notes		Me	asuren	nents	Meta	l Damage	S	eal Adhe	sion	Se	al Dama	nge		Debris	Deck I	leader
Line	Block	Pier	Side	Location	Joint Type	(Other Than Captured in Defect Quantities)	2019 Photo	L	w	Temp.	Surf. Corr.	SL, Crack, Break	<50% Ht	>50% Ht	100% Loss	Abras.	Punct. /Rip	Missing	Partial Fill	Complete Fill	< 1" D or < 6" Dia.	>1" D or > 6" Dia.
River	75	237	L	Center	Finger			2.8	2	66												
River	75	237	L	Forward	Comp.	Joint is filled with a mastic		11.0	1.75	66					1				9			
River	74	237	R	Rear	Comp.	sealant Joint is filled with a mastic sealant		11.0	2.25	64									10			
River	74	237	R	Center	Finger	surface corrosion present		2.8	2.25	64	2.8											
River	74	237	R	Forward	Comp.	4"x2" cracked and delaminated header, right side. 1-1/4" elevation difference between cap and span.		11.0	2.5	64									9			1
River	75	240	L	Rear	Comp.			11.0	2.5	66									10			
River	75	240	L	Center	Finger			2.8	2.25	66												
River	75	240	L	Forward	Comp.	1/2" gap between compression seal and deck.		11.0	3	66					11							
River	74	240	R	Rear	Comp.			11.0	1.75	64					11							
River	74	240	R	Center	Finger	Rear pourback has a delamination 16" x.5"		2.8	2.5	64											1.5	
River	74	240	R	Forward	Comp.	Covered with sealant		11.0	2.75	64												
River	71	243	L	Center	Finger			2.8	2.25	64	2.8											
River	71	243	L	Forward	Comp.			11.0	2.5	64			2	1					7			
River	70	243	R	Center	Comp.			11.0	2.75	64				10								
River	70	243	R	Center	Finger	2 delaminations, 1 forward, 1 rear, 5"x5"		2.8	2.25	64	2.8										1	
River	71	246	L	Center	Finger	Rear pourback has a delamination/spall, 6" x full width and wraps around the sides, 5' total, and a 6"x6" delamination between plates. Spall on both faces, 7"x3"X1"D.	S10-31	2.8	2.75	64	2.8											2.8
River	71	246	L	Center	Comp.			11.0	2.5	64					11							
River	70	246	R	Center	Comp.	3/4" vertical offset between decks, right side of guidebeam		11.0	3	64				2	8							
River	70	246	R	Center	Finger	Rear pourback has hairline map cracking throughout. 3 delaminations, forward: 4"x5" and 14"x4.5" (patch). Rear: 4"x5"	J10-27	2.8	2.25	64	2.8										2	



					Joint	Additional Notes	2019	Me	easurem	ents	Meta	l Damage	S	eal Adhe	sion	Se	eal Dama	age		Debris	Deck H	Header
Line	Block	Pier	Side	Location	Туре	(Other Than Captured in Defect Quantities)	Photo	L	w	Temp.	Surf. Corr.	SL, Crack, Break	<50% Ht	>50% Ht	100% Loss	Abras.	Punct. /Rip	Missing	Partial Fill	Complete Fill	< 1" D or < 6" Dia.	>1" D or > 6" Dia.
River	69	R1	L	Center	Finger	Expansion fingers are bent outward up to 3/16". Expansion joint fingers have a minimum of 1-1/4" of plate left to slide against. One tack weld, top left corner is cracked fully through	S28-17-20	2.8	4.625	67	2.8											
River	69	R1	L	Center	Plate			11.0	3	67												
River	70	R1	R	Center	Finger	Expansion joint fingers have a minimum of 2-3/8" of plate left to slide against. Rear pourback has hairline man cracking throughout.	S28-6, J28- 1	2.8	4.25	66	2.8											
River	70	R1	R	Center	Plate			11.0	2.5	66												
River	67	R6	L	Center	Plate			11.0	3.25	70												
River	67	R6	L	Center	Finger	On the right side, one of the lower fingers is broken off. 1 of 8 (previously 2 of 8) retrofit expansion guide plates has fallen off (bottom, left). Expansion joint fingers have a minimum of 7/8" of plate left to slide against.	S28-24-26	2.8	5	70	1.8	1										
River	66	R6	R	Center	Finger	5/16" elevation difference between sliding plates. 2 of 8 retrofit expansion guide plates have fallen off. The two remaining at the lower sets (one on each side) have cracked welds. Expansion joint fingers have a minimum of 1-1/4" of plate left to slide against. Rear pourback has a delamination 4-1/2" x 3-1/2".	J28-2-4	2.8	4.5	70												
River	66	R6	R	Center	Plate			11.0	1.875	70												
River	67	250	L	Center	Comp.			11.0	2.5	75					1				9			
River	67	250	L	Center	Finger		J28-8	2.8	2	75	2.8											
River	66	250	R	Center	Comp.			11.0	2.75	70									10			



						Additional Notes		Me	easuren	nents	Meta	I Damage	S	eal Adhe	sion	Se	al Dama	ige	Г	Debris	Deck H	leader
Line	Block	Pier	Side	Location	Joint Type	(Other Than Captured in	2019 Photo	L	W	Temp.	Surf.	SL, Crack,	<50%		100%	Abras.	Punct.	Missing	Partial	Complete	< 1" D or	>1" D or
					Туре	Defect Quantities)	Filoto		vv	remp.	Corr.	Break	Ht	Ht	Loss	Abras.	/Rip	iviissing	Fill	Fill	< 6" Dia.	> 6" Dia.
						Rear pourback has hairline map cracking throughout and a																
River	66	250	R	Center	Finger		R28-14	2.8	2	70	2											
						isolated light corrosion on the top plates.																
River	67	253	L	Center	Finger	top places.		2.8	1.75	75	2.8											
River	67	253	L	Center	Comp.			11.0	1.675	75					11							
River	67	253	-	Mid Span Rear	Comp.			26.0	1.25	77									26			
River	65	253	-	Mid Span Forward	Comp.	7"x3"X1/2" header spall on the left side of the left guidebeam	R28-26	26.0	1.25	75									26			1
River	66	253	R	Center	Comp.			11.0	1.5	72				2					8			
River	66	253	R	Center	Finger	Rear pourback has hairline map cracking in a previously patched area. Forward pourback has hairline map cracking throughout. Light corrosion on the top plates.		2.8	2	72	2.8											
River	65	254	L	Center	Comp.			11.0	1.375	81					11							
River	65	254	L	Center	Finger	Rear and forward pourbacks have a delamination 5"x4" between plates.		2.8		81	2.8										1	
River	64	254	R	Center	Comp.			11.0	1.5	79					5				5			
River	64	254	R	Center	Finger	Right face of forward pourback has hairline map cracking throughout and efflorescence at the cold joint.		2.8	1.75	79	2.8											
River	63	258	L	Rear	Comp.			11.0	2.5	81										10		
River	63	258	L	Center	Finger			2.8	2	81	2											
River	63	258	L	Forward	Comp.	1-3/4" elevation difference between cap and span.	S19-24	11.0	1.75	81										10		
River	62	258	R	Rear	Comp.			11.0	2.5	77			2							9		
River	62	258	R	Center	Finger	1/8" elevation difference between sliding plates.		2.8	1.75	77												
River	62	258	R	Forward	Comp.			11.0	2	77										9		
River	61	261	L	Rear	Comp.	1/4" elevation difference between cap and span.		11.0	2.5	81					2					9		
River	61	261	L	Center	Finger	Rear pourback has a delamination 5" x.2.75" between plates	R19-22	2.8	1.75	81	2										1	



						Additional Notes	2010	Me	easuren	nents	Meta	I Damage	S	eal Adhe	sion	Se	al Dama	nge		Debris	Deck H	Header
Line	Block	Pier	Side	Location	Joint Type	(Other Than Captured in	2019 Photo	L	w	Temp.	Surf.	SL, Crack,	<50%		100%	Abras.	Punct.	Missing	Partial	Complete	< 1" D or	>1" D or
River	61	261	L	Forward		Defect Quantities) 1" elevation difference between cap and span on left side (cap is higher)		11.0	1.75	81	Corr.	Break	Ht	Ht	Loss		/Rip		Fill	Fill 10	< 6" Dia.	> 6" Dia.
0&M	108	M2	-	Center	Comp.			33.0		73			13	5	2				12			
O&M	108	М3	С	Center	Open	No joint sealant		11.0		73											11	
O&M	107A	M4	С	Center	Open	No joint sealant	R19-9	11.0		73											5	2
0&M	107A	M5	С	Rear	Comp.			11.0	3.75	73					11							
O&M	107A	M5	С	Center	Finger	Rear and forward pourbacks have transverse cracks up to 20" x 0.008		2.8	1.75	73	2										1	
0&M	107A	M5	С	Forward	Comp.			11.0	2	73			10									
0&M	106	400	L	Forward	Comp.	covered by median barrier		11.0		81												
0&M	106	400	R	Forward	Comp.			11.0		73			3		4							
O&M	105B	405	L	Rear	Comp.	1/2" gap between compression seal and deck. 1.25" elevation difference between the cap and span		11.0	3.75	81					11							
O&M	105B	405	L	Center	Finger	Rear pourback has 2 delaminations, up to 14"x1.5". Forward pourback has a delamination, 2'-10"x2.5".		2.8	1.75	81											2.8	
O&M	105B	405	L	Forward	Comp.	1" elevation difference between the cap and span		11.0	2.5	81			1						4		3	
O&M	104	405	R	Rear	Comp.	Joint on right side has been covered with a neoprene gland that is splitting. Deck is 1-3/4" above pier cap	R19-14, 15	11.0	3.75	73					11							
O&M	104	405	R	Center	Finger	Fingers on the left and right sides have surface corrosion. Both pourbacks have cracks up to 6" x 0.01	S19-11	2.8	1.75	73	2.8											
0&M	104	405	R	Forward	Comp.			11.0	2.5	73					1				5			
0&M	103	408	L	Rear	Comp.			11.0	2	81			3							10		
0&M	103	408	L	Center	Finger	Forward pourback has a corner spall/ delamination, 4"x3.5"x2".		2.8	2	81											0.5	
O&M	103	408	L	Forward	Comp.	1/4" gap between compression seal and deck.		11.0	2	81					11							
O&M	100	408	R	Center	Comp.			11.0	2	75			4		2				5			



					Joint	Additional Notes	2019	Me	asuren	nents	Meta	l Damage	Se	eal Adhe	sion	Se	al Dama	ge	0	ebris ebris	Deck H	Header
Line	Block	Pier	Side	Location	Type	(Other Than Captured in Defect Quantities)	Photo	L	W	Temp.	Surf. Corr.	SL, Crack, Break	<50% Ht	>50% Ht	100% Loss	Abras.	Punct. /Rip	Missing	Partial Fill	Complete Fill		>1" D or > 6" Dia.
O&M	100	408	R	Center	Finger	Forward pourback has a delamination 13"x1.5" between plates. Fingers on the sides have light to moderate surface corrosion.		2.8	1.5	75	2										1.5	

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Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
Starter	11	1	N Ext.	Below	8' from Pier 1N	spall	3	2	1/2	1	Left overhang	new									PT
Starter	10	1	S Ext.	Below	throughout	spall	12	3	1/2	2	Right overhang	new							1	1	PT
Starter	13	2	N	Below	10' from Pier 3	Efflo.			-		along PT blockout construction joint	new					2				PT
Starter	11	2	N	Below	10' from Pier 2	crack	24	0.015	-		Within PT blockout	no change						2			PT
Starter	12	5	S	Above	12' from of Pier 5	spall	3	3	1	1	Second pour spall	No change									PT
Starter	13	5	N	Both	14' from Pier 5N	Cutout		-	-		The edge of the left overhang is cut out for 25" x 2.5" due to lack of clearance for an adiacent building column	new	J8-5, 19								PT
Starter	12	6	S	Above	15' from Pier 6	spall	6	4	1/2	1	Second pour spall	No change									CIP
Starter	15	6	N	Below	overhang	crack	12	HL			Transverse cracks in the overhang. A crack exhibits minor efflorescence at Pier 7N.	no change		1							CIP
Starter	12	6	S	Below		crack	12	HL			Transverse cracks in the overhang.	no change									CIP
Starter	15	6	Z	Above	throughout	Spall	Full Length		1 3/4		The second pour was saw cut on both sides of the guidebeam and the portions to the exterior of the cut was removed. This work damaged/removed the top of the deck up to 1-3/4" deep x 12" wide.									84	CIP
Starter	15	6	N	Above	20' from Pier 7N	Patch cracking				2	Exterior left face	no change							2		CIP
Starter	15	6	N	Above	midspan	Patch cracking		0.015		1	with efflorescence, exterior left face	no change							1		CIP
Starter	14	7	S	Below	25' from Pier 8	spall	15	5	2	1	Right overhang	no change								1	CIP
Starter	15	7	N	Above	throughout	Spall	Full Length		1 3/4		The second pour was saw cut on both sides of the guidebeam and the portions to the exterior of the cut was removed. This work damaged/removed the top of the deck up to 1-3/4" deep x 12" wide.		R8-18							84	CIP
Starter	15	7	N	Above	Pier 8	Debris					Heavy buildup of oak leaves over Pier 8 and in Span 7	No change	R23-3								CIP
Starter	15	8	N	Below	throughout	Delam.	3	3		12	Several with efflorescence along the right overhang drip edge.	no change		6					6		CIP



			_	Above /		Deficiency	Max	Max	Depth			2017 Note	2019	Efflor.	Rebar	Rebar	Crack	Crack	Spall	Spall	Element
Line	Block	Span	Beam	Below	Location	Туре	Length (in)	Width (in)	(in)	Qty	Additional Inspection Notes	Disposition	Photo	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	/patch (CS2)	(CS3)	Туре
											Longitudinal crack in the left overhang drip groove with										
Starter	15	8	N	Below	Pier 9	Crack					heavy efflorescence and	new	S17-4	20							CIP
											moisture leaching Longitudinal crack in the right										
Starter	14	8	S	Below	20' from Pier 8	Crack					overhang drip groove with	new		20							CIP
			•								heavy efflorescence and moisture leaching										
Starter	14	8	S	Below	50' from Pier 9	crack	20	HL		1	with efflorescence, left	No change		1							CIP
											overhang Heavy buildup of wet debris,										
Starter	14	8	S	Above	Pier 8	Debris					left of the guidebeam	new	S23-2								CIP
Starter	14	9	S	Above	throughout	crack					Second pour, transverse hairline cracks at random	no change									CIP
											locations. Several with efflorescence										<u> </u>
Starter	15	9	N	Below	throughout	Delam.	3	3		20	along the left overhang drip	new		10					10		CIP
											edge. Heavy buildup of wet debris,										ļ
Starter	14	9	S	Above	Pier 8	Debris					right of the guidebeam	new									CIP
Starter	15	9	N	Above	1/3 Span	spall	7	3	1	1	Second pour, left of the guidebeam	No change									CIP
											Second pour, transverse										
Starter	16	10	S	Above	throughout	crack				5	hairline cracks at random locations.	no change									CIP
Starter	15	10	N	Above	midspan	spall	8	3	1 1/2	1	Second pour, left of the	No change									CIP
Starter	15	10	N	Above	Pier 10	spall	12	3	2	1	guidebeam Second pour, right of the	No change									CIP
Starter		10	IN	Above	20' from Pier	Spail	12				guidebeam Second pour, right of the										
Starter	15	10	N	Above	10	spall	6	3	1/2	1	guidebeam	No change									CIP
Starter	15	10	N	Above	10' from Pier 10	spall	7	3	1 1/2	1	Second pour, left of the guidebeam	No change									CIP
Chautau	16	44		A la	41	-ul-	10				Second pour, transverse										CID
Starter	16	11	S	Above	throughout	crack	18			6	hairline cracks at random locations on right side.	no change									CIP
Starter	16	11	S	Above	30ft from Pier 12	spall	5	4	1	1	Second pour, left of the guidebeam	new									CIP
					12						Second pour, right of										
Starter	15	11	N	Above	Pier 12	Crack	24"	0.040"		1	guidebeam has a crack	New	R23-16								CIP
											between the expansion joints.										
Starter	16	12	S	Above	Pier 12	crack		0.04			Dense cracking of second pour between expansion joints	new	S23-11								PT
Starter	16	12	S	Above	Pier 13	spall	4	4	1	1	Second pour, left of the guidebeam	no change									PT
Starter	16	13	S	Below	15' from Pier 14	crack	6	HL		1	Diagonal crack between stems	no change					1				PT
Starter	15	13	N	Above	20' from P14	spall	2	2	2	1	Second pour, right of the guidebeam	No change									PT



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
Starter	16	14	S	Above	midspan	spall	6	4	1/2	1	Second pour, right of the guidebeam	No change							(00-)		PT
Starter	15	14	N	Above	midspan	spall	5	3	3/4	1	Second pour, left of the guidebeam	No change									PT
Starter	15	14	N	Above	20' from Pier 14	spall	5	2	1/2	1	Second pour, left of the guidebeam.	No change									PT
Starter	15	14	N	Above	15' from Pier 14	spall	5	2	1/2	1	Second pour, left of the guidebeam.	No change									PT
Starter	15	14	N	Above	10' from Pier 14	spall	5	2	1/2	1	Second pour, left of the guidebeam.	No change									PT
Starter	20	15	S	Above	20' from Pier 15	spall	14	3	4	1	Second pour, right of the guidebeam	no change									PT
Starter	20	15	S	Above	6' from Pier 15	spall	5	2	1	1	Second pour, left of the guidebeam	no change									PT
Starter	15	15	N	Above	Pier 15	spall	28	3	1/2	1	Second pour, left of the guidebeam	No change									PT
Starter	20	15	S	Above	10' from Pier 15	spall	6	3	1	1	Second pour, left of the guidebeam	no change									PT
Starter	20	15	S	Below	20' from Pier 17	Spall	12	2	1	1	Left face of top flange	no change								1	PT
Starter	20	17	S	Above	12' from Pier 18	spall	4	3	1	1	Second pour, left of the guidebeam	no change									PT
Starter	20	17	S	Above	17' from Pier 18	spall	6	2	1/2	1	Second pour, left of the guidebeam	no change									PT
Starter	20	17	S	Above	20' from Pier 17	spall	6	2	1	1	Second pour, left of the guidebeam	no change									PT
Starter	20	18	S	Above	10' from Pier 18	spall	4	2.5	1/2	1	Second pour, left of the guidebeam	new									PT
Starter	22	19	S	Above	24' from Pier 19	spall	4	2.5	1 1/2	1	Second pour, left of the guidebeam	no change									PT
Starter	22	19	S	Above	19' from Pier 19	spall	7	2.5	1 1/4	1	Second pour, left of the guidebeam	no change									PT
Starter	22	19	S	Above	13' from Pier 19	spall	5	2	1 1/4	1	Second pour, left of the guidebeam	no change									PT
Starter	22	20	S	Above	throughout	Debris					Heavy amount of wet debris accumulation, right side of second pour	new	S23-23								PT
Starter	21	20	N	Above	8' from Pier 20	spall	7	3	1	1	Second pour, right of the guidebeam	No change									PT
Starter	23	21	N	Below	15ft. from Pier 22N	spall	3	1	1/2	2	Right overhang	new							2		PT
Starter	23	22	N	Above	25' from Pier 22	spall	12	6	3	1	Second pour, left side of the guidebeam	No change									PT
Starter	22	24	S	Above	Pier 25	spall	3	3	1/2	1	Second pour, right of the guidebeam	No change									PT
Starter	23	24	N	Above	Pier 25	spall	12	6	2	1	Second pour	No change	_							_	PT
Starter	23	25	N	Above	15' from Pier 25	spall	15	4	2	1	Second pour, right of the guidebeam	No change									PT
Starter	23	25	N	Above	10' from Pier 25	spall	2	2	1/4	1	Second pour, right of the guidebeam	No change									PT



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
Starter	24	27	S	Above	20' from Pier 27	spall	7	2	1/2	1	Second pour, left of the guidebeam	No change									PT
Starter	24	27	S	Above	12' from Pier 28	spall	8	3.5	1 1/2	1	Second pour, left of the guidebeam	No change									PT
Starter	24	28	S	Above	Pier 29	spall	3	3	1/2	1	Second pour, right of the guidebeam	no change									CIP
Starter	25	28	N	Above	5' from Pier 28	spall	6	4	1/2	1	Second pour, left of the guidebeam	No change									PT
Starter	27	28	N	Above	Pier 29	spall	5	3	1	3	Second pour, left of the guidebeam	No change									PT
Starter	25	28	N	Above	5' from Pier 28	spall	3	2	1	1	Second pour, left of the guidebeam	No change									PT
Starter	27	29	N	Below	15' from Pier 30	Patch failure	11	4	3/4	1	Right overhang	no change	S16-31							1	CIP
Starter	27	29	N	Above	Pier 29	spall	2	2	1/2	1	Second pour, left of the guidebeam	No change									CIP
Starter	27	29	N	Above	Pier 30	spall	6	5	3	1	Second pour, right of the guidebeam	No change									CIP
Starter	27	29	N	Above	midspan	spall	3	3	1/2	1	Second pour, right of the guidebeam	No change									CIP
Starter	27	29	N	Above	15' from Pier 29	spall	5	2	1/2	1	Second pour, left of the guidebeam	No change									CIP
Starter	27	29	N	Above	10' from Pier 30	spall	6	2	1/2	1	Second pour, right of the guidebeam	No change									CIP
Starter	27	29	N	Above	9' from Pier 30	spall	3	2	1/4	1	Second pour, right of the guidebeam	No change									CIP
Starter	27	30	N	Below	6' from Pier 30	spall	2	2	1/2	1	Exterior left face	no change							1		CIP
Starter	27	30	N	Below	throughout	crack	12	HL			Transverse cracks in overhangs on 1' to 2' centers.	no change									CIP
Starter	27	30	N	Below	10' from Pier 31	spall	12	3	3	1	Right overhang	no change								1	CIP
Starter	26	30	S	Below	throughout	crack	12	HL			Transverse cracks in overhangs on 1' to 2' centers.	no change									CIP
Starter	26	30	S	Below	midspan	spall	6	4	1	2	Deck underside at junction for Span 261L	no change							2		CIP
Starter	26	30	S	Below	20' from Pier 31	spall	12	3	1/2	1	Left overhang	no change								1	CIP
Starter	27	30	N	Above	6' from Pier 31	spall	5	4	6	1	Second pour, left of the guidebeam	No change									CIP
Starter	27	30	N	Above	Pier 30	spall	4	3	1/2	1	Second pour, right of the guidebeam	No change									CIP
Starter	27	31	-	Below	25' from Pier 31	spall	12	4	1	1	Deck underside between boxes	no change								1	CIP



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
Starter	27	31	-	Below	15' from Pier 32	spall	24	1	1	1	Deck underside between boxes	no change								2	CIP
Starter	28	31	S Turn	Below	20' from Pier 31S	spall	6	6	3/4	1	Right overhang	new								1	CIP
Starter	27	31	N	Below	20' from Pier 31	spall / delam	24	12	1	1	Left exterior side	no change							2		CIP
Starter	27	31	N	Above	Midspan	spall	5	5	2	1	Second pour, right of the guidebeam	No change									CIP
Starter	27	31	N	Above	Pier 32	spall	6	1	1/2	1	Second pour, left of the guidebeam	No change									CIP
Starter	28	32	S	Above	Pier 32	spall	12	5	6	1	Second pour, right of the guidebeam	no change									PT
Starter	27	32	N	Above	Pier 32	spall	7	4	1/2	1	Second pour, right of the guidebeam	No change									PT
Starter	27	32	N	Above	5' from Pier 32	spall	5	5	1/4	1	Second pour, right of the guidebeam	No change									PT
Starter	27	32	N	Above	Pier 32	spall	8	4	4	1	Second pour, left of the guidebeam	No change									PT
Starter	27	33	N	Below	18' from Pier 33N	Spall	5	5	1	1	Right overhang	no change							1		PT
Starter	27	33	N	Below	10' from Pier 34	Spall	2	2	3/4	3	Located on the underside of top flange, adjacent to the inside face of the north stem	no change							1		PT
Starter	27	33	N	Above	midspan	spall	8	2	1	1	Second pour, right of the guidebeam	No change									PT
Starter	29	34	N	Above	Pier 35	spall	5	4	2	1	Second pour, right of the guidebeam	No change									PT
Starter	30	35	S	Above	Pier 35	spall/dela m	19	9	5	1	Second pour, left of the guidebeam	no change									PT
Starter	30	35	S	Above	25' from Pier 36	spall/dela m	14	6	1/2	1	Second pour, left of the guidebeam	no change	S23-35								PT
Starter	30	35	S	Above	20' from Pier 36	spall	4	3	1 1/2	2	Second pour, left of the guidebeam	no change									PT
Starter	30	35	S	Above	10' from Pier 36	spall	6	3	1/2	1	Second pour, right of the guidebeam	no change									PT
Starter	29	35	N	Above	Pier 35	spall	5	4	2	1	Second pour, right of the guidebeam	No change									PT
Starter	30	36	S	Above	Pier 36	spall	6	4	1	4	Second pour, right of the guidebeam	no change									PT
Starter	30	37	S	Above	10' from Pier 37S	spall	3	3	1	1	Second pour, right of the guidebeam	No change									PT
Starter	32	37	S	Below	Pier 38	Spall	6	6	1	1	Left overhang	no change								1	PT
Starter	32	37	S	Above	Pier 38	Delam.	18	6	1	2	Second pour, left of the guidebeam	no change	S23-37- 40								PT
Starter	29	37	N	Above	15' from Pier 38	spall	7	3	2	1	Second pour, left of the guidebeam	No change									PT
Starter	29	37	N	Above	Pier 38	spall	3	2	1	1	Second pour, right of the guidebeam	No change									PT
Starter	29	37	N	Above	15' from Pier 38	spall	2	2	1/2	1	Second pour, left of the guidebeam	No change									PT



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
Starter	32	38	S	Above	Pier 38	Spall	18	18	6	3	Second pour, left of the guidebeam	no change									PT
Starter	32	38	S	Above	20' from Pier 38	spall	12	4	2	1	Second pour, right of the guidebeam	no change									PT
Starter	32	38	S	Above	midspan	spall / delam	12	6	1	1	Second pour, left of the guidebeam	no change									PT
Starter	29	38	N	Below	20ft. from Pier 38	Spall	5	2	1/2	1	Left overhang	new							1		PT
Starter	32	39	S	Above	Pier 39	spall	4	4	1/2	1	Second pour, left of the guidebeam	no change									PT
Starter	32	40	S	Above	Pier 40S	spall	5	3	2 1/2	1	Second pour, left of the guidebeam	no change									PT
Starter	32	40	S	Above	Pier 41S	spall	18	5	1	1	Second pour, left of the guidebeam	no change									PT
Starter	31	40	N	Above	midspan	spall	3	3	1/2	1	Second pour, right of the guidebeam	No change									PT
Starter	33	41	N	Below	throughout	crack	60	HL		5	Right overhang, transverse cracks with efflorescence	no change					25				PT
Starter	33	41	N	Below	10' from Pier 41N	crack	12	HL		7	Diagonal cracks between stems at PT pourback, heavy efflo.	no change					7				PT
Starter	35	41	N-Cross	Below	6' from Pier 42	crack	36	HL		2	Right overhang with heavy efflo.	new					6				PT
Starter	35	41	N-Cross	Below	12' from Pier 42	crack	60	HL		1	Longitudinal crack between stems with heavy efflo.	new					5				PT
Starter	33	41	N	Below	15' from Pier 41N	Spall	8	8	2	1	Underside of top flange	no change								1	PT
Starter	33	41	N	Below	throughout	Efflo.					Right overhang, between flange and deck	new		7							PT
Starter	33	41	N	Above	Pier 41	spall	3	5	1/2	1	Second pour, right of the guidebeam	No change									PT
Starter	32	42	S	Above	10' from Pier 42S	spall	7	4	1	1	Second pour, left of the guidebeam	no change									PT
Starter	32	42	S	Below	throughout	Efflo.					Right overhang exhibits efflorescence between the slab and flange.	no change	J11-1	15							PT
Starter	32	42	S	Below	throughout	Efflo.					Left overhang exhibits efflorescence between the slab and flange.	new		10							PT
Starter	32	42	S-Cross	Below	Near Pier 42	Efflo.					Moderate efflorescence at PT blockout	new		1							PT
Starter	32	42	S	Below	2' from Pier 43S	spall	3	3	1/2	1	Right overhang with exposed and coated rebar	new	J11-2		1						PT
Starter	32	42	S	Below	5' from Pier 43S	Patch cracking	4	7		1	Left overhang	new							1		PT
Starter	32	42	S	Below	throughout	crack	48	HL		5	Left overhang, one crack with moderate efflorescence	new					20				PT
Starter	32	42	S	Below	throughout	crack	48	HL		5	Right overhang with light efflorescence	no change					20				PT
Starter	35	42	Cross	Above	throughout	Debris					Standing water and debris throughout	new	S23-42								PT



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
Starter	35	42	N	Above	Pier 43	spall	6	6	3	1	Second pour, left of the guidebeam	No change									PT
Starter	34	43	S	Above	midspan	spall	4	3	1	1	Second pour, left of the guidebeam	no change									PT
Starter	37	43	N	Below	6' from Pier 44N	Spall	8	6	1	1	Underside of top flange	no change								1	PT
Starter	34	43	S	Below	Pier 44	spall	4	2	3/4	1	Left overhang	new					1				PT
Starter	32	43	S	Below	2' from Pier 43	crack	12	0.015		1	Diagonal crack with efflorescence in left overhang	no change						1			PT
Starter	37	43	N	Above	throughout	crack	43	HL		9	Second pour, transverse cracks	No change									PT
Starter	37	43	N	Above	midspan	spall	5	3	1	1	Second pour, right of the guidebeam	No change									PT
Starter	37	44	N	Above	Pier 44	spall	6	2	1	1	Second pour, left of the guidebeam	No change									PT
Starter	34	45	S	Above	throughout	Debris					Heavy amount of wet debris accumulation, right side of second pour	new									РТ
Starter	34	46	S	Above	Pier 47	spall	8	6	5	1	Second pour, left of the guidebeam	no change									PT
Starter	37	46	N	Below	5' from Pier 46N	Protruding Bolt				1	4" L protruding steel bolt in the right face of the top flange	no change									PT
North	34	47	R	Above	throughout	debris					Deck is covered by debris up to 1" D right side.	no change									PT
North	34	47	R	Above	Pier 48R	spall	8	4	2	1	Second pour, left of the guidebeam	no change									PT
North	34	47	R	Below	Bay 5	Spall	4	2	1/2	1	Underside of left overhang, 10' from pier	no change							1		PT
North	39	48	L	Below	Pier 50	Patch cracking	6	6			Left overhang haunch	no change							1		PT
North	39	48	L	Below	Midspan	Spall	4	2	1/2	1	Underside of left overhang	no change							1		PT
North	34	48	R	Below	20ft. from Pier 48	Spall	4	2	1/2	1	Underside of left overhang	new								1	PT
North	34	48	R	Below	Near Pier 48	Efflo.	48			1	At PT blockout	new								1	PT
North	36	48	R	Below	Just ahead of midspan	Spall	15	3.5	3/4	1	Underside of right overhang	no change								1	PT
North	39	50	L	Below	midspan						Between the stems is a timber form still in place.	no change									PT
North	36	50	R	Below	midspan						Between the stems is a timber form still in place.	no change									PT
North	36	50	R	Below	Just ahead of midspan						Long sound sandy patch along the right edge of the right flange	new									РТ
North	36	51	R	Above	15' from Pier 52	spall	12	12	1/2	1	Second pour, left of the guidebeam	no change									PT
North	39	51	L	Above	Pier 52	spall	10	6	3	1	Second pour	No change	_								PT



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
North	39	52	-	Below	Near Pier 52	crack		HL			Transverse cracks in the deck underside between the steel boxes.	no change									CIP
North	41	52	L	Below	20' from Pier 53	spall	12	5	1/2	1	Right exterior face	no change								1	CIP
North	36	52	R	Above	throughout	crack					Second pour has transverse cracks spaced 2-4' apart	new									CIP
North	41	53	L	Below	20' from Pier 53	spall	2	3	2	1	Right overhang	no change							1		CIP
North	40	53	R	Below	Pier 54	spall	4	3	1	1	Left haunch	new							1		CIP
North	41	53	L	Below	Above 2nd to last cross brace	spall	12	3	1	1	Right overhang	new							1		CIP
North	40	54	R	Below	Throughout	Spall	6	3	1/2	7	Located throughout left overhang	no change							1		PT
North	41	55	L	Above	midspan	spall	6	3	2	1	Second pour, left of the guidebeam	no change									PT
North	41	55	L	Above	midspan	spall	4	3	1 1/2	1	Second pour, left of the guidebeam	no change									PT
North	41	55	L	Above	Pier 55	spall	12	7	6	1	Second pour, left of the guidebeam	no change									PT
North	41	55	L	Above	midspan	spall	120	3	4	1	Second pour, left of the guidebeam	no change									PT
North	41	55	L	Below	12' from Pier 56	Spall	3	1	1/2	1	Left face of top flange	no change							1		PT
North	41	55	L	Below	Both ends of span	Efflo.	48	HL		2	Transverse cracks exhibits minor efflorescence between stems along cold joint for PT blockouts	no change		4							РТ
North	41	56	L	Above	20' from Pier 56	spall	6	3	1	1	Second pour, right of the guidebeam	no change									PT
North	40	56	R	Below	Near Pier 56	Efflo.	48	HL		4	Minor efflorescence along the perimeter of the cold joint for the PT blockout	no change		4							PT
North	43	57	L	Below	4' from Pier 57	Spall	4	2	1/2	1	Right Overhang	no change							1		PT
North	42	58	R	Above	Pier 59	crack	36	HL		2	Deck exhibits hairline cracks	no change					6				PT
North	43	58	L	Below	15' from Pier 58	Spall	5	3	1/2	1	Left overhang	no change							1		PT
North	43	59	L	Below	20' from Pier 59	Spall	4	3	1/2	1	Left overhang	no change							1		PT
North	42	60	R	Above	2' from Pier 61	spall	13	3	3	1	Second pour, left of the guidebeam	no change									PT
North	42	60	R	Above	2' from Pier 61	spall	6	3	1/2	1	Second pour, right of the guidebeam	no change									PT
North	43	60	L	Below	Pier 60	Spall	4	2	1/4	1	Located in the left overhang	new							1		PT
North	43	60	L	Below	Pier 61L	Spall	4	2	1/4	1	Located in the left overhang	no change							1		PT



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
North	42	61	R	Above	Pier 62R	spall	10	4	2	3	Second pour, left of the guidebeam	no change									PT
North	43	61	L	Below	30ft. from Pier 61L	spall	15	4	1	1	Left overhang	new									PT
North	43	61	L	Below	Near Pier 61L	spall	15	4	1/2	1	Right overhang drip edge, multiple spalls	new									PT
North	45	61	L	Below	20ft from Pier 62	spall	6	3	1/2	1	Right overhang	new									PT
North	42	61	R	Below	20ft. from Pier 61R	Spall	15	3	1/4	1	Right overhang drip edge	no change								2	PT
North	42	61	R	Below	40ft. from Pier 61R	Spall	20	3	1/4	1	Right overhang drip edge	new								2	PT
North	42	62	R	Above	Pier 62R	spall	18	4	3	1	Second pour, left of the guidebeam	no change									PT
North	42	62	R	Above	Pier 62R	spall	9"	6"	5"	1	Second pour, right of the guidebeam with exposed steel	New	J14-10								PT
North	44	62	R	Above	12' from Pier 63	spall	18	4	3	1	Second pour, left of the guidebeam	no change									PT
North	44	62	R	Above	throughout	Debris					Up to 3 " debris accumulation on both right and left sides.	no change									PT
North	45	62	L	Above	2' from Pier 63L	spall	8	3	1/2	1	Second pour, right of the guidebeam	no change									PT
North	42	62	R	Below	25' from Pier 62R	Spall	12	3	1/2	1	Right overhang	no change								1	PT
North	42	62	R	Below	Pier 62R	Spall	18	6	1 1/2	1	Left overhang. Three exposed rebar with heavy surface corrosion.	no change	R22-5			2					PT
North	45	63	L	Below	Pier 63L	Spall	6	2	1/2	1	Right face of top flange	no change							1		PT
North	44	63	R	Below	Pier 63R	Spall	4	2	1	1	Right face of top flange	no change							1		PT
North	44	63	R	Below	2ft. from Pier 63R	Spall	4	2	1/4	1	Right overhang	no change							1		PT
North	45	64	L	Above	Throughout						Standing water on both sides of the guide rail.	New									PT
North	44	65	R	Above	throughout	spall	15	5	5	1	Second pour, left of the guidebeam	no change									PT
North	46	65	R	Above	10' from Pier 65R	spall	6	4	1	1	Second pour, right of the guidebeam	no change									PT
North	45	65	L	Above	Throughout						Standing water on both sides of the guide rail.	New									PT
North	45	65	L	Above	Pier 66L	spall	8	2	1 1/2	2	Second pour	no change									PT
North	46	65	R	Below	Near Pier 65	Crack	48	HL	-	2	Transverse cracks exhibits minor efflorescence between stems along cold joint for PT blockout	no change					8				PT
North	46	67	R	Above	12' from Pier 67	spall	10	4	2	1	Second pour, right of the guidebeam	no change									PT



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
North	47	67	L	Below	Pier 68	Patch Cracking		0.015		1	Located in top flange transition area	no change							1		PT
North	46	67	R	Below	Near Pier 67	Efflo.				1	Leaching from PT blockout	new							1		PT
North	47	68	L	Below	Midspan	Patch Cracking	8	0.06		-	Left overhang	no change							1		PT
North	47	68	L	Below	Pier 69	Crack	60	HL	-	2	Transverse cracks in the underside of the top flange, stem to stem	no change					10				PT
North	47	69	L	Below	Pier 69	Crack	66	HL	-	1	Transverse crack in the underside of the top flange, stem to stem	no change					6				PT
North	46	69	R	Below	Pier 69	Crack	66	HL	-	1	Transverse crack in the underside of the top flange, stem to stem	no change					6				PT
North	46	69	R	Below	10' from Pier 69	Spall	3	3	1/4	1	Right face of top flange	no change							1		PT
North	46	69	R	Below	Near Pier 70	Efflo.	48			1	Leaching from PT blockout	new	R21-4	1					1		PT
North	46	69	R	Below	20' from Pier 69	Spall	3	3	1/4	1	Right overhang	new							1		PT
North	47	70	L	Below	Near Pier 71	Efflo.				-	3 hole patches in slab PT transition exhibit minor efflorescence	no change		3							PT
North	47	71	L	Below	8' from Pier 71	Spall	11	3	1	1	Bottom edge of left overhang	no change	R21-5							1	PT
North	47	72	L	Below	Pier 72	Crack	66	HL	-	1	Transverse crack in the underside of the top flange, stem to stem	no change					6				PT
North	46	72	R	Below	Pier 72	Crack	66	HL	-	1	Transverse crack in the underside of the top flange, stem to stem	no change					6				PT
North	46	73	R	Above	Pier 73	spall	7	4	2	1	Second pour	no change									PT
North	46	73	R	Above	Pier 73	Crack	36	HL		2	Longitudinal cracks, left of the guidebeam	New	R14-3				6				PT
North	46	73	R	Above	Pier 74	crack		HL		2	Second pour, transverse cracks	no change									PT
North	46	73	R	Below	15' from Pier 74	Spall	2	2	1/2	1	Located in the right overhang	no change							1		PT
North	46	73	R	Below	2' from Pier 74	Spall	6	2	1/2	2	Located on the right flange edge	new							1		PT
North	51	74	L	Below	Pier 75	Crack	66	HL	-	1	Transverse crack in the underside of the top flange, stem to stem	no change					6				PT
North	50	74	R	Below	Pier 75	Crack	66	HL	1	1	Transverse crack in the underside of the top flange, stem to stem	no change					6				PT
North	50	75	R	Above	Pier 76	spall	8	2	6	1	Second pour	no change									PT



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
North	51	75	L	Below	Pier 75	Crack	66	HL	-	1	Transverse crack in the underside of the top flange, stem to stem	no change					6				PT
North	51	75	L	Below	Pier 75	Spall	2	1	1/4	1	In the diaphragm	no change							1		PT
North	51	75	L	Below	Near Pier 76	Efflo.					emanating from PT blockout	new									PT
North	50	75	R	Below		crack	72	HL		4	Transverse cracks in the right overhang with efflorescence	no change	R21-13	24							PT
North	51	76	-	Below	throughout	Efflo.	1080			2	Underside of closure pour deck, along cold joints	no change	R21-15	90							PT
North	51	76	,	Below	throughout	Efflo.	1080			2	Transverse hairline cracks are found at 4' centers along span.	no change		90							РТ
North	50	76	R	Below	Near Pier 76	Delam.	20	7		1	Located in the right stem haunch at the PT blockout.	no change							2		PT
North	51	76	-	Below	10' from Pier 77	spall	12	4	1 1/2	1	Underside of closure pour deck	no change	R21-17							1	PT
North	51	76	٦	Below	Near Pier 77	Grout Loss					At the PT blockout, perimeter grout is cracked at random locations and has missing sections of grout along the interface of the stems and the top slab transition.	no change	R21-15								РТ
North	51	76	L	Below	Near Pier 77	Patch Cracking	2	2	1/4	4	4 patches in top slab transition exhibit cracking.	no change							4		PT
North	51	77	-	Below	throughout	Efflo.	756			2	Underside of closure pour deck, along cold joints	no change		63							PT
North	51	77	1	Below	throughout	Efflo.	756			2	Transverse hairline cracks are found at 4' centers along span.	no change		63							PT
North	51	77	L	Below		crack	74	HL		3	Left overhang with minor efflorescence, spaced ~3' apart	no change		20							PT
North	51	77	L	Below	Near Pier 77	Efflo.					Efflorescence and cracked grout exist in PT blockout haunch area	no change									PT
North	51	78	L,	Above	10' from Pier 78	spall	5	3	1/2	1	Second pour, right of the guidebeam	no change									PT
North	51	78	L	Below	20' from Pier 78	Spall	4	3	1/2	1	Right overhang	no change							1		PT
North	51	78	L	Below	Midspan	Spall	4	2	1/4	3	Right overhang	no change							1		PT
North	50	78	R	Below	Near Pier 79R	Crack	48	HL	-	1	Transverse cracks exhibits minor efflorescence between stems along cold joint for PT blockouts	no change					4				PT
North	50	79	R	Below	Near Pier 79R	Efflo.	48			-	Efflorescence on the underside of the top flange at the post tension blockout.	no change		4							PT



Line	Block	Span	Beam	Above /	Location	Deficiency	Max Length	Max Width	Depth	Qty	Additional Inspection Notes	2017 Note	2019	Efflor.	Rebar	Rebar	Crack	Crack	Spall /patch	Spall	Element
Line	DIOCK	Spair	Deam	Below	Location	Type	(in)	(in)	(in)	Qty	Additional Inspection Notes	Disposition	Photo	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	(CS2)	(CS3)	Туре
North	51	79	L	Below	Pier 80L	Spall	5	3	1/2	1	Right overhang	no change							1		PT
North	50	79	R	Below	Near Pier 80R	Crack	48	HL		2	Transverse cracks exhibits minor efflorescence between stems along cold joint for PT blockouts	no change					8				PT
North	50	80	R	Above		wire mesh exposed	36	1		3	Second pour exhibits 9' of exposed wire mesh to the right of the guidebeam.	no change									PT
North	51	80	L	Above	midspan	spall	8	3	1/2	2	Second pour, right of the guidebeam	no change									PT
North	51	81	L	Below	Pier 81L	Spall	2	1	1/2	1	Right overhang	no change							1		PT
North	53	82	٦	Below	Throughout	Spall	5	2	1/4	7	Left overhang	no change							7		PT
North	52	82	R	Below	2ft. from Pier 82	Spall	2	2	1/2	2	Right face of top flange	new							1		PT
North	53	83	L	Below	Forward half	Spall	4	2	1/4	2	Left overhang	no change							4		PT
North	53	84	L	Below	Forward half	Spall	2	2	1/4	2	Left overhang	no change							1		PT
South	95	199	L	Below	Midspan	Spall	6	6	1/2	1	Underside of top flange	no change							1		PT
South	95	199	L	Below	Midspan	Spall	4	2	1/2	1	Underside of top flange	no change							1		PT
South	94	199	R	Below	Pier 199R	Delam.	18	4		1	Left overhang	no change							2		PT
South	94	199	R	Below	Throughout	Patch					Underside of left overhang exhibits numerous minor grout patches	no change							3		PT
South	94	199	R	Below	Pier 199R	Crack	30	HL		1	Left overhang, Diagonal, extending from CFRP	new					3				PT
South	94	199	R	Below	Pier 199R	Crack	28	HL		5	Left overhang, Diagonal, extending from CFRP	new					5				PT
South	94	199	R	Below	Pier 199R	Crack	12	HL		4	Underside of top flange	new					4				PT
South	95	199	L	Below	Pier 199L	Crack	20	0.01		1	Left overhang, Diagonal, extending from CFRP	new						2			PT
South	95	199	L	Below	Pier 199L	Crack	24	HL		1	Underside of top flange, extending from the diaphragm	new					2				PT
South	94	199	R	Above	2' from Pier 199R	Patch Spall	12	12	1/2	1	Lift point patch failure, right of guidebeam	no change							1		PT
South	94	199	R	Above	2' from Pier 200R	Patch Spall	12	12	1/2	1	Lift point patch failure, right of guidebeam	new							1		PT
South	95	200	L	Below	Near Pier 201L	Efflo.	48			2	along the transverse PT blockout joints	new		2							PT
South	95	201	L	Below	Midspan	Spall	6	2	1	1	Right overhang	no change							1		PT
South	94	201	R	Above	2' from Pier 202R	Patch Delam	12	7		1	Lift point patch failure, right of guidebeam	no change							1		PT
South	95	202	L	Below	Pier 202L	Spall	12	6	2	1	Right overhang with 3" of exposed steel at the compression seal	no change								1	PT



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
South	94	202	R	Below	5' from Pier 203R	spall	6	6	1	1	Adjacent to a scupper drain	no change								1	PT
South	94	202	R	Below	Near Pier 203R	Efflo.	60			2	Efflorescence leaching out from longitudinal and transverse construction joints for PT blockout	new		5							РТ
South	93	203	L	Below	10' from Pier 203L	Spall	4	3	1/2	1	Right overhang	no change							1		PT
South	92	203	R-Cross	Below	Near Pier 204 Mid	Crack	72	HL		2	transverse cracks in the underside of the top flange thst extend down into the stems	new					12				CIP
O&M	92	203	R-Cross	Below	20' from Pier 204 Mid	Efflo.					Moderate efflorescence dripping down left overhang	new	J2-14,15	1							CIP
South	93	203	L	Below	12' from Pier 203L	Spall	3	3	1/4	?	Left overhang	no change							1		PT
South	93	203	L	Below	15' from Pier 203L	Spall	4	1	1/2	1	Right overhang	no change							1		PT
South	93	203	L	Below	Pier 203L	Spall	3	1	1/2	1	Left overhang	no change							1		PT
South	92	203	R	Below	20' from Pier 203R	spall	6	6	1	1	Adjacent to a scupper drain, left overhang	no change									PT
South	92	203	R	Below	Near Pier 203R	Efflo.	60			2	Efflorescence leaching out from transverse construction joints for PT blockout	new		2							РТ
South	93	204	L-Cross	Below	Near Pier 204 Mid	Crack	72	HL		2	transverse cracks in the underside of the top flange thst extend down into the stems	new					12				CIP
South	92	204	R	Below	Pier 205R	crack	24	HL		1	transverse crack in underside of the flange	new					2				PT
South	92	204	R	Below	Near Pier 204R	Efflo.	60			2	Efflorescence leaching out from longitudinal and transverse construction joints for PT blockout	new		5							РТ
South	93	204	L	Below	Midspan	spall	8	8	1	1	Adjacent to a scupper drain, right overhang	no change	_	_					_	1	PT
South	93	204	L	Below		spall	4	4	1	1	Right overhang, between scupper drains	no change							1		PT
South	93	204	L	Below	Pier 205L	Spall	6	6	1/2	1	Left overhang near scupper	no change							1		PT
South	93	205	L	Below	throughout	crack	24	0.015			Vertical cracks in left exterior face with minor efflorescence	no change		6							CIP
South	90	205	R	Below	Midspan	Delam.	12	6		1	Exterior face	no change							1		CIP



Line	Block	Span	Beam	Above /	Location	Deficiency	Max Length	Max Width	Depth	Qty	Additional Inspection Notes	2017 Note	2019	Efflor.	Rebar	Rebar	Crack	Crack	Spall /patch	Spall	Element
Line	Diock	Span	Deam	Below	Location	Туре	(in)	(in)	(in)	۹۰۶	radicional hispection votes	Disposition	Photo	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	(CS2)	(CS3)	Туре
South	90	205	R	Below	throughout	crack	24	0.015			Vertical cracks in left exterior face with minor efflorescence space ~ 3' apart	no change		6							CIP
South	93	205	L	Above	throughout	crack	114	0.013			Transverse cracks spaced ~2' apart.	no change									CIP
South	90	205	R	Above	throughout	crack	114	0.013			Transverse cracks spaced ~3' apart.	no change									CIP
South	90	205	R	Above	throughout	Debris					Soil and debris at isolated locations	no change									CIP
South	91	206	L	Above	throughout	crack	114	0.013		2	Transverse cracks spaced ~3-5' apart.	new									CIP
South	91	207	L	Below	Pier 207	Crack	23	0.01		1	Underside of top flange	new						2			PT
South	90	207	R	Below	Pier 207	Crack	13	HL		1	Right overhang	new					1				PT
South	90	207	R	Below	Pier 207	Crack	36	HL		2		new					6				PT
South	90	208	R	Below	Near Pier 208	Efflo.	48			-	Along cold joints at PT blackouts	no change	J1-7	2							PT
South	91	209	L	Below	15ft from Pier 209	Efflo.	36			2		new		2							PT
South	90	209	R	Below	15ft from Pier 209	Efflo.	36			2		new		2							PT
South	90	209	R	Below	Pier 210	Crack	60	HL		3	transverse cracks in the underside of the beam flange, extending from stem to stem	new	J1-12				15				PT
South	91	209	L	Below	Pier 210	Crack	48	HL	-	1	Transverse crack in the underside of the top flange	no change					4				PT
South	91	210	L	Below	Pier 210	Crack	60	HL		3	transverse cracks in the underside of the beam flange, extending from stem to stem CFRPs	new					15				PT
South	91	210	L	Below	Pier 210	Crack	60	HL		3	transverse cracks in the underside of the beam flange, one extends from stem to stem	new					15				PT
South	91	210	L	Below	Pier 210	Crack	28	0.01		5	Left overhang, extending from CFRP	new						5			PT
South	91	210	L	Below	Pier 210	Crack	24	0.01		4	Right overhang, extending from CFRP	new						8			PT
South	90	210	R	Below	Pier 210	Crack	24	0.01		2	Left overhang, extending from CFRP	new						4			PT
South	90	210	R	Below	Pier 210	Crack	18	0.01		3	Right overhang, extending from CFRP	new						10			PT
South	91	210	L	Below	Near Pier 211	Efflo.	48	HL		1	Efflorescence along the construction joint for the post tensioning block out	new		1							PT
South	91	211	L	Below	Near Pier 211	Efflo.	48	HL		1	Efflorescence along the construction joint for the post tensioning block out	no change		1							PT



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
South	90	211	R	Below	Near Pier 211	Efflo.	48	HL		1	Efflorescence along the construction joint for the post tensioning block out	New		1							PT
South	85	212	L	Below	Pier 213	Crack	10	HL		4	Left overhang, extending from CFRP	new					4				PT
South	85	212	L	Below	Pier 213	Crack	10	HL		1	Diagonal , underside of interior flange, extending from CFRP	new					1				PT
South	85	212	L	Below	Pier 213	Crack	10	HL		3	Right overhang, extending from CFRP	new					3				PT
South	84	212	R	Below	Pier 213	Crack	15	HL		1	Left overhang, extending from CFRP	new					2				PT
South	84	212	R	Below	Pier 213	Crack	10	HL		1	Diagonal , underside of interior flange, extending from left stem CFRP	new					1				PT
South	84	212	R	Below	Pier 213	Crack	10	0.01		1	Right overhang, extending from CFRP	new						1			PT
South	91	212	L	Below	Near Pier 211	Efflo.	48	HL		1	Efflorescence along the construction joint for the post tensioning block out	New		1							РТ
South	84	213	R	Below	Pier 213	Spall	2	3	6	1	Exterior left face	no change								1	CIP
South	84	213	R	Below	throughout	crack	24	HL		10	Vertical cracks in the right exterior face with efflorescence.	no change		10							CIP
South	85	213	L	Above	throughout	crack	114	0.013			Transverse cracks spaced 3'-4' throughout	new									CIP
South	84	213	R	Above	30ft from Pier 214	crack	120	0.03		1	Transverse crack	new	R5-40								CIP
South	84	213	R	Above	5ft from Pier 214	crack	120	0.03		7	Transverse cracks, left of the guidebeam	no change									CIP
South	85	214	L	Below	Pier 214	crack	24	HL		3	Vertical cracks in the left exterior face with efflorescence.	no change	S15-8	3							CIP
South	85	214	L	Above	throughout	crack	114	0.013			Transverse cracks spaced 3'-4' throughout	no change									CIP
South	84	214	R	Above	throughout	crack	114	0.013			Transverse cracks at random locations throughout. Dense map cracking present throughout forward half of span	increase	R5-42				200				CIP
South	84	215	R	Below	Midspan	spall	3	3	1/4	1	Right overhang	no change	_	_					1	_	CIP
South	85	215	L	Above	15ft. from Pier 215	crack	48	0.013			Transverse crack	no change									CIP
South	84	215	R	Above	throughout	crack	114	0.013			Transverse cracks at random locations throughout	no change								_	CIP
South	82	217	R	Below	Near Pier 218R	Efflo.	48			1	Along cold joints at PT blackouts	new		4							PT
South	83	218	L	Below	10' from Pier 219L	Spall	5	5	1/2	?	Underside of top flange, from drill holes	no change							1		PT



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
South	83	218	L	Below	Near Pier 218L	Efflo.	48			1	Along cold joints at PT blackouts	new		4							PT
South	83	218	L	Below	Pier 219L	Crack	60	HL		3	Underside of top flange	new					3				PT
South	82	218	R	Below	Near Pier 218R	Efflo.	48			1	Along cold joints at PT blackouts	new		4							PT
South	82	218	R	Below	Pier 218R	Spall	1	1	1/4	1	Left overhang	no change							1		PT
South	82	219	R	Below	Pier 219R	Spall	3	3	1		Left overhang	no change							1		PT
South	82	219	R	Above	throughout						Photo of typical roughened deck for guidebeam pedestal	no change	J10-3								PT
South	83	219	L	Above	Pier 220L	Patch Spall	12	12	1/2	1	Pickup patch failure	new							1		PT
South	82	220	R	Below	20' from Pier 220R	Spall	2	1	1/2	1	Left overhang	no change							1		PT
South	83	220	L,	Above	Pier 221	Patch Spall	12	8	1/2	2	Lift point patch failure, both sides of the guidebeam	no change							1		PT
South	82	221	R	Below	10' from Pier 221R	Spall	2	2	1/4	1	Right face of top flange	no change							1		PT
South	82	222	R	Below	Pier 223R	Spall	12	4	2			new	J2-15							1	PT
South	83	222	L	Above	Pier 223	Patch Spall	12	12	1/2		Lift point patch failure, right of guidebeam	no change								1	PT
South	83	222	L	Above	Pier 222						Standing water on the left side of the guidebeam, drain on right.	new									PT
South	82	223	R	Below	Pier 223R	crack	65	HL		2	transverse and longitudinal cracks in the underside of the top flange.	new					10				PT
South	83	223	L	Below	throughout	chairs					Exposed rebar chairs on the underside of the top flange, no corrosion	new	J2-9,10								PT
South	83	223	L	Below	Midspan	spall	6	5	1/4	1	Exterior right side	no change							1		PT
South	82	223	R	Above	Midspan	Overlay Failure	36	24	1/8		Spalled overlay (filler for low spot?)	new	S10-4								PT
South	83	225	L	Above	15' from Pier 225L	exposed steel					Deck top has 1" L of exposed and coated steel on the left side of the guidebeam	no change	J10-40								PT
South	81	226	L	Below	Near Pier 226	Efflo.				2	Efflorescence leaching out from transverse construction joints for PT blockout	new		2							PT
South	80	226	R	Below	Near Pier 226	Efflo.				2	Efflorescence leaching out from transverse construction joints for PT blockout	new		2							РТ
South	80	226	R	Below	Pier 227	Spall	1	1	1/4	8	At cap interface	new							1		PT



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
South	80	227	R	Below	Pier 228	crack	18	0.013		2	Diagonal , underside of exterior flange, extending from CFRP	new	J3-21					3			PT
South	81	227	L	Below	Within 20' of Pier 228	Patch Delam.	6	6		5		no change	J3-7						1		PT
South	80	227	R	Above	Pier 227	Overlay Failure	144	72			Cracked and delaminated overlay (filler for low spot?)	no change	S10-5,6, J10-7								PT
River	81	228	L	Below	10' from Pier 229	Spall	6	4	1	1	Underside of top flange	no change							1		PT
River	81	228	L	Below	20' from Pier 229	Spall	3	5	1 1/2	1	Underside of top flange	no change								1	PT
River	80	228	R	Below	Midspan	Spall	3	1	1/4	1	Right overhang	no change							1		PT
River	80	228	R	Below	Pier 228	Crack	1	-	1	1	Underside of top flange exhibits crack sealant extending from the left haunch into the right haunch which appears to be effective.	no change									PT
River	80	228	R	Above	Near Pier 229	spall	12	4			Spalled pickup point patch	new									PT
River	81	229	L	Below	Pier 229	crack	84	HL		1	Longitudinal crack between right overhang flange and chamfer	new	J3-28, 29				7				PT
River	80	230	R	Above	10ft. from Pier 230	spall	15	17		2	Poor spall patches	new	J10-11						4		PT
River	80	230	R	Above	Pier 231	Delam.	12	12		2	Delaminated lifting point patches	new	S10-11						4		PT
River	81	231	L	Below	Throughout	Honey.	2	2	1/2	18	Underside of top flange adjacent to right stem	no change							1		PT
River	80	231	R	Below	Pier 231R	Crack	18	HL	-	1	Transverse crack in the right overhang	no change					2				PT
River	80	231	R	Above	Pier 231	spall	12	12		2	Lifting point patch is missing, left of the guidebeam	new	S10-12						4		PT
River	76	232	R	Below	20' from P233R	spall	3	3	1/2	1	Right overhang	no change							1		CIP
River	79	232	L	Below	15' from P233R	spall	2	2	1/2	1	Right overhang	new							1		CIP
River	76	232	R	Below	15' from P233R	spall	6	3	3/4	3	Left overhang	no change							3		CIP
River	79	232	L	Above	throughout	crack	114	0.012			Transverse cracks spaced 2-4' throughout	new									CIP
River	78	232	R	Above	throughout	crack	114	0.013			Transverse cracks at random locations throughout	new									CIP
River	76	233	R	Below	10' from Pier 233R	crack	72	HL			Transverse hairline cracks with minor efflorescence in right deck underside	no change		6							CIP
River	76	233	R	Below	2' from first diaphragm	spall	3	3	1	1	Interior slab between spans	no change							1		CIP



Line	Block	Span	Beam	Above /	Location	Deficiency	Max Length	Max Width	Depth	Qty	Additional Inspection Notes	2017 Note	2019	Efflor.	Rebar	Rebar	Crack	Crack	Spall /patch	Spall	Element
				Below		Туре	(in)	(in)	(in)			Disposition	Photo	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	(CS2)	(CS3)	Туре
River	77	233	-	Below	throughout			HL			transverse cracks spaced 3-5' between boxes, some with efflorescence	new		25							CIP
River	76	233	R	Below	10' from Pier 234	spall	4	4	1	1	Interior slab between spans	no change							1		CIP
River	76	233	R	Below	30' from Pier 234	spall	4	4	1	1	Interior slab between spans	no change							1		CIP
River	76	233	R	Above	throughout	crack	114	0.012			Transverse cracks spaced ~1ft. apart, longitudinal cracks are also present	new									CIP
River	79	233	L	Above	25ft from Pier 233	spall	6	5	1/2	1	Deck top	new							7		CIP
River	77	234	L	Above	throughout	crack	114	0.012			Transverse cracks spaced 2-4' throughout, 2 with efflorescence	new	S10-40	2							CIP
River	76	234	R	Above	throughout	crack	114	0.015			Transverse cracks spaced 1-3 ft throughout	no change	J10-17								CIP
River	77	235	L	Above	throughout	crack	114	0.012			Transverse cracks spaced 1-3' throughout	new									CIP
River	76	235	R	Above	throughout	crack	114	0.013			Transverse cracks spaced 2-4ft apart throughout, some with efflorescence	no change		2							CIP
River	75	236	L	Below	20' from Pier 237R	spall	4	2	1/2	1	Left overhang	no change							1		CIP
River	75	236	L	Below	15' from Pier 237L	exposed steel					1'-3" L of exposed steel protruding out of left overhang	no change									CIP
River	77	236	L	Below	20' from Pier 236R	spall	3	3	1	1	Right overhang	no change							1		CIP
River	74	236	R	Below	Pier 237R	exposed steel					Right overhang exhibits 6 exposed steel bars x 2" L	no change									CIP
River	74	236	R	Below	15' from Pier 237R	spall	12	3	1	1	Left overhang	no change								1	CIP
River	75	236	L	Above	throughout	crack	114	0.012			Transverse cracks spaced 2-4' throughout	new									CIP
River	75	236	L	Above	25ft from Pier 237	spall	6	5	1/2	2	Deck top	new							7		CIP
River	73	240	٦	Below	25' and 45' from Pier 240L	spall	12	12	1	2	Right overhang at drilled holes	no change								1	CIP
River	74	240	R	Below	6' from Pier 240R	spall	8	8	1	1	Left overhang at a drill hole	no change								1	CIP
River	73	240	L	Above	Midspan	spall	6	5	1/2	7	Deck top, forward half of span, left of guidebeam.	no change							7		CIP
River	73	240	L	Above	throughout	crack	114	0.012			Transverse cracks spaced 2-4' throughout	no change									CIP
River	72	240	R	Above	throughout	crack	114	0.015			Transverse cracks spaced 2-4' throughout	no change									CIP
River	73	241	L	Below	midspan	spall	6	6	3	1	Left overhang	no change								1	CIP



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
River	70	241	R	Below	Pier 242	exposed steel	•	•			The left overhang exhibits two areas of exposed steel 1" L, adjacent to Pier 242.	no change							,		CIP
River	73	241	L	Above	throughout	crack	114	0.012			Transverse cracks spaced 1-3' throughout	no change									CIP
River	73	241	L	Above	6' from Pier 241	spall	6	4	1/2	1	Left of guidebeam	no change							1		CIP
River	73	241	L	Above	midspan	spall	6	4	1/2	1	Right of guidebeam	no change							1		CIP
River	72	241	R	Above	throughout	crack	114	0.02			Transverse cracks spaced 1-3' throughout	no change	J10-25								CIP
River	70	242	R	Above	throughout	crack	114	0.012			Transverse cracks spaced 2-4' throughout	new									CIP
River	71	243	L	Above	throughout	crack	114	0.015			Transverse cracks spaced 1-3' throughout	new									CIP
River	70	243	R	Above	throughout	crack	114	0.012			Transverse cracks spaced 2-4' throughout	new									CIP
River	71	244	L	Below	3' from Pier 244	exposed steel					Right overhang exhibits two exposed steel bars 4" L protruding out	no change									CIP
River	71	244	L	Above	throughout	crack	114	0.015			Transverse cracks spaced 2-4' throughout	no change									CIP
River	70	244	R	Above	throughout	crack	114	0.012			Transverse cracks spaced 2-4' throughout	new									CIP
River	71	245	L	Above	throughout	crack	114	0.015			Transverse cracks spaced 2-4' throughout	no change									CIP
River	70	245	R	Above	throughout	crack	114	0.012			Transverse cracks spaced 2-4' throughout	new									CIP
River	69	246	L	Below	10' from Pier 247	spall	6	3	2 1/2	1	Left overhang	no change							1		CIP
River	69	246	L	Below	10' from Pier 247	exposed steel					Right overhang exhibits two areas of exposed steel 1" L, 6' and 10' from Pier 247.	no change									CIP
River	71	246	L	Above	throughout	crack	114	0.015			Transverse cracks spaced 2-4' throughout, 2 with efflorescence	no change		2							CIP
River	71	246	L	Above	midspan	spall	6	6	1/2	1	Left of guidebeam	no change							1		CIP
River	70	246	R	Above	throughout	crack	114	0.012			Transverse cracks spaced 2-4' throughout	new									CIP
River	69	247	L	Above	Pier R-1	Debris					Debris buildup 3-4" along the left and right sidewall	no change	J10-29								CIP
River	69	247	L	Above	throughout	crack	114	0.012			Transverse cracks spaced 2-4' throughout	no change									CIP
River	70	247	R	Above	throughout	crack	114	0.02			Transverse cracks spaced 2-4' throughout	no change									CIP
River	69	R1	L	Above	throughout	crack	114	HL			Transverse cracks spaced ~3-5' apart	no change									N/A, Second Pour
River	69	R2	L	Above	throughout	crack	114	HL			Transverse cracks, spaced 4'-6'. Spacing as close as 3', within 40' of Pier R-3	no change									N/A, Second Pour



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
River	70	R2	R	Above	throughout	crack	114	HL			Transverse cracks, spaced 4'-6'. Spacing as close as 3', within 20' of Pier R-3	no change	R28-5						(COL)		N/A, Second Pour
River	69	R3	L	Above	throughout	crack	114	HL			Transverse cracks, spaced 4'-6'. Spacing as close as 3', within 40' of Pier R-3	no change									N/A, Second Pour
River	68	R3	R	Above	throughout	crack	114	HL			Transverse cracks spaced ~5' apart	no change									N/A, Second Pour
River	67	R4	L	Above	throughout	crack	114	HL			Transverse cracks spaced ~5' apart	no change									N/A, Second Pour
River	68	R4	R	Above	throughout	crack	114	HL			Transverse cracks spaced ~5' apart	no change									N/A, Second Pour
River	67	R5	L	Above	throughout	Debris					left side of guidebeam	no change	R28- 29,30								N/A, Second Pour
River	67	R5	L	Above	throughout	crack	114	HL			Transverse cracks spaced ~5' apart	no change									N/A, Second Pour
River	66	R5	R	Above	throughout	crack	114	HL			Transverse cracks spaced ~5' apart	no change									N/A, Second Pour
River	67	R6	L	Above	Pier R-6	Debris					Up to 6" debris, left of guidebeam	new	J28-5								CIP
River	67	248	L	Above	throughout	crack	114	0.015			Transverse cracks spaced ~6'	new									CIP
River	67	248	L	Above	throughout	crack	114	HL			Transverse cracks spaced ~6' apart	new									CIP
River	67	250	L	Above	within 15ft. of Pier 251	crack	114	0.015			Transverse cracks spaced 1'-3' apart, (continuous over pier)	new									CIP
River	67	251	L	Below	Bay 11	crack	18	HL		1	Transverse crack with efflorescence in the left overhang above the splice	new		1							CIP
River	66	251	R	Below	Bay 11	crack	18	HL		1	Transverse crack with efflorescence in the left overhang above the splice	new		1							CIP
River	67	251	L	Above	within 40ft. of Pier 251	crack	114	0.015			Transverse cracks spaced 1'-3' apart, (continuous over pier)	new									CIP
River	66	252	R	Below	Bay 4	crack	18	HL		1	Transverse crack with efflorescence in the left overhang above the solice	new		1							CIP
River	66	252	R	Below	40' from P253	spall	8	3	1/2	2	Right overhang	no change							2		CIP
River	67	252	L	Above	throughout	crack	114	HL			Transverse cracks spaced ~5' apart	new									CIP



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
River	67	253	L	Above	Bent 253	crack	36	0.013		2	Diagonal cracks to the right of the guidebeam	no change	S28-32- 33						(C32)		Slab
River	67	253	L	Above	throughout	crack	114	0.015			Transverse cracks typical every 4'. Longitudinal deck cracks on right side of guidebeam	no change	S28-34								Slab
River	65	254	L	Below	Bay 8	crack	18	HL		1	Transverse crack with efflorescence in the left overhang above the splice	new		1							CIP
River	64	254	R	Below	Bay 8	crack	18	HL		1	Transverse crack with efflorescence in the right overhang above the splice	new		1							CIP
River	65	255	L	Above	throughout	crack	114	HL			Transverse cracks spaced ~5' apart	no change									CIP
River	65	256	L	Below	20' from Pier 257L	spall	4	3	1	1	Left overhang	no change							1		CIP
River	65	256	L	Below	10' from Pier 257L	spall	4	4	1/2	3	Right overhang at third and fourth downspouts	no change							1		CIP
River	65	256	L	Below	Pier 257L	crack	72	HL		3	Transverse cracks with efflorescence, left overhang	increase (prev. 2)		12							CIP
River	65	256	L	Below	Pier 257L	crack	72	HL		9	Transverse cracks with efflorescence, right overhang	no change	S24-2	54							CIP
River	62	256	R	Below	Pier 257R	crack	48	HL		3	Transverse cracks with efflorescence, right overhang	new		6							CIP
River	62	256	R	Below	10' from Pier 257R	spall	4	2	1	1	Left overhang	no change							1		CIP
River	65	256	L	Above	Pier 257L	crack	114	0.013		7	Transverse cracks, spaced ~1' apart	no change	S19-25								CIP
River	65	256	L	Above	throughout	crack	144	HL		3	Transverse cracks spaced ~3-5' apart, tighter spacing near Pier 256L	no change									CIP
River	64	256	R	Above	throughout	crack	114	HL			Transverse cracks spaced ~3-5' apart	no change									CIP
River	63	259	L	Below	midspan	Spall	7	5	1/2	1	Underside of top flange	no change								1	PT
River	61	261	L	Below	Bay 1	Spall	5.75	4	2	3	Underside of top flange	no change							2		PT
River	61	261	L	Below	Bay 2	Spall	6	6	1/2	1	Includes a 2" painted drill bit extending from the center.	no change	J9-25, 26						1		PT
River	61	261	L	Below	Bay 3	Spall	5	5	2	1	Underside of top flange	no change								1	PT
River	60	261	R	Below	Near Pier261	Efflo.					along PT blockout construction joint	new		1							PT
River	60	261	R	Below	8' from Pier 31S	Spall	3	3	2	1	Underside of top flange	no change								1	PT
River	60	261	R	Above	Pier 261R	Debris					Heavy amount of wet soil debris accumulation	new	S19-23								PT
O&M	108	Apr Slab 1	-	Above	M1B1	fracture	19	4.5	12	1	Left side of guidebeam	no change	S19-1							2	Apr Slab



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
0&M	108	Apr Slab 2	-	Above	M1B2	fracture	21	7	12	1	Right side of guidebeam	no change	R19-1							2	Apr Slab
0&M	108	Apr Slab 3	1	Above	M1B3	fracture	18	4.5	12	1	Left side of guidebeam	no change								2	Apr Slab
0&M	108	Apr Slab 4	1	Above	Rear	spall	19	2.5	4	1	Left side of guidebeam	new								2	Apr Slab
O&M	108	Apr Slab 4	1	Above	Rear	spall	9	2.5	2	1	Right side of guidebeam	new								2	Apr Slab
O&M	108	Spur B1		Above	M1B1	spall	3.5	3.5	2	1	Left side of guidebeam	no change								1	Slab
O&M	108	Spur B1		Above	M2	spall	7	2	3/4	1	Left side of guidebeam	new								1	Slab
0&M	108	Spur B1		Above	M1B1	honey.	30			1	Right side of guidebeam, on chamfer	no change	S19-2								Slab
0&M	107A	М3	-	Below	10' from Pier M4	Spall	8	8	1	1	Underside of top flange	no change	J4-14							1	PT
O&M	107B	М3	-	Below	Midspan	Spall	6	4	1	1	Left overhang at a drill hole	no change	J4-13							1	PT
0&M	107A	M4	-	Above	Pier M4	spall	18	7	1	1	Coded in header spall	no change									PT
O&M	106	400	L	Below	8' from Pier 401	Spall	4	2	1/2	1	Underside of top flange, with 2" of exposed steel	no change							1		PT
O&M	106	401	L	Below	Pier 402	Efflo.			-		Moderate efflo. leaching from PT blockout	new	J4-30	2							PT
O&M	106	401	L	Below	Pier 402	Crack	60	HL	-	4	Transverse cracks with efflorescence in the left overhang	no change		20							PT
O&M	106	402	R	Below	5' from Pier 403	Spall	6	6	1	1	Right face of top flange	no change							1		PT
0&M	106	402	R	Below	Midspan	Spall	8	8	1	1	Right face of top flange	no change								1	PT
O&M	105B	403	L	Below	throughout	Efflo.	60		-	4	longitudinal cracks with efflorescence on the underside of top flange	new	J4-32	5							PT
O&M	106	403	R	Below	Pier 403	Crack	60	HL		4	Transverse cracks with efflorescence in the right overhang	no change		20							PT
0&M	106	404	R	Below	Pier 404	Rough					Right drip edge exhibits a rough finish for 3' L.	no change									PT
0&M	104	404	R	Below	Pier 405	Spall	6	6	1	1	Underside of top flange at a drill hole	no change	J18-8						1		PT
0&M	104	405	R	Above	throughout	crack		HL			Transverse cracks spaced ~3-5' apart	new									CIP
O&M	103	406	L	Below	15' from Pier 406L	Spall	3	1	3/4	1	Underside of top flange adjacent to the left stem	no change							1		PT
O&M	103	406	L	Below	408L	Spall	18	4	2 1/2	1	Underside of top right flange with one exposed rebar	new	J24-15							1	PT



Line	Block	Span	Beam	Above / Below	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Inspection Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Rebar (CS3)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Element Type
0&M	102	406	R	Below	Pier 407R	spall	6	5	1/2	1	Left overhang at a drill hole	no change							1		CIP
0&M	104	406	R	Above	Pier 406	crack		HL			Transverse cracks spaced ~1-3' apart	new									CIP
0&M	104	406	R	Above	Pier 406	Debris		HL			Heavy debris accumulation on the left side of the guidebeam	new	S19-14								CIP
0&M	102	406	R	Above	throughout	crack		HL			Transverse cracks spaced ~3-5' apart	new									CIP
О&М	100	408	R	Below	?	spall	3	3	2	1	Left overhang	no change								1	CIP
O&M	100	408	R	Above	throughout	crack		HL			Transverse cracks spaced ~3-5' apart, tighter spacing near Pier 409	new									CIP
O&M	101	409	L	Below	20' from Pier 409L	spall	15	4	2	1	Left overhang at a drill hole	no change								2	CIP
0&M	65	409	L	Below	30' from Pier 409L	spall	9	6	2	1	Right overhang at drilled hole with water dripping down	no change	S24-5							1	CIP
0&M	65	409	L	Below	30' from Pier 409L	spall	3	3	1/2	1	with 1" of exposed steel, right overhang	no change							1		CIP
O&M	100	409	R	Below	Junction	spall	15	15	1/2	1	Left overhang at a drill hole with water dripping down causing corrosion on the beam	increase								1	CIP
O&M	100	409	R	Below	Pier 409R	spall	6	6	1	1	with 1" of exposed steel, right overhang, at a drill hole	no change								1	CIP
O&M	100	409	R	Above	throughout	crack		HL			Transverse cracks spaced ~1-3' apart	new									CIP

Appendix D-6 DECK AND TEE BEAM TOP FLANGES Page 23 of 23



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
Starter	11	1	N	L	Rear	Cantilever extension	Exposed Reinforcing					Due to saw cut	no change			1				
Starter	11	1	N	R	Rear	Cantilever extension	Exposed Reinforcing					Due to saw cut	no change			1				
Starter	13	2	N	Right	Exterior	2' from Pier 3N	Spall	6	5	1	1	at a grounding cable	new							
Starter	11	2	N	R	Interior	5ft. from Pier 2N	Patch Delam.	12	10		1		new							1
Starter	13	3	N	Right	Exterior	2' from Pier 3N	Spall	2	2	1/4	1		no change						1	
Starter	13	5	Z	L	Both	14' from Pier 5N	Cutout					The sidewall is cut out for 25" due to clearance from an adjacent building column	new	J8-13-16		1			1	
Starter	13	5	N	R	Exterior	10ft. from Pier 6	Spall	6	2	1	1		new							1
Starter	13	5	N	R	Interior	Pier 5N	Spall	6	5	3/4	1	exposed rebar	could not verify			1			1	
Starter	13	6	N	R	Exterior	4' from Pier 6N	Spall	3	3	1/2	2		no change						2	
Starter	14	6	S	L	Exterior	Midspan	Spall	4	2	1/2	1	exposed rebar	no change			1			1	
Starter	15	6	N	Both	Interior	Throughout	Cracking	28	0.016			wider than typical vertical cracks, spaced 1' to 2' apart	new							
Starter	14	7	S	Both	Interior	Throughout	Cracking	28	0.016			wider than typical vertical cracks, spaced 1' to 2' apart	new							
Starter	15	7	N	L	Exterior	20' from Pier 7N	Spall	5	3	1/2	2	exposed rebar	no change			2			2	
Starter	14	7	S		Interior	Midspan	Spall	12	5	2 1/2	1	exposed rebar	no change			1				1
Starter	14	7	S	L	Exterior	12' from Pier 8	Spall/Delam.	12	5	1	7	exposed rebar	no change			2				5
Starter	15	7	N	R	Interior	Throughout	Cracking		0.02			Vertical cracking in Starter section is more prominent. Some cracks up to 0.020. Spacing varies between 1'- 4'.	no change							
Starter	16	10	S	Both	Interior	Forward half	Cracking		0.016			Vertical/transverse cracks spaced 6" apart	new							



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
Starter	16	11	S	Both	Interior	Rear half	Cracking		0.016			Vertical/transverse cracks spaced 6" apart	new	S23-8						
Starter	15	12	N	L	Exterior	15' from Pier 12	Delam.	2	2	1	1		no change			1			1	
Starter	16	13	S	R	Exterior	15' from Pier 13	Spall	6	3	1/2	1	exposed rebar	no change			1				
Starter	16	13	S	R	Exterior	12' from Pier 14	Spall	3	2	1/2	1	exposed rebar	no change			1				
Starter	15	14	N	R	Exterior	Pier 14	Spall	6	6	1	1	At grounding cable	no change						1	
Starter	15	14	N	L	Exterior	15' from Pier 15	Spall	3	2	1/2	2	exposed rebar	no change			2			2	
Starter	16	14	S	R	Exterior	10' from Pier 14	Spall	1	1	1/4	1	exposed rebar	no change			1			1	
Starter	16	14	S	L	Exterior	Midspan	Spall	3	3	1/2	2	exposed rebar	no change			2				
Starter	20	14	S	L	Exterior	1' from Pier 15	Spall	8	4	1	1	at a grounding cable	no change							1
Starter	20	15	S	R	Exterior	15' from Pier 15	Spall	3	2	1/2	1	exposed rebar	no change			1				
Starter	20	15	S	R	Exterior	15' from Pier 16	Spall	2	1	1/2	1	exposed rebar	no change			1				
Starter	20	16	S	L	Exterior	Pier 16	Spall	1	3	1/4	2	exposed rebar	no change			2			2	
Starter	20	16	S	L	Exterior	20' from Pier 16	Spall	4	2	1/2	1	exposed rebar	no change			1			1	
Starter	20	16	S	L	Exterior	20' from Pier 17	Spall	6	3	1/2	2	exposed rebar	no change			2			2	
Starter	21	16	N	R	Exterior	20' from Pier 17	Spall	3	3	1/2	1	exposed rebar	no change			1			1	
Starter	20	16	S	L	Interior	Pier 16	Spall	3	1	1/4	3	exposed rebar	new	S23-17		3				
Starter	20	17	S	L	Exterior	5' from Pier 17	Spall	6	4	1	1		no change						1	
Starter	20	17	S	R	Exterior	8' from Pier 17	Spall	2	2	1/4	1	exposed rebar	no change			1				
Starter	21	17	N	R	Exterior	4' from Pier 18N	Spall	4	3	1/2	1	At grounding cable	no change						1	
Starter	21	17	N	R	Exterior	1' from Pier 18N	Spall	3	3	1/2	1		no change						1	
Starter	20	18	S	R	Exterior	1' from Pier 18S	Spall	2	2	1/4	1	exposed rebar	no change			1				
Starter	20	18	S	L	Exterior	Post 2	Spall	6	2	1/4	1		no change						1	
Starter	21	18	N	R	Exterior	6' from Pier 18N	Spall	4	1	1/4	2	exposed rebar	no change	_		2				
Starter	21	18	N	R	Exterior	15' from Pier 18N	Spall	6	2	1/2	2	exposed and coated rebar	no change			2				



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
Starter	21	18	N	R	Exterior	20' from Pier 18N	Spall	3	1	1/2	1	exposed and coated rebar	new			1				
Starter	21	18	N	L	Exterior	30' from Pier 18N	Spall	5	2	1/2	1	exposed rebar	no change			1			1	
Starter	20	18	S	L	Exterior	Midspan	Spall	3	2	1/2	1	exposed rebar	no change			1				
Starter	22	18	S	L	Exterior	2' from Pier 19S	Spall	4	4	1/2	1	At grounding cable	no change						1	
Starter	22	19	S	L	Exterior	12' from Pier 19S	Spall	4	2	1/2	1	exposed and coated rebar	no change	J7-2		1				
Starter	21	19	N	L	Exterior	20' from Pier 19N	Spall	6	2	1/4	1	exposed rebar	no change			1				
Starter	22	19	S	L	Тор	24' from Pier 20N	Delam.	18	6		1		no change	S23-22					2	
Starter	21	19	N	R	Exterior	20` from Pier 20N	Spall	6	3	3/4	1	exposed rebar	new			1				
Starter	21	19	N	R	Exterior	1' from Pier 20N	Spall	3	3	1/2	1	At grounding cable	no change						1	
Starter	22	19	S	L	Interior	20ft. from Pier 20	Delam.	18	6		1	Top face	new						2	
Starter	21	19	N	R	Interior	30' from Pier 19N	Patch Delam.	5	3		1		no change	R23-23					1	
Starter	22	20	S	R	Exterior	9' from Pier 20S	Spall	6	2	1/2	1	exposed rebar	no change			1			1	
Starter	23	22	N	L	L	Pier 23N	Faded Station Sign					Paint is faded with areas up to 2in. diameter missing	no change	J6-29						
Starter	23	24	N	R	Exterior	Pier 25N	Spall	3	2	1/2	1	at a grounding cable	new							
Starter	23	25	N			Pier 25N	Spall	3	3	1/4	1		no change						1	
Starter	23	25	N	R	Тор	5' from Pier 25N	Spall	4	3	1/2	1		no change						1	
Starter	22	25	S	L	Exterior	1' from Pier 25	Spall	2	1	1/2	1	exposed rebar	no change			1			1	
Starter	25	25	N	R	Exterior	Pier 26	Spall	4	3	1/2	1	At grounding cable	no change						1	
Starter	24	25	S	L	Exterior	5' from Pier 26	Spall	3	1	1/2	2	exposed and coated rebar	new			2				
Starter	24	25	S	L	Exterior	1' from Pier 26	Spall	4	4	1	1	At grounding cable	new						1	
Starter	24	26	S	R	Тор	Midspan	Spall	6	3	1	1		no change						1	
Starter	25	26	N	R	Exterior	Pier 27N	Spall	6	3	1/2	1	At grounding cable	no change	J6-5					1	
Starter	25	27	N	L	Тор		Spall	24	4	1/2	1		no change							2
Starter	25	27	N	R	Exterior	Pier 27N	Spall	3	2	1/2	1	At cable tray bolt	new	J7-14					1	



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
Starter	24	27	S	L	Exterior	Pier 28S	Spall	5	5	1/2	1	At grounding cable	no change						1	
Starter	24	29	S	R	Exterior	20' from Pier 29	Spall	3	3	1/4	1	exposed rebar	no change			1				
Starter	27	29	N	L	Exterior	25' from Pier 29	Spall	18	3	1	1		no change							2
Starter	27	30	N	R	Exterior	Pier 31	Spall	5	3	1	1	exposed and coated rebar	no change			1				
Starter	27	31	N	R	Exterior	8' from Pier 32	Spall	6	6	1	1		no change						1	
Starter	27	31	N	R	Exterior	6' from Pier 32	Spall	5	5	1	1		no change						1	
Starter	27	31	N	L	Interior	10' from Pier 32	Spall	6	5	1/2	2		no change						2	
Starter	27	32	N	L	Exterior	20' from Pier 33	Spall	4	2	1/2	1	at drilled hole	new						1	
Starter	30	33	S	L	Exterior	Throughout	Spall	2	1	1/4	5	exposed rebar	no change			5			5	
Starter	27	33	N	R	Exterior	1' from Pier 33	Spall	6	5	1	1	At grounding cable	no change						1	
Starter	27	33	N	L	Exterior	15' from Pier 33	Spall	4	2	1/2	1		no change						1	
Starter	30	34	S	R	Exterior	Throughout	Spall	2	2	1/4	5	exposed rebar	no change			5			5	
Starter	30	34	S	L	Exterior	Pier 34	Spall	4	4	1/2	1	At grounding cable	no change						1	
Starter	27	34	N	L	Exterior	20' from Pier 34	Spall	4	1	1/2	3	exposed rebar	increase			1			1	
Starter	29	35	N	L	Exterior	Pier 35	Spall	3	3	1/2	1	exposed rebar	increase (pre. delam)			1				
Starter	29	35	N	L	Exterior	12' from Pier 36	Spall	1	1	1/4	1		new						1	
Starter	29	35	N	R	Exterior	20' from Pier 36	Spall	5	5	1/2	1		no change						1	
Starter	29	35	N	R	Exterior	15' from Pier 36	Spall	1	1	1/2	1	exposed rebar	new			1			1	
Starter	29	35	N	R	Exterior	10' from Pier 36	Spall	4	3	1/4	2	exposed rebar	no change			2				
Starter	29	35	N	R	Exterior	6' from Pier 36	Spall	5	5	1/2	2		no change						1	
Starter	30	35	S	L	Exterior	15' from Pier 36	Spall	2	2	1/4	1	exposed rebar	new			1				
Starter	30	35	S	L	Exterior	2' from Pier 35	Spall	3	3	1/4	1	exposed rebar	no change			1				
Starter	30	35	S	L	Exterior	6' from Pier 35	Spall	6	3	1/2	2	exposed rebar	no change			2				
Starter	29	35	N	R	Interior	5' from Pier 35	Delam.	9	6		1	Delamination in the top of the sidewall.	New						1	



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
Starter	29	36	N	L	Exterior	Midspan	Spall	8	6	1/4	1		no change							1
Starter	29	36	N	L	Exterior	Midspan	Spall	3	1	1/4	3	exposed rebar	increase			2				
Starter	29	36	N	L	Exterior	15ft from Pier 37	Spall	1	1	1/4	2	exposed rebar	new			1				
Starter	29	36	N	R	Exterior	20' frim Pier 37	Spall	6	4	1	1		no change						1	
Starter	30	36	S	R	Exterior	4' from Pier 36	Spall	3	1	1/4	1	exposed rebar	new			1				
Starter	30	36	S	L	Exterior	20' from Pier 36	Spall	3	3	1/2	1	exposed rebar	no change			1				
Starter	30	36	S	L	Exterior	Midspan	Spall	5	5	1/2	2		no change						2	
Starter	30	37	S	L	Interior	20' from Pier 37	Spall	3	1	1/4	1		no change						1	
Starter	30	37	S	R	Interior	20' from Pier 37	Spall	4	2	1/4	1		no change						1	
Starter	30	37	S	L	Exterior	20' from Pier 37	Spall	8	3	1/2	1		no change							1
Starter	29	37	N	R	Тор	2' from Pier 38	Exposed Reinforcing	1/2					no change			1				
Starter	29	38	N	L	Exterior	10' from Pier 38	Spall	1	1	1/2	1	exposed rebar	no change			1				
Starter	29	38	N	R	Exterior	1' from Pier 38	Spall	5	5	1	1	At grounding cable	no change						1	
Starter	29	38	N	R	Exterior	10' from Pier 38	Spall	2	1	1/4	1	exposed rebar	increase (pre. delam)			1				
Starter	29	38	N	R	Exterior	15' from Pier 38	Spall	3	3	1/4	1	exposed rebar	no change			1				
Starter	29	38	N	R	Exterior	20' from Pier 38	Spall	5	3	1/2	2	exposed rebar	no change			2				
Starter	31	39	N	L	Exterior	15' from Pier 40N	Spall	2	2	1/4	1	exposed rebar	no change			1				
Starter	32	39	S	L	Exterior	1' from Pier 39S	Spall	5	5	1/2	1	At grounding cable	no change						1	
Starter	32	39	S	L	Exterior	1' from Pier 39S	Spall	2	1	1/4	1	exposed rebar	no change			1				
Starter	32	39	S	L	Exterior	Pier 40N	Spall	3	1	1/2	1	exposed rebar	no change			1				
Starter	31	40	N	L	Exterior	Throughout	Cracking		HL			Typical vertical cracking in the sidewall, hairline, spaced less than 3' apart.	no change							
Starter	31	40	N	R	Exterior	middle third	Spall	2	1	1/4	9	exposed rebar	no change			6				
Starter	33	40	N	R	Exterior	20ft. from Pier 41	Spall	2	1	1/4	1	exposed rebar	no change			1				
Starter	33	40	N	L	Exterior	Pier 41N	Spall	5	2	1/4	1	Inside Overflow Cutout	no change			1				



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
Starter	31	40	N		Тор	8' from Pier 40N	Spall	3	2	1/4	1		no change						1	
Starter	33	40	N	R	Exterior	15ft. from Pier 41N	Spall	6	2	1/2	1	Inside Overflow Cutout	new			1				
Starter	31	40	N	L	Exterior	Throughout	Spall	6	2	1/4	13	exposed rebar	new			13				
Starter	32	40	S	L	Exterior	15' from Pier 41S	Spall	5	3	1/2	2	exposed rebar	no change			2			2	
Starter	32	40	S	L	Exterior	1' from Pier 41S	Spall	6	5	1/2	1	At grounding cable	no change						1	
Starter	32	40	S	R	Exterior	1/3 Span	Spall	3	1	1/4	2	exposed rebar	no change			2			2	
Starter	32	40	S	R	Exterior	20' from Pier 41S	Spall	5	3	1/2	1	exposed and coated rebar	no change			1			1	
Starter	32	40	S	R	Exterior	8' from Pier 41S	Spall	4	1	1/2	1	exposed rebar	no change			1			1	
Starter	32	41	S	L	Exterior	10' from Pier 41S	Spall	3	1	1/4	1	exposed rebar	no change			1			1	
Starter	35	41	N	R	Exterior	L5' from Pier 42ነ	Bolts					Two 3" L protruding bolts for cable tray that does not extend that far. Not Significant.	no change							
Starter	35	42	N	L	Exterior	6' from Pier 43N	Spall	2	1	1/4	2	exposed rebar	no change			1				
Starter	35	42	N	R	Exterior	5' from Pier 43N	Spall	2	1	1/4	2	exposed rebar	new			1				
Starter	35	42	N	R	Exterior	20' from Pier 42N	Delam.	3	2		1		new						1	
Starter	35	43	N	R	Exterior	1' from Pier 43N	Spall	6	6	1/2	1	At grounding cable	no change						1	
Starter	37	44	N	L	Exterior	Midspan	Spall/Delam.	4	3	1/4	2	exposed rebar	no change			2				
Starter	34	44	S	R	Exterior	Midspan	Spall	3	3	1/2	1	exposed and coated rebar	no change			1				
Starter	34	45	S	R	Exterior	5' from Pier 45S	Spall	2	2	1/4	1		no change						1	
Starter	34	46	S	L	Exterior	3' from Pier 46S	Exposed Reinforcing	2					no change			1				
Starter	34	46	S	L	Exterior	10' from Pier 46S	Spall	5	3	1	1		no change						1	
Starter	34	46	S	L	Тор	20' from Pier 47S	Spall	12	4	1/2	1		no change							1
Starter	37	46	N	R	Exterior	12' from Pier 47N	Spall	4	2	1/4	1	exposed rebar	no change			1			1	
Starter	37	46	N	R	Exterior	4' from Pier 47N	Spall	2	1	1/4	1	exposed rebar	no change			1			1	
Starter	37	46	N	R	Exterior	Pier 47N	spall	6	3	1/2	1	exposed rebar	no change			1				



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
North	37	47	L	R	Exterior	Pier 47N	Spall	6	5	2	1		no change							1
North	34	47	R	L	Exterior	3' from Pier 47S	Spall	4	3	1/2	1		no change						1	
North	34	47	R	L	Exterior	1' from Pier 48R	Spall	3	2	1/2	1		no change						1	
North	39	48	L	L	Exterior		Spall	2	1.5	1/2	1		no change						1	
North	39	48	L	R	Exterior	1' from Pier 48L	Spall	6	4	1/2	1	At grounding cable	no change						1	
North	34	48	R	R	Exterior	Throughout	Cracking		HL			Typical vertical cracking, 12 with efflorescence	no change		12					
North	36	49	R	R	Exterior	Throughout	Cracking		HL			Hairline vertical cracking at 2' centers.	no change							
North	36	49	S	L	Interior	Throughout	Cracking	28	HL		10	Vertical cracks with efflorescence	New		10					
North	36	50	R	R	Exterior	Throughout	Cracking		HL			Hairline vertical cracking at 2' centers.	no change							
North	36	50	R	L	Exterior	Midspan	Spall	6	3	1/2	1	exposed rebar	no change						1	
North	39	50	L	R	Exterior	6' from Pier 51L	Spall	3	2.5	1/2	1	exposed rebar	no change			1				
North	39	50	L	R	Exterior	4' from Pier 51L	Spall	6	4	3/4	1	exposed rebar	no change						1	
North	39	50	L	R	Exterior	1' from Pier 51L	Spall	6	5	1	1	At grounding cable	no change						1	
North	36	50	R	R	Exterior	Pier 51	Spall	10	3	3/4	1		no change	J11-26						1.5
North	36	50	S	L	Interior	Throughout	Cracking	28	HL		20	Vertical cracks with efflorescence	New		20					
North	39	51	L	L	Exterior	5' from Pier 52	Spall	12	2	1/2	2	exposed rebar	no change							2
North	39	51	L	L	Exterior	12' from Pier 52	Spall	3	2	1/2	2	exposed rebar	no change			2				
North	39	51	L	L	Exterior	3' from Pier 51	Spall	2	2	1/2	1	exposed rebar	no change			1				
North	36	51	R	L	Exterior	4' from Pier 51	Spall	2	1	1/2	1	exposed rebar	no change			1				
North	36	51	R	L	Exterior	10' from Pier 52	Spall	6	3	1/2	2		no change							1
North	36	51	R	R	Exterior	Throughout	Cracking		HL			Hairline vertical cracking at 2' centers.	no change							
North	36	51	R	R	Exterior	3ft. from Pier 51	Spall	3	3	1/2	1	exposed and coated rebar	no change			1				
North	41	52	L	R	Exterior	3' from Pier 53	Spall	3	3	1/4	1		no change						1	



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
North	40	52	R	L	Exterior	3' from Pier 53	Spall	5	5	1/2	1		no change						1	
North	40	53	R	L	Exterior	Midspan	Spall	4	2	1/2	1	exposed rebar	no change			1			1	
North	40	53	R	L	Exterior	4' from Pier 54	Spall	4	1	1/4	2	exposed rebar	no change			2			2	
North	41	54	L	R	Exterior	20' from Pier 54	Spall/Delam.	5	3	1/2	1		no change			1			1	
North	40	54	R	L	Exterior	2' from Pier 55	Spall	5	5	1/2	1	At grounding cable	no change						1	
North	41	55	L	R	Exterior	Pier 55	Spall	5	2	1/2	3	exposed rebar	no change			3				
North	40	55	R	L	Exterior	20' from Pier 55	Spall	3	3	1/2	2	exposed rebar	no change			1				
North	40	55	R	L	Exterior	4' from Pier 55	Spall	3	1	1/2	1	exposed rebar	no change			1			1	
North	41	55	L	L	Interior	Throughout	Spall/Delam.	14	6	1/2	15	Spalls/delaminations along 18' of the sidewall near midspan and also near Pier 55		J14-30, 31, 32		1			9	5
North	41	56	L	R	Exterior	3' from Pier 56	Spall	2	1	1/4	1	exposed rebar	no change			1				
North	40	56	R	L	Exterior	6' from Pier 56	Spall	1	1	1/4	1	exposed rebar	no change			1				
North	40	57	R	R	Interior	5' from Pier 57	Spall/Delam.	4	3	1/2	3	exposed rebar	New	J14-5		2				
North	40	57	R	R	Interior	13' from Pier 57	Spall	3	3	1/2	1	exposed rebar	New			1				
North	40	57	R	R	Interior	18' from Pier 58	Delam.	6	6		2		New						1	
North	40	57	R	R	Interior	12' from Pier 58	Delam.	4	4		1		New						1	
North	40	57	R	R	Interior	7' from Pier 58	Delam.	6	6		3		New						3	
North	40	57	R	R	Interior	25' from Pier 58	Spall	5	5	1/2	1	exposed rebar	New			1				
North	43	57	L	R	Exterior	Pier 57	Spall	3	3	1	1		no change						1	
North	43	57	L	R	Interior	Pier 57	Spall	3	3	1	1	At grounding cable	no change						1	
North	40	57	R	L	Exterior	20' from Pier 57	Spall	15	4	1/4	2		no change							2
North	40	57	R	L	Exterior	2' from Pier 58	Spall	6	3	1/2	1	exposed rebar	no change			1				
North	40	57	R	L	Exterior	Pier 58	Spall	6	3	3/4	1	exposed rebar	no change			1				
North	43	57	L		Exterior	Pier 58	Spall	3	2.5	5	1		no change							1
North	42	58	R	R	Interior	30' from Pier 59	Delam.	4	4		1		New						1	



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
North	40	58	R	L	Exterior	3' from Pier 58	Spall	2	2	1/2	1		no change						1	
North	43	58	L	R	Exterior	Midspan	Spall	3	2	1/2	1	exposed rebar	no change			1				
North	42	59	R	R	Interior	25' from Pier 60	Spall	3	3	1/2	1		New						1	
North	43	60	L	R	Interior	Throughout	Cracking		HL			Typical vertical hairline cracks	no change							
North	43	60	L	R	Exterior	Pier 60	Spall	4	4	1/2	1	At grounding cable	no change						1	
North	42	60	R	L	Exterior	2' from Pier 60	Spall	6	3	1	1		no change						1	
North	43	60	L	R	Exterior	5' from Pier 60	Spall	3	2	1/2	1	exposed rebar	no change			1			1	
North	43	60	L	R	Exterior	6' from Pier 60	Spall	3	2	1	2		no change						2	
North	42	60	R	L	Exterior	Pier 61	Spall	3	3	1/2	1		no change						1	
North	42	61	R	L	Interior	10' from Pier 62	Spall	3	2	1/2	1	exposed rebar	New			1				
North	42	61	R	L	Exterior	1' from Pier 61R	Spall	4	3	1/2	1	At grounding cable	no change						1	
North	45	61	L	L	Exterior	3' from Pier 62L	Spall	6	5	1/2	1	At grounding cable	no change						1	
North	42	61	R	L	Exterior	1' from Pier 62R	Spall	6	3	1/2	1		no change						1	
North	43	61	L	R		Pier 61L	Drill Holes				10	1/2" Dia. X 6" D.	new							
North	45	62	L	L	Interior	Pier 62L	Delam.	6	6		1		New						1	
North	45	62	L	R	Interior	Pier 62L	Spall	3	3	1/2	1		No change						1	
North	45	62	L	R		10' from Pier 62L	Drill Hole	2			1		No change			1				
North	45	66	L	R		Pier 66	Drill Holes				2		No change							
North	46	66	R	R	Exterior	Pier 66R	Spall	2	2	1/2	2	exposed rebar	no change			2			2	
North	45	66	L	R	Exterior	Pier 67L	Spall	4	2	1/2	1	exposed rebar	new			1				
North	45	66		R	Exterior	3' from Pier 66	Spall	6	4	1/2	1		no change						1	
North	46	66	R	L	Exterior	3' from Pier 66R	Spall	4	3	1/2	1	At grounding cable	no change						1	
North	45	66	L	R	Exterior	Midspan	Spall	5	3	1/2	1	exposed rebar	no change			1				
North	45	66	L	R	Interior	Midspan	Spall	7	1	1/2	1	Spall with exposed steel	New							1
North	45	67	L	R	Exterior	1' from Pier 67L	Spall	8	6	1/2	1	At grounding cable	no change							1
North	46	67	R	L	Exterior	1' from P67R	Spall	5	5	1/2	1		no change						1	



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
North	47	67	L	R	Exterior	1' from Pier 68	Spall	12	6	1/2	1		no change							1
North	46	67	R	R	Exterior	40' from Pier 67	Spall	1	1	1/2	1		new							
North	47	67	L	R	Exterior	20' from Pier 68	Spall	5	3	1/2	1	exposed rebar	new							1
North	47	68	L	R	Exterior	Throughout	Spall	6	6	1	11	exposed rebar	no change			5			6	
North	46	68	R	L	Exterior	1' from Pier 68	Spall	6	5	1/2	1	At grounding cable	no change						1	
North	46	68	R	L	Exterior	Midspan	Spall	3	2	1/2	1	exposed rebar	no change			1			1	
North	46	69	R	L	Interior	15' from Pier 70	Delam.	12	6		1		New						1	
North	47	69	L	R	Exterior	Throughout	Drill Holes				14	1" Diam x 6" D	no change							
North	47	69	L	R	Exterior	3' from Pier 69	Spall	6	6	1/2	1	At grounding cable	no change						1	
North	46	69	R	L	Exterior	3' from Pier 69	Spall	6	6	1/2	1		no change						1	
North	47	69	L	R	Exterior	Midspan	Spall	4	3	1/2	2	exposed rebar	no change			2			2	
North	47	69	L	R	Exterior	25' from Pier 70	Spall	12	4	1/2	2	exposed rebar	no change	S21-4		2				2
North	47	69	L	R	Exterior	15' from Pier 70	Spall	4	4	1/4	2	exposed rebar	no change			2			2	
North	46	69	R	R	Exterior	15' from Pier 70	Spall	3	2	1/2	1	exposed rebar	no change			1			1	
North	47	70	L	R	Exterior	Throughout	Drill Holes					1" Diam. x 4" D	no change							
North	46	70	R	L	Exterior	1' from Pier 70	Spall	3	1	1/4	1	At grounding cable	no change						1	
North	47	70	L	R	Exterior	20' from Pier 70	Spall	4	3	1/2	1	exposed rebar	no change			1				
North	47	71	L	R	Exterior	1' from Pier 71	Spall	8	6	1	1	At grounding cable	no change							1
North	46	71	R	L	Exterior	1' from Pier 71	Spall	5	5	1/2	1		no change						1	
North	47	72	L	R		Pier 72	Drill Holes				1	1" Dia. X 6" D.	No change							
North	47	72	L	R	Exterior	1' from Pier 72	Spall	10	5	1/2	1		No change							1
North	47	72	L	R	Exterior	30ft. from Pier 72	Spall	4	3	1/2	2	exposed rebar	no change			2				
North	46	72	R	L	Exterior	20' from Pier 73	Spall	5	3	1/4	2	exposed rebar	no change			2			2	
North	47	72	L	R	Exterior	10' from Pier 73	Spall	4	3	1/2	1		no change						1	
North	47	73	L	R	Exterior	1' from Pier 73	Spall	4	5	1/2	1	At grounding cable	no change						1	



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
North	46	73	R	L	Exterior	1' from Pier 73	Spall	6	6	1	1		no change						1	
North	47	74	L	R	Exterior	2' from Pier 74	Spall	5	5	1/2	1		no change						1	
North	46	74	R	L	Exterior	2' from Pier 74	Spall	3	3	1/2	1	At grounding cable	no change						1	
North	47	74	L	R	Exterior	Midspan	Spall/Delam.	4	4	1/4	3	exposed rebar	no change			2			1	
North	51	74	L	L	Exterior	Pier 75	Spall	8	4	2	1		no change							1
North	47	74	L	R		Pier 74	Drill Holes				6	1" Dia. X 6" D.	New							
North	51	75	L	L	Exterior	3' from Pier 75	Spall	4	3	1/2	1		no change						1	
North	51	75	L	R	Exterior	4' from Pier 75	Spall	7	5	1/2	1	At grounding cable	no change							1
North	50	77	R	R		Throughout	Drill Holes					1" Dia. x 6" D	No change							
North	50	77	R	L		Throughout	Drill Holes					1" Dia. x 6" D	No change							
North	51	77	L	R		Throughout	Drill Holes					1" Dia. x 6" D	No change							
North	50	78	R	R	Interior	Midspan	Spall	10	5	1/2	2		No change	J14-17						1
North	50	78	R	L		3' from Pier 79R	Drill Holes					1" Dia. x 6" D	No change							
North	51	78	L	R	Exterior	2' from Pier 78	Spall	3	3	1/2	3	exposed rebar	no change			2			2	
North	51	78	L	R	Exterior	Near Pier 78	Drill Holes					2" dia. x 1/2" D, misdrilled walkway holes.	no change							
North	50	78	R	L	Exterior	Near Pier 78	Drill Holes					2" dia. x 1/2" D, misdrilled walkway holes.	no change							
North	51	78	L	R		Midspan	Drill Holes					1" Dia. x 6" D	No change							
North	50	78	R	L	Exterior	Pier 79R	Spall	6	3	1/2	1		no change						1	
North	51	79	L	R		Throughout	Drill Holes					1" Dia. x 6" D	No change							
North	51	80	L	R	Exterior	Pier 80L	Spall	8	8	1	1	At grounding cable	no change							1
North	50	80	R	L	Exterior	3' from Pier 81R	Spall	7	4	1/2	1	At grounding cable	no change							1
North	52	81	R	R	Exterior	10' from Pier 82R	Spall	7	3	1	1	exposed rebar	no change	R22-10		1				1
North	51	81	L	R	Exterior	Pier 81L	Spall	8	4	1/2	1	exposed rebar	new			1			1	



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
North	53	83	L	L	Exterior	Throughout	Cracking		HL			Typical vertical cracking in decorative sidewall, spaced less than 3' apart	no change	S22-2						
North	53	83	L	L	Exterior	Pier 83L	Spall	4.5	2.5	1	1	exposed rebar	no change			1			1	
North	53	83	L	L	Exterior	11' from Pier 83L	Spall	2.5	2.5	3/4	1	exposed rebar	no change			1			1	
North	53	84	L	R	Front	Pier 85L	Spall	6	3	1/2	1		No change						1	
South	95	199	L	L	Exterior	Pier 199L	Spall/Delam.	24	5	1	1		no change						2	
South	95	200	L	L	Exterior		Silicone Patches				6		no change							
South	95	201	L	L	Exterior		Silicone Patches				8		no change	J1-20						
South	95	202	L	R	Exterior	Pier 203L	Cracking	32	HL		1	with efflorescence	no change		1					
South	95	202	L	R	Exterior	5' from Pier 202L	Spall	8	4	1/4	1		no change						1	
South	95	202	L	R	Interior	6' from Pier 203L	Cracking		HL			Random hairline cracking	no change							
South	93	203	Cross	L	Тор	Throughout	Delam.	240	6		1	Top surface has transverse cracks up to 0.020" wide and intermittent delaminations throughout	new	R5-18					20	
South	93	204	L	L	Interior		Spall	6	5	1/2	1		no change						1	
South	93	204	Cross	R	Both	Pier 204 Mid	Cracking	29	0.06		1	Full height, wraps over	new	R5-20			1			
South	92	204	R	R	Тор	Pier 205R	Delam.	16	5		1	with transverse cracking	increase						2	
South	92	204	R	R	Тор		Cracking		0.012			Transverse cracking typical throughout	no change							
South	92	205	R	R	Тор	Pier 205R	Delam.	17	5		1	with transverse cracking	increase						2	
South	93	205	L	R	Interior	throughout	Cracking		0.03		7	Typical vertical and random cracks with some with moderate lefflorescence	new		7					

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Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
South	90	205	R	L	Interior	Throughout	Cracking		0.03			Typical vertical cracks. Average width is hairline, max is 0.03", some with light efflorescence	no change	R5-23	4					
South	90	205	R	R	Interior	Throughout	Cracking		0.03			Typical vertical cracks. Average width is hairline, max is 0.03"	no change							
South	92/93	206	?	L	Exterior	8' from Pier 207	Spall	4	4	1	1		no change						1	
South	90	206	R			Pier 207R	Spall	15	1	3	1		no change							1
South	90	207	R	L	Exterior	10' from Pier 207	Spall	2	1	1/4	3	exposed rebar	increase	J1-4		3				
South	91	207	L	R	Exterior	15' from Pier 208	Cracking	10	0.01		1	with efflorescence	New		1					
South	90	207	R	R	Exterior	20' from Pier 208	Cracking	32	0.015		2	2' L vertical crack	No change							
South	91	207	L	R	Interior	throughout	Cracking		0.03		12	Typical vertical and random cracks with some with moderate efflorescence	new		12					
South	90	207	R	R	Midspan	Throughout	Cracking	24	HL			Random cracking with efflorescence	new	R5-31						
South	90	207	R	L	Interior	Throughout	Cracking		HL			Typical hairline vertical cracking	no change							
South	91	208	L	L	Exterior		Spall	3	3	3/4	11	exposed rebar	No change			7			4	
South	91	208	L	R	Exterior	Pier 209	Spall	2	1	1/2	2	exposed rebar	No change			2				
South	90	208	R	R	Exterior	Throughout	Cracking	32	HL			Typical hairline vertical cracking with efflorescence	increase		9					
South	91	208	L	L	Interior	throughout	Cracking		0.03		3	Typical vertical and random cracks with some with moderate efflorescence	new		3					
South	91	208	L	R	Interior	throughout	Cracking		0.03		8	Typical vertical and random cracks with some with moderate efflorescence	new		8					



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
South	90	208	R	R	Interior	Throughout	Cracking		0.03			Typical vertical cracks. Average width is hairline, max is 0.03", some with light efflorescence	new		3					
South	91	209	L	R	Exterior	Pier 209	Spall	1	3	1/2	6	exposed rebar	No change			2				
South	90	209	R	R	Exterior	6' from Pier 209	Spall	4	2	1/4	1	exposed rebar	No change			1				
South	91	209	L		Interior	6' from Pier 210	Spall	6	4	2	1		no change							1
South	91	209	L	R	Interior	throughout	Cracking		0.03		2	Typical vertical and random cracks with some with moderate efflorescence	new		2					
South	91	209	L	L	Interior	throughout	Cracking		0.03		9	Typical vertical and random cracks with some with moderate efflorescence	new		9					
South	90	209	R	L	Interior	Midspan	Cracking		0.03			Typical vertical crack with light efflorescence	new		1					
South	90	210	R	R	Exterior	Throughout	Spall	3	1	1/4	20	exposed rebar	No change			20				
South	91	210	L	L	Exterior	6' from Pier 211	Spall	6	4	3/4	3		No change						3	
South	91	210	L	L	Interior	throughout	Cracking		0.03		6	Typical vertical and random cracks with some with moderate efflorescence	new		10					
South	90	210	R	R	Interior	20' from Pier 210	Cracking		0.03		1	Typical vertical crack with light efflorescence	new		1					
South	91	211	L	L	Exterior	Throughout	Cracking	18	HL		9	with efflorescence	no change		9					
South	90	211	R	R	Exterior	Throughout	Spall	3	1	1/4	30	exposed rebar	No change			20			10	
South	91	211	L	L	Interior	throughout	Cracking		0.03		12	Typical vertical and random cracks with some with moderate efflorescence	new	R5-62	12					



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
South	90	211	R	R	Interior	Throughout	Cracking		0.03		2	Typical vertical cracks with light efflorescence	new		2				,	
South	84	212	R	L	Exterior	15' from Pier 212	Spall	12	4	1/2	1	exposed rebar	No change	J1-16		1				
South	84	212	R	R	Exterior	Midspan	Spall	3	1	1/4	2	exposed rebar	No change			2				
South	91	212	L	L	Interior	throughout	Cracking		0.03		6	Typical vertical cracks with light efflorescence	new		6					
South	85	213	L	R	Interior	Throughout	Spall	2	2	1/4	40	exposed rebar	no change			20			40	
South	84	213	R	R	Interior	Throughout	Cracking		0.03		12	Vertical and map cracks with light efflorescence	new	R5-38	12					
South	85	214	L	L	Exterior	20' from Pier 214	Spall	2	2	1/4	2	exposed rebar	no change			2			2	
South	85	214	L	L	Exterior		Spall	4	1	1/2	1		no change						1	
South	85	214	L	L	Exterior		Cracking		0.03			2' L vertical crack	no change							
South	84	214	R	R	Interior	Midspan	Cracking		0.03		3	Vertical and map cracks with light efflorescence	new		3					
South	85	215	٦	L	Exterior		Cracking	6	HL			Located on the lower portion of the wall.	no change							
South	85	216	L	R	Exterior	10ft from Pier 216	spall	3	2	1/2	6	exposed rebar	no change			6				
South	85	216	L	L	Interior	throughout	Cracking		0.03		6	Typical vertical cracks with light efflorescence	new		6					
South	85	216	L	L	Interior	throughout	Cracking		0.01			Hairline map cracking, some with efflorescence	new	R5-60	14					
South	84	217	R	R	Interior	Throughout	Cracking	12	HL		17	with efflorescence	no change	R5-47	17					
South	82	218	R	R	Exterior	12' from Pier 218R	Spall	4	2	1/4	2	exposed rebar	no change			2				
South	82	218	R	R	Exterior	20' from Pier 219R	Spall	4	2	1/4	5	exposed rebar	no change			5				
South	83	218	L	L	Interior	2ft and 15ft. from Pier 218	spall	2	2	1/4	2	exposed rebar	new			2				
South	83	219	L	L	Interior	throughout	Cracking		0.03		5	Typical vertical cracks with light efflorescence	new		5					
South	82	219	R	R	Interior	throughout	Cracking		0.03		9	Typical vertical cracks with light efflorescence	new		9					
South	82	219	R	R	Rear	Pier 219R	Exposed Reinforcing					Shallow Cover	no change	R5-50		1				



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
South	82	220	R	R	Exterior	10' from Pier 220R	Spall	2	1	1/4	1	exposed and coated rebar	new			1				
South	82	220	R	R	Exterior	20' from Pier 221R	Spall	5	2	1/4	11	exposed and coated rebar	no change			11				
South	82	221	R	R	Exterior	10' from Pier 222R	Spall	4	3	1/4	1	exposed and coated rebar	no change			1				
South	83	222	L	L	Exterior	Throughout	Spall	4	3	1/2	10	exposed and coated rebar	no change			5			5	
South	82	222	R	R	Exterior	Throughout	Spall	5	2	1/4	40	Approximately 10 uncoated with active corrosion	no change			20			20	
South	83	222	L	L	Exterior	Above Pier 223L	Cracking	14	0.013		1	vertical crack	new							
South	83	223	L	R	Exterior	14' from Pier 224L	Spall/Delam.	3	3	1/2	15	popouts, some with exposed and corroded rebar	no change		8				7	
South	82	223	R	R	Interior	Throughout	Spall	4	3	1/2	5		No change						5	
South	82	223	R	L	Interior	Throughout	Cracking	24	HL		8	Typical vertical cracks, 8 with efflorescence	new		8					
South	81	225	L	L	top	throughout	Delam.	240	6		2	Top face	new	J10-39					30	
South	82	225	R	L	Interior	Pier 225R	Delam.	7	2		1		no change						1	
South	80	225	R	R	Interior	Midspan	Spall	3	3	1/2	4	At drill holes	No change						4	
South	81	226	L	L	Exterior	6' from Pier 227	Spall	2	1	1/4	1		no change						1	
South	80	226	R	R	Exterior	Throughout	Cracking		HL			Typical vertical hairline cracks.	no change	J3-4						
South	81	227	L	L	Exterior	Pier 228	Spall	18	4	1/2	1		no change	J3-22						1.5
River	80	228	R	R	Interior	15ft. from Pier 229	Cracking	24	0.02		1		new							
River	81	229	L	L	Exterior	Pier 229	Cracking		HL			Random hairline cracking	no change							
River	80	230	R	R	Interior	8' from Pier 230	Spall	4	5	1/2	1		no change	J10-10					1	
River	80	231	R	R	Interior	15' from Pier 231	Spall	4	4	1/2	2		no change						2	
River	76	235	R	L	Exterior	3' from Pier 236R	Spall	3	3	1/2	1		no change						1	
River	74	237	R	R	Exterior	4' from Pier 237R	Spall	6	4	1	1		No change						1	
River	75	240	L	L	Exterior	Pier 240	Spall	20	8	2	1	Exposed rebar	new	J26-2						1
River	73	240	L	R	Exterior	1' from Pier 241	Spall	3	3	1/2	1	At grounding cable	no change						1	



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
River	74	240	R	R	Interior	10' from Pier 240R	Bolts					Two abandoned bolts with corrosion	no change							
River	70	241	R	L	Exterior	2' from Pier 242	Spall	6	6	1	1	At grounding cable	no change						1	
River	70	241	R	R	Interior	25' from Pier 242	Spall	2	2	1/2	1		no change						1	
River	71	243	L	R	Exterior	1' from Pier 243	Spall	4	5	1/2	1	At grounding cable	No change						1	
River	70	243	R	L	Interior	Midspan	Spall	4	2	1/2	3	exposed rebar	no change			3			3	
River	71	244	L	R	Exterior	1' from Pier 245	Spall	6	4	1	1	At grounding cable	no change						1	
River	71	244	L	L	Both	Pier 244	Delam.	12	2		1		new						1	
River	70	244	R	R	Interior	25' from Pier 245	Spall	3	1	1/2	1	exposed rebar	no change			1			1	
River	70	244	R	R	Interior	15' from Pier 245	Cracking	24	0.02		1	vertical crack	new							
River	70	245	R	L	Interior	15' from Pier 245	Cracking	24	0.02		1	vertical crack	new							
River	70	245	R	R	Interior	midspan	Spall	2	2	1/2	2	exposed rebar	no change			2			2	
River	71	246	L	L	Interior	Throughout	spall	3	2	1/4	11	exposed and coated rebar	new			11				
River	70	247	R	L	Exterior	4' from Pier 247	Spall	6	6	1/2	1	At grounding cable	no change						1	
River	69	247	L	R	Front	Pier R-1	Spall	18	3	4	1		no change	S10-29						1.5
River	66	R5	R	L	Тор	10' from Pier R- 6	Spall	19	3	3	1	At walkway support bracket	no change	R28-10						2
River	67	R6	L	R	Interior	Pier R-6	Spall	12	7	3	1	2 exposed rebar	new	S28-29						
River	67	R6	L	R	Interior	Throughout	Cracking		HL		3	Typical vertical crack with light efflorescence	new		3					
River	66	250	R	L	Exterior	1' from Pier 250	Spall	6	6	1/2	1	At grounding cable	No change						1	
River	67	250	L	R	Exterior	Pier 251	Spall	6	6	1/2	1	At grounding cable	no change						1	
River	66	250	R	L	Interior	20' from Pier 251	Cracking		HL			significant hairline map cracking for 10'.	no change	R28-16			10			
River	67	250	L	R	Interior	5' from Pier 250	Patch failure	3	2	1/2	1	2 exposed rebar	new			1			1	
River	67	251	L	R	Exterior	Pier 252	Spall	4	4	1/2	1	At a drill hole	new							
River	67	252	L	R	Exterior	10' from Pier 252	Exposed Reinforcing	1	_				No change			1				
River	67	252	L	R	Interior	50' from Pier 252	Spall	6	6	1/2	1		no change						1	



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)	Ht/Wi (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
River	66	253	R	R	Interior	30' from Pier 253	Delam.	480	6			Areas of delamination on the top of the sidewall for approx. 40'.	New	R28-19					40	
River	64	254	R	R	Interior	Pier 255	Spall	7	1	1/2	1	Associated with a full height wrap over crack up to 0.013" wide.	no change							1
River	65	255	L	R	Exterior	1' from Pier 256L	Spall	4	5	1	1		no change						1	
River	64	256	R	L	Exterior	Pier 256R	Spall	4	4	1	1		no change						1	
River	65	256	L	R	Interior	Throughout	Cracking		HL			Circular cracks with efflorescence spaced 2ft apart	new	S19-26-27	10					
River	62	257	R	R	Exterior	Pier 257R	Cracking		HL			Transverse	no change		1					
River	63	257	L	L	Interior	Pier 258L	Cracking		0.06		1	Full height, wraps over	no change				1			
River	62	259	R	L	Exterior	Throughout	Cracking	28	HL			Typical vertical hairline cracks, two with efflorescence	new		2					
River	62	259	R	R	Exterior	Throughout	Cracking	28	HL			Typical vertical hairline cracks, five with efflorescence	new		5					
River	63	259	L	R	Exterior	1' from Pier 259L	Spall	8	4	1/2	1	At grounding cable	no change							1
River	60	259	R	L	Exterior	1' from Pier 260L	Spall	5	5	3/4	1	At grounding cable	new							1
River	60	261	R	L	Exterior	Throughout	Cracking	28	HL			Typical vertical hairline cracks, two with efflorescence	new		2					
River	60	261	R	R	Exterior	Throughout	Cracking	28	HL			Typical vertical hairline cracks, one with efflorescence	new		1					
River	61	261	L	R	Exterior	2' from Pier 261L	Spall	3	3	1/2	1	At grounding cable	no change						1	
0&M	108	M2	-	R	Interior	?	Spall	7	4	1/2	1		new	R19-5						1
0&M	107A	M4	-	R	Exterior	1' from Pier M5	Spall	8	8	1	1	At a drill hole	no change	J4-20						1
0&M	107A	M5	-	L	Тор	Pier M5	Spall/Delam.	360	6	1/2	1	Top face	no change	S19-10					30	
0&M	106	400	R	R	Exterior	Pier 400	Spall	4	4	2	1		no change						1	



Line	Block	Span	Beam	Sidewall	Face	Location	Deficiency Type	Max Length (in)		Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	CS2 Crack (LF)	CS3 Crack (LF)	Spall /patch (CS2)	Spall (CS3)
0&M	106	402	L	L	Exterior	1' from Pier 402	Spall	4	4	1/2	1	at a drilled hole	no change						1	
0&M	106	403	R	R	Exterior	Midspan	Spall	4	4	1/2	1	front face of right overhang	no change						1	
0&M	105B	404	L	L	Exterior	5' from Pier 404L	Spall	8	5	1	1		no change	J18-3						1
O&M	104	405	R	L	Exterior	Pier 405	Spall	4	3	1	2		new						1	
O&M	104	405	R	R	Interior	Throughout	Cracking		HL			Typical vertical cracks, some with efflorescence	new	R19-17	8					
0&M	100	408	R	R	Exterior	10' from Pier 408R	Spall	8	8	1	1		no change							1
O&M	103	408	L	R	Interior	Throughout	Cracking		HL		6	Typical vertical cracks, some with efflorescence	new		6					
0&M	65	409	L	R	Interior	At Merge	Cracking		0.02		1	Full height, wraps over	no change							

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Line	Block	Span	Side	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Abrasion (CS2)
Starter	11	1	N	Pier 1N	corrosion					Steel base plate for the guidebeam bumper stop has moderate surface corrosion around the perimeter	no change	J8-12							
Starter	12	2	S	Throughout	Cracking		HL			Typical hairline longitudinal crack along the centerline of the guidebeam	new	R8-20							
Starter	12	3	S	Throughout	Cracking		HL			Typical hairline longitudinal crack along the centerline of the guidebeam	new								
Starter	13	3	N	Throughout	Cracking		HL			Typical hairline longitudinal crack along the centerline of the guidebeam	new	J8-10							
Starter	12	4	S	Throughout	Not Visible					Span 4 is covered by plywood	new								
Starter	12	4	S		Cracking	84				7' of greater than typical cracking on top, transverse and longitudinal	no change								
Starter	13	4	N	Throughout	Not Visible					Span 4 is covered by plywood	new	J8-11							
Starter	13	5	N	Throughout	Cracking		HL			Transverse cracks in the guidebeam pedestal spaced less than 1ft. apart, primarily to the right of the guidebeam	new	R8-17							
Starter	13	5	N	Throughout	Efflo.	180				Moderate efflorescence buildup between the guidebeam and the pedestal	new	R8-17	15						
Starter	14	7	S	25' from Pier 7 S	Cracking	52	0.02			Transverse crack in the top that wraps down both sides	new								
Starter	14	8	S		corrosion					Switchbeam paint is very chalky and there is minor surface corrosion over 10% of the top surface.	no change	S23-4							
Starter	14	8	S		corrosion					A number of the switchbeam pedestal plate anchor bolts exhibit light to moderate surface corrosion.	no change								
Starter	15	8	N		Cracking		0.125			Crack in the guidebeam pedestal 1 at the base plate left side.	no change	R23-4							
Starter	15	9	N		corrosion					Switchbeam paint is very chalky and there is light surface corrosion over 10% of the top surface.	no change	R23-8							
Starter	15	9	N		corrosion	_				A number of the switchbeam pedestal plate anchor bolts exhibit light to moderate surface corrosion.	no change	R23-7							
Starter	16	10	S	20ft. from Pier 11	Cracking		0.016		5	Vertical/transverse cracks on top surface in superelevated section	new	S23-7							
Starter	15	10	N		Cracking	96	0.016		6	Wider than typical vertical/transverse cracks in guidebeam up to 0.016" wide.	Increase (prev. 2)	R23-10, 11							



Line	Block	Span	Side	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Abrasion (CS2)
Starter	16	11	S	Rear half	Cracking		0.016		8	Vertical/transverse	new								
Starter	16	12	S	15ft. from Pier 13	Cracking		0.016		3	Vertical/transverse	new								
Starter	15	15	N	Pier 15	spall	16	6	2	1	right side of pedestal	no change	R23-17						1	
Starter	21	16	N		Cracking	36			1	Vertical crack with efflorescence in the guidebeam, 20' from Pier 16.	no change	R23-18	1						
Starter	20	17	S	8' from Pier 17	spall	4	2	2	1	right bottom edge of guidebeam	no change	S23-18						1	
Starter	20	17	S	Throughout	Cracking	12	HL		4	Vertical cracking exists beneath brackets.	no change	S23-20							
Starter	20	17	S	Throughout	Cracking	24	HL		4	Vertical cracks exist in both the left and right faces	no change	S23-19							
Starter	20	18	S	7' from Pier 18	spall	4	4	4	1	Left side of guidebeam pedestal	no change							1	
Starter	20	18	S	Pier 18	spall	4	4	1/2	1	Left side of guidebeam pedestal	no change						1		
Starter	20	18	S	Pier 18	Cracking		0.025		1	Left side of guidebeam pedestal at forward joint	new					1			
Starter	23	21	N	Pier 21	Efflo.					Guidebeam cold joint exhibits efflorescence on both sides.	no change	R23-25	1						
Starter	22	22	S		Cracking	96	0.02		5	Wider than typical vertical/transverse and longitudinal cracking	new	S23- 25,26							
Starter	22	23	S	6' from Pier 23	spall	6	3	2	1	Right side of guidebeam pedestal	no change							1	
Starter	22	23	S		Cracking	96	0.02		5	Wider than typical vertical/transverse cracking	no change								
Starter	26	31	S		Corrosion					Surface corrosion with pitting up to 1/4" on motor actuator assembly brackets for switchbeam, located mid span of switchbeam.	no change	S23-30							
Starter	26	31	S		spall					The fourth pedestal for the switchbeam has multiple fractures and wide cracks throughout the perimeter	new	S23-31							
Starter	26	31	S		spall	19	4	2 1/2	1	There is a fracture in the right rear edge of the 3rd pedestal for the O&M right switch beam.	no change	S23-32						2	
Starter	30	32	S	Midspan	Cracking	6	HL		1	Transverse crack with associated spalling near a construction joint	new								
Starter	29	36	N	33' from Pier 36	spall/delam	36	2	2	1	Top left edge of guidebeam. Previous patch	no change	R23-34						3	
Starter	29	37	N		Delam	5	2.5		1	Right side of guidebeam pedestal	no change						1		



Line	Block	Span	Side	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Abrasion (CS2)
Starter	32	38	S	Pier 38	Efflo.					Heavy efflorescence leaching from forward pourback construction joint, left face	new	S23-41							
Starter	29	38	N		Delam	6	2		1	Left side of guidebeam pedestal	no change						1		
Starter	33	41	N	Throughout	corrosion					Paint scrapes with surface corrosion on the top edges of the guidebeam	no change	R23-36							
Starter	33	41	N		Cracking	10	0.125		1	Pedestal 1 for the cross beam, right rear corner.	no change	R23-35							
Starter	32	42	S		corrosion					Top face of switchbeam has two 4in. diameter areas with laminating corrosion	new	S23-43							
Starter	32	42	S		corrosion					Actuator bracket bolts have heavy surface corrosion and the pedestal bolts have corrosion bleeding through previously applied paint.	new	S23-44							
Starter	34	44	S		Cracking	96	0.02		5	Wider than typical vertical/transverse cracking	no change								
Starter	37	44	N		Cracking	96	0.02		5	Wider than typical vertical/transverse cracking	no change	R23-41							
Starter	34	45	S		Cracking	96	0.02		7	Wider than typical vertical/transverse and longitudinal cracking	new								
North	39	47	L	Midspan	spall	3	3	1	1	Left side of guidebeam pedestal	no change						1		
North	39	51	L	Pier 51	Cracking	12	0.02		1	Vertical crack in guidebeam pedestal at Pier 51, right side	no change	R23-42							
North	39	51	L	Midspan	spall	3	4	2	1	Right side of guidebeam pedestal	no change							1	
North	40	53	R	Throughout	Cracking		0.01			Top of guidebeam has longitudinal cracks and vertical/transverse cracks throughout	new	S23-50							
North	40	53	R	5ft. from Pier 53	Patch failure	1	1	1/4	7	Top of guidebeam	new								
North	40	54	R	Pier 55	Cracking	108	0.02		1	Transverse crack in top of the Guidebeam extending down to the pedestal on both sides.	New	J14-2, J14-3		1					
North	40	57	R	Midspan	Honeycombi ng	18	3	1/4	1	Minor honeycombing with 2 pieces of exposed steel	New	J14-6		1					
North	43	58	L	Pier 58	Cracking	24	HL		1	Vertical crack with efflorescence in guidebeam pedestal at Pier 58, left side	no change		1						
North	45	61	L	Pier 62	Spall	8	6	1 1/2	1	Spall in the guidebeam pedestal to the left of the guidebeam.	New							1	
North	45	62	L	Pier 62	Spall	8	6	2 1/2	1	Spall in the guidebeam pedestal to the left of the guidebeam.	New							1	



Line	Block	Span	Side	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Abrasion (CS2)
North	44	64	R	12' from Pier 64	Cracking	11	0.04		1		new	J14-11, 12							
North	45	64	L		Cracking	12	HL		6	Guidebeam pedestal exhibits 6 transverse hairline crack spaced 1' apart on the left side.	no change								
North	45	64	L		Cracking	180	0.013		1	Wider than typical longitudinal cracks on top surface.	no change								
North	47	68	L	Pier 68L	Cracking	96	0.03		1	Wider than typical vertical/transverse cracking	no change								
North	50	77	R	Above	spall	3	2	3	1	Switch beam pedestal, adjacent to anchor bolt.	no change						1		
North	51	78	L	20' from Pier 78	spall	2	2	1/2	1	Top left edge of guidebeam	no change						1		
North	52	84	R	Pier 85	corrosion	5	4	1/16		2 areas of pitting on the interior of the forward left vertical plate of the bumper stop.	New	J14-19, 20							
North	52	84	R	Pier 85	corrosion	36				Light surface corrosion on the edges of the slide plates of the bumper stop.	New	J14-21							
North	53	84	L	Pier 85	corrosion					Steel base plate for the guidebeam bumper stop has moderate surface corrosion with up to 1/16" pitting around the perimeter. A number of the washers on the anchor bolts have corrosion with up to 50% section loss.	Increase	J14-22, 23, 24							
South	95	199	L	Pier 199L	corrosion					Moderate surface corrosion on guidebeam bumper stop components	no change								
South	94	199	R	Pier 199R	corrosion					Light surface corrosion on guidebeam bumper stop components	no change	R5-1, 2							
South	94	199	R	Near Pier 199R	Cracking		HL			5' of map cracking on the left face of guidebeam	no change	R5-3			5				
South	94	199	R	Near Pier 199R	Cracking		HL			Typical vertical crack in guidebeam pedestal with efflorescence	no change	R5-5							
South	94	202	R	Throughout	Scaling					Photo of typical scaling on the top surface of the guidebeam	new	R5-11							
South	92	203	R		corrosion					Switch beam plate 1 exhibits corrosion on the brackets and bolts at the right side, possible low spot in deck, sand buildup. Corrosion on the top surface, throughout	no change	R5- 12,13,14							
South	92	203	R	Pier 203R	corrosion					Guidebeam exhibits moderate corrosion at the joint at Pier 203R.	no change	R5-15							
South	93	204	L		corrosion					Light surface corrosion on guidebeam top surface	no change	R5-68,69							



Line	Block	Span	Side	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Abrasion (CS2)
South	93	204	L		corrosion					Surface corrosion switchbeam pedestal bumper post, left side.	no change	R5-70							
South	93	204	L	5' from Pier 205L	Delam	8	2	3/4	1	Top right edge of guidebeam	no change						1		
South	92	204	R	Midspan	Efflo.					moderate efflo. buildup on the right face of the guidebeam at a construction joint	new	R5-25							
South	92	204	R	Pier 205	Cracking	12	0.013		1	Typical vertical crack in guide pedestal at expansion joint	no change								
South	90	205	R	Throughout	Cracking	36	0.013			Wider than typical vertical cracks in the guidebeam, spaced 3-4' in curved section	no change								
South	90	207	R	Pier 207	Delam	18	6		1	The left face of the guidebeam pedestal has an 18" long area of cracking and delaminations at the expansion joint	no change	R5-30					2		
South	91	209	L	throughout						Photo of typical pedestal removal in the south line	no change	R5-65							
South	90	209	R	Throughout	Cracking	12	HL		6	Vertical cracks in left face of guidebeam pedestal, spaced ~1' apart	no change								
South	85	212	L	Pier 213	Cracking	3	HL		1	Longitudinal crack down the centerline	new								
South	84	214	R	Throughout	Cracking	96	HL			Vertical / Transverse cracks spaced 1'-3'	no change								
South	84	215	R	Pier 215	Cracking	96	HL		6	Vertical / Transverse cracks spaced 1'-3'	no change	R5-43, 44							
South	82	218	R		abrasion	12				Small area of more than typical scaling/abrasion	no change	R5-49							1
South	82	220	R	10' from Pier 220R	exposed steel				1	The cold joint exhibits 4" L of exposed steel wire	no change								
South	82	222	R	Near Pier 222	Cracking		0.016			two longitudinal cracks in construction joint	new	J10-6							
River	80	229	R	Near Pier 229	Cracking		HL			typical vertical cracks with light efflorescence in the guidebeam pedestal	new	J10-9							
River	80	230	R	Midspan	Cracking		HL			typical vertical cracks with light efflorescence in the guidebeam pedestal	new	S10-10							
River	80	231	R		Cracking	48	0.02		1	Vertical crack across the top that extends down both faces, with efflorescence	no change	J10-12	1						
River	79	232	L		corrosion					Steel plates exhibit surface corrosion just ahead of Pier 232	no change	J10-36							
River	78	232	R	Pier 232	spall	2	3	2	1	Left top edge of guidebeam, previously patched	no change						1		



Line	Block	Span	Side	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Abrasion (CS2)
River	77	233	L		paint failure					Switchbeam paint is very chalky.	no change							
River	77	233	L		corrosion					Switchbeam and machinery support plates exhibit areas of random failed paint with surface corrosion	no change							
River	77	233	L		corrosion					Switchbeam motor bracket on the left side exhibits 12 bolts with nearly 100% section loss. Moderate to heavy corrosion on motor bracket also.	no change	S10-41						
River	76	233	R		corrosion					Many pedestal bolts have corrosion bleeding through paint	new	J10-15						
River	76	233	R		corrosion					Switchbeam motor bracket on the right side exhibits 12 bolts with nearly 100% section loss. Moderate to heavy corrosion on motor bracket also.	no change	S10- 15,16						
River	76	233	R		Cracking	9	0.13		3	1/8" wide cracks on right side of crossbeam Pedestal 7, 8 and 9	no change	S10-14						
River	76	234	R	10' from Pier 234R	Cracking		HL		6	Guidebeam pedestal exhibits 3 vertical cracks with minor efflorescence on the left and right sides	no change		3					
River	76	235	R	30ft. from Pier 236	Cracking	60	0.02			Transverse crack in the top that wraps down both sides	new	S10-18						
River	75	236	L	Pier 237	Delam	10	6	6	1	Right side of guidebeam pedestal	no change	S10-38				1		
River	75	236	L	Pier 237	Spall	20	10	5	1	Left side of guidebeam pedestal with exposed steel	no change	J10-35					2	
River	76	236	R	20ft. from Pier 236	Spall	6	2	1/2		Spall in the top left edge at a construction joint	new						1	
River	74	237	R	Pier 237	Spall	7	8	6	1	Left side of guidebeam pedestal	new	S10-20					1	
River	74	237	R	Pier 237	Spall	14	27	6 1/2	1	Right side of guidebeam pedestal	no change	J10-23					2	
River	75	238	L	Midspan	abrasion	24	12		1	Heavier than normal scaling	no change	J10-34						2
River	75	238	L	Throughout	Cracking		HL			Dense map cracking throughout both side	new							
River	75	240	L	Pier 240						Leveling epoxy deteriorated, delaminated and partially removed	no change	S10-34						
River	73	240	L	20' from Pier 240	spall	3	2	1/4	1	left face of guidebeam	new					1		
River	70	241	R	Throughout	Cracking		HL			typical longitudinal cracks	no change							
River	70	241	R	10' from Pier 242	Delam	6	5	1/2	1	Right face of guidebeam	no change	J10-26				1		
River	71	244	L		Cracking	120	0.016		1	Longitudinal crack on the top face.	no change							



Line	Block	Span	Side	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Abrasion (CS2)
River	69	247	L	Throughout	Cracking	96	0.02		10	Vertical/transverse cracks in guidebeam, randomly spaced	no change								
River	69	R1	L	30ft.from R2	Patch delam	7	3		1	top left edge at construction joint	new								
River	69	R2	L	Midspan	patch failure	9	2.75	2	1	top right edge at construction joint	new	S28-36							
River	68	R3	R		Cracking	96	0.125		2	There are cracks up to 1/8" W along the cold joint.	no change	R28-7				1			
River	69	R3	L	Throughout	corrosion					Corrosion on power rail bracket welds attached to both faces of guidebeam.	new								
River	67	R4	L	40ft. from P5	corrosion					Corrosion on power rail plate and bracket attached to both faces of guidebeam at first construction joint	new								
River	67	R5	L	40ft. from P5	corrosion					Corrosion on power rail plate and bracket attached to both faces of guidebeam at first construction joint	new	R28-32							
River	67	R5	L	Throughout	Cracking		HL			Guidebeam exhibits surface map cracks on top and side of guidebeam beam.	no change				20				
River	67	R6	L	20ft. from Pier 248	Efflo.					One inch deep accumulation of efflorescence on the deck top from the guidebeam pedestal	new	J28-7							
River	66	249	R	5' from Pier 249R	Efflo.	36	HL		2	Guidebeam cold joint on both left and right sides exhibit efflorescence	no change	R28-13	1						
River	66	250	R	10' from Pier 251R	Cracking	14	HL		3	Vertical cracks spaced 1' apart with efflorescence in left and right pedestals	no change	R28-17	3						
River	67	251	L	Throughout	Cracking	96	0.016		?	Wider than typical vertical / transverse cracks spaced ~3' apart	no change								
River	66	251	R	1/3 span	Efflo.	24	HL		2	Guidebeam cold joint on both left and right sides exhibit efflorescence	no change		2						
River	66	251	R	2/3 span	Efflo.	24	HL		2	Guidebeam cold joint on both left and right sides exhibit efflorescence	no change		2						
River	66	251	R	10ft. from Pier 252	Efflo.	24	HL		2	Guidebeam cold joint on both left and right sides exhibit efflorescence	no change		2						
River	66	252	R	20' from Pier 252	Cracking	18	HL		2	Guidebeam cold joint on both left and right sides exhibit efflorescence	no change		2						
River	66	252	R	Pier 253	Cracking	24	HL		2	Guidebeam cold joint on both left and right sides exhibit efflorescence	no change		2						
River	67	253	L	Rear Midspan Joint	Cracking	96	0.02			Vertical / transverse cracks in the guidebeam spaced less than 1' apart, within 20ft. of the rear midspan construction joint. Longitudinal crack on the right vertical face also present	no change	J28- 12,13							



Line	Block	Span	Side	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Abrasion (CS2)
River	65	253	L	Forward Midspan Joint	spall	4	1.5	1	2	Guidebeam pedestal spalls on the left side at midspan construction joint 2	no change						2		
River	65	253	L	Forward Midspan Joint	Cracking	96	0.02		8	Vertical / transverse cracks in the guidebeam spaced less than 1' apart, at one of the two midspan construction joints	no change	J28-14							
River	65	253	L	Throughout	Cracking		0.016			Longitudinal cracking in guidebeam top.	no change	J28- 10,11,15							
River	65	253	L	Throughout	Cracking	96	0.016			Vertical/Transverse cracking is more prominent than in other spans, wider and spaced 1'-3'	no change	J28-9							
River	65	253	L	Pier 254	Spall	7	5	2	1	Spall in the pedestal	New							1	
River	66	253	R	Midspan	spall	8	6	6	1	Fractured guidebeam pedestal at the 2nd midspan joint, right side	no change							1	
River	66	253	R	Midspan	Delam	7	4	4	1	Top right edge of guidebeam, located at first interior joint	no change	R28-21					1		
River	66	253	R	Midspan	spall	11	7	2 1/2	2	At the first interior joint, right rear pedestal	no change	R28-22						1	
River	66	253	R	Midspan	Delam	11	7	2 1/2	2	At the first interior joint, forward pedestals	no change	R28-22						1	
River	66	253	R	40' from Pier 254	Delam	18	3 1/2	1	1	Top right edge of guidebeam has a delaminates patch.	New	R28-27						2	
River	66	253	R	Throughout	Cracking	96	0.016			Vertical/Transverse cracking is more prominent than in other spans, wider and spaced 1'-3'	no change	R28-23							
River	64	254	R	10' from 255R	Cracking	24	HL		2	Guidebeam exhibits a vertical crack with minor efflorescence extending into pedestal on both left and right faces	no change		1						
River	65	256	L		corrosion					Switchbeam plates and anchor bolts have been painted but surface corrosion is reactivating	no change								
River	62	258	R	Pier 258R	Cracking	14	HL		6	Dense cracking in guidebeam pedestal at expansion joint	no change	S19-21			2				
River	60	259	R	Pier 260R	Cracking	24	HL		2	Guidebeam cold joint on both left and right sides exhibit efflorescence	no change		1						
River	63	260	L	Throughout	Cracking		HL			Longitudinal crack on top of guidebeam.	no change								
0&M	108	M2	-	Throughout	corrosion					Guidebeam support plates and anchor bolts exhibit light to moderate corrosion.	no change	S19-6							



Line	Block	Span	Side	Location	Deficiency Type	Max Length (in)	Max Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	 Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Abrasion (CS2)
O&M	107A	M4	-	Throughout	Cracking		0.025			Heavier than typical map cracking on the top surface with transverse cracks spaced less than 1ft. apart	new	R19-11						
O&M	107A	M4	-	20ft from M5	Patch delam	11	4	1/4	1	Top of guidebeam patch is spalled/delaminated with smaller edge spalls throughout	new	R19-12						
O&M	107A	M5	-	Throughout	corrosion					Switchbeam plates and bolts exhibit light to moderate surface corrosion with heavy surface and laminating corrosion with ~1/8" section loss on isolated anchor bolts and brackets.	increase	R19-13						
O&M	106	401	L	Throughout	corrosion					Peeled paint in the wheel paths with surface corrosion on left guidebeam, both sides.	no change							
O&M	106	402	L	Throughout	Corrosion					Peeled paint in the wheel paths with surface corrosion on left guidebeam, both sides.	no change	R19-23- 24						
O&M	106	402	R	Throughout	corrosion					Light surface corrosion on the plates and the plates and bolts in the switch area.	no change							
O&M	106	403	R	Throughout	corrosion					Switchbeam plates and bolts exhibit light to moderate surface corrosion with heavy surface and laminating corrosion with section loss on isolated anchor bolts and brackets.	increase							
0&M	102	406	R	Midspan	Cracking	24	HL		2	Guidebeam cold joint on both left and right sides exhibit efflorescence	no change							
0&M	103	408	L	25' from Pier 408L	spall	6	3	3/4	1	Top left edge of the guidebeam	no change					1		
O&M	65	409	L		Honey					1/4" D honeycombing, full width of guidebeam x 3"W at cold joint just before the Span merge	no change							

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Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	11	1	N	-	Rear	Pier 1N	Crack	2	34	0.013		Diagonal cracks in diaphragm.	No change		•		,	,		•	P/S
Starter	11	1	N	L	Exterior	Pier 2N	Crack	1	18	HL	-	Diagonal shear crack	No change				2				P/S
Starter	11	1	N, Ext.	L	Exterior	Pier 1N	Crack	2	24	HL	-	One diagonal shear crack and one horizontal crack	No change				-				P/S
Starter	11	1	N, Ext.	L	Interior	Pier 1N	Crack	2	24	HL	-	One diagonal shear crack and one horizontal crack	No change				-				P/S
Starter	11	1	N, Ext.	R	Interior	Pier 1N	Crack	2	24	0.01	-	One diagonal shear crack and one horizontal crack	No change				2				P/S
Starter	11	1	N, Ext.	R	Interior	Pier 2N	Crack	1	12	HL	-	Diagonal shear crack	No change				-				P/S
Starter	11	1	N, Ext.	L	Interior	Pier 2N	Crack	1	15	HL	1	Diagonal shear crack	No change				ı				P/S
Starter	11	1	N, Ext.	L	Exterior	Pier 2N	Crack	3	18	HL	1	Two diagonal shear cracks and one horizontal crack	No change				1				P/S
Starter	11	1	N, Ext.	R	Exterior	Pier 2N	Crack	1	12	0.02	1	vertical/diagonal crack above the spall.	No change					1			P/S
Starter	11	1	N, Ext.	R	Exterior	Pier 2N	Spall	1	4	3	1/2	Bottom of stem at the end	No change						1		P/S
Starter	10	1	S	R	Exterior	Pier 2S	Crack	1	20	HL	-	Diagonal shear crack	No change				2				P/S
Starter	10	1	S, Ext.	R	Exterior	Pier 1S	Crack	1	18	0.013	-	Diagonal shear crack	No change					-			P/S
Starter	10	1	S, Ext.	R	Interior	Pier 1S	Crack	1	18	HL	-	Diagonal shear crack	No change				-				P/S
Starter	10	1	S, Ext.	L	Interior	Pier 1S	Crack	1	24	0.013	-	Horizontal crack, 14" from the bottom	No change					2			P/S
Starter	10	1	S, Ext.	R	Exterior	Pier 2S	Crack	1	12	0.016	-	Diagonal shear crack	No change					1			P/S
Starter	10	1	S, Ext.	R	Interior	Pier 2S	Crack	1	12	0.013	-	Diagonal shear crack	No change					-			P/S
Starter	13	2	N	L	Exterior	Pier 3N	Crack	1	12	HL	-	Downward diagonal crack	No change				1				P/S
Starter	10	2	S	R	Exterior	Pier 2S	Grout Crack	1	28	HL	-	Vertical grout crack	No change								P/S
Starter	12	2	S	L	Exterior	Pier 3S	Crack	1	12	HL	-	Diagonal shear crack, radial shrinkage cracking also present	new					1			P/S
Starter	12	2	S	R	Exterior	Pier 3S	Crack	2	12	HL	1	Diagonal shear crack	No change					1			P/S
Starter	13	3	N	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 10% of the surface	No change								P/S
Starter	13	3	N	L	Exterior	Pier 4N	Crack	1	5	HL	-	Diagonal shear crack	No change				1				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	12	3	S	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 10% of the surface	No change		(332)	(552)	(002)	ζοσογ	(322)	(333)	P/S
Starter	12	3	S	R	Exterior	Pier 3S	Crack	2	18	HL	-	Diagonal shear cracks	No change					-			P/S
Starter	12	3	S	L	Interior	Pier 3S	Crack	?	8	0.013	-	Numerous diagonal shear cracks starting from the bottom of the stem, extending for 6' from the pier.	No change					6			P/S
Starter	12	3	S	R	Interior	Pier 3S	Crack	?	8	0.013	-	Numerous diagonal shear cracks starting from the bottom of the stem, extending for 6' from the pier.	No change					-			P/S
Starter	12	3	S	R	Exterior	Pier 3S	Grout Crack	1	28	HL	-	Vertical grout crack	No change								P/S
Starter	12	3	S	L	Exterior	Pier 4S	Crack	1	8	HL	-	Diagonal shear crack	new				-				P/S
Starter	12	3	S	R	Exterior	Pier 4S	Crack	1	9	HL	-	Diagonal shear crack	No change				1				P/S
Starter	13	4	N	L	Exterior	Pier 4N	Crack	1	12	HL	-	Diagonal shear crack	No change				1				P/S
Starter	13	4	N	L	Exterior	Pier 5N	Crack	1	15	HL	-	Diagonal shear crack	new				2				P/S
Starter	13	4	N	L	Exterior	Pier 5N	Spall	1	8	8	1	Bottom of stem	new	J8-3,4						1	P/S
Starter	13	4	N	L	Interior	Pier 5N	Crack	1	12	HL	-	Diagonal shear crack	No change				-				P/S
Starter	13	4	N	R	Exterior	Pier 5N	Crack	1	18	HL	-	Diagonal shear crack	No change				-				P/S
Starter	12	4	S	Both	Both	Throughout	Crack	-	-	-	ı	Shrinkage map cracks on 5% of the surface	No change								P/S
Starter	12	4	S	R	Exterior	Pier 4S	Crack	1	8	HL	-	Diagonal shear crack	No change				1				P/S
Starter	12	4	S	R	Interior	Pier 4S	Crack	2	10	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	12	4	S	L	Interior	Pier 5S	Crack	1	9	HL	-	Diagonal shear crack	No change				1				P/S
Starter	12	4	S	R	Exterior	Pier 4S	Grout Crack	1	28	HL	-	Vertical grout crack	No change								P/S
Starter	12	4	S	R	Interior	Pier 5S	Crack	1	10	HL	-	Diagonal shear crack	No change				-				P/S
Starter	12	4	S	R	Exterior	Pier 5S	Crack	1	10	HL	- 1	Diagonal shear crack	No change				-				P/S
Starter	13	5	N	L	Exterior	Pier 5N	Crack	3	36	HL	-	Diagonal shear and radial cracks	No change				3				P/S
Starter	13	5	N	L	Exterior	Pier 5N	Grout Crack	1	28	HL	-	Vertical grout crack. Crack turns diagonal into the beam.	No change								P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	13	5	N	L	Interior	Pier 5N	Crack	2	18	HL	-	Diagonal shear cracks	No change		(22)	(/	-	, ,	, , ,	, ,	P/S
Starter	13	5	N	R	Interior	Pier 5N	Crack	3	32	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	13	5	N	R	Exterior	Pier 5N	Crack	3	18	HL	-	Diagonal shear and radial crack	No change				-				P/S
Starter	13	5	N	L	Exterior	Pier 6N	Crack	4	30	0.016	-	Diagonal shear and radial cracks	No change					3			P/S
Starter	13	5	N	L	Interior	Pier 6N	Delam.	1	3	1.5			No change						1		P/S
Starter	13	5	N	L	Interior	Pier 6N	Crack	2	36	0.013	-	Diagonal shear cracks	No change					-			P/S
Starter	13	5	N	R	Interior	Pier 6N	Crack	2	36	0.013	-	Diagonal shear cracks with radial surface cracks also present.	No change					-			P/S
Starter	13	5	N	R	Exterior	Pier 6N	Crack	5	33	0.016	-	Diagonal shear and radial cracks; crack extending from beam notch is 0.016" W for 2"L, otherwise, cracks are up to 0.013" W.	No change					-			P/S
Starter	12	5	S	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 10% of the surface with shrinkage radial cracks at the ends	No change								P/S
Starter	12	5	S	L	Exterior	Pier 5S	Crack	1	32	HL	-	Diagonal shear crack	No change				3				P/S
Starter	12	5	S	L	Interior	Pier 5S	Crack	1	36	HL	1	Diagonal shear crack	No change				1				P/S
Starter	12	5	S	R	Exterior	Pier 5S	Crack	1	24	HL	-	Diagonal shear crack	No change				-				P/S
Starter	12	5	S	L	Exterior	Pier 6S	Crack	4	36	0.02	'	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 2" L, otherwise, cracks are up to 0.013" W.	No change					3			P/S
Starter	12	5	S	L	Interior	Pier 6S	Crack	2	36	0.013	-	Diagonal shear cracks	No change					-			P/S
Starter	12	5	S	R	Interior	Pier 6S	Crack	5	42	0.013	-	Diagonal shear and radial cracks	No change					-			P/S
Starter	12	5	S	R	Exterior	Pier 5S	Grout Crack	1	28	0.013	-	Vertical grout crack that turns diagonal (HL) into the stem.	No change				1				P/S
Starter	12	5	S	R	Exterior	Pier 6S	Crack	23	42	0.016		Diagonal shear cracks	No change								P/S
Starter	15	12	N	L	Rear	Pier 12	Spall	1	10	8	3/4	exposed tendon ends	No change	J6-13						1	P/S
Starter	15	12	N	L	Exterior	Pier 12	Crack	5	42	0.02	-	Diagonal shear cracks	increase (prev. 0.016")	J6-12, 15				4			P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	15	12	N	L	Interior	Pier 12	Crack	5	42	0.016	-	Diagonal and radial shear cracks	No change		, ,	()	, ,	-	\	(322)	P/S
Starter	15	12	N	R	Interior	Pier 12	Crack	4	33	0.016	1	Diagonal shear cracks	No change					•			P/S
Starter	15	12	N	R	Exterior	Pier 12	Crack	4	48	0.02	1	Diagonal shear cracks	No change					-			P/S
Starter	15	12	N	L	Exterior	Pier 13	Poor Patch	1	8	5			No change								P/S
Starter	15	12	N	L	Exterior	Pier 13	Crack	2	72	HL	-	Diagonal and radial shear cracks	No change				6				P/S
Starter	15	12	N	L	Interior	Pier 13	Crack	2	16	HL	-	Downward diagonal cracks	increase (prev. 12")				-				P/S
Starter	15	12	N	R	Interior	Pier 13	Crack	1	16	HL	1	Downward diagonal crack	No change				-				P/S
Starter	16	12	S	L	Exterior	Pier 12	Crack	4	52	0.016	1	Diagonal shear cracks	increase (prev. 48")					5			P/S
Starter	16	12	S	L	Interior	Pier 12	Crack	4	54	0.016	-	Diagonal shear cracks	No change					-			P/S
Starter	16	12	S	R	Interior	Pier 12	Crack	3	36	0.013	1	Diagonal shear cracks	No change					-			P/S
Starter	16	12	S	R	Exterior	Pier 12	Crack	4	38	0.02	-	Diagonal shear cracks	No change					-			P/S
Starter	16	12	S	R	Interior	Pier 13	Crack	1	16	HL	1	Downward diagonal crack	increase (prev. 10")				1				P/S
Starter	16	12	S	R	Exterior	Pier 13	Poor Patch	1	16	6			No change								P/S
Starter	15	13	N	L	Exterior	Pier 13	Poor Patch	1	8	5			No change							1	P/S
Starter	15	13	N	L	Exterior	Pier 14	Crack	1	24	HL	-	Diagonal shear crack	new				2				P/S
Starter	15	13	N	L	Interior	Pier 14	Crack	3	24	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	15	13	N	L	Interior	Pier 14	Crack	1	6	HL	-	Diagonal crack at the bottom corner of the stem	No change				-				P/S
Starter	15	13	N	R	Interior	Pier 14	Crack	3	18	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	15	13	N	R	Interior	Pier 14	Crack	1	6	HL	- 1	Diagonal crack at the bottom corner of the stem	No change				-				P/S
Starter	15	13	N	R	Exterior	Pier 14	Delam.	1	9	10	-	Bottom of stem	new	J6-18							P/S
Starter	16	13	S	R	Interior	Pier 13	Crack	1	19	HL	1	Downward diagonal crack	No change				2				P/S
Starter	16	13	S	R	Exterior	Pier 13	Crack	3	12	HL	ı	Diagonal shear cracks	No change				-				P/S
Starter	15	13	N	R	Exterior	Pier 14	Crack	1	12	HL	-	Diagonal shear cracks	No change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	16	13	S	L	Interior	Pier 14	Crack	3	12	HL	-	Diagonal shear cracks	No change		(22)	(33)	-	(,	, , ,	, 7	P/S
Starter	16	13	S	R	Interior	Pier 14	Crack	4	36	HL	-	Diagonal shear cracks	No change				3				P/S
Starter	16	13	S	R	Exterior	Pier 14	Poor Patch	1	8	5			No change								P/S
Starter	16	13	S	R	Exterior	Pier 14	Crack	4	14	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	15	14	N	L	Interior	Pier 14	Crack	2	17	HL	-	Downward diagonal cracks	new				2				P/S
Starter	15	14	N	R	Interior	Pier 14	Crack	2	18	HL	- 1	Downward diagonal cracks	No change				-				P/S
Starter	15	14	N	L	Exterior	Pier 15	Crack	7	48	0.013	1	Diagonal shear cracks	No change					4			P/S
Starter	15	14	N	L	Interior	Pier 15	Crack	6	48	0.016	1	Diagonal shear cracks	No change					-			P/S
Starter	15	14	N	R	Interior	Pier 15	Crack	4	48	0.013	1	Diagonal shear cracks	No change					-			P/S
Starter	15	14	N	R	Exterior	Pier 15	Crack	8	42	0.016	1	Diagonal shear cracks	No change					-			P/S
Starter	16	14	S	L	Interior	Pier 14	Crack	2	16	HL	1	Downward diagonal cracks	new				-				P/S
Starter	16	14	S	L	Interior	Pier 14	Crack	1	18	HL	1	Horizontal crack, mid height	No change				-				P/S
Starter	16	14	S	R	Interior	Pier 14	Crack	1	-	-		Shrinkage map cracking at the end	new								P/S
Starter	16	14	S	R	Exterior	Pier 14	Crack	2	18	HL	1	Diagonal shear cracks	No change				2				P/S
Starter	20	14	S	L	Exterior	Pier 15	Crack	6	48	0.016	1	Diagonal shear cracks	No change					•			P/S
Starter	20	14	S	L	Interior	Pier 15	Crack	3	48	0.016	1	Diagonal shear cracks	No change					•			P/S
Starter	20	14	S	R	Interior	Pier 15	Crack	5	36	0.016	1	Diagonal shear cracks	No change					-			P/S
Starter	20	14	S	R	Exterior	Pier 15	Crack	4	48	0.02	1	Diagonal shear cracks	No change					4			P/S
Starter	15	15	N	L	Rear	Pier 15	Spall	1	3	3	3/4		No change								P/S
Starter	15	15	N	L	Exterior	Pier 15	Crack	7	48	0.01	-	Diagonal shear cracks with numerous radial shrinkage cracks also present	No change				-				P/S
Starter	15	15	N	L	Interior	Pier 15	Crack	4	48	0.013	-	Diagonal shear cracks	No change					4			P/S
Starter	15	15	N	R	Interior	Pier 15	Crack	6	36	0.013	-	Diagonal shear cracks	No change					-			P/S
Starter	15	15	N	R	Exterior	Pier 15	Crack			HL	-	greater than typical fine surface cracking in the end 4ft.	New				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	15	15	N	R	Exterior	Pier 15	Crack	6	36	0.013	-	Diagonal shear and radial cracks	increase (prev. HL)					-	,	•	P/S
Starter	21	15	N	L	Exterior	Pier 16	Crack	3	36	HL	-	Diagonal shear cracks with numerous radial shrinkage cracks also present	No change				3				P/S
Starter	21	15	N	L	Both	Pier 16	Crack	1	-	-	-	Shrinkage map cracking at the end 10'.	no change								P/S
Starter	20	15	S	L	Exterior	Pier 15	Crack	1	-	-	-	greater than typical fine surface cracking in the end 4ft.	New								P/S
Starter	20	15	S	L	Exterior	Pier 15	Crack	3	42	0.01	-	Diagonal shear cracks	No change				-				P/S
Starter	20	15	S	L	Interior	Pier 15	Crack	3	42	0.01	-	Diagonal shear cracks	increase (prev. HL)				-				P/S
Starter	20	15	S	R	Interior	Pier 15	Crack	5	30	0.01	-	Diagonal shear cracks	No change				-				P/S
Starter	20	15	S	R	Rear	Pier 15	Spall	1	4	3	1/4		no change								P/S
Starter	20	15	S	R	Exterior	Pier 15	Crack	6	42	0.016	-	Diagonal shear cracks	No change					4			P/S
Starter	21	15	N	L	Interior	Pier 16	Crack	2	18	HL	-	Downward diagonal cracks	No change				-				P/S
Starter	21	15	N	R	Interior	Pier 16	Crack	2	18	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	21	15	N	R	Exterior	Pier 16	Crack	1	20	HL	-	Diagonal shear	New				-				P/S
Starter	20	15	S	R	Interior	Pier 16	Crack	2	8	HL	-	Downward diagonal cracks	New				2				P/S
Starter	20	15	S	R	Exterior	Pier 16	Crack	1	8	HL	-	Diagonal shear cracks	New				-				P/S
Starter	20	15	S	R	Both	Pier 16	Crack	1	-	-	-	Shrinkage map cracking at the end 5'.	no change								P/S
Starter	21	16	N	L	Exterior	Pier 16	Poor Patch	1	8	5			No change								P/S
Starter	21	16	N	L	Exterior	Pier 16	Crack	3	18	HL	-	Diagonal shear crack	No change				2				P/S
Starter	21	16	N	L	Interior	Pier 16	Crack	1	18	HL	-	Downward diagonal crack	No change				-				P/S
Starter	21	16	N	R	Interior	Pier 16	Crack	1	18	HL	-	Diagonal shear crack	No change				-				P/S
Starter	21	16	N	R	Exterior	Pier 16	Crack	1	12	HL	-	Diagonal shear crack	No change				-				P/S
Starter	21	16	N	L	Exterior	Pier 17	Crack	3	30	HL	-	Diagonal shear and radial cracks	no change				3				P/S
Starter	21	16	N	L	Interior	Pier 17	Crack	2	36	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	21	16	N	R	Interior	Pier 17	Crack	1	20	HL	-	downward diagonal crack	No change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	21	16	N	R	Exterior	Pier 17	Crack	1	12	HL	-	Diagonal shear crack	No change				-			•	P/S
Starter	20	16	S	R	Exterior	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 10% of the surface	No change								P/S
Starter	20	16	S	R	Interior	Pier 16	Crack	2	18	HL	-	Diagonal shear cracks	No change				2				P/S
Starter	20	16	S	L	Exterior	Pier 16	Crack	1	18	HL	-	Diagonal shear crack	No change				-				P/S
Starter	20	16	S	L	Interior	Pier 16	Crack	4	18	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	20	16	S	R	Interior	Pier 16	Crack	3	18	HL	-	Downward diagonal crack	no change				-				P/S
Starter	20	16	S	R	Exterior	Pier 16	Crack	5	24	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	20	16	S	R	Exterior	Pier 16	Crack	- 1	-	-	1	Shrinkage map cracking at the end	No change								P/S
Starter	20	16	S	L	Interior	Pier 17	Crack	1	24	HL	1	Horizontal crack starting 1' from the cap.	No change				2				P/S
Starter	20	16	S	R	Interior	Pier 17	Crack	2	22	HL	-	Downward diagonal cracks	increase (prev. 18)				-				P/S
Starter	20	16	S	R	Exterior	Pier 17	Crack	1	12	HL	-	Diagonal shear crack	increase (prev. 8)				-				P/S
Starter	21	17	N	R	Exterior	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 20% of the surface	No change								P/S
Starter	21	17	N	L	Exterior	Pier 17	Crack	3	12	HL	-	Diagonal shear cracks	No change				1				P/S
Starter	21	17	N	L	Interior	Pier 17	Crack	1	12	HL	1	Downward diagonal crack	No change				-				P/S
Starter	21	17	N	R	Interior	Pier 17	Crack	2	18	HL	-	Downward diagonal cracks	no change				-				P/S
Starter	21	17	N	L	Exterior	Pier 18N	Crack	7	42	0.025	-	Diagonal shear and radial cracks	increase (prev. 0.02")					4			P/S
Starter	21	17	N	L	Interior	Pier 18N	Crack	7	42	0.025	-	Diagonal shear and radial cracks	increase (prev. 0.013")					-			P/S
Starter	21	17	N	R	Interior	Pier 18N	Crack	5	36	0.01	-	Diagonal shear and radial cracks	increase (prev. HL)					-			P/S
Starter	21	17	N	R	Exterior	Pier 18N	Crack	4	45	0.013	-	Diagonal shear cracks	No change					-			P/S
Starter	20	17	S	L	Bottom	Pier 17	Spall	1	4	2	3/4		No change	J6-24							P/S
Starter	20	17	S	R	Both	Throughout	Crack	- 1	-	-	-	Shrinkage map cracks on 20% of the surface	No change								P/S
Starter	20	17	S	R	Exterior	Pier 17	Crack	1	12	HL	-	Diagonal shear crack	No change				1				P/S
Starter	20	17	S	L	Exterior	Pier 18S	Crack	8	54	0.013	-	Diagonal shear cracks. Hairline radial surface cracks are also present	No change					5			P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	20	17	S	L	Interior	Pier 18S	Crack	5	51	0.013		Diagonal shear cracks	No change	FIIOLO	(C32)	(C32)	(C32)	- (C33)	(C32)	(033)	P/S
Starter	20	17	S	R	Interior	Pier 18S	Crack	4	48	0.013	-	Diagonal shear cracks	No change					-			P/S
Starter	20	17	S	R	Exterior	Pier 18S	Crack	4	34	0.013	-	Diagonal shear cracks	No change					-			P/S
Starter	21	18	N	L	Exterior	Pier 18N	Crack	6	42	0.02	-	Diagonal shear and radial cracks; crack extending from beam notch is 0.02" W for 10" L, otherwise, cracks are up to 0.013" W.	Increase (0.02" prev. for 5")					4			P/S
Starter	21	18	N	L	Exterior	20' from Pier 18N	Popout	1	1	1	1/4	Corrosion staining , coated	No change						1		P/S
Starter	21	18	N	L	Interior	Pier 18N	Crack	5	42	0.013		Diagonal shear cracks, also a 60" vertical shear the goes up into the flange	No change					-			P/S
Starter	21	18	N	R	Interior	Pier 18N	Crack	4	30	0.02	-	Diagonal shear and radial cracks; crack extending from beam notch is 0.02" W for 3" L, otherwise, cracks are up to 0.013" W.	no change					-			P/S
Starter	21	18	N	R	Exterior	Pier 18N	Crack	6	42	0.02	-	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 8"L, otherwise, cracks are up to 0.013" W.	Increase (0.02" prev. for 3")					-			P/S
Starter	21	18	N	R	Exterior	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 10% of the surface	No change								P/S
Starter	21	18	N	R	Bottom	20' from Pier 18N	Gouge	1	12	4	1/4		No change								P/S
Starter	21	18	N	L	Exterior	Pier 19N	Crack	2	24	HL	-	Diagonal shear cracks	No change				2				P/S
Starter	21	18	N	L	Interior	Pier 19N	Crack	2	12	HL	-	Diagonal and radial shear crack	No change				-				P/S
Starter	21	18	N	R	Interior	Pier 19N	Crack	1	18	HL	-	Downward diagonal crack	No change				-				P/S
Starter	21	18	N	R	Exterior	Pier 19N	Crack	2	18	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	20	18	S	R	Exterior	Throughout	Crack	-		HL	-	Shrinkage map cracks on 50% of the surface	No change								P/S
Starter	20	18	S	R	Interior	Pier 18S	Spall	1	2	1	1/2	Bottom of stem	No change						1		P/S
Starter	20	18	S	L	Exterior	Pier 18S	Crack	6	54	0.02	-	Diagonal shear and radial cracks; crack extending from beam notch is 0.02" W for 4" L, otherwise, cracks are up to 0.013" W.	Increase (0.02" prev. for 3")					5			P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency	Qty	Max	Max Width	Depth	Additional Notes	2017 Note	2019	Efflor.	Rebar	Crack	Crack	Spall /patch	Spall	Beam
							Туре		Len. (in)	(in)	(in)		Disposition	Photo	(CS2)	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	Туре
Starter	20	18	S	L	Interior	Pier 18S	Crack	4	50	0.013	-	Diagonal shear cracks Diagonal shear cracks.	no change					-			P/S
Starter	20	18	S	R	Interior	Pier 18S	Crack	3	48	0.013	-	Shrinkage map cracking at the end	No change					-			P/S
Starter	20	18	S	R	Exterior	Pier 18S	Crack	8	41	0.013	-	Diagonal shear and radial cracks	No change					-			P/S
Starter	20	18	S	R	Exterior	Midspan	Corr. Bleed	1				Due to insufficient cover	No change		1						P/S
Starter	22	18	S	R	Both	Pier 19S	Poor Patch	1	8	5			No change								P/S
Starter	22	18	S	R	Interior	Pier 19S	Crack	2	18	HL	-	Downward diagonal cracks. Shrinkage map cracking at the end	New				2				P/S
Starter	22	18	S	R	Exterior	Pier 19S	Crack	2	12	HL	-	Diagonal shear and radial cracks. Shrinkage map cracking at the end	No change				-				P/S
Starter	21	19	N	L	Exterior	Pier 19N	Crack	1	8	HL	-	Downward diagonal crack	No change				1				P/S
Starter	21	19	N	L	Exterior	Pier 20N	Crack	3	24	HL	-	Diagonal shear cracks	no change				-				P/S
Starter	21	19	Ν	L	Interior	Pier 20N	Crack	4	24	HL	1	Diagonal shear and radial cracks. Shrinkage map cracking at the end.	No change				,				P/S
Starter	21	19	N	R	Interior	Pier 20N	Crack	1	12	HL	ı	Diagonal shear crack. Shrinkage map cracking at the end.	No change				1				P/S
Starter	21	19	N	R	Exterior	Pier 20N	Crack	3	36	HL	-	Diagonal shear and radial cracks	No change				3				P/S
Starter	22	19	S	L	Exterior	Pier 19S	Crack	1	10	HL	-	Diagonal shear crack; surface map cracking also present	No change				1				P/S
Starter	22	19	S	R	Interior	Pier 19S	Crack			HL	1	Surface map cracking present	No change				-				P/S
Starter	22	19	S	R	Exterior	Pier 19S	Crack	2	20	HL	-	Diagonal shear crack; surface map cracking also present	No change				-				P/S
Starter	22	19	S	L	Exterior	Pier 20S	Crack	2	20	HL	-	Diagonal shear cracks	increase (prev. 14")				2				P/S
Starter	22	19	S	L	Interior	Pier 20S	Crack	1	15	HL	•	Diagonal shear crack	New				-				P/S
Starter	22	19	S	Both	Bottom	Pier 20S	Honey.	2	18	6	1/4		No change	J7-3					2		P/S
Starter	22	19	S	R	Interior	Pier 20S	Crack	4	24	HL	-	Diagonal shear and radial cracks	increase (prev. 18)				-				P/S
Starter	22	19	S	R	Exterior	Pier 20S	Crack	3	18	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	21	20	N	L	Exterior	Pier 20N	Crack	3	24	HL	-	Diagonal shear cracks	no change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	21	20	N	L	Interior	Pier 20N	Crack	5	24	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	21	20	N	R	Interior	Pier 20N	Crack	4	18	HL	ı	Diagonal shear and radial cracks	No change				-				P/S
Starter	21	20	N	R	Exterior	Pier 20N	Crack	3	36	HL	1	Diagonal shear, horizontal and radial	No change				3				P/S
Starter	23	20	N	L	Exterior	Pier 21N	Crack	4	39	0.013	1	Diagonal shear cracks	no change					4			P/S
Starter	23	20	N	L	Interior	Pier 21N	Crack	3	36	0.013	1	Diagonal shear and radial cracks	No change					-			P/S
Starter	23	20	N	R	Interior	Pier 21N	Crack	4	36	HL	-	Diagonal shear and radial cracks	no change				-				P/S
Starter	23	20	N	R	Exterior	Pier 21N	Crack	3	36	0.016	1	Diagonal shear cracks	No change					-			P/S
Starter	22	20	S	L	Exterior	Pier 20S	Crack	1	12	HL	-	Diagonal shear crack; surface map cracking also present	No change				-				P/S
Starter	22	20	S	L	Interior	Pier 20S	Crack	2	20	HL		Downward diagonal cracks; surface map cracking also present	New				2				P/S
Starter	22	20	S	R	Exterior	Pier 20S	Crack	1	12	HL	-	Diagonal shear crack; surface map cracking also present	No change				-				P/S
Starter	22	20	S	L	Exterior	Pier 21S	Crack	3	32	0.016	-	Diagonal shear and radial cracks	No change					3			P/S
Starter	22	20	S	L	Bottom	Pier 21S	Spall	1	6	4	1 1/2		No change	J7-3							P/S
Starter	22	20	S	L	Interior	Pier 21S	Crack	4	30	HL	-	Diagonal shear and radial cracks. Shrinkage map cracking at the end	No change				-				P/S
Starter	22	20	S	R	Interior	Pier 21S	Delam.	1	7	3			No change	J7-5							P/S
Starter	22	20	S	R	Interior	Pier 21S	Crack	2	36	0.016	-	Diagonal shear cracks. Shrinkage map cracking at the end	No change					-			P/S
Starter	22	20	S	R	Exterior	Pier 21S	Crack	5	30	0.02	ı	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 2" L, otherwise, cracks are up to 0.013" W.	No change	J7-6				-			P/S
Starter	23	21	N	L	Exterior	Pier 21N	Honey.	1	6	3	1/4	Bottom of stem	No change								P/S
Starter	23	21	N	L	Exterior	Pier 21N	Crack	3	36	0.016	ı	Diagonal shear cracks	No change					3			P/S
Starter	23	21	N	L	Interior	Pier 21N	Crack	2	42	0.016	·	Diagonal shear cracks	No change					-			P/S
Starter	23	21	N	R	Interior	Pier 21N	Crack	1	30	0.016	-	Diagonal shear crack	No change					-			P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width	Depth (in)	Additional Notes	2017 Note	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	23	21	N	R	Exterior	Pier 21N	Crack	3	36	0.02	-	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 4" L, otherwise, cracks are up to 0.013" W.	No change		(***2)	()	(555)	-	(33.2)	()	P/S
Starter	23	21	N	L	Bottom	8' from Pier 21N	Spall	1	3	3	1/4		No change						1		P/S
Starter	23	21	N	L	Bottom	20' from Pier 21N	Spall	2	2	2	1/4		new						1		P/S
Starter	23	21	N	L	Bottom	20' from Pier 21N	Gouge	1	24	2	1/4		No change							2	P/S
Starter	23	21	N	L	Exterior	Pier 22N	Crack	3	24	HL	-	Diagonal shear and radial cracks	No change				2				P/S
Starter	23	21	N	R	Interior	Pier 22N	Crack	1	18	HL	-	Diagonal shear crack	new				-				P/S
Starter	23	21	N	R	Exterior	Pier 22N	Delam.	1	8	7	2 1/2	located at the bottom edge of the stem	No change								P/S
Starter	23	21	N	R	Exterior	Pier 22N	Crack	2	10	HL	-	Horizontal cracks	No change				-				P/S
Starter	22	21	S	L	Exterior	Pier 21S	Spall	1	4	4	1	Adjacent to bearing plate	No change								P/S
Starter	22	21	S	L	Exterior	Pier 21S	Crack	3	36	0.016	-	Diagonal shear cracks	No change					3			P/S
Starter	22	21	S	L	Interior	Pier 21S	Crack	2	24	0.013	-	Diagonal shear crack	No change					-			P/S
Starter	22	21	S	R	Bottom	Pier 21S	Spall	1	2	3	1/4		No change								P/S
Starter	22	21	S	R	Interior	Pier 21S	Crack	3	30	0.013	-	Diagonal shear crack	No change					-			P/S
Starter	22	21	S	R	Exterior	Pier 21S	Crack	4	36	0.02	-	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 6" L, otherwise, cracks are up to 0.013" W.	No change					-			P/S
Starter	22	21	S	L	Exterior	Pier 22S	Crack	2	21	HL	1	Diagonal shear cracks	No change				-				P/S
Starter	22	21	S	L	Interior	Pier 22S	Crack	1	24	HL	-	Diagonal shear crack	No change				-				P/S
Starter	22	21	S	R	Interior	Pier 22S	Crack	1	24	HL	1	Diagonal shear crack	No change				-				P/S
Starter	22	21	S	R	Exterior	Pier 22S	Crack	2	36	HL	ı	Diagonal shear cracks	No change				3				P/S
Starter	23	22	N	R	Interior	Pier 22N	Crack	2	12	HL	-	Diagonal shear and radial cracks	No change				1				P/S
Starter	23	22	N	L	Exterior	Pier 23N	Crack	2	18	HL	1	Diagonal shear cracks	No change				2				P/S
Starter	23	22	N	R	Interior	Pier 23N	Crack	1	10	HL	-	Diagonal shear crack	new				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	22	22	S	L	Exterior	Pier 22S	Crack	2	12	HL	-	Diagonal shear cracks	No change		(332)	(552)	-	(333)	(322)	(333)	P/S
Starter	22	22	S	L	Interior	Pier 22S	Crack	2	18	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	22	22	S	R	Interior	Pier 22S	Crack	2	18	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	22	22	S	R	Exterior	Pier 22S	Crack	2	26	HL	-	Diagonal shear cracks	No change				3				P/S
Starter	22	22	S	L	Interior	Pier 23S	Crack	1	10	HL	-	Diagonal shear crack	No change				-				P/S
Starter	22	22	S	R	Interior	Pier 23S	Crack	1	10	HL	-	Diagonal shear crack	No change				-				P/S
Starter	22	22	S	R	Exterior	Pier 23S					1	Station Sign - Center of the letter "O" is displaced	new	J7-8				1			P/S
Starter	22	22	S	R	Exterior	Pier 23S	Crack	3	18	HL	-	Diagonal shear cracks	No change				2				P/S
Starter	22	23	S	L	Bottom	Pier 23S	Honey.	1	4	2	1/2		No change								P/S
Starter	22	23	S	R	Exterior	Pier 23S	Crack	2	10	HL	-	Diagonal shear cracks	No change				1				P/S
Starter	22	23	S	R	Exterior	Pier 23S	Grout Crack	1	28	HL	-	Vertical grout crack	No change								P/S
Starter	22	23	S	L	Exterior	Pier 24S	Crack	1	9	HL	-	Diagonal shear crack	No change				-				P/S
Starter	22	23	S	L	Both	Pier 24S	Grout Crack	1	28	HL	-	Vertical grout crack	No change								P/S
Starter	22	23	S	L	Interior	Pier 24S	Crack	1	12	HL	-	Diagonal shear crack	No change				-				P/S
Starter	22	23	S	R	Interior	Pier 24S	Crack	1	18	HL	-	Diagonal shear crack	No change				2				P/S
Starter	22	23	S	R	Exterior	Pier 24S	Crack	2	9	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	23	24	N	L	Exterior	Pier 24N	Crack	4	24	HL	-	Diagonal shear cracks	no change				-				P/S
Starter	23	24	N	L	Interior	Pier 24N	Crack	2	12	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	23	24	N	L	Bottom	10' from Pier 24N	Spall	1	5	3	1/2		No change						1		P/S
Starter	23	24	N	R	Interior	Pier 24N	Crack	3	18	HL	-	Diagonal shear and radial cracks. Shrinkage map cracking at the end	No change				-				P/S
Starter	23	24	N	R	Exterior	Pier 24N	Crack	1	36	HL	-	Diagonal shear crack	No change				3				P/S
Starter	23	24	N	R	Bottom	20' from Pier 25N	Scrape	5	8	1	1/4		New								P/S
Starter	23	24	N	L	Exterior	Pier 25N	Crack	4	32	0.016	-	Diagonal shear cracks	No change					-			P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	23	24	N	L	Interior	Pier 25N	Crack	2	36	0.013	-	Diagonal shear cracks	No change		(332)	(552)	(302)	-	(322)	(333)	P/S
Starter	23	24	N	R	Interior	Pier 25N	Crack	2	36	0.016	ı	Diagonal shear cracks with numerous shrinkage cracks also present	No change					3			P/S
Starter	23	24	N	R	Exterior	Pier 25N	Crack	3	30	0.016	-	Diagonal shear cracks	No change					-			P/S
Starter	22	24	S	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage map cracking throughout	No change								P/S
Starter	22	24	S	L	Exterior	Pier 24S	Crack	2	36	HL	-	Diagonal shear cracks	No change				2				P/S
Starter	22	24	S	L	Interior	Pier 24S	Crack	2	20	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	22	24	S	R	Interior	Pier 24S	Crack	6	12	0.013	-	Diagonal shear and radial cracks	No change					1			P/S
Starter	22	24	S	R	Both	Pier 24S	Grout Crack	-	28	-	-	Vertical grout crack	No change								P/S
Starter	22	24	S	R	Exterior	Pier 24S	Crack	4	24	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	22	24	S	L	Exterior	Pier 25S	Crack	2	31	0.02	-	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 3" L, otherwise, cracks are up to 0.013" W.	No change					-			P/S
Starter	22	24	S	L	Interior	Pier 25S	Crack	4	42	0.016	-	Diagonal shear cracks	No change					-			P/S
Starter	22	24	S	R	Interior	Pier 25S	Crack	2	30	0.016	-	Diagonal shear cracks	No change					-			P/S
Starter	22	24	S	R	Exterior	Pier 25S	Crack	4	42	0.02	-	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 4" L, otherwise, cracks are up to 0.013" W.	No change	J7-16				4			P/S
Starter	23	25	N	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 20% of the surface	No change								P/S
Starter	23	25	N	L	Exterior	Pier 25N	Crack	6	27	0.02	-	Diagonal shear and radial cracks; crack extending from beam notch is 0.02" W for 4" L, otherwise, cracks are up to 0.013" W.	No change					-			P/S
Starter	23	25	N	L	Interior	Pier 25N	Crack	3	42	0.013	-	Diagonal shear and radial cracks	No change					4			P/S
Starter	23	25	N	R	Interior	Pier 25N	Crack	2	36	HL	-	Diagonal shear cracks with numerous shrinkage cracks also present	No change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	23	25	N	R	Bottom	Pier 25N	Delam.	1	12	4	,	Accompanied by a wrap under crack	no change				,	,	1	•	P/S
Starter	23	25	N	R	Exterior	Pier 25N	Crack	5	36	0.016	1	Diagonal shear and radial cracks	No change					-			P/S
Starter	23	25	N	R	Exterior	Pier 25N	Spall	1	2	1	1/2		No change						1		P/S
Starter	25	25	N	L	Exterior	Pier 26N	Crack	2	36	HL	-	Diagonal shear cracks	No change				3				P/S
Starter	25	25	N	L	Interior	Pier 26N	Crack	3	16	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	25	25	N	R	Interior	Pier 26N	Crack	2	12	HL	-	Downward diagonal cracks	No change				-				P/S
Starter	25	25	N	R	Exterior	Pier 26N	Crack	2	36	HL	1	Diagonal shear cracks	No change				-				P/S
Starter	22	25	S	Both	Both	Throughout	Crack	1	-	-	1	Shrinkage map cracks on 40% of the surface	No change								P/S
Starter	22	25	S	L	Exterior	Pier 25S	Crack	4	36	0.016	1	Diagonal shear and radial cracks	No change					-			P/S
Starter	22	25	S	L	Interior	Pier 25S	Crack	4	42	0.013	-	Diagonal shear and radial cracks	increase (prev. 30")					-			P/S
Starter	22	25	S	R	Interior	Pier 25S	Crack	5	42	0.02	-	Diagonal shear and radial cracks; crack extending from beam notch is 0.02" W for 4" L, otherwise, cracks are up to 0.013" W.	No change					4			P/S
Starter	22	25	S	R	Exterior	Pier 25S	Crack	5	42	0.02	1	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 4" L, otherwise, cracks are up to 0.013" W.	Increase (.02 prev. for 2")					,			P/S
Starter	24	25	S	L	Exterior	Pier 26S	Crack	5	30	HL	-	Diagonal shear and radial cracks	increase (prev. 24")				-				P/S
Starter	24	25	S	L	Interior	Pier 26S	Crack	3	30	HL	1	Diagonal shear and radial cracks, numerous shrinkage cracks also present	new				1				P/S
Starter	24	25	S	R	Interior	Pier 26S	Crack	6	24	HL	-	Diagonal shear and radial cracks, numerous shrinkage cracks also present	No change				-				P/S
Starter	24	25	S	R	Exterior	Pier 26S	Crack	5	24	0.013	-	Diagonal shear and radial cracks. Downward diagonal crack wraps underneath stem and up other face	increase (prev. 20")					2			P/S
Starter	24	25	S	Both	Both	Pier 26S	Grout Crack	2	28	HL	-	Vertical grout crack	No change								P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width	Depth (in)	Additional Notes	2017 Note	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	25	25	N	R	?	Pier 26N	Delam.	1	7	4	3 1/2	Bottom corner of south stem	Disposition	7 11000	(COL)	(CSL)	(652)	(633)	(COL)	(000)	P/S
Starter	25	26	N	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 20% of the surface	no change	J6-8,9							P/S
Starter	25	26	N	L	Interior	Pier 26N	Crack	2	24	HL	i	Diagonal shear and radial cracks	no change				-				P/S
Starter	25	26	N	R	Interior	Pier 26N	Crack	1	30	HL	-1	Diagonal shear crack	no change				-				P/S
Starter	25	26	N	R	Both	Pier 26N	Grout Crack	1	28	HL	1	Vertical grout crack	no change								P/S
Starter	25	26	N	L	Exterior	Pier 26N	Crack	2	36	HL	1	Diagonal shear cracks	no change				3				P/S
Starter	25	26	N	R	Exterior	Pier 26N	Crack	5	22	0.01	- 1	Diagonal shear and radial cracks	increase (prev. 18")				-				P/S
Starter	25	26	N	R	Both	Pier 26N	Grout Crack	1	28	HL	1	Vertical grout crack	no change								P/S
Starter	25	26	N	R	Exterior	20' from Pier 26N	Spall	1	2 1/2	3.5	1/2	bottom edge	no change						1		P/S
Starter	25	26	N	L	Interior	Pier 27N	Crack	4	8	HL	1	Typical radial cracks	no change	J6-4			-				P/S
Starter	25	26	N	R	Interior	Pier 27N	Crack	2	21	HL	1	Diagonal shear and radial cracks	increase (prev. 18")				-				P/S
Starter	25	26	N	R	Both	Pier 27N	Grout Crack	1		HL	-	Horizontal grout crack	no change								P/S
Starter	25	26	N	L	Exterior	Pier 27N	Crack	2	32	HL	-	Diagonal shear cracks	increase (prev. 30")	J6-1			3				P/S
Starter	25	26	N	R	Exterior	Pier 27N	Crack	3	18	HL	1	Diagonal shear cracks	increase (prev. 12")				-				P/S
Starter	24	26	S	R	?	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 10% of the surface	No change								P/S
Starter	24	26	S	L	Exterior	Pier 26S	Crack	2	46	HL	-	Diagonal shear cracks	increase (prev. 24")				4				P/S
Starter	24	26	S	L	Exterior	Pier 26S	Crack	-	-	-	-	Shrinkage map cracking at the end 6'.	No change								P/S
Starter	24	26	S	L	Interior	Pier 26S	Crack	2	18	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	24	26	S	R	Interior	Pier 26S	Crack	2	14	HL	-	Diagonal shear cracks with numerous shrinkage cracks also present	No change				-				P/S
Starter	24	26	S	R	Exterior	Pier 26S	Crack	2	36	HL	-	Diagonal shear cracks	increase (prev. 20")				-				P/S
Starter	24	26	S	Both	Both	Pier 26S	Grout Crack	1	28	HL	i	Vertical grout crack	No change								P/S
Starter	24	26	S	L	Exterior	Pier 27S	Crack	4	28	HL	-	Diagonal shear cracks with numerous radial shrinkage cracks also present	increase (prev. 16")				3				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	24	26	S	L	Interior	Pier 27S	Crack	2	18	HL	-	Diagonal shear and radial cracks with numerous radial shrinkage cracks also present	No change	Filoto	(C32)	(C32)	-	(C33)	(6)2)	(633)	P/S
Starter	24	26	S	R	Interior	Pier 27S	Crack	2	14	HL	-	Diagonal shear cracks with numerous radial shrinkage cracks also present	No change				-				P/S
Starter	24	26	S	R	Exterior	Pier 27S	Crack	2	25	HL	-	Diagonal shear crack with shrinkage radial cracking also present	increase (prev. 6")				-				P/S
Starter	25	27	N	L	Exterior	Pier 27N	Crack	3	16	HL	1	Diagonal shear and radial cracks	No change				-				P/S
Starter	25	27	Ν	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 50% of the surface area	No change								P/S
Starter	25	27	N	L	Interior	Pier 27N	Crack	2	18	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	25	27	N	R	Interior	Pier 27N	Crack	2	24	HL	1	Diagonal shear and radial cracks	No change				-				P/S
Starter	25	27	N	R	Exterior	Pier 27N	Crack	2	48	HL	1	Diagonal shear cracks	No change				4				P/S
Starter	25	27	N	L	Exterior	Pier 28N	Patch Cracking	1	12	HL		bottom of stem	No change								P/S
Starter	25	27	N	L	Exterior	Pier 28N	Crack	3	30	0.013	-	Diagonal shear and radial cracks	No change					-			P/S
Starter	25	27	N	L	Exterior	Pier 28N	Crack	1	-	-	-	Shrinkage radial cracking at the end 4'.	No change	J7-17,18							P/S
Starter	25	27	N	L	Interior	Pier 28N	Crack	1	20	HL	-	Downward diagonal crack with radial shrinkage cracking	No change				-				P/S
Starter	25	27	N	R	Interior	Pier 28N	Crack	-	-	-	-	Radial shrinkage cracking at the end 4'.	No change	J7-19							P/S
Starter	25	27	N	R	Exterior	Pier 28N	Crack	6	36	0.013	-	Diagonal shear and radial cracks	No change					3			P/S
Starter	25	27	N	R	Exterior	20' from Pier 28N	spall	2	2	2	1/4		new						1		P/S
Starter	24	27	S	L	Exterior	Pier 27S	Crack	1	12	HL	-	Diagonal shear crack	no change				-				P/S
Starter	24	27	S	L	Interior	Pier 27S	Crack	1	12	HL	-	Downward diagonal crack	No change				-				P/S
Starter	24	27	S	R	Interior	Pier 27S	Crack	3	36	HL	-	Diagonal shear and radial cracks	No change				3				P/S
Starter	24	27	S	R	Exterior	Pier 27S	Crack	4	30	HL	-	Diagonal shear and radial cracks with shrinkage radial cracking also present	increase (prev. 24")				-				P/S
Starter	24	27	S	L	Exterior	Pier 28S	Crack	5	30	HL	-	Diagonal shear and radial cracks	No change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	24	27	S	L	Interior	16' from Pier 28S	Spall	3	11	4	1/2		No change	J7-20,21					1	1	P/S
Starter	24	27	S	L	Interior	Pier 28S	Crack	2	36	HL	-	Diagonal shear and radial cracks. radial shrinkage crack are also present	No change				-				P/S
Starter	24	27	S	R	Interior	Pier 28S	Crack	3	36	HL	1	Diagonal shear and radial cracks. radial shrinkage crack are also present	No change				3				P/S
Starter	24	27	S	R	Exterior	15' from Pier 28S	Gouge	1	15	2	1/4		No change						1		P/S
Starter	24	27	S	R	Exterior	Pier 28S	Crack	2	24	HL	1	Diagonal shear cracks	No change				-				P/S
Starter	25	28	N	L	Exterior	Pier 28N	Crack	1	12	HL	ı	Diagonal shear crack with shrinkage radial cracks	No change				•				P/S
Starter	25	28	N	R	Interior	Pier 28N	Crack	1	-	-	1	Radial shrinkage cracking at the end 4'.	new								P/S
Starter	25	28	N	R	Exterior	Pier 28N	Crack	3	18	HL	1	Diagonal shear and radial cracks	No change				2				P/S
Starter	27	28	N	L	Exterior	Pier 29	Crack	4	32	0.016	1	Diagonal shear cracks	no change					-			P/S
Starter	27	28	N	L	Interior	Pier 29	Crack	3	30	HL	-	Diagonal shear cracks	no change				-				P/S
Starter	27	28	N	R	Interior	Pier 29	Crack	4	30	HL	1	Diagonal shear cracks	no change				-				P/S
Starter	27	28	N	R	Exterior	Pier 29	Crack	6	37	0.016	-	Diagonal shear cracks; radial shrinkage cracks are also present	no change					4			P/S
Starter	24	28	S	L	Exterior	Pier 28S	Crack	1	12	HL	-	Diagonal shear crack with radial shrinkage cracking	no change				-				P/S
Starter	24	28	S	L	Interior	Pier 28S	Crack	1	18	HL	- 1	Downward diagonal crack with radial shrinkage cracking	no change				-				P/S
Starter	24	28	S	R	Interior	Pier 28S	Crack	1	1	-	1	Radial shrinkage cracking at the end 4'.	new								P/S
Starter	24	28	S	R	Exterior	Pier 28S	Poor Patch	1				Sandy patch is cracking	No change								P/S
Starter	24	28	S	R	Exterior	Pier 28S	Crack	2	24	HL	-	Diagonal shear and radial cracks with horizontal shrinkage cracking also	No change				2				P/S
Starter	24	28	S	L	Exterior	Pier 29	Crack	7	42	0.013	-	present Diagonal shear cracks with shrinkage radial cracking also present	No change					-			P/S
Starter	24	28	S	L	Interior	Pier 29	Crack	5	42	0.013	-	Diagonal shear and radial cracks with shrinkage radial cracking also present	No change					-	_		P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency	Qty	Max	Max Width	Depth	Additional Notes	2017 Note	2019	Efflor.	Rebar	Crack	Crack	Spall /patch	Spall	Beam
	Dioon	opu	200	0.0	1 4 6 6	2000000	Type	٦٠,	Len. (in)	(in)	(in)	Diagonal shear and radial	Disposition increase	Photo	(CS2)	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	Type
Starter	24	28	S	R	Interior	Pier 29	Crack	5	42	0.01	-	cracks	(prev. HL")				-				P/S
			_	_								Diagonal shear cracks with	·					_			- /-
Starter	24	28	S	R	Exterior	Pier 29	Crack	5	54	0.013	-	radial shrinkage cracking also prese t	No change					5			P/S
Starter	27	32	N	L	Rear	Pier 32	Spall	1	6	4	1	2 exposed and coated	No change							1	P/S
Starter	27	32	- "		iteai	1101 32	Span	-			_	tendon ends	No change							-	1/3
Starter	27	32	N	L	Exterior	Pier 32	Crack	8	42	0.013	-	Diagonal shear and radial cracks	No change					-			P/S
Starter	27	32	N	L	Interior	Pier 32	Crack	3	48	0.013	-	Diagonal shear and radial cracks	No change					-			P/S
Starter	27	32	N	R	Interior	Pier 32	Crack	4	48	0.013	-	Diagonal shear cracks	No change					4			P/S
Starter	27	32	N	R	Exterior	Pier 32	Crack	4	36	0.014	-	Diagonal shear cracks	increase					-			P/S
													(prev. HL) increase								
Starter	27	32	N	L	Interior	Pier 33	Crack	2	18	0.01	-	Diagonal shear and radial c	(prev. HL)				2				P/S
Starter	27	32	N	R	Interior	Pier 33	Crack	2	18	HL	1	Downward diagonal crack	No change				-				P/S
Starter	28	32	S	L	Exterior	Pier 32	Crack	3	36	0.016	-	Diagonal shear cracks	No change					3			P/S
Starter	28	32	S	L	Interior	Pier 32	Crack	2	36	0.013	-	Diagonal shear cracks	No change					-			P/S
Starter	28	32	S	R	Interior	Pier 32	Crack	2	36	0.013	-	Diagonal shear cracks	No change					-			P/S
Starter	28	32	S	R	Exterior	Pier 32	Crack	8	36	0.013	-	Diagonal shear cracks	No change					-			P/S
Starter	30	32	S	R	Exterior	Pier 33	Crack	1	18	HL		Diagonal shear cracks	No change				2				P/S
Starter	27	33	N	L	Exterior	Pier 33	Crack	2	24	HL	-	Diagonal shear and radial cracks	No change				2				P/S
Starter	27	33	N	R	Interior	Pier 33	Crack	1	12	HL	-	Downward diagonal crack	No change				-				P/S
Starter	27	33	N	L	Exterior	Pier 34	Crack	3	24	0.01	-	Diagonal shear and radial cracks	increase (prev. HL)				2				P/S
Starter	27	33	N	L	Interior	Pier 34	Crack	2	24	0.01	-	Diagonal shear and radial cracks	increase (prev. HL)				-				P/S
Starter	27	33	N	R	Interior	Pier 34	Crack	1	24	HL	-	Downward diagonal crack	No change				-				P/S
Starter	27	33	N	R	Exterior	Pier 34	Crack	1	18	HL	-	Downward diagonal crack	No change				-				P/S
Starter	30	33	S	L	Interior	Pier 33	Crack	1	12	HL	-	Downward diagonal crack	No change				1				P/S
Starter	30	33	S	R	Interior	Pier 33	Crack	1	12	HL	-	Horizontal crack 2` from the cap	No change				-				P/S
Starter	30	33	S	R	Exterior	Pier 33	Crack	1	12	HL	-	Downward diagonal crack	No change				-				P/S
Starter	30	33	S	L	Exterior	Pier 34	Crack	1	20	HL	-	Diagonal shear crack	No change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency	Qty	Max	Max Width	Depth	Additional Notes	2017 Note	2019	Efflor.	Rebar	Crack	Crack	Spall /patch	Spall	Beam
Lille	BIOCK	эрап	Dealli	Steili	race	Location	Туре	Qty	Len. (in)	(in)	(in)	Additional Notes	Disposition	Photo	(CS2)	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	Туре
Starter	30	33	S	L	Interior	Pier 34	Crack	1	24	HL	-	Downward diagonal crack	No change				-				P/S
Starter	30	33	S	R	Interior	Pier 34	Crack	3	24	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	30	33	S	R	Exterior	Pier 34	Crack	3	30	0.01	-	Diagonal shear and radial cracks	increase (prev. HL)				3				P/S
Starter	27	34	N	L	Exterior	Pier 34	Crack	2	20	HL	-	Diagonal shear cracks	No change				2				P/S
Starter	27	34	N	L	Interior	Pier 34	Crack	1	18	HL	-	Downward diagonal crack	No change				-				P/S
Starter	27	34	N	R	Interior	Pier 34	Crack	2	18	HL	-	Downward diagonal crack	No change				-				P/S
Starter	29	34	N	L	Exterior	Pier 35	Crack	4	36	0.013	-	Diagonal shear and radial cracks	No change	J12-10				3			P/S
Starter	29	34	N	L	Interior	Pier 35	Crack	5	30	0.013	-	Diagonal shear and radial cracks	No change					-			P/S
Starter	29	34	N	R	Interior	Pier 35	Crack	8	24	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	29	34	N	R	Exterior	Pier 35	Crack	4	36	0.02	-	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 2" L, otherwise, cracks are up to 0.013" W.	No change					-			P/S
Starter	30	34	S	L	Interior	Pier 34	Crack	1	12	HL	-	Downward diagonal crack	No change				-				P/S
Starter	30	34	S	R	Exterior	Pier 34	Crack	1	18	HL	-	Diagonal shear cracks	No change				2				P/S
Starter	30	34	S	Both	Both	Pier 34	Crack	-	-	-	-	Shrinkage radial cracking at the end 3'.	No change								P/S
Starter	29	34	N	Both	Both	Pier 35	Crack	1	-	-	-	Shrinkage radial cracking at the end 3'.	new								P/S
Starter	30	34	S	L	Exterior	Pier 35	Crack	3	39	0.016	-	Diagonal shear cracks	no change					4			P/S
Starter	30	34	S	L	Bottom	Pier 35	Spall	1	8	12	1	exposed and coated tendon	no change								P/S
Starter	30	34	S	L	Interior	Pier 35	Crack	4	36	0.016	-	Diagonal shear and radial cracks; crack extending from beam notch is 0.016" W for 5"L, otherwise, cracks are up to 0.013" W.	increase (prev. 3")					-			P/S
Starter	30	34	S	R	Interior	Pier 35	Crack	6	36	0.013	-	Diagonal shear and radial cracks	no change					-			P/S
Starter	30	34	S	R	Exterior	Pier 35	Crack	5	36	0.016	-	Diagonal shear cracks. Radial shrinkage cracking also present	no change					-			P/S
Starter	29	35	N	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 5% of the surface	no change								P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency	Qty	Max	Max Width	Depth	Additional Notes	2017 Note	2019	Efflor.	Rebar	Crack	Crack	Spall /patch	Spall	Beam
Starter	29	35	N	L	Exterior	Pier 35	Type Crack	4	Len. (in) 36	(in) 0.013	(in) -	Diagonal shear cracks	Disposition No change	Photo	(CS2)	(CS2)	(CS2)	(CS3) -	(CS2)	(CS3)	Type P/S
Starter	29	35	N	L	Interior	Pier 35	Crack	4	30	0.013	-	Diagonal shear and radial cracks	No change					-			P/S
Starter	29	35	N	L	Both	Pier 35	Crack	1	-	-	1	Shrinkage radial cracking at the end 3'.	new								P/S
Starter	29	35	N	R	Interior	Pier 35	Crack	3	36	0.013	1	Diagonal shear cracks	No change					-			P/S
Starter	29	35	N	R	Exterior	Pier 35	Crack	2	36	0.016	-	Diagonal shear cracks; crack extending from beam notch is 0.016" W for 5" L, otherwise, cracks are up to 0.013" W.	increase (prev. 2")					3			P/S
Starter	29	35	N	L	Exterior	Pier 36	Crack	3	10	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	29	35	N	L	Interior	Pier 36	Crack	2	18	HL	·	Diagonal shear and radial cracks	new				-				P/S
Starter	29	35	N	R	Interior	Pier 36	Crack	1	24	HL	-	Downward diagonal crack	new				2				P/S
Starter	29	35	N	R	Exterior	Pier 36	Crack	1	12	HL	-	Diagonal shear crack	No change				-				P/S
Starter	29	35	N	Both	Both	Pier 36	Crack	-	-	-	-	Shrinkage radial cracking at the end 6'.	new								P/S
Starter	30	35	S	Both	Both	Pier 36	Crack	-	-	-	-	Shrinkage radial cracking at the end 6'.	new								P/S
Starter	30	35	S	L	Exterior	Pier 35	Crack	3	18	0.016	-	Diagonal shear cracks; crack extending from beam notch is 0.016" W for 4" L, otherwise, cracks are up to 0.013" W.	increase (prev. 2")					-			P/S
Starter	30	35	S	L	Interior	Pier 35	Crack	2	36	0.013	-	Diagonal shear cracks	increase (prev. 24")					-			P/S
Starter	30	35	S	Both	Both	Pier 35	Crack	-	-	-	-	Shrinkage radial cracking at the end 3'.	new								P/S
Starter	30	35	S	R	Exterior	Pier 35	Crack	6	48	0.02	-	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 8" L, otherwise, cracks are up to 0.013" W.	No change	J12-13-15				4			P/S
Starter	30	35	S	R	Interior	Pier 35	Crack	3	36	0.013	-	Diagonal shear cracks	No change					-			P/S
Starter	30	35	S	L	Exterior	Pier 36	Crack	1	12	HL	-	Diagonal shear crack	No change				-				P/S
Starter	30	35	S	R	Interior	Pier 36	Crack	1	20	HL	-	Downward diagonal crack	new				-				P/S
Starter	30	35	S	R	Exterior	Pier 36	Crack	2	30	0.01	ı	Diagonal shear and radial cracks	increase (prev. HL)				3				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency	Qty	Max	Max Width	Depth	Additional Notes	2017 Note	2019	Efflor.	Rebar	Crack	Crack	Spall /patch	Spall	Beam
							Туре		Len. (in)	(in)	(in)	Diagonal shear and radial	Disposition	Photo	(CS2)	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	Туре
Starter	29	36	N	L	Exterior	Pier 36	Crack	2	14	HL	-	cracks	No change				-				P/S
Starter	29	36	N	L	Interior	Pier 36	Crack	3	18	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	29	36	N	R	Interior	Pier 36	Crack	3	18	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	29	36	N	R	Exterior	Pier 36	Crack	3	20	HL	-	Diagonal shear and radial cracks	No change				2				P/S
Starter	29	36	N	L	Exterior	Pier 37	Crack	4	26	0.01	1	Diagonal shear and radial cracks	increase (prev. HL)				3				P/S
Starter	29	36	N	Both	Both	Pier 37	Crack	1	-	-	-	Shrinkage radial cracking at the end 4'.	No change								P/S
Starter	29	36	N	L	Interior	Pier 37	Crack	2	24	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	29	36	N	R	Interior	Pier 37	Delam.	1	7	6	3	located at the bottom edge of the stem	No change								P/S
Starter	29	36	N	R	Interior	Pier 37	Crack	2	24	HL	-	Downward diagonal cracks	No change				-				P/S
Starter	29	36	N	R	Exterior	Pier 37	Crack	3	18	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	30	36	S	R	Interior	Pier 36	Crack	1	19	HL	-	Downward diagonal crack	No change			2					P/S
Starter	30	36	S	L	Interior	Pier 37	Crack	1	12	HL	-	Diagonal shear crack	No change			-					P/S
Starter	30	36	S	R	Interior	Pier 37	Crack	1	18	HL	-	Downward diagonal crack	No change			-					P/S
Starter	30	36	S	R	Exterior	Pier 37	Crack	1	24	HL	-	Diagonal shear crack	No change			2					P/S
Starter	30	36	S	R	Both	Pier 37	Crack	-	-	-	-	Shrinkage radial cracking at the end 4'.	No change								P/S
Starter	30	36	S	R	Exterior	Pier 37	Crack	1	9	HL	-	Transverse crack on the underside of the stem that runs upward for 3" on the right face.	No change			-					P/S
Starter	29	37	N	L	Exterior	Pier 37	Crack	1	18	HL	-	Diagonal shear crack	No change				-				P/S
Starter	29	37	N	L	Interior	Pier 37	Crack	3	18	HL	1	Downward diagonal cracks	No change				2				P/S
Starter	29	37	N	R	Bottom	Pier 37	Delam.	1	8	18			No change								P/S
Starter	29	37	N	R	Interior	Pier 37	Crack	3	12	HL	-	Downward diagonal cracks	No change								P/S
Starter	29	37	N	L	Exterior	Pier 38	Crack	3	39	0.02	-	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 4" L, otherwise, cracks are up to 0.013" W.	increase (prev. 0.016 for 4")					4			P/S
Starter	29	37	N	L	Interior	Pier 38	Crack	4	42	0.013		Diagonal shear and radial cracks	No change								P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	29	37	N	Both	Both	Pier 38	Crack		` '	HL		Shrinkage radial cracking at the end 6'.	New		•		-	, ,		•	P/S
Starter	29	37	N	R	Interior	Pier 38	Crack	4	42	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	29	37	N	R	Exterior	Pier 38	Crack	3	48	0.016	-	Diagonal shear cracks; crack extending from beam notch is 0.016" W for 6" L, otherwise, cracks are up to 0.013" W.	increase (prev. 3")					-			P/S
Starter	30	37	S	R	Interior	Pier 37	Crack	3	24	HL	-	Diagonal shear and radial cracks	no change				2				P/S
Starter	32	37	S	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage radial cracks on the end 6ft., other shrinkage cracks sporadic throughout	no change								P/S
Starter	32	37	S	L	Exterior	Pier 38	Crack	3	24	0.013	ı	Diagonal shear cracks	no change					-			P/S
Starter	32	37	S	L	Interior	Pier 38	Crack	2	30	0.013	-	Diagonal shear cracks	no change					-			P/S
Starter	32	37	S	R	Interior	Pier 38	Crack	3	24	0.013	-	Diagonal shear and radial cracks	no change					-			P/S
Starter	32	37	S	R	Exterior	Pier 38	Crack	5	34	0.016	-	Diagonal shear cracks; crack extending from beam notch is 0.016" W for 4" L, otherwise, cracks are up to 0.013" W.	no change					3			P/S
Starter	29	38	N	L	Exterior	Pier 38	Crack	2	30	0.016	-	Diagonal shear cracks; crack extending from beam notch is 0.016" W for 3" L, otherwise, cracks are up to 0.013" W. There is also a minor amount of unconsolidated concrete in the dapped corner.	No change					-			P/S
Starter	29	38	N	L	Interior	Pier 38	Crack	5	42	0.013	-	Diagonal shear and radial cracks	No change					4			P/S
Starter	29	38	N	R	Interior	Pier 38	Crack	4	30	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	29	38	N	R	Bottom	Pier 38	Crack	1	8	0.02	-	Diagonal crack in bottom end stem repair.	increase (prev. HL)					-			P/S
Starter	29	38	N	R	Bottom	Midspan	Spall	1	14	4	5/8		No change							2	P/S
Starter	29	38	N	R	Exterior	Pier 38	Crack	4	42	0.013	1	Diagonal shear and radial cracks	No change					-			P/S
Starter	31	38	N	L	Exterior	Pier 39N	Crack	1	18	HL	-	Downward diagonal crack	No change				2				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	31	38	N	L	Interior	Pier 39N	Crack	1	12	HL	-	Downward diagonal crack	No change				-			•	P/S
Starter	32	38	S	L	Exterior	Pier 38	Crack	4	48	0.016	-	Diagonal shear cracks; crack extending from beam notch is 0.016" W for 3"L, otherwise, cracks are up to 0.013" W.	No change					4			P/S
Starter	32	38	S	L	Interior	Pier 38	Crack	5	24	0.01	-	Diagonal shear cracks	increase (prev. HL)				-				P/S
Starter	32	38	S	R	Interior	Pier 38	Crack	4	30	0.01	-	Diagonal shear and radial cracks	increase (prev. HL and 24")				-				P/S
Starter	32	38	S	R	Exterior	Pier 38	Crack	5	30	0.013	-	Diagonal shear cracks	No change					-			P/S
Starter	32	38	S	L	Both	Pier 39S	Grout Crack	1	28	HL	-	Vertical grout crack	no change								P/S
Starter	32	38	S	R	Interior	Pier 39S	Crack	3	18	HL	-	Diagonal shear and radial cracks	no change				2				P/S
Starter	32	38	S	R	Exterior	Pier 39S	Crack	2	18	HL	- 1	Diagonal shear and radial cracks	no change				1				P/S
Starter	31	39	N	L	Exterior	Pier 39N	Crack	1	18	HL	- 1	Diagonal shear crack	No change				2				P/S
Starter	31	39	N	L	Interior	Pier 39N	Crack	2	12	HL	- 1	Downward diagonal cracks	No change				1				P/S
Starter	31	39	N	R	Interior	Pier 39N	Crack	2	12	HL	-	Downward diagonal cracks	No change				-				P/S
Starter	31	39	N	L	Exterior	Pier 40N	Crack	3	18	0.016	-	Diagonal shear cracks; crack extending from beam notch is 0.16" W for 5" L, otherwise, cracks are up to 0.01" W.	No change					-			P/S
Starter	31	39	N	L	Interior	Pier 40N	Crack	2	36	0.013	-	Diagonal shear cracks	No change					-			P/S
Starter	31	39	N	R	Interior	Pier 40N	Crack	2	36	0.013	1	Diagonal shear cracks	No change					-			P/S
Starter	31	39	N	R	Exterior	Pier 40N	Crack	5	36	0.013	1	Diagonal shear cracks with shrinkage radial cracking also present	No change					3			P/S
Starter	32	39	S	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 10% of the surface	no change								P/S
Starter	32	39	S	R	Exterior	Pier 39S	Crack	1	8	HL	-	Diagonal shear crack	no change				1				P/S
Starter	32	39	S	L	Exterior	Pier 40S	Crack	5	30	HL	i	Diagonal shear cracks	no change				·				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	32	39	S	L	Interior	Pier 40S	Crack	3	36	0.02	-	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 3" L, otherwise, cracks are up to 0.013" W.	no change	Filoto	(032)	(632)	(C32)	3	(632)	(633)	P/S
Starter	32	39	S	R	Interior	Pier 40S	Crack	5	30	0.013	-	Diagonal shear cracks	no change					-			P/S
Starter	32	39	S	R	Exterior	Pier 40S	Crack	6	30	0.013	-	Diagonal shear cracks	no change	J11-29				-			P/S
Starter	31	40	N	Both	Bottom	Pier 40N	Crack	-	-	-	-	Shrinkage radial cracking at the end 3'.	No change								P/S
Starter	31	40	N	L	Exterior	Pier 40N	Crack	3	36	0.013	-	Diagonal shear and radial cracks	No change					-			P/S
Starter	31	40	N	L	Interior	Pier 40N	Crack	4	36	0.013	-	Diagonal shear cracks	No change					3			P/S
Starter	31	40	N	R	Interior	Pier 40N	Crack	5	30	0.013	-	Diagonal shear and radial cracks	No change					-			P/S
Starter	31	40	N	R	Exterior	Pier 40N	Crack	6	36	0.013	-	Diagonal shear cracks	No change					-			P/S
Starter	33	40	N	R	Exterior	Pier 41N	Crack	1	18	HL	-	Diagonal shear crack	No change				2				P/S
Starter	33	40	N	Both	Bottom	Pier 41N	Crack	-	-	-	-	Shrinkage radial cracking at the end 3'.	No change								P/S
Starter	32	40	S	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 10% of the surface	no change								P/S
Starter	32	40	S	L	Exterior	Pier 40S	Crack	4	54	0.016	-	Diagonal shear cracks	no change	J11-34,35				5			P/S
Starter	32	40	S	L	Interior	Pier 40S	Crack	4	36	0.02	-	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 3"L, otherwise, cracks are up to 0.013" W.	no change	J11-32, 33				-			P/S
Starter	32	40	S	R	Interior	Pier 40S	Crack	3	36	0.013	-	Diagonal shear cracks. Note that it is typical for the stems with reflective shear cracks at the beam notch corner, this cracks extends across the rear of the stem	no change	J11-30,31				-			P/S
Starter	32	40	S	R	Rear	Pier 40S	Spall	1	5	4	1/2	bottom of stem	no change								P/S
Starter	32	40	S	R	Exterior	Pier 40S	Crack	6	24	0.013	-	Diagonal shear cracks	no change					-			P/S
Starter	32	40	S	L	Exterior	Pier 41S	Crack	-	-	-	-	Radial shrinkage cracks	no change								P/S
Starter	32	40	S	L	Interior	Pier 41S	Crack	1	12	HL	1	Downward diagonal crack. Radial shrinkage cracking also present	no change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	32	40	S	R	Interior	Pier 41S	Crack	2	12	HL	-	Downward diagonal cracks	no change				-			•	P/S
Starter	32	40	S	R	Exterior	Pier 41S	Crack	2	14	HL	-	Diagonal shear cracks	no change				2				P/S
Starter	33	41	N	L	Bottom	Pier 41	Spall	1	5	2	1/2	4" of exposed rebar due to insufficient cover.	no change			1					CIP
Starter	33	41	N	L	Bottom	15' from Pier 41	Spall	1	6	2	1/2	4" of exposed rebar due to insufficient cover.	no change						1		CIP
Starter	33	41	Z	۔	Exterior	Throughout	Patch Failure	?	2.5	2.5		There is a row of patches 2.5"x2.5" space 2' apart at the top and bottom of the stem. 10 are spalled off with exposed steel.	no change			10					CIP
Starter	33	41	N	Both	Both	Throughout	Crack	-	Full Height	0.016	-	Vertical flexural cracks that wrap under, spaced ~1.5' (6" spacing mid span)	no change								CIP
Starter	33	41	N-Cross	Both	Both	Throughout	Crack	-	Full Height	0.02	-	Vertical flexural cracks in the middle 2/3L that wrap under, spacing is 6" or less in the middle 20'. Widest cracks extend from the corners of the cutouts.	No change								CIP
Starter	32	41	S	L	Exterior	Pier 41S	Crack	3	30	0.013	-	Diagonal shear and radial cracks	no change					3			P/S
Starter	32	41	S	L	Interior	Pier 41S	Crack	3	12	HL	-	Diagonal shear and radial cracks; radial shrinkage cracks also present	no change				-				P/S
Starter	32	41	S	R	Interior	Pier 41S	Crack	2	18	HL	-	Diagonal shear and radial cracks	no change				-				P/S
Starter	32	41	S	R	Exterior	Pier 41S	Crack	2	18	HL	-	Diagonal shear and radial cracks	no change				-				P/S
Starter	32	41	S	R	Exterior	Pier 42S	Crack	2	9	0.013	-	Downward diagonal cracks	No change					1			P/S
Starter	35	42	N	R	Interior	Pier 42N	Crack	1	24	HL	-	Diagonal shear crack	No change				2				P/S
Starter	35	42	N	Both	Both	Pier 42N	Crack	-	-	-	-	Shrinkage radial and map cracking at the end 6'.	No change								P/S
Starter	35	42	N	Both	Interior	Pier 43N	Crack	-	-	-	-	Shrinkage radial and map cracking at the end 6'.	No change								P/S
Starter	35	42	N	L	Both	Pier 43N	Grout Crack	1	28	0.016	-	Vertical grout crack	No change								P/S
Starter	35	42	N	L	Exterior	Pier 43N	Crack	2	18	0.01	-	Diagonal shear cracks	increase (prev. HL)				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	35	42	N	L	Interior	Pier 43N	Crack	2	12	HL	-	Diagonal shear cracks	No change				-				P/S
Starter	35	42	N	R	Interior	Pier 43N	Crack	2	18	HL	-	Diagonal shear and radial c	no change				-				P/S
Starter	35	42	N	R	Exterior	Pier 43N	Crack	2	30	HL	-	Diagonal shear cracks					3				P/S
Starter	32	42	S	-	Both	Midpoint	Crack	6	24	HL		Midpoint diaphragm exhibits diagonal hairline cracks up to 2'L.	no change								CIP
Starter	32	42	S	-	Front	22ft. from Pier 43S	Crack	1	10	HL	-	First diaphragm from Pier 43S exhibits a vertical crack x 10" L with efflorescence at the underside of deck transition	no change								CIP
Starter	32	42	S	Both	Both	Throughout	Crack	-	Full Height	0.016	-	Diagonal shear cracking in the end 1/4 L and vertical flexural cracking within the middle 1/2L. Cracks are 0.010-0.016" W, spaced 8-12" wrap under and are nearly full height on both faces. Including intersection blockout. A portion of these cracks have been sealed.	no change	J11-3,4							CIP
Starter	32	42	S-Cross	Both	Both	Throughout	Crack	-	Full Height	0.016	-	Diagonal shear cracking in the end 1/4 L and vertical flexural cracking within the middle 1/2 L. Cracks are spaced 10-16" and wrap under and are nearly full height on both faces. Including triangular junction with Span 42S. A portion of these cracks have been sealed.	no change	J11-5-8							CIP
Starter	35	43	N	L	Exterior	Pier 43N	Crack	5	18	HL	1	Diagonal shear and radial cracks	No change				-				P/S
Starter	35	43	N	L	Both	Pier 43N	Crack	1	22	HL	-	Vertical crack that wraps under the beam stem	new				2				P/S
Starter	35	43	N	L	Interior	Pier 43N	Crack	6	18	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	35	43	N	R	Interior	Pier 43N	Crack	5	20	HL	-	Diagonal shear and radial cracks	No change				-				P/S
Starter	35	43	N	R	Exterior	Pier 43N	Crack	5	18	0.01	-	Diagonal shear and radial cracks	increase (prev. HL)				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	35	43	N	Both	Both	Pier 43N	Crack	-	-	-	-	Shrinkage radial cracking at the end 6'.	no change		(302)	(302)	(332)	(333)	(302)	(000)	P/S
Starter	37	43	N	Both	Both	Pier 44N	Crack	ı	-	-	i	Shrinkage radial cracking at the end 6'.	new								P/S
Starter	37	43	N	L	Exterior	Pier 44N	Crack	6	30	0.016	1	Diagonal shear cracks; crack extending from beam notch is 0.16" W for 3" L, otherwise, cracks are up to 0.013" W.	increase (prev. 24")					,			P/S
Starter	37	43	N	L	Interior	Pier 44N	Crack	4	42	0.013	-	Diagonal shear and radial cracks	no change					4			P/S
Starter	37	43	N	R	Interior	Pier 44N	Crack	3	42	0.013	-	Diagonal shear and radial cracks	no change					-			P/S
Starter	37	43	N	R	Exterior	Pier 44N	Crack	5	18	HL	-	Diagonal shear and radial cracks	no change				-				P/S
Starter	34	43	S	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 20% of the surface	no change								P/S
Starter	34	43	S	L	Exterior	Pier 44S	Crack	1	18	HL	-	Diagonal shear crack	no change				-				P/S
Starter	34	43	S	L	Interior	Pier 44S	Crack	2	18	HL	-	Diagonal shear cracks	no change				2				P/S
Starter	34	43	S	R	Interior	Pier 44S	Crack	2	12	HL	-	Diagonal shear cracks	no change				-				P/S
Starter	34	43	S	R	Exterior	Pier 44S	Crack	2	18	HL	-	Diagonal shear cracks	no change				-				P/S
Starter	37	44	N	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 10% of the surface	No change								P/S
Starter	37	44	N	L	Exterior	Pier 44N	Crack	3	24	0.01	-	Diagonal shear cracks	increase (prev. HL)				-				P/S
Starter	37	44	N	L	Interior	Pier 44N	Crack	1	28	HL	-	Diagonal shear crack	increase (prev. 18")				-				P/S
Starter	37	44	N	R	Interior	Pier 44N	Crack	3	30	HL	-	Diagonal shear and radial cracks	no change				3				P/S
Starter	37	44	N	R	Exterior	Pier 44N	Crack	3	20	HL	-	Diagonal shear cracks	no change				-				P/S
Starter	37	44	N	Both	Both	Pier 45N	Crack	-	-	-	-	Shrinkage radial cracking at the end 6'.	new								P/S
Starter	37	44	N	L	Exterior	Pier 45N	Crack	1	24	HL	-	Diagonal shear and radial cracks	increase (prev. 18")				2				P/S
Starter	37	44	N	L	Interior	Pier 45N	Crack	1	24	HL	-	Diagonal shear crack	no change				-				P/S
Starter	37	44	N	R	Interior	Pier 45N	Crack	1	24	HL	-	Diagonal shear crack	no change				-				P/S
Starter	37	44	N	R	Interior	Pier 45N	Crack	1	24	HL	-	Diagonal shear crack	new				-				P/S
Starter	34	44	S	Both	Both	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 30% of the surface	no change								P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	34	44	S	L	Exterior	Pier 44S	Crack	2	18	0.01	-	Diagonal shear cracks	no change		(002)	(332)	-	(333)	(332)	(333)	P/S
Starter	34	44	S	L	Interior	Pier 44S	Crack	3	36	0.01	-	Diagonal shear cracks	no change				-				P/S
Starter	34	44	S	R	Interior	Pier 44S	Crack	2	36	0.013	-	Diagonal shear cracks	no change					-			P/S
Starter	34	44	S	R	Exterior	Pier 44S	Crack	2	36	0.016	-	Diagonal shear cracks; crack extending from beam notch is 0.016" W for 6" L, otherwise, cracks are up to 0.013" W.	no change					3			P/S
Starter	34	44	S	L	Interior	7' from Pier 45S	Crack	3	24	0.013	-	Diagonal shear cracks	no change					2			P/S
Starter	34	44	S	R	Exterior	Pier 45S	Crack	2	12	HL	-	Diagonal shear cracks	no change				1				P/S
Starter	37	45	N	Both	Both	Pier 45N	Crack	-	-	-	-	Shrinkage radial cracking at the end 6'.	new								P/S
Starter	37	45	N	R	Exterior	Pier 45N	Crack	1	12	HL	-	Diagonal shear cracks	new				1				P/S
Starter	37	45	N	Both	Both	Pier 46N	Crack	ı	_	-	-	Shrinkage radial cracking at the end 6'.	new								P/S
Starter	37	45	N	L	Exterior	Pier 46N	Crack	2	24	HL	-	Diagonal shear cracks	No change				2				P/S
Starter	37	45	N	R	Interior	Pier 46N	Crack	1	12	HL	-	Diagonal shear crack	No change				-				P/S
Starter	34	45	S	Both	Both	Throughout	Crack	1	-	-	-	Shrinkage map cracks on 30% of the surface	no change								P/S
Starter	34	45	S	R	Exterior	Pier 45S	Crack	2	24	HL	-	Diagonal shear and radial cracks	no change					2			P/S
Starter	34	45	S	R	Interior	Pier 46S	Crack	1	12	HL	-	Downward diagonal crack	no change								P/S
Starter	34	45	S	R	Exterior	Pier 46S	Crack	1	15	HL	-	Diagonal shear crack	no change					1.5			P/S
Starter	37	46	N	L	Exterior	Pier 46N	Crack	5	18	HL	-	Diagonal shear and radial cracks	no change				-				P/S
Starter	37	46	N	L	Interior	Pier 46N	Crack	2	30	HL	-	Diagonal shear and radial cracks	no change				3				P/S
Starter	37	46	N	R	Interior	Pier 46N	Crack	2	20	HL	-	Diagonal shear and radial cracks	no change				-				P/S
Starter	37	46	N	R	Exterior	Pier 46N	Crack	2	12	HL	-	Diagonal shear and radial cracks	no change				-				P/S
Starter	37	46	N	Both	Both	Pier 46N	Crack	-	-	-	-	Shrinkage radial cracking at the end 6'.	new								P/S
Starter	37	46	N	Both	Both	Pier 47N	Crack	-	-	-	-	Shrinkage radial cracking at the end 10'.	new								P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
Starter	37	46	N	L	Exterior	Pier 47N	Crack	3	30	0.02	-	Diagonal shear cracks; crack extending from beam notch is 0.02" W for 3" L, otherwise, cracks are up to 0.013" W.	no change					-			P/S
Starter	37	46	N	L	Interior	Pier 47N	Crack	3	36	0.016	-	Diagonal shear cracks; crack extending from beam notch is 0.016" W for 6"L, otherwise, cracks are up to 0.013" W.	No change					-			P/S
Starter	37	46	N	R	Interior	Pier 47N	Crack	5	42	0.016	-	Diagonal shear and radial cracks; crack extending from beam notch is 0.016" W for 7"L, otherwise, cracks are up to 0.013" W.	No change					4			P/S
Starter	37	46	Z	R	Exterior	Pier 47N	Crack	4	30	0.025	1	Diagonal shear and radial cracks; crack extending from beam notch is 0.025" W for 3" L, otherwise, cracks are up to 0.013" W.	No change					,			P/S
Starter	37	46	N	R	Exterior	Pier 47N	Spall	1	3	1.5	3/4	Adjacent to the keeper plate.	no change								P/S
Starter	34	46	S	L	Exterior	Pier 46S	Crack	3	30	0.013	-	Diagonal shear and radial cracks	no change					3			P/S
Starter	34	46	S	L	Interior	Pier 46S	Crack	3	18	0.013	-	Diagonal shear and radial cracks	no change					-			P/S
Starter	34	46	S	R	Interior	Pier 46S	Crack	4	18	HL	-	Diagonal shear and radial cracks	no change				-				P/S
Starter	34	46	S	R	Exterior	Pier 46S	Crack	2	24	HL	-	Diagonal shear and radial cracks	no change				-				P/S
Starter	34	46	S	L	Interior	Pier 47S	CFRP Delam	2	4	1			new								P/S
Starter	34	46	S	R	Interior	Pier 47S	Crack	2	30	HL	-	Diagonal shear cracks. Radial shrinkage cracks are also present.	no change				-				P/S
Starter	34	46	S	R	Exterior	Pier 47S	Crack	8	34	0.01	-	Diagonal shear and radial cracks. 3 have epoxy injections	no change	J11-14			3				P/S
North	37	47	L	L	Rear	Pier 47N	Spall	1	6	7	3/4	2 exposed tendon ends, coated by inspectors	no change							1	P/S
North	37	47	L	R	Right	Pier 47N	Crack	6	10	HL		Right overhang, extending from CFRP	new				1				P/S
North	37	47	L	R	Rear	Pier 47N	Spall	2	4	1	1/2	2 exposed tendon ends, coated by inspectors	no change							1	P/S
North	39	47	L	L	Exterior	Pier 48L	Patch Cracking	1		HL			No change								P/S
North	39	47	L	L	Exterior	Pier 48L	Crack	1	12	HL	-	Diagonal shear cracks	no change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	39	47	L	R	Interior	Pier 48L	Delam.	1	18	8.5	()		no change	J12-19	(032)	(C32)	(032)	(633)	(632)	(033)	P/S
North	39	47	L	R	Exterior	Pier 48L	Crack	1	30	HL	-	Diagonal shear cracks	no change				3				P/S
North	34	47	R	-	-	Bay 1	Delam.	1	3	1		Rear diaphragm has a delamination and several hairline cracks.	no change						1		CIP
North	34	47	R	-	-	Bay 1	Crack	1	58	0.016	-	Diagonal crack in forward diaphragm; crack has been partially sealed.	no change								CIP
North	34	47	R	_	Interior	Bay 2	Crack	2	96	0.013	-	Diagonal hairline cracks extend up from rear diaphragm into bottom of deck slab and continue eastward along left stem for 8'	no change								CIP
North	34	47	R	1	-	Bay 2	Crack		24	0.01	-	Random cracking in forward diaphragm, 1 up to 0.010	no change								CIP
North	34	47	R	-	-	Bay 3	Crack	?		HL	-	Random hairline cracking in rear and forward diaphragms.	no change								CIP
North	34	47	R	R	Exterior	Bay 4	Crack	i		HL	ı	Diagonal cracking showing through the coating, between 10' and 24' from Pier 48S, spaced 10-12" apart.	no change	J11-23,24							CIP
North	34	47	R	1	-	Bay 5	Crack	4	30	0.013	-	Diagonal cracks in rear diaphragm, shrinkage map cracking also present	no change								CIP
North	34	47	R	R	Interior	Pier 47R	CFRP Delam	9	3	2		spongy	no change								CIP
North	34	47	R	R	Exterior	Pier 47R	CFRP Delam	24	5	2		spongy	no change	J11-16,17							CIP
North	34	47	R	_	Interior	Pier 47R	Crack	6	84	0.03	-	Diagonal shear cracks extending into haunch and the deck underside. Cracks have been mostly sealed and appear to be epoxy injected.	no change	J11-18							CIP
North	34	47	R	R	Exterior	Pier 48R	Delam.	1	24	14		Located at the bottom of the stem	no change	J11-22					2		CIP



Line	Block	Span	Beam	Stem	Face	Location	Deficiency	Otv	Max	Max Width	Depth	Additional Notes	2017 Note	2019	Efflor.	Rebar	Crack	Crack	Spall /patch	Spall	Beam
Line North	Block 34	Span 47	Beam	Stem	Face Both	Location Throughout	Type Crack	Qty -	Len. (in)	(in)	(in)	Additional Notes Stems have been coated. Numerous cracks in the stems have been sealed and are hard to identify, but numerous flexural cracks are apparent as some can be seen above the coating in the fillet and others can be seen	Disposition	Photo	(CS2)	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	Type
												through the coating. Spacing is 10-12" apart, and hairline to 0.014" wide above the stem coating Shrinkage map cracks on									
North	39	48	L	Both	Interior	Pier 48L	Crack	-	-	-	-	10% of the surface	new								P/S
North	39	48	L	L	Exterior	Pier 48L	Crack	1	30	HL	-	Diagonal shear crack	no change				3				P/S
North	39	48	L	L	Interior	Pier 48L	Scrape	4	180	6	1/8	Longitudinal scrapes at the bottom of the stem	no change	J12-23							P/S
North	39	48	L	R	Exterior	Pier 48L	Crack	1	30	HL	-	Diagonal shear crack	No change				-				P/S
North	39	48	L	L	Exterior	Pier 50	Delam.	1	4	1		Grout delamination at end of dapped end	No change								P/S
North	39	48	L	L	Exterior	Pier 50	Crack	1	26	HL	-	Diagonal shear crack	No change				-				P/S
North	39	48	L	R	Exterior	Pier 50	Crack	1	30	HL	-	Diagonal shear crack	No change				3				P/S
North	39	48	L	Both	Both	Pier 50	Grout Crack	1	28	HL	-	Vertical grout crack	no change								P/S
North	36	48	R	L	Exterior	Pier 49R	Crack	1	24	HL	-	Diagonal shear crack	no change				2				P/S
North	36	48	R	Both	Both	Pier 49R	Grout Crack	1	28	0.016	1	Vertical grout crack	no change								P/S
North	36	48	R	R	Exterior	Pier 49R	Crack	1	18	HL	-	Diagonal shear crack	no change				-				P/S
North	36	49	R	L	Interior	Pier 49R	Crack	1	24	HL	1	Downward diagonal crack	no change				2				P/S
North	36	49	R	R	Interior	Pier 49R	Crack	1	18	HL	1	Downward diagonal crack	no change				-				P/S
North	36	49	R	R	Exterior	Pier 49R	Crack	1	14	HL	-	Downward diagonal crack	no change				,				P/S
North	36	49	R	L	Both	Pier 50	Grout Crack	1	28	0.013	-	Vertical grout crack	no change								P/S
North	36	49	R	L	Exterior	Pier 50	Crack	2	24	HL	-	Downward diagonal and ve	No change				2				P/S
North	36	49	R	L	Interior	Pier 50	Crack	1	6	HL	-	Vertical, also grout coating crack	no change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	36	49	R	R	Interior	Pier 50	Grout Crack	1	28	0.016	-	Vertical grout crack	no change		(302)	(302)	(332)	(333)	(332)	(000)	P/S
North	36	49	R	R	Exterior	Pier 50	Crack	-		HL	-	Random cracking in spall repair	No change				-				P/S
North	36	49	R	R	Exterior	Pier 50	Crack	3	20	HL	-	One vertical and two horizontal crack	no change				-				P/S
North	39	50	L	L	Exterior	Pier 50	Crack	1	24	HL	-	Diagonal shear crack	No change				2				P/S
North	39	50	L	R	Interior	Pier 50	Crack	- 1	-	-	-	Shrinkage radial cracking at the end 4'.	new								P/S
North	39	50	L	R	Interior	12' from Pier 51	CFRP Delam	1	2	5			no change								P/S
North	39	50	L	R	Exterior	Pier 51	CFRP Delam	4	2	2		Located between 4.5' and 10' from the cap.	no change								P/S
North	36	50	R	R	Interior	Pier 51	CFRP Delam	13	5	2		Throughout CFRP	new								P/S
North	39	50	L	L	Both	Pier 50	Grout Crack	1	28	0.061	-	Vertical grout crack	new	J12-24							P/S
North	39	50	L	R	Exterior	Pier 50	Spall	1	3	1	1/4		new								P/S
North	36	50	R	R	Exterior	Pier 50	Crack	1	22	HL	-	Diagonal shear crack	new				2				P/S
North	36	50	R	L	Both	Pier 50	Grout Crack	1	28	0.061	-	Vertical grout crack	new								P/S
North	36	50	R	R	Both	Pier 50	Grout Crack	2	28	HL	-	Vertical grout crack	no change								P/S
North	39	51	L	L	Exterior	Pier 51	Crack	2	8	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change				-				P/S
North	39	51	L	L	Rear	Pier 51	Spall	1	6	6	1		no change						1		P/S
North	39	51	L	R	Interior	Pier 51	Crack	1	12	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	No change				-				P/S
North	39	51	L	R	Exterior	Pier 51	Crack	2	24	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	No change				2				P/S
North	39	51	L	L	Exterior	Pier 52	Crack	1	12	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	39	51	L	R	Exterior	Pier 52	Crack	2	12	0.013	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change		(***)	(3.5)	(***)	1	(33)	(333)	P/S
North	36	51	R	L	Bottom	Pier 51	Spall	1	2.5	2	1/2		no change								P/S
North	36	51	R	L	Exterior	Pier 51	Crack	1	12	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change				-				P/S
North	36	51	R	L	Interior	Pier 51	Crack	1	12	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change				-				P/S
North	36	51	R	R	Interior	Pier 51	Crack	1	12	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change				-				P/S
North	36	51	R	R	Exterior	Pier 51	Crack	2	14	HL	1	Diagonal shear cracks extending from the dapped end notch above the half height CFRP wrap	no change				2				P/S
North	36	51	R	L	Exterior	Pier 52	Crack	1	12	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change				1				P/S
North	36	51	R	L	Interior	Pier 52	Crack	1	4	HL	1	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change				,				P/S
North	36	51	R	R	Interior	Pier 52	Crack	1	4	HL	1	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change				•				P/S
North	36	51	R	R	Exterior	Pier 52	Crack	2	12	HL	1	Diagonal shear cracks extending from the dapped end notch above the half height CFRP wrap	no change				,				P/S
North	41	54	L	L	Rear	Pier 54	Spall	1	4	3	1	Above the beam seat	no change						1		P/S
North	41	54	L	L	Exterior	Pier 55	Crack	1	12	HL	1	Diagonal shear crack	no change				1				P/S
North	40	54	R	R	Exterior	Pier 55	Crack	1	12	HL	1	Diagonal shear crack	no change				1				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	41	55	L	L	Exterior	Pier 55	Spall	2	3	2	1/2		no change		(,	()	, , ,	, , , ,	, , ,	, ,	P/S
North	41	55	L	L	Exterior	Pier 55	Crack	1	27	HL	-	Diagonal shear crack	no change				3				P/S
North	41	55	L	R	Both	4' from Pier 55	Crack	1	42	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	no change				3				P/S
North	40	55	R	L	Both	Pier 55	Grout Crack	1	28	HL	-	Vertical grout crack	no change								P/S
North	40	55	R	R	Exterior	Pier 55	Crack	2	14	HL	-	Diagonal shear crack	No change				2				P/S
North	40	55	R	L	Both	4.5' from Pier 55	Crack	1	52	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	No change				5				P/S
North	40	55	R	L	Exterior	8' from Pier 55	Honey	1	4	4	1/4		No change						1		P/S
North	40	55	R	R	Both	4.5' from Pier 55	Crack	1	52	HL	-	Crack is vertical for half of the stem height and extends diagonally.	No change				-				P/S
North	40	55	R	R	Bottom	4' from Pier 55	Gouge	1	12	1	1/4		No change								P/S
North	41	55	L	L	Exterior	Pier 56	Crack	1	22	HL	-	Diagonal shear crack	no change				-				P/S
North	41	55	L	R	Both	5' from Pier 56	Crack	1	46	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	no change				-				P/S
North	40	55	R	L	Both	4.5' from Pier 56	Crack	1	37	HL	-	Crack is vertical for half of the stem height and extends diagonally.	no change				-				P/S
North	40	55	R	R	Both	4.5' from Pier 56	Crack	2	47	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	no change				4				P/S
North	40	55	R	R	Exterior	Pier 56	Crack	1	24	HL	-	Diagonal shear crack	no change				2				P/S
North	41	56	L	L	Exterior	Pier 56	Crack	1	26	HL	-	Diagonal shear crack	no change				3				P/S
North	41	56	L	L	Both	4.5' from Pier 56	Crack	1	49	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	increase (prev. 47")				4				P/S
North	41	56	L	R	Both	4.5' from Pier 56	Crack	1	49	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	no change				-				P/S
North	40	56	R	R	Exterior	Pier 56	Spall	1	12	6	1		No change	R20-6							P/S
North	40	56	R	R	Exterior	Pier 56	Crack	2	21	HL	-	Diagonal shear cracks	no change				2				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	40	56	R	R	Both	4.5' from Pier 56	Crack	1	50	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	increase (prev. 45")	R20-7		·	4			, ,	P/S
North	43	56	L	L	Exterior	Pier 57	Crack	1	27	HL	1	Diagonal shear crack	no change				3				P/S
North	43	56	L	L	Interior	Pier 57	Spall	1	1	1	1/2	One protruding nail	no change								P/S
North	43	56	L	R	Bottom	15' from Pier 57	Spall	1	1	1	1/4		No change						1		P/S
North	43	56	L	R	Interior	Pier 57	Spall	2	2	2	1/2	Three protruding nails	no change	R20-8							P/S
North	43	56	L	R	Exterior	Pier 57	Spall	3	4	3	1/2		no change								P/S
North	43	56	L	R	Both	4.5' from Pier 57	Crack	1	44	HL	1	Crack is vertical for up to half of the stem height and extends diagonally.	no change				4				P/S
North	40	56	R	L	Exterior	Pier 57	Spall	2	6	3	1/2	Mid-height of stem	no change								P/S
North	40	56	R	R	Both	4.5' from Pier 57	Crack	1	47	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	no change				4				P/S
North	40	56	R	L	Exterior	Pier 57	Crack	1	10	HL	1	Diagonal shear crack	no change				-				P/S
North	40	56	R	R	Exterior	Pier 57	Crack	1	20	HL	1	Diagonal shear crack	no change				2				P/S
North	43	57	L	L	Exterior	Pier 57	Crack	1	26	HL	1	Diagonal shear crack	no change				3				P/S
North	43	57	L		Both	4.5' from Pier 57	Crack	1	52	HL	1	Crack is vertical for up to half of the stem height and extends diagonally.	increase (prev. 40")				4				P/S
North	43	57	L	R	Both	4.5' from Pier 57	Crack	1	49	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	increase (prev. 36")				-				P/S
North	40	57	R	L	Exterior	4.5' from Pier 57	Crack	1	11	HL	- 1	Diagonal shear crack in the middle of the stem	no change				-				P/S
North	40	57	R	R	Interior	4.5' from Pier 57	Crack	1	21	HL	1	Diagonal shear crack in the middle of the stem	no change				2				P/S
North	43	57	L	L	Exterior	Pier 58	Crack	5	11	HL	1	Cracks extending up from CFRP repairs	no change				-				P/S
North	43	57	L	L	Interior	4.5' from Pier 58	CFRP Tear	1	2.5	2.5			no change								P/S
North	43	57	L	L	Interior	Pier 58	Crack	3	39	HL	-	Cracks extending up from CFRP repairs	no change				4				P/S
North	43	57	L	R	Interior	Pier 58	Crack	3	27	HL	-	Cracks extending up from CFRP repairs	no change				_				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	43	57	L	R	Exterior	Pier 58	Crack	4	12	HL	-	Cracks extending up from CFRP repairs	no change		, , ,	(/	-	, , , , ,	(, ,	P/S
North	40	57	R	Both	Interior	Pier 58	Crack	2	36	HL	-	Diagonal crack on inside face of each stem extending above CFRP repairs and meet in the underside of the flange	no change				3				P/S
North	40	57	R	L	Bottom	16' from Pier 58	Gouge	2	2	4	1/4		no change						1		P/S
North	40	57	R	R	Exterior	Pier 58	Crack	2	8	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	43	58	L	L	Exterior	Pier 58	Crack	3	14	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	43	58	L	L	Interior	Pier 58	Crack	2	32	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	43	58	L	R	Interior	Pier 58	Crack	1	34	HL	-	Cracks extending up from CFRP repairs	no change				3				P/S
North	43	58	L	R	Exterior	Pier 58	Crack	3	6	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	43	58	L	R	Interior	25' from Pier 58	Spall	2	3	3	1/4		no change						1		P/S
North	40	58	R	L	Exterior	Pier 58	Crack	4	8	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	40	58	R	L	Interior	Pier 58	Crack	3	44	0.016	-	Cracks extending up from CFRP repairs	no change					4			P/S
North	40	58	R	R	Interior	Pier 58	Crack	4	17	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	40	58	R	R	Exterior	Pier 58	Crack	4	8	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	42	58	R	R	Exterior	25' from Pier 59	Spall	1	6	3	1/2		No change						1		P/S
North	42	58	R	L	Interior	25' from Pier 59	Spall	2	5	2	1/2		No change						2		P/S
North	42	58	R	R	Interior	4.5' from Pier 59	Crack	1	38	HL	-	Horizontal crack	No change				3				P/S
North	42	58	R	R	Exterior	Pier 59	Crack	1	20	HL	-	Diagonal shear crack	No change				2				P/S
North	43	59	L	L	Exterior	Pier 59	Crack	1	21	HL	-	Diagonal shear crack	No change				2				P/S
North	43	59	L	R	Interior	Pier 59	Grout Spall	1	2	2	1/4		no change								P/S
North	42	59	R	L	Both	Pier 59	Grout Crack	1	28	HL	-	Vertical grout crack	no change								P/S
North	42	59	R	R	Exterior	Pier 59	Crack	1	10	HL	-	Diagonal shear crack	no change				1				P/S
North	42	59	R	L	Both	5' from Pier 59	Crack	1	40	0.016	-	Crack is vertical for up to half of the stem height and extends diagonally.	no change	R20-12- 13				4			P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	42	59	R	R	Both	5' from Pier 59	Crack	1	39	0.013	-	Crack is vertical for up to half of the stem height and extends diagonally.	no change	FIIOLO	(032)	(C32)	-	(633)	(632)	(033)	P/S
North	43	59	L	L	Exterior	Pier 60	Crack	1	20	HL	-	Diagonal shear crack	increase (prev. 16")				2				P/S
North	43	59	L	R	bottom	15' from Pier 60	Spall	1	3	2.5	1/4		no change						1		P/S
North	42	59	R	L	Both	5' from Pier 60	Crack	1	46	HL	ı	Crack is vertical for up to half of the stem height and extends diagonally.	increase (prev. 36")				4				P/S
North	42	59	R	L	Bottom	Pier 60	scrapes	5	34	0.25	1/4		new								P/S
North	42	59	R	R	Both	5' from Pier 60	Crack	1	42	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	increase (prev. 43")				•				P/S
North	42	59	R	R	Bottom	Pier 60	Spall	1	3	2	1/2		no change								P/S
North	42	59	R	R	Exterior	Pier 60	Crack	1	12	HL	-	Diagonal shear crack	increase (prev. 10")				1				P/S
North	43	60	L	L	Exterior	Pier 60	Crack	1	16	HL	-	Diagonal shear crack	no change				2				P/S
North	43	60	L	R	Interior	10' from Pier 60	Patch Cracking	1	6	0.03			No change						1		P/S
North	42	60	R	R	Exterior	Pier 60	Spall	1	7	3	3/4	Located at the bottom of the stem	no change							1	P/S
North	42	60	R	L	Interior	Midspan	Spall	1	4	2.5	1	Located at the bottom of the stem	no change						1		P/S
North	43	60	L	L	Exterior	Pier 61L	Crack	1	21	HL	1	Diagonal shear crack	no change				2				P/S
North	43	60	L	L	Exterior	Pier 61L	Crack	1	18	HL	-	Diagonal shear crack	no change				-				P/S
North	42	60	R	L	Exterior	Pier 61R	Crack	1	18	HL		Diagonal shear crack extending from the dapped end.	new				2				P/S
North	42	60	R	R	Exterior	Pier 61R	Delam.	1				Exterior face of right stem has a delamination, 6"Lx3"H, 1' from Pier 61R.	no change								P/S
North	42	60	R	R	Exterior	Pier 61R	Spall	1	7	3	1/4	2' from Pier 62R	no change							1	P/S
North	43	61	L	L	Exterior	Pier 61L	Crack	1	20	HL	,	Diagonal shear crack	no change				2				P/S
North	43	61	L	L	Both	5' from Pier 61L	Crack	1	38	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	no change				3				P/S
North	43	61	L	R	Exterior	Pier 61L	Crack	1	19	HL	-	Diagonal shear crack	no change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	43	61	L	R	Both	4.5' from Pier 61L	Crack	1	40	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	no change		,	,	-	, , ,	,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	P/S
North	43	61	L	R	Bottom	25' from Pier 61L	Spall	1	2	2	1/4		no change						2		P/S
North	45	61	L	L	Bottom	20' from Pier 62L	Spall	1	3	1	1/4		no change						1		P/S
North	45	61	L	L	Interior	Pier 62L	Crack	2	13	HL	-	Cracks extending up from CFRP repairs	no change				2				P/S
North	45	61	L	R	Interior	Pier 62L	Crack	1	6	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	42	61	R	R	Exterior	Pier 62R	Crack	1	12	HL	-	Vertical hairline crack above the bearing plate	no change				1				P/S
North	45	62	L	L	Exterior	Pier 62L	Crack	1	18	HL	-	Diagonal shear crack above half If height CFRP wrap	increase (prev. 12")				2				P/S
North	45	62	L	R	Exterior	Pier 62L	Crack	1	10	HL	-	Diagonal shear crack above half If height CFRP wrap	new				-				P/S
North	42	62	R	L	Exterior	Pier 62R	Crack	2	10	HL	-	Diagonal shear and vertical cracks extending from the dapped end notch above the half height CFRP wrap	no change				-				P/S
North	42	62	R	R	Exterior	Pier 62R	Crack	2	39	HL	-	Diagonal shear cracks extending from the dapped end notch above the half height CFRP wrap	increase (prev. 30")				3				P/S
North	44	62	R	R	Exterior	Pier 63R	Crack	1	4	HL	-	Diagonal shear crack	no change				1				P/S
North	45	63	L	L	Exterior	Pier 63L	Crack	1	10	HL	-	Diagonal shear crack	no change				1				P/S
North	45	63	L	L	Interior	Pier 63L	Delam.	1	4	4	-		new				1				P/S
North	45	63	L	R	bottom	Forward half	Spall	2	3	1	1/2		new				1				P/S
North	45	63	L	L	Exterior	Pier 64L	Crack	1	6	HL	-	Diagonal shear crack	no change				1				P/S
North	45	63	L	Both	Both	Pier 64L	Grout Crack	1	28	HL	-	Vertical grout crack	no change								P/S
North	44	63	R	R	Exterior	Pier 63R	Crack	1	12	HL	-	Downward diagonal crack	no change				1				P/S
North	45	64	L	L	Exterior	Pier 64L	Crack	1	19	HL	-	Diagonal shear crack	no change				2				P/S
North	44	64	R	R	Both	Pier 64R	Grout Crack	1	28	HL	-	Vertical grout crack	no change								P/S
North	44	64	R	R	Interior	Pier 65R	Crack	1	16	HL	-	Diagonal shear crack	new				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	44	64	R	R	Exterior	Pier 65R	Crack	1	18	HL	- (111)	Diagonal shear crack	increase (prev. 12")	Piloto	(C32)	(C32)	2	(C33)	(C32)	(033)	P/S
North	45	65	L	L	Exterior	Pier 66L	Crack	2	18	HL	-	Diagonal shear cracks	no change				2				P/S
North	45	65	L	R	Interior	Pier 66L	Crack	2	11	HL	-	Diagonal shear crack extending above the half height CFRP wrap	new				1				P/S
North	45	65	L	R	Exterior	Pier 66L	Crack	1	12	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	No change				•				P/S
North	46	65	R	R	Exterior	Pier 66R	Crack	1	14	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change				•				P/S
North	46	65	R	L	Interior	Pier 66R	Crack	1	18	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	No change				,				P/S
North	46	65	R	R	Interior	Pier 66R	Crack	1	24	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	new				2				P/S
North	45	66	L	L	Exterior	Pier 66L	Crack	3	8	HL	-	Cracks extending up from CFRP repairs	new				1				P/S
North	45	66	L	L	Rear	Pier 66L	Spall	5	1	1	1/2	with exposed and coated tendond	No change	R20-20		1					P/S
North	45	66	L	L	Interior	Pier 66L	Crack	2	6	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	45	66	L	R	Interior	Pier 66L	Crack	1	8	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	45	66	L	R	Exterior	Pier 66L	Crack	2	6	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	45	66	L	R	Exterior	Pier 66L	CFRP Delam	2	2	1			no change								P/S
North	45	66	L	L	bottom	15' from Pier 66L	Spall	2	2	4	1/4		no change						1		P/S
North	45	66	L	R	Interior	18' from Pier 66L	Patch Cracking	1		0.016			no change						1		P/S
North	45	66	L	L	Exterior	Midspan	Spall	1	6	2	1/4		no change						1		P/S
North	45	66	L	L	Exterior	Pier 67L	Crack	1	25	HL	-	Diagonal shear crack	no change				-				P/S
North	45	66	L	R	Both	4.5' from Pier 67R	Crack	1	51	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	no change				4				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency	Qty	Max	Max Width	Depth	Additional Notes	2017 Note	2019	Efflor.	Rebar	Crack	Crack	Spall /patch	Spall	Beam
		66			Both	Pier 67L	Type Grout		Len. (in)	(in) HL	(in) -		Disposition	Photo	(CS2)	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	Type
North	45		L	Both			Crack	2	28			Vertical grout crack	no change								P/S
North	45	66	L	R	Exterior	Pier 67L	Crack	1	30	HL	-	Diagonal shear crack	no change				3				P/S
North	46	66	R	R	Exterior	Pier 66R	Crack	2	29	HL	-	Diagonal shear crack	increase (prev. 24")				2				P/S
North	46	66	R	-	-	Pier 66R	Crack	1	12	0.016	-	Diaphragm crack	no change				-				P/S
North	46	66	R	L	Bottom	15' from Pier 66R	Spall	1	8	2	1		no change							1	P/S
North	46	66	R	L	Bottom	18' from Pier 66R	Spall	1	5	3	1/2		no change						1		P/S
North	46	66	R	R	Bottom	25' from Pier 66R	Spall	1	4	2	1/2		no change						1		P/S
North	46	66	R	L	Both	Pier 67R	Crack	1	15	HL	-	Downward diagonal crack	increase (prev. 12" and not seen interior)				2				P/S
North	46	66	R	R	Exterior	Pier 67R	Crack	1	9	HL	-	Downward diagonal crack	no change				-				P/S
North	45	67	L	L	Exterior	Pier 67	Crack	1	20	HL	-	Diagonal shear crack	no change				2				P/S
North	45	67	L	L	Interior	4.5' from Pier 67	Crack	1	28	HL	-	Horizontal crack	increase (prev. 24")				-				P/S
North	45	67	L	L	Bottom	15' from Pier 67	Spall	2	12	2	1/4		no change						1		P/S
North	45	67	L	R	Interior	4' from Pier 67	Crack	1	42	HL	-	Horizontal crack	no change				4				P/S
North	45	67	L	R	Bottom	20' from Pier 67	Spall	1	2	3	1/4		no change						1		P/S
North	47	67	L	L	Interior	Pier 68	Spall	1	1	1	1/4	Exposed nail	new				1.5				P/S
North	47	67	L	L	Exterior	Pier 68	Crack	1	15	HL	-	Diagonal shear crack	no change				2				P/S
North	46	67	R	R	Bottom	Pier 67R	Spall	2	3	2	1/4		no change						2		P/S
North	46	67	R	R	Exterior	8' from Pier 67R	Crack	1	20	HL	1	Horizontal crack, 1'-6" up from bottom of the stem	no change				2				P/S
North	46	67	R	L	Bottom	15' from Pier 67R	Spall	1	2	2	1/4		no change						1		P/S
North	46	67	R	L	Both	Pier 68	Grout Crack	1	28	HL	-	Vertical grout crack	no change								P/S
North	46	67	R	R	Exterior	Pier 68	Crack	1	27	HL	-	Diagonal shear crack	no change				3				P/S
North	47	68	L	L	Exterior	Pier 68	Crack	1	8	HL	-	Diagonal shear	new				1				P/S
North	46	68	R	L	Interior	Pier 68	Crack	1	18	HL	-	Downward diagonal crack	no change				2				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	46	68	R	L	Exterior	Pier 68	Spall	1	4	2	1		no change			,			1		P/S
North	46	68	R	L	Interior	Pier 68	Spall	2	1	1	1/4	Spalls have protruding nails	no change						2		P/S
North	46	68	R	L	Interior	Pier 68	Spall	1	1	1	1/4	protruding nail	no change						2		P/S
North	47	68	L	L	Exterior	Pier 69	Crack	4	6	HL	1	Cracks extending up from CFRP repairs	new				1				P/S
North	47	68	L	L	Interior	Pier 69	Crack	4	36	HL		Cracks extending up from CFRP repairs	no change				3				P/S
North	47	68	L	R	Interior	Pier 69	Crack	3	36	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	47	68	L	R	Bottom	20ft. from Pier 69	Spall	1	3	2	1/4		no change								P/S
North	47	68	L	R	Exterior	Pier 69	Crack	5	19	HL	1	Cracks extending up from CFRP repairs	no change				1				P/S
North	46	68	R	L	Exterior	Pier 69	Crack	1		HL	1	9SF of random hairline cracking	no change				3				P/S
North	46	68	R	-	-	Pier 69	Crack	1	14	0.016	-	Vertical crack in diaphragm adjacent to the right stem	no change					-			P/S
North	47	69	L	L	Exterior	Pier 69	Crack	4	8	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	47	69	L	L	Interior	Pier 69	Crack	4	18	HL	-	Cracks extending up from CFRP repairs	No change				2				P/S
North	47	69	L	L	Exterior	Midspan	Patch Cracking	1	10	12	1	Cracks up to 1/16" with minor spalling	new	R21-3					1		P/S
North	47	69	L	R	Interior	Pier 69	Crack	4	18	HL	-	Cracks extending up from CFRP repairs	No change				-				P/S
North	47	69	L	R	Exterior	Pier 69	CFRP Delam	1	2	2			No change								P/S
North	47	69	L	R	Exterior	Pier 69	Crack	4	9	HL	1	Cracks extending up from CFRP repairs	No change				,				P/S
North	46	69	R	L	Exterior	Pier 69	CFRP Delam	1	3	1			No change								P/S
North	46	69	R	L	Exterior	Pier 69	Crack	4	8	HL	1	Cracks extending up from CFRP repairs	No change				1				P/S
North	46	69	R	L	Interior	Pier 69	Crack	2	7	HL	1	Cracks extending up from CFRP repairs	No change				1				P/S
North	46	69	R	R	Interior	Pier 69	Crack	1	6	HL	1	Cracks extending up from CFRP repairs	No change				-				P/S
North	46	69	R	R	Exterior	Pier 69	Crack	3	9	HL	-	Cracks extending up from CFRP repairs	No change				-				P/S
North	47	69	L	L	Exterior	40' from Pier 70	Spall	1	3	2	1		no change						1		P/S
North	47	69	L	L	Exterior	Pier 70	Crack	1	24	HL	-	Diagonal shear crack	no change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	47	69	L	R	Both	4.5' from Pier 70	Crack	1	48	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	no change		,	, , , , , , , , , , , , , , , , , , ,	4	,	, ,	(===)	P/S
North	47	69	L	R	Interior	Pier 70	Crack	1	28	HL	-	Diagonal shear crack	no change				3				P/S
North	47	69	L	R	Exterior	Pier 70	Crack	2	32	HL	-	Diagonal shear crack	no change				-				P/S
North	46	69	R	R	Exterior	Pier 70	Crack	1	30	HL	-	Diagonal shear crack	no change				3				P/S
North	47	70	L	L	Bottom	Throughout	Spall	1	4	4	1/2		no change						2		P/S
North	47	70	L	R	Bottom	Throughout	Spall	3	2	3	1/2		no change						2		P/S
North	46	70	R	R	Interior	Pier 70	Crack	1	14	HL	-	Diagonal shear crack	no change				2				P/S
North	47	70	L	L	Exterior	Pier 71	Crack	1	12	HL	-	Diagonal shear crack	no change				-				P/S
North	47	70	L	R	Interior	Pier 71	Crack	1	15	HL	-	Diagonal shear crack	new				2				P/S
North	47	70	L	R	Exterior	Pier 71	Crack	1	7	HL	-	Diagonal shear crack	new				-				P/S
North	47	70	L	L	Both	Pier 71	Grout Crack	1	28	HL	-	Vertical grout crack	no change								P/S
North	46	70	R	R	Bottom	8' from Pier 71	Spall	1	2	2	1/4		no change						1		P/S
North	46	70	R	R	Exterior	Pier 71	Crack	1	20	HL	-	Diagonal shear crack	new				2				P/S
North	46	70	R	R	Both	Pier 71	Grout Crack	1	28	HL	-	Vertical grout crack	no change								P/S
North	47	71	L	L	Exterior	Pier 71	Crack	1	18	HL	-	Diagonal shear crack	increase (prev. 9")				-				P/S
North	47	71	L	Both	Both	Pier 71	Grout Crack	1	28	HL	-	Vertical grout crack	no change								P/S
North	47	71	L	R	Exterior	Pier 71	Crack	1	20	HL	-	10" diagonal shear crack with minor efflorescence that extends into the cap face	no change				2				P/S
North	46	71	R	L	Exterior	Pier 71	Crack	1	6	HL	ı	Diagonal shear crack	no change				_				P/S
North	46	71	R	R	Exterior	Pier 71	Crack	1	10	HL	ı	Diagonal shear crack	no change				1				P/S
North	47	71	L	L	Exterior	Pier 72	Crack	2	28	HL	-	Diagonal shear crack from t	no change				-				P/S
North	47	71	L	R	Interior	Pier 72	Crack	1	32	HL	-	Diagonal shear crack above	new				3				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	47	71	L	R	Interior	Pier 72	Crack	1	21	HL	-	Vertical crack at corner of stem and end diaphragm, extending into haunch.	no change		(22)	,	-	,	, , ,	,	P/S
North	47	71	L	R	Exterior	Pier 72	Crack	1	28	HL	-	Diagonal shear crack above	no change				-				P/S
North	46	71	R	L	Exterior	Pier 72	Crack	1	7	HL	-	Diagonal shear crack above	new				-				P/S
North	46	71	R	R	Exterior	Pier 72	Crack	1	20	HL	-	Vertical crack extending from the dapped end notch above the half height CFRP	no change				1				P/S
North	47	72	L	L	Interior	Pier 72	Crack	1	8	HL	-	Cracks extending up from CFRP repairs	no change				1				P/S
North	47	72	L	R	Exterior	Pier 72	Crack	3	8	HL	-	Cracks extending up from CFRP repairs	no change				1				P/S
North	47	72	L	L	Exterior	Midspan	Spall	1	2	2	1/4		no change						1		P/S
North	46	72	R	L	Exterior	Pier 72	Crack	2	6	HL	1	Cracks extending up from CFRP repairs	no change				1				P/S
North	46	72	R	L	Exterior	4' from Pier 72	CFRP Delam	1	1	1			no change								P/S
North	46	72	R	R	Exterior	Pier 72	Crack	2	7	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	46	72	R	R	Interior	10' from Pier 72	Crack	1	6	HL	1	Crack extending up from CFRP repairs	no change				1				P/S
North	46	72	R	L	Interior	10' from Pier 72	Crack	1	6	HL	1	Crack extending up from CFRP repairs	no change				1				P/S
North	47	72	L	L	Exterior	Pier 73	Crack	1	17	HL	1	Diagonal shear crack	increase (prev. 9")				2				P/S
North	47	72	L	L	Exterior	4' from Pier 73	Spall	2	2	2	1/4		no change						2		P/S
North	47	72	L	R	?	40' from Pier 73	Patch Cracking	1	3	0.03			No change						1		P/S
North	47	72	L	R	Exterior	Pier 73	Efflo	1	8	HL	-	At the pier interface	No change								P/S
North	46	72	R	L	Both	4' from Pier 73	Crack	1	30	HL	-	Crack is vertical for half of the stem height and extends diagonally.	No change				3				P/S
North	46	72	R	R	Exterior	Pier 73	Crack	1	15	HL	-	Diagonal shear crack	No change				2				P/S
North	47	73	L	L	Both	4.5' from Pier 73	Crack	1	47	HL	1	Crack is vertical for up to half of the stem height and extends diagonally.	increase (prev. 37")				3				P/S
North	47	73	L	L	Exterior	Pier 73	Crack	1	27	HL	-	Diagonal shear crack	increase (prev. 24")				3				P/S
North	46	73	R	R	Exterior	Pier 73	Crack	1	24	HL	-	Diagonal shear crack	No change					2			P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	47	73	L	R	Bottom	20ft. from Pier 74	Spall	1	6	2	1/4		No change		(302)	(332)	(302)	(333)	(322)	(000)	P/S
North	46	73	R	R	Bottom	Throughout	Gouge	4	15	2	1/4	Located at 1', 5' and (2) at 12' from Pier 73.	No change								P/S
North	47	74	L	L	?	Pier 74	Spall	1	2	2	1/4		No change								P/S
North	47	74	L	L	Exterior	Pier 74	Crack	1	24	HL	-	Diagonal shear crack	no change				2				P/S
North	46	74	R	R	Exterior	Pier 74	Crack	1	17	HL	-	Diagonal shear crack	no change				2				P/S
North	46	74	R	L	Interior	4' from Pier 74	Crack	1	30	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	no change				3				P/S
North	51	74	L	L	Exterior	Pier 75	Crack	2	7	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	51	74	L	L	Interior	Pier 75	Crack	1	11	HL	-	Cracks extending up from CFRP repairs	no change				1				P/S
North	51	74	L	R	Interior	Pier 75	Crack	1	11	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	51	74	L	R	Exterior	Pier 75	Crack	2	9	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	50	74	R	L	Exterior	Pier 75	Crack	2	9	HL	-	Cracks extending up from CFRP repairs	no change				1				P/S
North	50	74	R	L	Interior	Pier 75	Crack	1	6	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	50	74	R	R	Interior	Pier 75	Crack	1	6	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	50	74	R	R	Exterior	Pier 75	Crack	4	8	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	51	75	L	L	Exterior	Pier 75	Crack	4	10	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	51	75	L	L	Interior	Pier 75	Crack	2	11	HL	-	Cracks extending up from CFRP repairs	no change				1				P/S
North	51	75	L	R	Interior	Pier 75	Crack	1	8	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	51	75	L	R	Exterior	Pier 75	Crack	4	10	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	50	75	R	L	Exterior	Pier 75	Crack	3	9	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	50	75	R	L	Interior	Pier 75	Crack	3	44	HL	-	Cracks extending up from CFRP repairs	no change				4				P/S
North	50	75	R	R	Interior	Pier 75	Crack	3	44	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	50	75	R	R	Exterior	Pier 75	Crack	4	8	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	51	75	L	L	Exterior	Pier 76	Crack	1	20	HL	-	Diagonal shear crack	no change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	51	75	L	R	Exterior	Pier 76	Crack	1	24	HL	- (111)	Diagonal shear crack	no change	Filoto	(032)	(C32)	2	(033)	(C32)	(033)	P/S
North	50	75	R	L	Bottom	Pier 76	Spall	1	10.5	9	1 1/2		no change	R21-12							P/S
North	50	75	R	R	Exterior	Pier 76	Crack	1	16	HL	-	Diagonal shear crack	no change				2				P/S
North	51	76	L	L	Exterior	Pier 76	Crack	1	20	HL	-	Diagonal shear crack	no change				-				P/S
North	51	76	L	Both	Both	Pier 76	Grout Crack		28	HL	-	Vertical grout crack	no change								P/S
North	51	76	L	R	Interior	Pier 76	Crack	1	144	HL	-	Longitudinal crack along top inside corner	no change	R21-14			12				P/S
North	51	76	L	R	Exterior	4' from Pier 76	Crack	1	12	HL	- 1	Horizontal crack	no change				1				P/S
North	51	76	L	R	Exterior	Pier 76	Patch delam	1	12	3	1		new						1		P/S
North	50	76	R	R	Exterior	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 20% of the surface	no change								P/S
North	50	76	R	L	Exterior	Pier 76	Crack	1	36	HL	1	Diagonal shear crack	no change				3				P/S
North	50	76	R	R	Exterior	Pier 76	Crack	1	23	HL	1	Diagonal shear crack	no change				-				P/S
North	51	76	L	L	Both	Pier 77	Grout Crack	1	28	0.016	1	Vertical grout crack	no change								P/S
North	51	76	L	L	Exterior	Pier 77	Crack	1	24	HL	-	Diagonal shear crack	no change				2				P/S
North	51	76	L	R	Interior	Pier 77	Grout Crack	1	28	0.016	1	Vertical grout crack	no change								P/S
North	50	76	R	L	Both	4.5' from Pier 77	Crack	1	43	HL	-	Crack is vertical for up to half of the stem height and extends diagonally.	no change				4				P/S
North	50	76	R	L	Bottom	Pier 77	Spall	1	4	2	1/2		no change								P/S
North	50	76	R	R	Exterior	Pier 77	Crack	1	20	HL	-	Diagonal shear crack	no change				2				P/S
North	50	76	R	R	Both	Pier 77	Grout Crack	1	28	0.016	-	Vertical grout crack with minor efflorescence	no change								P/S
North	51	77	L	L	Exterior	Pier 77	Crack	1	19	HL	1	Diagonal shear crack	no change				-				P/S
North	51	77	L	L	Interior	Pier 77	Crack	1	120	HL	-	Longitudinal crack along top inside corner with efflorescence	no change				10				P/S
North	50	77	R	R	Exterior	Pier 77	Crack	1	14	HL	-	Diagonal shear crack	No change				1				P/S
North	50	77	R	L	Exterior	Pier 77	Efflo.					Moderate efflorescence between stem and cap	No change	R21-18							P/S
North	51	77	L	L	Exterior	Pier 78	Crack	1	6	HL	-	Crack extending up from CFRP repairs	No change				1				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	51	77	L	R	Interior	Pier 78	Crack	1	6	HL	-	Crack extending up from CFRP repairs	No change	111000	(032)	(CJZ)	-	(633)	(632)	(033)	P/S
North	50	77	R	L	Interior	Pier 78	Crack	1	42	HL	-	Crack extending up from CFRP repairs	No change				4				P/S
North	50	77	R	R	Interior	Pier 78	Crack	2	42	HL	-	Cracks extending up from CFRP repairs	No change				-				P/S
North	50	77	R	R	Exterior	Pier 78	Crack	2	6	HL	-	Cracks extending up from CFRP repairs	No change				-				P/S
North	51	78	L	L	Exterior	Pier 78	Crack	1	8	HL	-	Crack extending up from CFRP repairs	Increase (prev. 6")				-				P/S
North	51	78	L	L	Interior	Pier 78	Crack	3	13	HL	-	Cracks extending up from CFRP repairs	no change				2				P/S
North	51	78	L	R	Interior	Pier 78	Crack	3	7	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	51	78	L	-	-	Pier 78	Crack	1	20	HL	-	Horizontal crack in diaphragm bottom edge	no change				-				P/S
North	51	78	L	R	Exterior	Pier 78	Crack	3	12	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	50	78	R	L	Exterior	Pier 78	CFRP Delam	2	3	1.5			no change								P/S
North	50	78	R	L	Exterior	Pier 78	Crack	1	6	HL	-	Crack extending up from CFRP repairs	new				1				P/S
North	50	78	R	-	Exterior	Pier 78	Crack	1	6	HL	-	Diagonal crack in diaphragm bottom edge	no change				-				P/S
North	51	78	L	R	Exterior	Pier 79L	Crack	1	24	HL	-	Diagonal shear crack	no change				2				P/S
North	51	78	L	R	Exterior	Pier 79L	Grout Crack	1	28	0.016	-	Vertical grout crack	no change								P/S
North	50	78	R	R	Exterior	Pier 79R	Crack	1	20	HL	-	Diagonal shear crack	no change				-				P/S
North	50	78	R	L	Exterior	Pier 79R	Crack	1	30	HL	-	Diagonal shear crack	no change				3				P/S
North	51	79	L	L	Bottom	Throughout	Scrape		Full length	3.5	1/4	Associated gouges exist on inside bottom corner up to 2' long. Bottom face has exposed wires or chairs space 6"	no change	R22-14							P/S
North	51	79	L	R	Exterior	Pier 79L	Crack	1	14	HL	-	Diagonal shear crack	new				2				P/S
North	51	79	L	L	Exterior	Pier 80L	Spall	1	2	2	1/4		no change						2		P/S
North	51	79	L	L	Both	Pier 80L	Grout Crack	1	28	HL	-	Vertical grout crack	no change								P/S
North	51	79	L	R	Interior	Pier 80L	Patch Cracking	1	4	0.016			no change								P/S
North	50	79	R	L	Exterior	Pier 79R	Crack	1	22	HL	-	Diagonal shear crack	no change				2				P/S
North	50	79	R	R	Exterior	Pier 79R	Crack	1	10	HL	-	Diagonal shear crack	no change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	50	79	R	L	Interior	8' from Pier 79	Crack	1	42	HL	1	Crack is vertical for up to half of the stem height and extends diagonally.	new				4				P/S
North	50	79	R	L	Exterior	Pier 80R	Crack	1	12	HL	1	Diagonal shear crack	new				1				P/S
North	51	80	L	L	Exterior	25' from Pier 80L	Spall	1	4	4	1	Bottom of the stem	no change						1		P/S
North	51	80	L	R	Exterior	Pier 80L	Spall	2	3	3	1/4		no change								P/S
North	51	80	L	R	Exterior	Pier 80L	Crack	1	15	HL	ı	Downward diagonal crack	no change				-				P/S
North	51	80	L	L	Interior	Pier 80L	Exposed Nails	2					no change								P/S
North	51	80	L	R	Bottom	Pier 80L	Delam.	1	12	6		In the grout	no change								P/S
North	51	80	L	R	Bottom	Pier 80L	Crack	1	18	0.02	-	12" vertical crack on the inside face that wraps around the bottom of the stem for 6".	Increase (prev. 10")					2			P/S
North	51	80	L	L	Exterior	Pier 81L	Crack	3	10	HL	-	1 diagonal shear crack and 2 vertical cracks extending up from the bearing	no change				1				P/S
North	50	80	R	L	Exterior	Pier 80R	Crack	1	16	HL	-	Diagonal shear crack	no change				2				P/S
North	50	80	R	R	Exterior	Pier 81R	Crack	3	8	HL	-	Cracks extending up from CFRP repairs	no change				-				P/S
North	50	80	R	R	Interior	Pier 81R	Crack	3	12	HL	1	Cracks extending up from CFRP repairs	no change				1				P/S
North	50	80	R	R	Exterior	Pier 81R	CFRP Delam	1	2	2			no change								P/S
North	50	80	R	R	Exterior	Pier 81R	Crack	3	8	HL		Diagonal shear cracks extending from the CFRP wrap	no change				-				P/S
North	50	80	R	R	Interior	Pier 81R	crack	3	12	HL		Diagonal cracks extending up from the CFRP wrap	new				-				P/S
North	50	80	R	L	Interior	Pier 81R	crack	3	12	HL		Diagonal cracks extending up from the CFRP wrap	new				-				P/S
North	51	81	L	L	Exterior	Pier 81L	Crack	2	14	HL	-	Diagonal shear and vertical crack	no change				2				P/S
North	50	81	R	R	Exterior	Throughout	Crack	-	-	-	-	Shrinkage map cracks on 60% of the surface	no change	R22-9							P/S
North	50	81	R	R	Exterior	Pier 81R	Crack	1	26	HL	-	Diagonal shear crack	no change				2				P/S
North	50	81	R	L	Exterior	Pier 81R	Crack	1	20	HL	-	Diagonal shear crack	no change				-				P/S
North	52	81	R	R	Bottom	3ft. from Pier 82R	Spall	1	7	2	1/2		no change							1	P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
North	53	82	L	R	Bottom	Midspan	Spall	1	4	2	1/4		no change	Piloto	(C32)	(C32)	(C32)	(C33)	1	(C33)	P/S
North	53	82	L	L	Exterior	Pier 82L	Grout Crack	1	28	0.016	-	Vertical grout crack	no change								P/S
North	53	82	L	R	Both	Pier 82L	Grout Crack	1	28	HL	-	Vertical grout crack	No change								P/S
North	53	82	L	L	Exterior	Pier 82L	Crack	1	8	HL	-	Diagonal shear crack	No change				1				P/S
North	52	82	R	R	Both	Pier 82R	Grout Crack	1	28	HL	-	Vertical grout crack	no change								P/S
North	52	82	R	R	Exterior	Pier 82R	Crack	1	12	HL	- 1	Diagonal shear crack	No change				1				P/S
North	52	82	R	R	Exterior	Pier 83R	Crack	1	13	HL	-	Diagonal shear crack	No change				1				P/S
North	52	82	R			Diaphragm	Exposed					Exposed steel, 1-1/2" diam	new	R22-11							P/S
North	52	82	R	L	Both	Pier 83R	Grout Crack	1	28	HL	1	Vertical grout crack	No change								P/S
North	53	83	L	L	Exterior	Pier 83L	Crack	1	20	HL	-	Diagonal shear crack	No change				2				P/S
North	53	83	L	L	Both	Pier 83L	Grout Crack	1	28	HL	-	Vertical grout crack	No change								P/S
North	53	83	L	L	Bottom	Pier 84L	Spall	1	3	2.5	1/2		no change								P/S
North	53	83	L	R	Bottom	2ft from Pier 84L	Gouge	1	4	1	1/4		no change						1		P/S
North	53	83	L	L	Both	Pier 84L	Grout Crack	1	28	0.016	-	Vertical grout crack	no change								P/S
North	52	83	R	R	Interior	Pier 83R	Scrape	1	3	0.75	3/8		no change								P/S
North	52	83	R	R	Exterior	Pier 83R	Crack	1	12	HL	-	Diagonal shear crack	no change				1				P/S
North	52	83	R	R	Both	Pier 83R	Grout Crack	1	28	-	-	Vertical grout crack	no change								P/S
North	52	83	R	R	Exterior	Midspan	Spall	1	7	3	1		no change							1	P/S
North	52	83	R	R	Exterior	Pier 84R	Crack	1	8	HL	-	Diagonal shear crack	no change				1				P/S
North	53	84	L	L	Exterior	Pier 84L	Crack	1	12	HL	1	Diagonal shear crack	no change				1				P/S
North	53	84	L	L	Exterior	Pier 85L	Crack	1	12	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap.	no change				1				P/S
North	53	84	L	R	Bottom	Midspan	Spall	1	2	2	1/4	exposed rebar	no change			1					P/S
North	53	84	L	R	Exterior	Pier 85L	Crack	1	12	HL	1	Diagonal shear crack	No change				-				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency	Qty	Max	Max Width	Depth	Additional Notes	2017 Note	2019	Efflor.	Rebar	Crack	Crack	Spall /patch	Spall	Beam
North	52	84	R	R	Exterior	Pier 84R	Type Crack	3	Len. (in)	(in) HL	(in) -	Diagonal shear and radial	increase	Photo	(CS2)	(CS2)	(CS2) 2	(CS3)	(CS2)	(CS3)	Type P/S
North	52	84	R	R	Exterior	Pier 85R	CFRP Delam	12	2.5	1		cracks	(prev. 24") no change								P/S
North	52	84	R	R	Interior	Pier 85R	Crack	1	4	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap.	new				-				P/S
North	52	84	R	R			Spall	1	4	2	1/2	In the diaphragm	new								P/S
North	52	84	R	L	Exterior	Pier 85R	Crack	1	6	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap.	no change				1				P/S
South	94	199	R	L	Bottom	Pier 200	Efflo.	1	48	HL		Efflorescence in construction joint crack between the bottom of the beam stem and the cap.	no change								P/S
South	95	200	L	L	Exterior	Pier 201L	Crack	1	13	HL	-	Diagonal shear crack	no change				2				P/S
South	95	201	L	L	Exterior	Pier 202L	Crack	1	13	HL	-	Diagonal shear crack	no change				1				P/S
South	94	201	R	L	Exterior	Pier 202R	Crack	1	36	HL	-	Diagonal shear crack	new				3				P/S
South	94	201	R	R	Exterior	Pier 202R	Crack	4	30	HL	-	Diagonal shear cracks	no change				3				P/S
South	95	202	L	R	Exterior	Pier 202L	Crack	3	14	HL	-	Diagonal shear cracks	no change				-				P/S
South	95	202	L	L	Interior	Pier 202L	Crack	2	8	HL		Diagonal shear cracks	new				-				P/S
South	95	202	L	L	Exterior	Pier 202L	Crack	2	24	0.01	-	Diagonal shear cracks	increase				2				P/S
South	95	202	L	R	Interior	Pier 203L	Crack	1	18	HL	-	Downward diagonal crack	no change				2				P/S
South	93	203	L	L	Exterior	Pier 203L	Crack	1	12	HL	-	Diagonal shear crack	no change				1				P/S
South	93	203	L	L	Interior	Pier 203L	Crack	1	9	HL	-	Downward diagonal crack	no change				-				P/S
South	93	203	L	R	Interior	Pier 203L	Crack	1	9	HL	-	Downward diagonal crack	no change				-				P/S
South	93	203	L	R	Exterior	12' from Pier 203L	Spall	1	2	2	1/4		no change						1		P/S
South	93	203	L	R	Exterior	Pier 204L	Crack	1	16	HL	-	Diagonal shear crack	no change				2				P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency	Qty	Max	Max Width	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam
South	92	203	R	Both	Both	Throughout	Type Crack	-	Len. (in)	(in) 0.013	-	Vertical shrinkage, possible flexure cracks throughout. Some cracks wrap under and are up to full height, spaced 1'-3'	no change	J3-38, 39	(CSZ)	(CS2)	(C32)	(C33)	(62)	(C33)	CIP
South	92	203	R-Cross	Left	Ledft	Pier 204 Mid	Crack	2	24	0.01	-	Diagonal shear crack	new								CIP
South	92	203	R-Cross	Both	Both	Throughout	Crack	-		0.01	-	Several vertical, hairline flexural cracks throughout. Cracks are up to full height, spaced 8'- 10' apart	no change								CIP
South	92	203	R-Cross	Both	Bottom	20' from Pier 204	Scrape	-				There are minor scrape marks on the underside of both stems, 20' from Pier 204. Scrapes have been epoxy repaired.	no change								CIP
South	93	204	L	R	Exterior	15' from Pier 205L	Spall	1	3	3	1	Grout patch spall	no change						1		CIP
South	93	204	L	R	Exterior	Pier 205L	Crack	4	24	0.01	-	Diagonal shear and radial cracks	Increase								CIP
South	93	204	L	R	Interior	Pier 205L	Crack	5	0.015	0	-	Diagonal shear	no change								CIP
South	93	204	L	L	Exterior	Pier 205L	Crack	4	16	HL	-	Diagonal shear cracks	no change								CIP
South	93	204	L	Both	Both	Throughout	Crack	-		0.01	-	Several vertical, hairline flexural cracks throughout. Cracks are up to full height, spaced 2'-4'	no change								CIP
South	93	204	L-Cross	Both	Both	Throughout	Crack	1		0.013	-	Several vertical, hairline flexural cracks throughout. Cracks are up to full height, spaced 3'-5' apart.	no change								CIP
South	92	204	R	L	Interior	Pier 205R	CFRP Bulges					Couple bulges, all hard	no change								P/S
South	92	204	R	L	Exterior	Pier 205R	Crack	1	12	HL		Diagonal shear extending upfrom CFRP	new				1				P/S
South	92	204	R	R	Exterior	Pier 205R	Crack	1	12	HL		Diagonal shear extending upfrom CFRP	new		_		-			_	P/S
South	92	204	R	R	Exterior	Pier 205R	CFRP Bulges					Numerous, bulges are solid.	no change	J3-37							P/S
South	90	207	R	R	Rear	Pier 207	Spall	1	8	5	1 1/4		New	J1-3					1		P/S
South	90	207	R	R	Exterior	Pier 207	Crack	2	24	0.01		Diagonal shear crack	New				2				P/S
South	91	207	L	R	Exterior	Pier 207	Crack	2	34	HL		Diagonal shear crack	New				3				P/S



I line I Block I Snan I Beam I Stem I Face I location I I Oty I I I I I I I I I I I I I I I I I I I	Spall Beam	Spall	Spall /patch	Crack	Crack	Rebar	Efflor.	2019	2017 Note		Depth	Max Width	Max	_	Deficiency							
South 90 207 R R underside Pier 208 Effic.	•	(CS3)		(CS3)	(CS2)	(CS2)	(CS2)	Photo	Disposition	Additional Notes		(in)	Len. (in)	Qty		Location	Face	Stem	Beam	Span	Block	Line
South 90 208 R R underside Pier 208 Efflo. Control of the Cap. Control contr	P/S							J1-6	no change	bottom of the cap, Construction joint. TYPICAL CONDITION				-	Efflo.	Pier 208	underside	R	R	207	90	South
South 90 208 R R R Interior 209 Soal I 4 4 2 3 3/4 On bottom edge in ochange	P/S								no change	bottom of the cap, Construction joint.				-	Efflo.	Pier 208	underside	R	R	208	90	South
South 91 209 L L Exterior Pier 210 Delam 1 3 1 Sponey no change	P/S		1						no change	On bottom edge	3/4	2	4	1	Spall		Interior	R	R	208	90	South
South 91 209 L L Exterior Pier 210 Delam 1 3 1 Spongy no change	P/S								no change	spongy		1	3	1		Pier 210	Interior	L	L	209	91	South
South 91 209 L R Interior Pier 210 Ceam 1 3 1 Spongy no change 1 1 1 1 1 1 1 1 1	P/S								no change	spongy		1	3	5		Pier 210	Exterior	L	L	209	91	South
South 90 209 R L Exterior Pier 10 Crack 6 16 0.01 Extending up from CFRP new 2 2 2 2 2 3 3 3 3 3	P/S								no change	spongy		1	3	1		Pier 210	Interior	R	L	209	91	South
South 90 209 R R R Exterior Pier 10 CFRP Tear 8 6 2 Eight small impact tears South 90 209 R R R Exterior Pier 210 CFRP Tear 8 8 6 2 Eight small impact tears South 91 210 L R Exterior Pier 210 CFRP Tear 8 6 2 Eight small impact tears South 90 210 R R R Interior Pier 210 CFRP Delam 3 3 1 Spongy no change South 90 210 R R I Interior Pier 210 CFRP Delam 6 3 1 Spongy no change South 90 210 R L Interior Pier 210 CFRP Delam 3 3 1 Spongy no change South 90 210 R L Interior Pier 210 CFRP Delam 6 3 1 Spongy no change South 90 210 R L Interior Pier 210 CFRP Delam 1 188 6 North Spongy no change South 90 210 R L Exterior Pier 210 Delam 1 188 6 North Spongy no change South 91 211 L R Interior Pier 210 Delam 1 188 6 North Spongy no change South 91 211 L R Interior Pier 210 Delam 1 180 6 North Spongy no change South 85 212 L L Exterior Pier 210 Delam 1 6 6 6 Ieft bottom edge of stem North Spongy no change South 84 212 R R Interior 213 Delam 1 2 2 2 Spongy no change South 85 217 L L Exterior At Pier 213 Delam 1 2 1 Spongy no change South 85 217 L L Exterior Pier 217. CFRP Delam 1 2 1 Spongy no change South 85 217 L L Exterior Pier 217. CFRP Delam 1 2 1 Spongy no change South 88 217 L L Exterior Pier 218. CFRP Delam 1 Delam 1 North Spongy no change South 88 217 L L Exterior Pier 218. CFRP Delam 1 De	P/S		1						new		1/4	1	4	1	spall		underside	L	R	209	90	South
South 91 209 R R Exterior Pier 210 CFRP Tear 8 6 2 Eight small impact tears from overheight vehicle. Incomplete Incomp	P/S				2				new			0.01	16	6	Crack	Pier 10	Exterior	L	R	209	90	South
South 90 200 R R Exterior Pier 210 CFRP 8 6 2 from overheight vehicle. no change 11-13	P/S		1					J1-9	new			5	10	1	Delam		Interior	R	L	209	91	South
South 91 210 L R Exterior Pier 210 Delam 3 3 1 spongy no change South 90 210 R R Interior Pier 210 CFRP Delam 3 3 1 spongy no change South 90 210 R L Interior Pier 210 CFRP Delam 3 3 1 spongy no change South 90 210 R L Interior CFRP Delam 1 18 6 3 1 spongy no change South 90 210 R L Exterior Pier 210 CFRP Delam 1 6 6 left bottom edge of stem new South 85 212 L L Exterior CFRP Delam 1 2 2	P/S							J1-13	no change			2	6	8	CFRP Tear	Pier 210	Exterior	R	R	209	90	South
South 90 210 R R Interior Pier 210 Delam 6 3 1 Spongy no change	P/S								no change	spongy		1	3	3		Pier 210	Exterior	R	L	210	91	South
South 90 210 R	P/S								no change	spongy		1	3	6		Pier 210	Interior	R	R	210	90	South
South 90 210 R L Exterior Pier 210 CFRP Delam 6 3 1 spongy no change 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 2 2 2 2 2 2 3 1 2 2 3 1 2 2 3 1 2 2 3 1 2 2 3 2 3 2 2 2 3 2 2 2 3 3 2 3 2 3 3 4 2 2 2 3 3 4 2 2 3 4 2 2 2 3 3 4 2 2 3 3 4 2 2 3 3 4 2 2 3 3 3 4 3 2 2 <td>P/S</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>no change</td> <td>spongy</td> <td></td> <td>1</td> <td>3</td> <td>3</td> <td></td> <td>Pier 210</td> <td>Interior</td> <td>L</td> <td>R</td> <td>210</td> <td>90</td> <td>South</td>	P/S								no change	spongy		1	3	3		Pier 210	Interior	L	R	210	90	South
South 90 210 R L Exterior Pier 210 Delam 6 3 1 spongy no change 1 1 1 South 91 211 L R Interior 1ft. from Pier 212 Delam 212 1 6 6 6 left bottom edge of stem new 1 2 2 South 85 212 L L Exterior 213 CFRP Delam 1 2 2 spongy no change 1 1 2 2 spongy no change 1 1 2 2 spongy no change 1 1 2 2 1 3 1 1 2 1 3 1 1 2 1 3	P/S		2						new			6	18	1		Pier 211	Interior	L	R	210	90	South
South 91 211 L R Interior 212 Delam 1 6 6 Ieft bottom edge of stem new	P/S			<u> </u>					no change	spongy		1	3	6			Exterior	L	R	210	90	South
South 85 212 L L Exterior 213 Delam 1 2 2 spongy no change 1 2 2 South 84 212 R R Interior 10' from Pier 213 CFRP Delam 1 2 2 spongy no change 1 2 2 South 84 212 R L Exterior At Pier 213 CFRP Delam 1 2 1 spongy no change 1 2 1 South 85 217 L L Exterior Pier 217L Crack 1 6 HL - Diagonal shear crack no change 1 1 1 South 85 217 L L Exterior Pier 218L Crack 1 2 HL - Diagonal shear crack no change 1 1 1 South 82 217 R L Exterior Pie	P/S	$oxed{oxed}$		<u> </u>					new	left bottom edge of stem		6	6	1		212	Interior	R	L	211	91	South
South 84 212 R R Interior 213 Delam 1 2 2 spongy no change 1 2 2 2 2 2 2 2 3 2 2 2 2 3 2 2 2 2 2 3 2 3 2 2 2 2 3 2 2 2 2 3 2 2 2 2 3 2 2 2 3 3 2	P/S	<u> </u>		<u> </u>					no change	spongy		2	2	1	Delam	213	Exterior	L	L	212	85	South
South 84 212 R L Exterior At Pier 213 CFRP Delam 1 2 1 spongy new 1 2 1 spongy new 1 1 2 1 2 1 spongy new 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 3 1 1 4 2 2 2 2 2 2 2 1 3 1 1/4 1 3 1 1/4 1 4 1 2 1 3 1 1/4 1 4 1 2 1 3 1 1/4 1 2 1 <td>P/S</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>no change</td> <td>spongy</td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td></td> <td></td> <td>Interior</td> <td>R</td> <td>R</td> <td>212</td> <td>84</td> <td>South</td>	P/S								no change	spongy		2	2	1			Interior	R	R	212	84	South
South 85 217 L L Exterior Spall 217 217L Spall 217 3 1 1/4 no change 1 1 South 83 217 L L Exterior Pier 218L Crack 1 22 HL - Diagonal shear crack no change 2 2 - South 2 -	P/S								new	spongy		1	2	1	CFRP		Exterior	L	R	212	84	South
South 85 217 L L Exterior 217L Spall 1 3 1 1/4 no change 1 1 South 83 217 L L Exterior Pier 218L Crack 1 22 HL - Diagonal shear crack no change 2 2 South 2 South 2 No change 1 No change No change	P/S				1				no change	Diagonal shear crack	-	HL	6	1	Crack	Pier 217L	Exterior	L	L	217	85	South
South 82 217 R L Exterior Pier 218R Crack 1 9 HL - Diagonal shear crack no change 1 1 1 South 83 218 L R Exterior Pier 218L Crack 6 18 HL - Diagonal shear crack increase - <td< td=""><td>P/S</td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td>no change</td><td></td><td>1/4</td><td>1</td><td>3</td><td>1</td><td>Spall</td><td></td><td>Exterior</td><td>L</td><td>L</td><td>217</td><td>85</td><td>South</td></td<>	P/S		1						no change		1/4	1	3	1	Spall		Exterior	L	L	217	85	South
South 83 218 L R Exterior Pier 218L Crack 6 18 HL - Diagonal shear crack increase	P/S	<u> </u>	<u> </u>	<u> </u>					no change		-							L				
	P/S	↓	<u> </u>	Ь—						-								_				
South 83 218 L L Exterior Pier 218L Crack 1 24 HL Diagonal shear crack new 2	P/S	—		 							-											
South 83 218 L R Exterior Midspan Spall 1 4 3 1/4 no change 1	P/S P/S	₩		—	2		ļ			Diagonal shear crack												



							Deficiency		Max	Max Width	Depth		2017 Note	2019	Efflor.	Rebar	Crack	Crack	Spall /patch	Spall	Beam
Line	Block	Span	Beam	Stem	Face	Location	Type	Qty	Len. (in)	(in)	(in)	Additional Notes	Disposition	Photo	(CS2)	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	Туре
South	83	218	L	L	Interior	Pier 219L	CFRP Delam	1	5	1	,		no change		((,	(222)	(***)	, ,	P/S
South	83	218	L	L	Exterior	Pier 219R	CFRP Delam	1	1	1			no change								P/S
South	83	218	L	L	Interior	5ft. from Pier 218L	Crack	1	16	HL			new				2				P/S
South	82	218	R	L	Exterior	Midspan	Spall	1	5	3	1/4		New								P/S
South	82	218	R	L	Exterior	Pier 218R	Spall	1	2	2	1/4		no change						1		P/S
South	82	218	R	L	Exterior	Pier 219R	CFRP Delam	1	3	1			no change								P/S
South	82	218	R	R	Exterior	Pier 219R	Crack	1	10	HL		Diagonal shear crack from CFRP	new			1					P/S
South	82	219	R	R	Exterior	Pier 219R	Crack	1	17	HL	-	Diagonal shear crack	no change				2				P/S
South	83	219	L	R	Exterior	Pier 219L	Crack	4	22	HL	-	Diagonal shear cracks	no change				-				P/S
South	83	219	L	L	Exterior	Pier 219L	Crack	3	36	0.016	-	Diagonal shear cracks	no change					3			P/S
South	82	219	R	L	Exterior	Pier 219R	Crack	2	12	HL		Diagonal shear crack	new								P/S
South	82	219	R	L	Interior	15' from Pier 220R	Spall	3	1	1	1/2	Due to drill holes	no change								P/S
South	82	219	R	R	Interior	15' from Pier 220R	Spall	4	2	1	1/2	Due to drill holes	no change						4		P/S
South	82	220	R	L	Exterior	25' from Pier 220R	Spall	1	3	3	1/2	bottom edge of stem							1		P/S
South	83	220	L	L	Bottom	Pier 221	Gouge	1	15	1	1/4		no change	J2-5					1.5		P/S
South	82	221	R	R	Exterior	15' from Pier 222R	Spall	2	3	2	1/4	bottom edge of stem	no change						2		P/S
South	83	221	L	L	Bottom	Midspan	Scrape	1	14	1.5	1/8		no change								P/S
South	82	222	R	R	Exterior	Pier 222R	Crack	1	20	HL	-	Diagonal shear crack	no change				2				P/S
South	83	222	L	R	Bottom	Pier 222L	Spall	1	3	3	1/4		no change						1		P/S
South	83	222	L	R	Exterior	Pier 223L	Crack	2	24	HL			new				2				P/S
South	83	222	L	R	Bottom	15' from Pier 222L	Spall	1	2	2	1		no change						1		P/S
South	82	223	R	R	Exterior	Pier 223R	Crack	4	12	HL		Diagonal shear crack	new				1				P/S
South	83	223	L	R	Exterior	Pier 223L	Crack	2	32	HL	-	Diagonal shear cracks	no change				3				P/S
South	83	223	L	R	Bottom	Pier 223L	Honey.	1	6	4	1/2		no change	J2-8					1		P/S
South	83	224	L	R	Bottom	Midspan	Spall	1	1	1	1/2		no change	10.44					1		P/S
South	82	225	R R	R L	Bottom	Pier 225R Pier 226	Spall Crack	1	88	HL	-	Horizontal crack on the interior face of stem, midway up, extending from the pier cap. Crack is reflected for 56"(previously 51") on the exterior face. Possible previous repaired area.	increase	J2-11 J3-1,2 3			8		1		P/S P/S
South	81	225	L	L	Bottom	15' from Pier 226	Spall	2	2	2	1		no change						2		P/S
South	80	227	R	R	Interior	Midspan	Spall	1	2	2	1/4		new	J3-6							P/S
South	80	227	R	L	Exterior	Pier 228	crack	2	18	HL		Diagonal, extending from CFRP	new				2				P/S



							Defisions		Mari	N.C	Danath		2017 Nata	2010	F#1	Dahas	Cunali	Cunni	Coall /astab	Casil	Danus
Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
							,,		` '	` ,	. ,	Area of the skim coat	·		,	` '		, ,		, ,	
South	81	227	L	R	Exterior	Pier 228	Flaking		8	2		beginning to flake off. 4ft.	increase	J3-15,16							P/S
												from the pier									
												CFRP repair exhibits									
												numerous delaminations on both left and right									
							CFRP					stems adjacent to Pier									
South	81	227	L	Both	Both	Pier 228	Delam					228. Attempts to repair	no change								P/S
												these locations with epoxy									
												injection appear to be									
												ineffective.									
												CFRP is cracked and									
												popping off 40" L x 12" H,									
												12' from Pier 228 and 30"									
South	81	227	L	L	Exterior	Pier 228	CFRP		18	4		L × 10" H at Pier 228. Also	increase	J3-7-11							P/S
							Failure					the wrap is delaminated nearly completely over the									
												rear 6' with peeled and									
												cracked areas.									
												Dislodged and unattached		J3-12, 14,							
South	81	227	L	L	Interior	Pier 228	Wires					electrical wires in beam.	no change	17							P/S
												Diagonal, extending from									-
River	81	228	L	L	Exterior	Pier 228	crack	1	12	HL		CFRP	new				1				P/S
River	81	228	L	L	Interior	Pier 228	Patch	1	12	6		No significant deficiencies	no change								P/S
River	81	228	L	R	Exterior	Pier 228	Patch	1	36	6		No significant deficiencies	no change						3		P/S
River	80	228	R	L	Exterior	Pier 228	Patch	1	36	6		No significant deficiencies	no change								P/S
River	80	228	R	R	Exterior	Pier 228	Patch	1	24	12		No significant deficiencies	no change								P/S
River	81	228	L	R	Interior	15' from Pier 229	Spall	1	2	1	1/2		no change	J3-26					1		P/S
River	80	229	R	R	Exterior	Pier 229	Crack	1	24	HL	-	Diagonal shear crack	no change				2				P/S
River	80	229	R	L	Underside	12' from Pier 229	Spall	3	2	2	1/2	2 spalls and 1 scrape	no change						1		P/S
River	81	229	L	R	Exterior	2' from Pier 230	Spall	1	2	2	1/2		no change						1		P/S
River	80	229	R	L	Exterior	2' from Pier 230	Spall	1	2	2	1/2		no change						1		P/S
River	80	229	R	R	Exterior	Pier 230	Crack	1	19	HL	-	Diagonal shear crack	no change				2				P/S
River	81	230	L	R	Bottom	1' from Pier	Spall	1	2	2	1/4		no change						1		P/S
KIVEI	01	250	-		Dottom	230	Span	_			1/ 4	Horizontal hairline crack,	no change						1		1/3
River	80	230	R	R	Interior	4' from Pier 230	Crack	1	44	HL	-	11" from the bottom of the stem	no change	J3-32			4				P/S
River	80	230	R	R	Exterior	20' from Pier 231	Spall	1	1	1	1/2	uie steili	no change						1		P/S
River	81	230	L	L	Exterior	Pier 230	Crack	1	10	HL	-	Diagonal shear crack	new				1				P/S
River	80	230	R	R	Exterior	Pier 231	Crack	1	16	HL	-	Diagonal shear crack	no change				2				P/S
River	79	231	L	R	Exterior	Pier 232	Delam.	2	6	1		Above CFRP repair	no change						1		P/S



Line	Block	Span	Beam	Stem	Face	Location	Deficiency Type	Qty	Max Len. (in)	Max Width (in)	Depth (in)	Additional Notes	2017 Note	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /patch (CS2)	Spall (CS3)	Beam Type
							1750		zem (m)	()	()	Fretting corrosion between the keeper plate	Disposition	111000	(652)	(CSL)	(632)	(633)	(CSL)	(655)	Турс
River	79	231	L	L	Exterior	Pier 232	movement					and the beam stem indicates movement of 3/4". Stem still has 8" of	new	S25-3,4					1		P/S
												hearing One exposed vertical bar									
River	75	237	L	R	-	Pier 237L	Exposed Reinf.	1				at the end of the stem, beam not fully cast around bar.	no change	J13-6,7							P/S
River	75	237	L	R	Exterior	Pier 237L	Crack	1	24	HL	-	Diagonal shear crack	no change				2				P/S
River	75	237	L	L	Exterior	Pier 237L	Crack	2	12	HL	-	Diagonal shear crack	no change				-				P/S
River	75	238	L	Both	Both	Pier 238L	Crack	-	-	-	1	Shrinkage radial cracks in the end 4ft.	new								P/S
River	75	238	L	L	Exterior	Pier 238L	Crack	1	12	HL	-	Diagonal shear crack	no change				1				P/S
River	75	238	L	L	Exterior	Pier 239L	Crack	1	14	HL	-	Diagonal shear crack	no change				2				P/S
River	74	238	R	R	Exterior	Pier 238R	Crack	1	18	HL	-	Diagonal shear crack	no change				2				P/S
River	74	238	R	R	Exterior	Pier 239R	Crack	1	10	HL	-	Downward diagonal crack	no change				-				P/S
River	74	238	R	R	Interior	Pier 239R	Crack	1	16	HL	-	Downward diagonal crack	new				2				P/S
River	75	239	L	R	Interior	Midspan	Efflo	1	15		-	Beneath PT blockout	new				1				P/S
River	75	239	L	L	Exterior	Pier 240L	Spall	1	2	2	1/4		no change								P/S
River	63	258	L	L	Exterior	Pier 258L	Crack	1	12	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	new				1				P/S
River	63	258	L	L	Interior	Pier 258L	Crack	1	7	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change				-				P/S
River	63	258	L	R	Exterior	Pier 258L	Crack	1	6	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change				-				P/S
River	63	258	L	L	Exterior	Pier 259L	Crack	1	14	HL	-	Diagonal shear crack	Increase (prev. 12")				2				P/S
River	63	258	L	L	Interior	7' from Pier 258L	CFRP Patch	1				Mid-height of stem	no change								P/S
River	62	258	R	L	Exterior	Pier 258R	Crack	2	24	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	Increase (prev. 12")				-				P/S
River	62	258	R	L	Interior	Pier 258R	Crack	1	24	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change				-				P/S



							Deficiency		Max	Max Width	Depth		2017 Note	2019	Efflor.	Rebar	Crack	Crack	Spall /patch	Spall	Beam
Line	Block	Span	Beam	Stem	Face	Location	Type	Qty	Len. (in)	(in)	(in)	Additional Notes	Disposition	Photo	(CS2)	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	Type
River	62	258	R	R	Interior	Pier 258R	Crack	1	27	HL	-	Diagonal shear crack extending from the dapped end notch above the half height CFRP wrap	no change				-				P/S
River	62	258	R	R	Exterior	Pier 258R	Crack	2	33	HL	-	Diagonal shear cracks extending from the dapped end notch above the half height CFRP wrap	no change				4				P/S
River	62	258	R	R	Exterior	Pier 259R	Crack	1	20	HL	-	Diagonal shear crack	new				2				P/S
River	63	259	L	R	Interior	Pier 259L	Crack	1	14	HL	-	Diagonal shear crack	new				-				P/S
River	63	259	L	L	Exterior	Pier 259L	Exposed Nails	10					no change								P/S
River	63	259	L	L	Exterior	Pier 259L	Crack	1	18	HL	-	Diagonal shear crack	no change				2				P/S
River	63	259	L	L	Exterior	15' from Pier 259L	Spall	1	5	1	1/4	Bottom of stem. Also a scrape, 1' -3" L	no change						1		P/S
River	63	259	L	L	Exterior	Pier 260L	Exposed Nails	8					no change								P/S
River	63	260	L	L	Exterior	Pier 260L	Exposed Nails	7					no change								P/S
River	63	260	L	L	Bottom	Pier 260L	Spall	1	3	3	1/4		no change						1		P/S
River	63	260	L	L	Exterior	Pier 260L	Grout Crack	1	28	HL	-	Vertical grout crack that turns diagonal into the stem.	no change								P/S
River	63	260	L	Both	Both	Throughout	crack	-	-	-	-	Shrinkage map cracking is present on ~20% of the surface area	no change								P/S
River	63	260	L	L	Interior	Pier 260L	Grout Crack	1	28	HL	1	Vertical grout crack that turns diagonal into the stem.	no change								P/S
River	61	260	L	R	Bottom	Pier 261	Spall	1	10	10	2	Includes exposed rebar; spall has been covered with epoxy mastic.	no change	J9-22						1	P/S
River	60	260	R	L	Exterior	Pier 260R	Crack	1	12	HL	-	Diagonal shear crack	no change				-				P/S
River	60	260	R	L	Interior	Pier 260R	Crack	1	16	HL	-	Diagonal shear crack	new				-				P/S
River	60	260	R	R	Interior	Pier 260R	Crack	1	16	HL	-	Diagonal shear crack	new				-				P/S
River	60	260	R	R	Both	Pier 260R	Grout Crack	1	28	HL	-	Vertical grout crack	no change								P/S
River	60	260	R	R	Exterior	Pier 260R	Exposed Nails	9					no change								P/S
River	60	260	R	R	Exterior	Pier 260R	Crack	1	40	HL	-	Horizontal crack starting 3'	new				4				P/S
River	60	260	R	R	Exterior	Pier 260R	Crack	1	18	HL	-	Diagonal shear crack	no change				-				P/S
River	60	260	R	L	Exterior	Pier 261R	Crack	1	7	HL	-	Diagonal shear crack	no change				-				P/S
River	60	260	R	L	Exterior	Pier 261R	Exposed Nails	8					no change								P/S
River	60	260	R	R	Exterior	Pier 261R	Exposed Nails	5					no change								P/S
River	60	260	R	R	Exterior	Pier 261R	Crack	1	10	HL	-	Diagonal shear crack	no change				1				P/S



Lina	Block	Sman	Beam	Stem	Face	Location	Deficiency	Otre	Max	Max Width	Depth	Additional Notes	2017 Note	2019	Efflor.	Rebar	Crack	Crack	Spall /patch	Spall	Beam
Line	DIOCK	Span	реан	Stem	race	Location	Туре	Qty	Len. (in)	(in)	(in)	Additional Notes	Disposition	Photo	(CS2)	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	Туре
River	60	261	R	R	Both	Throughout	Crack			HL	-	Vertical hairline flexural cracks, spaces ~1-2' apart, ranging full length of beam, starting a couple feet from each pier.	no change								CIP
River	61	261	L	L	Exterior	2nd Diaphragm	Crack	1	48	HL	-	Vertical crack	new								CIP
River	61	261	L	_	Both	Throughout	Crack		48	HL	1	Vertical hairline flexural cracks, spaces ~1' apart, ranging full length of beam, starting a couple feet from each pier.	new								CIP
River	61	261	L	R	Both	Throughout	Crack		48	HL	-	Vertical hairline flexural cracks, spaces ~2' apart, ranging full length of beam, starting a couple feet from each pier.	new								CIP
River	61	261	L	L	Exterior	Pier 261L	Crack	2	32	HL	-	Diagonal shear cracks	no change								CIP
River	60	261	R	R	Interior	10' from Pier 261	Crack	-		HL	-	Flexural crack with minor efflorescence	new	J9-23	1						CIP
River	60	261	R	R	Exterior	Pier 261R	Exposed Nails	4					no change								CIP
River	60	261	R	L	Exterior	Pier 31S	Crack	1	24	0.013	-	Diagonal shear crack	no change								CIP
River	60	261	R	R	Exterior	Pier 31S	Crack	1	12	HL	-	Diagonal shear crack	no change								CIP
River	60	261	R	L	Both	Throughout	Crack	-		HL	-	Vertical flexural cracks, spaces <1' apart, ranging full length of beam, starting a couple feet from each pier. Cracks at midspan are full height.	no change								CIP
0&М	108	M2	1	Both	Both	Throughout	Patch	,				All beams exhibit patches on both faces, 18' from M2 and 20' from M3. Perhaps from some previous attachments.	no change	J4-1,2					3		P/S
0&M	108	M2	С	1	Left	10' from Pier M2	Spall	2	8	4.5	1 1/2	Bottom of stem	no change	J4-3						2	CIP
0&M	108	M2	С	-	Right	10' from Pier M2	Spall	2	5	2	1 1/2	Bottom of stem	no change								CIP
0&M	108	M2	С	-	Right	Pier M2	Spall	1	2	1	1/2	2 exposed nails also	no change						1		CIP
О&М	108	M2	С	-	Both	Throughout	Crack	-		HL	-	Vertical shrinkage and flexural cracks are present, spaced ~2' apart.	no change	J4-10							CIP
0&M	108	M2	L	L	Exterior	10' from Pier M2	CFRP Patch	1	33	11		patch is sound	no change								P/S
0&M	108	M2	L	L	Interior	Pier M2	CFRP Delam	1	2.5	1		spongy	no change								P/S



							Deficiency		Max	Max Width	Depth		2017 Note	2019	Efflor.	Rebar	Crack	Crack	Spall /patch	Spall	Beam
Line	Block	Span	Beam	Stem	Face	Location	Туре	Qty	Len. (in)	(in)	(in)	Additional Notes	Disposition	Photo	(CS2)	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	Туре
0&M	108	M2	L	R	Interior	20' from Pier M2	CFRP Delam	1	3	1.5		spongy	no change								P/S
0&M	108	M2	R	R	Interior	Midspan	Spall	1	5	5	1		no change						1		P/S
0&M	108	M2	R	-	-	Pier M2	Patch	1	10	6		Diaphragm patch, solid	no change								P/S
0&M	108	M2	L	-	-	Pier M2	Crack	5	12	HL		Vertical cracks in diaphragm	no change								P/S
0&M	108	М3	_	R	Rear	Pier M3	Delam.	1	27	10		diapiniagini	no change	J4-11							P/S
0&M	108	M3	_	R	Interior	Pier M3	Crack	1	9	HL	_	Diagonal shear crack	no change				_				P/S
0&M	108	M3	_	R	Exterior	Pier M3	Crack	1	27	HL	-	Diagonal shear cracks	no change				3				P/S
0&M	107A	M3	-	i	Exterior	Pier M4	Crack	3	22	0.013	_	Diagonal shear cracks	no change					-			P/S
0&M	107A	M3	_	R	Interior	Pier M4	Crack	1	9	HL	_	Diagonal shear crack	no change				_				P/S
O&M	107A	M3	_	R	Exterior	Pier M4	Crack	4	24	0.013	_	Diagonal shear cracks	no change	J4-17,18				2			P/S
O&M	107A	M3	-	Both	Interior	Throughout	Honey.	-				The haunch between the inside faces of the stems and the underside of the flange has minor honeycombing throughout.	no change	J4-15				-			P/S
0&M	107A	M4	-	L	Exterior	Pier M4	Crack	1	12	HL	-	Diagonal shear crack	no change				-				P/S
0&M	107A	M4	-	R	Exterior	Pier M4	Crack	1	14	HL	-	Diagonal shear crack	no change				-				P/S
0&M	107A	M4	-	R	Interior	20' from Pier M5	Scrape	1	12	1	1/2	Bottom of stem	no change							1	P/S
0&M	107A	M4	-	L	Exterior	20' from Pier M5	Spall	1	12	3	1/2		no change								P/S
0&M	107A	M4	-	L	Exterior	15' from Pier M5	Spall	1	3	3	1/4		no change						1		P/S
0&M	107A	M4	-	R	Exterior	Pier M5	Popout	1	1.5	1.5	1/2	One exposed nail	no change								P/S
0&M	107A	M4	-	L	Front	Pier M5	Spall	1	3	2	1/4		no change								P/S
0&M	107A	M4	-	L	Interior	Pier M5	Crack	1	12	HL	-	Diagonal shear crack	no change				-				P/S
0&M	107A	M4	-	L	Exterior	Pier M5	Crack	3	30	0.013	-	Diagonal shear cracks	no change					3			P/S
0&M	107A	M4	-	R	Exterior	Pier M5	Crack	4	30	0.013	-	Diagonal shear cracks	no change					-			P/S
0&M	107A	M5	-	L	Interior	2' from midspan diaphragm	Spall	1	2	1	1/4	1" of exposed steel	no change						1		CIP
0&M	107A	M5	-	L	Interior	Pier M5	Crack	1	3	HL	-	Diagonal shear crack	no change								CIP
0&M	107A	M5	-	L	Exterior	Pier M5	Crack	1	7	HL	-	Diagonal shear crack	no change								CIP
O&M	107A	M5	-	L	Both	Throughout	Skewed & Bent Bolts					A number of the bolts for the bottom stem plate are skewed causing the nuts not to be fully seated, though nuts are tight.	no change	J4-23							CIP
0&M	106	400	L	R	Exterior	Pier 400	Crack	1	9	HL	-	Diagonal shear crack	no change								CIP
0&М	106	400	L	L	Exterior	Throughout	Skewed & Bent Bolts					A number of the bolts for the bottom stem plate are skewed causing the nuts not to be fully seated, though nuts are tight.	no change								CIP



_							Deficiency	_	Max	Max Width	Depth		2017 Note	2019	Efflor.	Rebar	Crack	Crack	Spall /patch	Spall	Beam
Line	Block	Span	Beam	Stem	Face	Location	Type	Qty	Len. (in)	(in)	(in)	Additional Notes	Disposition	Photo	(CS2)	(CS2)	(CS2)	(CS3)	(CS2)	(CS3)	Туре
O&M	106	400	R	L	Interior	Pier 400	Crack	1	48	HL	-	Diagonal shear crack from the bottom of the diaphragm, 24" long that propagates longitudinally alone the flange haunch, intersecting another crack for another 24".	no change								CIP
0&M	106	400	R	L	Exterior	Pier 400	Crack	3	30	HL	-	Diagonal shear cracks	no change								CIP
0&M	106	400	R	R	Exterior	Pier 400	Crack	2	42	0.01	-	Diagonal shear cracks	no change								CIP
0&M	106	400	R	R	Exterior	Pier 401	Crack	2	15			Epoxy injected crack repair	no change	J4-24							CIP
0&M	106	401	L	L	Exterior	Pier 401	Spall	1	3	3	1		no change						1		P/S
0&M	106	403	L	L	Exterior	Pier 403	Crack	1	7	HL	-	Diagonal shear crack	no change				1				P/S
0&M	105B	403	L	L	Interior	Pier 404	Spall/dela m	1	10	6	1/4		no change	J18-2						1	P/S
0&M	105B	404	L	L	Exterior	Pier 405	Crack	1	9	HL	-	Diagonal shear crack	no change				1				P/S
0&M	105B	404	L	R	Front	Pier 405	Spall	1	6	3	1/2		no change								P/S
0&M	104	404	R	R	Front	Pier 405	Spall	1	10	4	1/2	Front bottom edge	no change							1	P/S
0&M	104	404	R	R	Exterior	Pier 405	Exposed Nails	5					no change								P/S
0&M	103	405	L	L	Bottom	20' from Pier 406L	Exposed Wire	1	2				no change								P/S
0&M	105B	405	L	L	Exterior	Pier 405	Crack	2	28	HL		Diagonal shear cracks extending from the CFRP wrap	new				3				P/S
0&М	105B	405	L	R	Exterior	Pier 405	Crack	2	18	0.01		Diagonal shear cracks extending from the CFRP wrap	new				-				P/S
O&M	103	405	L	L	Exterior	Pier 406L	Crack	-	-	-	-	Radial shrinkage cracking in the end 4ft.	new				-				P/S
O&M	103	405	L	R	Exterior	Pier 406L	Exposed Nails	3					no change								P/S
O&M	103	406	L	R	Exterior	10' from Pier 408L	CFRP Delam	2	1	1			no change								P/S
O&M	103	406	L	R	Exterior	Pier 408L	Crack	1	18	0.012		extending from the CFRP wrap	new					2			P/S
O&M	103	406	L	L	Exterior	Pier 406L	Exposed Nails	3					no change								P/S

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Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
Starter	15	6	N	Exterior	Throughout	Light freckling corrosion is present at isolated locations on the webs and flanges throughout	no change	
Starter	15	6	N	Exterior	Throughout	There is light surface corrosion on the underside of the top left flange along the deck interface at isolated locations throughout.	new	
Starter	13	6	N	Exterior	Pier 6	Light to moderate surface corrosion along right and left top flange for 3ft.	new	
Starter	12	6	S	Exterior	Pier 6	Light to moderate surface corrosion along right and left top flange for 3ft.	new	
Starter	12	6	S	Exterior	Pier 6	Moderate surface corrosion along rear face of bottom and top flanges	no change	
Starter	14	6	S	Exterior	Pier 7	Light surface corrosion on the underside of the bottom flange above the pier	no change	
Starter	14	6	S	Interior	Throughout	Up to 1 1/2" deep concrete accumulation at random locations. Other minor debris noted.	New	
Starter	14	6	S	Interior	Throughout	Several locations of peeling top coat.	No change	
Starter	12	6	S	Interior	Bay 1	Moderate to heavy corrosion above both outside bearing anchor bolts.	New	
Starter	12	6	S	Interior	Bay 3	Two pinhole flaws in the left side top flange, 2' from Bay 2.	No change	J17-11
Starter	14	6	S	Interior	Bay 5	Pinhole flaw in right top weld at midspan.	No change	
Starter	14	6	S	Interior	End bay	Light to moderate corrosion above both outside bearing anchor bolts.	New	
Starter	15	6	N	Interior	Throughout	Peeling paint is typical inside the boxes on the webs, top flanges and lateral bracing. Average is 8 SF in each bay.	No change	
Starter	15	6	N	Interior	Throughout	Typical concrete overpour, up to 1"H x 8"W along the bottom flange. Often covers up weld, so can't be inspected.	No change	
Starter	13	6	N	Interior	Bay 1	Light to moderate corrosion on the underside of the top plate over Pier 6.	New	R17-16
Starter	13	6	N	Interior	Bay 1	Moderate corrosion on the SIP forms over Pier 6.	New	R17-18
Starter	13	6	N	Interior	Bay 2	Pinhole flaw in rear vertical stiffener, left side.	No change	
Starter	13	6	N	Interior	Bay 3	Nearly 100% of the bottom flange paint is peeled, exposing the primer in the forward half of Bay 3, all of Bay 4, and half of Bay 5.	No change	
Starter	15	6	N	Interior	Bay 5	Left web just below the top flange in Bay 5, 5' from Bay 4 exhibits 2 crescent moon gouges up to 3" long, slightly ground.	No change	R17-20
Starter	15	6	N	Interior	Bay 6	Pinhole flaw in upper fillet weld right side adjacent to 1st stiffener at 1/3 bay length.	No change	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
Starter	15	6	N	Interior	Bay 6	7 inches of vertical fillet weld for the left stiffener at Bay 5 exhibits pinhole flaws	No change	R17-21
Starter	15	7	N	Exterior	Throughout	Light surface corrosion on bottom flange right edge at isolated locations, full length	no change	
Starter	15	7	N	Exterior	Bay 3	Light surface corrosion on splice plates and bolts	no change	
Starter	14	7	S	Exterior	Throughout	Light to moderate surface corrosion along right and left top flange, isolated locations, full length.	no change	
Starter	14	7	S	Exterior	Throughout	Light surface corrosion along left bottom flange, full length.	no change	S17-14
Starter	14	7	S	Exterior	Bay 3	Light surface corrosion on slice plates and bolts	no change	
Starter	14	7	S	Exterior	Midspan	1" of exposed steel with surface corrosion at midspan, right bottom flange and web weld.	no change	S17-17
Starter	15	7	N	Exterior	Pier 8	Heavy surface and laminating corrosion with $\sim 1/16$ " section loss on the underside of the top flange at Pier 8, both flanges, up to 4' L.	increase	S17-22
Starter	14	7	S	Exterior	Pier 8	Heavy surface and laminating corrosion with \sim 1/16" section loss on the underside of the top flange at Pier 8, both flanges, up to 4' L.	increase	
Starter	14	7	S	Exterior	Pier 8	Moderate to heavy corrosion on the forward edges of the flanges and web plates.	increase	S17-13
Starter	14	7	S	Interior	Throughout	Up to 1 1/2" deep concrete accumulation at random locations. Other minor debris noted.	No change	
Starter	14	7	S	Interior	Throughout	Peeling top coat on webs, bottom flange and cross frames.	No change	
Starter	14	7	S	Interior	Bay 2	4 pinhole flaws exist in top flange fillet welds at random locations in the left side.	No change	
Starter	14	7	S	Interior	End Bay	Minor surface corrosion on the top lateral bracing.	New	J17-12
Starter	15	7	N	Interior	Throughout	Peeling paint is typical inside the boxes on the webs, top flanges and lateral bracing. Average is 10 SF in each bay.	No change	
Starter	15	7	N	Interior	Bay 1	The 1st vertical stiffener for the left web exhibits several pinhole flaws in the welds, along both sides	No change	
Starter	15	7	N	Interior	Bay 1	The top weld exhibits a pinhole flaw, 3" from Bay 2 on the left side.	No change	
Starter	15	7	N	Interior	Bay 7	Heavy surface corrosion on top flange plate at Pier 8 with pitting up to 1/8 D., likely from failed deck joint.	Increase	R17-22
Starter	15	7	N	Interior	Bay 7	3 pinhole flaws exist in right top fillet weld at mid point and 1 exists at 3/4 of the bay length.	No change	
Starter	15	8	N	Exterior	Pier 8	Left edge of bottom flange exhibits several small gouges up to 1" x 1/8" x 1/8".	new	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
Starter	15	8	N	Exterior	Pier 8	The rear face of the bottom flange exhibits minor surface corrosion.	no change	
Starter	15	8	N	Exterior	Pier 8	Right top flange exhibits moderate surface corrosion for 3'.	no change	
Starter	14	8	S	Exterior	Pier 8	Left top flange exhibits heavy surface corrosion and $\sim 1/8$ " section loss along the edge for 3'.	increase	S17-11
Starter	14	8	S	Exterior	Pier 8	Right top flange exhibits moderate surface corrosion for 3'.	new	
Starter	15	8	N	Exterior	27' from Pier 8	Scrapes in bottom face of bottom flange which exhibits moderate corrosion.	no change	S17-12
Starter	15	8	N	Exterior	Throughout	There is light to moderate surface corrosion on the underside of the top right flange along the deck interface at isolated locations throughout.	new	S17-6
Starter	14	8	S	Exterior	Throughout	There is light to moderate surface corrosion on the underside of the top left flange along the deck interface at isolated locations throughout.	new	
Starter	15	8	N	Exterior	Pier 9	There are areas of up to 1SF of peeling paint exposing primer on the underside of the bottom flange and on the exterior face of the right web	no change	
Starter	15	8	N	Exterior	Midspan	The left edge of the bottom flange exhibits minor surface corrosion up to 1'-6" L at midspan.	no change	
Starter	15	8	N	Exterior	15' from Pier 9	10 small smooth gouges on right web.	no change	
Starter	15	8	N	Exterior	20' from Pier 9	$3" \times 2"$ area of heavy surface corrosion and up to $1/8"$ pitting around a drain hole on the underside of the bottom flange	new	S17-5
Starter	15	8	N	Exterior	Pier 9	Light to moderate surface corrosion on splice plates and bolts	no change	S17-7
Starter	15	8	N	Exterior	Pier 9	Left edge of bottom flange exhibits 21 small gouges up to 1" x 1/8" x 1/8".	no change	
Starter	14	8	S	Interior	Throughout	Concrete from deck pour accumulated on bottom flange up to 1" deep on top of the bottom flange and on splice plates.	New	
Starter	14	8	S	Interior	Bay 1	Moderate to heavy corrosion above both outside bearing anchor bolts.	New	J17-1
Starter	14	8	S	Interior	Bay 2	Pinhole defects exist in top right fillet weld at 2/3 of the bay length.	No change	
Starter	14	8	S	Interior	Bay 3	Corrosion on SIP form full width of deck near rear cross frame	No change	J17-2
Starter	14	8	S	Interior	Bay 4	2 pinhole defects exist in top right fillet weld at mid bay length and 1 at 3/4 bay length.	No change	
Starter	14	8	S	Interior	Bay 4	3 pinhole defects exist in top left fillet weld.	No change	
Starter	14	8	S	Interior	Bay 5	A pinhole defect exists in top flange right fillet at 3/4 bay length.	No change	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
Starter	14	8	S	Interior	Bay 6	5 pinhole defects exist in top right flange fillet weld throughout.	No change	
Starter	14	8	S	Interior	Bay 8	4 top flange splice bolts have been torch to fit.	No change	
Starter	15	8	N	Interior	Pier 8	SIP formwork failure 8' L x 4' W x 1' D (collapse during construction) 1' from Pier 8.	No change	R17-1
Starter	15	8	N	Interior	Pier 8	The top plate over the left and right most anchor bolts exhibits moderate corrosion.	New	R17-3
Starter	15	8	N	Interior	Throughout	Typical concrete overpour, up to 1 "H x 8 "W along the bottom flange. Often covers up weld, so can't be inspected.	No change	R17-7
Starter	15	8	N	Interior	Bay 3	Exhibits 5 pinhole flaws in the right top flange fillet weld at 1/4 of bay length.	No change	
Starter	15	8	N	Interior	Bay 3	Exhibits pinhole flaws in the left top flange, 5 at 3/4 bay and 1 at 1/4 bay.	No change	R17-4
Starter	15	8	N	Interior	Bay 4	Exhibits 5 pinhole flaws in the right top flange fillet weld at 3/4 of bay length.	No change	
Starter	15	8	N	Interior	Bay 4	There are 3 pinhole flaws in the left top flange, 6' from Bay 5.	No change	
Starter	15	8	N	Interior	Bay 5	The T-beam between Bays 5 and 6 has a slight deformation on the top flange, 1/8" over 4", 1' from the left end.	New	R17-5, 6
Starter	15	8	N	Interior	Bay 6	1 SF of peeling paint on the top of bottom flange at Bay 7.	No change	R17-8
Starter	15	8	N	Interior	Bay 7	4 pinhole flaws in the left side at the 2nd vertical stiffener, west side.	No change	
Starter	15	8	N	Interior	Bay 7	Bay 7 and 8 - There is standing water (prev. noted as staining) for 12' on the bottom flange along the right web with light surface corrosion on the fillet weld with an active leak from a corrosion hole in the SIP forms at Bay 6.	Increase	R17-9, 10, 11
Starter	15	8	N	Interior	Bay 8	There are two bolts in the underside of the right top flange that have been torched during construction to fit at the splice plate.	No change	R17-12
Starter	15	9	N	Exterior	Pier 9	Moderate to heavy surface corrosion on splice plates and bolts and on the underside of the bottom flange.	increase	S17-1
Starter	15	9	N	Exterior	Pier 9	Right web splice connection has five bolts that are not fully seated with ~1/16" gaps between the bolt head and washer	new	
Starter	15	9	N	Exterior	Throughout	There is light surface corrosion the underside of the top left and right flange along the deck interface at isolated locations throughout.	new	
Starter	15	9	N	Exterior	Throughout	There is light surface corrosion on the underside of the top left and right flange along the deck interface at isolated locations throughout.	new	
Starter	15	9	N	Exterior	Pier 10	Light surface corrosion on splice plates and bolts.	new	
Starter	15	9	N	Exterior	Pier 10	Left web connection to the cross beam exhibits three bolts with a slight gap.	no change	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
Starter	14	9	S	Exterior	Pier 9	Light surface corrosion on splice plates and bolts.	new	
Starter	14	9	S	Exterior	Pier 10	Light surface corrosion on splice plates and bolts.	no change	
Starter	15	9	Pier Cross	Interior	Throughout	Peeling paint exposing primer is present throughout	No change	
Starter	15	9	Pier Cross	Interior	Throughout	The top flange exhibits minor surface corrosion up to 4' L x 2' W.	No change	J17-3
Starter	15	9	Pier Cross	Interior	Throughout	The vertical stiffeners exhibit minor surface corrosion at the top and at the weld.	Increase	J17-4
Starter	14	9	S	Interior	Throughout	Concrete from deck pour accumulated on bottom flange up to 1" deep on top of the bottom flange and on splice plates.	No change	
Starter	14	9	S	Interior	Throughout	Top coat paint peeling in multiple bays in the webs and on some cross bracing, bottom flange on the longitudinal beam.	No change	J17-5/9
Starter	14	9	S	Interior	Bay 1	One top flange splice bolt head has been torch cut to fit.	No change	
Starter	14	9	S	Interior	Bay 2	Pinhole defect at right top fillet weld at midspan.	No change	
Starter	14	9	S	Interior	Bay 5	The top left vertical stiffener bolt is skewed resulting in a 1/8" gap.	New	J17-6
Starter	14	9	S	Interior	Bay 6	SIP form sagging down approximately 1 1/2".	No change	J17-7
Starter	14	9	S	Interior	Bay 10	3 bolt heads on both right and left top flange splice bolts have been torch to fit	No change	J17-8
Starter	14	9	S	Interior	Bay 10	Minor paint failure on the splice connection bolts exposing bare metal.	New	J17-10
Starter	14	9	S	Interior	Bay 10	Moderate corrosion above both rounded vertical stiffener plates on the top flange.	New	
Starter	15	9	N	Interior	Throughout	Typical concrete overpour, up to 1"H x 8"W along the bottom flange. Often covers up weld, so can't be inspected.	No change	
Starter	15	9	N	Interior	Throughout	This span exhibits significant peeling and bubbling paint throughout, up to 80 SF per bay.	No change	R17-14
Starter	15	9	N	Interior	Bay 4	Isolated areas of moderate corrosion on the SIP forms.	New	R17-15
Starter	15	9	N	Interior	Bay 5	Isolated areas of moderate corrosion on the SIP forms.	New	
Starter	15	9	N	Interior	Bay 7	Left side top weld at flange exhibits 2 pinhole flaws, midspan.	No change	
Starter	15	9	N	Interior	Bay 9	There is one bolt in the underside of each top flange that has been torched during construction to fit at the splice plate.	New	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
Starter	15	9	N	Interior	Bay 8	3 pinhole flaws in top left flange fillet weld at edge of fillet, midspan.	No change	
Starter	15	10	Pier Cross	Exterior	Throughout	The front and rear edges of the bottom flange exhibit gauges up to 8" L and up to 3/8" deep.	no change	
Starter	15	10	Pier Cross	Exterior	Throughout	Both faces exhibit light to heavy surface corrosion along the web to bottom flange interface at isolated locations throughout.	increase	S15-18
Starter	15	10	Pier Cross	Exterior	Midspan	There is moderate surface corrosion on the rear face along the top edge under the deck	new	
Starter	15	10	Pier Cross Girder	Exterior	Column 10N	Front face exhibits 5SF of peeling paint with heavy surface corrosion and pitting up to 1/32" deep. Partially coated by inspectors but needs to be properly cleaned and coated	increase	S15-19
Starter	15	10	Pier Cross Girder	Exterior	Column 10S	Minor surface corrosion at the corners of the flanges and the web, in the right rear face and light surface corrosion on the underside of the beam at the bearing	increase	
Starter	15	10	Ν	Exterior	Pier 10	Light surface corrosion on connection plates and bolts at Pier 10	no change	S16-2
Starter	14	10	S	Exterior	Pier 10	Light surface corrosion on connection plates and bolts at Pier 10	new	
Starter	15	10	Ν	Exterior	Pier 10	Right web connection to the cross head exhibits two bolts with a slight gap.	no change	S16-1
Starter	16	10	S	Exterior	throughout	Right web is slightly warped in several locations.	no change	
Starter	16	10	S	Exterior	throughout	There are numerous areas of bubbling paint throughout the underside of the bottom flange and to a lesser extent, on the exterior face of the right web.	new	S16-5, 6
Starter	16	10	S	Exterior	throughout	The right edge of the top flange has light surface corrosion along the deck interface, isolated locations nearly full length.	new	S16-3
Starter	14	10	S	Both	Bay 3	Right web exhibits a 2 3/4" long outward bulge/gouge, 1' from Bay 2 and a 2" L area of no paint/separation at base of the weld.	no change	S16-4
Starter	15	10	N	Exterior	Pier 11	Right web splice exhibits two bolts with a slight gap between the bolt head and the washer	new	
Starter	15	10	N	Exterior	Pier 11	Light to moderate surface corrosion on splice plates and bolts.	no change	S16-11
Starter	16	10	S	Exterior	Pier 11	Light to moderate surface corrosion on splice plates and bolts.	no change	S16-7
Starter	15	10	Pier Cross	Interior	Throughout	Primary paint coating is failing (peeling and bubbling) at random locations throughout interior. The top coat is very thin and poorly applied throughout.	No change	J15-20/J15- 22
Starter	15	10	Pier Cross	Interior	Throughout	Paint flakes and debris are present throughout the bottom flange	No change	J15-21



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
Starter	15	10	Pier Cross Girder	Interior	Column 10N	There is minor surface corrosion on the left end perimeter weld. There is also minor surface corrosion on the vertical fillet welds for the two left end stiffeners.	No change	R15-25-26
Starter	15	10	Pier Cross Girder	Interior	Column 10S	There is minor surface corrosion on the right end perimeter weld. There is also minor to moderate surface corrosion in the vicinity of the vertical fillet welds for the two right end stiffeners.	No change	J15-24
Starter	15	10	Pier Cross	Interior	Adjacent to hatch	There is light surface corrosion at isolated locations on the cap underside adjacent to the hatch.	New	R15-28
Starter	15	10	Pier Cross	Interior	midspan	There is light surface corrosion at isolated locations on the stiffeners at the box beam junctions.	No change	R15-27
Starter	16	10	S	Interior	Throughout	Concrete over pour up to 1in., concrete covers floor bolts in bay 1	New	J16-3
Starter	16	10	S	Interior	Throughout	Peeing top coat of paint in webs, on cross frames and some areas on bottom flange.	No change	J16-10
Starter	14	10	S	Interior	Bay 1	Minor surface corrosion at the splice plate and 2 unpainted bolts on the top right side 3 web splice bolts and 1 flange bolt torched to fit and exhibiting surface corrosion	No change	J16-1-2
Starter	16	10	S	Interior	Bay 4	2 pinhole flaws on the top right side weld, 1' to2' from Bay 3	Increase	J16-7
Starter	16	10	S	Interior	Bay 5	Right web exhibits two 1" long x $1/16'$ deep outward bulge/gouge, 1' from Bay 4 and 6" from Bay 6.	New	J16-8
Starter	16	10	S	Interior	Bay 5	A pinhole flaw in the right side, 2' from Bay 6.	No change	J-16-9
Starter	16	10	S	Interior	Bay 6	Right web and flange exhibits two 2" long x 1/8"deep outward bulge/gouge, 1' from Bay 5	New	
Starter	16	10	S	Interior	Bay 7	Left web exhibits a pinhole flaw at midspan.	No change	
Starter	16	10	S	Interior	Bay 7	Right flange exhibits two 1" long x 1/16" deep gouges,2' from Bay 8.	New	
Starter	16	10	S	Interior	Bay 8	Several (5) pinhole flaws throughout, right side.	No change	
Starter	15	10	N	Interior	throughout	Typical concrete overpour, up to 1"H x 8"W along the bottom flange. Often covers up weld, so can't be inspected.	No change	R16-3
Starter	15	10	N	Interior	Bay 1	One bolt for the top left and right splice plates has been ground down for clearance of the side plate splice nuts.	New	R16-2
Starter	15	10	N	Interior	Bay 10	Three bolts for the top right splice plate have been ground down for clearance of the side plate splice nuts.	New	
Starter	15	10	N	Interior	Bay 10	One nut at the top of the right splice plate is not fully engaged.	New	R16-4



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
Starter	15	10	N	Interior	throughout	This span exhibits significant peeling and bubbling paint throughout, up to 100 SF per bay.	No change	R16-1
Starter	15	11	Pier Crosshe ad	Exterior	Pier 11	Light surface corrosion on the underside of the rear top flange plate	new	S16-12
Starter	15	11	N	Exterior	Pier 11	Light to moderate surface corrosion on splice plates and bolts. Many have been painted, but corrosion is still present.	no change	S16-13,14
Starter	16	11	S	Exterior	Pier 11	Light to moderate surface corrosion on splice plates and bolts. Many have been painted, but corrosion is still present.	no change	
Starter	15	11	N	Exterior	throughout	The left and right edges of the top flange have light surface corrosion along the deck interface at isolated locations throughout	new	
Starter	16	11	S	Exterior	throughout	The left and right edges of the top flange have light surface corrosion along the deck interface at isolated locations throughout, with moderate corrosion noted for 1ft. at Pier 12	new	
Starter	15	11	N	Exterior	Throughout	There are isolated areas of bubbling paint throughout	no change	
Starter	16	11	S	Exterior	Throughout	There are numerous areas of bubbling paint throughout the underside of the bottom flange with three areas of peeled paint exposing primer, largest measuring 4SF	increase	S16-15
Starter	15	11	Pier Crosshe ad	Interior	Throughout	The inside of the cross head exhibits peeling paint on 50% of the surface throughout	No change	J16-11
Starter	16	11	S	Interior	Throughout	Up to 1 1/2" deep concrete spillage on top flange from deck pour.	No change	
Starter	16	11	S	Interior	Throughout	Peeling top coat of paint in webs, on cross frames and some areas on bottom flange and on the longitudinal stiffener at the bottom flange.	No change	
Starter	16	11	S	Interior	Bay 4	There are 3 pinhole flaws in the weld of the 1st vertical stiffener	No change	
Starter	16	11	S	Interior	Bay 9	Light to moderate corrosion web stiffeners above dapped end.	No change	J16-13
Starter	16	11	S	Interior	Bay 9	SIP form clips exhibit minor corrosion.	No change	J16-12
Starter	15	11	N	Interior	Throughout	Bay 5 exhibits 100 SF of peeling paint - on the right web and on the bottom flange. Otherwise, approximately 20 SF per bay.	No change	
Starter	15	11	N	Interior	Throughout	Typical concrete overpour, up to 1"H x 8"W along the bottom flange. Often covers up weld, so can't be inspected.	No change	
Starter	15	11	N	Interior	Throughout	Light debris throughout most bays.	New	R16-7, 10
Starter	15	11	N	Interior	Bay 1	Light surface corrosion on two bolts at the top left splice plate.	New	R16-6



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
Starter	15	11	N	Interior	Bay 1	Two bolts for the top right splice plate have been ground down for clearance of the side plate splice nuts.	New	
Starter	15	11	N	Interior	Bay 3	Poor quality weld over approx. 60% of forward side of right gusset plate at Bay 2/3 junction.	New	R16-8, 9
Starter	15	11	N	Interior	Bay 8	Pinhole flaw in the left side at midspan	No change	R16-11
Starter	15	11	N	Interior	Bay 9	#1 anchor bolt nut is not fully engaged at Pier 12.	No change	R16-12, 13
Starter	15	11	N	Interior	Bay 9	#4 anchor bolt nuts is covered in concrete overpour.	No change	R16-14
Starter	27	29	N	Exterior	Pier 29	There are isolated areas of bubbling paint on the exterior face of the right web within 6' of Pier 29	New	
Starter	24	29	S	Exterior	Pier 29	There are isolated areas of bubbling paint on the exterior face of the left web within 20' of Pier 29	New	
Starter	24	29	S	Exterior	throughout	There is light surface on the underside of the top left flange along the deck interface at isolated locations throughout.	New	
Starter	27	29	N	Exterior	throughout	There is light surface on the underside of the top left flange along the deck interface at isolated locations throughout.	New	
Starter	27	29	N	Exterior	Pier 30	Light surface corrosion on splice plates	no change	
Starter	24	29	S	Exterior	Pier 30	Light surface corrosion on splice plates	no change	
Starter	24	29	S	Interior	Throughout	Bottom internal fillet welds cannot be inspected in numerous areas due to excess concrete deck pour drainage inside box girder on bottom surface.	No change	
Starter	24	29	S	Interior	Bay 1	1" deep powdery substance throughout bay.	No change	J16-15
Starter	24	29	S	Interior	Bay 1	Peeling top coat exposing primer coat.	No change	
Starter	24	29	S	Interior	Bay 1	Light corrosion on top flange of the end web.	No change	J16-16
Starter	24	29	S	Interior	Bay 1	Light corrosion on top lateral bracing	New	J16-17
Starter	24	29	S	Interior	Bay 2	Pinhole flaw in the right side of the vertical stiffener weld, at 3/4 point.	No change	
Starter	24	29	S	Interior	Bay 3	Pinhole flaw in the right top flange weld.	No change	
Starter	24	29	S	Interior	Bay 4	Peeling top coat exposing primer coat.	New	
Starter	24	29	S	Interior	Bay 5	Pinhole flaw in the left flange weld.	No change	
Starter	24	29	S	Interior	Bay 6	Top coat paint peeling on top of cross frame.	No change	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
Starter	24	29	S	Interior	Bay 7	Top coat paint peeling on right web splice plate. Also concrete build up on bottom flange splice plate.	No change	
Starter	24	29	S	Interior	Bay 7	Bolted splice connection exhibits 3 torched bolt heads.	No change	
Starter	27	29	N	Interior	Throughout	Multiple locations of peeling paint exposing primer on webs and bottom flange. Approximately 5 SF per bay.	No change	
Starter	27	29	N	Interior	Bay 1	Lateral bracing in first bay exhibits minor surface corrosion.	No change	R16-21
Starter	27	29	N	Interior	Bay 1	Moderate surface corrosion on the underside of the top flange plate above the bearing stiffeners.	No change	R16-19
Starter	27	29	N	Interior	Bay 1	Build up, up to 1/2" deep of cement material and saw dust.	No change	R16-20
Starter	27	29	N	Interior	Bay 2	Top flange to left stiffener weld between Bay 2 and 3 exhibits poor quality weld termination due to improper fusion.	No change	R16-22
Starter	27	29	N	Interior	Bay 2	There is a pinhole flaw in the right flange in the top, midspan.	No change	
Starter	27	29	N	Interior	Bay 7	There are three bolts in the underside of the right top flange that have been torched during construction to fit at the splice plate.	No change	
Starter	27	30	N	Exterior	Pier 30	Splice plates and bolts at Pier 30 exhibits minor surface corrosion.	no change	
Starter	24	30	S	Exterior	Pier 30	Minor surface corrosion on the splice plate and bolts at Pier 30.	no change	
Starter	24	30	S	Exterior	1/4 span	Left edge of the bottom flange has 2 kinks up to $3'' L \times 1/2'' W \times 1/2'' D$ between the splice plate at Pier 30 and mid span.	no change	
Starter	27	30	N	Exterior	15' from Pier 30	Left face exhibits 2 gouges up to 2" L x 1 1/2" W x 1/8" D	no change	
Starter	26	30	S	Exterior	30' from Pier 30	Left face exhibits 2 gouges up to 3" L x 1 1/2" W x 1/8" D	new	S16-33
Starter	27	30	N	Exterior	Midspan	Light surface corrosion on the underside of the bottom flange.	no change	
Starter	27	30	N	Exterior	midspan	Bottom right edge of the flange is scraped, exposing primer for 4', mid span.	no change	S16-35
Starter	27	30	N	Exterior	throughout	There is light surface on the underside of the top left flange along the deck interface at isolated locations throughout.	New	
Starter	27	30	N	Exterior	35' from P31	Right bottom flange has a bend, 4 " L x 1 $1/8$ " x $1/4$ " D ($1/8$ " loss).	no change	S16-36
Starter	27	30	N	Exterior	30' from Pier 31	Bottom face of bottom flange exhibits 20 SF of bubbling paint with 2SF of peeling paint exposing primer	no change	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
Starter	26	30	S	Exterior	30' from Pier 31	Bottom face of bottom flange, bottom face of the top right flange and the exterior faces of both webs exhibit 50 SF of bubbling paint with 2 SF of peeling paint exposing primer.	increase	
Starter	26	30	S	Exterior	40' from Pier 31	Exterior face of the left web has 10SF of bubbling paint	new	
Starter	27	30	N	Exterior	3.5' from Pier 31	Lower flange on left side exhibits gouges 4" L x 1" W x 1/8" D.	no change	
Starter	27	30	Ν	Exterior	4.5' from Pier 31	Lower flange on right side exhibits a gouge 3" L x 1" W x 1/8" D	no change	
Starter	27	30	N	Exterior	Pier 31	A bolt in the left web exhibits a 1/8" gap.	no change	
Starter	27	30	Pier Cross	Interior	throughout	The left faces of all the stiffeners between boxes are missing a top coat of paint	No change	
Starter	26	30	S	Interior	Throughout	Top coat has peeling paint in multiple bays in the webs and on some cross bracing	No change	
Starter	24	30	S	Interior	Bay 1	Bolted splice connection exhibits 3 torched bolt heads.	No change	
Starter	24	30	S	Interior	Bay 3	The SIP form is sagging up to 3" down over the cross frame.	No change	
Starter	24	30	S	Interior	Bay 3	There is a pinhole flaw in the top weld 2/3 length in the right flange.	No change	J16-18
Starter	26	30	S	Interior	Bay 6	Concrete from deck pour accumulated on bottom flange up to 3" deep.	No change	J16-19
Starter	26	30	S	Interior	Bay 8	Bolted splice connection exhibits 2 torched bolt heads.	New	
Starter	27	30	N	Interior	Throughout	Multiple locations of peeling paint exposing primer on webs and top flange. Approximately 4 SF in bays 5 thru 8, with nearly 10 SF on the rear face of the diaphragm at Pier 31.	No change	
Starter	27	30	N	Interior	Throughout	Typical concrete buildup on the bottom flange along the webs	No change	
Starter	27	30	N	Interior	Bay 1	There are two bolts in the underside of the right top flange that have been torched during construction to fit at the splice plate.	New	
Starter	27	30	N	Interior	Bay 3	Top right fillet weld exhibits pinhole flaw at 2/3 distance of the bay length.	No change	
Starter	27	30	N	Interior	Bay 5	Top right fillet weld exhibits 1 pinhole flaw at mid span and 3 in the right forward stiffener vertical weld.	No change	
Starter	27	30	N	Interior	Bay 6	Top right fillet weld exhibits 4 pinhole flaws at 1/3 the distance of the bay length.	No change	
Starter	27	30	N	Interior	Bay 7	There is a pinhole flaw in the right flange at the top, midspan.	No change	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
Starter	27	30	N	Interior	Bay 8	Concrete buildup on top of the bottom splice plate.	New	
Starter	27	30	N	Interior	Bay 8	There are two bolts in the right top flange splice that have been torched to fit	No change	
Starter	27	30	N	Interior	Bay 8	The bottom splice plate has one broken bolt and another bolt that has been flame cut off.	New	R16-26, 27
Starter	27	31	N	Exterior	3/4 Span	30 SF area of blistered paint, on exterior right web and bottom flange.	no change	
Starter	27	31	N	Exterior	Pier 31	Minor surface corrosion at the splice plate at Pier 31.	no change	
Starter	27	31	N	Exterior	Pier 32	Surface corrosion on left top flange for 5', coated by inspectors	decrease	
Starter	26	31	S	Exterior	Throughout	Isolated locations of minor corrosion along top flange.	New	
Starter	26	31	S	Exterior	Pier 31	Minor surface corrosion at the splice plate	no change	
Starter	28	31	S	Exterior	Pier 32	Bottom flange, right edge there is a 2 1/2" x 1/2" x 1/8" nick, 9" from end of beam.	no change	
Starter	28	31	S	Exterior	Pier 32	3 SF blistering paint exposing primer, on exterior right web	increase (prev 1SF)	J12-4
Starter	61	31	N. Turn.	Exterior	throughout	There are isolated areas of bubbling paint on the right web and on the underside of the bottom flange	increase	
Starter	28	31	S. Turn.	Exterior	throughout	There are isolated areas of bubbling paint on the left web and on the underside of the bottom flange	no change	
Starter	60	31	S. Turn.	Exterior	Pier 31S	Could not close hatch all the way	new	S16-27
Starter	28	31	S	Exterior	Throughout	Areas of bubbling paint throughout the left web primarily in the rear half with 7SF peeling paint exposing primer.	increase	
Starter	60	31	S. Turn.	Exterior	Pier 31S	Light to moderate surface corrosion on bottom faces of the top flanges at Pier 31S.	new	
Starter	61	31	N. Turn.	Exterior	Pier 31S	Light surface corrosion on bottom face of bottom and top flanges at Pier 31S.	increase	S16-21
Starter	27	31	N	Exterior	Throughout	Webs exhibit bubbling paint at numerous isolated locations, nearly full length.	increase	
Starter	27	31	Pier Cross	Interior	Throughout	The bottom flange exhibits paint peel with minor surface corrosion, areas missing top coat and debris up to 1", including bird carcasses.	No change	J16-20-21
Starter	26	31	S	Interior	throughout	Large areas of peeling top coat	No change	J16-23-24
Starter	26	31	S	Interior	throughout	Concrete over pour up to 3" deep on top of bottom flange at several locations.	No change	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
Starter	26	31	S	Interior	Bay 1	Missing bolt in right top splice plate	No change	J16-22
Starter	28	31	S	Interior	Bay 9	Intermediate web stiffener exhibits minor surface corrosion along the stiffener to top flange weld.	No change	
Starter	28	31	S. Turn.	Interior	Throughout	Up to 1/2" of concrete over pour on the bottom flanges along webs.	No change	
Starter	60	31	S. Turn.	Interior	Bay 1	Inside face of left web exhibits 10 sf of peeling paint, exposing primer. 1 sf on right web. 4 sf in bearing area.	No change	
Starter	60	31	S. Turn.	Interior	Bay 3	4'x6' area of peeling paint exposing primer on the inside face of the left web.	No change	
Starter	28	31	S. Turn.	Interior	Bay 4	4"x6" area of surface corrosion on the inside face of the left web adjacent to splice.	New	J16-14
Starter	28	31	S. Turn.	Interior	Bay 4	Two areas 1'x1' of peeling paint exposing primer on the inside face of the left web.	New	
Starter	27	31	N	Interior	Throughout	Multiple locations of peeling paint exposing primer on webs and top flanges. Average of 6 SF per bay.	No change	
Starter	27	31	N	Interior	Bay 2	There are 2 pinhole flaws in the 1st vertical stiffener in the left flange.	No change	
Starter	27	31	N	Interior	Bay 6	Pinhole flaw in right flange top weld.	No change	
Starter	27	31	N	Interior	Bay 8	3 Pinhole flaws exist in right top flange fillet weld at 1/4 bay length.	No change	
Starter	27	31	N	Interior	Bay 9	Pinhole flaw in the left side vertical stiffener, rear face.	No change	
Starter	27	31	N	Interior	Bay 9	Moderate surface corrosion on the internal bearing stiffener and on the underside of the top flange plate.	No change	R16-29, 30
Starter	61	31	N. Turn.	Interior	Bay 1	Approx. 70% of surface area has peeling paint exposing primer.	No change	R16-16
Starter	61	31	N. Turn.	Interior	Bay 1	Left splice plate has numerous unpainted bolts	No change	R16-15
Starter	61	31	N. Turn.	Interior	Bay 1	Typical concrete buildup on bottom flange and splice	No change	R16-17
North	36	52	R	Exterior	Throughout	Cross-bracing between the left and right spans exhibit minor surface corrosion, primarily on the bolts.	no change	
North	40	52	R	Exterior	Junction and Bay 11	Light surface corrosion on splice bolts	new	
North	36	52	R	Exterior	Pier 52	There is heavy surface corrosion on the underside of the top right flange along the deck interface for 1ft	new	
North	41	52	L	Exterior	Bay 11	Light surface corrosion on splice bolts	new	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
North	36	52	R	Interior	Bay 1	There is light surface corrosion on the bearing stiffeners above the mid flange.	New	J17-20
North	36	52	R	Interior	Bay 1	There is light surface corrosion on the top flange above both outside bearing anchor bolts.	New	
North	36	52	R	Interior	Bay 1	Minor standing water on the horizontal bearing stiffener.	New	J17-19
North	36	52	R	Interior	Bay 2	Minor surface corrosion on the nuts.	No change	
North	36	52	R	Interior	Bay 3	Minor surface corrosion on the nuts.	New	
North	40	52	R	Interior	Bay 6	Light to moderate surface corrosion on all splice bolts.	New	
North	40	52	R	Interior	Bay 7	Rear top cross bracing has a bend 3" L x 1/4".	No change	J17-21
North	40	52	R	Interior	Bay 8	Minor surface corrosion on the nuts.	New	
North	40	52	R	Interior	Bay 10	Minor surface corrosion on the nuts.	New	
North	40	52	R	Interior	Bay 11	Light surface corrosion on all splice bolts.	New	
North	40	52	R	Interior	Bay 12	Minor surface corrosion on the nuts.	New	
North	40	52	R	Interior	Bay 15	Portal diaphragm exhibits a vertical weld at the left web junction of diaphragm and web lacking a primer and final paint coat.	No change	J17-21-22
North	40	52	R	Interior	Bay 15	Efflorescence stains with light corrosion on SIP forms along the top of both webs	No change	
North	39	52	L	Interior	Bay 1	Bearing stiffeners at the bottom flange have moderate surface corrosion.	No change	R17-31
North	39	52	L	Interior	Bay 1	Bearing stiffeners at the dapped bottom flange at the right anchor bolt exhibit isolated laminating corrosion with up to 1/16" section loss, in four areas up to 4 square inches each.	Increase (prev. 2 areas up to 2 square inches)	R17-30
North	41	52	L	Interior	Bay 15	Left top fillet weld exhibits a pinhole flaw at the center of bay. Right side similar at the first 1/3 of bay.	No change	
North	41	52	L	Interior	Bay 3	Leaves and styrofoam debris on top of the bottom flange	No change	R17-32
North	41	52	L	Interior	Throughout	A number of the fasteners for the top lateral bracing, cross bracing, and external cross bracing exhibit light surface corrosion.	New	R17-33, 34
North	41	52	L	Interior	Bay 7	Pinhole flaw in weld of cross bracing connector plate weld at end of weld.	No change	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
North	41	52	L	Interior	Bay11	Light surface corrosion on bolts and nuts in splice plate.	No change	R17-35
North	41	52	L	Interior	Bay13	Right top fillet weld exhibits a pinhole flaw, 1' past stiffener 14-2.	No change	
North	41	52A	L	Exterior	Pier 52A & Junction	Light to moderate corrosion on splice plate and bolts	no change	
North	40	52A	R	Exterior	Junction	Light surface corrosion on splice bolts	new	
North	40	52A	R	Interior	Bay 1	Light surface corrosion on all splice bolts.	No change	J17-14
North	40	52A	R	Interior	Bay 1	Light surface corrosion on all lateral bracing bolts.	New	J17-15-16
North	40	52A	R	Interior	Bay 2	Light surface corrosion on all splice bolts.	No change	
North	40	52A	R	Interior	Bay 2	Light surface corrosion on most of the lateral bracing bolts.	New	
North	40	52A	R	Interior	Bay 5	There are left over metal pieces that have significant corrosion on the bottom flange and dapped mid flange.	No change	J17-18
North	40	52A	R	Interior	Bay 5	There is light surface corrosion on the bearing stiffeners above the mid flange.	No change	
North	40	52A	R	Interior	Bay 5	There is light surface corrosion on the top flange above both outside bearing anchor bolts.	New	
North	41	52A	L	Interior	Bay 1	Moderate to heavy laminating and surface corrosion on all splice bolts with up to 20% (prev. noted as 15%) section loss on nuts.	Increase	R17-27
North	41	52A	L	Interior	Bay 1	There is an area of minor corrosion at the bottom of the 1st vertical stiffener, south face.	No change	R17-28
North	41	52A	L	Interior	Bay 2	Light corrosion on bottom of end web stiffeners	No change	R17-26
North	41	52A	L	Interior	Bay 2	Light corrosion on the bottom of the top flange over Pier 52A.	New	R17-25
North	41	52A	L	Interior	Bay 2	Minor surface corrosion on all splice bolts.	No change	R17-29
North	41	53	-	Exterior	Pier 53	Diaphragm bolts and plate exhibit light surface corrosion.	no change	
North	41	53	L	Exterior	Pier 54	The underside of the bottom flange has staining at the hatch.	no change	
North	41	53	L	Exterior	Bay 5	Splice plates and bolts exhibit light surface corrosion.	new	
North	40	53	R	Exterior	Bay 5	Splice plates and bolts exhibit light surface corrosion.	no change	
North	40	53	R	Exterior	Pier 54	3" of bare metal is exposed on the left edge of the left flange due to a deck spall	new	S17-35



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
North	40	53	R	Exterior	Pier 54	The underside of the bottom flange has staining at the hatch.	no change	
North	41	53	Both	Exterior	throughout	Cross bracings between the left and right spans exhibit light to moderate surface corrosion on the members and bolts.	no change	S17-34
North	40	53	R	Interior	Throughout	Light to moderate surface corrosion on the top left lateral panel point bolts.	New	
North	40	53	R	Interior	Bay 1	Sawdust and other debris accumulation up to 1/4" deep in Bays 1 $\&$ 2.	No change	J17-25
North	40	53	R	Interior	Bay 1	Efflorescence and light corrosion along edges of SIP forms at the top flange both left and right sides.	No change	J17-24
North	40	53	R	Interior	Bay 5	Moderate surface corrosion on tops of splice bolts where paint is missing.	Increase	
North	40	53	R	Interior	Bay 8	There are several bolts and nuts in the left flange that exhibit light to moderate surface corrosion.	Increase	J17-26
North	40	53	R	Interior	Bay 11	There is light surface corrosion on the top flange above both outside bearing anchor bolts.	New	
North	41	53	L	Interior	throughout	The fasteners for the external cross bracing exhibit light surface corrosion.	New	R17-36
North	41	53	L	Interior	Bay 1	Right top fillet weld exhibits a pinhole defect at the first 1/3 of bay.	No change	
North	41	53	L	Interior	Bay 10	There is a pinhole flaw in the 1st vertical stiffener in the left flange at the top	No change	
North	41	53	L	Interior	Bay 11	Light surface corrosion on the underside of the top flange over Pier 54.	New	R17-37
North	41	53	L	Interior	Bay 5	Minor surface corrosion on splice bolts.	No change	
South	41	205	L	Exterior	Bay 6	Light to moderate surface corrosion on splice plate bolts.	no change	
South	90	205	R	Exterior	Bay 7	Light to moderate surface corrosion on splice plate bolts.	no change	
South	90	205	R	Interior	Throughout	Concrete over pour is present on the bottom flange, throughout.	no change	J15-1-3
South	90	205	R	Interior	Bay 4 right bottom right bracing	Light scattered spot corrosion	New	J15-4-5
South	90	205	R	Interior	Bay 7 thru	Light scattered spot corrosion for a total of 15lf starting at splice, corrosion is on floor, splices and hardware and lateral bracing 6 and 7	New	J15-6-9
South	93	205	L	Interior	Throughout	Minor amounts of concrete over pour buildup is present on the bottom flange, throughout, some of which is covering the welds marking them difficult to inspect.	no change	R15-3



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
South	93	205	L	Interior	Bay 1	Light surface corrosion on bearing stiffeners	no change	R15-1
South	93	205	L	Interior	Bay 6	Staining on the bottom flange which may indicate water intrusion. Top of right web at the SIP form exhibits corrosion from possible water leak.	no change	R15-4, 5
South	93	205	L	Interior	Bay 6	Very light surface corrosion on splice plates and fasteners.	no change	R15-6
South	93	205	L	Interior	Bay 7	Light staining on the bottom flange which may indicate water intrusion.	no change	
South	93	205	L	Interior	Bay 9	Moderate surface corrosion at SIP form drain opening.	no change	R15-7
South	93	206	L	Exterior	Bay 3	Light to moderate surface corrosion on splice plate bolts.	no change	
South	91	206	L	Exterior	Bay 7	scrape marks on the underside of the box, NSD	new	
South	90	206	R	Exterior	Bays 5 and 8	1SF areas of light surface corrosion on the underside of the box	new	
South	90	206	R	Exterior	Bay 7	scrape marks on the underside of the box, NSD	new	
South	90	206	R	Exterior	Bay 4	Light to moderate surface corrosion on splice plate bolts.	no change	
South	90	206	R	Interior	Throughout	Light scattered spot corrosion	No change	
South	91	206	L	Interior	Throughout	Mortar leakage on the bottom flange weld at various locations.	no change	
South	91	206	L	Interior	Bay 10	Light debris accumulation on dapped bottom flange at anchor bolts	no change	R15-8
South	93	206	L	Interior	Bay 3	Very light surface corrosion on splice plate bolts.	no change	
South	85	213	L	Exterior	Bay 10	Light surface corrosion on splice plate bolts.	no change	
South	84	213	R	Exterior	Bay 10	Light surface corrosion on splice plate bolts.	no change	
South	84	213	R	Interior	Throughout	Concrete overpour up to 1" on bottom flange throughout.	New	
South	84	213	R	Interior	Bay 1	Corrosion along bottom right web	New	
South	84	213	R	Interior	Bay 10	Concrete spill from deck pour has covered some splice bolts.	No change	J15-15
South	84	213	R	Interior	Bay 10	Minor corrosion along splice bolts	New	J15-16
South	85	213	L	Interior	Throughout	There is up to $\frac{1}{2}$ " of concrete over flow present on the bottom flange, isolated locations throughout.	no change	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
South	85	213	L	Interior	Bay 8	Light surface corrosion on the right side of the SIP forms.	New	R15-13
South	85	213	L	Interior	Bay 9	Light surface corrosion on both sides of the SIP forms.	New	
South	85	213	L	Interior	Bay 10	Light surface corrosion on splice plates and bolts and on bottom flange for 2'x6'.	no change	R15-14
South	85	213	L	Interior	Bay 12	Weld at top of rear cross bracing, right side exhibits no paint for 1".	no change	R15-15, 16
South	85	213	L	Interior	Bay 12	Light sheen of surface corrosion on the top of the bottom flange in this bay, $10' L \times 6'$ W.	no change	R15-17
South	85	213	L	Interior	Bay 2	Bottom flange, right side at rear cross frame has an area of light surface corrosion 10'x1'.	no change	R15-12
South	85	214	L	Exterior	Bay 4	Light to moderate surface corrosion on splice plate bolts.	no change	
South	85	214	L	Exterior	Bay 7	scrape marks on the underside of the box, NSD	new	
South	84	214	R	Exterior	Bay 4	Light surface corrosion on splice plate bolts.	no change	
South	84	214	R	Interior	Bay 4	Lateral bracing at the splice location has minor corrosion on top right corner.	No change	
South	84	214	R	Interior	Throughout	Concrete overpour up to 1" on bottom flange throughout.	No change	
South	84	214	R	Interior	Bay 3	Top right edge of SIP form exhibits minor surface corrosion and efflorescence in Bays 2, 3 and 4.	Increase	
South	84	214	R	Interior	Bay 4	Splice connection exhibits minor surface corrosion and concrete over pour on splice bolts and plates.	No change	
South	85	214	L	Interior	Throughout	There is up to ½" of concrete over flow present on the bottom flange, throughout.	no change	
South	85	214	L	Interior	Bay 1	A light sheen of surface corrosion on the top of the bottom flange in this bay, $8' L \times 6'$ W.	no change	
South	85	214	L	Interior	Bay 10	Some leftover metal pieces have created minor corrosive marks on the bottom flange.	no change	R15-20
South	85	214	L	Interior	Bay 10	Light to moderate surface corrosion on the top face of the bottom flange, right side in Bays 10 and 11.	no change	R15-21
South	85	214	L	Interior	Bay 4	Light surface corrosion on the splice plates and bolts	no change	
South	85	215	L	Exterior	Throughout	There is light to moderate surface corrosion on the canopy support bolts.	no change	S15-14
South	85	215	L	Exterior	Bay 1	The right bottom flange exhibits peeling paint up to 12" L.	no change	S15-13



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
South	85	215	L	Exterior	Bay 2	Light surface corrosion on splice plate bolts.	no change	
South	84	215	R	Exterior	Throughout	Right web of span exhibits splattered concrete originating from the construction of an adjacent high rise building.	no change	
South	84	215	R	Both	Throughout	Both sides of the webs exhibit 1/4" drilled hole used to hold the template for the canopy drill holes.	no change	
South	84	215	R	Exterior	Throughout	There is light to moderate surface corrosion on the canopy support bolts.	no change	
South	84	215	R	Exterior	Bay 2	Light to moderate surface corrosion on splice plate bolts.	no change	
South	84	215	R	Interior	Throughout	Concrete over pour up to 1" deep on top of bottom flange at several locations.	No change	
South	84	215	R	Interior	Bay 2	Light to moderate surface corrosion on splice plate bolts and concrete over pour on splice bolts and plates.	Increase	
South	84	215	R	Interior	Bay 8	Right side drill hole for canopy through weld at stiffener.	No change	J15-19
South	85	215	L	Interior	Throughout	There are isolated areas of concrete over pour buildup 1/2" on the bottom flange.	no change	
South	85	215	L	Interior	Bay 4	A slight upward deformation (hardly perceptible) noted in the bottom flange, middle of bay.	No change	R15-23
South	85	215	L	Interior	Bay 9	Minor surface corrosion on last right web stiffener	no change	R15-24
River	79	232	L	Exterior	Bay 9	Splice plate bolts exhibit light to moderate surface corrosion.	increase	
River	79	232	R	Exterior	Bay 9	Splice plate bolts exhibit light to moderate surface corrosion.	increase	
River	78	232	R	Interior	Throughout	Concrete spillage on top of the bottom flange throughout from deck placement.	no change	
River	78	232	R	Interior	Throughout	Random nuts and bolts for the cross bracing/ transverse struts have light corrosion.	New	
River	78	232	R	Interior	Bay 1	Light corrosion on the top flanges above both outside anchor bolts.	New	J25-1
River	78	232	R	Interior	Bay 4	The rear horizontal cross brace is distorted up to 1/4" over 16" at the left end.	New	J25-2-4
River	78	232	R	Interior	Bay 6	Corrosion with efflorescence on SIP forms	New	
River	76	232	R	Interior	Bay 7	Corrosion with efflorescence on SIP forms	New	
River	76	232	R	Interior	Bay 9	Light to moderate corrosion on bolt heads of splice plates	Increase	J25-5
River	78	232	R	Interior	Bay 4	Light corrosion on bolt heads of splice plates	New	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	76	232	R	Interior	Bay 9	Corrosion with efflorescence on SIP forms	New	J25-6
River	76	232	R	Interior	Bay 9	The forward horizontal cross brace is distorted up to 1/4" over 4" at the left end.	New	
River	76	232	R	Interior	Bay 12	Corrosion with efflorescence on SIP forms	New	
River	79	232	L	Interior	Bay 1	Light surface corrosion on the underside of the top flange at the bearing stiffeners.	New	R25-2
River	79	232	L	Interior	Bay 10	SIP forms exhibit light surface corrosion and have efflorescence buildup.	no change	
River	79	232	L	Interior	Bay 11	SIP forms exhibit light surface corrosion and have efflorescence buildup.	no change	
River	79	232	L	Interior	Bay 12	SIP forms exhibit light surface corrosion and have efflorescence buildup.	no change	
River	79	232	L	Interior	Bay 9	The splice plate bolts exhibit light surface corrosion.	no change	R25-3
River	79	232	L	Interior	Bay 9	SIP forms exhibit light surface corrosion and have efflorescence buildup.	no change	R25-4
River	79	232	L	Interior	Bay 9	The lateral bracing connection plates exhibit light surface corrosion.	no change	R25-5
River	77	233	L	Exterior	Bay 4	The splice plates and bolts exhibit light to moderate surface corrosion.	new	
River	76	233	R	Exterior	Bay 4	The splice plates and bolts exhibit light to moderate surface corrosion.	new	
River	77	233	-	Exterior	Throughout	Cross bracing between the left and right spans exhibit minor corrosion on the bolts.	no change	
River	76	233	R	Exterior	First 30ft.	Light surface corrosion on the right edge of the bottom flange and the lower 2in. of the web	new	S25-6
River	76	233	R	Interior	Throughout	Minor concrete spillage along the bottom flange mainly along the web wall from deck construction.	no change	
River	76	233	R	Interior	Throughout	Random nuts and bolts for the cross bracing/ transverse struts have light corrosion.	New	
River	76	233	R	Interior	Bay 4	Light corrosion on the transverse strut gusset plates and nuts and bolts	New	J25-7
River	76	233	R	Interior	Bay 5	Corrosion with efflorescence on SIP forms	no change	
River	76	233	R	Interior	Bay 9	Corrosion with efflorescence on SIP forms	no change	
River	77	233	L	Interior	Bay 4	Moderate surface corrosion along the bottom edge of the lateral bracing, vertical leg.	no change	R25-6
River	77	233	L	Interior	Bay 4	Splice plate bolts exhibit light surface corrosion.	no change	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	77	233	L	Interior	Bay 11	The rear cross bracing is bent up 1/4".	no change	R25-7
River	77	234	L	Exterior	Bay 3	The splice plate bolts exhibit light surface corrosion.	no change	
River	76	234	R	Exterior	Bay 3	The splice plate bolts exhibit light to moderate surface corrosion.	increase	
River	76	234	R	Interior	Throughout	Concrete from deck pour up to 1" deep on top of the bottom flange.	no change	
River	76	234	R	Interior	Throughout	Random nuts and bolts for the cross bracing/ transverse struts have light corrosion.	New	
River	76	234	R	Interior	Bay 3	Corrosion with efflorescence on SIP form at the splice connections and along the centerline	no change	
River	76	234	R	Interior	Bay 3	The splice plate bolts exhibit light surface corrosion.	no change	
River	76	234	R	Interior	Bay 3	Lateral bracing above the splice exhibits moderate corrosion at the bottom of the vertical leg.	no change	
River	76	234	R	Interior	Bay 8	There is evidence of water stains with light debris accumulation throughout on the bottom flange at the last bay before pier 235	no change	J25-8
River	77	234	L	Interior	Bay 3	The splice plate bolts exhibit light surface corrosion.	no change	
River	77	234	L	Interior	Bay 3	Lateral bracing above the splice exhibits moderate corrosion at the bottom of the vertical leg.	no change	
River	77	234	L	Interior	Bay 3	The lateral bracing connection plates exhibit light surface corrosion.	New	
River	77	235	L	Exterior	Bay 7	Splice plate bolts have light surface corrosion.	no change	
River	76	235	R	Exterior	Bay 6	Splice plate bolts have light surface corrosion.	no change	
River	77	235	L	Exterior	Pier 235	There is light surface corrosion on the underside of the top left flange	new	
River	76	235	R	Exterior	Pier 235	There is light surface corrosion on the underside of the top left flange	new	
River	77	235	-	Exterior	Pier 235	Steel spans were constructed with a lateral offset of 1-1/2" between Span 234 and Span 235 at this location.	no change	R25-17
River	76	235	R	Interior	Throughout	Random nuts and bolts for the cross bracing/ transverse struts have light corrosion.	New	
River	76	235	R	Interior	Throughout	Bird carcasses and debris present	New	J25-9
River	76	235	R	Interior	Bay 1	Corrosion with efflorescence on SIP forms	New	
River	76	235	R	Interior	Bay 6	The splice plate bolts exhibit light surface corrosion.	New	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	76	235	R	Interior	Bay 8	Corrosion with efflorescence on SIP forms	New	
River	77	235	L	Interior	Bay 5	Moderate surface corrosion along the bottom edge of the lateral bracing, vertical leg.	New	
River	77	235	L	Interior	Bay 7	Splice plate bolts have light surface corrosion.	no change	
River	77	235	L	Interior	Bay 8	SIP forms exhibit light surface corrosion and have efflorescence buildup.	New	
River	77	235	L	Interior	Bay 10	Forward cross brace vertical connection plate has up to 1/16" gap between the angle and the bottom flange.	New	R25-10
River	77	235	L	Interior	Bay 11	Minor corrosion and efflorescence on SIP forms at the drain pipe.	no change	R25-11
River	77	235	L	Interior	Bay 11	Damp debris in the forward right corner under drain, causing minor corrosion at the bottom of the right web.	no change	R25-12
River	77	236	L	Exterior	Bay 4	Splice plate bolts have light surface corrosion.	new	
River	75	236	L	Exterior	Pier 237L	20" x 3" area of moderate to heavy surface corrosion on the underside of the right top flange, with 6 square inches of up to 1/16" pitting.	no change	J13-3, 4
River	76	236	R	Interior	Bay 4	Lateral bracing, bottom of vertical leg exhibits peeling paint and corrosion.	no change	J25-10
River	76	236	R	Interior	Bay 4	Corrosion and efflorescence on SIP panel above the bracing.	no change	
River	76	236	R	Interior	Bay 4	Light to moderate corrosion on bolts and nuts in bottom flange splice	no change	
River	74	236	R	Interior	Bay 12	End diaphragm stiffeners on the left and right sides exhibits areas of corrosion.	Increase	
River	76	236	R	Interior	Throughout	Random nuts and bolts for the cross bracing/ transverse struts have light corrosion.	New	
River	75	236	L	Interior	Bay 4	Splice plate bolts have light surface corrosion.	no change	
River	75	236	L	Interior	Bay 9	(4) 6" diameter pipe supports. Reason unknown	no change	
River	75	236	L	Interior	Bay 11	Rear cross race is bent downward 1/8" over 8" at the left end.	New	R25-13
River	75	236	L	Interior	Bay 11	Lateral brace fasteners exhibit light surface corrosion.	New	R25-14
River	75	236	L	Interior	Bay 12	Rear left cross brace stiffener is deflected rearward 1/4" over 32".	New	R25-15
River	75	236	L	Interior	Bay 12	Light surface corrosion between stiffeners above dapped end.	no change	R25-16
River	73	240	L	Exterior	Throughout	Thin top coat on exterior faces of both boxes in this Span	no change	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	73	240	L	Exterior	Bay 11	Splice plate bolts exhibit light surface corrosion.	no change	
River	72	240	R	Exterior	Throughout	Thin top coat on exterior faces of both boxes in this Span	no change	
River	72	240	R	Exterior	Bay 10	Splice plate bolts exhibit light surface corrosion.	no change	
River	74	240	R	Interior	Bay 1	Nesting material present on top of the horizontal stiffener between the vertical stiffeners.	New	J27-4
River	74	240	R	Interior	Bay 1	Light surface corrosion on the vertical stiffeners, top flange and welds at the end diaphragms.	New	J27-2-3
River	72	240	R	Interior	Throughout	Minor concrete spillage along the bottom flange mainly along the web wall from deck construction.	no change	
River	72	240	R	Interior	Bay 7	Light surface corrosion on the SIP forms.	New	
River	72	240	R	Interior	Bay 8	Light surface corrosion on the SIP forms.	New	
River	72	240	R	Interior	Bay 10	Light surface corrosion on the SIP forms.	New	J27-5
River	72	240	R	Interior	Bay 10	The splice connections hardware exhibits light surface corrosion.	New	
River	73	240	L	Interior	Throughout	Minor concrete spillage along the bottom flange mainly along the web wall from deck construction.	no change	R27-3
River	75	240	L	Interior	Bay 1	Light surface corrosion on the underside of the top flange at the bearing stiffeners	New	R27-1
River	73	240	L	Interior	Bay 4	The forward cross bracing is bent downward up to 1" at the bottom left corner.	no change	
River	73	240	L	Interior	Bay 5	The forward cross bracing is bent downward up to 1" at the bottom left corner.	no change	R27-4
River	73	240	L	Interior	Bay 6	The forward cross bracing is bent downward up to 1" at the bottom left corner.	no change	
River	73	240	L	Interior	Bay 10	The forward cross bracing is bent upward 1/8" over 4" in two places, one in the center and another near the left end.	New	
River	73	240	L	Interior	Bay 11	The rear cross bracing is bent downward up to 1/2" at the bottom right corner.	New	
River	73	241	Pier Cross	Exterior	Throughout	Light surface corrosion along the rear and front edges of the top flange, full length.	no change	S27-13
River	73	241	Pier Cross	Exterior	Front face	Moderate surface corrosion on the top flange along the right deck interface	new	
River	73	241	Pier Cross	Exterior	Rear face	Moderate surface corrosion on the top flange along the left deck interface	new	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	73	241	Pier Cross	Exterior	Throughout	There is a thin paint top coat on the exterior face of the steel cross girder.	no change	S27-14
River	73	241	L	Exterior	Throughout	Thin top paint coat, throughout the span; typical of river line spans, south of the river	no change	
River	73	241	L	Exterior	Bay 1	Splice plate bolts exhibit light surface corrosion.	no change	
River	73	241	L	Exterior	Bay 8	Splice plate bolts exhibit light surface corrosion.	no change	
River	73	241	L	Exterior	Bay 11	Splice plates and bolts exhibit light to moderate surface corrosion.	increase	
River	72	241	R	Exterior	Throughout	Thin top paint coat, throughout the span	no change	
River	72	241	R	Exterior	Bay 1	Splice plate bolts exhibit light surface corrosion.	no change	
River	70	241	R	Exterior	Bay 8	Splice plate bolts exhibit light surface corrosion.	no change	
River	70	241	R	Exterior	Bay 11	Splice plates and bolts exhibit light to moderate surface corrosion.	increase	
River	72	241	R	Interior	Throughout	The bottom flange exhibits concrete over pour and sawdust buildup, throughout.	no change	
River	72	241	R	Interior	Throughout	Minor concrete spillage on the bottom flange mainly along the web walls.	no change	
River	72	241	R	Interior	Bay 1	The splice connection hardware exhibits light surface corrosion.	New	
River	72	241	R	Interior	Bay 1	The bottom flange has a 1 soft area of peeling paint in the right corner adjacent to the end diaphragm.	New	J27-6
River	72	241	R	Interior	Bay 1	The bottom of the transverse strut has light surface corrosion throughout the full length.	New	J27-7
River	72	241	R	Interior	Bay 1	Light surface corrosion on the SIP forms.	New	
River	72	241	R	Interior	Bay 2	Light surface corrosion on the SIP forms.	New	
River	72	241	R	Interior	Bay 2	Light surface corrosion on the forward transverse strut hardware.	New	J27-8
River	72	241	R	Interior	Bay 3	Light surface corrosion on the SIP forms.	New	
River	72	241	R	Interior	Bay 4	Light surface corrosion on the SIP forms.	New	
River	72	241	R	Interior	Bay 5	Light surface corrosion on the SIP forms.	New	
River	70	241	R	Interior	Bay 6	Light surface corrosion on the SIP forms.	New	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	70	241	R	Interior	Bay 7	Light surface corrosion on the SIP forms.	New	
River	70	241	R	Interior	Bay 11	The splice connections hardware exhibits light surface corrosion.	New	
River	73	241	L	Interior	Throughout	Minor concrete spillage along the bottom flange mainly along the web wall from deck construction.	New	
River	73	241	L	Interior	Bay 1	Very light surface corrosion on splice bolts	no change	R27-5
River	73	241	L	Interior	Bay 2	Light surface corrosion on the lateral brace connection plates.	New	R27-6
River	73	241	L	Interior	Bay 3	Minor surface corrosion in the SIP forms.	no change	
River	73	241	L	Interior	Bay 4	Minor surface corrosion in the SIP forms.	no change	
River	73	241	L	Interior	Bay 5	Minor surface corrosion in the SIP forms.	no change	
River	73	241	L	Interior	Bay 6	Minor surface corrosion in the SIP forms.	no change	R27-7
River	73	241	L	Interior	Bay 12	The rear cross bracing is bent downward up to 1/4" at the bottom right corner.	New	
River	73	242	Pier Cross	Exterior	Rear face	Moderate surface corrosion on the top flange along the left deck interface	new	S27-10
River	73	242	Pier Cross	Exterior	Rear face	Light surface corrosion along the rear edge of the top flange, full length.	new	S27-11
River	73	242	L	Exterior	Bay 1	Splice plate bolts exhibit light surface corrosion.	new	
River	71	242	L	Exterior	Bay 4	Splice plate bolts exhibit light surface corrosion.	new	
River	70	242	R	Exterior	Bay 4	Splice plate bolts exhibit light surface corrosion.	new	
River	70	242	R	Exterior	Bay 1	Splice plates and bolts exhibit light to moderate surface corrosion.	new	S27-9
River	70	242	R	Interior	Bay 1	There is a 1 SF area of peeling paint at the bottom of the web.	New	
River	70	242	R	Interior	Bay 1	The rear transverse strut gusset plate has bubbling paint with minor areas of light corrosion.	New	J27-10
River	70	242	R	Interior	Bay 1	The transverse strut has minor areas of surface corrosion.	New	
River	70	242	R	Interior	Bay 1	The splice connections hardware exhibits light surface corrosion.	New	
River	70	242	R	Interior	Bay 4	The splice connections hardware exhibits light surface corrosion.	New	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	70	242	R	Interior	Bay 4	Light surface corrosion on the SIP forms.	New	
River	70	242	R	Interior	Throughout	Dead birds, nesting materials and droppings are present on the bottom flange in bays 8 thru 13. Droppings are also present on the cross bracing members.	New	
River	71	242	L	Interior	Bay 4	Light surface corrosion in the steel SIP forms.	no change	
River	71	242	L	Interior	Bay 6	There is a 1/8" gap in the top left bolt of the rear bracing.	no change	R27-8
River	71	242	L	Interior	Bay 11	Dead birds, nesting materials and droppings up to 1" deep are present in Bays 11-13.	no change	
River	71	242	L	Interior	Bay 13	Light surface corrosion in the steel SIP forms.	no change	
River	71	242	L	Interior	Bay 13	Light surface corrosion on the underside and forward edge of the top flange, between Spans 242 and 243.	New	R27-10
River	70	243	R	Exterior	Bay 9	Splice plates and bolts exhibit light to moderate surface corrosion.	no change	
River	71	243	L	Exterior	Bay 9	Splice plates and bolts exhibit light to moderate surface corrosion.	new	
River	70	243	R	Exterior	Pier 243	There is moderate surface corrosion on the underside of the top left flange.	new	S27-1
River	70	243	R	Interior	Bay 1	Light area of surface corrosion on the left vertical stiffener adjacent to the man hole.	New	
River	70	243	R	Interior	Throughout	Nesting materials and droppings are present on the bottom flange throughout. Droppings are also present on the cross bracing members.	New	
River	70	243	R	Interior	Throughout	Minor concrete spillage along the bottom flange mainly along the web wall from deck construction.	New	
River	71	243	L	Interior	Bay 1	Light surface corrosion on the underside of the top flange at the bearing stiffeners	New	
River	71	243	L	Interior	Bay 1	Dead birds, nesting materials and droppings up to 1" deep are present in Bays 1-3.	New	R27-11
River	71	243	L	Interior	Bay 8	There is a 1/16" gap in the top right bolt of the rear bracing.	New	
River	71	243	L	Interior	Bay 8	Nesting material is present on top of the forward horizontal brace.	New	R27-12
River	71	243	L	Interior	Bay 9	Light surface corrosion on splice bolts.	New	
River	71	244	L	Exterior	Bay 4	Splice plates and bolts exhibit light surface corrosion.	no change	
River	71	244	L	Exterior	Bay 4	An area of light surface corrosion 6" x 2" on the underside of the bottom flange	new	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	70	244	R	Exterior	Bay 4	Splice plates and bolts exhibit light surface corrosion.	no change	
River	70	244	R	Interior	Bay 4	Minor corrosion with efflorescence stains on SIP form, right side at top flange splice connection	no change	
River	70	244	R	Interior	Bay 4	The splice connections hardware exhibits light surface corrosion.	New	
River	70	244	R	Interior	Throughout	Minor concrete spillage along the bottom flange mainly along the web wall from deck construction.	New	
River	71	244	L	Interior	Throughout	Concrete pour and saw dust is present on the bottom flange, throughout.	no change	
River	71	244	L	Interior	Bay 2	Isolated area of peeling paint 2" x 2" at the top of the right web, 2' from Bay 1.	New	R27-13
River	71	244	L	Interior	Bay 4	The bottom flange exhibits a bolt with peeling paint at the splice plate.	no change	R27-14
River	71	244	L	Interior	Bay 4	Light surface corrosion on the forward lateral brace connection plate.	New	
River	71	244	L	Interior	Bay 9	The rear cross bracing has a bolt on the right side with a 1/16" gap.	no change	
River	70	245	R	Exterior	Bay 3	Light to moderate surface corrosion on splice plate bolts	no change	
River	71	245	L	Exterior	Bay 3	Light to moderate surface corrosion on splice plate bolts	no change	
River	70	245	R	Interior	Throughout	Dead birds, nesting materials and droppings up to 1" deep are present on the bottom flange throughout. This debris is covering bottom welds, preventing proper inspection. Droppings are also present on the cross bracing members.	no change	
River	70	245	R	Interior	Bay 1	The left and right bottom web welds at the diaphragm have light to moderate surface corrosion over a 1' long area.	New	J27-11
River	70	245	R	Interior	Bay 3	The splice connections hardware exhibits light surface corrosion.	New	
River	70	245	R	Interior	Bay 4	The transverse strut has minor areas of surface corrosion.	New	
River	70	245	R	Interior	Bay 6	The transverse strut has minor areas of surface corrosion.	New	
River	70	245	R	Interior	Bay 7	The rear transverse strut attachment hardware has light to moderate surface corrosion. The strut has minor corrosion as well.	New	
River	71	245	L	Interior	Throughout	Dead birds, nesting materials and droppings up to 1" deep are present on the bottom flange throughout. This debris is covering bottom welds, preventing proper inspection. Droppings are also present on the cross bracing members.	no change	
River	71	245	L	Interior	Bay 3	Light surface corrosion on splice bolts.	New	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	71	245	L	Interior	Bay 8	Bird feces is causing moderate surface corrosion on the bottom of the right web	no change	R27-15
River	70	246	R	Exterior	Pier 246	There is light surface corrosion on the underside of the top left flange.	new	
River	70	246	R	Exterior	Bay 8	Light surface corrosion on splice plate bolts	no change	
River	69	246	L	Exterior	Bay 8	Light surface corrosion on splice plate bolts	no change	
River	70	246	R	Interior	Throughout	Concrete over pour is present on the bottom flange, throughout.	No change	
River	70	246	R	Interior	Throughout	Dead birds, nesting materials and droppings up to 1" deep are present on the bottom flange throughout. This debris is covering bottom welds, preventing proper inspection. Droppings are also present on the cross bracing members.	No change	
River	70	246	R	Interior	Bay 7	The forward lateral cross brace is bent 1/4" over 7"	New	J26-12
River	70	246	R	Interior	Bay 8	There are two unpainted nuts at the splice plate in the bottom face.	No change	J26-13
River	69	246	L	Interior	Throughout	Dead birds, nesting materials and droppings up to 1" deep are present on the bottom flange throughout. This debris is covering bottom welds, preventing proper inspection. Droppings are also present on the cross bracing members.	no change	
River	71	246	L	Interior	Bay 2	Surface corrosion along the bottom left and right web, full bay due to bird debris buildup and possibly previous water staining.	no change	R26-7
River	69	246	L	Interior	Bay 5	Horizontal brace above forward cross bracing in bent upward 1/4" over 4" near the left end.	New	R26-8
River	69	246	L	Interior	Bay 8	Light surface corrosion on splice plate bolts.	no change	R26-9
River	69	246	L	Interior	Bay 9	Surface corrosion along the bottom left and right web, full bay due to bird debris buildup and possibly previous water staining.	no change	
River	69	246	L	Interior	Bay 9	Horizontal brace above rear cross bracing in bent upward 1/8" over 4" near the midpoint.	New	
River	69	246	L	Interior	Bay 10	Surface corrosion along the bottom left and right web, full bay due to bird debris buildup and possibly previous water staining.	no change	
River	69	246	L	Interior	Bay 11	Surface corrosion along the bottom left and right web, full bay due to bird debris buildup and possibly previous water staining.	no change	
River	69	246	L	Interior	Bay 12	Surface corrosion along the bottom left and right web, full bay due to bird debris buildup and possibly previous water staining.	no change	
River	69	246	L	Interior	Bay 12	There is concrete overpour at the portal to Span 247L.	no change	R26-10
River	70	247	R	Exterior	Bay 5	Light surface corrosion on splice plate bolts	new	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	69	247	L	Exterior	Bay 5	Light surface corrosion on splice plate bolts	new	
River	70	247	R	Interior	Bay 1	Bay 1 and 2: Up to 1" deep debris accumulation and evidence of water accumulating up to bottom of the portal and sides of the web walls to approximately 10".	No change	J26-21
River	70	247	R	Interior	Bay 5	Light corrosion on nuts and washers of bottom flange splice.	No change	
River	70	247	R	Interior	Bay 5	Bay 5 thru Bay 11: Dead birds, nesting materials and droppings up to 1" deep are present on the bottom flange throughout. This debris is covering bottom welds, preventing proper inspection. Droppings are also present on the cross bracing members.	No change	J26-15-20
River	69	247	L	Interior	Bay 12	Light surface corrosion on the left face of both left bearing stiffeners.	New	R26-13
River	69	247	L	Interior	Throughout	Dead birds, nesting materials and droppings up to 2" deep are present on the bottom flange throughout. This debris is covering bottom welds, preventing proper inspection. Droppings are also present on the cross bracing members.	no change	R26-12
River	69	247	L	Interior	Throughout	It appears as if water was flowing through at some point in history because there are flow lines through the organic debris. There is no standing water now.	no change	R26-11
River	66	R6	R	Exterior	Bay 8	Light to moderate surface corrosion on splice plate bolts	no change	
River	67	R6	L	Exterior	Bay 8	Light to moderate surface corrosion on splice plate bolts	no change	
River	66	R6	R	Interior	Bay 3	Bay 1 - Bay 10: Up to 2" of bird droppings covering mostly full width of bays.	Increase	J29-3-6
River	67	R6	L	Interior	throughout	There is a significant amount of bird droppings (up to 2") and carcasses throughout this Span. Lower welds cannot be inspected. Debris is causing corrosion on the bottoms of the webs and on the splice plates.	no change	R29-4, 5
River	67	R6	L	Interior	Bay 1	Heavy surface corrosion on access hatch cover	no change	R29-2
River	67	R6	L	Interior	Bay 1	Light surface corrosion on the underside of the left side of the top flange at the bearing stiffeners.	New	R29-3
River	66	248	R	Exterior	Bay 4	Light to moderate surface corrosion on splice plates and bolts	no change	
River	67	248	L	Exterior	Bay 4	Light to moderate surface corrosion on splice plates and bolts	no change	
River	66	248	R	Interior	Bay 4	The splice connection hardware has light surface corrosion.	New	J29-7
River	66	248	R	Interior	Bay 4	The lateral cross bracing and gusset plates have light surface corrosion.	New	J29-8



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	66	248	R	Interior	Bay 9	3/16" gap in between top left bolt and top angle right side of rear cross frame	no change	J29-9
River	67	248	L	Interior	Bay 1	Minor concrete overpour on the bottom flange	no change	R29-6
River	67	248	L	Interior	Bay 2	One bolt has a 1/16" gap between the nut and washer at the connection of the forward cross bracing and the right vertical stiffener.	New	R29-7
River	67	248	L	Interior	Bay 4	Light surface corrosion on the lateral bracing gusset plates.	no change	R29-8
River	66	249	R	Exterior	Bay 3	Light to moderate surface corrosion on splice plate bolts	no change	
River	67	249	L	Exterior	Bay 3	Light to moderate surface corrosion on splice plate bolts	no change	
River	66	249	R	Both	Bay 3	One (of 88) bottom flange splice bolts is missing	no change	S29-1
River	66	249	R	Interior	Bay 2	The cross bracing top left side exhibits a 1/16" gap between the bolt head and forward bracing	no change	
River	66	249	R	Interior	Bay 3	The splice connection hardware has light surface corrosion.	New	
River	66	249	R	Interior	Bay 3	One splice connection bolt is missing along the bottom flange.	New	J29-10
River	66	249	R	Interior	Bay 3	The lateral cross bracing and gusset plates have light surface corrosion.	New	J29-8
River	66	249	R	Interior	Bay 7	Bay 7 - Bay 10: Up to 1/2" of bird droppings covering the bottom flange.	New	
River	66	249	R	Interior	Bay 10	The lateral cross bracing and gusset plates have light surface corrosion.	New	
River	67	249	L	Interior	Bay 1	Concrete pour is present up to 1" high.	no change	
River	67	249	L	Interior	Bay 3	Light surface corrosion on the rear lateral bracing gusset plate.	New	
River	67	250	L	Exterior	Bay 9	Moderate surface corrosion on splice pates and bolts.	increase	
River	66	250	R	Exterior	Bay 9	Moderate surface corrosion on splice pates and bolts.	increase	
River	66	250	R	Interior	Bay 1	Bay 1 - Bay 9: Up to 1/2" of bird droppings along the bottom flange primarily adjacent to the cross bracing connections	New	
River	66	250	R	Interior	Bay 5	Left over construction material (boards) are present	no change	J29-11
River	67	250	L	Interior	Bay 1	Light amount of bird droppings and carcasses on the bottom flange in Spans 1 through 8. Droppings are also present on the cross bracing.	New	
River	67	251	L	Exterior	Bay 5	Moderate surface corrosion on splice pates and bolts.	increase	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	66	251	R	Exterior	Bay 5	Moderate surface corrosion on splice pates and bolts.	increase	
River	66	251	R	Exterior	Bay 11	Moderate surface corrosion on splice pates and bolts.	increase	S29-4
River	67	251	L	Exterior	Bay 11	Moderate surface corrosion on splice pates and bolts.	increase	
River	66	251	R	Interior	Throughout	Concrete over pour up to 1" in isolated locations adjacent to the web walls.	New	
River	66	251	R	Interior	Bay 2	Rear cross bracing in the right top exhibits a 1/8" gap between the bolt head and diaphragm angle.	No change	
River	66	251	R	Interior	Bay 4	Forward cross bracing in the right top exhibits a bolt with a 1/8" gap between the bolt head and the diaphragm top angle.	no change	
River	66	251	R	Interior	Bay 5	Minor corrosion on several splice bolt nuts.	no change	J29-12
River	66	251	R	Interior	Bay 5	Minor corrosion with efflorescence on bottom of SIP form	no change	
River	66	251	R	Interior	Bay 11	Minor corrosion with efflorescence on bottom of SIP form	no change	
River	66	251	R	Interior	Bay 11	Minor corrosion on several splice bolt nuts.	New	
River	66	251	R	Interior	Bay 15	The vertical stiffeners at the end diaphragm have light surface corrosion adjacent to the bottom flange.	New	J29-13
River	67	251	L	Interior	Bay 6	One bolt hos a 1/16" gap between the nut and washer at the connection of the forward cross bracing and the left vertical stiffener.	no change	
River	67	251	L	Interior	Bay 10	Forward cross bracing between is bent down 1/4" on the left side.	no change	R29-11
River	67	251	L	Interior	Bay 12	The rear horizontal brace is bent upward 1/4" over 8" near the right end.	New	R29-12
River	67	251	L	Interior	Bay 12	One missing washer at the forward cross bracing, top right.	New	R29-13
River	67	251	L	Interior	Bay 12	Bay 12 - Bay 15: Concrete over pour is present at isolated locations	no change	
River	67	252	L	Exterior	Bay 4	Light to moderate surface corrosion on splice plates and bolts.	no change	
River	66	252	R	Exterior	Bay 4	Light to moderate surface corrosion on splice plates and bolts.	no change	
River	67	252	L	Exterior	6'-20' from Pier 253	There are numerous insignificant scrapes on the underside of the bottom flange	no change	
River	66	252	R	Exterior	30' from Pier 253	Gouge with moderate surface corrosion for 1' along the right bottom flange	no change	
River	66	252	R	Interior	Bay 4	Minor corrosion on several splice bolt nuts.	New	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	66	252	R	Interior	Throughout	Concrete over pour up to 1" in isolated locations adjacent to the web walls.	New	
River	67	252	L	Interior	Throughout	Concrete over pour is present throughout	no change	
River	67	252	L	Interior	Bay 2	The forward left vertical stiffener is bent forward 1/4"	no change	
River	67	252	L	Interior	Bay 3	The rear cross brace is bent downward 1/4" at the right end.	New	
River	67	252	L	Interior	Bay 8	One bolt hos a 1/8" gap between the nut and washer at the connection of the forward cross bracing and the right vertical stiffener.	New	
River	65	254	L	Exterior	Bay 8	Light surface corrosion on splice bolt heads	new	
River	64	254	R	Exterior	Bay 8	Light surface corrosion on splice bolt heads	new	
River	64	254	R	Exterior	Pier 254	Bottom flange exhibits four scratches near Pier 254	no change	
River	64	254	R	Interior	Bay 1	Diaphragm access hatch bracket welds have light to moderate corrosion.	New	J24-1
River	64	254	R	Interior	Bay 1	Top left lateral bracing nuts and bolts exhibit minor corrosion.	New	
River	64	254	R	Interior	Bay 2	Left side lateral bracing nuts and bolts exhibit minor corrosion.	New	J24-2
River	64	254	R	Interior	Bay 4	Left and right side lateral bracing nuts and bolts exhibit minor corrosion.	New	
River	64	254	R	Interior	Bay 5	Left side lateral bracing nuts and bolts exhibit minor corrosion.	New	
River	64	254	R	Interior	Bay 8	Lateral bracing gusset plates and welds exhibit minor corrosion.	no change	J24-5
River	64	254	R	Interior	Bay 8	Top flange, right splice plate has one bolt unpainted and with surface corrosion.	no change	J24-3
River	64	254	R	Interior	Bay 8	SIP forms have light surface corrosion and efflorescence.	no change	J24-4
River	64	254	R	Interior	Bay 11	There is concrete overpour up to 2.5" H adjacent to the portal at Pier 255.	no change	J24-6
River	65	254	L	Interior	Bay 1	One missing washer at the rear cross bracing, bottom right.	no change	
River	65	254	L	Interior	Bay 8	There is concrete covering the bottom splice plate bolts.	no change	R29-16
River	65	254	L	Interior	Bay 8	Right top flange splice has two unpainted bolts, right web splice has one bolt that is torched at the end.	no change	R29-14, 15
River	65	254	L	Interior	Bay 11	There is concrete overpour on the bottom flange up to 1" at the portal for Pier 255L.	no change	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	65	255	L	Exterior	Bay 4	Light to moderate surface corrosion on splice bolt heads	increase	
River	65	255	L	Exterior	Bay 9	Light to moderate surface corrosion on splice bolt heads	increase	
River	64	255	R	Exterior	Bay 9	Light to moderate surface corrosion on splice bolt heads	increase	
River	64	255	R	Exterior	Bay 4	Light to moderate surface corrosion on splice bolt heads	increase	
River	65	255	L	Exterior	throughout	Thin top coat. Can see primer coat through.	new	
River	64	255	R	Exterior	throughout	Thin top coat. Can see primer coat through.	new	
River	64	255	R	Interior	Bay 1	Left side lateral bracing nuts and bolts exhibit minor corrosion.	New	
River	64	255	R	Interior	Bay 1	Light surface corrosion and efflorescence on SIP forms.	New	
River	64	255	R	Interior	Bay 2	Left and right side lateral bracing nuts and bolts exhibit minor corrosion.	New	
River	64	255	R	Interior	Bay 4	Light surface corrosion and efflorescence on SIP forms.	no change	
River	64	255	R	Interior	Bay 7	Left side lateral bracing nuts and bolts exhibit minor corrosion.	New	
River	64	255	R	Interior	Bay 9	Wasps are present in this bay	no change	J24-9
River	64	255	R	Interior	Bay 9	Light surface corrosion on splice bolts.	no change	J24-8
River	64	255	R	Interior	Bay 10	26) Span 255R (Bay 10) - Minor corrosion is present on lateral cross bracing bolts at rear end. NO CHANGE	no change	
River	64	255	R	Interior	Bay 11	Left side lateral bracing nuts and bolts exhibit minor corrosion.	New	
River	64	255	R	Interior	Bay 11	Light surface corrosion and efflorescence on SIP forms.	New	
River	64	255	R	Interior	Bay 12	Light surface corrosion and efflorescence on SIP forms.	New	
River	64	255	R	Interior	Bay 12	SIP form at hatch is deflected downward up to 4" due to drain pipe	New	J24-10
River	65	255	L	Interior	Bay 1	Laminating corrosion on the bottom cut-out of the vertical stiffeners at Pier 255.	New	R29-17
River	65	255	L	Interior	Bay 4	Very light surface corrosion on splice bolts and lateral bracing gusset plates.	no change	
River	65	255	L	Interior	Bay 5	One pinhole flaw is present in the weld on the top corner of the right web.	no change	R29-18



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	65	255	L	Interior	Bay 8	The forward cross bracing is bent upward 1/8" at the midpoint.	New	
River	65	255	L	Interior	Bay 9	Lateral bracing gusset plates exhibit light corrosion.	no change	
River	65	255	L	Interior	Bay 9	Light surface corrosion on splice bolts.	no change	
River	65	255	L	Interior	Bay 10	One pinhole flaw is present in the weld on the top corner of the left web.	no change	
River	64	256	R	Exterior	Bay 3	Light to moderate surface corrosion on splice bolts	increase	
River	65	256	L	Exterior	throughout	Thin top coat. Can see primer coat through.	new	
River	64	256	R	Exterior	throughout	Thin top coat. Can see primer coat through.	new	
River	64	256	R	Interior	Bay 2	1 of 3 top right horizontal lateral bracing bolts is not full seated resulting in a 1/8" gap	New	J24-11
River	64	256	R	Interior	Bay 3	Minor corrosion is present on the lateral bracing bolts and support at the rear and forward ends.	Increase	
River	64	256	R	Interior	Bay 3	Light surface corrosion and efflorescence on SIP forms.	New	
River	64	256	R	Interior	Bay 4	One pinhole flaw is present in the weld on the top corner of the right web.	no change	
River	64	256	R	Interior	Bay 4	Minor corrosion is present on the lateral bracing bolts and support at the rear and forward ends.	New	
River	64	256	R	Interior	Bay 5	Minor corrosion is present on the lateral bracing bolts and support at the rear and forward ends.	New	
River	64	256	R	Interior	Bay 5	One pinhole flaw is present in the weld on the top corner of the right web.	No change	
River	64	256	R	Interior	Bay 5	Light surface corrosion and efflorescence on SIP forms.	New	
River	62	256	R	Interior	Bay 7	One pinhole flaw is present in the weld on the top corner of the right web.	no change	
River	62	256	R	Interior	Bay 7	Minor corrosion is present on the lateral bracing bolts and support at the rear and forward ends.	New	
River	62	256	R	Interior	Bay 9	One pinhole flaw is present in the weld on the top corner of the right web.	no change	J24-12
River	62	256	R	Interior	Bay 9	Minor corrosion is present on the lateral bracing bolts and support at the rear and forward ends.	New	
River	65	256	L	Interior	Bay 2	One pinhole flaw is present in the weld on the top corner of the right web.	no change	
River	65	256	L	Interior	Bay 3	One bolt hos a 1/8" gap between the nut and washer at the connection of the rear cross bracing and the left vertical stiffener.	New	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	65	256	L	Interior	Bay 3	Light surface corrosion is present on the SIP forms, near the right web.	no change	R29-19
River	65	256	L	Interior	Bay 4	One pinhole flaw is present in the weld on the top corner of the left web.	no change	
River	65	256	L	Interior	Bay 5	One pinhole flaw is present in the weld on the top corner of both the left web and right web.	no change	
River	65	256	L	Interior	Bay 6	Light surface corrosion on splice bolts.	no change	
River	65	256	L	Interior	Bay 6	Forward cross frame exhibit 19 unpainted bolts.	no change	R29-20
River	65	256	L	Interior	Bay 6	Forward cross brace and horizontal brace are unpainted; primer only	New	R29-21
River	65	256	L	Interior	Bay 7	Rear cross brace and horizontal brace are unpainted; primer only	New	
River	65	256	L	Interior	Bay 7	Light surface corrosion on splice bolts.	no change	
River	65	256	L	Interior	Bay 7	Moderate corrosion is exhibited on the lateral bracing connection plates.	no change	R29-25
River	65	256	L	Interior	Bay 8	Because of an almost full height diaphragm between Bays 7 & 8 there is no physical access to the last few feet of the span except to take photo below the diaphragm.	no change	R29-22, 23, 24
River	65	257	L	Exterior	Bay 1	Light surface corrosion on splice bolts	no change	
River	62	257	R	Exterior	Pier 258R	There is light surface corrosion on the underside of the top left flange.	new	
River	62	257	R	Exterior	Throughout	There is light surface corrosion along the left edge of the bottom flange.	new	
River	65	257	L	Both	Bay 1	There is a vertical offset of up to 1/4" between the bottom flanges between Spans 409L and 257L over Pier 257L at the splice location (no bottom plate splice).	no change	S24-3
River	65	257	L	Exterior	Pier 257L	1 SF of light surface corrosion on the bottom face of the bottom flange	new	
River	63	257	L	Exterior	Pier 258L	1 SF of light surface corrosion on the bottom face of the bottom flange	no change	
River	62	257	R	Both	Bay 1	There is a vertical offset of up to 3/8" between the bottom flanges between Spans 256R and 257R over Pier 257R at the splice location (no bottom plate splice).	no change	J24-13
River	62	257	R	Exterior	Bay 1	Light surface corrosion on splice bolts	no change	
River	62	257	R	Interior	Bay 1	Light surface corrosion on splice bolts.	no change	



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
River	63	257	L	Interior	Throughout	Minor concrete spillage along the bottom flange mainly along the web wall from deck construction.	no change	
River	65	257	L	Interior	Bay 1	Minor corrosion on bottom row of web splice plate bolt nuts both webs.	no change	R24-20
O&M	104	405	R	Exterior	Throughout	Finish coat of paint is very thin along this span.	no change	J18-12
O&M	104	405	R	Exterior	Bay 7	Light to moderate surface corrosion on splice plate bolt heads.	no change	J18-10-11
O&M	104	405	R	Interior	Bay 1	The underside of the right top flange exhibits light corrosion above Pier 405.	New	R18-2
O&M	104	405	R	Interior	Bay 4	Minor rust staining on the left rear stiffener plate at the top horizontal.	New	R18-4
O&M	104	405	R	Interior	Bay 6	Minor deformation in the forward cross bracing at the left stiffener, 1/8" over 5".	New	R18-5
O&M	104	405	R	Interior	Bay 7	The fasteners for the top splice plates are missing washers.	New	R18-7
O&M	104	405	R	Interior	Bay 7	Splice plate bolts exhibit light surface corrosion.	New	R18-6
O&M	104	405	R	Interior	Bay 9	The rear cross bracing exhibits minor surface corrosion up to 5" L x 2" W on the right bottom face.	No change	R18-9
O&M	104	405	R	Interior	Bay 9	The bottom flange has 2 small areas up to 6" x 3" of missing paint.	New	R18-8
O&M	104	405	R	Interior	Bay 10	Light corrosion with efflorescence on SIP form at the portal bracing	No change	R18-10
O&M	102	406	R	Both	Throughout	Finish top coat is thin throughout this span	no change	
O&M	102	406	R	Exterior	Bay 11	Splice plate bolts exhibit moderate surface corrosion.	no change	
O&M	102	406	R	Exterior	Bay 4	Splice plate bolts exhibit moderate surface corrosion.	no change	J24-16,17
O&M	102	406	R	Both	Throughout	Finish top coat is thin throughout this span	No change	
O&M	104	406	R	Interior	Bay 1	The top flange at the left side adjacent to the gusset plate exhibits area of surface corrosion 4" x 1".	No change	R18-11
O&M	104	406	R	Interior	Bay 3	The rear cross bracing exhibits minor surface corrosion up to 6" L x 2" L in the bottom face	No change	
O&M	102	406	R	Interior	Bay 4	Splice plate bolts exhibit light surface corrosion.	No change	
O&M	102	406	R	Interior	Bay 11	Splice plate bolts exhibit light surface corrosion.	No change	
O&M	102	406	R	Interior	Bay 11	One bolt is unpainted and exhibits light corrosion at the bottom flange right side splice.	No change	R18-12



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
0&M	102	406	R	Interior	Bay 11	The forward cross bracing exhibits two areas minor surface corrosion up to $8'' L \times 1'' L$ in the bottom face	New	
O&M	102	406	R	Interior	Bay 12	The rear cross bracing exhibits minor surface corrosion up to $4'' L \times 1'' L$ in the bottom face	New	
O&M	102	406	R	Interior	Bay 13	The forward cross bracing exhibits minor surface corrosion up to 10" L x 1" L in the bottom face	New	
0&M	102	406	R	Interior	Bay 14	The rear cross bracing exhibits minor surface corrosion up to 6" L x 2" L in the bottom face	New	
0&M	102	407	R	Exterior	Bay 4	Splice plate bolts exhibit moderate surface corrosion.	new	S29-17
O&M	102	407	R	Interior	Throughout	There is a thin paint top coat throughout.	No change	R18-17, 18
O&M	102	407	R	Interior	Bay 1	Nesting material and carcass on the bottom flange at the left side adjacent to the Pier 407 bulkhead.	New	R18-13
O&M	102	407	R	Interior	Bay 4	Splice plate bolts exhibit light surface corrosion.	New	
O&M	102	407	R	Interior	Bay 5	The rear horizontal bracing exhibits minor surface corrosion up to $6'' L \times 1'' L$ in the bottom face	New	
0&M	100	407	R	Interior	Bay 8	Bird droppings up to 1" deep are present on the bottom flange throughout Bays 8, 9 and 10. This debris is covering bottom welds, preventing proper inspection. Droppings are also present on the cross bracing members.	No change	R18-14, 15
0&M	100	408	R	Exterior	Bay 6	Light to moderate surface corrosion on splice bolt heads	increase	
O&M	103	408	L	Exterior	throughout	Thin top coat. Can see primer coat through.	new	
O&M	101	408	L	Exterior	Bay 9	Light surface corrosion on splice bolt heads	no change	
O&M	100	408	R	Interior	Bay 1	Bay 1 - Bay 3 and Bay 6: Dead birds, nesting materials and droppings up to 1" deep are present on the bottom flange throughout. This debris is covering bottom welds, preventing proper inspection. Droppings are also present on the cross bracing members.	no change	
0&M	100	408	R	Interior	Bay 6	The splice connection hardware has light surface corrosion.	New	
O&M	100	408	R	Interior	Bay 7	Rear cross bracing, top right side exhibits a bolt gap 1/16".	no change	
0&M	103	408	L	Interior	throughout	Minor corrosion with efflorescence on SIP forms along the girder webs	no change	R24-5
0&M	103	408	L	Interior	throughout	Light surface corrosion on random bracing bolts.	New	R24-4
0&M	103	408	L	Interior	Bay 1	Light to moderate corrosion on the bearing stiffeners.	New	R24-2



Line	Block	Span	Side	Exterior / Interior	Location	2019 Inspection Notes	2017 Note Disposition	2019 Photo
O&M	103	408	L	Interior	Bay 1	Light to moderate corrosion on the underside of the top flange at the bearing stiffeners.	New	R24-1
O&M	101	408	L	Interior	Bay 8	Minor corrosion stain on the left vertical stiffener at the end of bay.	no change	R24-7
O&M	101	408	L	Interior	Bay 10	The right vertical stiffener on the rear cross bracing is bent 1/4" x 4" L. near the bottom.	no change	R24-8
0&M	101	408	L	Interior	Bay 13	Corrosion on the underside of the top flange near the drain pipe. An active water leak was observed during the 2019 inspection.	increase	R24-9
0&M	100	409	R	Exterior	Junction	Surface corrosion on the underside of the top left flange due to water from a drilled hole in the deck	new	S24-11-12
0&M	65	409	L	Exterior	throughout	Thin top coat. Can see primer coat through.	no change	
0&M	101	409	L	Exterior	Bay 5	Light surface corrosion on splice bolt heads	no change	
O&M	100	409	R	Exterior	Bay 5	The left top flange exhibits moderate surface corrosion for 2' adjacent to deck spalls.	no change	
0&M	100	409	R	Interior	Bay 5	The splice in Bay 5 and Bay 6 exhibits minor surface corrosion and concrete over pour.	no change	
0&M	100	409	R	Interior	Bay 5	The forward cross bracing has 19 unpainted bolts.	no change	J29-15
O&M	100	409	R	Interior	Bay 6 cross bracing	Washer missing on top center bolt on each side of bay 6 side of cross bracing.	no change	J29-16
O&M	100	409	R	Interior	Bay 8	Because of an almost full height diaphragm between Bays 7 & 8 there is no physical access to the last few feet of Span 409 except to take photo below the diaphragm.	no change	J29-17-20
O&M	65	409	L	Interior	throughout	Concrete from deck construction located along sides of top of bottom flange at random locations.	no change	R24-11
O&M	101	409	L	Interior	Bay 1	The forward cross race is bent downward 1/4" over 4" at the left end.	New	R24-10
O&M	101	409	L	Interior	Bay 4	Discontinuous weld on top of right web adjacent to field splice. Weld appears to be satisfactory. Light surface corrosion on weld.	no change	R24-12, 13
0&M	65	409	L	Interior	Bay 5	SIP deck form exhibits corrosion due to possible water leak on both sides.	no change	R24-14
0&M	65	409	L	Interior	Bay 5	The splice plate exhibits light surface corrosion.	no change	R24-15
0&M	65	409	L	Interior	Bay 5	Left web splice has a bolt that has not been painted and exhibits corrosion.	no change	R25-16
0&M	65	409	L	Interior	Bay 6	Rear cross bracing bottom is bent ¼" over 7".	no change	R24-17
O&M	65	409	L	Interior	Bay 10	Bolted connection plate for Span 256L on the right web exhibits a gap up to 1/8" between the plate and the bolt heads.	no change	R24-18, 19



Line	Block	Span	L/R N/S	Interior / Exterior	2019 Photo	Light-Mod Corrosion (LF)	Light-Mod Corrosion (SF)	Section Loss (LF)	Section Loss (SF)	Minor Chalky (%)	Very Chalky (%)	Peel /Bub /Crack - Top Coat (SF)	Peel /Bub /Crack - Metal Exposed (SF)
Starter	14	6	S	Exterior		1	10				100		
Starter	15	6	N	Exterior		30	40				100		
Starter	14	6	S	Interior		2	4			100		45	
Starter	15	6	N	Interior		1	6			100		228	
Starter	14	7	S	Exterior		85	90	3	3		100		
Starter	15	7	N	Exterior		24	28	3	3		100		
Starter	14	7	S	Interior		3	6			100		35	
Starter	15	7	N	Interior		1	6			100		70	
Starter	14	8	S	Exterior		20	20	3	3		100		
Starter	15	8	N	Exterior	S17-5-7	25	30	1	1		100	6	
Starter	14	8	S	Interior	J17-1	1	3			100			
Starter	15	8	N	Interior	R17-11	10	10			100		2	
Starter	15	9	Pier Crosshead	Exterior							100		
Starter	14	9	S	Exterior		36	42				100		
Starter	15	9	N	Exterior		36	76				100		
Starter	15	9	Pier Crosshead	Interior	J17-3	8	8					50	
Starter	14	9	S	Interior	J17-9	1	2			100		130	
Starter	15	9	N	Interior						100		800	
Starter	15	10	Pier Cross Girder	Exterior		18	20	5	5		100		
Starter	16	10	S	Exterior	S16-3,5-7	80	98				100	50	
Starter	15	10	N	Exterior	S16-11	5	18				100		
Starter	15	10	Pier cross girder	Interior		53	53	16	16			700	
Starter	16	10	S	Interior	J16-1-2	1	1			100		200	
Starter	15	10	N	Interior	R16-1							800	
Starter	15	11	Pier Crosshead	Exterior	S16-12	4	5				100		
Starter	16	11	S	Exterior	S16-15	22	52				100	200	
Starter	15	11	N	Exterior	S16-13,14	22	52				100	50	



Line	Block	Span	L/R N/S	Interior / Exterior	2019 Photo	Light-Mod Corrosion (LF)	Light-Mod Corrosion (SF)	Section Loss (LF)	Section Loss (SF)	Minor Chalky (%)	Very Chalky (%)	Peel /Bub /Crack - Top Coat (SF)	Peel /Bub /Crack - Metal Exposed (SF)
Starter	15	11	Pier Crosshead	Interior	J16-11					100		50	
Starter	16	11	S	Interior	J16-13	1	3			100		300	
Starter	15	11	N	Interior		1				100		260	
Starter	24	29	S	Exterior		22	22				100	25	
Starter	27	29	N	Exterior		17	17				100	15	
Starter	24	29	S	Interior		4	6					17	
Starter	27	29	N	Interior	R16-19, 21	4	4			100		40	
Starter	27	30	Pier Crosshead	Exterior									
Starter	26	30	S	Exterior		2	12				100	50	
Starter	27	30	N	Exterior		48	66				100	25	
Starter	27	30	Pier Crosshead	Interior								25	
Starter	26	30	S	Interior								28	
Starter	27	30	N	Interior						100		26	
Starter	27	31	Pier Crosshead	Exterior									
Starter	28	31	S. Turn.	Exterior		1	2				100	15	
Starter	26	31	S	Exterior		3	8				100	300	
Starter	61	31	N. Turn.	Exterior		4	12				100	25	
Starter	27	31	N	Exterior		3	8				100	300	
Starter	27	31	Pier Crosshead	Interior		5	5					10	
Starter	28	31	S. Turn.	Interior	J16-14	1	1			100		40	
Starter	26	31	S	Interior		11	11					350	
Starter	61	31	N. Turn.	Interior	R16-16							240	
Starter	27	31	N	Interior	R16-29, 30	1	6			100		54	
North	36	52	R	Exterior		9	28				100		
North	41	52	L	Exterior		9	18				100		
North	36	52	R	Interior		14	53			100		1	
North	41	52	L	Interior		15	45	1	2	100			



Line	Block	Span	L/R N/S	Interior / Exterior	2019 Photo	Light-Mod Corrosion (LF)	Light-Mod Corrosion (SF)	Section Loss (LF)	Section Loss (SF)	Minor Chalky (%)	Very Chalky (%)	Peel /Bub /Crack - Top Coat (SF)	Peel /Bub /Crack - Metal Exposed (SF)
North	41	52A	L	Exterior		4	20				100		
North	40	52A	R	Exterior	S17-27,28	2	6				100		
North	40	52A	R	Interior		14	34			100			
North	41	52A	L	Interior	R17-25, 26, 27	19	30	2	2	100			
North	40	53	R	Exterior		2	6				100		
North	41	53	L	Exterior		2	8				100		
North	40	53	R	Interior	J17-26	16	31			100			
North	41	53	L	Interior		12	32			100			
South	93	205	L	Exterior		2	6				100		
South	90	205	R	Exterior		2	9				100		
South	90	205	R	Interior		2	8			100			
South	93	205	L	Interior		2	10			100			
South	91	206	L	Exterior		2	12				100		
South	90	206	R	Exterior		4	14				100		
South	90	206	R	Interior		2	8			100			
South	90	206	R	Interior	J15-12-13							300	
South	91	206	L	Interior		2	8			100			
South	85	213	L	Exterior		2	6				100		
South	84	213	R	Exterior		2	6				100		
South	84	213	R	Interior		4	4			100			
South	85	213	L	Interior		26	90			100		1	
South	85	214	L	Exterior		2	6				100		
South	84	214	R	Exterior		2	4				100		
South	84	214	R	Interior		1	4			100			
South	85	214	L	Interior		30	70			100			
South	85	215	L	Exterior		2	6				100		



Line	Block	Span	L/R N/S	Interior / Exterior	2019 Photo	Light-Mod Corrosion (LF)	Light-Mod Corrosion (SF)	Section Loss (LF)	Section Loss (SF)	Minor Chalky (%)	Very Chalky (%)	Peel /Bub /Crack - Top Coat (SF)	Peel /Bub /Crack - Metal Exposed (SF)
South	84	215	R	Exterior		2	6				100		
South	84	215	R	Interior		1	3			100			
South	85	215	L	Interior		3	3			100			
River	79	232	L	Exterior		2	20				100		
River	78	232	R	Exterior		2	20				100		
River	78	232	R	Interior		12	21			100			
River	79	232	L	Interior		3	12			100			
River	77	233	L	Exterior		2	10				100		
River	76	233	R	Exterior		32	40				100		
River	76	233	R	Interior		8	12			100			
River	77	233	L	Interior		4	9			100			
River	77	234	L	Exterior		2	10				100		
River	76	234	R	Exterior		2	15				100		
River	76	234	R	Interior		7	16			100			
River	77	234	L	Interior		5	10			100			
River	77	235	L	Exterior		2	10				100		
River	76	235	R	Exterior		2	10				100		
River	76	235	R	Interior		6	12			100			
River	77	235	L	Interior		7	13			100			
River	77	236	L	Exterior		2	4	2	2		100		
River	76	236	R	Exterior							100		
River	76	236	R	Interior		7	20			100			
River	77	236	L	Interior		3	8			100			
River	73	240	L	Exterior		2	12				100		
River	72	240	R	Exterior		4	18				100		
River	72	240	R	Interior	J27-2-3	2	11			100			
River	73	240	L	Interior	R27-1	1	1			100			



Line	Block	Span	L/R N/S	Interior / Exterior	2019 Photo	Light-Mod Corrosion (LF)	Light-Mod Corrosion (SF)	Section Loss (LF)	Section Loss (SF)	Minor Chalky (%)	Very Chalky (%)	Peel /Bub /Crack - Top Coat (SF)	Peel /Bub /Crack - Metal Exposed (SF)
River	73	241	Pier Crosshead	Exterior		30	30				100		
River	73	241	L	Exterior		2	12				100		
River	72	241	R	Exterior		2	12				100		
River	72	241	R	Interior		8	19			100			
River	73	241	Pier Crosshead	Interior						100			
River	73	241	L	Interior		2	7			100			
River	71	242	Pier Crosshead	Exterior		20	20				100		
River	71	242	L	Exterior		3	15				100		
River	70	242	R	Exterior	S7-9	3	15				100		
River	70	242	R	Interior		7	16			100		1	
River	71	242	Pier Crosshead	Interior						100			
River	71	242	L	Interior	R27-10	1	1			100			
River	71	243	L	Exterior		3	13				100		
River	70	243	R	Exterior		3	13				100		
River	70	243	R	Interior		1	1			100			
River	71	243	L	Interior		5	7			100			
River	71	244	L	Exterior		3	9				100		
River	70	244	R	Exterior		2	8				100		
River	70	244	R	Interior		1	5			100			
River	71	244	L	Interior		1	1			100		2	
River	71	245	L	Exterior		2	10				100		
River	70	245	R	Exterior		2	10				100		
River	70	245	R	Interior		5	18			100			
River	71	245	L	Interior		2	7			100			
River	71	246	L	Exterior		2	6				100		
River	70	246	R	Exterior		3	7				100		
River	70	246	R	Interior		1	1			100			



Line	Block	Span	L/R N/S	Interior / Exterior	2019 Photo	Light-Mod Corrosion (LF)	Light-Mod Corrosion (SF)	Section Loss (LF)	Section Loss (SF)	Minor Chalky (%)	Very Chalky (%)	Peel /Bub /Crack - Metal Exposed (SF)
River	71	246	L	Interior		51	108			100		
River	69	247	L	Exterior		2	10				100	
River	70	247	R	Exterior		2	10				100	
River	70	247	R	Interior		1	7			100		
River	69	247	L	Interior		116	234			100		
River	67	R6	L	Exterior		2	12				100	
River	66	R6	R	Exterior		2	12				100	
River	66	R6	R	Interior						100		
River	67	R6	L	Interior		100	202			100		
River	67	248	L	Exterior		2	16				100	
River	66	248	R	Exterior		2	12				100	
River	66	248	R	Interior	J29-7	3	8			100		
River	67	248	L	Interior		2	2			100		
River	67	249	L	Exterior		2	18				100	
River	66	249	R	Exterior		2	24				100	
River	66	249	R	Interior		5	11			100		
River	67	249	L	Interior		1	1			100		
River	67	250	L	Exterior		2	27				100	
River	66	250	R	Exterior		2	27				100	
River	66	250	R	Interior						100		
River	67	250	L	Interior						100		
River	67	251	L	Exterior		4	40				100	
River	66	251	R	Exterior		4	40				100	
River	66	251	R	Interior		3	12			100		
River	67	251	L	Interior						100		
River	67	252	L	Exterior		2	16				100	
River	66	252	R	Exterior		3	17				100	1



Line	Block	Span	L/R N/S	Interior / Exterior	2019 Photo	Light-Mod Corrosion (LF)	Light-Mod Corrosion (SF)	Section Loss (LF)	Section Loss (SF)	Minor Chalky (%)	Very Chalky (%)	Peel /Bub /Crack - Top Coat (SF)	Peel /Bub /Crack - Metal Exposed (SF)
River	66	252	R	Interior		1	3			100			
River	67	252	L	Interior						100			
River	65	254	L	Exterior		2	10				100		
River	64	254	R	Exterior		2	10				100		
River	64	254	R	Interior	J24-5	8	8			100			
River	65	254	L	Interior						100			
River	65	255	L	Exterior		4	30				100		
River	64	255	R	Exterior		4	30				100		
River	64	255	R	Interior		7	14			100			
River	65	255	L	Interior		9	26			100			
River	64	256	R	Exterior		2	10				100		
River	65	256	L	Exterior							100		
River	64	256	R	Interior		10	10			100			
River	65	256	L	Interior		10	15			100			
River	63	257	L	Exterior		3	10				100		
River	62	257	R	Exterior		12	17				100		
River	62	257	R	Interior		1	1			100			
River	63	257	L	Interior		1	2			100			
O&M	104	405	R	Exterior		3	20				100		
O&M	104	405	R	Interior	R18-2, 6, 8	3	6			100		1	
O&M	102	406	R	Exterior			4				100		
0&M	102	406	R	Interior	R18-11	6	22			100			
O&M	102	407	R	Exterior		2	20				100		
O&M	102	407	R	Interior		1	9			100			
O&M	100	408	R	Exterior		2	10				100		
O&M	103	408	L	Exterior		2					100		
O&M	100	408	R	Interior		1	5			100			



Line	Block	Span	L/R N/S	Interior / Exterior	2019 Photo	Light-Mod Corrosion (LF)	Light-Mod Corrosion (SF)	Section Loss (LF)	Section Loss (SF)	Minor Chalky (%)	Very Chalky (%)	Peel /Bub /Crack - Metal Exposed (SF)
O&M	103	408	L	Interior		3	12			100		
0&M	65	409	L	Exterior		2	10				100	
О&М	100	409	R	Exterior		2	2				100	
0&M	100	409	R	Interior		3	9			100		
O&M	65	409	L	Interior		3	3			100		

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				_ ,						Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Rear /	Bearing Type	Box Exterior	2019 Inspection Note	2017 Note	2019	Lt-Mod	S.L.	Loose	Missing	<15% T		<10%	>10%
				Front		/ Interior		Disposition	Photo	(CS 2)	(CS 3)	Fasteners	/ Broken	(CS 2)	(CS 2)	(CS 2)	(CS 3)
Starter	12	6	S	Rear	Elastomeric	-	Keeper plates for both stems are missing washers.	no change									
Starter	12	6	S	Rear	Elastomeric	-	Left stem keeper plate has one nut that is not fully engaged.	no change				1					
Starter	13	6	N	Rear	Elastomeric	-	Keeper plates for both stems have one nut that is not fully seated.	no change				1					
Starter	13	6	N	Rear	Elastomeric	-	Keeper plates for both stems are missing washers.	no change									
Starter	12	6	S	Front	Sliding Plate	Exterior	Both bearings exhibit light surface corrosion on the sole plates and masonry plates	inaccessible		2							
Starter	12	6	S	Front	Sliding Plate	Exterior	The right bearing has shim plates between the sole plate and the bronze plate.	inaccessible									
Starter	13	6	N	Front	Sliding Plate	Exterior	Both bearings exhibit moderate surface corrosion on the sole plates and masonry plates	inaccessible		2							
Starter	13	6	N	Front	Sliding Plate	Interior	2 of 4 anchor bolts exhibit corrosion on the nuts.	new	R17-17								
Starter	13	6	N	Rear	Sliding Plate	Interior	1 of 4 anchor bolts exhibits light surface corrosion.	no change	R17-2	1							
Starter	14	7	S	-	Elastomeric	Exterior	Both bearings exhibit light surface corrosion on the undersides of the sole plates.	no change	S17-18	1							
Starter	14	7	S	-	Elastomeric	Exterior	Left bearing elastomeric pad is not fully seated on the pedestal, with up to 1/2" overhang on the left side.	no change	S17-20							1	
Starter	15	7	N	-	Elastomeric	Exterior	Both bearings exhibit light surface corrosion on the undersides of the sole plates.	no change		1							
Starter	15	7	Ν	-	Elastomeric	Exterior	Elastomeric pads for both bearings are not fully seated on the pedestal, with up to 1/4" overhang on each exterior side.	no change								2	
Starter	15	7	N	-	Sliding Plate	Interior	2 of 4 washers are free to spin below the anchor bolt nuts.	New				1					
Starter	15	8	N	Front	Sliding Plate	Exterior	The left bearing exhibits moderate to heavy surface corrosion on the sole plate and masonry plate with up to 1/16" pack rust between the sole plate and bronze plate and laminating corrosion with up to 1/8" loss on the masonry plate	increase	\$17-10		1						
Starter	15	8	N	Front	Sliding Plate	Exterior	The right bearing exhibits moderate to heavy surface corrosion on the sole plate and masonry plate	increase			1						
Starter	15	8	N	Rear	Sliding Plate	Exterior	Both bearings exhibit moderate to heavy surface corrosion on the sole plates and masonry plates	increase			2						



				Door /		Day Futarian		2017 Note	2010	Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Rear / Front	Bearing Type	Box Exterior / Interior	2019 Inspection Note	2017 Note Disposition	2019 Photo	Lt-Mod	S.L.	Loose	Missing	<15% T	>15% T	<10%	>10%
				110110		, interior	4 of 4 on the standard by the light scores	Біорозісіон	111010	(CS 2)	(CS 3)	Fasteners	/ Broken	(CS 2)	(CS 2)	(CS 2)	(CS 3)
Starter	15	8	N	Rear	Sliding Plate	Interior	1 of 4 anchor bolts exhibits light surface corrosion.	no change	R17-23								
							Both bearings exhibit moderate to heavy										
Starter	14	8	S	Rear	Sliding Plate	Exterior	surface corrosion on the sole plates and	increase		2							
					-		masonry plates										
							Both bearings exhibit moderate to heavy										
Starter	14	8	S	Front	Sliding Plate	Exterior	surface corrosion on the sole plates and	increase		2							
							masonry plates The interior faces of both upper casting										
Starter	15	9	_	_	Rocker	Exterior	interior plates have gouges up to 6" L x 3" W x	no change	S17-2-3								
Starter					Bearing	Exterior	1/2" D.	no change	31, 23								
							The rocker bearing castings exhibit light,										
Starter	15	9	_	_	Rocker	Exterior	freckled corrosion throughout and light to	increase		1							
					Bearing		moderate surface corrosion around the			_							
							baseplate perimeter.										
							The masonry plate exhibits areas of heavy										
Ctantan	1.4	10	S		Dat Dagging	F. shasias	surface corrosion with laminating corrosion	:			1						
Starter	14	10	3	-	Pot Bearing	Exterior	and pitting up to 1/16" around the bottom perimeter. There is light surface corrosion on	increase			1						
							the underside of the sole plate.										
							·										
							The masonry plate exhibits areas of heavy										
Charter	4.5	40			Dat Danis	F. A	surface corrosion with laminating corrosion		S15-16,								
Starter	15	10	N	-	Pot Bearing	Exterior	and pitting up to 1/16" around the bottom perimeter. There is light surface corrosion on	increase	17		1						
							the underside of the sole plate.										
							There are small gaps between the masonry										
							plate and the pedestal, for 6" L in the forward										
Starter	15	10	N	-	Pot Bearing	Exterior	right corner and along the full length of the	increase	S15-20							1	
							left edge. These gaps are now filled with pack										
							rust.										
					Daalian		There is light surface corrosion around the		C1 C 0								
Starter	15	11	-	-	Rocker Bearing	Exterior	bottom perimeter of the lower casting and on lower and upper casting surfaces and on the	increase	S16-8- 10								
					bearing		pin.		10								
Ctartor	15	11		Front	Rocker	Interior	The jam nut for Anchor Bolt 2 is not fully	2011	R16-5			1					
Starter	15	11	-	Front	Bearing	interior	seated.	new	K10-2			1					
							Both bearings exhibit heavy surface and										
Starter	15	12	Both	Rear	Sliding Plate	Exterior	laminating corrosion on the masonry plate	increase	S16-		4						
Starter	13	12	וווטפ	Neai	Siluling Flate	Exterior	with pitting and up to 1/16" section loss. sole	iliciease	17,18		4						
							plates also exhibit heavy surface corrosion.							<u></u>			
Starter	16	12	S	Front	Elastomeric	-	Right stem keeper plate is missing washers.	no change									
<u> </u>	4-	1.5			FI		Keeper plates for both stems are missing			1							
Starter	15	12	N	Front	Elastomeric	-	washers.	no change									



				D /		Day Fatasias		2047 Note	2040	Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Rear / Front	Bearing Type	Box Exterior / Interior	2019 Inspection Note	2017 Note Disposition	2019 Photo	Lt-Mod	S.L.	Loose	Missing	<15% T		<10%	>10%
Starter	15	12	N	Front	Elastomeric	-	Left stem keeper plate has one nut that is not fully seated, 1/4in gap.	no change	J6-11	(CS 2)	(CS 3)	Fasteners 1	/ Broken	(CS 2)	(CS 2)	(CS 2)	(CS 3)
Starter	15	15	Both	Both	Elastomeric	-	7 of the 8 keeper plates are missing washers.	no change									
Starter	20	18	S	Rear	Elastomeric	-	Both stem keeper plates are missing washers.	no change									
Starter	20	18	S	Rear	Elastomeric	-	The left stem keeper plate has one skewed bolt causing a 1/4" gap.	no change									
Starter	21	18	Z	Rear	Elastomeric	-	The left stem keeper plate is positioned between the stem and the anchor bolts because the bolts were cast too far to the exterior.	no change	J6-25				1				
Starter	21	18	N	Rear	Elastomeric	-	The left stem keeper plate is welded to the embedded cap plate	no change									
Starter	20	18	S	Front	Elastomeric	-	The left stem keeper plate is missing washers.	no change									
Starter	21	18	N	Front	Elastomeric	-	The left stem keeper plate is welded to the embedded cap plate	no change									
Starter	22	21	S	Rear	Elastomeric	-	Keeper plates for both stems are missing washers.	no change									
Starter	22	21	S	Rear	Elastomeric	-	The left stem keeper plate is missing one anchor bolt nut.	no change	J7-4				1				
Starter	23	21	N	Rear	Elastomeric	-	Both nuts for the right keeper plate are not fully seated, 1/8" gap	no change				1					
Starter	23	21	N	Rear	Elastomeric	-	1/8" gap between bearing pad and beam diaphragm over 42"	new								1	
Starter	23	21	N	Rear	Elastomeric	-	Keeper plates for both stems are missing washers.	no change									
Starter	23	21	N	Rear	Elastomeric	-	Left keeper plate has one skewed bolt	no change									
Starter	22	21	S	Front	Elastomeric	-	Both anchor bolt nuts for the left stem keeper plate exhibit light surface corrosion	no change		1							
Starter	22	21	S	Front	Elastomeric	-	Left stem keeper plate is missing washers.	no change									
Starter	23	21	N	Front	Elastomeric	-	Both nuts for the left keeper plate are not fully seated.	no change				1					
Starter	23	21	N	Front	Elastomeric	-	Left stem keeper plate is missing washers.	no change									
Starter	22	25	S	Rear	Elastomeric	-	Keeper plates for both stems are missing washers.	no change									
Starter	23	25	N	Rear	Elastomeric	-	Right stem keeper plate is missing washers.	no change									
Starter	22	25	S	Front	Elastomeric	-	Left stem keeper plate is missing washers.	no change									
Starter	23	25	N	Rear & Front	Elastomeric	-	Left stem keeper plate is missing washers.	no change									



				Door /		Day Exterior		2017 Note	2019	Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Rear / Front	Bearing Type	Box Exterior / Interior	2019 Inspection Note	Disposition	Photo	Lt-Mod (CS 2)	S.L. (CS 3)	Loose Fasteners	Missing / Broken	<15% T (CS 2)		<10% (CS 2)	>10% (CS 3)
Starter	27	29	N	Rear	Elastomeric	-	Left keeper plate is missing both anchor bolt nuts, due to the close proximity to the beam stem.	no change		(03.2)	(63.3)	rastellers	1	(63.2)	(63.2)	(63.2)	(63.3)
Starter	27	29	N	Rear	Elastomeric		Right stem keeper plate is cut out for clearance	no change	J7-22				1				
Starter	27	29	Ν	Front	Sliding Plate	Exterior	Both bearings exhibit moderate surface corrosion on the sole plate and heavy surface and delaminating corrosion on the masonry plate with ~1/8" section loss.	increase	S16-30		2						
Starter	27	29	N	Front	Sliding Plate	Interior	The nuts for the right bearing, left bolt and left bearing, right bolt are not fully seated.	new	R16-18								
Starter	24	29	S	Front	Sliding Plate	Exterior	Both bearings exhibit moderate surface corrosion on the sole plate and heavy surface and delaminating corrosion on the masonry plate with ~1/16" section loss.	increase	S16-29		2						
Starter	27	30	-	-	Rocker Bearing	Exterior	The upper casting exhibits light surface corrosion between the interior plates.	no change	S16-32								
Starter	27	30	N	-	Rocker Bearing	Interior	The second from the left forward bolt has a loose jam nut.	new	R16-23			1					
Starter	61	31\$	Both	Front	Sliding Plate	Exterior	Both bearings exhibit moderate surface corrosion on the sole plates and heavy surface and delaminating corrosion on the masonry plates with ~1/4" section loss	increase	S16-23		4						
Starter	27	31	-	-	Rocker Bearing	Exterior	There is light surface corrosion between the interior plates of the upper casting, around the bolts and on the front face. Painted over pitting up to 1/16" deep is also present on the front face.	no change		1							
Starter	28	32	S	Rear	Sliding Plate	Exterior	The right bearing bronze plate and masonry plate are rotated up to 2" with respect to the sole plate. There are gaps up to 1/8" between the sole plate and the bronze plate, between the bronze plate and the masonry plate, and between the masonry plate and the pier cap.	no change	J12-1-3								1
Starter	28	32	S	Rear	Sliding Plate	Exterior	Left bearing had moderate surface corrosion on the masonry plate, coated by inspectors, 1/16" pack rust between bronze and masonry plate	decrease	J12-5,6		1						
Starter	27	32	N	Rear	Sliding Plate	Exterior	Right bearing had moderate surface corrosion on the masonry plate, coated by inspectors, 1/16" pack rust between bronze and masonry plate	new	J12-8,9		1						



				Rear /		Box Exterior		2017 Note	2019	Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Front	Bearing Type	/ Interior	2019 Inspection Note	Disposition	Photo	Lt-Mod (CS 2)	S.L. (CS 3)	Loose Fasteners	Missing / Broken	<15% T (CS 2)		<10% (CS 2)	>10% (CS 3)
Starter	27	32	N	Rear	Sliding Plate	Exterior	Left bearing had moderate surface corrosion on the masonry plate, coated by inspectors, 1/16" pack rust between bronze and masonry plate	decrease		(63.2)	1	rastellers	/ blokell	(63.2)	(63.2)	(632)	(63.3)
Starter	28	32	S	Front	Elastomeric	-	Keeper plates for both stems are missing washers.	no change									
Starter	27	32	N	Front	Elastomeric	-	Keeper plates for both stems are missing washers.	no change									
Starter	29	35	N	Rear	Elastomeric	-	Left stem keeper plate is missing washers.	no change									
Starter	30	35	S	Rear	Elastomeric	-	Left stem keeper plate is missing washers.	no change									
Starter	29	35	N	Front	Elastomeric	-	Left stem keeper plate is missing washers.	no change									
Starter	30	35	S	Front	Elastomeric	-	Right stem keeper plate is missing washers.	no change									
Starter	29	38	N	Rear	Elastomeric	-	Left stem keeper plate is missing washers.	no change									
Starter	32	38	S	Rear	Elastomeric	-	Left keeper plate has one nut that is not fully seated.	no change				1					
Starter	32	38	S	Rear	Elastomeric	-	Left stem keeper plate is missing washers.	no change									
Starter	29	38	N	Front	Elastomeric	-	Left stem keeper plate is missing washers.	no change									
Starter	32	38	S	Front	Elastomeric	-	Left stem keeper plate is missing washers.	no change									
Starter	32	38	S	Front	Elastomeric	-	Right keeper plate is not fully seated on the pier cap.	no change									
Starter	32	40	S	Front	Elastomeric		Left keeper plate has a cutout	new	J11-36				1				
Starter	32	40	S	Front	Elastomeric	-	Right keeper plate is not fully seated on the pier cap with a 1/8" gap and the anchor bolt nuts are not fully threaded.	no change				1					
Starter	34	44	S	Rear	Elastomeric	-	Right keeper plate has one nut not fully seated due to a skewed anchor bolt.	no change									
Starter	34	44	S	Front	Elastomeric	-	Delaminating corrosion up to 1/2" on left stem keeper plate	no change	J11-11		1						
Starter	37	44	N	Front	Elastomeric	-	Right keeper plate has one nut not fully seated due to a skewed anchor bolt.	no change									
North	34	47	S	Rear	Elastomeric	-	Left keeper plate has one nut not fully seated due to a skewed anchor bolt.	no change									
North	34	47	S	Front	Elastomeric		Bearing pad has walked forward, overhanging the cap by 3/4"	new	J11-19, 20							1	
North	34	47	S	Front	Elastomeric	-	Right keeper plate is missing one anchor bolt.	no change					1				
North	37	47	N	Front	Elastomeric	-	Keeper plates for both stems have one missing anchor bolt.	no change					1				



				Decr /		Day Enterit		2017 Nata	2010	Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Rear / Front	Bearing Type	Box Exterior / Interior	2019 Inspection Note	2017 Note Disposition	2019 Photo	Lt-Mod	S.L.	Loose	Missing	<15% T		<10%	>10%
				Front		/ interior		Disposition	Photo	(CS 2)	(CS 3)	Fasteners	/ Broken	(CS 2)	(CS 2)	(CS 2)	(CS 3)
North	36	51	R	Rear	Elastomeric	-	Right beam stem, the keeper plate is not installed because there is not enough space between the anchor bolts and the beam stem.	no change	J11-25				1				
North	36	51	R	Front	Elastomeric	-	The web plate at the left stem keeper plate exhibits moderate surface corrosion.	no change		1							
North	36	52	R	Rear	Elastomeric	-	Right beam stem, the keeper plate is missing one anchor bolt	new	J11-28				1				
North	36	52	R	Rear	Elastomeric	-	Left stem, left side anchor bolt and shim plates exhibit moderate to heavy surface and delaminating corrosion.	increase	J12-27- 28								
North	39	52	L	Rear	Elastomeric	-	Left stem bearing is missing the anchor bolt.	no change									
North	36	52	R	Front	Sliding Plate	Exterior	Right bearing exhibits moderate surface corrosion on the sole plate and heavy surface and laminating corrosion on the masonry plate, with pitting and section loss up to 1/16"	no change			1						
North	36	52	R	Front	Sliding Plate	Exterior	Left bearing exhibits moderate surface corrosion on the sole plate and heavy surface and laminating corrosion on the masonry plate, with pitting and section loss up to 1/16"	new			1						
North	39	52	L	Front	Sliding Plate	Exterior	Left bearing exhibits moderate surface and delaminating corrosion on the sole plate and masonry plates, coated by inspectors	no change		1							
North	39	52	L	Front	Sliding Plate	Exterior	There is a 1" steel plate welded to the back of the girder, resulting in no room for further beam expansion.	no change	J12- 25,26								
North	41	52A	L	Rear	Sliding Plate	Exterior	Left bearing has a gap up to 3/8" between the bronze plate and the sole plate.	no change	S17-25							1	
North	41	52A	L	Rear	Sliding Plate	Exterior	Right bearing sole plate has corrosion bleeding through the new paint on the exterior face.	no change		1							
North	40	52A	R	Rear	Sliding Plate	Exterior	Both bearing sole plates have moderate to heavy corrosion bleeding through the new paint on the exterior face.	new	S17-24								
North	40	52A	R	Rear	Sliding Plate	Interior	The bearing nuts are not fully engaged with a gap up to 1/8". No jam nuts are present	No change	J17-18				1				
North	41	52A	L	Rear	Sliding Plate	Interior	The bearing nuts are not fully engaged with a gap up to 1/8".	no change	R17-24			1					
North	41	53	Both	-	Pot Bearing	Exterior	All four bearings exhibit light surface corrosion on the weld between the undersides of the beams and the sole plates.	no change		4							



				Poor /		Box Exterior		2017 Note	2019	Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Rear / Front	Bearing Type	/ Interior	2019 Inspection Note	Disposition	Photo	Lt-Mod	S.L.	Loose	Missing	<15% T	>15% T	<10%	>10%
North	41	53	Both	-	Pot Bearing	Exterior	Anchor bolts for all four bearings are two short resulting in nuts not fully threaded. A number of the bolts are also skewed, resulting in gaps between the nuts and the washers.	no change	S17-33	(CS 2)	(CS 3)	Fasteners	/ Broken	(CS 2)	(CS 2)	(CS 2)	(CS 3)
North	41	53	Both	-	Pot Bearing	Exterior	in gaps between the masonry plates and the	new	S17-32								
North	41	53	Both	ì	Pot Bearing	Exterior	Top of pier cap surface is uneven causing small gaps between the bearing masonry plates and									2	
North	41	54	L	Rear	Sliding Plate	Exterior	Both bearings exhibit moderate to heavy surface corrosion on the sole plates and masonry plates Both bearings exhibit moderate to neavy	no change		2							
North	40	54	R	Rear	Sliding Plate	Exterior	surface corrosion on the sole plates and	new		2							
North	41	54	L	Front	Elastomeric	-	Left keeper plate has one nut that is not fully seated due to close proximity of the stem.	no change				1					
North	40	58	R	Front	Elastomeric	-	Left keeper plate is cut in half and missing both anchor bolt nuts, due to the close proximity to the beam stem. Plate is welded	no change	R20-11				1				
North	45	62	L	Rear	Elastomeric	-	Right keeper plate is cut in half and missing both anchor bolts, due to the close proximity to the beam stem. Plate is welded at the bottom	no change					1				
North	45	62	٦	Front	Elastomeric	-	Right keeper plate has surface corrosion	new	R20-19	1							
North	42	62	R	Rear	Elastomeric	-	The middle 28" long elastomeric bearing pads is missing (previously was protruding out from the pier cap).	increase	R22-2								1
North	42	62	R	Front	Elastomeric	-	One of two nuts for the left keeper plate has moderate corrosion	new		1							
North	42	62	R	Front	Elastomeric	-	Top of pier cap surface is uneven causing gaps up to 1/2" between right keeper plate and cap.	no change	R22-4								
North	42	62	R	Rear	Elastomeric	-	The right stem keeper shim plate has heavy surface and laminating corrosion.	new	R22-1		1						1
North	42	62	R	Rear	Elastomeric	-	The left stem keeper shim plate has moderate corrosion and there is heavy debris build up around the bearing	no change	R22-3	1							
North	45	66	L	Rear	Elastomeric	-	The right keeper plate is missing one anchor bolt nut and the other is not fully seated.	no change					1				
North	45	66	L	Front	Elastomeric	-	The left keeper plate is missing one anchor bolt nut and the other is not fully seated.	no change					1				



				Daan /		Day Futarian		2017 Note	2019	Corro	sion	Conne	ction	Bulge/S	plit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Rear / Front	Bearing Type	Box Exterior / Interior	2019 Inspection Note	Disposition	Photo	Lt-Mod (CS 2)	S.L. (CS 3)	Loose Fasteners	Missing / Broken	<15% T (CS 2)		<10% (CS 2)	>10% (CS 3)
North	45	66	L	Front	Elastomeric	-	The right keeper plate has moderate corrosion and there is debris buildup around the bearing area.	no change		1	(63.3)	rusteners	, broken	(632)	(63.2)	(63.2)	(63.3)
North	46	66	R	Rear	Elastomeric	-	Left keeper plate has light surface corrosion	new		1							
North	46	66	R	Front	Elastomeric	-	Left keeper plate has light surface corrosion with up to 3" of wet debris accumulation.	new		1							
North	46	66	R	Front	Elastomeric	-	Right keeper plate is cut in half and missing both anchor bolts, due to the close proximity to the beam stem. Plate is welded at the bottom	no change					1				
North	47	69	L	Rear	Elastomeric	-	Left keeper plate is cut in half and missing both anchor bolt nuts, due to the close proximity to the beam stem. Plate is welded at the bottom.	no change					1				
North	46	69	R	Front	Elastomeric	-	Left keeper plate is cut in half and missing both anchor bolts, due to the close proximity to the beam stem. Plate is welded at the bottom.	no change					1				
North	47	72	L	Front	Elastomeric	-	The left stem keeper plate exhibits corrosion	no change		1							<u> </u>
North	47	72	L	Front	Elastomeric	-	The right stem keeper plate is missing both anchor bolts. Plate is welded at the bottom.	no change					1				
North	46	72	R	Front	Elastomeric	-	The left stem keeper plate is missing both anchor bolts. Plate is welded at the bottom.	no change					1				
North	51	75	L	Rear	Elastomeric	-	The right stem keeper plate is cut in half and missing both anchor bolts, due to the close proximity to the beam stem. Plate is welded at the bottom. Keeper plate has laminating corrosion.	increase (corrosion not previously noted)	R21-7				1				
North	50	75	R	Rear	Elastomeric	-	The left stem keeper plate is cut in half and missing both anchor bolts, due to the close proximity to the beam stem. Plate is welded at the bottom.	no change					1				
North	51	75	L	Front	Elastomeric	-	The right stem keeper plate is cut in half and missing both anchor bolts, due to the close proximity to the beam stem. Plate is welded at the bottom.	no change					1				
North	50	75	R	Front	Elastomeric	-	The left stem keeper plate is cut in half and missing both anchor bolts, due to the close proximity to the beam stem. Plate is welded at the bottom.	no change	R21-8				1				



				Rear /		Box Exterior		2017 Note	2019	Corro	sion	Conne	ction	Bulge/Sp	lit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Front	Bearing Type	/ Interior	2019 Inspection Note	Disposition	Photo	Lt-Mod	S.L.	Loose	Missing		>15% T	<10%	>10%
North	50	78	R	Rear	Elastomeric	-	The left stem keeper plate is cut in half and missing both anchor bolts, due to the close proximity to the beam stem. Plate is welded	no change		(CS 2)	(CS 3)	Fasteners	/ Broken	(CS 2)	(CS 2)	(CS 2)	(CS 3)
North	50	78	R	Front	Elastomeric		at the bottom. The left stem keeper plate is cut in half, as is one of the nuts. this nut is welded to the	no change	R21-19				1				
North	50	78	R	Front	Elastomeric	-	washer. The left stem keeper plate is missing 1 of 2 anchor bolts and the nut for the other bolt.	no change					1				
North	50	78	R	Front	Elastomeric	-	The right stem keeper plate is missing both bolts. Keeper plate is welded at the bottom.	no change					1				
North	51	81	٦	Rear	Elastomeric	-	The bearing pad under the left stem is overcompressed	new						1			
North	50	81	R	Rear	Elastomeric	-	One nut for the right stem keeper plate has been torched to fit. Light surface corrosion is present	no change					1				
North	52	85	R	Rear	Elastomeric	-	The right stem keeper plate has one anchor bolt nut that is not fully seated and cannot be turned down.	no change					1				
South	94	199	R	Front	Elastomeric	-	Left stem keeper plate is missing washers.	No Change									
South	94	202	R	Rear	Elastomeric	-	Keeper plates are missing washers for both stems.	No Change									
South	94	202	R	Rear	Elastomeric	-	A 1/4" gap exists between the stem and the shim plate (plans call for 1/16" gap).	No Change									
South	95	202	L	Rear	Elastomeric		Right stem keeper plate is missing both washers	new									
South	95	202	L	Rear	Elastomeric	-	Left stem keeper plate is missing 1 washer.	No Change									
South	94	202	R	Front	Elastomeric	-	Left bearing has a gap between the bearing pad and the bottom of the beam stem, measured up to 1/4" for up to 12" L.	No Change	J3-41							1	
South	94	202	R	Front	Elastomeric	-	Left stem keeper plate is missing one washer.	No Change									
South	94	202	R	Front	Elastomeric	-	A 1/4" gap exists between the stem and the shim plate (plans call for 1/16" gap).	No Change	J3-40								
South	92	205	R	Front	Sliding Plate	Exterior	Both bearings exhibit moderate surface corrosion on sole, bronze, and masonry plates	No Change	J3-35, 36	2							
South	93	205	L	Front	Sliding Plate	Exterior	Both bearings exhibit moderate surface corrosion on sole plates and masonry plates	No Change									
South	93	205	L	Front	Sliding Plate	Exterior	Right bearing has a gap up to 1/4" between the bronze plate and the sole plate.	No Change									1



				Door /		Day Futarian		2017 Note	2010	Corro	sion	Conne	ction	Bulge/S	plit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Rear / Front	Bearing Type	Box Exterior / Interior	2019 Inspection Note	2017 Note Disposition	2019 Photo	Lt-Mod	S.L.	Loose	Missing	<15% T	>15% T	<10%	>10%
				FIUIL		/ interior		Disposition	Piloto	(CS 2)	(CS 3)	Fasteners	/ Broken	(CS 2)	(CS 2)	(CS 2)	(CS 3)
South	93	205	L	Front	Sliding Plate	Interior	Anchor bolt nuts for both bearings are not fully seated. Also, jam nuts are missing.	No Change	R15-2				1				
South	93	206	L	-	Pot Bearing	Exterior	Both bearing cylinders have peeling paint and there is light surface corrosion on the ole plate welds.	Increase	S15-1,2	2							
South	90	207	R	Rear	Sliding Plate	Exterior	Both bearings exhibit moderate to heavy surface corrosion on sole plate and masonry plate with up to 1/16" pack rust between the sole plate and bronze plate and pitting up to 1/32" at the bottom of the sole plate	increase	S15-4		2						
South	91	207	L	Rear	Sliding Plate	Exterior	Both bearings exhibit moderate to heavy surface corrosion on sole plate and masonry plate with up to 1/16" pack rust between the sole plate and bronze plate and pitting up to 1/32" at the bottom of the sole plate	increase			2						
South	90	207	R	Front	Elastomeric	-	Left stem keeper plate is missing one washer.	No Change	J1-1								
South	90	207	R	Rear	Sliding Plate	Interior	Left and right anchor bolt nuts are not fully seated. Also, jam nuts are missing. All are loose.	Increase	J15-14								
South	91	207	L	Rear	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change	R15-9								
South	91	210	L	Rear	Elastomeric		Right stem keeper plate is missing both washers.	new									
South	91	210	Both	Front	Elastomeric	-	The bearing pads are slightly over compressed due to an uneven bearing surface.	No Change	J1-14					2			
South	85	213	L	Rear	Elastomeric	-	Left stem keeper plate is missing washers.	No Change									
South	84	213	R	Front	Sliding Plate	Exterior	Both bearings exhibit moderate to heavy surface corrosion on sole plate and masonry plate with up to 1/16" pack rust between the sole plate and bronze plate and pitting up to 1/32" at the bottom of the sole plate	increase			2						
South	85	213	L	Front	Sliding Plate	Exterior	Both bearings exhibit light to moderate surface corrosion on sole plate.	increase		2							
South	84	213	R	Front	Sliding Plate	Interior	One of two anchor bolt nuts for the left bearing is not flush with the washer. All 4 are loose.	Increase									
South	84	214	R	-	Pot Bearing	Exterior	Bearing anchor bolt nuts are not fully seated and one of four bolts is slightly skewed at the right bearing.	No Change									



				Rear /		Box Exterior		2017 Note	2019	Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Front	Bearing Type	/ Interior	2019 Inspection Note	Disposition	Photo	Lt-Mod	S.L.	Loose	Missing	<15% T		<10%	>10%
South	84	214	R	-	Pot Bearing	Exterior	Top of pier cap surface is uneven causing minor gaps between both masonry plates and cap.	No Change	S15-9	(CS 2)	(CS 3)	Fasteners	/ Broken	(CS 2)	(CS 2)	(CS 2)	(CS 3)
South	85	214	L	-	Pot Bearing	Exterior	Bearing anchor bolt nuts are not fully seated and one of four bolts is slightly skewed at the left bearing.	No Change	S15-7								
South	84	215	R	-	Pot Bearing	Exterior	2 of 4 anchor bolt nuts for the left bearing are not fully seated.	No Change									
South	84	215	R	-	Pot Bearing	Exterior	2 of 4 anchor bolt nuts for the right bearing are not fully seated.	No Change									
South	85	215	L	-	Pot Bearing	Exterior	Anchor bolt nuts on both left and right bearings are not fully seated.	No Change									
South	84	216	R	Rear	Sliding Plate	Exterior	Both bearings exhibit moderate to heavy surface corrosion on sole plate and masonry plate with up to 1/16" pack rust between the sole plate and bronze plate and pitting up to 1/32" at the bottom of the sole plate	increase			2						
South	85	216	L	Rear	Sliding Plate	Exterior	Both bearings exhibit light to moderate surface corrosion on sole plates and masonry plates	No Change		2							
South	85	216	L	Rear	Sliding Plate	Exterior	The bronze and masonry plates are displaced 1/2" to the left	No Change	S15-15								
South	84	216	R	Front	Elastomeric	-	Left stem keeper plate is missing washers.	No Change									
South	85	216	L	Front	Elastomeric	-	Keeper plates for both stems are missing washers.	No Change									
South	85	216	L	Front	Elastomeric	-	Left bearing has a gap between the bearing pad and the bottom of the beam stem, measured up to 1/4" for up to 10" L.	No Change	J2-1							1	
South	84	216	R	Rear	Sliding Plate	Interior	All four anchor bolts are skewed. Bolts are not long enough for jam nuts. 3 of 4 are loose	Increase									
South	82	219	R	Rear	Elastomeric	-	Left stem keeper plate is missing washers.	No Change									
South	82	219	R	Rear	Elastomeric	-	Right bearing shim plate exhibits moderate surface corrosion.	No Change									
South	82	219	R	Front	Elastomeric	-	Left bearing has a gap between the bearing pad and the bottom of the beam stem, measured up to 1/8" for up to 12" L.	No Change								1	
South	82	219	R	Front	Elastomeric	-	Right stem keeper plate is missing washers.	no change									
South	82	223	R	Rear	Elastomeric	-	Left stem keeper plate is missing washers.	No Change									
South	82	223	R	Rear	Elastomeric	-	Right bearing has a gap between the bearing pad and the bottom of the beam stem, measured up to 1/8" for up to 10" L.	No Change								1	



				_ ,				2047.11	2015	Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Rear / Front	Bearing Type	Box Exterior / Interior	2019 Inspection Note	2017 Note Disposition	2019 Photo	Lt-Mod	S.L.	Loose	Missing	<15% T		<10%	>10%
				110110		, interior	Vacaran plates for high stores one rejector	Disposition	1 11010	(CS 2)	(CS 3)	Fasteners	/ Broken	(CS 2)	(CS 2)	(CS 2)	(CS 3)
South	83	223	L	Rear	Elastomeric	-	Keeper plates for both stems are missing washers.	No Change									
South	82	223	R	Front	Elastomeric	_	Left stem keeper plate has minor surface	No Change		1							
Journ	02	223	- 1	110110	Liastomene		corrosion.	140 Change		_							
South	82	223	R	Front	Elastomeric	-	Right stem keeper plate is missing washers.	No Change									
South	83	223	L	Front	Elastomeric	-	Keeper plates for both stems are missing washers.	No Change									
							Right bearing has a gap between the bearing										
South	83	223	L	Rear	Elastomeric	-	pad and the bottom of the beam stem,	No Change	J2-7							1	
							measured up to 1/4" for up to 20" L. Left bearing is uneven exhibiting a gap up to										
River	81	228	L	Rear	Elastomeric	-	1/8" over 10" between the bearing pad and	no change								1	
							bottom of stem.		J3-18,								
River	80	228	R	Rear	Elastomeric		30" L bulge in the pad below the diaphragm.	new	19, 20					1			
River	80	228	R	Front	Elastomeric	_	One of two right stem keeper plate anchor	No Change	J3-24								
							bolts is slightly skewed.										
River	81	228	Both	Both	Elastomeric	-	7 of the 8 keeper plates are missing washers.	No Change									
River	78	232	R	Front	Sliding Plate	Exterior	Top of pier cap surface is uneven causing gaps up to 1/2" between right bearing masonry plate and cap. Surface corrosion is present on the front face of the sole plate.	no change								1	
River	79	232	-	Front	Sliding Plate	Exterior	Left bearing exhibits a gap up to 1/8" between bearing plates, uneven seat.	no change								1	
River	78	232	R	Front	Sliding Plate	Exterior	Both bearings exhibit moderate surface corrosion on the sole plate and masonry plate.	new		2							
River	78	232	R	Front	Sliding Plate	Interior	Anchor bolt nuts are not fully seated at both the left and right bearings.	No change									
River	79	232	L	Front	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change	R25-1				1				
River	76	233	R	-	Pot Bearing	Exterior	Right bearing anchor bolt nuts are not fully seated	No Change									
River	79	232	L	Front	Sliding Plate	Exterior	Right bearing exhibits moderate surface corrosion on the sole plate and masonry plate.	new									
River	79	233	L	-	Pot Bearing	Exterior	Left bearing anchor bolt nuts are not fully seated	No Change									
River	77	234	L	-	Pot Bearing	Exterior	1 of 4 anchor bolt nuts for the left bearing are not fully seated	No Change									
River	77	235	L	Rear	Sliding Plate	Exterior	Both bearings exhibit minor surface corrosion on the sole plate	No Change		1							
River	77	235	L	Front	Sliding Plate	Exterior	Both bearings exhibit minor surface corrosion on the sole plate	No Change		1							



				Rear /		Box Exterior		2017 Note	2019	Corro	sion	Conne	ction	Bulge/Sp	lit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Front	Bearing Type	/ Interior	2019 Inspection Note	Disposition	Photo	Lt-Mod	S.L.	Loose	Missing	<15% T (CS 2)	>15% T	<10%	>10%
River	76	235	R	Front	Sliding Plate	Exterior	Both bearings exhibit minor surface corrosion on the sole plate	new		(CS 2) 1	(CS 3)	Fasteners	/ Broken	(C3 Z)	(CS 2)	(CS 2)	(CS 3)
River	76	235	R	Front	Sliding Plate	Exterior	Left bearing has a gap up to ½" between the bronze plate and the sole plate.	No Change	R25-18							1	
River	76	235	R	Rear	Sliding Plate	Exterior	Right bearing has a gap up to 1/4" between the bronze plate and the sole plate.	No Change								1	
River	76	235	R	Front	Sliding Plate	Interior	Anchor bolts missing jam nuts	New	J25-9				2				
River	77	235	L	Rear	Sliding Plate	Interior	Bird debris up to 1/2" thick is present on and around the bearing anchor bolts.	No Change									
River	77	235	L	Rear	Sliding Plate	Interior	Right bearing, left anchor bolt nut is not fully seated.	No Change	R25-8								
River	77	235	L	Rear	Sliding Plate	Interior	All four anchor bolts are missing jam nuts.	New					2				
River	77	235	L	Front	Sliding Plate	Interior	Bird debris up to 1" thick is present on and around the bearing anchor bolts.	No Change	R25-9								
River	77	235	L	Front	Sliding Plate	Interior	All four anchor bolts are missing jam nuts.	New					2				
River	76	236	R	-	Pot Bearing	Exterior	Anchor bolt nuts on both left and right bearings are not fully seated.	No Change									
River	76	236	R	-	Pot Bearing	Exterior	The grout below the right bearing does not fill the entire gap between the plate and top of cap.	No Change									
River	77	236	L	-	Pot Bearing	Exterior	All four anchor bolts for both the left and right bearing assemblies are missing washers and the nuts are loose.	No Change				2					
River	77	236	L	-	Pot Bearing	Exterior	The grout below both left and right masonry plates does not fill the entire gap between the plate and top of cap. Gap is 5/8". Shim plates are present	No Change	R25-20								
River	74	237	R	Rear	Sliding Plate	Exterior	Both bearings exhibit light to moderate surface corrosion on the sole and masonry plate	No Change									
River	75	237	L	Rear	Sliding Plate	Exterior	Left bearing exhibits light surface corrosion on the sole plate and masonry plate.	No Change									
River	75	237	L	Rear	Sliding Plate	Exterior	Right bearing exhibits moderate surface corrosion on the sole plate and masonry plate.	No Change	J13-2	1							
River	74	237	R	Front	Elastomeric	-	Right stem, the keeper plate is not installed because there is not enough space between the anchor bolts and the beam stem.	No Change	R26-3				1				
River	75	237	L	Front	Elastomeric	-	Right beam stem, one of two keeper plate anchor bolt nuts is not fully seated and cannot be hand tightened.	No Change				1					



				Rear /		Box Exterior		2017 Note	2019	Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of I	Bearing
Line	Block	Pier	Side	Front	Bearing Type	/ Interior	2019 Inspection Note	Disposition	Photo	Lt-Mod (CS 2)	S.L.	Loose Fasteners	Missing	<15% T (CS 2)	>15% T (CS 2)	<10% (CS 2)	>10% (CS 3)
River	74	237	R	Rear	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change		(CS 2)	(CS 3)	rasteners	2 2	(C3 Z)	(CS 2)	(CS 2)	<u>(CS 3)</u>
River	75	237	L	Rear	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change					2				
River	74	240	R	Rear	Elastomeric	-	The double nuts on the left and right sides are not fully engaged with 1/4" gap.	no change	S28-1								
River	75	240	L	Rear	Elastomeric	-	Left anchor bolt has surface corrosion.	No Change		1							
River	75	240	L	Rear	Elastomeric	-	The double nuts on the right side are not fully engaged with 1/2" gap. Right anchor bolt and beam cutout has surface corrosion.	No Change	J13- 10,11	1							
River	74	240	R	Front	Sliding Plate	Exterior	Left bearing exhibits light to moderate surface corrosion on the sole plate and masonry plate	No Change		1							
River	74	240	R	Front	Sliding Plate	Exterior	Right bearing exhibits light surface corrosion on the front face of the sole plate	no change	S28-4	1							
River	75	240	L	Front	Sliding Plate	Exterior	Both bearings exhibit light surface corrosion on the front faces of the sole plates and masonry plate	increase (prev. only sole)									
River	74	240	R	Front	Sliding Plate	Interior	The anchor bolt nuts for both bearings exhibit gaps up to 1/4" and the nuts and bolt exhibit heavy surface corrosion.	No change	J27-1	2							
River	75	240	L	Front	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change	R27-2				2				
River	73	241	Both	-	Rocker Bearing	Exterior	Bearing assembly anchor bolt nuts are loose and not fully seated, with up to 3/16" gap.	no change	S27-17			2					
River	73	241	Both	-	Rocker Bearing	Exterior	Light to moderate surface corrosion on the underside of the pin	new	S27-18								
River	73	241	L	-	Rocker Bearing	Exterior	Heavy surface corrosion on the lower casting around the front right anchor bolt.	new	S27-15								
River	73	241	L	-	Rocker Bearing	Exterior	Neoprene pad between column and lower casting is bulged out toward the left, 4".	no change	S27-16								
River	73	241	Both	-	Rocker Bearing	Interior	Jam nuts for both boxes are not fully seated.	No Change									
River	73	242	Both	-	Rocker Bearing	Exterior	rior Light to moderate surface corrosion is present around the bottom perimeter of the lower castings and light surface corrosion is present at the interfaces of the upper and lower castings and interface of lower casting and pins.		\$27-5,6	1							
River	70	242	R	-	Rocker Bearing	Interior	erior One Jam nut is not fully seated.		J27-9			1					
River	71	243	L	Rear	Sliding Plate	Exterior	Right bearing exhibits light surface corrosion on the sole plate.	new		1							



				Rear /		Box Exterior		2017 Note	2019	Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Front	Bearing Type	/ Interior	2019 Inspection Note	Disposition	Photo	Lt-Mod (CS 2)	S.L. (CS 3)	Loose Fasteners	Missing / Broken	<15% T (CS 2)		<10% (CS 2)	>10% (CS 3)
River	71	243	L	Front	Sliding Plate	Exterior	Right bearing exhibits light surface corrosion on the sole plate.	new		(65.2)	(65.5)	rasteriers	y broken	(00 2)	(65 2)	(65.2)	(65.5)
River	70	243	R	Rear	Sliding Plate	Exterior	Right bearing exhibits light to moderate surface corrosion on the sole plate.	increase									
River	70	243	R	Rear	Sliding Plate	Interior	4 of 4 anchor bolts are missing jam nuts.	New					2				
River	70	243	R	Front	Sliding Plate	Interior	One of two anchor bolts for the left bearing is missing a jam nut.	No Change					1				
River	71	243	Г	Rear	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change					2				
River	71	243	L	Rear	Sliding Plate	Interior	Bird debris up to 1/4" thick is present on and around the bearing anchor bolts.	No Change	R27-9								
River	71	243	Г	Front	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change					2				
River	71	243	L	Front	Sliding Plate	Interior	Bird debris up to 1/4" thick is present on and around the bearing anchor bolts.	No Change									
River	70	244	R	-	Pot Bearing	Exterior	1 of 4 anchor bolt nuts for the left bearing are not fully seated.	no change									
River	71	244	L	-	Pot Bearing	Exterior	7 of 8 anchor bolt nuts are not fully seated.	no change									
River	71	245	L	1	Pot Bearing	Exterior	1 of 4 anchor bolt nuts for the right bearing are not fully seated.	no change									
River	71	245	L	-	Pot Bearing	Exterior	All four left bearing anchor bolt nuts are not fully seated.	no change									
River	70	246	R	Both	Sliding Plate	Exterior	All four bearings exhibit light surface corrosion on the sole plates and masonry plates	no change									
River	71	246	L	Both	Sliding Plate	Exterior	All four bearings exhibit light to moderate surface corrosion on the sole plates and masonry plates	increase									
River	70	246	R	Rear	Sliding Plate	Interior	3 of 4 anchor bolts are missing jam nuts.	Increase					2				
River	70	246	R	Front	Sliding Plate	Interior	4 of 4 anchor bolts are missing jam nuts.	New					2				
River	71	246	L	Rear	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change					2				
River	71	246	L	Rear	Sliding Plate	Interior	Bird debris up to 1/4" thick is present on and around the bearing anchor bolts.	No Change									
River	71	246	L	Front	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change	R26-5				2				
River	71	246	L	Front	Sliding Plate	Interior	Bird debris up to 1/4" thick is present on and around the bearing anchor bolts.	No Change	R26-6								
River	70	247	R	-	Pot Bearing	Exterior	5 of 8 anchor bolt nuts are not fully seated.	no change	R26-4								
River	69	247	L	-	Pot Bearing	Exterior	3 of 4 anchor bolt nuts for the left bearing are not fully seated.	No Change									



				Daan /		Day Futarian		2017 Note	2019	Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Rear / Front	Bearing Type	Box Exterior / Interior	2019 Inspection Note	Disposition	Photo	Lt-Mod (CS 2)	S.L. (CS 3)	Loose Fasteners	Missing / Broken	<15% T (CS 2)		<10% (CS 2)	>10% (CS 3)
River	70	247	R	Rear	Sliding Plate	Interior	All anchor bolts are too short for the installation of jam nuts and have moderate corrosion.	New	J26-14	(03.2)	(63.3)	rastellers	2	(63.2)	(632)	(0.5.2)	(63.3)
River	69	R1	L	Rear	Sliding Plate	Exterior	Both bearings exhibit light to moderate surface corrosion on the sole plates (visible from on top of acosta deck)	Increase		2							
River	69	R1	L	Rear	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	New					2				
River	66	R6	R	Front	Sliding Plate	Exterior	Both bearings exhibit light surface corrosion on the sole plates and masonry plates	no change		2							
River	66	R6	R	Front	Sliding Plate	Exterior	Left bearing has a gap up to 1/8" between the bronze plate and the sole plate.	no change									
River	66	R6	R	Front	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change					2				
River	66	R6	R	Front	Sliding Plate	Interior	The right anchor bolt of the left bearing is loose and can be rotated up to 1/2".	No Change	J29-2								
River	67	R6	L	Front	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change	R29-1				2				
River	66	248	R	-	Pot Bearing	Exterior	All anchor bolt nuts on both left and right bearings are loose.	no change				2					
River	67	248	Ы	1	Pot Bearing	Exterior	All anchor bolt nuts on both left and right bearings are loose.	no change				2					
River	66	249	R	ı	Pot Bearing	Exterior	All anchor bolt nuts on both left and right bearings are loose.	No Change				2					
River	67	249	ш	ı	Pot Bearing	Exterior	All anchor bolt nuts on both left and right bearings are loose.	No Change				2					
River	66	250	R	Front	Sliding Plate	Exterior	Left bearing has a gap up to 1/8" over 9" between the bronze plate and the sole plate.	no change	S29-2							1	
River	67	250	L	Rear	Sliding Plate	Exterior	Both bearings exhibit light surface corrosion on the sole plates	new									
River	66	250	R	Rear	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	New					2				
River	66	250	R	Front	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	New					2				
River	67	250	L	Rear	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change					2				
River	67	250	L	Rear	Sliding Plate	Interior	Bird debris up to 4" thick is present on and around the bearing anchor bolts.	No Change	R29-9								
River	67	250	L	Rear	Sliding Plate	Interior	Right bearing anchor bolts are not fully seated due to a lack of threads on the bolts. The right bearing, right anchor bolt is missing a washer.	New	R29-10								
River	67	250	L	Front	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change					2				



				_ ,						Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Rear /	Bearing Type	Box Exterior	2019 Inspection Note	2017 Note Disposition	2019 Photo	Lt-Mod	S.L.	Loose	Missing	<15% T	>15% T	<10%	>10%
				Front		/ Interior		Disposition	Pnoto	(CS 2)	(CS 3)	Fasteners	/ Broken	(CS 2)	(CS 2)	(CS 2)	(CS 3)
River	67	250	L	Front	Sliding Plate	Interior	Bird debris up to 1" thick is present on and	No Change									
							around the bearing anchor bolts. All anchor bolt nuts on both left and right	0-									
River	66	251	R	-	Pot Bearing	Exterior	bearings are loose.	No Change				2					
River	67	251	L	-	Pot Bearing	Exterior	All anchor bolt nuts on both left and right bearings are loose.	no change				2					
River	66	252	R	-	Pot Bearing	Exterior	All anchor bolt nuts on both left and right bearings are loose.	no change				2					
River	67	252	L	1	Pot Bearing		All anchor bolt nuts on both left and right bearings are loose.	no change				2					
River	67	253	L	Rear	Sliding Plate		Right bearing has a gap up to 3/32" between the bronze plate and the sole plate on the right rear corner.	no change									
River	66	253	R	Rear	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	New					2				
River	67	253	L	Rear	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	New					2				
River	64	254	R	ı	Sliding Plate	Exterior	Both bearings exhibit light surface corrosion on the sole plate and masonry plate	increase		2							
River	65	254	L	-	Sliding Plate	Exterior	Right bearing has a gap up to 5/16" between the bronze plate and the sole plate.	no change									1
River	65	254	L	-	Sliding Plate	Interior	Anchor bolts for both bearings are missing jam nuts.	No Change									
River	64	255	R	Front	Pot Bearing	Exterior	Top of pier cap surface is uneven causing a gap up to 1/4" between right bearing masonry plate and the cap.	No Change								1	
River	64	256	R	-	Pot Bearing	Exterior	All anchor bolt nuts on both left and right bearings are loose	no change				2					
River	65	256	L	-	Pot Bearing	Exterior	All anchor bolt nuts on both left and right bearings are loose	no change	S24-7			2					
River	65	257	L	Rear	Sliding Plate	Exterior	Left bearing exhibits light surface corrosion on the sole plate and masonry plate	no change									
River	62	257	R	Rear	Sliding Plate		Right bearing exhibits light surface corrosion on the sole plate and masonry plate	new									
River	62	257	R	Rear	Sliding Plate	Interior	3 of 4 anchor bots are missing washers. 2 of 4 anchor bolt nuts are not fully turned down and cannot be hand tightened. All four bolts are missing jam nuts	No change					2				
River	65	257	L	Rear	Sliding Plate	Interior	Left bearing, both anchor bolt nuts are loose and the right bearing, right anchor bolt nut is loose.	increase (prev. far right only)				2					



	_			Rear /		Box Exterior		2017 Note	2019	Corro	sion	Conne	ction	Bulge/Sp	lit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Front	Bearing Type	/ Interior	2019 Inspection Note	Disposition	Photo	Lt-Mod	S.L.	Loose	Missing	<15% T	>15% T	<10%	>10%
River	62	258	R	Rear	Sliding Plate	Exterior	Left bearing has a gap up to 3/16" between the bronze plate and the sole plate along the front edge and a gap up to 3/16" between the masonry plate and the pier cap.	no change	J9-17	(CS 2)	(CS 3)	Fasteners	/ Broken	(CS 2)	(CS 2)	(CS 2) 1	(CS 3)
River	62	258	R	Rear	Sliding Plate	Exterior	Right bearing has a gap up to 1/4" between the bronze plate and the sole plate full length and a gap up to 3/16" between the masonry plate and the pier cap.	no change	J9-7-12							1	
River	62	258	R	Front	Elastomeric		1/8" gap between the bearing pad and left stem over 12"	new								1	
River	63	258	L	Front	Elastomeric	-	Minor bulging of the pad for 30" under the diaphragm	new						1			
River	63	258	L	Front	Elastomeric	-	Left stem keeper plates is missing both washers.	no change									
River	63	258	L	Front	Elastomeric	-	Right keeper plate has a nut that is not flush with the washer.	no change	J9-18			1					
River	63	258	L	Rear	Sliding Plate	Interior	Right bearing, both anchor bolt nuts are loose.	New				1					
River	61	261	L	Rear	Elastomeric	-	The left and right keeper plate anchor bolt nuts are loose and are missing washers.	no change				1					
O&M	108	M3	L	Rear	Elastomeric	-	Left bearing has a gap between the bearing pad and the bottom of the beam stem, measured up to 1" for up to 15" L.	no change	J4-9								1
0&M	107A	M4		Both	Elastomeric	-	No keeper plates were noted at this location.	no change					1				
0&M	107A	M5	-	Rear	Elastomeric	-	Keeper plates for both stems are missing washers.	no change									
0&M	107A	M5	-	Front	Elastomeric	-	Keeper plates for both stems are missing washers.	no change									
0&M	106	400	R	Front	Elastomeric	-	Bearing pad is slightly over compressed at random locations.	no change						1			
0&M	106	400	R	Front	Elastomeric	-	Right stem keeper plate is missing washers.	no change									
0&M	106	400	L	Front	Elastomeric	-	Keeper plates are missing washers, and keeper has been cut to fit.	no change					1				
0&M	105B	405	L	Rear	Elastomeric	-	Bearing pad is over compressed ~3/16" over one foot under the left stem.	no change	J18-5					1			
0&M	105B	405	L	Rear	Elastomeric	-	Keeper plates for both stems are missing washers.	no change									
0&M	105B	405	L	Rear	Elastomeric	-	The nut for 1 of 2 keeper plate bolts for the left stem is not fully seated due to lack of threading	new				1					
O&M	105B	405	L	Rear	Elastomeric	-	The web plate at the right stem keeper plate exhibits minor surface corrosion, coated by inspectors	decrease	J18-6								



				Doc" /		Day Fretainte		2017 Note	2010	Corro	sion	Conne	ction	Bulge/Sp	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Rear / Front	Bearing Type	Box Exterior / Interior	2019 Inspection Note	2017 Note Disposition	2019 Photo	Lt-Mod (CS 2)	S.L. (CS 3)	Loose Fasteners	Missing / Broken	<15% T (CS 2)	>15% T	<10% (CS 2)	>10% (CS 3)
O&M	104	405	R	Rear	Elastomeric	-	Keeper plates for both stems are missing washers.	no change									
O&M	104	405	R	Rear	Elastomeric	-	One keeper plate nut is missing and the other nut cannot be hand tightened.	no change	J18-9			1					
O&M	104	405	R	Rear	Elastomeric	-	Bearing pad is rotated outward 1/4" over 5' at the left stem	new	J18-7								
O&M	105B	405	L	Front	Elastomeric	-	Bearing pad is pushed outward 1/4" over 5' between stems	new									
O&M	105B	405	L	Front	Elastomeric	-	Keeper plates for both stems are missing washers.	no change									
O&M	104	405	R	Front	Sliding Plate	Exterior	Left bearing exhibits moderate to heavy surface corrosion on the sole plate and masonry plate with up to 1/16" pack rust between the sole plate and bronze plate.	increase	J18-13- 14		1						
O&M	104	405	R	Front	Sliding Plate	Exterior	Right bearing exhibits gaps: 3/16" between the sole plate and the bronze plate and 1/4" between the bronze plate and the masonry plate. 4 shim plates are present.	no change	J18-15- 16								1
0&M	104	405	R	Front	Sliding Plate	Interior	Left bearing anchor bolts are missing nuts and the right bearing anchor bolts are missing jam nuts and washers.	no change	R18-1, 3				1				
O&M	104	406	R	1	Pot Bearing	Exterior	1 of 4 anchor bolts is slightly skewed at the right bearing and 2 of 4 are slightly skewed at the left	new	J24-19								
O&M	102	407	R		Pot Bearing	Exterior	2 of 4 anchor bolt nuts are not fully engaged at Ithe left bearing	new				1					
O&M	102	407	R	-	Pot Bearing	Exterior	Right bearing anchor bolt nuts are not fully engaged. 3 of 4 bolts are skewed and wedge washers are present at the forward two.	no change	S29-11			1					
O&M	100	408	R	Rear	Sliding Plate	Exterior	Left bearing exhibits a gap up to 1/4" x 18" L (bearing is 24" long) between the sole plate and the bronze plate as well as a 1/4" gap between the bronze plate and the masonry plate.	no change	S29-14- 16							1	
O&M	100	408	R	Rear	Sliding Plate	Exterior	Left bearing exhibits cracked paint and light surface corrosion on the masonry plate	no change									
O&M	103	408	L	Rear	Elastomeric	-	1/2" of shim plates are present below the left stem bearing pad and 3/4" of shim plates are present below the right stem bearing pad. Shim plates have light to moderate surface corrosion	increase	J24-14								
O&M	103	408	L	Rear	Elastomeric	-	Left stem keeper plate is missing washers.	no change									
O&M	103	408	L	Rear	Elastomeric	-	Right stem keeper plate is missing nuts	no change					1				



				Rear /		Boy Exterior		2017 Note	2019	Corro	sion	Conne	ction	Bulge/S _l	olit/Tear	Loss of	Bearing
Line	Block	Pier	Side	Front	Bearing Type	/ Interior	2019 Inspection Note	Disposition	Photo	Lt-Mod	S.L.	Loose	Missing	<15% T	>15% T	<10%	>10%
						,		2.0000.0.0	1	(CS 2)	(CS 3)	Fasteners	/ Broken	(CS 2)	(CS 2)	(CS 2)	(CS 3)
O&M	103	408	L	Front	Sliding Plate	Exterior	Both left and right bearings have a gap up to 1/8" between the bronze plate and the sole plate.	no change								2	
O&M	103	408	L	Front	Sliding Plate	Exterior	Left bearing exhibits light surface corrosion on the sole plate and masonry plate	new									
O&M	103	408	L	Front	Sliding Plate		Right bearing exhibits light to moderate surface corrosion on the sole plate and masonry plate	increase									
O&M	100	408	R	Rear	Sliding Plate	Interior	All nuts on all four anchor bolts are loose.	New	R18-16								
O&M	100	408	R	Rear	Sliding Plate	Interior	Anchor bolt nuts are not fully seated at both the left and right bearings.	No Change									
O&M	100	408	R	Front	Sliding Plate	Interior	All anchor bolts are missing jam nuts.	New					2				
O&M	103	408	L	Front	Sliding Plate	Interior	Left bearing, right nut and right bearing, left nut are loose.	New									
0&M	103	408	L	Front	Sliding Plate	Interior	Light surface corrosion on the anchor bolts.	New	R24-3								
O&M	100	409	R	-	Pot Bearing	Exterior	All anchor bolt nuts on both left and right bearings are loose	no change				2					
O&M	101	409	L	-	Pot Bearing	Exterior	All anchor bolt nuts on both left and right bearings are loose	no change				2					

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Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	11	1	N	Сар	Rear	Spall	8	6	1 1/2	1	Located in the bottom left corner	no change							1
Starter	11	1	N	Сар	Rear & Front	Crack	24	0.016		5	Diagonal and vertical cracks in both faces of the cap overhang, to the left of the column.	no change							
Starter	11	2	N	Сар	Left	Crack	42	HL		2	Vertical cracks throughout face	no change							
Starter	11	2	N	Сар	Rear	Spall	4	3	1/2	1	Below exterior beam south stem with a vertical crack up to 1'L extending from spall.	no change						1	
Starter	11	2	N	Сар	Front	exposed steel					Several exposed steel threaded bars up to 1" L.	no change							
Starter	10	2	S	Сар	Rear	Crack	24	HL		1	Diagonal crack extending down from the exterior beam cap notch	no change							
Starter	13	3	N	Сар	Left	Crack		HL			Map cracking over approximately 20% of surface.	no change							
Starter	13	3	N	Сар	Rear	Crack	24	HL		1	Diagonal crack extending down from beam right overhang	no change							
Starter	13	3	N	Сар	Front	Crack	24	0.01		1	Diagonal crack extending down from beam right overhang	new							
Starter	13	3	Ctr	Сар	Rear & Front	Crack	48	HL			Vertical, diagonal and random map cracks throughout.	no change							
Starter	12	3	S	Сар	Rear	Crack	18	HL		1	Diagonal crack extending down from beam left overhang	no change							
Starter	12	3	S	Сар	Front	Crack	18	HL		1	Diagonal crack extending down from beam left overhang	no change							
Starter	13	4	N	Сар	Rear	Crack	30	0.016		1	Diagonal crack extending down from beam right overhang	no change							
Starter	13	4	Ν	Сар	Rear & Front	Crack	54	HL		7	Vertical and diagonal ranging from 2" to 4'- 6", from the centerline of the column toward the south, all originating from the top	no change							
Starter	12	4	S	Сар	Rear	Crack	30	HL		1	Diagonal crack extending down from beam left overhang	no change							
Starter	12	4	S	Сар	Front	Crack	30	HL		1	Diagonal crack extending down from beam left overhang	no change						_	
Starter	13	5	N	Сар	Rear	Crack	30	HL		1	Diagonal crack extending down from beam right overhang.	no change							
Starter	13	5	N	Сар	Front	Crack	8	HL			Diagonal crack extending down from beam right overhang. Random hairline cracking is also present, to the right of the beam.	no change							
Starter	12	5	S	Сар	Right	Crack		HL			Random map cracking over approximately 50% of surface area.	no change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	12	5	S	Сар	Rear & Front	Crack	36	HL		2	Vertical crack extending down from beam left overhang, on both cap faces	no change							
Starter	12	5	S	Сар	Rear & Front	Crack	60	HL			Random map cracking with vertical cracks to the left of the beam.	no change							
Starter	12	5	S	Сар	Rear & Front	Crack	36	HL		2	Horizontal crack between the stems of the beam, both cap faces	no change							
Starter	12	6	S	Сар	Left	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
Starter	12	6	S	Сар	Rear	Crack	54	HL		1	full height vertical crack in the center	no change							
Starter	12	6	S	Сар	Bottom	Crack	6	HL		1	Diagonal crack	no change							
Starter	15	7	N	Column	Left	Crack	19	HL		1	Vertical crack in the pedestal & column originating under the middle of the bearing	no change							
Starter	15	7	N	Column	Right	Crack	19	HL		2	Vertical cracks in the pedestal & column originating under the middle of the bearing	no change							
Starter	15	7	N	Column	Right	Hole					2" diameter cored hole 8" below top of column with #10 gauge wire extending out up to walkway.	no change	S17-21						
Starter	14	7	S	Column	Front	Spall	12	2	1/2	1	There is a gouge on the front face, with associated scrape marks on the front a d left faces	new	S17-23						1
Starter	14	7	S	Column	Left	Crack	12	0.016		1	Vertical crack in the pedestal & column originating under the middle of the bearing	no change	S17-19						
Starter	14	7	S	Column	Right	Crack	12	0.016		1	Vertical crack in the pedestal & column originating under the middle of the bearing	no change							
Starter	15	8	Ν	PT Cap	Left	Crack		0.01			Map cracking with efflorescence throughout and surface cracking on post-tension block. failed caulking full perimeter	no change	S17-8						
Starter	15	8	N	PT Cap	Left	Crack	4	0.06		1	Horizontal crack in the front face of the PT cover	new	S17-9						
Starter	14	8	S	PT Cap	Right	Crack		HL			Map cracking throughout	no change				24			
Starter	14	8	S	PT Cap	Bottom	Exposed steel					Rebar support chairs exposed and exhibit moderate corrosion.	no change							
Starter	15	8	-	PT Cap	Ctr Rear & Front	Staining					Heavy water staining and algae growth	new							
Starter	15	8	-	Column	Rear & Front	Crack	240	HL			Full height vertical crack in the center	no change							

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Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	15	10	N	Column	all faces	Crack		HL			Minor random cracking throughout.	no change							
Starter	15	10	N	Column	all faces	Crack	3	0.016			Vertical cracks in the pedestal	no change							
Starter	15	10	Ν	Column	Rear	Spall	4	2	1/2	1	In the pedestal	new							
Starter	14	10	S	Column	Rear	Staining					Minor surface staining on the column.	no change							
Starter	14	10	S	Column	all faces	Crack		HL			Minor random cracking throughout.	no change							
Starter	15	11	ı	Column	all faces	Crack		HL			Minor random cracking throughout.	no change							
Starter	15	12	Ν	PT Cap	Left	Delam.	4	2.5	1 1/2	1	Front corner	no change						ı	
Starter	15	12	N	PT Cap	Left	Patch failure	10	6	1/2		4" exposed steel	no change	J6-14						1
Starter	15	12	N	PT Cap	Front	Crack		HL			Hairline map cracking at left end of pier stem	no change	J6-10			-			
Starter	15	12	-	PT Cap	Ctr Rear	Spall	2	1	1/2	2	With exposed and coated rebar	no change						2	
Starter	15	12	1	Column	Rear	Crack	36	HL		4	Random cracking throughout. Horizontal cracking spaced 1' apart, upper 10' of the column, cracks wrap around to right face	no change							
Starter	15	12	-	PT Cap	Bottom	Honey.	24	8	1/4		Front face	no change	J6-16					2	
Starter	15	12	ı	Column	Right	Patch delam	7	4			42" above ground	no change	R6-1						
Starter	15	12	1	PT Cap	Bottom	Honey.	12	8	1/4		Rear face	no change						-	
Starter	15	12	-	РТ Сар	Rear	Debris					On the beam seat behind the beams, there is debris including concrete and reinforcing bars.	no change	S16-16, 19						
Starter	16	12	S	PT Cap	Right	Crack	2	0.016			Diagonal cracks extending from both beam seat corners.	no change					1		
Starter	16	12	S	PT Cap	Right	Crack	24	HL			Diagonal cracks, one extending down from each beam seat.	no change				1			
Starter	16	12	S	PT Cap	Bottom	Patch delam	6	6			Right overhang	no change						1	
Starter	15	13	N	PT Cap	Rear	Crack	12	HL		2	Diagonal cracks extending down from beam seats.	new				2			
Starter	15	13	-	Column	Front	Crack	44	HL		2	Horizontal cracks at the top of the column that wrap around the sides, spaced ~18"	new							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	15	14	N	PT Cap	Left	Efflo.					Minor efflorescence at forward face of post-tension block out.	no change	J6-17	-					
Starter	15	14	N	PT Cap	Left	Sealant Missing					There is no sealant across the top of the PT blockout, gap is 3/8"	new	J6-19						
Starter	15	14	-	Column	Rear	Crack	60	HL		5	Horizontal cracks spaced 1' apart in the top 5 feet, extend around sides	no change							
Starter	15	15	N	PT Cap	Left	Efflo.					Moderate efflorescence around post- tension block out.	new	J6-21	-					
Starter	15	15	N	PT Cap	Left	Crack	4	0.01		1	Diagonal crack extending from forward beam seat corner.	no change				1			
Starter	15	15	N	PT Cap	Left and right	Sealant Missing					There is no sealant across the top of the PT blockout, gap is 3/8". This is typical	new							
Starter	15	15	N	PT Cap	Bottom	Spall	6	2	1/2	1	6" of exposed steel underneath the left rear beam	no change						1	
Starter	20	15	S	PT Cap	Right	Crack	6	0.01		1	Diagonal crack extending from the rear beam seat corner.	no change				1			
Starter	20	15	S	PT Cap	Right	Crack		HL			Map cracking on PT cover	no change							
Starter	21	16	N	PT Cap	Left	Efflo.					Minor efflorescence below PT cover	no change		1					
Starter	21	16	-	PT Cap	Ctr Rear	Crack	24	HL		1	Diagonal crack adjacent to right beam	no change				2			
Starter	20	16	R	PT Cap	Rear	Crack	60	HL		1	Horizontal crack between stems	new				5			
Starter	20	16	R	PT Cap	Front	Crack	16	HL		1	Horizontal crack between stems	no change				2			
Starter	21	16	-	PT Cap	Ctr Bottom	exposed steel	0.5				At the rear face	no change			1				
Starter	20	16	S	PT Cap	Right	Gap					1/4" gap along the top of the PT cover	no change							
Starter	21	17	N	PT Cap	Left	Crack	5	HL		1	Diagonal crack extending down from the rear beam seat.	no change				1			
Starter	21	17	N	PT Cap	Left	Delam.	11	7		1	Forward end	no change	J6-23					1	
Starter	21	17	-	PT Cap	Ctr Rear	Crack	48	HL		1	Horizontal crack, mid-height	no change				4			
Starter	21	17	N	PT Cap	Left	Gap					1/8" gap along the top of the PT cover	new							
Starter	20	17	S	PT Cap	Right	Gap					1/8" gap along the top of the PT cover	new							
Starter	21	17	-	Column	Rear	Crack	60	HL		2	Horizontal cracks, 1' from the cap, hairline map cracking throughout	increase							

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Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	21	18	N	PT Cap	Left	Gap					1/4" gap along the top of the PT cover	new							
Starter	21	18	N	PT Cap	Left	Spall	6	7	1/2	1	Grout coating spall in left face of overhang	new							
Starter	21	18	N	PT Cap	Right	Gap					1/4" gap along the top of the PT cover	new							
Starter	20	18	S	Column	Left	Crack	24	HL		1	Horizontal crack at the forward corner, 10" below cap	no change							
Starter	20	18	S	Column	all faces	Plywood Cover					The bottom 8ft. is protected with plywood from the adjacent building construction.	new	R7-1						
Starter	20	18	S	PT Cap	Right	Crack	16	HL		1	Diagonal crack extending from the forward beam seat corner.	no change				1			
Starter	22	19	S	Column	all faces	Plywood Cover					The bottom 8ft. is protected with plywood from the adjacent building construction.	new							
Starter	21	19	N	PT Cap	Right	Crack	24	HL		1	Vertical crack below the PT cover	no change				1			
Starter	21	19	N	PT Cap	Right	Efflo.					Moderate efflorescence below the PT cover	no change		-					
Starter	21	19	N	Column	Right	Crack	108	HL			Horizontal flexure cracks spaced 6" - 12" apart that wrap around to the front and rear faces.	no change	R6-2						
Starter	22	19	S	PT Cap	Left	Crack		HL			Shrinkage map cracking throughout	no change				1			
Starter	22	19	S	Column	Rear	Spall	2	2	1/2		left corner, 4' above ground	no change						1	
Starter	22	19	S	Column	Front	Crack	24	HL		2	Horizontal crack that wraps around both sides, 1' below the cap.	no change							
Starter	22	20	S	Column	all faces	Plywood Cover					The bottom 8ft. is protected with plywood from the adjacent building construction.	new							
Starter	21	20	N	Column	Right	Crack	108	HL			Horizontal flexure cracks spaced 8" - 12" apart that wrap around to the front and rear faces.	no change							
Starter	21	20	Ν	PT Cap	Left	Gap					1/4" gap along the top of the PT cover	new							
Starter	21	20	N	PT Cap	Right	Efflo.					Moderate efflorescence below the PT cover	no change	J6-27	1					
Starter	23	21	N	PT Cap	Left	Efflo.					Minor efflorescence below the PT cover	no change		-					
Starter	23	21	N	PT Cap	Left	Crack	26	HL			Curved crack below the cover	no change				1			
Starter	23	21	N	PT Cap	Left	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	no change				1			

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Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	23	21	N	PT Cap	Bottom	exposed steel					Four exposed steel wires below the rear and forward left stems	no change							
Starter	23	21	N	PT Cap	Front	Spall	6	6	1 1/4	1	At the top corner next to the right flange of the beam.	no change	J6-28					1	
Starter	23	21	N	PT Cap	all faces	Crack		HL			Map cracking exists over 20% of all cap faces.	no change				5			
Starter	23	21	N	PT Cap	Right	Efflo.					Moderate efflorescence below the PT cover	no change		1					
Starter	23	21	N	Column	Right	Crack	108	HL			Horizontal flexure cracks spaced 1 foot apart that wrap around to the front and rear faces.	no change							
Starter	22	21	S	PT Cap	Left	Crack		HL			Surface map cracking present	new				1			
Starter	22	21	S	PT Cap	Right	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	no change				1			
Starter	22	21	S	Сар	Front	Staining					Stains and algae, corrosion from failed joint	no change							
Starter	23	22	N	Сар	Rear & Front	Crack	24	0.013		2	Vertical crack extending down from beam right overhang	no change							
Starter	23	22	Ctr	Сар	Rear & Front	Crack	48	HL			Vertical cracking, spaced at 2'-4' centers along cap between columns	no change							
Starter	22	22	S	Сар	Right	Crack	48	HL		1	Full height hairline crack at center	no change							
Starter	22	22	S	Сар	Rear & Front	Crack	36	HL		2	Horizontal hairline crack between the stems, both cap faces.	no change							
Starter	22	22	S	Сар	Front	Crack	36	HL		2	Vertical cracks extending down from beam left overhang	no change							
Starter	23	23	N	Сар	Rear	Crack	24	HL		1	Vertical crack extending down from beam right overhang	no change							
Starter	23	23	N	Сар	Front	Crack	14	HL		1	Vertical crack extending down from beam right overhang	new							
Starter	23	23	N	Сар	Rear & Front	Crack	24	HL		4	Vertical and diagonal cracks extending from the top of the cap, typical both faces	no change							
Starter	22	23	S	Сар	Left	Crack		HL			Shrinkage map cracking throughout	no change							
Starter	22	23	S	Сар	Rear	Delam.	4	6			Left top corner with a crack up to 0.013".	no change	J7-7						
Starter	22	23	S	Сар	Right	Crack		HL			Shrinkage map cracking throughout	no change							
Starter	22	23	S	Сар	Front	Crack	48	0.013		2	Two vertical cracks extending down from the beam left overhang	no change							

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Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	22	23	S	Сар	Front	Crack	18	HL		1	Vertical crack extending from the top of the cap. Hairline random cracks ae also present	no change							
Starter	23	24	N	Сар	Front	Crack	24	HL		1	Vertical crack extending from the top of the cap	new							
Starter	23	24	N	Cap	Rear & Front	Crack	26	HL		2	Vertical crack extending down from beam right overhang	no change							
Starter	23	24	Ctr	Сар	Rear & Front	Crack	48	HL			Vertical cracks up to full height located every 3' to 4' along cap length. Cracks also exists at the south stem overhang on both faces with efflorescence.	no change							
Starter	22	24	S	Сар	Right	Crack		HL			Shrinkage map cracking throughout	no change							
Starter	22	24	S	Сар	Rear & Front	Crack	30	HL		2	Vertical crack extending down from beam left overhang	no change							
Starter	22	24	S	Сар	Rear & Front	Crack	36	HL		2	Horizontal crack between the stems, both faces.	no change							
Starter	23	25	N	РТ Сар	Left	Crack	48	HL		2	Crack that extends from bearing to bearing and a 4" diagonal crack from the forward beam seat corner	no change				1			
Starter	23	25	N	PT Cap	Left	Gap					1/4" gap along the top of the PT cover	new							
Starter	23	25	N	PT Cap	Right	Efflo.					Moderate efflorescence to the rear and below the PT cover	no change							
Starter	23	25	N	PT Cap	Right	Sealant Failure					Sealant around PT cover has failed	new	J7-9						
Starter	23	25	N	PT Cap	Front	Spall	12	3	1/2	1	Behind the right stem with 8" of exposed and coated steel.	no change	J7-12						1
Starter	23	25	N	PT Cap	all faces	Crack		HL			Map cracking exists over 20% of all cap faces.	no change				5			
Starter	23	25	N	Column	Right	Crack	84	HL		9	Horizontal flexure cracks spaced 18" - 24" apart that wrap around to the front and rear faces.	no change	J7-10,11						
Starter	22	25	S	PT Cap	Left & Right	Crack		HL			Shrinkage map cracking throughout	no change				2			
Starter	25	26	N	Cap	Left	Crack	20	ΗL		3	Diagonal cracks extending from both beam seat corners and a vertical crack x 20" starting from the bottom of cap	no change							
Starter	25	26	N	Cap	Right	Crack	12	HL		3	Diagonal cracks extending from both beam seat corners and a vertical crack x 12" starting from the bottom of cap	no change							

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Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	25	26	N	Column	all faces	crack	24			5	horizontal cracks within the top 5ft.	new							
Starter	25	26	N	Сар	all faces	Crack		HL			Shrinkage map cracking throughout	no change							
Starter	24	26	S	Сар	Left	Crack	28	HL		2	Diagonal cracks extending from both beam seat corners to the bottom of the cap.	no change							
Starter	24	26	S	Сар	Right	Crack	28	HL		2	Diagonal cracks extending from both beam seat corners to the bottom of the cap.	no change							
Starter	24	26	S	Column	Front	Crack	240	HL			Full height vertical crack at the center Shrinkage map cracking at the top 3' of the column on the right and front faces	no change							
Starter	25	26	N	Column	all faces	Honey.					Light sporadic poor consolidation voids throughout	new							
Starter	25	27	N	Сар	Left	Crack	24	HL		2	Diagonal cracks extending from both beam seat corners. Map cracking also present.	no change							
Starter	25	27	N	Сар	Right	Crack	24	HL		2	Diagonal cracks extending from both beam seat corners. Map cracking also present.	no change							
Starter	25	27	N	Column	all faces	Honey.					Light sporadic poor consolidation voids throughout	new							
Starter	25	27	N	Сар	Front	Crack	24	HL		1	Vertical hairline crack in the center which wraps underneath the cap toward the column	no change							
Starter	24	27	S	Сар	Left	Crack	24	HL		3	Diagonal cracks extending from both beam seat corners also a vertical crack extending up from the bottom at the center	no change							
Starter	24	27	S	Сар	Right	Crack	24	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
Starter	25	28	N	Сар	Left	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
Starter	25	28	N	Column	Rear	Crack		HL			Random cracking throughout.	no change							
Starter	25	28	N	Column	Rear	Spall	20	6	3/4		Bottom left corner	no change							1
Starter	25	28	N	Column	Left	Spall	2	2	1/4		bottom, forward edge	new							1
Starter	25	28	N	Сар	Right	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
Starter	25	28	N	Сар	Front	Crack	40	HL		1	Vertical crack	no change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	24	28	S	Сар	Left	Crack	24	HL		2	Diagonal crack extending from the beam seat corners, extending to the bottom. Random hairline cracking is also present.	no change							
Starter	24	28	S	Сар	Right	Crack		HL			Random shrinkage cracking throughout.	no change							
Starter	24	28	S	Сар	Front	Crack		HL			Map cracking throughout.	no change							
Starter	24	29	R	PT Cap	Right	Gap					1/4" gap along the top of the PT cover	new							
Starter	27	29	N	PT Cap	Left	Sealant Failure					Sealant is missing along the top of the PT cover	new							
Starter	27	29	-	PT Cap	all faces	crack					Surface map cracking is present throughout	new				24			
Starter	27	29	-	PT Cap	Ctr Rear	Crack	8	HL		2	vertical cracks near the centerline	new				1			
Starter	24	29	S	PT Cap	Right	Efflo.					Moderate efflorescence below the PT cover	no change		1					
Starter	24	29	S	PT Cap	Right	Spall	7.5	4	1 1/2	1	Failure of previous repair, forward edge of overhang flange	no change	J7-23						1
Starter	27	30	-	Column	Front	Delam.	5	2		1	Right corner of pedestal	no change						1	
Starter	26	31	S	Column	all faces	Crack		HL			Wrap around crack, 7' above the sidewalk.	no change							
Starter	27	31	-	Column	Left	Crack	18	0.01		2	Vertical cracks extending down from bearing pedestal	no change	S16-26						
Starter	27	31	ı	Column	Front	Spall	12	1	1 1/2	1	Bottom left corner	no change	S16-20						1
Starter	60	315	S	PT Cap	Front and rear	Crack	144	0.05		1	Vertical crack, 1' from right end that wraps underneath the bottom of the cap	Increase	S16- 24,25				1		
Starter	60	315	S	PT Cap	Front	Crack	24	0.01		1	Vertical crack, under the right bearing of the north beam	new				1			
Starter	61	315	Ν	PT Cap	Left	Efflo.					The caulk around the PT cover has failed and there is efflorescence leaching from the cover	new			1				
Starter	61	315	N	PT Cap	Bottom	Pigeon					There are multiple pigeon carcasses stuck between the front face of the cap and the steel box	new	S16-22		1				
Starter	60	315	S	РТ Сар	Bottom	exposed steel					There are numerous small pieces of exposed and coated steel on the underside	no change			1				
Starter	27	32	-	PT Cap	Ctr Rear	Delam.	36	12	5	1	On top edge at beam seat.	no change	J12-7					3	



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	28	32	S	PT Cap	Rear	Crack	7	0.016		2	Cap stem at right corner	Increase					1		
Starter	27	32	-	PT Cap	Ctr Front	Spall	4	2.5	1	1	Adjacent to the north beam, south overhang	no change						1	
Starter	28	32	S	PT Cap	Right	Gap					1/4" gap along the top of the PT cover	New							
Starter	27	32	N	PT Cap	Left	Gap					1/2" gap along the top of the PT cover	New							
Starter	27	32	N	PT Cap	Left	Crack	4	0.013		1	Extending from the rear beam seat	New					1		
Starter	28	32	S	PT Cap	Right	Efflo.					Minor efflorescence leaching from PT cover	New							
Starter	28	32	S	PT Cap	Front	Spall	6	3.5	1/2	1	Behind the south stem, with exposed rebar.	no change			1				
Starter	27	32	1	Column	all faces	Crack		HL			Map cracking throughout	no change							
Starter	27	33	-	Column	all faces	voids					poor consolidation voids, isolated throughout	new	R12-1			1			
Starter	27	33	N	PT Cap	Left	Gap					1/4" gap along the top of the PT cover	New							
Starter	30	33	S	PT Cap	Right	Gap					1/4" gap along the top of the PT cover	New							
Starter	27	34	N	PT Cap	Left	Gap					1/4" gap along the top of the PT cover	New							
Starter	30	34	S	PT Cap	Right	Gap					1/4" gap along the top of the PT cover	New							
Starter	27	34	-	PT Cap	Ctr Rear	Patch Cracking					1 SF patch near south beam left flange has map cracking throughout.	no change						1	
Starter	27	34	1	Column	Rear	Crack	12	HL		1	left corner, 2.5' below cap.	no change							
Starter	27	34	-	Column	Right	Patch delam	9	5		1	8' above the ground	new							
Starter	29	35	N	PT Cap	Left	Gap					1/4" gap along the top of the PT cover	New							
Starter	29	35	N	PT Cap	Left	Crack	_	HL			Map cracking throughout	no change				1			
Starter	30	35	S	PT Cap	Right	Crack	3	HL		2	Diagonal cracks extending from both beam seat corners.	no change				1			
Starter	29	35	N	PT Cap	Right	Gap					1/8" gap along the top of the PT cover	New							
Starter	29	35	-	PT Cap	Ctr Front	Spall	12	7	1	1	Behind the left flange of the right beam.	no change	J12-12						1



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	29	35	-	Column	Front	Patch delam	12	12		1	Right edge, 8' above the ground.	no change						1	
Starter	29	36	N	PT Cap	Left	Gap					1/8" gap along the top of the PT cover	no change							
Starter	30	36	S	PT Cap	Right	Gap					1/w" gap along the top of the PT cover	no change							
Starter	29	37	N	PT Cap	Left	Gap					1/4" gap along the top of the PT cover	no change							
Starter	30	37	S	PT Cap	Right	Gap					1/4" gap along the top of the PT cover	new							
Starter	29	38	L	PT Cap	Front	Spall	2.5	1.5	1		Behind the left stem of the left beam, exposed steel	no change			1				
Starter	32	38	R	PT Cap	Front	Spall	1	1	1/2		Behind the right stem of the right beam, exposed nail	new			1				
Starter	29	38	L	PT Cap	Bottom	Spall					3 locations of exposed steel due to popouts from insufficient cover on the underside of the cap, north of the column. Coated by inspectors.	no change			1				
Starter	32	38	R	PT Cap	Rear	Spall	18	6	1	1	Behind the diaphragm of the south beam	new			1				
Starter	32	38	R	PT Cap	Rear	Spall	8	8	1/2	1	Behind right overhang of beam	new			1				
Starter	29	38	-	PT Cap	Left	Crack	24	HL			1/2" gap along the top of the PT cover Hairline map cracking with moderate efflorescence is also present	no change							
Starter	31	39	N	PT Cap	Left	Gap					1/4" gap along the top of the PT cover	no change							
Starter	31	39	Ctr	PT Cap	Bottom	Spall	2	2	1/4	9	exposed steel	no change			6				
Starter	32	39	S	PT Cap	Right	Gap					1/4" gap along the top of the PT cover	new							
Starter	32	39	S	Column	Rear	Spall	3	1	1/4	1	Right corner, 6' below cap.	no change						1	
Starter	31	40	N	PT Cap	Left	Gap					1/2" gap along the top of the PT cover	no change							
Starter	31	40	N	Column	Right	Crack	108	HL			Horizontal flexure cracks spaced 1 foot apart that wrap around to the front and rear faces.	no change	R12-2,3						
Starter	31	40	N	PT Cap	Right	Efflo.					Moderate efflorescence below the PT cover. Deteriorated caulk around PT cover.	no change							
Starter	31	40	N	PT Cap	Front	Crack	12	HL		1	Diagonal crack extending down from beam seat notch.	no change				1			



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	31	40	N	PT Cap	Bottom	Honey.					1/2 SF of 1/2" deep honeycombing on the underside of the cap	no change							
Starter	32	40	S	Column	Left	Spall / Delam.	24	12	1/2	1	Located on the top face of the left step	no change	R11-1						2
Starter	32	40	S	Сар	Left	Delam.	12	3		1	At the forward bearing	new							
Starter	32	40	S	Column	Left	Spall	3	3	1/2	1	Left face above step exhibits a 3" diameter x 1/2" deep spall with exposed and coated rebar	no change						1	
Starter	32	40	S	Column	all faces	Crack	24	HL			Horizontal cracks wrap around the column at all four corners, spaced 14-18" throughout. Hairline map cracking also present.	no change							
Starter	32	40	S	Cap	Rear	Spall	5	4	3/4	2	Spall with 1 exposed and coated rebar, left of the left stem. Also a 2" diameter x 1/2" spall behind the left stem.	no change			1				
Starter	32	40	S	Сар	Bottom	exposed steel				2	Up to 2" L in the underside of the left and right sides	no change			2				
Starter	32	40	S	РТ Сар	Left & Right	Crack	6	HL		4	Diagonal cracks extending from both beam seat corners. Map cracking is also present.	no change				2			
Starter	33	41	N	Column	Rear	Crack		0.013		3	Hairline wrap around cracks, spaced 8-10", top half of the column.	no change							
Starter	33	41	N	Сар	Right	Patch delam	20	6				no change							
Starter	33	41	N	Сар	Right	Wire					An electrical wire, approximately 10 gauge, is extending out from cap and is not connected to anything	no change							
Starter	32	41	S	Сар	Left	Spall	4	3	3/4	1	In overhang with 2" of exposed rebar	no change			1				
Starter	32	41	S	Column	Right	Crack	12	HL		10	Horizontal wrap around cracks on the rear and front corners every 2', full height.	no change							
Starter	35	42	N	Сар	Left	Gap					1/4" gap along the top of the PT cover	new							
Starter	35	43	N	Сар	Left	Crack		HL			Surface cracking throughout skim coating	no change							
Starter	35	43	N	Сар	Right	Crack	28	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
Starter	32	43	S	Сар	Rear	Crack		HL			Random cracking throughout	no change							
Starter	32	43	S	Column	Multiple	Crack	24	HL		6	Horizontal cracks, located 3" and 1' below the cap on the left, front, and right faces (2 cracks per face)	no change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	37	44	N	Cap	Left	Crack	4	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
Starter	37	44	N	Сар	Front	Debris					Bird nest present on beam seat	new							
Starter	37	44	N	Сар	Rear	Crack	9	HL		1	Diagonal crack extending downward from the beam seat corner.	no change							
Starter	37	44	Ctr	Сар	Front	Debris					Bird nest and debris on top of the beam seat adjacent to the left beam	no change	J11-12- 13						
Starter	34	44	S	Сар	Right	Delam.	14	7	4	1	Below the forward keeper plate.	no change						1	
Starter	34	44	S	Сар	Right	Crack		HL			Map cracking throughout face	no change							
Starter	34	44	S	Сар	Front	Debris					Debris up to 1" deep on beam seat at left stem bearing	no change							
Starter	34	44	S	Cap	Rear & Front	Crack	14	HL		2	Diagonal crack extending downward from the beam seat corner, both faces.	no change							
Starter	37	45	N	Сар	Rear	Crack	24	HL		1	Vertical crack extending down from beam right overhang	no change							
Starter	37	45	N	Сар	Front	Crack	30	0.013		1	Vertical crack extending down from beam right overhang	no change							
Starter	37	45	Ν	Сар	Rear & Front	Crack	48	HL			Vertical cracks up to full height	no change							
Starter	34	45	S	Сар	Front	Crack	30	HL		3	Vertical cracks extending down from the top of the cap, left of the beam	no change							
Starter	34	45	S	Сар	Right	Crack	6	HL		2	Extending down from beam seat corners	new							
Starter	34	45	S	Сар	Front	Crack		HL			Map cracking at random locations	no change							
Starter	34	45	S	Сар	Rear & Front	Crack	36	HL		2	Vertical crack extending down from beam left overhang on each face	no change							
Starter	37	46	N	Сар	Left	Crack	30	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
Starter	37	46	N	Сар	Rear	Crack	36	HL		1	Vertical crack below beam right drip edge	no change							
Starter	37	46	N	Сар	Front	Crack	20	0.013		1	Diagonal crack extending from right stem overhang	increase (prev. HL)							
Starter	37	46	N	Сар	Front	Crack		HL			Random cracking throughout	no change			_		_		
Starter	34	46	S	Сар	Rear	Crack	24	HL		1	Vertical crack extending down from beam left overhang	no change							
Starter	34	46	S	Сар	Right	Crack		HL			Random map cracking throughout.	no change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
Starter	34	46	S	Сар	Front	Crack	24	HL		1	Vertical crack extending down from beam left overhang	no change							
Starter	34	46	S	Сар	Rear & Front	Crack		HL			Random cracking throughout	no change							
North	37	47	N	Сар	Rear	Crack	24	HL		1	Vertical crack	no change							
North	37	47	N	Cap Stem	Rear	Spall	12	7	1 1/2	1	1ft. from left edge	no change							1
North	37	47	N	Сар	Right	Crack	5	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	37	47	N	Column	all faces	Crack	192	HL		2	Horizontal cracks located 2' and 4' below cap, around full perimeter (above and below a repaired area)	no change							
North	34	47	S	Сар	Right	Crack		HL			Map cracking throughout	no change							
North	34	47	S	Column	Front	Crack	60	HL		2	Horizontal cracks approximately 3' and 6' from top of column.	no change							
North	39	48	L	Сар	Left	Crack	30	HL		2	Diagonal cracks extending from both beam seat corners. Map cracking is also present.	no change							
North	39	48	L	Сар	Rear	Crack	42	HL		5	Full height vertical and diagonal hairline cracks	no change							
North	39	48	_	Сар	Right	Crack	24	HL		2	Diagonal cracks extending from both beam seat corners and a vertical crack x 24" starting from the bottom of pier cap. Random map cracking also present	no change							
North	39	48	L	Сар	Front	Crack	40	HL		1	Vertical crack between beam stems. Random map cracking is also present.	no change							
North	34	48	R	Сар	Front	Crack		HL			Map cracking throughout	no change							
North	34	48	R	Cap	Left	Crack	42	HL		2	Diagonal/horizontal cracks extending from beam seat to beam seat	no change							
North	34	48	R	Сар	Left	Delam.	6	4		1	On top of the rear beam seat	new							
North	34	48	R	Сар	Left	Delam.	6	4		1	On top of the forward beam seat	new							
North	34	48	R	Сар	Right	Crack	42	0.013		2	Diagonal/horizontal cracks extending from beam seat to beam seat	no change							
North	36	49	R	Cap	Left & Right	Crack	30	HL		4	Diagonal cracks extending from both beam seat corners. Random shrinkage cracks also present.	no change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	39	50	L	Cap	Left	Crack	18	HL		2	Diagonal cracks extending from both beam seat corners. Map cracking also present.	no change							
North	36	50	R	Сар	Right	Crack	42	HL		1	Diagonal/horizontal crack extending from beam seat to beam seat. Shrinkage map cracking also present	new							
North	36	50	R	Сар	Rear	Crack		HL			Map cracking throughout	new							
North	36	50	R	Сар	Front	Crack	18	HL		1	Between beam stems	no change							
North	39	51	1	Cap	Ctr Rear & Front	Crack	96	HL		2	Negative moment cracks that wrap over the cap and extend down both faces up to 2.5'.	no change							
North	39	51	-	Сар	Left & Right	Crack	8	HL		4	Diagonal cracks extending from both beam seat corners. Random shrinkage cracks also present.	no change							
North	39	52	1	Сар	Ctr Rear	Crack	14	HL		3	Vertical cracks	no change							
North	39	52	-	Сар	Ctr Rear	Spall	24	4	1 1/2	1	Cap Stem	no change	J12-29- 30						2
North	39	52	-	Сар	Ctr Front	Spall	3	6	1/2	1	Below the right stem of the left beam.	no change							1
North	39	52	-	Сар	Ctr Front	Spall	3	2	1	6	perimeter of cutout	no change						3	
North	36	52	R	Сар	Right	Crack	10	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	39	52	-	Сар	Bottom	Exposed steel					Rebar support chairs exposed.	no change							
North	41	52A	1	Cap Stem	Ctr Rear	Crack	28	HL		3	Vertical cracks throughout face	no change							
North	40	52A	R	Сар	Front	Crack		HL		3	Vertical cracks	no change							
North	41	52A	-	Сар	Bottom	Exposed steel					Rebar support chairs exposed throughout the underside	no change							
North	41	53	-	Сар	Rear & Front	Crack	180	HL		8	Negative moment cracks with efflorescence that wrap over the cap and extend down both faces up to 5'.	increase (prev. 3 noted)	S17- 30,31	3					
North	41	53	-	Сар	Left	Crack	24	HL		1	Vertical crack extending down from the rear anchor bolt	new							
North	41	54	L	Сар	Left	Crack	24	HL		3	14" diagonal cracks extending from both beam seat corners and a vertical crack x 24" starting from the bottom of pier cap.	no change							
North	41	54	L	Column	Left	Spall	12	6	1/2	1	At location of previous street light connection	no change	R20-1						1



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	41	54	L	Сар	Front	Crack	20	HL		1	Vertical hairline crack below beam	no change							
North	41	54	-	Сар	Ctr Rear	Crack	60	HL		4	Full height vertical cracks in the cap and stem , some with efflorescence, between the beams	no change							
North	41	54	-	Сар	Ctr Front	Crack	60	HL		7	Full height vertical cracks in the cap and stem, between the beams, one with a popout with exposed steel	Increase	R20-2		1				
North	40	54	R	Сар	Right	Crack	24	HL		3	16" diagonal cracks extending from both beam seat corners and a vertical crack x 24" starting from the bottom of pier cap.	no change							
North	40	54	R	Сар	Front	Crack	36	HL		3	Vertical hairline cracks below beam	no change							
North	41	55	L	Сар	Left	Crack	24	HL		3	Diagonal cracks extending from both beam seat corners, also a vertical crack extending up from the bottom of the cap at the center.	Increase (prev 2)							
North	41	55	L	Сар	Rear	Crack	24	HL		1	Diagonal crack between stems	new							
North	41	55	-	Сар	Ctr Rear	Crack	16	HL		2	Diagonal crack extending down from the bearing area of the inboard stem of each beam	no change							
North	41	55	-	Сар	Ctr Rear	Exposed steel					There is a steel bar 1" L protruding out of the rear face under the right overhang of the left beam.	no change							
North	41	55	-	Сар	Ctr Rear & Front	Crack	180	HL		3	Negative moment cracks that wrap over cap and extend down both faces up to 5'.	no change							
North	40	55	R	Сар	Right	Crack	30	HL		3	Diagonal cracks extending from both beam seat corners, also a vertical crack extending up from the bottom of the cap at the center.	no change							
North	41	56	L	Сар	Left	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners. Map cracking also present.	no change							
North	41	56	-	Сар	Ctr Rear	Crack	24	HL		2	Diagonal crack extending down from the bearing area of the inboard stem of each beam	Increase (pre. 16")							
North	41	56	-	Сар	Ctr Front	Crack	16	HL		2	Diagonal crack extending down from the bearing area of the inboard stem of each beam	no change							
North	41	56	-	Сар	Ctr Rear & Front	Crack	138	HL		3	Negative moment crack that wraps over cap and extends down both faces up to 40". Also 2 vertical cracks on the rear face.	no change							

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Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	40	56	R	Сар	Right	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	43	57	L	Сар	Left	Crack	18	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	43	57	,	Сар	Ctr Rear	Crack	16	HL		4	Diagonal crack extending down from the bearing area of the inboard stem of each beam, also vertical cracks extending down from the flange overhangs	Increase (only diagonal cracks prev. noted)							
North	43	57	-	Сар	Ctr Front	Crack	30	HL		2	Diagonal crack extending down from the bearing area of the inboard stem of each beam	no change							
North	43	57	1	Сар	Ctr Rear & Front	Crack	180	0.01		1	Negative moment crack that wraps over cap and extends down both faces up to 5'. Minor efflorescence	Increase (pre. HL)	R20-10	1					
North	40	57	R	Сар	Right	Crack	24	HL		3	Diagonal cracks extending from both beam seat corners that intersect a vertical crack 2' L up from the bottom at the midpoint.	no change							
North	43	57	1	Column	Rear	Delam.	3	3		1	At the rear light bracket	no change						1	
North	43	58	L	Сар	Left	Crack	9	HL		2	Diagonal crack extending from the seat corners.	no change							
North	43	58	-	Сар	Ctr Rear	Delam.	8	2		1	At the left keeper plate for the right beam	no change						1	
North	43	58	-	Сар	Ctr Rear & Front	Crack	120	HL		6	Negative moment cracks that wrap over cap stem and extend down both faces up to 2.5'.	no change							
North	43	59	_	Сар	Left	Crack	18	HL		3	18" diagonal cracks extending from both beam seat corners and a vertical crack starting from the bottom of pier cap.	no change							
North	43	59	L	Сар	Rear	Crack	20	HL		2	Diagonal cracks extending from the left stem	new							
North	43	59	-	Сар	Ctr Rear	Crack	29	HL		2	Diagonal crack extending down from the bearing area of the inboard stem of each beam	no change							
North	43	59	-	Сар	Ctr Rear & Front	Crack	144	HL		2	Negative moment cracks that wrap over cap and extend down both faces up to 4'.	Increase (prev 3ft on each face)							
North	43	59	L	Сар	Front	Crack	43	HL		1	Vertical hairline crack between the beam stems.	Increase (pre. 30")							
North	43	59	-	Сар	Ctr Front	Crack	16	HL		4	Diagonal crack extending down from the bearing area of the inboard stem of each beam, also from the flange overhangs	no change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	42	59	R	Сар	Right	Delam.	6	3		1	In grout coating no beam seat at the forward beam with cracking up to 1/16" for 9".	no change						1	
North	42	59	R	Сар	Right	Crack	15	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	43	60	-	Сар	Ctr Rear	Crack	10	HL		2	Diagonal crack extending down from the bearing area of the inboard stem of each beam	new							
North	43	60	-	Сар	Ctr Rear	Crack	54	HL		2	Full height vertical crack in the center and a 2'-6" vertical crack from the left beam overhang. Map cracking present.	no change							
North	43	60	ı	Сар	Ctr Front	Crack	54	HL		3	One vertical crack extending down from each beam overhang. Also a 10" diagonal crack from the left beam stem.	no change							
North	43	60	1	Сар	Ctr Bottom	Spall	3	1	1/2	1	In front of the column with an exposed and coated wire.	no change						1	
North	43	61	L	Сар	Left	Crack	6	HL		1	Diagonal crack extending from the rear beam seat corner.	new							
North	43	61	Ctr	Сар	Rear	Crack	36	HL		1	Vertical crack extending from the left beam overhang	new							
North	43	61	Ctr	Сар	Front	Crack	14	0.01		1	Diagonal crack extending from the bearing area of the left beam inboard stem	Increase (pre. 12")							
North	43	61	Ctr	Сар	Rear & Front	Crack	138	HL		10	Negative moment cracks above the left column that wrap over cap and extend down both faces up to 4'. Some with efflorescence	no change	R20-14	5					
North	42	61	R	Сар	Rear	Delam.	6	4	5		At top right corner	no change	R21-1					1	
North	42	61	R	Сар	Right	Crack	8	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	42	61	R	Сар	Front	Crack	48	HL		6	Vertical and diagonal cracks between beam stems	no change							
North	45	62	٦	Сар	Left	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	45	62	L	Сар	Rear	Debris					Bearing area is covered with bird nests and debris.	no change	R20-16						
North	45	62	Ctr	Сар	Rear	Crack	30	HL		2	Diagonal cracks with efflorescence extending downward from the left beam seat corner and the top flange notch.	no change	R20-15	2					
North	45	62	Ctr	Сар	Rear & Front	Crack	96	HL		11	Negative moment cracks that wrap over cap and extend down both faces up to 2'.	no change		7					



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	45	62	Ctr	Cap	Rear & Front	Staining					Minor water staining on the cap.	no change							
North	45	62	L	Сар	Front	Staining					Heavy water staining and algae	new	R20-17						
North	45	62	L	Сар	Front	Debris					Bearing area is covered with wet debris.	no change	R20-18						
North	45	62	L	Сар	Front	Crack	12	HL		1	Diagonal crack with minor efflorescence extending downward from the beam seat corner.	no change		1					
North	42	62	R	Сар	Rear	Debris					Bearing area is covered with bird nests and debris.	no change							
North	42	62	R	Сар	Front	Staining					Heavy moisture and mildew staining on the front face.	new							
North	42	62	R	Сар	Right	Crack	12	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	45	63	L	Сар	Left	Crack	6	HL		1	Diagonal crack extending from the forward beam seat corner.	no change							
North	45	63	Ctr	Сар	Rear & Front	Crack	138	0.016		6	Negative moment cracks above the left column that wrap over cap and extend down both faces up to 3'.	no change							
North	44	63	R	Сар	Right	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	Increase (pre. 6")							
North	45	64	L	Сар	Left	Crack	8	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	45	64	L	Сар	Rear & Front	Crack	114	HL		6	Negative moment cracks that wrap over cap and extend down both faces up to 3'.	Increase (prev. 2')							
North	44	64	R	Сар	Right	Crack	10	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	45	65	Ctr	Сар	Rear	Crack	5	HL		1	Diagonal crack extending from the left beam, right stem bearing.	new							
North	45	65	Ctr	Сар	Front	Crack	11	HL		1	Diagonal crack extending from the left beam, right stem bearing.	new							
North	45	65	Ctr	Сар	Rear & Front	Crack	114	HL		5	Negative moment cracks that wrap over cap and extend down both faces up to 2'.	no change							
North	45	66	L	Сар	Left	Delam.	5	3		1	At the rear beam keeper plate	new						1	
North	45	66	L	Сар	Left	Delam.	16	3.5	3	1	Under the forward beam keeper plate	no change						1	
North	45	66	L	Сар	Left	Crack	15	HL	_	2	Diagonal cracks extending from both beam seat corners.	Increase (pre. 14")		_	_			_	
North	45	66	L	Cap	Rear	Crack	24	HL		1	Vertical crack between stems	new							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	45	66	Ctr	Сар	Rear	Crack	30	HL		2	Diagonal cracks extending downward from the left beam seat corner and top flange.	no change							
North	45	66	Ctr	Сар	Rear & Front	Crack	138	HL		9	Negative moment cracks with efflorescence above left column, spaced at ~2' that wrap over cap and extend down both faces up to 54".	Increase (pre. 6)		5					
North	45	66	Ctr	Сар	Front	Crack	30	HL		2	Diagonal cracks with efflorescence extending downward from the left beam seat corner and top flange notch.	no change		2					
North	45	66	Ctr	Сар	Rear & Front	Crack	54	HL		5	Negative moment cracks with efflorescence that wrap over cap and extend down both faces up to 54".	no change							
North	45	66	Ctr	Сар	Rear	Patch cracking		HL			Large patch with random cracks at the top adjacent to the left overhang of the right beam.	no change	R22-7						2
North	45	66	Ctr	Сар	Front	Crack	12	HL		1	Diagonal crack extending downward from the right beam seat corner.	no change							
North	46	66	R	Сар	Right	Crack	42	HL		3	18" diagonal cracks extending from both beam seat corners and a vertical crack x 42" starting from the bottom of pier cap.	no change							
North	46	66	R	Column	Through out	Crack	72	HL		1	Vertical cracks at the bottom of the column on the front and right faces. Horizontal cracks also present	increase							
North	45	67	L	Сар	Left	Crack	8	HL		1	Diagonal crack extending from the forward beam seat corner.	no change							
North	45	67	Ctr	Сар	Front	Crack	6	HL		1	Diagonal crack extending from the left beam, right stem bearing.	new							
North	45	67	L	Сар	Rear & Front	Crack	138	HL		12	Negative moment cracks above the left column that wrap over cap and extend down both faces up to 3'.	Increase (pre. 6)	R20-21	9					
North	45	67	L	Сар	Rear & Front	Crack		HL		1	Horizontal crack extending from right beam to 1ft. left of the left column.	new							
North	45	67	L	Column	Left	Delam.					The grout coating on the rear and front faces is delaminated up to 3ft wide, full height, with map cracking throughout.	new	S20-3					1	
North	46	67	R	Column	Left	Spall	12	12	1/4	1	In the grout coating, 4' from the ground. Also 3 smaller spalls, front and left face.	increase	S22-1					1	
North	46	67	R	Сар	Right	Crack	17	HL		2	Diagonal cracks extending from both beam seat corners.	Increase (pre. 15")							
North	47	68	L	Сар	Left	Crack	30	HL		2	Diagonal cracks extending from both beam seat corners.	no change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	47	68	-	Cap	Ctr Front	Crack	29	HL		1	Diagonal crack from the left stem bearing of the right beam	new							
North	47	68	-	Сар	Ctr Front	Crack	26	HL		1	Vertical crack extending from the left overhang of the right beam.	new							
North	47	68	-	Сар	Ctr Front	Crack	38	HL		1	Diagonal crack adjacent to right stem of left beam	no change							
North	47	68	-	Сар	Ctr Rear & Front	Crack	167	0.01		4	Negative moment cracks that wrap over cap and extend down both faces up to 4.5'.	no change							
North	46	68	R	Сар	Right	Crack	36	HL		3	Horizontal crack between beam seat corners and 15" L diagonal cracks extending from both beam seat corners.	no change							
North	47	68	-	Column	Front	Delam.	30	30		1	4' from ground with map cracking throughout the face	no change	S21-1					1	
North	47	69	L	Сар	Left	Delam.	7	5.5	1	1	Beneath the rear keeper plate	no change						1	
North	47	69	L	Cap	Left	Crack	12	HL		2	Diagonal cracks with minor efflorescence extending from both beam seat corners.	no change							
North	47	69	-	Сар	Ctr Rear	Popouts	2	2	1/2	10	10 popouts with exposed rebar up to 2" diameter between beams.	no change		6					
North	46	69	R	Сар	Front	Exposed steel					5 sets of exposed chairs due to insufficient cover	no change							
North	47	69	-	Сар	Ctr Front	Exposed steel					10 sets of exposed chairs due to insufficient cover	no change							
North	47	69	-	Сар	Ctr Rear & Front	Crack	72	HL		4	Negative moment cracks that wrap over the stem and extend down both faces up to 1.5'. 3 into the cap	no change							
North	47	69	-	Сар	Ctr Rear & Front	Staining					Moderate water staining on the cap.	no change							
North	46	69	R	Сар	Right	Crack	16	HL		2	Diagonal cracks with minor efflorescence extending from both beam seat corners.	Increase (pre. 12")							
North	47	69	-	Column	Front	Delam.	4	4		1	Located at the street light	no change							
North	47	69	-	Column	Through out	Crack	228	HL		3	Vertical cracks up to full height in the rear, left, and front faces	no change	S21-2						
North	47	69	-	Column	Through out	Caulk failure					Caulking around the base of the column is failing, leaving gaps.	no change	S21-3						
North	47	70	L	Сар	Left	Crack	8	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	47	70	-	Сар	Ctr Rear	Crack	36	HL		1	Vertical crack extending down from right overhang of left beam	no change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	47	70	-	Сар	Ctr Rear & Front	Crack	138	0.013		1	Negative moment crack at the centerline that wraps over the cap and extends down both faces up to 3'.	no change							
North	47	70	-	Сар	Ctr Rear	Crack	36	HL		1	Vertical crack extending down from left overhang of right beam	no change							
North	46	70	R	Сар	Right	Crack	36	HL		1	Horizontal crack between beam seat corners	no change							
North	47	70	-	Сар	Ctr Front	Crack	18	HL		1	Vertical crack extending down from left overhang of right beam	no change							
North	47	70	-	Сар	Ctr Front	Crack	14	HL		1	Diagonal cracks extending from Right beam left stem bearing	new							
North	47	70	-	Column	Front	Crack	228	HL		3	Full height vertical crack on the front face.	no change							
North	47	71	_	Cap	Left	Crack	9	ΗL		3	Diagonal cracks extending from both beam seat corners. Also a 24" vertical crack extending from the bottom	increase							
North	47	71	-	Column	Through out	Caulk failure					Caulking around the base of the column is failing, leaving gaps.	no change							
North	47	71	1	Column	Left	Spall	4	3	1/8	1	Grout coating spall	new				1			
North	47	71	-	Сар	Ctr Rear & Front	Crack	138	0.01		1	Negative moment crack that wraps over cap and extends down both faces up to 3'.	no change							
North	47	72	L	Сар	Left	Crack	9	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	47	72	L	Сар	Left	Crack	14	HL		1	Horizontal crack under the rear beam bearing.	no change							
North	47	72	1	Cap	Ctr Rear & Front	Crack	116	ΗL		5	Negative moment cracks that wrap over cap stem and extend down both faces up to 2'-4" and 8" into the cap face	no change							
North	47	72	-	Column	Through out	Caulk failure					Caulking around the base of the column is failing, leaving gaps.	new	S21-5						
North	47	72	-	Column	Front						Impact damage to decorative brick base	new	S21-6			1			
North	46	72	R	Сар	Right	Crack	9	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	47	73	L	Сар	Left	Crack	18	HL		2	Diagonal cracks extending from both beam seat corners.	Increase (pre. 15")							
North	47	73	-	Сар	Ctr Rear	Crack	23	HL		2	Diagonal crack with efflorescence extending down from the bearing area of the inboard stem of each beam	no change		2					

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Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	47	73	-	Сар	Ctr Front	Crack	9	HL			Diagonal crack extending from the left stem bearing of the right beam Surface map cracking throughout	no change							
North	47	73	ı	Сар	Ctr Rear & Front	Crack	156	HL		1	Negative moment crack that wraps over cap and extends down both faces up to 3'-9".	no change							
North	46	73	R	Сар	Right	Crack	15	HL		2	Diagonal cracks extending from both beam seat corners. Map cracking also present.	no change							
North	47	73	-	Column	Front	Crack	8	HL		1	At the top of the light base.	no change							
North	47	74	L	Сар	Left	Crack	10	HL		2	Diagonal cracks extending from both beam seat corners. Map cracking also present.	no change							
North	47	74	-	Сар	Ctr Rear & Front	Crack	138	HL		3	Negative moment cracks with efflorescence that wrap over the cap and extend down both faces up to 3'.	no change							
North	47	74	-	Сар	Ctr Front	Crack	36	HL		4	Vertical cracks extending from each beam overhang. Also diagonal cracks extending from both stem bearings up to 27".	new							
North	47	74	-	Сар	Ctr Rear	Crack	36	HL		4	Vertical cracks extending from each beam overhang. Also diagonal cracks extending from both stem bearings up to 6".	new							
North	47	74	-	Column	Through out	Caulk failure					Caulking around the base of the column is failing, leaving gaps.	new							
North	46	74	R	Сар	Right	Crack	36	HL		2	Diagonal cracks extending from both beam seat corners that meet in the middle	no change							
North	51	75	L	Сар	Left	Crack	7	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	51	75	-	Сар	Ctr Rear & Front	Crack	102	HL		5	Negative moment cracks that wrap over the cap stem and extend down both faces up to 1'-6".	no change							
North	51	75	-	Сар	Ctr Rear & Front	Debris					Debris and water standing exist in the bearing areas for both beams, both faces	no change							
North	51	75	-	Column	Right	Crack	240	HL		1	Full height crack with efflorescence.	no change	S21-7	1					
North	50	75	R	Сар	Right	Crack	8	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	51	75	L	Сар	Front	Spall	24	2	2	1	Along the compression joint, visible from the left face.	no change							1
North	51	75	-	Сар	Ctr Front	Spall	24	3	2	1	Along the compression joint behind the left beam	no change	R21-9						1



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	50	75	R	Сар	Front	Spall	24	4	2	1	Along the compression joint, visible from the right face.	no change							1
North	50	76	R	Сар	Left	Crack	13	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	51	76	L	Сар	Rear	Crack	28	HL		2	Vertical cracks between beam stems	no change							
North	51	76	-	Сар	Ctr Rear	Crack	15	HL		2	Diagonal crack extending down from the bearing area of the inboard stem of each beam	no change							
North	51	76	-	Сар	Ctr Front	Crack	15	HL		2	Diagonal crack extending down from the bearing area of the inboard stem of each beam	no change							
North	51	76	-	Сар	-	Debris					Bird nesting material and feces in block out.	no change							
North	51	76	-	Сар	Ctr Rear & Front	Crack	90	HL		2	Negative moment cracks that wrap over the cap and extend down both faces to the blockout.	no change							
North	50	76	R	Сар	Right	Crack	15	HL		4	Diagonal cracks extending from both beam seat corners.	no change							
North	51	76	-	Column	Rear	Spall	8	2	1/4	2	10' below the cap	no change						1	
North	51	76	-	Column	Through out	Caulk failure					Caulking around the base of the column is failing, leaving gaps.	new							
North	51	76	-	Column	Through out	Crack	252	HL		2	Full height vertical cracking is present on the rear and left faces.	no change							
North	51	77	L	Сар	Left	Crack	5	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	51	77	-	Сар	Ctr Rear & Front	Crack	118	HL		4	Negative moment cracks that wrap over cap and extend down both faces up to 2'-2".	no change							
North	51	77	-	Сар	Ctr Rear	Crack	6	HL		1	Diagonal crack extending from the left beam, right stem bearing.	no change							
North	51	77	-	Сар	Ctr Front	Crack	36	HL		2	Vertical crack extending from each beam overhang	new							
North	50	77	R	Сар	Right	Delam.	6	4		1	Rear beam seat	new							
North	50	77	R	Cap	Right	Crack	16	HL		1	Diagonal crack extending from the rear beam seat corner.	no change							
North	51	78	L	Сар	Left	Crack	8	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	51	78	-	Сар	Ctr Rear	Spall	11	4	1/2	1	Top of beam seat adjacent to the right beam	no change							1



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	51	78	1	Cap	Ctr Rear & Front	Crack	90	HL		6	Negative moment cracks that wrap over cap stem and extend down both faces up to 2'-3". 3 extend down into cap face.	Increase (pre. 2)							
North	50	78	R	Сар	Right	Debris					Bird nesting material in front of the rear beam.	new							
North	50	78	R	Сар	Right	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	51	78	1	Сар	Ctr Front	Spall	5	2	1/2		Top of beam seat adjacent to the right beam	no change						1	
North	51	78	1	Сар	Ctr Front	Spall	5	2	1/2		Top of beam seat adjacent to the left beam	new						1	
North	51	78	L	Сар	Front	Patch Cracking	12	HL			crack along the edge of a patch at the left end	no change							
North	51	78	L	Сар	Front	Spall	11	3	1/2	1	Top of beam seat adjacent to the left stem of the left beam	no change							1
North	51	79	L	Column	Left	Crack		HL			Flexural cracks on the left face, spaced 5" apart, full height	no change	S22-3-5				1		
North	51	79	L	Сар	Left	Crack	18	HL		2	Vertical cracks	no change							
North	51	79	L	Сар	Rear	Crack	36	0.013			Diagonal crack extending down from the bearing area of the left stem	no change							
North	51	79	L	Сар	Rear	Crack		HL			Map cracking over approximately 30% of surface between beam stems.	no change							
North	51	79	L	Сар	Rear	Crack	17	HL			Diagonal crack extending down from beam left overhang	no change							
North	51	79	L	Сар	Rear & Front	Crack	90	HL		3	Negative moment cracks to the right of the column that wrap over cap and extend down both faces up to 36".	increase (prev. 12")							
North	51	79	L	Column	Rear and front	Crack	240	HL		2	Full height vertical cracks with numerous short transverse cracks	no change							
North	51	79	L	Column	Rear and front	Delam.					The rear and front faces are delaminated, up to 3' wide by full height	new							
North	51	79	L	Сар	Right	Crack	30	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	51	79	L	Сар	Bottom	Scaling					Isolated areas of minor scaling, up to 1/8" deep.	no change							
North	50	79	R	Сар	Left	Crack	36	HL			Horizontal crack between beam seat corners	no change							
North	50	79	R	Сар	Right	Crack	36	HL		2	Horizontal crack between beam seat corners and a 2' L vertical crack extending up from the bottom at the midpoint	no change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	50	79	R	Сар	Front	Crack		HL			Random cracking throughout	no change							
North	51	80	L	Сар	Left	Crack	t	HL			Diagonal crack extending from the forward beam seat corner.	no change							
North	51	80	L	Сар	Right	Crack	3	HL			Diagonal crack extending from the forward beam seat corner and map cracking throughout.	no change							
North	51	80	L	Column	Through out	Crack		HL			Light vertical hairline cracks throughout	no change							
North	50	80	R	Сар	Left	Crack	32	HL		3	Horizontal crack between beam seat corners and a vertical crack extending up from the bottom	no change							
North	50	80	R	Cap	Rear	Crack	30	HL			Diagonal crack extending down from beam right overhang	no change							
North	50	80	R	Сар	Right	Crack	56	HL		1	Full height vertical crack.	no change							
North	50	80	R	Сар	Front	Crack	12	HL			Vertical crack extending down from beam right overhang	new							
North	50	80	R	Column	Through out	Caulk failure					Caulking around the base of the column is failing, leaving gaps.	new							
North	50	80	R	Column	Through out	Crack		HL			Right face exhibits light flexural horizontal cracks and a full height vertical crack. Random cracking is present throughout, all faces. Also noted in 2019, the front and back faces exhibit delaminated areas throughout, full height.	increase							
North	51	81	L	Сар	Left	Delam.	12	6	3/4	1	On rear beam seat	no change						1	
North	51	81	L	Сар	Left	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	51	81	L	Сар	Right	Crack	8	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	50	81	R	Сар	Left	Delam.	4	2	1/4		Under rear beam seat	no change						1	
North	50	81	R	Сар	Left	Crack	8	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	50	81	R	Сар	Right	Spall	4	2	1/2		On top of the rear beam seat	new						1	
North	50	81	R	Сар	Right	Patch delam	15	2	2		Under rear beam seat	no change	R22-8					1	
North	50	81	R	Сар	Right	Crack	12	HL		2	Diagonal cracks extending from both beam seat corners.	increase (prev. 8")							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	50	81	R	Сар	Front	Crack	27	HL		2	Full height vertical crack at the cap centerline	no change							
North	51	81	L	Сар	Rear	Debris					Nesting material is present between the beam and cap stem.	new				2			
North	53	82	L	Сар	Left	Crack	18	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	53	82	Ctr-L	Cap	Rear	Crack	48	HL		2	Vertical crack extending down from left beam, right overhang. Also an 32" diagonal crack extending from the stem bearing	no change							
North	53	82	Ctr-L	Сар	Rear	Crack	24	HL		1	Diagonal shear crack to the right of the left column.	no change							
North	53	82	Ctr-L	Сар	Front	Crack	24	HL		1	Vertical crack extending down from left beam, right overhang	no change							
North	53	82	Ctr-L	Сар	Front	Crack	48	HL		1	Diagonal shear crack to the right of the left column.	no change							
North	52	82	Ctr-R	Сар	Rear	Crack	12	HL		1	Vertical crack extending down from right beam, left overhang	no change							
North	52	82	R	Сар	Right	Crack	7	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	52	82	Ctr-R	Сар	Rear & Front	Crack	114	HL		2	Negative moment cracks over the right column that wrap over the cap and extend down both faces up to 2'.	no change							
North	53	83	L	Сар	Left	Crack	9	HL		2	Diagonal cracks extending from both beam seat corners. Map cracking also present.	no change							
North	53	83	L	Сар	Rear	Exposed					1-1/2" diameter exposed steel	new				1			
North	53	83	L	Сар	Left	Honey.	36	3	1/4		Along the bottom of the cap	new				1			
North	53	83	Ctr-L	Сар	Rear	Crack	12	HL			Vertical crack extending down from the left beam, right overhang	no change							
North	53	83	Ctr-L	Сар	Rear & Front	Crack	114	HL		3	Negative moment cracks over the left column that wrap over the cap and extend down both faces up to 2'.	no change							
North	53	83	Ctr-L	Сар	Front	Crack	30	HL			Diagonal shear crack to the right of the left column.	no change							
North	52	83	R	Сар	Right	Crack	12	HL		2	Diagonal cracks extending from both beam seat corners. Map cracking also present	no change							
North	52	83	R	Сар	Right	Delam.	6	5	1/2	2	One on each beam seat	no change						1	
North	52	83	Ctr-R	Сар	Front	Crack	30	HL		2	Diagonal cracks extending from the left beam bearing.	no change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	52	83	Ctr-R	Сар	Rear & Front	Crack	120	HL		2	Negative moment cracks over the right column that wrap over the cap and extend down both faces up to 2'.	no change							
North	53	84	L	Сар	Left	Patch delam	6	5	3/4	2	Rear and forward beam seats	no change						1	
North	53	84	L	Cap	Left	Crack	30	HL		3	Horizontal crack between beam seat corners and 15" diagonal cracks extending down from both beam seat corners.	no change							
North	53	84	L	Сар	Rear	Crack	24	HL		3	Cracking to the right of the left beam: Two diagonal cracks up to 2' L and a 2' horizontal crack from the beam seat corner. NO CHANGE	no change							
North	53	84	Ctr-L	Cap	Rear & Front	Crack	114	HL		3	Negative moment cracks over the left column that wrap over the cap and extend down both faces up to 2'.	new							
North	53	84	Ctr-L	Сар	Front	Crack	15	0.016			Diagonal crack extending down from the bearing area of the right stem	no change							
North	53	84	Ctr-L	Cap	Front	Crack	108	HL		3	Cracking to the right of the left beam: two horizontal cracks, one 2'-8" L and one 9' (prev. 6ft.), and a diagonal crack, 12". Random cracking also present.	increase							
North	52	84	Ctr-R	Cap	Rear	Crack	18	HL		3	Cracking to the left of the right beam: 2 horizontal cracks up to 1.5' L and an 18" vertical crack extending from the overhang. Random cracking also present.	no change							
North	52	84	R	Cap	Right	Crack	24	HL		3	17" diagonal cracks extending from both beam seat corners. Vertical crack extending up from the bottom	no change							
North	52	84	R	Сар	Right	Patch delam	6	4	3/4	2	Rear and forward beam seats	no change						1	
North	52	84	Ctr-R	Cap	Rear & Front	Crack	114	HL		2	Negative moment cracks over the left column that wrap over the cap and extend down both faces up to 2'-6".	no change							
North	52	84	Ctr-R	Cap	Front	Crack	96	HL		3	Cracking to the left of the right beam: two horizontal cracks, one 2'-8" L and one 8', and a 16" vertical crack extending down from the beam overhang. Random cracking also present.	no change							
North	53	85	L	Cap	Left	Crack	7	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
North	53	85	L	Сар	Left	Delam.	12	6		1	L shaped on top of rear beam seat, also exhibits a crack.	no change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
North	53	85	L	Сар	Right	Spall	36	8	1	1	Drip groove in right overhang was likely field cut, exposing aggregate; no significant deficiency.	no change							
North	53	85	L	Сар	Rear	Debris					Nesting material is present between the beam and cap stem.	new				2			
North	52	85	R	Сар	Left	Crack	9	0.01		2	Diagonal crack extending from both beam seat corners.	increase (prev. 6")							
North	52	85	R	Сар	Left	Delam.	12	2	3/4	1	Below rear beam seat	no change						1	
North	52	85	R	Сар	Rear	Crack	28	HL		2	Full height vertical cracks	no change							
North	52	85	R	Сар	Rear	Debris					Nesting material is present between the beam and cap stem.	new				2			
North	53	85	L	Сар	Right	Crack	48	HL		3	Diagonal cracks extending from both beam seat corners, also full height vertical crack	new							
North	52	85	R	Сар	Right	Crack	25	HL		3	8" diagonal cracks extending from the beam seat corners. Vertical crack extending up from the bottom. Map cracking also present	no change							
North	52	85	R	Сар	Front	Crack		HL			Vertical cracks with efflorescence. Efflorescence is also present at the cold joint between the cap and second pour	no change	R22-12	1					
South	95	199	L	Сар	Rear	Crack	56	HL		1	Full height vertical crack at the centerline of the cap	No Change							
South	94	199	R	Сар	Front	Crack	28	HL		3	Vertical cracks	new							
South	95	200	L	Сар	Rear	Spall	2	2	1/2	1	Right side of left beam	new						1	
South	95	201	L	Сар	Left	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	No Change							
South	94	201	R	Сар	Rear	Crack	24	HL		1	vertical crack over the column	No Change							
South	95	202	L	Сар	Rear	Crack	16	HL		1	Diagonal crack extending downward from the beam seat corner.	No Change							
South	95	202	L	Сар	Rear	Crack	30	HL		1	vertical crack 2ft to the right of the left column	New							
South	95	202	L	Сар	Left	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	new							
South	94	202	R	Сар	Right	Crack	8	HL		1	Diagonal crack extending from the rear beam seat corner.	No Change							
South	94	202	R	Сар	Front	Crack	16	HL		1	Diagonal crack extending downward from the beam seat corner.	No Change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
South	94	202	R	Сар	Rear	Crack	12	HL		1	Diagonal crack extending downward from the beam seat corner.	new							
South	93	203	L	Сар	Left	Patch Cracking		HL		1	Patches on the left and bottom left surfaces have hairline map cracking	No Change							
South	92	203	R	Сар	Rear	Crack	36	HL		1	Vertical crack at the centerline extending from the beam top flange.	No Change							
South	92	203	R	Сар	Front	Crack	36	HL		2	Vertical cracks located one foot on either side of the centerline of the column.	No Change							
South	93	204	L	Column	Rear	Crack		HL			Top 1/3 of the column exhibits circumference cracks spaced 8" apart.	No Change	J2-16						
South	93	204	L	Сар	Rear	Crack	40	HL		1	Vertical hairline crack.	No Change							
South	93	204	L	Сар	Front	Crack	24	HL		5	Three vertical and two diagonal cracks.	No Change							
South	92	204	R	Cap	Rear	Crack	36	HL		2	Two vertical cracks with minor efflorescence at the centerline of the cap.	No Change							
South	93	204	Mid	Cap	Right	Crack	34	HL		1	Vertical crack with minor efflorescence extending from the overhang drip line to the middle of the cap.	No Change							
South	93	204	Mid	Column	front	Crack		0.01			map cracking throughout the bottom 4ft	new							
South	93	205	L	Сар	Rear	Crack	16	HL		1	Vertical crack at the centerline of the cap.	new							
South	93	205	L	Column	Left	Spall	1	1	1	1	3ft above ground	new						1	
South	93	206	L	Column	Front	Spall	4	2	1/4	3	1' from the ground.	No Change						1	
South	90	206	R	Column	Front	exposed steel	1	2-Jan	1/4	5	Within the top 4'	new	S15-3					1	
South	90	206	R	Сар	Left	Crack	51	HL		1	Vertical cracks in skim coat.	No Change							
South	90	206	R	Сар	Rear	Crack	20	HL		3	Vertical cracks in skim coat.	No Change							
South	90	206	R	Сар	Front	Crack	14	HL		3	Vertical cracks in skim coat.	No Change							
South	91	207	-	Cap Stem	Ctr Rear	Crack	28	HL		2	Vertical cracks.	No Change							
South	91	207	-	Сар	Ctr Rear	Spall	29	8	1	1	On beam seat.	no change							3



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
South	91	207	-	Сар	Ctr Front	Crack	60	HL		4	Vertical cracks, some with efflorescence.	No Change							
South	91	207	1	Сар	Ctr Front	Spall	20	7	1/2	1	On beam seat.	New	J1-2						2
South	90	207	R	Сар	Right	Staining					Water staining from leaking joints	No Change				-			
South	91	207	ı	Column	Rear	Gouge	5.75	0.75	1/4	1	4ft from ground	New						1	
South	91	207	ı	Column	Rear	Crack	48	HL		1	Vertical crack at the ground.	No Change							
South	91	208	L	Сар	Left	Crack	12	HL		2	Diagonal cracks extending from both beam seat corners.	No Change							
South	91	208	1	Сар	Ctr Rear	Crack	36	HL		2	Vertical cracks with minor efflorescence extending down from beam top flanges	increase	J1-5	2					
South	91	208	1	Сар	Ctr Front	Crack	8	HL		1	"C" shaped crack in the skim coating.	No Change	J1-8						
South	91	208	1	Column	Right	Spall	4	3	1/4	1	2' from the ground.	No Change	R1-1					1	
South	91	209	L	Сар	Left	Crack	12	HL		2	Diagonal cracks extending from both beam seat corners.	No Change							
South	91	209	1	Сар	Ctr Rear & Front	Crack	138	HL		2	Negative moment cracks that wrap over cap and extends down both faces up to 3'.	increase		2					
South	90	209	R	Сар	Left	Crack	7	HL		2	Diagonal cracks extending from both beam seat corners.	No Change							
South	91	210	L	Сар	Left	Crack	12	HL		1	Diagonal crack extending from the rear beam seat corner.	No Change							
South	91	210	L	сар	left	Delam.	10	3		1	at top rear bearing	new	J1-10					1	
South	91	210	1	Сар	Ctr Rear	Crack	32	HL		1	Horizontal / diagonal with moderate efflorescence extending from under the right stem of left beam.	increase	J1-11	2					
South	91	210	1	Cap Stem	Ctr Rear	Crack	28	HL		7	Vertical cracks	No Change							
South	91	210	1	Cap and Cap stem	Ctr Rear & Front	Crack	27	HL		5	Vertical and diagonal cracks with minor efflorescence, o e extends across the top	No Change		2					
South	90	210	R	Сар	Right	Delam.	12	3		1	At the rear beam seat with a horizontal hairline crack x 8" L.	No Change							1
South	91	210	-	Column	Right	Spall	2	2	1/4	14	minor gouges within lower 5ft.	increase						1	
South	91	211	L	Сар	Left	Crack	12	HL		2	Diagonal cracks extending from both beam seat corners.	No Change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
South	91	211	-	Сар	Rear & Front	Crack	138	HL		4	Negative moment cracks that wrap over the cap and extend down both faces up to 3'.	No Change							
South	91	212	-	Column	througho ut	Crack	36	0.015		5	Vertical cracks throughout the column.	No Change							
South	91	212	L	Сар	Left	Crack	24	HL		2	Diagonal cracks extending from both beam seat corners.	No Change							
South	91	212	-	Сар	Ctr Front	Crack	30	HL		1	diagonal crack extending from the left beam stem	new							
South	91	212	-	Cap	Ctr Rear & Front	Crack	84	HL		2	Negative moment cracks that wrap over the cap and extend down both faces up to 4'.	No Change							
South	85	213	L	Сар	Left	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	No Change							
South	85	213	L	Сар	Right	Crack	10	HL		2	Diagonal cracks extending from both beam seat corners.	new							
South	85	213	L	Сар	Rear	Delam.	16	2		1	On top of beam seat at left keeper plate.	No Change							1
South	85	213	-	Сар	Ctr Rear & Front	Staining					Watermarks and fungal buildup.	No Change	J1-17						
South	85	213	-	Cap stem	Ctr Rear	Crack	28	HL		3	Vertical cracks	No Change							
South	85	213	-	Сар	Ctr Front	Crack	21	HL		4	Vertical cracks with minor efflorescence.	No Change		4					
South	85	213	-	Сар	Ctr Front	exposed steel	6			2	coated	No Change			2				
South	85	213	-	Column	Front and Rear	Crack	full height	0.015		1	Vertical crack and random hairline cracks throughout.	No Change	R1-2						
South	85	214	L	Сар	Left	Crack	48	HL		2	Vertical cracks	No Change							
South	85	214	-	Сар	Ctr Rear	Crack	72	HL		3	Vertical cracks with light efflorescence	No Change	S15-6	3					
South	85	214	-	Сар	Ctr Front	Crack	60	HL		4	Vertical cracks with light efflorescence	No Change		4					
South	85	214	-	Column	Front & Rear	Crack	144	HL		2	Vertical crack	No Change	S15-11						
South	85	214	-	Сар	througho ut	Staining					Minor surface staining on the column.	No Change							
South	85	215	-	Сар	Ctr Rear & Front	Crack	204	0.01		3	Negative moment cracks that wrap over the cap and extend down both faces up to 6'.	increase (prev. HL)	S15-12						
South	85	215	-	Сар	Ctr Front	Crack	204	0.01		3	Negative moment cracks that wrap over the cap and extend down both faces up to 6'.	increase (prev. HL)	S15-12						



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
South	85	216	-	Cap Stem	Ctr Front	Crack	26	HL		2	Vertical crack at the centerline of the cap.	No Change							
South	84	216	R	Сар	Right	Crack	9	HL		1	Diagonal crack extending from the forward beam seat corner.	No Change							
South	84	216	R	Сар	Front	Crack	12	HL		1	Below left stem	No Change							
South	85	216	-	Сар	Ctr Rear	Crack	12	HL		1	Extends down from left bearing of the right beam	new							
South	85	216	-	Column	Front & Rear	Crack	full height	0.03		2	Vertical crack, with random transverse cracking throughout	No Change							
South	85	217	L	Column	Rear	Crack	36	0.016		2	Adjacent to the underside of the cap.	No Change							
South	85	217	L	Сар	Left	crack	8	HL		1	Diagonal crack extending downward from the front beam seat corner.	new							
South	84	217	R	Сар	Left	crack	6	HL		1	Diagonal crack extending downward from the front beam seat corner.	new							
South	85	217	L	Сар	Left	crack	10	HL		2	Diagonal cracks extending downward from the beam seat corners.	new							
South	85	217	L	Сар	Front	Crack	42	HL		1	Vertical crack	No Change							
South	84	217	R	Сар	Rear	Crack	12	HL		2	Minor cracks in patchwork	No Change							
South	83	218	L	Сар	Rear	Crack	15	HL		2	Vertical	No Change							
South	83	218	L	Сар	Left	crack	10	HL		2	Diagonal cracks extending downward from the beam seat corners.	new							
South	83	218	L	Сар	Front	Crack	15	HL		2		No Change							
South	83	218	L	Column	througho ut	Crack		HL			Random hairline cracking throughout	No Change							
South	82	218	R	Сар	Front	Crack	24	HL		2	Vertical crack	New							
South	82	218	R	Сар	Rear	Crack	44	HL		1	Vertical crack extending from the top corner. Map cracking in a patch.	No Change							
South	83	219	L	Сар	Rear	Delam.	9	7	7		Under right keeper plate	No Change						1	
South	83	219	L	Сар	Front	Crack	17	HL		6	Vertical cracks	increase							
South	83	219	L	Сар	Front	Patch	11	5			Left end	No Change						1	
South	82	219	R	Сар	Front	Delam.	9	5	2 1/2	1	Under left keeper plate	No Change						1	



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
South	83	219	L	Сар	Left	Crack					Minor areas of map HL cracking	New	J2-4						
South	83	219	L	Сар	Rear	Crack	18	HL		2	Vertical cracks	New							
South	82	219	R	Сар	Bottom	exposed steel					Rebar chairs, left end	No Change							
South	83	220	L	Сар	Left	Crack	33	HL		2	Diagonal cracks extending from both beam seat corners.	No Change							
South	83	220	L	Сар	Right	Crack	10	HL		2	Diagonal cracks extending from both beam seat corners.	new							
South	83	220	L	Сар	Front	Crack	28	HL		1	Vertical and horizontal	new							
South	83	220	L	Cap	Rear	Crack	24	HL		2	Vertical crack extending up from the bottom of the cap at the centerline.	No Change							
South	82	220	R	Сар	Left	Crack	24	HL		1	12" diagonal cracks extending from both beam seat corners and a vertical crack x 28" starting from the bottom of pier cap.	increase							
South	82	220	R	Сар	Front	Crack	18	HL		1	Vertical crack extending up from the bottom of the cap at the centerline.	No Change							
South	82	220	R	Сар	Right	Crack	24	HL		3	Diagonal cracks extending from both beam seat corners and a vertical crack starting from the bottom of pier cap.	No Change							
South	83	221	L	Сар	Left	Crack	12	HL		2	Diagonal cracks extending from both beam seat corners. Map cracking also present.	No Change							
South	83	221	L	Cap	Left	Crack	15	HL		1	Crack in overhang with minor efflorescence.	No Change	J2-6	1					
South	83	221	L	Column	Left	Crack	full height	HL			Vertical crack	new							
South	83	221		Cap	front	Crack	60	HL		1	Crack with minor efflorescence, 3' from the right stem. Efflorescence is also present along the exterior side of the right stem.	No Change		1					
South	83	221	L	Cap	Front	Crack	60	HL		3	Horizontal crack between stems, 1' below the beam flange, also 2 vertical cracks up to 15in.	increase							
South	83	221	L	Сар	Front	Staining					Light fungal buildup, efflorescence, and water stains.	no change							
South	82	221	R	сар	rear	Crack	6	HL		1	extends down from left corner of flange	new							
South	83	222	L	Cap	Left	Crack	32	HL		2	Diagonal cracks extending from both beam seat corners. Map cracking is also present on the surface.	No Change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
South	83	222	L	cap	Front	Crack	12	HL		1	Vertical crack between stems	new							
South	83	222	L	сар	Front	Crack	18	HL		1	Vertical crack from the top at the right of the column	new							
South	83	222	L	cap	Rear	Crack	30	HL		1	Vertical crack between stems	new							
South	83	222	L	Сар	Rear	Crack	28	HL		1	Diagonal crack extending up from the column toward the right beam stem.	increase							
South	83	222	L	Сар	Rear & Front	Staining					Minor fungal buildup, efflorescence, and water stains adjacent to the right beam stem.	No Change							
South	82	222	R	Cap	Right	Crack	60	HL		2	Diagonal cracks extending from both beam seat corners that meet and extend to the bottom of the cap.	No Change							
South	82	222	R	Сар	Rear & Front	Staining					Minor efflorescence adjacent to the left beam stem.	No Change							
South	83	223	L	Сар	Left	Crack	12	HL		5	12" diagonal cracks extending from both beam seat corners and horizontal cracks x 1' L with minor efflorescence, 9" below the keeper plates.	No Change		2					
South	83	223	L	Сар	Front	Crack	12	HL		1	Diagonal crack extending downward from the beam seat corner.	No Change							
South	83	223	L	Сар	Rear	Crack	12	HL		2	Diagonal crack extending downward from the beam seat corner. There is also a horizontal crack just below the right stem bearing with minor efflorescence.	No Change		1					
South	82	223	R	Сар	Right	Delam.	9	9	3	1	Below rear keeper plate.	No Change						1	
South	82	223	R	cap	right	Crack	6	HL		2	vertical cracks from forward keeper plate	new							
South	82	223	R	cap	Front	Crack	28	HL		1	vertical crack in cap stem	new							
South	82	223	R	cap	Rear	Delam.	12	4		1	below left rear keeper plate	new						1	
South	82	223	R	cap	Rear	Crack	6	HL		1	diagonal from beam seat corner	new							
South	82	223	R	cap	Front	Crack	7	HL		1	diagonal from beam seat corner	new							
South	82	223	R	Сар	Front	Staining					Right cap overhang exhibits water marks with fungal buildup on front surface.	No Change	J2-12						

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Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
South	83	224	٦	Сар	Left	Staining					Fungal buildup and water stains attributed to a 1" diameter hole in the overhang.	No Change							
South	83	224	L	Сар	Front	Spall	5	2	1/2	2	One adjacent to the exterior face of the left stem, the other adjacent to the inside face of the right stem.	No Change						2	
South	83	224	L	Сар	Front	Crack	6	HL		1	Adjacent to the inside face of the right stem.	No Change							
South	83	225	L	cap	rear	crack	60	HL		1	Vertical crack, centerline	new							
South	83	225	L	сар	front	crack	12	HL		2	Vertical cracks	new							
South	82	225	R	Сар	Front	Crack	6	HL		4	Along the right edge	No Change							
South	82	225	R	Сар	rear	Crack	30	HL		3	Vertical	new							
South	81	226	-	Сар	Ctr Rear	Crack	34	HL		1	Vertical hairline crack extending from the top edge with minor efflorescence.	increase (efflo)		1					
South	81	226	-	Сар	Ctr Front	Crack	48	HL		2	Vertical hairline cracks extending down from beam flange corners	new							
South	81	226	-	Column	Rear & Front	crack	24	HL		4	Horizontal cracks, within 24in. of cap	new							
South	81	227	L	Сар	Front	Patch Delam	3	3		1	At the bottom of the left stem.	No Change						1	
South	81	227	-	Cap	Ctr Rear	Crack	40	HL		2	Diagonal hairline crack x 2' L extending down from the left beam overhang. 40" (previously 30") vertical crack at the centerline extending up from the bottom.	No Change							
South	81	227	-	Cap	Ctr Front	Crack	30	HL		2	Diagonal hairline crack x 2' L extending down from the right beam overhang. 2'-6" vertical crack at the centerline extending up from the bottom. Also efflorescence from construction joint with stem of left beam (typical)	No Change	J3-5	1					
South	81	227	-	Column	Rear	Crack	84	HL		1	1' from the bottom of cap	No Change			_				
South	81	227	-	Column	Rear	spall	2	2	1/2	1	9ft. above ground	new						1	
River	81	228	-	Сар	Ctr Rear	Crack	16	HL		3	One at the centerline and 1' from each beam.	No Change							
River	81	228	-	Cap Stem	Ctr Rear	Crack	28	HL		6	Full height	No Change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	81	228	1	Cap Stem	Ctr Front	Crack	28	HL		4	Full height	No Change							
River	81	228	1	Сар	Ctr Front	Crack	22	HL		1	Vertical hairline crack	No Change							
River	81	228	1	Сар	Ctr Front	Delam.	22	10		1	On beam seat.	No Change	J3-25						
River	81	228	1	Column	Right	Crack		HL			Map cracking, essentially full height	new							
River	81	228	1	Column	Front	Crack		HL			Radom hairline cracking in a 4 SF area just below the cap	No Change							
River	81	229	L	Сар	Rear	Crack	48	HL		5	One vertical and 4 (previously 3)diagonal cracks between beam stems	increase							
River	81	229	1	Сар	Ctr Rear	Crack	36	HL		6	4 verticals and 2 diagonals, up to 3ft. L	No Change							
River	80	229	R	Сар	Rear	Crack	18	HL		1	Vertical hairline crack x 1'-6" L between beam stems	No Change							
River	81	229	1	Column	Rear	exposed steel	2			1	Exposed steel wire, 1' below the cap.	No Change	J3-27						
River	81	229	-	Column	Rear	Crack		HL			Random hairline cracking throughout and one horizontal crack, 1ft. above ground, 18in. long01in wide	new							
River	81	229	L	Сар	Front	Crack	30	HL		3	Vertical crack between beam stems	No Change							
River	81	229	ı	Сар	Ctr Front	Crack	36	HL		6	Vertical and diagonal cracks with efflorescence extending from the top. Map cracking is also present.	increase		1					
River	80	229	R	Сар	Front	Crack	18	HL		3	Diagonal hairline crack between beam stems	No Change							
River	81	229	-	Column	Front	Crack		HL			Radom cracking in a 4 SF area just below the cap	No Change							
River	81	230	L	Сар	Rear	Crack	30	HL		2	Vertical crack between beam stems and a diagonal emanating from the left stem	increase (diagonal new)							
River	81	230	-	Сар	Ctr Rear	Crack	56	0.013		4	Vertical cracks with minor efflorescence	increase	J3-31	1					
River	80	230	R	Сар	Rear	Crack	30	HL		1	Vertical crack between beam stems	No Change							
River	80	230	R	Сар	Right	Crack	14	HL		2	Diagonal cracks extending from both beam seat corners.	No Change							
River	81	230	-	Column	all	Crack		HL			Hairline vertical and horizontal cracks are typical throughout; Typical condition on the columns in the River line	new	J3-30						



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	80	230	R	Сар	Front	Crack	30	HL		2	vertical cracks	new							
River	81	230	-	Сар	Ctr Front	Crack	48	HL		6	Two vertical cracks x 4' L with minor efflorescence and four 1' L diagonal cracks.	increase (2 diagonals new)		1					
River	81	230	-	Column	Front	exposed steel	2				Numerous exposed wires at the top of the column new	new							
River	80	230	R	Cap	Front	Crack	30	HL		2	Vertical crack x 2'-6" L and a 1' diagonal crack	No Change							
River	80	231	R	Сар	Left	Crack	10	HL		1	Diagonal crack extending from the rear beam seat corner.	new							
River	81	231	-	Сар	Ctr Rear	Crack	48	HL		2	One vertical crack extending down from each beam overhang	No Change							
River	80	231	R	Сар	Right	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	No Change							
River	81	231	-	Column	Right	Crack	120	0.016		1	Vertical crack at the top of the column.	No Change	J3-33, 34						
River	80	231	R	Сар	Rear	Crack	24	HL		1	Vertical crack	New							
River	80	231	R	Сар	Front	Crack	24	HL		1	Diagonal crack extending from the left stem bearing	No Change							
River	81	231	-	Сар	Ctr Front	Crack	48	HL		2	One vertical crack extending down from each beam overhang	No Change							
River	79	232	L	Сар	Left	Crack	36	HL		3	Horizontal crack between beam seat corners and a vertical crack up to 1' L down from each corner	No Change							
River	79	232	L	Сар	Left	Delam.	9	7	4 1/2	1	Front left corner; extends under the masonry plate for 2"x2.5".	No Change	S25-1-2					1	
River	79	232	L	Сар	Left	Delam.	12	6	2	1	Rear left corner under keeper plate	No Change						٠	
River	79	232	1	Сар	Ctr Rear	Crack	28	HL		1	Vertical crack	No Change							
River	79	232	1	Column	Rear	Scrapes					Minor scrapes and gouges on the right corner in the bottom 4.5'.	No Change							
River	79	232	-	Column	througho ut	Staining					Moderate surface staining	No Change							
River	79	233	L	Сар	Rear	Crack	60	HL		4	4 vertical cracks extending from the top of cap.	No Change							
River	79	233	L	Сар	Front	Crack	60	HL		5	45 vertical cracks extending from top of cap and one horizontal.	No Change							
River	79	233	-	Сар	Ctr Rear & Front	Crack	204	0.016		2	Negative moment cracks that wrap over cap and extends down both faces up to 6'.	increase (Prev. HL)	S25-7						



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	76	233	R	Сар	Rear	Crack	36	HL		6	4 vertical cracks and 2 horizontal cracks	No Change							
River	76	233	R	Сар	Front	Crack	48	HL		6	4 vertical cracks and 2 diagonal cracks	No Change							
River	76	233	R	Сар	Right	Crack	48	HL		6	Full height vertical crack	new							
River	79	233	-	Column	Rear	Crack	60	HL		1	Horizontal crack with efflorescence in the cold joint, 20' from the top of the column.	No Change							
River	79	233	-	Column	Front	Crack	60	HL		1	Horizontal crack with efflorescence in the cold joint, 6' from the top of the column.	new							
River	79	233	1	Column	Rear & Front	Crack		HL		4	Vertical hairline cracks essentially full height of the column.	No Change							
River	79	233	1	Column	Left and Right	Crack		HL			Random map cracking throughout	New							
River	77	234	1	Column	Rear & Front	Crack		HL		4	Vertical hairline cracks essentially full height of the column.	New							
River	77	234	1	Column	Left and Right	Crack		HL			Random map cracking throughout	New							
River	77	234	-	Column	Right	exposed steel					numerous exposed wires due to insufficient cover, 15ft and 25ft below the cap	New				-			
River	77	234	L	Сар	Rear	Crack	60	HL		2	Vertical cracks	No Change							
River	77	234	L	Сар	Front	Crack	42	HL		4	3 vertical cracks and a horizontal crack up to 3'-6" L at mid height of cap.	No Change							
River	77	234	1	Сар	Ctr Rear & Front	Crack	204	0.016		2	Negative moment cracks that wrap over cap and extends down both faces up to 6'.	increase (Prev. HL)							
River	76	234	R	Сар	Rear	Crack	48	HL		3	Vertical cracks extending from the top of cap.	No Change							
River	76	234	R	Сар	Front	Crack	48	HL		6	Vertical cracks extending from the top of cap.	No Change							
River	77	235	1	Column	Rear & Front	Crack		HL		4	Vertical hairline cracks essentially full height of the column.	New							
River	77	235	L	Сар	Rear	Delam.	36	19		1	Below left bearing	No Change						3	
River	77	235	L	Сар	Rear	Crack	36	HL		3	Vertical cracks	No Change							
River	77	235	L	Сар	Front	Crack	29	HL		2	Vertical cracks	No Change							
River	76	235	R	Сар	Front	Crack	29	HL		2	Vertical cracks	new							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	77	235	1	Cap	Ctr Rear & Front	Crack	60	HL		2	Negative moment cracks that wrap over cap and extends down both faces up to 6'.	No Change							
River	76	235	R	Сар	Rear	Crack	60	HL		4	Vertical cracks, map cracking also present.	No Change							
River	76	235	R	Сар	Rear	Efflo.					At crack between column and right cap	No Change		1					
River	77	235	-	Column	Rear	Staining					Minor surface staining	No Change							
River	77	235	-	Column	Rear	Crack		HL			Cold joint exhibits a crack with efflorescence, 20' from the ground.	No Change		1					
River	77	236	L	Column	Left	Crack	12	HL		1	Vertical crack extending from top of column	No Change							
River	77	236	L	Column	Right	Crack	24	HL		2	Vertical cracks extending from top of column	No Change							
River	77	236	L	Column	Rear	Crack	6	HL		4	Horizontal cracks in the top 10ft.	new							
River	77	236	L	Column	Front	Crack	480	0.016		4	Vertical cracks x full height of column.	increase (Prev. HL)							
River	76	236	R	Column	Right	Crack	12	HL		1	Vertical cracks extending from top of column	new							
River	76	236	R	Column	Rear	Crack	84	0.016		2	Vertical cracks extending from top of column	increase (Prev. HL)							
River	76	236	R	Column	Front	Crack	480	0.01		2	Vertical cracks x full height of column.	No Change							
River	76	236	R	Column	Rear & Front	Crack					Minor surface map cracking	No Change							
River	75	237	L	Сар	Left	Crack	6	HL		1	Diagonal crack extending from the forward beam seat corner.	No Change							
River	75	237	L	Сар	Left	Delam.	14	2	1	1	Below left keeper plate	No Change						1	
River	75	237	L	Cap stem	Rear	Crack	16	HL		3	Vertical and diagonal cracking to the right of the beam	No Change							
River	75	237	L	Сар	Rear	Crack	42	0.01		4	One diagonal hairline shear crack x 3.5' L just to the right of the column. 3 vertical cracks x up to 1'-6" L, 5' to the right of the column.	No Change							
River	75	237	L	Сар	Rear	Staining					Heavy mildew staining below right bearing area and running down column.	No Change	J13-5						

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Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	75	237	L	Strut	Rear	Crack	48	HL		2	Full height vertical crack with efflorescence extending down from top corner at column connection. Full height diagonal crack, extending up from the bottom strut connection to the column	No Change							
River	75	237	L	Strut	Front	Spall	3	1	1/2	1	Exposed steel, near the left column	New			1				
River	75	237	L	Column	Front	exposed steel	3				Right side exhibits 4" of exposed steel wire, 6' from the ground.	No Change							
River	75	237	L	Cap stem	Front	Crack	16	HL		1	Vertical crack	No Change							
River	75	237	L	Сар	Front	Crack	42	HL		3	Two diagonal shear cracks with efflorescence x up to 3'-6" L, extending up from the column. 16" vertical crack extending down from the beam seat corner.	No Change		2					
River	75	237	L	Column	througho ut	Staining					Moderate mildew buildup on the column and strut.	No Change	J13-1						
River	74	237	R	Сар	Rear	Staining					Below left bearing area and down onto glass frame causing corrosion, and down onto strut.	no change	J26-3,4						
River	74	237	R	Strut	Rear & Front	Crack	156	0.012		9	Vertical and diagonal cracks, some with efflorescence that wrap over cap and extend down both faces up to 4', located near the column	No Change							
River	74	237	R	Сар	Rear	Crack	84	0.014		1	Diagonal shear crack with moderate to heavy efflorescence extending from the left side of the column, onto the beam seat and continuing into pier stem behind beam	increase (Prev. HL)	J26-5	2					
River	74	237	R	Сар	Rear & Front	Crack	156	0.02		8	Vertical and diagonal cracks, some with efflorescence that wrap over cap and extend down both faces up to 4', located between beam and right end	No Change	J26-6,7						
River	74	237	R	Сар	Right	Crack	66	HL			Full width horizontal crack, located 2' from the bottom of the cap. Random map cracking is also present.	No Change							
River	74	237	R	Сар	Front	Crack	36	HL		1	Diagonal crack with minor efflorescence extending down from right stem bearing toward column	No Change		1					
River	74	237	R	Column	througho ut	Crack		HL			Random hairline cracks, vertical and map on all faces.	No Change							
River	75	238	L	Сар	Left	Crack	4	HL		1	Diagonal crack extending from the rear beam seat corner	No Change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	75	238	L	Column	Rear	Crack	468	0.01		1	Full height vertical crack with efflorescence	No Change	R13-1,2	1					
River	75	238	٠	Cap	Rear	Crack	30	HL		3	30" vertical crack with efflorescence that splits at the top, located 1' from right flange overhang 20" diagonal cracks with efflorescence extending from the right stem bearing	No Change	J13-8	3					
River	75	238	L	Cap	Front	Crack	48	HL		3	36" vertical crack extending down from the right flange overhang 30" diagonal crack extending from right stem bearing area. 48" full height diagonal shear crack extending from column. All with efflorescence	No Change	R13-3	3					
River	75	238	L	Сар	Rear & Front	exposed steel	1				1' to the right of the right beam flange	new			1				
River	75	238	Ctr	Сар	Rear & Front	Crack		HL			Random map cracking throughout.	No Change							
River	75	238	Ctr	Сар	Rear & Front	Crack	24	HL			Random vertical hairline cracks between the columns	No Change							
River	74	238	R	Сар	Rear	exposed steel	7				1' to the right of the right beam stem	No Change			1				
River	74	238	R	Strut	Rear & Front	Crack	144	0.025		6	Diagonal shear cracks extending up from the column, many of which wrap over the top of the strut. Only one is up to 0.025, others are HL	increase (Prev. HL)	J26-9						
River	74	238	R	Сар	Rear & Front	Crack	144	0.03		8	Vertical and diagonal cracks up with minor efflorescence that wrap over the top of the cap and extend down on both faces up to 4'	increase (prev. 2' down)	J26-8						
River	74	238	R	Сар	Right	Crack		HL			Random map cracking throughout.	new							
River	74	238	R	Сар	Rear	Crack	36	HL		1	Vertical crack to the left of the beam that wraps under the cap for 6"	new							
River	74	238	R	Сар	Front	Crack	30	HL		1	Vertical crack to the left of the beam that wraps under the cap for 16"	new							
River	74	238	R	Сар	Front	Crack	36	HL		1	Diagonal crack extending down from beam right overhang.	No Change							
River	74	238	R	Column	Through out	Crack		HL			Random cracks, vertical and map on all faces.	No Change							
River	75	239	L	Сар	Rear	exposed steel					Rear and bottom of cap exhibit exposed rebar chairs and nails to the right of the beam.	No Change	J13-9						



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	75	239	L	Cap	Rear	Crack	48	0.016		3	Two 18" diagonal hairline cracks extending from the beam exterior right stem bearing area 4' diagonal shear crack extending up from the column up to 0.016", 4' vertical hairline crack with moderate	No Change							
River	75	239	L	Strut	Rear	Crack	48	0.016		1	Diagonal shear crack extending from the left column. 2 shorter vertical/diagonal cracks to the right of it	No Change							
River	75	239	L	Column	Right	Crack		HL			Map cracking x up to 3' L within the bottom 12ft.	No Change							
River	75	239	L	Column	Front	Crack	48	HL		1	Horizontal crack, 6ft above ground	New							
River	75	239	L	Column	Front	Crack	240	HL		1	Vertical crack in the grooved area of column.	No Change							
River	75	239	٦	Cap	Front	Crack	48	Н		1	18" downward diagonal crack extending from beam right stem bearing area with heavy efflorescence. 4' vertical crack with moderate efflorescence, 1ft. from the beam right flange	No Change							
River	75	239	L	Сар	Front	Crack	15	HL		1	Horizontal crack with efflorescence between the beam stems.	No Change		1					
River	75	239	L	Сар	Front	Delam.	3	3		4		new						4	
River	75	239	Ctr	Сар	Rear & Front	Crack		HL			Random vertical and diagonal cracks between beams	No Change							
River	74	239	R	Сар	Rear	Staining					Minor water staining	No Change							
River	74	239	R	Сар	Rear	Crack	48	HL		1	Vertical hairline crack, 4' to the left of the left beam stem.	No Change							
River	74	239	R	Сар	Rear	Crack	16	HL		1	Diagonal crack extending from the right beam stem bearing	new							
River	74	239	R	Сар	Rear	Patch delam	1	1	1/4	3	Between beam stems	No Change	J26-10					1	
River	74	239	R	Сар	Rear & Front	Crack	156	0.014		6	Vertical cracks that wrap over and extend down both faces up to 4'-6" L with minor efflorescence.	increase (Prev. HL)							
River	74	239	R	Strut	Rear & Front	Crack	132	HL		5	Diagonal shear cracks near the right column that extend up and wrap over the top of the strut.	No Change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	74	239	R	Strut	Rear	Crack	30	HL		2	Vertical cracks, 10' from the right column.	No Change							
River	74	239	R	Cap	Right	Crack	60	HL			Full width horizontal crack, located 2' from the bottom of the cap. Random map cracking is also present.	No Change							
River	74	239	R	Сар	Front	Crack	30	HL		4	Vertical hairline cracks, 6' to the left of the left beam stem.	No Change							
River	74	239	R	Сар	Front	Crack		HL			Numerous areas with surface map cracking.	No Change							
River	74	239	R	Column	througho ut	Crack		HL			Random cracks, vertical and map on all faces.	No Change							
River	75	240	۔	Column	Left	Crack		0.01			Horizontal cracks that wrap around the front and rear faces, spaced 1'-3' apart, full height and map cracking throughout	No Change							
River	75	240	L	Strut	Rear	Spall	1	1	1/4	1	Popout, 6in. from left column	New						1	
River	75	240	L	Сар	Rear	Crack	24	HL			Diagonal crack extending downward from the left beam, right stem seat corner.	No Change							
River	75	240	_	Cap	Rear	Crack	42	ΗL		2	10" diagonal crack extending downward from the left beam left stem seat corner. There is also a 3.5' L diagonal hairline shear crack above it.	No Change							
River	75	240	L	Сар	Front	Crack	72	0.02		4	Diagonal shear cracks with moderate to heavy efflorescence extending up from the bottom of the cap at the left column. Longest one extend through the beam seat corner and up the pier cap stem, behind the beam.	No Change	R26-1,2						
River	75	240	L	Сар	Rear & Front	Crack	144	HL		6	Vertical cracks with minor efflorescence that wrap over the top of the cap at the left column.	increase (prev. 36")							
River	75	240	L	Сар	Bottom	exposed steel					Exposed chairs with minor surface corrosion, 10' from Column 240L.	No Change							
River	75	240	Ctr	Сар	Rear & Front	Crack		HL			Random vertical and diagonal cracks between the beams.	No Change							
River	74	240	R	Сар	Rear	Debris					Top of beam seat has 2.5" of debris buildup, left side of left stem.	No Change	S28-2						
River	74	240	R	Column	Right	Delam.	30	20		1	Just below the cap at the forward corner.	No Change	S28-5						
River	74	240	R	Сар	Right	Crack	15	0.02		2	Diagonal cracks extending from both beam seat corners.	No Change	S28-3						



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	74	240	R	Сар	Front	Crack	12	HL		2	Vertical crack, 4' left of the left stem.	No Change							
River	74	240	R	Сар	Front	Staining					Moderate staining below bearings	No Change							
River	74	240	R	Column	througho ut	Crack		HL			Random cracks, vertical and map on all faces.	No Change							
River	73	241	-	Column	througho ut	Crack	360	HL		5	Full height vertical cracks on the front, left, and rear faces.	No Change			-				
River	73	241	1	Column	througho ut	Crack	60	0.016		10	Vertical cracks extending from the top of the column on all faces. Front and rear faces each have two cracks which run over the top for 2.5'.	No Change			1				
River	73	242	-	Column	Right	Crack	8	HL			Vertical crack extending from the top of the column.	No Change							
River	73	242	1	Column	Front	Crack	20	HL			Horizontal crack, 1' from top of column.	No Change							
River	73	242	ı	Column	Rear & Front	Crack	444	0.03		1	Extending from the top of the column, 20'L to full height	increase (Prev. HL)	S27-7,8						
River	73	242	-	Column	Front	Spall	7	2	1/2		7" of exposed rebar at the ground level, right corner.	No Change	S26-2						1
River	73	242	-	Column	Rear & Front	Crack				4	Full height vertical cracks, 2 each face.	No Change							
River	71	243	L	Сар	Front	Crack	42	HL		2	Vertical cracks extending down from top	No Change							
River	71	243	٦	Сар	Rear	Crack	22	HL		2	Vertical cracks extending down from top	new							
River	71	243	-	Сар	Ctr Rear & Front	Crack	216	0.016		4	Negative moment cracks, two with moderate to heavy efflorescence that wrap over the top and extend down both faces up to 6ft.	increase (Prev. HL)	S27-2						
River	70	243	R	Сар	Rear	Crack	48	HL		2	Vertical cracks extending down from top	new							
River	70	243	R	Сар	Right	Crack	48	HL		2	One full height vertical crack down the center of the face with heavy efflorescence, another vertical crack, 17"	new	S27-3						
River	70	243	R	Сар	Front	Crack	48	HL		1	Diagonal extending down from the right bearing.	No Change							
River	71	243	-	Column	Front	Patch failure	3	3		3	10' from the top of cap	increase (prev. delam)	S27-4						
River	71	243	-	Column	Front	Spall	3	3	1/2	2	Left edge, 2' from the ground.	new						1	



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	71	243	-	Column	Rear & Front	Crack				6	Full height vertical cracks, 3 each face.	No Change							
River	71	244	-	Cap	Ctr Rear & Front	Crack	216	0.016		2	Negative moment cracks that wrap over the top and extend down both faces up to 6ft.	increase (Prev. HL)							
River	70	244	R	Сар	Rear	Crack	24	HL		1	Vertical crack extending down from the top of the cap	No Change							
River	70	244	R	Сар	Front	Crack	72	HL		3	6ft. horizontal crack and two vertical cracks up to 12"	No Change							
River	71	244	-	Column	Rear & Front	Crack		HL		6	Full height vertical cracks, 3 each face.	new							
River	71	245	ı	Сар	Ctr Rear & Front	Crack	72	0.016		3	Negative moment cracks that wrap over the top and extend down both faces up to 6ft.	No Change							
River	71	245	L	Сар	Front	Crack	48	HL		1	Vertical crack extending from the top of cap.	new							
River	70	245	R	Сар	Front	Crack	48	HL		1	Vertical crack extending from the top of cap.	No Change							
River	71	245	-	Column	Rear	Spall	4	3	1/2	2	3' from the ground.	No Change						1	
River	71	245	-	Column	Rear & Front	exposed steel					Diagonal steel rods which are exposed intermittently, full height	new							
River	71	245	-	Column	Rear & Front	Crack		HL		6	Full height vertical cracks, 3 each face.	new							
River	71	246	L	Сар	Left	Crack	24	HL		1	Vertical crack extending down from the top of the cap	No Change							
River	70	246	R	Сар	Right	Crack	48	0.01		2	Vertical/diagonal cracks with efflorescence extending down from the rear bearing	new		1					
River	70	246	R	Сар	Rear	Crack	36	HL		1	Vertical crack extending from the left bearing	new							
River	71	246	-	Сар	Ctr Rear & Front	Crack	36	HL		3	Negative moment cracks that wrap over the cap and extends down both faces up to 4'.	No Change							
River	71	246	-	Сар	Ctr Front	Crack	40	HL		1	Horizontal crack x 2' L, 3' from the top	No Change							
River	71	246	-	Column	Rear	Patch failure	3	3		2	10' from the top of cap	new							
River	71	246	-	Column	Rear	Crack	12	HL			Numerous horizontal and map cracks within the top 10ft. of the column, below the cap	new							
River	71	246	-	Column	Rear	exposed steel					2' of exposed rod, 10' above the ground.	No Change	S26-1						

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Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	71	246	-	Column	All	Crack		HL			Full height vertical cracks on the rear and front faces and map cracking throughout all faces	new							
River	71	246	ı	Column	Left	exposed steel				4	Four steel vertical rods which are exposed intermittently, full height	new							
River	69	247	L	Сар	Rear	Crack	60	0.016		2	Diagonal crack below the right bearing	No Change							
River	69	247	-	Сар	Ctr Rear & Front	Crack	228	HL		3	Negative moment crack that wraps over cap and extends down both faces up to 7'.	No Change							
River	70	247	R	Сар	Rear	Crack	60	0.013		1	Diagonal crack below the left bearing	No Change							
River	70	247	R	Сар	Bottom	Spall	4	2	1/4	1		new						1	
River	69	247	-	Column	Front	Crack		HL			Full height vertical cracks	new							
River	69	247	1	Column	Right	exposed steel				4	Four steel vertical rods which are exposed intermittently, full height	No Change	J26-11		1				
River	69	R1	L	Сар	Front	Spall	92	15	5	1	Spalling at the interface of the Guideway pedestal and the Acosta Bridge pedestal	no change	S28-7-9						1
River	69	R1	L	Cap	Rear	Spall	69	2	1	1	Spalling at the interface of the Guideway pedestal and the Acosta Bridge pedestal	no change	S28-10- 13						1
River	69	R1		Сар	Тор	Spall	7	5	3	1	The 7" wide lip that overhangs the Acosta bridge pedestal has a spalled segment at the rear end and is cracked, full length	no change							-
River	70	R1	R	Сар	Rear	Spall	16	HL		1	Crack along interface of the Guideway pedestal and the Acosta Bridge pedestal	no change	S28-14- 15						-
River	70	R1	R	Сар	Front	Spall	36	2	2	1	Spalling at the interface of the Guideway pedestal and the Acosta Bridge pedestal	no change	S28-16, 22-23						1
River	70	R1	R	Сар	Тор	Spall	7	6	4	1	The 7" wide lip that overhangs the Acosta bridge pedestal has a spalled segment at the front end	no change							-
River	66	R6	R	Сар	Front	Crack	12	HL		2	Two hairline vertical cracks on forward face of pedestal	no change							
River	67	248	-	Сар	Ctr Top	Crack	48	0.02		1	Transverse cracks over the top, spaced 6"- 12" apart, many extend down both faces up to 5ft.	No Change							
River	66	248	R	Сар	Front	Crack	48	HL		1	Diagonal crack below the left bearing	No Change							
River	67	248	-	Column	Rear	Crack		HL		2	Full height vertical cracks	new							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	67	248	-	Column	Front	Crack		HL		1	Full height vertical crack	new							
River	67	248	ı	Column	Left & Right	Crack		HL			Random cracking throughout	new							
River	67	249	ı	Сар	Ctr Rear	Crack	60	0.016		1	Vertical crack extending down from the top of the cap with light efflorescence	no change		1					
River	67	249	-	Сар	Ctr Front	Crack	60	0.016		1	Vertical crack extending down from the top of the cap	new							
River	67	249	-	Column	Rear & Front	exposed steel	4				Numerous pieces of up to 4" L exposed steel wire.	No Change							
River	67	249	-	Column	Front	Crack		HL		1	Full height vertical crack	new							
River	67	250	L	Сар	Rear	Crack	48	HL		2	Vertical and diagonal cracks extending from the top of the cap with light efflorescence, under and to the right of the right bearing	No Change							
River	66	250	R	Сар	Rear	Crack	48	HL		2	Vertical cracks extending from the top of the cap under the left bearing.	No Change		1					
River	67	250	L	Сар	Front	Crack	48	HL		3	Vertical cracks extending from the top of the cap.	No Change							
River	66	250	R	Сар	Front	Crack	46	HL		2	Vertical cracks extending from the top of the cap.	increase (prev. 36")							
River	67	250	L	Сар	Left	Crack	18	HL		1	Vertical cracks extending from the top of the cap.	new							
River	66	250	R	Сар	Bottom	Spall	3	2	1/4	1	Spall with 2" of exposed rebar	No Change			1				
River	67	251	-	Сар	Ctr Rear & Front	Crack	228	0.016		3	Negative moment cracks that wrap over cap and extend down both faces up to 7'. one on the rear face has light efflorescence	increase (Prev. HL)		1					
River	67	251	-	Column	Rear	Crack		HL		2	Full height vertical cracks	new							
River	67	251	-	Column	Front	Crack		HL		2	Full height vertical cracks	new							
River	67	251	-	Column	Front	exposed steel	4	_			Numerous pieces of up to 4" L exposed steel wire.	new							
River	67	251	L	Column	Front	Crack	72	HL		2	Horizontal cracks at bottom of the cap	new							
River	67	252	L	Сар	Front	Crack	60	HL		1	Horizontal crack, mid-height of cap	No Change							
River	67	252	-	Сар	Ctr Front & Top	Staining					Water staining is present on the top of the cap around the left downspout and on the front face.	No Change	S29-3, 5						



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	67	252	1	Сар	Ctr Rear & Front	Crack	204	HL		9	Vertical cracks that extend down both faces up to 6'; 3 may be negative moment cracks that wrap over cap.	No Change							
River	67	253	L	Wall	Left	Crack	60	0.03		1	7' from the ground at the cold joint for the cheek wall at Pier 253	No Change	S29-6						
River	66	253	R	Wall	Right	Crack	60	0.016		1	7' from the ground at the cold joint for the cheek wall at Pier 253	No Change							
River	66	253	R	Wall	Rear	Crack	31	HL		1	Vertical crack extending down from the top at the right bearing	No Change							
River	66	253	R	Wall	Right	Broken Barbed Wire					There is broken barbed wire on the barrier wall on the left and right sides at several locations.	No Change	S29-7						
River	67	253	L	Wall	Left	Spall	10	6	1 1/2	1	50' from Pier 253.	No Change	S29-10						1
River	67	253	L	Wall	Left	Crack	120	HL		1	Full height vertical, isolated throughout	new							
River	67	253	L	Wall	Left	Crack	36	HL		15	Vertical cracks with efflorescence extending from the deck into the wall	new		15					
River	66	253	R	Wall	Right	Spall	10	6	1 1/2	1	Ground level, 30' from Pier 254.	new							1
River	66	253	R	Wall	Right	Crack	96	HL		30	Between the two middle cold joints there are numerous vertical cracks with efflorescence in the right face of the deck, extending down the right face of the wall, spaced ~3' apart.	No Change	S29-8						
River	66	253	R	Wall	Right	Crack	36	HL		2	Horizontal, extending from the 2nd cold joint, starting 2' below the deck	No Change							
River	66	253	R	Wall	Right	Spall	17	1	1	1	2nd cold joint	new							2
River	66	253	R	Wall	Right	Crack	36	HL		1	with efflorescence, 50' from Pier 254.	new		3					
River	65	254	Ctr	Wall	Front	Crack	84	HL		4	Vertical cracks extending down from the top of the wall, one with efflorescence	No Change		1					
River	64	254	R	Wall	Right	Spall	11	4	1/2	1	3' off the ground	new							1
River	64	254	R	Wall	Right	Crack		HL			Cheek wall exhibits minor random hairline cracks.	No Change							
River	64	254	R	Wall	Front	Debris					Up to 3" of debris behind the right bearing	No Change							
River	64	254	R	Wall	Front	Crack	108	HL		1	Horizontal crack that wraps around the forward right corner, located 4' above ground	No Change						_	
River	65	255	L	Сар	Rear	Crack	54	HL		3	Vertical cracks extending down from the top of the cap under the bearings	No Change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	64	255	R	Сар	Rear	Crack	60	HL		1	Vertical crack extending down from the top of the cap	No Change							
River	65	255	L	Сар	Front	Crack	36	HL		3	Vertical cracks extending down from the top of the cap under the bearings	No Change							
River	65	255	-	Сар	Ctr Rear & Front	Crack	204	HL		5	Negative moment cracks that wrap over cap and extend down both faces up to 6', 2 with efflorescence.	No Change		2					
River	64	255	R	Сар	Right	Spall	4	2	1/2		Front bottom corner	No Change						1	
River	64	255	R	Сар	Front	Crack	60	HL		2	Diagonal cracks	No Change							
River	65	255	1	Column	Rear	Crack	120	HL		1	Vertical crack at the bottom of the column	No Change							
River	65	256	L	Column	Left	Crack	15	HL		2	Vertical cracks extending down from the top of the column	no change							
River	65	256	L	Column	Rear	Crack		HL			2 SF of map cracking on the at the top right corner.	no change							
River	65	256	L	Column	Right	Crack	17	HL		1	Vertical crack extending down from the center of the bearing.	no change							
River	64	256	R	Column	Left	Crack	24	0.01		2	Vertical cracks extending down from middle and rear of bearing	no change							
River	64	256	R	Column	Right	Crack	16	0.03		3	Vertical cracks extending down from middle and rear of bearing, also a 6" long crack, 2ft from the top, all with moderate efflorescence	increase	S24-9, 10	1					
River	64	256	R	Column	Front	Crack	9	HL		1	Vertical crack extending down from the top of the column at the right corner.	no change							
River	65	257	L	Column	Right	Crack	24	HL		1	Vertical crack extending down from the middle of the bearing	no change							
River	62	257	R	Column	Right	Crack	18	HL		1	Vertical crack extending down from the bearing	no change							
River	63	258	L	Сар	Left	Staining					Minor water staining below bearings	no change							
River	63	258	L	Сар	Left	Crack	24	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
River	63	258	L	Сар	Left	Delam.	9	1.5		1	Below forward keeper plate	no change						1	
River	63	258	L	Сар	Front	Delam.	14	7		1	On beam seat to the right of the right stem	new						1	
River	63	258	L	Сар	Rear	Delam.	33	13	2	1	Under the right bearing, extending 1" under the masonry plate. Area inaccessible for conventional spall repair.	no change	J9-1-3					3	



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	63	258	L	Сар	Front	Spall	3	2	1/2	1	To the right of the left stem.	no change						1	
River	63	258	L	Column	Front	Spall	3	2	1/2	1	4' above ground	new						1	
River	63	258	L	Column	Front	Spall	4	2	1/2	1	10' below the cap	no change						1	
River	63	258	Ctr	Сар	Rear & Front	Crack	48	0.01		1	vertical cracks spaced ~30" apart starting from the top of the cap; map cracking on top of cap	new	J9-5,6						
River	63	258	Ctr	Сар	Rear	Crack	408	HL		1	Horizontal crack across the full length of the cap between columns at mid height of cap.	no change	J9-4						
River	62	258	R	Сар	Rear	Crack	30	HL		1	Diagonal crack extending downward from the beam seat corner.	no change							
River	62	258	R	Сар	Rear	Debris					Bird debris between the cap stem and the rear steel beam	no change							
River	62	258	R	Сар	Rear & Front	Crack		HL			The right edge of the beam seat exhibits cracking, possibly the beginnings of a delamination	new	J9-13						4
River	62	258	R	Сар	Rear	Spall / Delam.	48	4	3	1	Top edge of the beam seat below the left bearing	no change	J9-14-16						4
River	62	258	R	Cap	Right	Crack	36	HL		1	Horizontal crack between beam seat corners	no change							
River	62	258	R	Сар	Front	Crack	14	HL		1	Diagonal crack extending downward from the beam seat corner.	no change							
River	62	258	R	Column	Rear & Front	Crack	72	HL		2	Horizontal crack on each face, 6-1/2' feet above ground	New							
River	62	258	R	Сар	Rear & Front	Staining					Water stains on both faces and standing water on the forward beam seat.	no change							
River	63	259	L	Сар	Left	Crack	30	HL		3	12" diagonal cracks extending from both beam seat corners and a horizontal crack in the stem.	no change							
River	63	259	L	Сар	Rear	Crack		HL		4	Full height vertical cracks, spaced 2-3', some with minor efflorescence to the right of the beam	no change							
River	63	259	L	Сар	Front	Crack	40	HL		2	Diagonal cracks between stems	New							
River	63	259	L	Сар	Right	Crack	48	HL		1	Vertical crack, map cracking also present	no change							
River	63	259	L	Сар	Rear & Front	Crack		HL	_		Map cracking present throughout both faces.	no change							
River	63	259	L	Column	Rear	Crack	60	HL		2	Horizontal cracks that extend into the right face, top 2 feet of the column	new							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	63	259	L	Column	Front	Crack	30	HL		2	vertical cracks jus below the cap	new							
River	63	259	L	Column	Rear	Crack	20	HL		4	vertical cracks jus below the cap	new							
River	63	259	L	Column	All faces	Crack		HL		1	Intermittent crack that wraps around, 7' from ground.	no change							
River	62	259	R	Сар	Rear	Efflo.					Adjacent to the left beam stem	new	J9-20	1					
River	62	259	R	Сар	Rear & Front	Crack	120	HL		6	Vertical cracks to the left of the beam that wrap over the top. Surface map cracking also present.	no change							
River	62	259	R	Сар	Rear	Crack	24	HL		1	Vertical crack between the beam stems.	no change							
River	62	259	R	Сар	Right	Crack	36	HL		5	Numerous diagonal and horizontal cracks, two extending from the rear bearing notch to the forward bearing notch.	no change	J9-19						
River	62	259	R	Сар	Right	Crack	8	HL		2	Diagonal cracks with efflorescence in the right face of the overhang flange	new							
River	63	260	L	Сар	Left	Crack	4	HL		2	Diagonal cracks extending from both beam seat corners. Map cracking also present.	no change							
River	63	260	L	Сар	Rear	Crack	36	HL			Vertical crack extending downward from the right flange overhang.	no change							
River	63	260	L	Column	Right	Crack		HL			Map cracking throughout face	no change							
River	63	260	Ctr	Cap	Rear & Front	Crack	54	HL			Full height hairline vertical cracking, spaced 2' OC that wrap over the top, full length between columns, some with minor efflorescence. Surface map cracking present throughout both faces, between columns.	no change		10					
River	60	260	R	Сар	Rear	Efflo.					Moderate efflorescence along the exterior face of the left beam stem.	no change	J9-31	1					
River	60	260	R	Сар	Front	Efflo.					Moderate efflorescence along the exterior face of the left beam stem.	new		1					
River	60	260	R	Сар	Right	Crack	12	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
River	60	260	R	Сар	Bottom	Exposed 2x4					To the right of the column there is an exposed piece of 2x4 end.	no change							
River	60	260	R	Column	Through out	Crack		HL			Map cracking on the back, front and right faces within the upper third of the column.	no change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
River	61	261	L	Сар	Left	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
River	61	261	L	Сар	Right	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
River	61	261	L	Сар	Rear & Front	exposed steel					3 small pieced of exposed steel on each face	no change							
River	60	261	R	Сар	Left	Crack	36	HL			Horizontal crack between beam seat corners	no change							
River	60	261	R	Сар	Rear	Crack	48	0.01		3	Vertical cracking	no change							
River	60	261	R	Сар	Right	Crack	36	HL		2	Horizontal cracks between beam seat corners	no change							
River	60	261	R	Column	Rear	Crack		HL			Random cracking throughout rear and right faces.	no change							
O&M	108	M2	-	Abutment	Front	Gap					1in. gap between the bent cap and the slope protection	new	J4-4,5						
O&M	107A	M5	L	Cap	Left	Crack	7	HL		1	Diagonal crack extending from the forward beam seat corner.	no change							
O&M	107A	M5	R	Сар	Right	Crack	3	HL		1	Diagonal crack extending from the forward beam seat corner.	no change							
O&M	106	400	-	Сар	Ctr Front	Debris					Sand and debris on bridge seat	no change							
O&M	106	401	L	Сар	Rear	Crack	48	HL		2	One vertical and one diagonal crack between beam stems	no change							
O&M	106	401	L	Сар	Bottom	Crack	24	HL		1	With moderate efflorescence	no change	J4-28,29	1					
O&M	106	401	L	Сар	Front	Crack	42	HL		1	Diagonal crack between beam stems	no change							
O&M	106	401	-	Сар	Ctr Front	Crack	20	HL		1	Diagonal, extending from the right beam	new							
O&M	106	401	-	Сар	Ctr Rear	Crack	36	HL		1	Diagonal, extending from the left beam	new							
O&M	106	401	-	Сар	Ctr Rear & Front	Crack	138	HL		2	Negative moment cracks that extend down both faces up to 3'. Efflo on the rear face	no change		1					
O&M	106	401	R	Сар	Right	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
O&M	106	401	R	Сар	Right	Delam.	16	7		1	forward beam seat	no change	J4-25, 26						
0&M	106	402	-	Сар	Ctr Rear	Crack	30	HL		1	vertical crack	new							
0&M	106	402	R	Сар	Right	Crack	7	HL			Diagonal crack extending from the forward beam seat corner.	no change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
0&M	106	403	-	Сар	Ctr Rear	Crack	29	HL		1	Vertical hairline crack	no change							
0&M	106	403	-	Column	Front	Spall	3	3	1/2	2	1' from the ground.	no change						1	
0&M	106	403	-	Column	Rear	Spall	8	3	1/2	1	3' from the ground.	no change							1
0&M	105B	404	-	Сар	Ctr Rear	Crack	60	0.013		2	Vertical cracks with efflorescence, one extending from each top flange drip line.	no change	J18-1	2					
O&M	105B	404	-	Сар	Ctr Front	Crack	58	HL		2	Vertical cracks with efflorescence, one extending from each top flange drip line.	no change		1					
0&M	105B	404	-	Сар	Ctr Front	Efflo.					Leaching from the right stem bearing of the left beam	new	J18-4	1					
0&M	106	404	R	Сар	Right	Crack	12	HL		1	Diagonal crack extending from the forward beam seat corner.	no change							
O&M	105B	405	L	Сар	Left	Crack	9	HL		1	Diagonal crack extending from the rear beam seat corner.	no change							
O&M	105B	405	-	Cap stem	Ctr Rear	Crack	24	HL		1	Horizontal crack at the top	no change							
O&M	104	405	R	Сар	Тор	Delam.	9	3		1		new						1	
O&M	105B	405	-	Сар	Ctr Rear	exposed steel	3				Exposed steel wire, below left beam seat	no change							
O&M	105B	405	-	Сар	Ctr Front	Crack	7	HL		2	Diagonal cracks extending from the left beam seat corner and cap stem notch	no change							
O&M	103	406	L	Сар	Left	Spall	3	3		2	Exposed and coated rebar	no change			1				
O&M	103	406	L	Сар	Right	Spall	3	3	1/4	1	One exposed and coated rebar	no change			1				
O&M	103	406	L	Column	Through out	Crack	360	HL			Full height vertical cracks on all faces	no change	S18-3						
O&M	104	406	R	Сар	Тор	exposed steel	4			1	Steel hook extending up from the top of the cap between bearings	no change							
0&M	104	406	R	Сар	Тор	Debris					Bird nest between bearings	new	J24-18						
0&M	102	407	R	Column	Front	Exposed steel					Exposed steel wires	no change							
0&M	100	408	R	Column	Front	Crack	28	HL		1	Horizontal crack wraps around left face, 2' from the top of the cap	No Change							
O&M	100	408	R	Column	Left	Crack	36	HL		1	Vertical crack extending down from the top of the column under the forward bearing.	No Change							



Line	Block	Pier	Side	Element	Face	Deficiency Type	Max Length (in)	Width (in)	Depth (in)	Qty	Additional Notes	2017 Note Disposition	2019 Photo	Efflor. (CS2)	Rebar (CS2)	Crack (CS2)	Crack (CS3)	Spall /Patch (CS2)	Spall (CS3)
O&M	100	408	R	Column	Rear	Crack	24	HL		1	Vertical crack extending down from the top of the column	No Change							
O&M	100	408	R	Column	Right	Crack	19	0.016		1	Vertical crack extending down from the top of the column under the forward bearing	No Change							
O&M	100	408	R	Column	Rear	Patch Delam	5	3	1	1	The top rear right corner has a patch repair that is delaminating and cracking. Crack is 0.01" wide and runs underneath the right bearing	No Change	S29-13					1	
О&М	103	408	L	Сар	Left	Crack	6	HL		2	Diagonal cracks extending from both beam seat corners.	no change							
O&M	103	408	L	Сар	Rear	Crack	12	HL		1	Horizontal crack at the left stem bearing	no change							
O&M	103	408	L	Cap	Right	Crack	24	HL		3	6" diagonal cracks extending from both beam seat corners and a vertical crack x 24" starting from the bottom of pier cap.	no change							
O&M	103	408	L	Column	Rear	Crack		HL			Map cracking in rear face	no change							
O&M	103	408	L	Column	Left	Spall	3	3	1/2	1	2.5' from the ground.	new						1	
O&M	103	408	L	Column	Right	Spall	8	4	1/2	2	5' from the ground.	no change	R24-21						1
O&M	101	409	L	Column	Front	Crack	6	HL		1	Vertical crack extending down from the top of the column	no change							
O&M	101	409	L	Column	Left	Crack	24	0.013		2	Vertical crack extending down from the top of the column	no change							
O&M	101	409	L	Column	Rear	Crack	16	HL		1	Vertical crack extending down from the top of the column	no change							
O&M	100	409	R	Column	Front	Crack	60	0.016			Vertical crack at ground level	no change							
O&M	100	409	R	Column	Left	Crack	38	HL		2	Vertical cracks extending down from the ends of the bearing	no change							
O&M	100	409	R	Column	Right	Crack	36	HL		1	Vertical crack extending down from the rear of the bearing	increase (prev. 30")							
0&M	100	409	R	Column	Rear	Crack	18	HL		3	Two horizontal cracks and one vertical crack, near the top.	no change							

Appendix D-13 SUBSTRUCTURE ELEMENTS Page 55 of 55

APPENDIX E

Excerpts from FDOT Acosta Bridge Report

FLORIDA DEPARTMENT OF TRANSPORTATION BRIDGE MANAGEMENT SYSTEM

Inspection/CIDR Report with PDF attachment(s) Inspection

Structure ID: 720570 ACOSTA BRIDGE SB

DISTRICT: D2 - Lake City INSPECTION DATE: 8/14/2018 ECHR

The previous requested repair (Repair honeycomb void areas with exposed reinforcing steel) was not completed.

1080/4 Refer to Parent Element

1090/4 Refer to Parent Element

1130/4 Refer to Parent Element

SUBSTRUCTURE: Substructure

Str Uı	it Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty
0	234 / 4	Re Conc Pier Cap	233	99.15	0		2	0.85	0		235 ft
0	1080 / 4	Delamination/Spall/Patched Area	0		0		2	100	0		2 ft

Element Inspection Notes:

234/4

Pier Cap 1, South face, (Pier 8 of Structure #720576) adjacent to the Monorail skyway express pedestal cap, is spalling along the bearing seat beneath the left bearing. Cracking/spalling extends into the bearing seat beneath the bearing. Deficiencies are as follows:

South face, spalled, 69 in. x 17 in. x up to 3 in. See Appendix A, Photo 21 for view. North face, spall, 92 in. x 15 in. x 5 in. with exposed rebar (not accessible for ZRC). See Appendix A, Photo 22 for view. Top face, cracking/spalling in a 30 in. area extending through the bearing seat, which is 5 in. high. The effected area extends beneath the left end of bearing approximately 4 in. on the South side and 3 1/2 in. on the North side (Photo could not be obtained due to limited access). The bearing measurement is 25 in. x 9 in. The Bridge Structural Engineer reviewed these areas on 04/25/16 and recommended to continue to monitor. No significant change was noted during this inspection, therefore pose no problem at this time.

(New) There is construction debris built-up on Pier Cap 6, behind Bearings 6-1 and 6-2. See Appendix A, Photo 23 for typical view. Posing no problem at this time.

The previous requested repair (Repair spalled area and crack in Pier 1 under People Mover) was not completed.

1080/4 Refer to Parent Element

SUBSTRUCTURE: Substructure

Str Unit	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty
0	8389 / 4	Timber Fender/Dolphin	266	100	0		0		0		266 (LF)

Element Inspection Notes:

8389/4

Divers were required to inspect Element 8389. See Appendix A, Underwater Bridge Inspection Report for diver's comments and recommendations.

The previous requested repair (Rehabilitate fender system) was in the process of being completed under FIN Proj. #432195-1-52-01

SUPERSTRUCTURE: Bearings

Str Unit	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty
0	314 / 4	Pot Bearing	6	33.33	12	66.67	0		0		18 each
0	1000 / 4	Corrosion	0		12	100	0		0		12 each

BRIDGE NO.	720570	FLORIDA DEPARTMENT	LOCATION	SR-13 SB (ACOSTA) OVER ST. JOHNS RIVER
COUNTY SECTION NO.	72160448	OF TRANSPORTATION	INSPECTION DATE	08/14/2018
STATE ROAD NO.	13	**************************************	LEAD INSPECTOR	D. HEUSCHKEL
U.S. ROAD NO.	N/A		MILE POST NO.	0.477



PHOTO 21 – ELEMENT 234 (W.O) VIEW OF 69 IN. X 17 IN. X UP TO 3 IN. DEEP SPALLED AREA IN SOUTH FACE OF PIER CAP 1, ADJACENT TO MONORAIL SKYWAY EXPRESS



PHOTO 22 – ELEMENT 234 (W.O) VIEW OF 92 IN. X 15 IN. X 5 IN. DEEP SPALLED AREA IN NORTH FACE OF PIER CAP 1, ADJACENT TO MONORAIL SKYWAY EXPRESS

FLORIDA DEPARTMENT OF TRANSPORTATION BRIDGE MANAGEMENT SYSTEM

Inspection/CIDR Report with PDF attachment(s) Inspection

Structure ID: 720571

ACOSTA BRIDGE NB

DISTRICT: D2 - Lake City INSPECTION DATE: 1/17/2018 KRUI

220/4 Divers were required to inspect Piers 1 thru 6. See Appendix A, Underwater

Bridge Inspection Report for diver's remarks and recommendations.

1080/4 Refer to Parent Element

1090/4 Refer to Parent Element

1130/4 Refer to Parent Element

SUBSTRUCTURE: Substructure

Str Uı	nit Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty
0	234 / 4	4 / 4 Re Conc Pier Cap		93.05	21	6.95	0		0		302 ft
0	1130 / 4	1130 / 4 Cracking (RC and Other)			21	100	0		0		21 ft

Element Inspection Notes:

234/4

(New) There are several up to moderate size vertical and diagonal cracks, some with efflorescence bleedout in the cantilever portion of the pier caps, the most pronounced cracks were noted in Pier Caps 1 and 6.

(Change) South face of Pier Cap 1 has two up to 16 in. vertical crack (possible incipient spall), adjacent to the cast-in-place cap for the People Mover. See Appendix A, Photo 20 for view. Due to limited access, inspectors could not get close enough for hands-on inspection/investigation.

(Change) North face of Pier 1 Cap has moderate size horizontal and diagonal cracks exhibiting efflorescence below Bearing 1-1. See Appendix A, Photo 21 for view.

1130/4

Refer to Parent Element

SUBSTRUCTURE: Substructure

Str Unit	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty
0	8389 / 4	Timber Fender/Dolphin	0		0		215	80.83	51	19.17	266 (LF)
0	1020 / 4	Connection	0		0		51	100	0		51 (LF)
0	1140 / 4	Decay/Section Loss	0		0		164	76.28	51	23.72	215 (LF)

Element Inspection Notes:

8389/4 Divers were required to inspect Element 8389. See Appendix A, Underwater

Bridge Inspection Report for diver's comments and recommendations.

1020/4 Refer to Parent Element

1140/4 Refer to Parent Element

SUPERSTRUCTURE: Bearings

<u> </u>	Litt Flow Flow Description												
Str Unit	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty		
0	314 / 4	Pot Bearing	0		17	94.44	1	5.56	0		18 each		
0	1000 / 4	Corrosion	0		17	94.44	1	5.56	0		18 each		
0	8516 / 4	Painted Steel	0		122	59.8	61	29.9	21	10.29	204 sq.ft		
0	3410 /	Chalk(Steel Protect Coatings)	0		122	100	0		0		122 sq.ft		
0	3440 /	4 Eff (Stl Protect Coat)	0		0		61	74.39	21	25.61	82 sq.ft		

Element Inspection Notes:

314/4 The paint system on the bearings is deteriorated and the bearings are showing

This report contains information relating to the physical security of a structure and depictions of the structure. This information is confidential and exempt from public inspection pursuant to sections 119.071(3)(a) and 119.071(3)(b), Florida Statutes. Only the cover page of this report may be inspected and copied.

BRIDGE NO.	720571	FLORIDA DEPARTMENT	LOCATION	SR-13 NB (ACOSTA) OVER ST. JOHNS RIVER
COUNTY SECTION NO.	72160448	OF TRANSPORTATION	INSPECTION DATE	01/17/2018
STATE ROAD NO.	13	**************************************	LEAD INSPECTOR	D. HEUSCHKEL
U.S. ROAD NO.	N/A	BIAD OL IIVOI ECITOTVIELI ORT	MILE POST NO.	0.477



 ${\tt PHOTO~19-ELEMENT~210}\\ {\tt TYPICAL~VIEW~OF~THE~GLASS~LIGHT~LENS~COVERS~MISSING~IN~PIER~6}\\$



PHOTO 20 – ELEMENT 234 VIEW OF THE CRACKS IN THE SOUTH FACE OF PIER 1, ADJACENT TO THE PEOPLE MOVER PORTION OF THE PIER

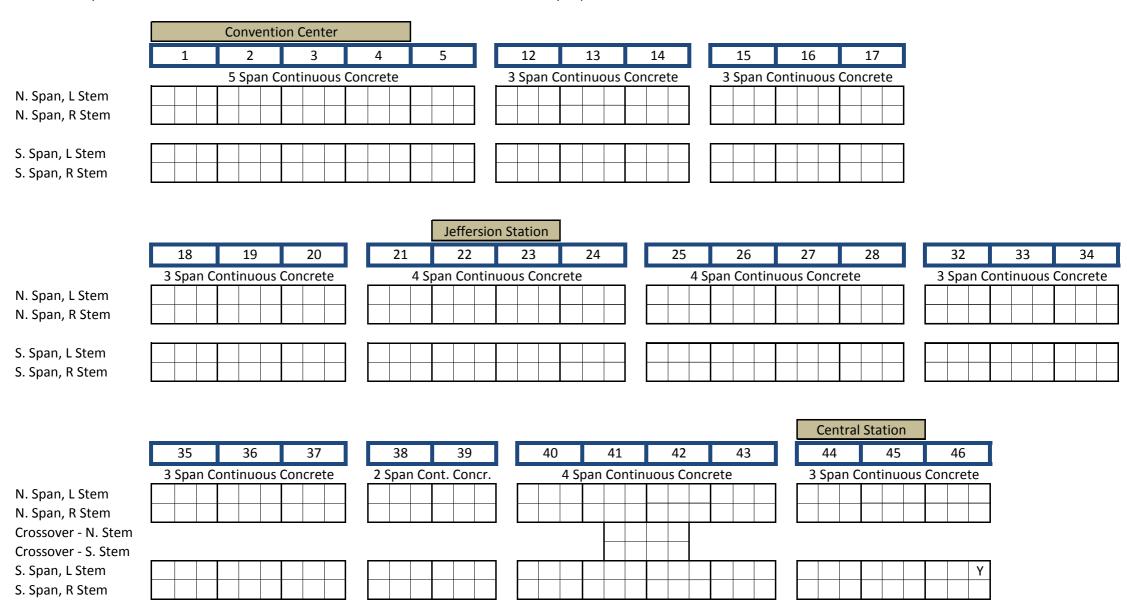
APPENDIX F

CFRP Wrap Locations



CFRP Locations - Starter Line

Three boxes per stem of each concrete tee beam. A "Y" in a box indicates that a CFRP wrap is present on the stem end.

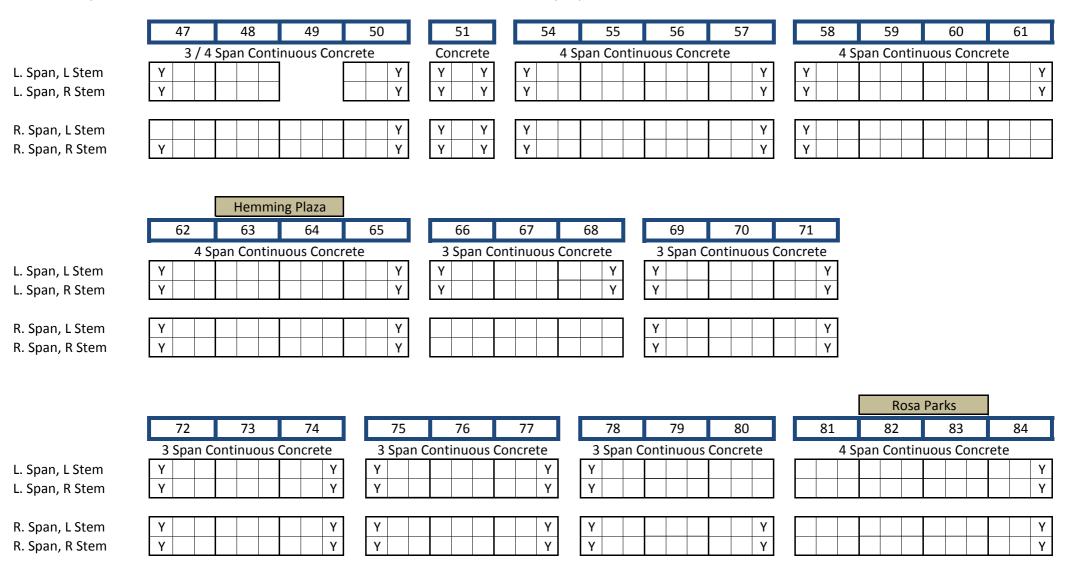


CFRP WRAP LOCATIONS Page 1 of 4



CFRP Locations - North Line

Three boxes per stem of each concrete tee beam. A "Y" in a box indicates that a CFRP wrap is present on the stem end.

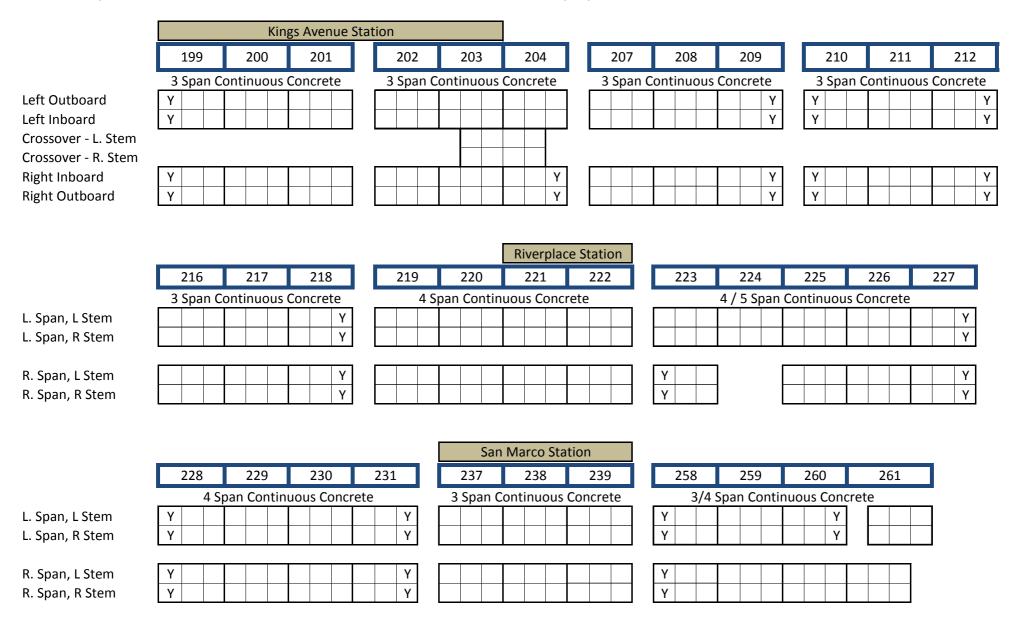


CFRP WRAP LOCATIONS Page 2 of 4



CFRP Locations - South & River Lines

Three boxes per stem of each concrete tee beam. A "Y" in a box indicates that a CFRP wrap is present on the stem end.



CFRP WRAP LOCATIONS Page 3 of 4



CFRP Locations - O&M Line

Three boxes per stem of each concrete tee beam. A "Y" in a box indicates that a CFRP wrap is present on the stem end.

	M2	M3	M4	M5	400	401	402	403	}	404	405	5	406	
	Concrete	Concrete	Concrete	Concrete		5 Span C	Continuou	s Concre	te		2 Span	Cor	t. Conc	r.
L. Span, L Stem	YY										Υ			Υ
L. Span, R Stem	YY										Υ			Υ
R. Span, L Stem	YY													
R. Span, R Stem	Y													

CFRP WRAP LOCATIONS Page 4 of 4