NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION: PAR, NEW REPAIRS, DATA CHANGES

Structure Safety Report

Routine Element Inspection - Contract

INSPECTION DATE: 06/03/2020

DIVISION: 6 **COUNTY:** COLUMBUS **STRUCTURE NUMBER:** 230005 **FREQUENCY:** 24 MONTHS

FACILITY CARRIED: US76 **MILE POST:**

LOCATION: 0.3 MI.E.JCT.SR1355

FEATURE INTERSECTED: GAPWAY SWAMP

LATITUDE: 34° 16' 32.84" **LONGITUDE:** 79° 2' 29.8"

SUPERSTRUCTURE:

SUBSTRUCTURE:

SPANS: 4 SPANS. SEE SPAN PROFILE SHEET FOR SPAN DETAILS

☐ FRACTURE CRITICAL ☐ TEMPORARY SHORING ☐ SCOUR CRITICAL ☐ SCOUR PLAN OF ACTION

NBI GRADES: **DECK** 6 **SUPERSTRUCTURE** 6 **SUBSTRUCTURE** ~~5~~ 4 **CULVERT** N

Controlled by U/W inspection per DNS

POSTED SV: Not Posted Not Posted **POSTED TTST:** Not Posted Not Posted

OTHER SIGNS PRESENT: TWO (2) DELINEATORS

LOOKING EAST

Sign noticed issued for		Number Required
NO	WEIGHT LIMIT	0
YES	DELINEATORS	2
NO	NARROW BRIDGE	0
NO	ONE LANE BRIDGE	0
NO	LOW CLEARANCE	0

DIRECTION OF INSPECTION W-E

DIRECTION MATCHES PLANS YES

INSPECTED BY	SIGNATURE	ASSISTED BY
D. Curtis	D. Curtis	R. Wendlandt

NATIONAL BRIDGE INVENTROY ----- STRUCTURE INVENTORY AND APPRAISAL

08/14/2020

IDENTIFICATION

(1) STATE NAME NORTH CAROLINA BRIDGE **230005**
(8) STRUCTURE NUMBER (FEDERAL) **0470005**
(5) INVENTORY ROUTE (ON/UNDER) ON **121000760**
(2) STATE HIGHWAY DEPARTMENT DISTRICT **6**
(3) COUNTY CODE (FEDERAL) **47** (4) PLACE CODE **00000**
(6) FEATURE INTERSECTED **GAPWAY SWAMP**
(7) FACILITY CARRIED **US76**
(9) LOCATION **0.3 MI.E.JCT.SR1355**
(11) MILEPOINT **0.0**
(12) BASE HIGHWAY NETWORK **1**
(13) LRS INVENTORY ROUTE & SUBROUTE **20076**
(16) LATITUDE **34° 16' 32.84"** (17) LONGITUDE **79° 2' 29.8"**
(98) BORDER BRIDGE STATE CODE PERCENT SHARED
(99) BORDER BRIDGE STRUCTURE NUMBER

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE MAIN **Concrete**
TYPE **Tee Beam** CODE **104**
(44) STRUCTURE TYPE APPROACH
TYPE CODE
(45) NUMBER OF SPANS IN MAIN UNIT **4**
(46) NUMBER OF SPANS IN APPROACH **0**
(107) DECK STRUCTURE TYPE CODE **1**
(108)WEARING SURFACE/PROTECTIVE SYSTEM
(A) TYPE OF WEARING SURFACE CODE **1**
(B) TYPE OF MEMBRANE CODE **0**
(C) TYPE OF DECK PROTECTION CODE **0**

AGE AND SERVICE

(27) YEAR BUILT **1927**
(106) YEAR RECONSTRUCTED **1952**
(42) TYPE OF SERVICE ON - **Highway**
OFF - **Waterway** CODE **15**
(28) LANES ON STRUCTURE **2** LANES UNDER STRUCTURE **0**
(29) AVERAGE DAILY TRAFFIC **1000**
(30) YEAR OF ADT **2017** (109) TRUCK ADT PCT **14**
(19) BYPASS OR DETOUR LENGTH **99.0**

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN **37.0**
(49) STRUCTURE LENGTH **150.0**
(50) CURB OR SIDEWALK: LEFT **1.6** RIGHT **1.6**
(51) BRIDGE ROADWAY WIDTH, CURB TO CURB **28.0**
(52) DECK WIDTH OUT TO OUT **33.5**
(32) APPROACH ROADWAY WITH (W/ SHOULDERS) **25.0**
(33) BRIDGE MEDIAN **No median** CODE **0**
(34) SKEW **30** (35) STRUCTURE FLARED **0**
(10) INVENTORY ROUTE MIN VERT CLEAR **999.9**
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR **28.0**
(53) MIN VERT CLEAR OVER BRIDGE RDWY **999.9**
(54) MIN VERT UNDERCLEAR: REFERENCE **0.0**
(55) MIN LAT UNDERCLEARANCE RT: REFERENCE **N** **0.0**
(56) MIN LAT UNDERCLEARANCE LT: **0.0**

NAVIGATION DATA

(38) NAVIGATION CONTROL - CODE **0**
(111) PIER PROTECTION CODE
(39) NAVIGATION VERTICAL CLEARANCE **0.0**
(116) VERT - LIFT BRIDGE NAV MIN VERT CLEAR **0.0**
(40) NAVIGATION HORIZONTAL CLEARANCE **0.0**

SUFFICIENCY RATING **61.30**
STATUS =

CLASSIFICATION — CODE

(112) NBIS BRIDGE SYSTEM **YES**
(104) HIGHWAY SYSTEM **Inventory Route is on NHS** **1**
(26) FUNCTIONAL CLASS **Rural Principal Arterial - Other** **02**
(100) STRAHNET HIGHWAY **Non-Interstate STRAHNET Route** **2**
(101) PARALLEL STRUCTURE **No parallel structure exists** **N**
(102) DIRECTION OF TRAFFIC **2-way traffic** **2**
(103) TEMPORARY STRUCTURE
(110) DESIGNATED NATIONAL NETWORK - **on national network for trucks** **0**
(20) TOLL **On Free Road** **3**
(21) MAINT - **01**
(22) OWNER - **01**
(37) HISTORICAL SIGNIFICANCE - **5**

CONDITION — CODE

(58) DECK **6**
(59) SUPERSTRUCTURE **6**
(60) SUBSTRUCTURE **5**
(61) CHANNEL & CHANNEL PROTECTION **4**
(62) CULVERTS **N**

LOAD RATING AND POSTING — CODE

(31) DESIGN LOAD **HS 15** **3**
(63) OPERATING RATING METHOD - **Load Factor** **1**
(64) OPERATING RATING - **HS-28** **53**
(65) INVENTORY RATING METHOD - **1**
(66) INVENTORY RATING **HS-17** **32**
(70) BRIDGE POSTING **No Posting Required** **5**
(41) STRUCTURE OPEN, POSTED, OR CLOSED **A**
DESCRIPTION **Open, no restriction**

APPRAISAL — CODE

(67) STRUCTURAL EVALUATION **5**
(68) DECK GEOMETRY **5**
(69) UNDERCLEARANCES, VERT & HORIZ **N**
(71) WATERWAY ADEQUACY **5**
(72) APPROACH ROADWAY ALIGNMENT **5**
(36) TRAFFIC SAFETY FEATURES **0111**
(113) SCOUR CRITICAL BRIDGES **4**

PROPOSED IMPROVEMENTS

(75) TYPE OF WORK CODE
(76) LENGTH OF STRUCTURE IMPROVEMENT
(94) BRIDGE IMPROVEMENT COST
(95) ROADWAY IMPROVEMENT COST
(96) TOTAL PROJECT COST
(97) YEAR OF IMPROVEMENT COST ESTIMATE
(114) FUTURE ADT **2,000** YEAR OF FUTURE ADT **2040**

INSPECTION

(90) INSPECTION DATE **06/20** (91) FREQUENCY **24**
(92) CRITICAL FEATURE INSPECTION (93) CFI DATE
A) FRACTURE CRIT DETAIL A)
B) UNDERWATER INSP **60** B) **03/20**
C) OTHER SPECIAL INSP C)
SCOUR

Superstructure Build Details

Span Number 1 **Span Length** 37.5000 **Skew** 60.0000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
2	Concrete Railing	Reinforced Concrete Bridge Railing	76 Feet		
1	Reinforced Concrete Deck	Reinforced Concrete Deck	1182 Square Feet		
4	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	152 Feet		

Span Number 2 **Span Length** 37.5000 **Skew** 60.0000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
2	Concrete Railing	Reinforced Concrete Bridge Railing	76 Feet		
1	Standard Joint	Pourable Joint Seal	32 Feet		
1	Reinforced Concrete Deck	Reinforced Concrete Deck	1182 Square Feet		
4	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	152 Feet		

Span Number 3 **Span Length** 37.5000 **Skew** 60.0000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
1	Reinforced Concrete Deck	Reinforced Concrete Deck	1182 Square Feet		
4	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	152 Feet		
1	Standard Joint	Pourable Joint Seal	32 Feet		
2	Concrete Railing	Reinforced Concrete Bridge Railing	76 Feet		

Span Number 4 **Span Length** 37.5000 **Skew** 60.0000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
2	Concrete Railing	Reinforced Concrete Bridge Railing	76 Feet		
4	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	152 Feet		
2	Standard Joint	Pourable Joint Seal	64 Feet		
1	Reinforced Concrete Deck	Reinforced Concrete Deck	1182 Square Feet		

Structure Element Scoring

Structure Number: **230005**

Inspection Date **6/3/2020**

Element Number	Parent Number	Element Name	Location	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity
12	0	Reinforced Concrete Deck	Deck	4728	893	84	3751	0
110	0	Reinforced Concrete Open Girder/Beam	Beam	608	422	178	8	0
210	0	Reinforced Concrete Pier Wall	Piles and Columns	108	35	71	2	0
215	0	Reinforced Concrete Abutment	Abutments	108	29	79	0	0
220	0	Reinforced Concrete Pile Cap/Footing	Footing	36	0	0	36	0
228	0	Timber Pile	Foundation Pile	22	0	0	22	0
234	0	Reinforced Concrete Pier Cap	Caps	168	144	22	2	0
301	0	Pourable Joint Seal	Expansion Joints	128	127	0	0	1
331	0	Reinforced Concrete Bridge Railing	Bridge Rail	304	292	11	1	0

Summary of Maintenance Needs

Maintenance By Defect

Structure Number: **230005** Inspection Date: **06/03/2020**

MMS Code	Element Name	Defect Name	Recommended Quantity
3326	Reinforced Concrete Deck	Cracking (RC and Other)	3871 Square Feet
3326	Reinforced Concrete Deck	Delamination/Spall	9 Square Feet
3306	Reinforced Concrete Open Girder/Beam	Exposed Rebar	1 Feet
3306	Reinforced Concrete Open Girder/Beam	Cracking (RC and Other)	3 Feet
3306	Reinforced Concrete Open Girder/Beam	Efflorescence/Rust Staining	1 Feet
3306	Reinforced Concrete Open Girder/Beam	Delamination/Spall	7 Feet
3306	Reinforced Concrete Open Girder/Beam	Patched Area	3 Feet
3348	Reinforced Concrete Pier Wall	Delamination/Spall	5 Feet
3348	Reinforced Concrete Pile Cap/Footing	Scour	36 Feet
3348	Reinforced Concrete Pile Cap/Footing	Delamination/Spall	12 Feet
3344	Timber Pile	Decay/Section Loss	22 Each
3348	Reinforced Concrete Pier Cap	Patched Area	2 Feet
3310	Pourable Joint Seal	Seal Damage	1 Feet
3318	Reinforced Concrete Bridge Railing	Exposed Rebar	3 Feet
3318	Reinforced Concrete Bridge Railing	Cracking (RC and Other)	1 Feet

Element Structure Maintenance Quantities

Structure Number: **230005** Inspection Date **06/03/2020**

Location	MMS Code	Description	Maint Quantity	Total Quantity	Severe Quantity	Poor Quantity	Fair Quantity	Good Quantity
Abutments	3350	Maintenance of Concrete Wings and Wall	0	108	0	0	79	29
Beam	3306	Maintenance Concrete Superstructure Components	15	608	0	8	178	422
Bridge Rail	3318	Maintenance of Concrete Bridge Rail	4	304	0	1	11	292
Caps	3348	Maintenance of Concrete Substructure	2	168	0	2	22	144
Deck	3326	Maintenance of Concrete Deck	3880	4728	0	3751	84	893
Expansion Joints	3310	Maintenance of Standard Bridge Expansion Joints	1	128	1	0	0	127
Footing	3348	Maintenance of Concrete Substructure	48	36	0	36	0	0
Foundation Pile	3344	Maintenance To Timber Substrcutre	22	22	0	22	0	0
Piles and Columns	3348	Maintenance of Concrete Substructure	2	108	0	2	71	35

Priority Actions Request

Structure Number 230005

Span1

3306 **Beam 1** Reinforced Concrete Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Delamination/Spall	1	Span 1 Beam 1: 21" X 10" X 4" DEEP SPALL WITH EXPOSED REBAR IN LEFT FACE OF GIRDER AT PIER 1.

3306 **Beam 3** Reinforced Concrete Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Delamination/Spall	1	Span 1 Beam 3: 11" X 6" X 3" DEEP SPALL WITH EXPOSED REBAR IN RIGHT FACE OF GIRDER AT PIER 1.

Span3

3306 **Beam 2** Reinforced Concrete Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Delamination/Spall	1	Span 3 Beam 2: 9" X 2" X 2" DEEP SPALL WITH EXPOSED REBAR IN LEFT FACE OF GIRDER AT PIER 3.

Span4

3326 **Deck** Reinforced Concrete Deck

Priority Level	Defect Type	Quantity	Defect Description
2	Delamination/Spall	1	Span 4 Deck: 8" X 3" X 1/2" DEEP SPALL WITH EXPOSED REBAR IN TOP OF DECK IN WHEEL LINE OF EASTBOUND LANE, APPROXIMATELY 16" FROM END BENT 2 FILL FACE.

General Comments and Misc Items

General Comments and Misc Items General Comments and Misc Items

Priority Level	Defect Type	Quantity	Defect Description
2		1	MISSING DELINEATOR AT NORTHEAST CORNER.
2		1	MISSING DELINEATOR AT NORTHWEST CORNER.
2		250	50' SECTION WITH AREAS OF DECAY UP TO FULL DEPTH WITH EXPOSED FILL THROUGHOUT FACE OF SOUTHEAST WINGWALL, BEGINNING APPROXIMATELY 18' FROM NEAR END OF WINGWALL.

? Priority Action Request (PAR) 1 Assigned Routine Maintenance 2 Assigned Priority Maintenance 3 Assigned Critical Find

Priority Actions Request

Structure Number 230005

? Priority Action Request (PAR) 1 Assigned Routine Maintenance 2 Assigned Priority Maintenance 3 Assigned Critical Find

Element Condition and Maintenance Data

Structure Number: **230005** Inspection Date: **06/03/2020**

Span 1 Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,182	283	74	825	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
12	**Cracking (RC and Other)**	**UP TO 1/16" DIAGONAL CRACKS IN TOP OF DECK IN WESTBOUND LANE NEAR ABUTMENT 1 FILL FACE (SEE PHOTO)**	3		16	Square Feet
12	Cracking (RC and Other)	UP TO 1/16" MAP CRACKS IN TOP OF DECK PRIMARILY IN TRAVEL LANES	3	825	825	Square Feet
12	Delamination/Spall	13" X 4" X 1" DEEP SPALL WITH EXPOSED REBAR AND 16" X 7" AREA OF DELAMINATION WITH UP TO 0.02" MAP CRACKS IN BOTTOM OF DECK IN BAY 1, APPROXIMATELY 7' FROM ABUTMENT 1 (SEE PHOTO)	3		2	Square Feet
12	**Abrasion/Wear (PSC/RC)**	**751 SF OF WORN CONCRETE WITH EXPOSED AGGREGATE THROUGHOUT TOP OF DECK IN TRAVEL LANES**	2			Square Feet
12	Cracking (RC and Other)	UP TO 0.012" DIAGONAL, TRANSVERSE, AND LONGITUDINAL CRACKS WITH AND WITHOUT EFFLORESCENCE IN BOTTOM OF DECK IN VARIOUS LOCATIONS THROUGHOUT	2		100	Square Feet
12	Delamination/Spall	12" X 2" X 1/2" DEEP SPALL IN BOTTOM OF DECK IN BAY 1, APPROXIMATELY 1' FROM ABUTMENT 1	2		1	Square Feet
12	**Patched Areas**	**106" X 77" PATCH IN TOP OF DECK IN CENTERLINE OF ROADWAY NEAR ABUTMENT 1 FILL FACE (SEE PHOTO)**	2	57		Square Feet
12	Patched Areas	52" X 43" PATCH IN BOTTOM OF DECK IN BAY 2 NEAR ABUTMENT 1 (SEE PHOTO)	2			Square Feet
12	**Patched Areas**	**88" X 27" PATCH IN TOP OF DECK IN LEFT SHOULDER AND WESTBOUND LANE, APPROXIMATELY 13' FROM PIER 1 JOINT**	2	17		Square Feet

General Comments

VEGETATION GROWTH ALONG ABUTMENT 1 AT LEFT END, EXTENDING TO BOTTOM OF DECK (SEE PHOTO)

Span 1 Left Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	38	33	5	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
331	**Cracking (RC and Other)**	**UP TO 0.025" TRANSVERSE AND VERTICAL CRACKS IN TOP AND FACE OF CURB NEAR ABUTMENT 1 FILL FACE (SEE PHOTO)**	2	5		Feet

General Comments

Span 1 Right Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	38	35	3	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
331	**Cracking (RC and Other)**	**UP TO 0.025" TRANSVERSE AND VERTICAL CRACKS IN TOP AND FACE OF CURB ABUTMENT 1 FILL FACE**	2	3		Feet

General Comments

Span 1 Beam 1

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	21	16	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	**Cracking (RC and Other)**	**10" X 5" AREA OF DELAMINATION WITH UP TO 1/4" DIAGONAL CRACK IN RIGHT FACE OF GIRDER AT PIER 1 (SEE PHOTO)**	3		1	Feet
110	Delamination/Spall	PAR: 21" X 10" X 4" DEEP SPALL WITH EXPOSED REBAR IN LEFT FACE OF GIRDER AT PIER 1 (SEE PHOTO)	3	1	1	Feet
110	**Cracking (RC and Other)**	**6' SECTION OF UP TO 0.012" DIAGONAL CRACKS IN LEFT FACE OF GIRDER EXTENDING FROM ABUTMENT 1, CRACK APPROXIMATELY 18" FROM ABUTMENT 1 SHOWN IN PHOTO**	2	6		Feet
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet

General Comments

UP TO 1/16" HORIZONTAL CRACKS IN FACE OF PIER 1 DIAPHRAGM IN BAY 1

Span 1 Beam 2

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	27	10	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Patched Area	12" X 5" FAILED REPAIR WITH UP TO 1/8" DIAGONAL CRACKS IN RIGHT FACE OF GIRDER AT PIER 1 (SEE PHOTO)	3	1	1	Feet
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet

General Comments

Span 1 Beam 3

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	26	11	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Delamination/Spall	PAR: 11" X 6" X 3" DEEP SPALL WITH EXPOSED REBAR IN RIGHT FACE OF GIRDER AT PIER 1 (SEE PHOTO)	3	1	1	Feet
110	Cracking (RC and Other)	12" X 4" X 5" AREA OF DELAMINATION WITH UP TO 0.02" LONGITUDINAL AND HORIZONTAL CRACKS IN BOTTOM AND LEFT FACE OF GIRDER AT PIER 1 (SEE PHOTO)	2	1		Feet
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet

General Comments

Span 1 Beam 4

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	26	12	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	12		Feet

General Comments

Span 2 Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,182	205	1	976	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
12	**Cracking (RC and Other)**	**UP TO 1/16" DIAGONAL CRACK IN TOP OF DECK IN WESTBOUND LANE EXTENDING FROM PIER 1 JOINT**	3	6	6	Square Feet
12	Cracking (RC and Other)	UP TO 1/16" MAP CRACKS IN TOP OF DECK PRIMARILY IN TRAVEL LANES	3	970	970	Square Feet
12	**Abrasion/Wear (PSC/RC)**	**800 SF OF WORN CONCRETE WITH EXPOSED AGGREGATE THROUGHOUT TOP OF DECK IN TRAVEL LANES**	2			Square Feet
12	Delamination/Spall	10" DIAMETER AREA OF DELAMINATION IN BOTTOM OF DECK IN BAY 3, ADJACENT TO GIRDER 4 NEAR MIDSPAN	2	1	1	Square Feet

General Comments

UP TO 1/2" VERTICAL MISALIGNMENT BETWEEN SPAN 2 AND 3 DECKS ALONG PIER 2 JOINT, CONDITION AT LEFT CURB SHOWN IN PHOTO

Span 2 Right Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	38	35	3	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
331	**Exposed Rebar**	**(3) AREAS OF EXPOSED REBAR UP TO 7" X 1" IN FACE OF RAIL APPROXIMATELY 7', 12', AND 13' FROM PIER 1 JOINT CONDITION 12' FROM PIER 1 JOINT SHOWN IN PHOTO**	2	3	3	Feet

General Comments

Span 2 Beam 1

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	25	13	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet
110	Patched Area	(2) REPAIRS UP TO 14" X 6" IN LEFT FACE OF GIRDER, APPROXIMATELY 1' AND 3' FROM PIER 1 (SEE PHOTO)	2	3		Feet

General Comments

Span 2 Beam 2

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	26	12	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	**Cracking (RC and Other)**	**6" X 5" AREA OF DELAMINATION WITH UP TO 0.035" DIAGONAL CRACKS IN RIGHT FACE OF GIRDER AT PIER 1**	2			Feet
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet
110	Cracking (RC and Other)	UP TO 0.035" DIAGONAL CRACK IN LEFT FACE OF GIRDER AT PIER 1	2			Feet
110	**Delamination/Spall**	**16" X 4" X 4" AREA OF DELAMINATION WITH UP TO 0.025" LONGITUDINAL AND HORIZONTAL CRACKS IN BOTTOM AND RIGHT FACE OF GIRDER AT PIER 1 (SEE PHOTO)**	2	2	2	Feet

General Comments

Span 2 Beam 3

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	28	10	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet

General Comments

UP TO 1/16" HORIZONTAL CRACKS IN FACE OF PIER 1 DIAPHRAGM IN BAY 3, ADJACENT TO GIRDER 4 (SEE PHOTO)

Span 2 Beam 4

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	26	11	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Cracking (RC and Other)	11" X 8" AREA OF DELAMINATION WITH UP TO 1/8" DIAGONAL CRACKS IN LEFT FACE OF GIRDER AT PIER 1	3	1	1	Feet
110	Efflorescence/Rust Staining	UP TO 0.025" DIAGONAL CRACKS WITH RUST STAINING AND 2" X 1" AREA OF EXPOSED REBAR IN RIGHT FACE OF GIRDER AT PIER 1 (SEE PHOTO)	3		1	Feet
110	**Cracking (RC and Other)**	**2' OF UP TO 0.035" HORIZONTAL CRACKS IN LEFT FACE OF GIRDER AT PIER 1**	2	1		Feet
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet

General Comments

Span 3 Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,182	205	6	971	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
12	**Cracking (RC and Other)**	**UP TO 1/16" MAP CRACKS IN TOP OF DECK PRIMARILY IN TRAVEL LANES (SEE PHOTO)**	3	970	970	Square Feet
12	Delamination/Spall	10" X 8" X 1" DEEP SPALL WITH EXPOSED REBAR IN BOTTOM OF RIGHT OVERHANG NEAR PIER 3 (SEE PHOTO)	3	1	1	Square Feet
12	**Abrasion/Wear (PSC/RC)**	**800 SF OF WORN CONCRETE WITH EXPOSED AGGREGATE THROUGHOUT TOP OF DECK IN TRAVEL LANES**	2			Square Feet
12	Cracking (RC and Other)	UP TO 0.035" DIAGONAL CRACKS IN TOP OF DECK EXTENDING FROM PIER 2 JOINT IN WESTBOUND LANE	2	6	6	Square Feet

General Comments

Span 3 Right Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	38	37	0	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
331	**Cracking (RC and Other)**	**UP TO 1/16" DIAGONAL CRACK IN TOP AND FACE OF CURB, APPROXIMATELY 4' FROM PIER 3 JOINT (SEE PHOTO)**	3	1	1	Feet

General Comments

Span 3 Beam 1

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	27	11	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet
110	Exposed Rebar	1" DIAMETER X 1/4" DEEP AREA OF EXPOSED REBAR IN LEFT FACE OF GIRDER AT PIER 3	2	1	1	Feet

General Comments

Span 3 Beam 2

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	26	10	2	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Delamination/Spall	PAR: 9" X 2" X 2" DEEP SPALL WITH EXPOSED REBAR IN LEFT FACE OF GIRDER AT PIER 3 (SEE PHOTO)	3	1	1	Feet

110	Patched Area	13" X 8" FAILED REPAIR WITH UP TO 1/4" DIAGONAL CRACK IN RIGHT FACE OF GIRDER AT PIER 3 (SEE PHOTO)	3	1	1	Feet
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet

General Comments

Span 3 Beam 3

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	28	10	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet

General Comments

Span 3 Beam 4

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	27	10	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Cracking (RC and Other)	10" X 5" AREA OF DELAMINATION WITH UP TO 1/16" VERTICAL AND DIAGONAL CRACKS IN LEFT FACE OF GIRDER AT PIER 2	3	1	1	Feet
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet

General Comments

Span 3 Expansion Joint 2

Standard Joint

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
301	Pourable Joint Seal	32	31	0	0	1	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
301	**Seal Damage**	**9" SECTION OF MISSING JOINT MATERIAL ALONG PIER 2 JOINT AT CENTERLINE OF ROADWAY (SEE PHOTO)**	4	1	1	Feet

General Comments

Span 4 Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,182	200	3	979	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

12	**Cracking (RC and Other)**	**UP TO 1/16" DIAGONAL CRACKS IN TOP OF DECK NEAR ABUTMENT 2 FILL FACE IN EASTBOUND LANE**	3	8	8	Square Feet
12	Cracking (RC and Other)	UP TO 1/16" MAP CRACKS IN TOP OF DECK PRIMARILY IN TRAVEL LANES	3	970	970	Square Feet
12	Delamination/Spall	6" X 6" X 1" DEEP SPALL WITH EXPOSED REBAR IN BOTTOM OF LEFT OVERHANG, APPROXIMATELY 11' FROM PIER 3	3	1	1	Square Feet
12	**Abrasion/Wear (PSC/RC)**	**800 SF OF WORN CONCRETE WITH EXPOSED AGGREGATE THROUGHOUT TOP OF DECK IN TRAVEL LANES**	2			Square Feet
12	Delamination/Spall	(2) SPALLS WITH EXPOSED REBAR UP TO 8" X 3" X 1" DEEP ALONG RIGHT EDGE OF DECK NEAR ABUTMENT 2	2	2	2	Square Feet
12	**Delamination/Spall**	**PAR: 8" X 3" X 1/2" DEEP SPALL WITH EXPOSED REBAR IN TOP OF DECK IN WHEEL LINE OF EASTBOUND LANE, APPROXIMATELY 16" FROM ABUTMENT 2 FILL FACE (SEE PHOTO)**	2	1	1	Square Feet

General Comments

Span 4 Beam 1

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	27	11	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT, CONDITION ON RIGHT SIDE NEAR MIDSPAN SHOWN IN PHOTO	2	10		Feet
110	Delamination/Spall	(2) SPALLS WITH EXPOSED REBAR UP TO 3" DIAMETER X 1/2" DEEP IN LEFT FACE OF GIRDER, APPROXIMATELY 3' FROM PIER 3 (SEE PHOTO)	2	1	1	Feet

General Comments

8" X 5" X 1" DEEP SPALL WITH EXPOSED REBAR IN BOTTOM OF PIER 3 DIAPHRAGM IN BAY 1 (SEE PHOTO)

Span 4 Beam 2

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	27	11	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet
110	Delamination/Spall	7" X 2" X 1" DEEP SPALL IN LEFT FACE OF GIRDER AT PIER 3	2	1	1	Feet

General Comments

Span 4 Beam 3

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	28	10	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet

General Comments

Span 4 Beam 4

Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	38	27	10	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
110	Patched Area	13" X 10" FAILED REPAIR WITH UP TO 1/8" DIAGONAL CRACKS IN LEFT FACE OF GIRDER AT PIER 3	3	1	1	Feet
110	Cracking (RC and Other)	UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT	2	10		Feet

General Comments

Bent 1 Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	36	34	0	2	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
234	**Patched Area**	**21" X 12" FAILED REPAIR WITH UP TO 0.012" MAP CRACKS AND (2) SPALLS UP TO 12" X 4" X 1/2" DEEP IN SPAN 1 FACE OF CAP BENEATH GIRDER 3 (SEE PHOTO)**	3	2	2	Feet

General Comments

Bent 1 Pile 1

Reinforced Concrete Pier Wall

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
210	Reinforced Concrete Pier Wall	36	35	0	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
210	**Delamination/Spall**	**12" X 6" X 1" DEEP SPALL WITH EXPOSED REBAR IN SPAN 1 FACE OF PIER WALL, APPROXIMATELY 1' FROM BOTTOM OF CAP (SEE PHOTO)**	3	1	1	Feet
210	**Delamination/Spall**	**16" X 14" X 2" DEEP SPALL IN SPAN 2 FACE OF PIER WALL, APPROXIMATELY 2' FROM GROUND LINE**	3	2	2	Feet
210	**Abrasion/Wear (PSC/RC)**	**36' OF UP TO 7' HIGH SCALING WITH EXPOSED AGGREGATE THROUGHOUT PIER WALL**	2	32		Feet
210	**Delamination/Spall**	**4" DIAMETER X 1" DEEP SPALL WITH EXPOSED REBAR IN SPAN 2 FACE OF PIER WALL, APPROXIMATELY 3' FROM GROUND LINE**	2	1	1	Feet

General Comments

End Bent 1 Abutment

Reinforced Concrete Abutment

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
215	Reinforced Concrete Abutment	54	20	34	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

215	**Abrasion/Wear (PSC/RC)**	**34' OF UP TO 32" HIGH SCALING WITH EXPOSED AGGREGATE THROUGHOUT FACE OF ABUTMENT FROM BENEATH BAY 1 TO RIGHT END**	2	25	Feet
215	**Cracking (RC and Other)**	**UP TO 0.012" LONGITUDINAL AND VERTICAL CRACKS IN FACE OF CURTAIN WALL IN VARIOUS LOCATIONS THROUGHOUT**	2	5	Feet
215	**Cracking (RC and Other)**	**UP TO 0.016" VERTICAL CRACKS IN FACE OF ABUTMENT IN VARIOUS LOCATIONS, CRACK BENEATH BAY 2 SHOWN IN PHOTO**	2	4	Feet

General Comments

End Bent 1 Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	30	25	5	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
234	**Cracking (RC and Other)**	**UP TO 0.012" VERTICAL CRACKS IN FACE OF CAP IN VARIOUS LOCATIONS THROUGHOUT, CRACK IN BAY 2 TO LEFT OF GIRDER 3 SHOWN IN PHOTO**	2	5		Feet

General Comments

Bent 2 Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	36	29	7	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
234	**Patched Area**	**APPROXIMATELY 7' X 12" REPAIR IN SPAN 2 FACE OF CAP BENEATH BAY 1 (SEE PHOTO)**	2	7		Feet

General Comments

Bent 2 Pile 1

Reinforced Concrete Pier Wall

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
210	Reinforced Concrete Pier Wall	36	0	35	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
210	**Delamination/Spall**	**11" X 4" X 2" DEEP SPALL IN SPAN 2 FACE OF PIER WALL, APPROXIMATELY 2' FROM TOP OF FOOTING BENEATH BAY 1**	3	1	1	Feet
210	**Abrasion/Wear (PSC/RC)**	**36' OF UP TO 7' HIGH SCALING WITH EXPOSED AGGREGATE THROUGHOUT PIER WALL**	2	32		Feet
210	**Patched Area**	**33" X 16" REPAIR IN SPAN 3 FACE OF PIER WALL AT TOP OF FOOTING BENEATH GIRDER 4 (SEE PHOTO)**	2	3		Feet

General Comments

Bent 2 — Reinforced Concrete Footing 1

Reinforced Concrete Footing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
220	Reinforced Concrete Pile Cap/Footing	36	0	0	36	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
220	Delamination/Spall	UNDERWATER 3/9/20 - 12-SPALLS AROUND TOP PERIMETER OF FOOTING 4'' - 8'' DIAMETER X 2'' DEEP	3		12	Feet
220	Scour	UNDERWATER 3/9/20 - FOOTING IS COMPLETERLY UNDERMINED EXPOSING FOUNDATION PILES(MEASUREMENTS TAKEN FROM BOTTOM OF FOOTING TO MUDLINE) SOUTH.WEST. CORNER 2.0', NORTH.WEST. CORNER 1.6', CAP/LOOKING OF WEST FACE 2.2', SOUTH.EAST. CORNER 2.0', NORTH.EAST. CORNER 0.8', CAP/LOOKING OF EAST FACE 1.0'	3	36	36	Feet
220	Abrasion/Wear (PSC/RC)	UNDERWATER 3/9/20 - WATER ABRASION WITH COARSE AGGREGATE EXPOSED TO 1/4"	2			Feet

General Comments

Bent 2 — Foundation Pile 1

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 2

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 3

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 4

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 5

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 6

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 7

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 8

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 9

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 10

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 11

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 12

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 13

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 14

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 15

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 16

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 17

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 18

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 19

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 20

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 21

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

Bent 2 — Foundation Pile 22

Timber Foundation Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
228	Timber Pile	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
228	Decay/Section Loss	UNDERWATER 3/9/20 - SURFACE SOFT TO 1/2" WITH AREAS OF SPOT DECAY TO 1.5" DEEP, LIMITED ACCESS DUE TO LOW CLEARANCE UNDER FOOTING	3	1	1	Each

General Comments

End Bent 2 — Abutment

Reinforced Concrete Abutment

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
215	Reinforced Concrete Abutment	54	9	45	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
215	Abrasion/Wear (PSC/RC)	45' OF UP TO 55" HIGH SCALING WITH EXPOSED AGGREGATE THROUGHOUT FACE OF ABUTMENT, EXTENDING FROM BAY 1 TO RIGHT END	2	43		Feet
215	Cracking (RC and Other)	UP TO 0.025" VERTICAL CRACKS IN FACE OF CURTAIN WALL AT RIGHT END (SEE PHOTO)	2	2		Feet

General Comments

End Bent 2 Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	30	22	8	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
234	Cracking (RC and Other)	UP TO 0.012" VERTICAL CRACKS IN FACE OF CAP IN VARIOUS LOCATIONS THROUGHOUT	2	8		Feet

General Comments

Bent 3 Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	36	34	2	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
234	Cracking (RC and Other)	UP TO 0.012" VERTICAL CRACK IN SPAN 3 FACE OF CAP BENEATH GIRDER 1	2	1		Feet
234	Patched Area	12" X 12" REPAIR IN SPAN 3 FACE OF CAP BENEATH GIRDER 2	2	1		Feet

General Comments

Bent 3 Pile 1

Reinforced Concrete Pier Wall

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
210	Reinforced Concrete Pier Wall	36	0	36	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
210	Abrasion/Wear (PSC/RC)	UP TO 38" HIGH SCALING WITH EXPOSED AGGREGATE THROUGHOUT PIER WALL, CONDITION IN SPAN 3 FACE SHOWN IN PHOTO	2	36		Feet

General Comments

Elements Verfied

Location	Name	Component	Element Name	Amount
Span 1	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1182
Span 1	Beam 1	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 1	Beam 2	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 1	Beam 3	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 1	Beam 4	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 1	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	38
Span 1	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	38
Span 2	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1182
Span 2	Beam 1	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 2	Beam 2	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 2	Beam 3	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 2	Beam 4	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 2	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	38
Span 2	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	38
Span 2	Expansion Joint 1	Standard Joint	Pourable Joint Seal	32
Span 3	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1182
Span 3	Beam 1	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 3	Beam 2	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 3	Beam 3	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 3	Beam 4	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 3	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	38
Span 3	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	38
Span 3	Expansion Joint 2	Standard Joint	Pourable Joint Seal	32
Span 4	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1182
Span 4	Beam 1	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 4	Beam 2	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 4	Beam 3	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 4	Beam 4	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	38
Span 4	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	38
Span 4	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	38
Span 4	Expansion Joint 3	Standard Joint	Pourable Joint Seal	32
Span 4	Expansion Joint 4	Standard Joint	Pourable Joint Seal	32
Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	36
Bent 1	Pile 1	Reinforced Concrete Pier Wall	Reinforced Concrete Pier Wall	36
End Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	30
End Bent 1	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	54
Bent 2	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	36
Bent 2	Pile 1	Reinforced Concrete Pier Wall	Reinforced Concrete Pier Wall	36
End Bent 2	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	30
End Bent 2	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	54
Bent 3	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	36
Bent 3	Pile 1	Reinforced Concrete Pier Wall	Reinforced Concrete Pier Wall	36

General Inspection Notes

Span 4 Expansion Joint 3

BROKEN AND HANGING BACKER ROD ALONG PIER 3 JOINT IN VARIOUS LOCATIONS THROUGHOUT BAYS, CONDITION IN BAY 2 SHOWN IN PHOTO

National Bridge and NC Inspection Items

Structure Number: 230005 **Inspection Date:** 06/03/2020

National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	**6**
Item 59: Superstructure	0 - 9 , N	**6**
Item 60: Substructure	0 - 9 , N	~~**5**~~ 4
Item 61: Channel and Channel Protection	0 - 9 , N	**4**
Item 62: Culvert	0 - 9 , N	**N**
Item 71: Waterway Adequacy	0 - 9 , N	**7**
Item 72: Approach Roadway Alignment	0 - 9 , N	**8**

Controlled by U/W inspection per DNS

Note: If NBI Inspection Item is not present, code NBI item with "N"

NC SMU Inspection Items

Item	Grade Scale	Grade	Maint. Qty.	Maint. Code
Deck Debris	G, F, P, or C	**F**	**4200**	**3376**
Drainage System	G, F, P, or C	**G**	**0**	**3332**
Utilities	G, F, P, or C			
Slope Protection	G, F, P, or C		**0**	**3352**
Scour	G, F, P, or C	**P**		
Wingwall	G, F, P, or C	**F**	**250**	**3350**
Field Scour Evaluation		**P**		
Drift	G, F, P, or C	**G**	**0**	**3366**
Fender System	G, F, P, or C		**0**	**3364**
Movable Span Machinery	G, F, P, or C			
Response to Live Load	G, F, P, or C	**G**		
Superstructure Paint Code				

Note: If NC SMU Insepction Item is not present, leave NC SMU item blank

Inspection Information

Item	Grade Scale	Grade
Sign Noticed Issued	YES/NO	**Y**
Priority Maintenance Request Submitted	YES/NO	**Y**
Inspection Time	Hours	**12**
Traffic Control Time	Hours	
Snooper Time	Hours	
Ladder Used	YES/NO	**Y**
Bucket Truck Used	YES/NO	**N**
Boat Used	YES/NO	**Y**
Other Equipment Used	YES/NO	**N**

National Bridge and NC SMU Inspection Item Details

Structure Number: 230005 **Inspection Date:** 06/03/2020

Item	Channel and Channel Protection - Item 61	**Grade**	4	**Maint Code**		**Qty.**	0
Details	GRADE TAKEN FROM UNDERWATER REPORT DATED 3.09.2020						

Item	Sign Notice Issued	**Grade**	Y	**Maint Code**		**Qty.**	0
Details	MISSING DELINEATOR AT NORTHWEST CORNER MISSING DELINEATOR AT NORTHEAST CORNER						

Item	Priority Maintenance Issued	**Grade**	Y	**Maint Code**		**Qty.**	0
Details	SPAN 4 DECK SPAN 1 GIRDER 1 SPAN 1 GIRDER 3 SPAN 3 GIRDER 2 SOUTHEAST WINGWALL DELINEATOR AT NORTHWEST CORNER DELNEATOR AT NORTHEAST CORNER						

Item	Deck Debris	**Grade**	F	**Maint Code**	3376	**Qty.**	4200
Details	DIRT AND DEBRIS ACCUMULATION IN BOTH SHOULDERS, ACCUMULATION IN LEFT SHOULDER SHOWN IN PHOTO						

Item	Scour	**Grade**	P	**Maint Code**		**Qty.**	0
Details	SCOUR AND EXPOSED TIMBER FOUNDATION PILES AT PIER 2 NOTED IN UNDERWATER INSPECTION REPORT DATED 3.09.2020						

Item	Wingwalls	**Grade**	F	**Maint Code**	3350	**Qty.**	250
Details	PAR: 50' SECTION WITH AREAS OF DECAY UP TO FULL DEPTH WITH EXPOSED FILL THROUGHOUT FACE OF SOUTHEAST WINGWALL, BEGINNING APPROXIMATELY 18' FROM NEAR END OF WINGWALL (SEE PHOTOS) (2) AREAS OF SHOULDER EROSION UP TO 55" X 26" X 21" DEEP BEHIND SOUTHEAST WINGWALL, APPROXIMATELY 20' AND 24' FROM ABUTMENT 2 FILL FACE (SEE PHOTO) PRIORITY MAINTENANCE REPAIR TO SOUTHWEST WINGWALL SINCE 2018 INSPECTOIN (SEE PHOTO) PRIORITY MAINTENANCE REPAIR TO SOUTHWEST WINGWALL BRACE PILE 1 WITH ADDITION OF PILE TO RIGHT OF ORIGINAL PILE SINCE 2018 INSPECTOIN (SEE PHOTO) PRIORITY MAINTENANCE REPAIR TO SOUTHEAST WINGWALL SINCE 2018 INSPECTOIN (SEE PHOTO) PRIORITY MAINTENANCE REPAIR TO SOUTHEAST WINGWALL BRACE PILE 4 SINCE 2018 INSPECTOIN, APPROXIMATELY 13' FROM NEAR END OF SOUTHEAST WINGWALL (SEE PHOTO)						

Item	Field Scour Evaluation	**Grade**	P	**Maint Code**		**Qty.**	0
Details	SCOUR BENEATH PIER 2 FOOTING EXPOSING TIMBER FOUNDATION PILES NOTED IN UNDERWATER REPORT DATED 3.9.2020; PRIORITY MAINTENANCE SUBMITTED FOR SCOUR AT PIER 2 AND AREAS OF DECAY IN EXPOSED TIMBER FOUNDATION PILES						

Item	General Comments and Misc Items	**Grade**		**Maint Code**		**Qty.**	0
Details	PAR: MISSING DELINEATOR AT NORTHWEST CORNER PAR: MISSING DELINEATOR AT NORTHEAST CORNER (2) AREAS OF DISTORTION UP TO 33" LONG X 2" ALONG TOP OF NORTHEAST APPROACH GUARDRAIL, APPROXIMATELY 23' AND 32' FROM ABUTMENT 2 FILL FACE, CONDITION APPROXIMATELY 32' FROM ABUTMENT 2 FILL FACE SHOWN IN PHOTO; PREVIOUSLY NOTED IN SPAN 4 RIGHT RAIL						

Span 1 Left Bridge Rail: UP TO 0.025" TRANSVERSE AND VERTICAL CRACKS IN TOP AND FACE OF CURB NEAR ABUTMENT 1 FILL FACE

Span 2 Right Bridge Rail: (3) AREAS OF EXPOSED REBAR UP TO 7" X 1" IN FACE OF RAIL APPROXIMATELY 7', 12', AND 13' FROM PIER 1 JOINT, CONDITION 12' FROM PIER 1 JOINT SHOWN

Span 3 Right Bridge Rail: UP TO 1/16" DIAGONAL CRACK IN TOP AND FACE OF CURB, APPROXIMATELY 4' FROM PIER 3 JOINT

(2) AREAS OF DISTORTION UP TO 33" LONG X 2" ALONG TOP OF NORTHEAST APPROACH GUARDRAIL, APPROXIMATELY 23' AND 32' FROM ABUTMENT 2 FILL FACE, CONDITION APPROXIMATELY 32' FROM ABUTMENT 2 FILL FACE SHOWN; PREVIOUSLY NOTED IN SPAN 4 RIGHT RAIL

DIRT AND DEBRIS ACCUMULATION IN BOTH SHOULDERS, ACCUMULATION IN LEFT SHOULDER SHOWN

Span 1 Deck: 106" X 77" PATCH IN TOP OF DECK IN CENTERLINE OF ROADWAY NEAR ABUTMENT 1 FILL FACE

Span 1 Deck: UP TO 1/16" DIAGONAL CRACKS IN TOP OF DECK IN WESTBOUND LANE NEAR ABUTMENT 1 FILL FACE

Span 3 Expansion Joint 2: 9" SECTION OF MISSING JOINT MATERIAL ALONG PIER 2 JOINT AT CENTERLINE OF ROADWAY

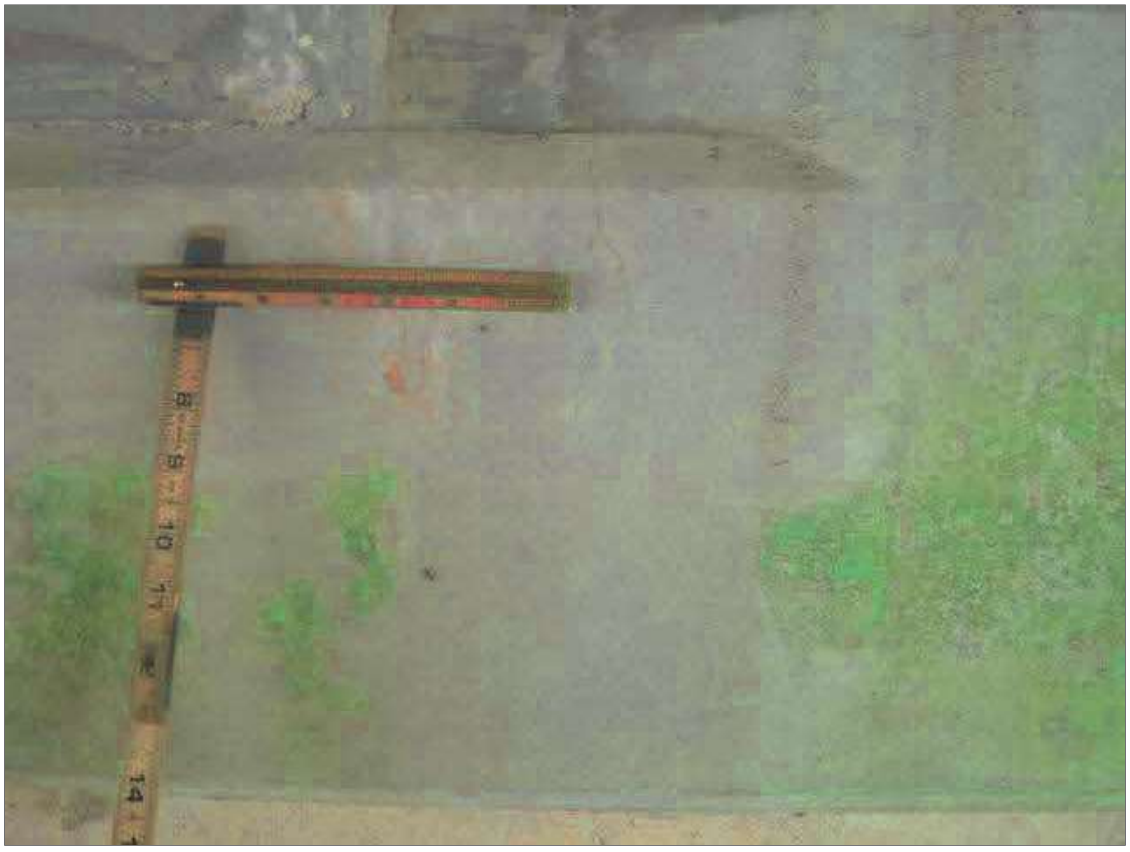
Span 2 Deck: UP TO 1/2" VERTICAL MISALIGNMENT BETWEEN SPAN 2 AND 3 DECKS ALONG PIER 2 JOINT, CONDITION AT LEFT CURB SHOWN

Span 3 Deck: UP TO 1/16" MAP CRACKS IN TOP OF DECK PRIMARILY IN TRAVEL LANES

Span 4 Deck: PAR: 8" X 3" X 1/2" DEEP SPALL WITH EXPOSED REBAR IN TOP OF DECK IN WHEEL LINE OF EASTBOUND LANE, APPROXIMATELY 16" FROM ABUTMENT 2 FILL FACE

(2) AREAS OF SHOULDER EROSION UP TO 55" X 26" X 21" DEEP BEHIND SOUTHEAST WINGWALL, APPROXIMATELY 20' AND 24' FROM ABUTMENT 2 FILL FACE

PRIORITY MAINTENANCE REPAIR TO SOUTHWEST WINGWALL SINCE 2018 INSPECTOIN



End Bent 1 Cap 1: UP TO 0.012" VERTICAL CRACKS IN FACE OF CAP IN VARIOUS LOCATIONS THROUGHOUT, CRACK IN BAY 2 TO LEFT OF GIRDER 3 SHOWN

End Bent 1 Abutment: UP TO 0.016" VERTICAL CRACKS IN FACE OF ABUTMENT IN VARIOUS LOCATIONS, CRACK BENEATH BAY 2 SHOWN

Span 1 Deck: VEGETATION GROWTH ALONG ABUTMENT 1 AT LEFT END, EXTENDING TO BOTTOM OF DECK

Span 1 Deck: 52" X 43" PATCH IN BOTTOM OF DECK IN BAY 2 NEAR ABUTMENT 1

Span 1 Deck: 13" X 4" X 1" DEEP SPALL WITH EXPOSED REBAR AND 16" X 7" AREA OF DELAMINATION WITH UP TO 0.02" MAP CRACKS IN BOTTOM OF DECK IN BAY 1, APPROXIMATELY 7' FROM ABUTMENT 1

Span 1 Beam 1: 6' SECTION OF UP TO 0.012" DIAGONAL CRACKS IN LEFT FACE OF GIRDER EXTENDING FROM ABUTMENT 1, CRACK APPROXIMATELY 18" FROM ABUTMENT 1 SHOWN

Span 1 Beam 1: PAR: 21" X 10" X 4" DEEP SPALL WITH EXPOSED REBAR IN LEFT FACE OF GIRDER AT PIER 1

Span 2 Beam 1: (2) REPAIRS UP TO 14" X 6" IN LEFT FACE OF GIRDER, APPROXIMATELY 1' AND 3' FROM PIER 1

Span 1 Beam 1: 10" X 5" AREA OF DELAMINATION WITH UP TO 1/4" DIAGONAL CRACK IN RIGHT FACE OF GIRDER AT PIER 1

Span 2 Beam 2: 16" X 4" X 4" AREA OF DELAMINATION WITH UP TO 0.025" LONGITUDINAL AND HORIZONTAL CRACKS IN BOTTOM AND RIGHT FACE OF GIRDER AT PIER 1

Span 1 Beam 2: 12" X 5" FAILED REPAIR WITH UP TO 1/8" DIAGONAL CRACKS IN RIGHT FACE OF GIRDER AT PIER 1

Span 1 Beam 3: 12" X 4" X 5" AREA OF DELAMINATION WITH UP TO 0.02" LONGITUDINAL AND HORIZONTAL CRACKS IN BOTTOM AND LEFT FACE OF GIRDER AT PIER 1

Span 1 Beam 3: PAR: 11" X 6" X 3" DEEP SPALL WITH EXPOSED REBAR IN RIGHT FACE OF GIRDER AT PIER 1

Span 2 Beam 4: UP TO 0.025" DIAGONAL CRACKS WITH RUST STAINING AND 2" X 1" AREA OF EXPOSED REBAR IN RIGHT FACE OF GIRDER AT PIER 1

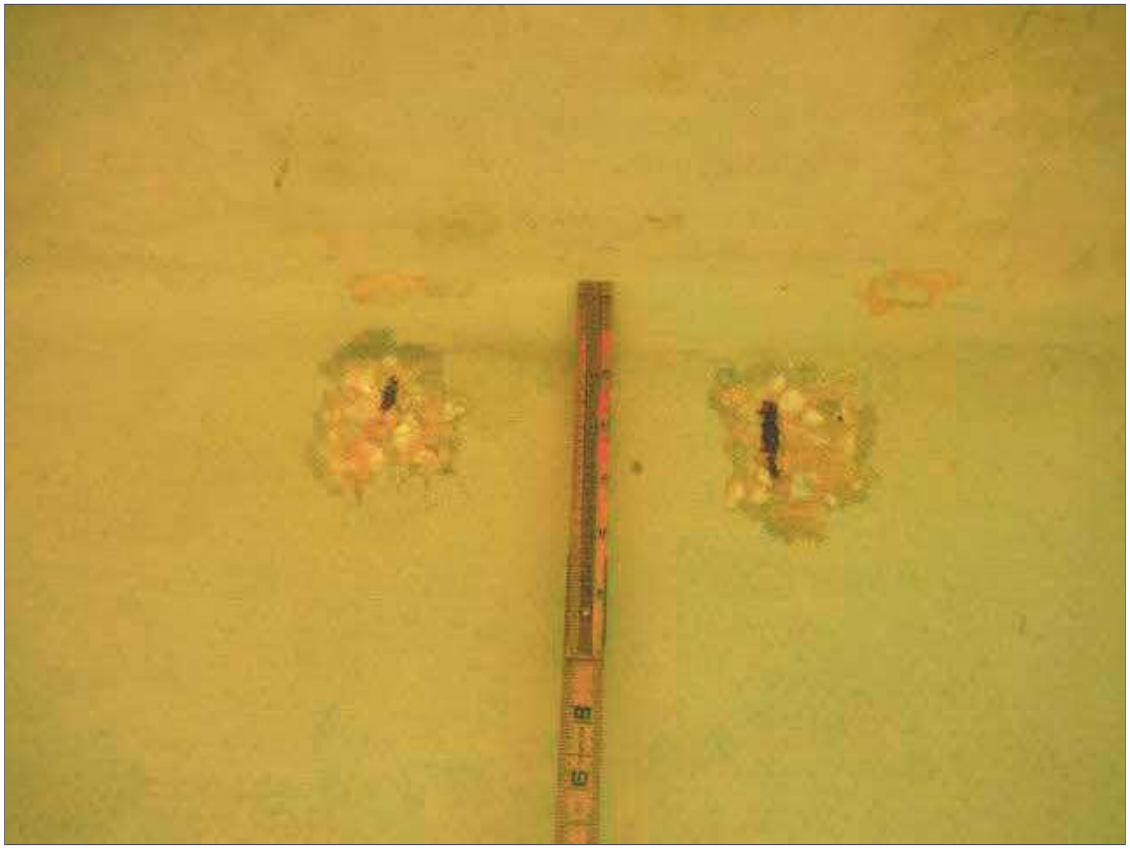
Bent 1 Cap 1: 21" X 12" FAILED REPAIR WITH UP TO 0.012" MAP CRACKS AND (2) SPALLS UP TO 12" X 4" X 1/2" DEEP IN SPAN 1 FACE OF CAP BENEATH GIRDER 3

Bent 1 Pile 1: 12" X 6" X 1" DEEP SPALL WITH EXPOSED REBAR IN SPAN 1 FACE OF PIER WALL, APPROXIMATELY 1' FROM BOTTOM OF CAP

Span 2 Beam 3: UP TO 1/16" HORIZONTAL CRACKS IN FACE OF PIER 1 DIAPHRAGM IN BAY 3, ADJACENT TO GIRDER 4

Bent 2 Pile 1: 33" X 16" REPAIR IN SPAN 3 FACE OF PIER WALL AT TOP OF FOOTING BENEATH GIRDER 4

Bent 2 Cap 1: APPROXIMATELY 7' X 12" REPAIR IN SPAN 2 FACE OF CAP BENEATH BAY 1



Span 4 Beam 1: (2) SPALLS WITH EXPOSED REBAR UP TO 3" DIAMETER X 1/2" DEEP IN LEFT FACE OF GIRDER, APPROXIMATELY 3' FROM PIER 3

Bent 3 Pile 1: UP TO 38" HIGH SCALING WITH EXPOSED AGGREGATE THROUGHOUT PIER WALL, CONDITION IN SPAN 3 FACE SHOWN

Span 3 Deck: 10" X 8" X 1" DEEP SPALL WITH EXPOSED REBAR IN BOTTOM OF RIGHT OVERHANG NEAR PIER 3

Span 4 Beam 1: 8" X 5" X 1" DEEP SPALL WITH EXPOSED REBAR IN BOTTOM OF PIER 3 DIAPHRAGM IN BAY 1

Span 3 Beam 2: PAR: 9" X 2" X 2" DEEP SPALL WITH EXPOSED REBAR IN LEFT FACE OF GIRDER AT PIER 3

Span 4 Expansion Joint 3: BROKEN AND HANGING BACKER ROD ALONG PIER 3 JOINT IN VARIOUS LOCATIONS THROUGHOUT BAYS, CONDITION IN BAY 2 SHOWN

Span 3 Beam 2: 13" X 8" FAILED REPAIR WITH UP TO 1/4" DIAGONAL CRACK IN RIGHT FACE OF GIRDER AT PIER 3

Span 4 Beam 1: UP TO 0.012" TRANSVERSE AND VERTICAL CRACKS IN BOTTOM AND BOTH FACES OF GIRDER IN VARIOUS LOCATIONS THROUGHOUT, CONDITION ON RIGHT SIDE NEAR MIDSPAN SHOWN

End Bent 2 Abutment: UP TO 0.025" VERTICAL CRACKS IN FACE OF CURTAIN WALL AT RIGHT END

PRIORITY MAINTENANCE REPAIR TO SOUTHEAST WINGWALL SINCE 2018 INSPECTOIN

PAR: 50' SECTION WITH AREAS OF DECAY UP TO FULL DEPTH WITH EXPOSED FILL THROUGHOUT FACE OF SOUTHEAST WINGWALL, BEGINNING APPROXIMATELY 18' FROM NEAR END OF WINGWALL, CONDITION APPROXIMATELY 20' FROM NEAR END OF WINGWALL SHOWN

PAR: 50' SECTION WITH AREAS OF DECAY UP TO FULL DEPTH WITH EXPOSED FILL THROUGHOUT FACE OF SOUTHEAST WINGWALL, BEGINNING APPROXIMATELY 18' FROM NEAR END OF WINGWALL, CONDITION APPROXIMATELY 40' FROM NEAR END OF WINGWALL SHOWN

PAR: 50' SECTION WITH AREAS OF DECAY UP TO FULL DEPTH WITH EXPOSED FILL THROUGHOUT FACE OF SOUTHEAST WINGWALL, BEGINNING APPROXIMATELY 18' FROM NEAR END OF WINGWALL, CONDITION APPROXIMATELY 60' FROM NEAR END OF WINGWALL SHOWN

PRIORITY MAINTENANCE REPAIR TO SOUTHEAST WINGWALL BRACE PILE 4 SINCE 2018 INSPECTOIN, APPROXIMATELY 13' FROM NEAR END OF SOUTHEAST WINGWALL

PRIORITY MAINTENANCE REPAIR TO SOUTHWEST WINGWALL BRACE PILE 1 WITH ADDITION OF PILE TO RIGHT OF ORIGINAL PILE SINCE 2018 INSPECTOIN

Stream Bed Soundings

(Profile diagram on following sheet)

County **COLUMBUS** Structure Number: **230005** Inspection Date **06/03/2020**

Sounding recorded from: **Top of Bridge Rail**

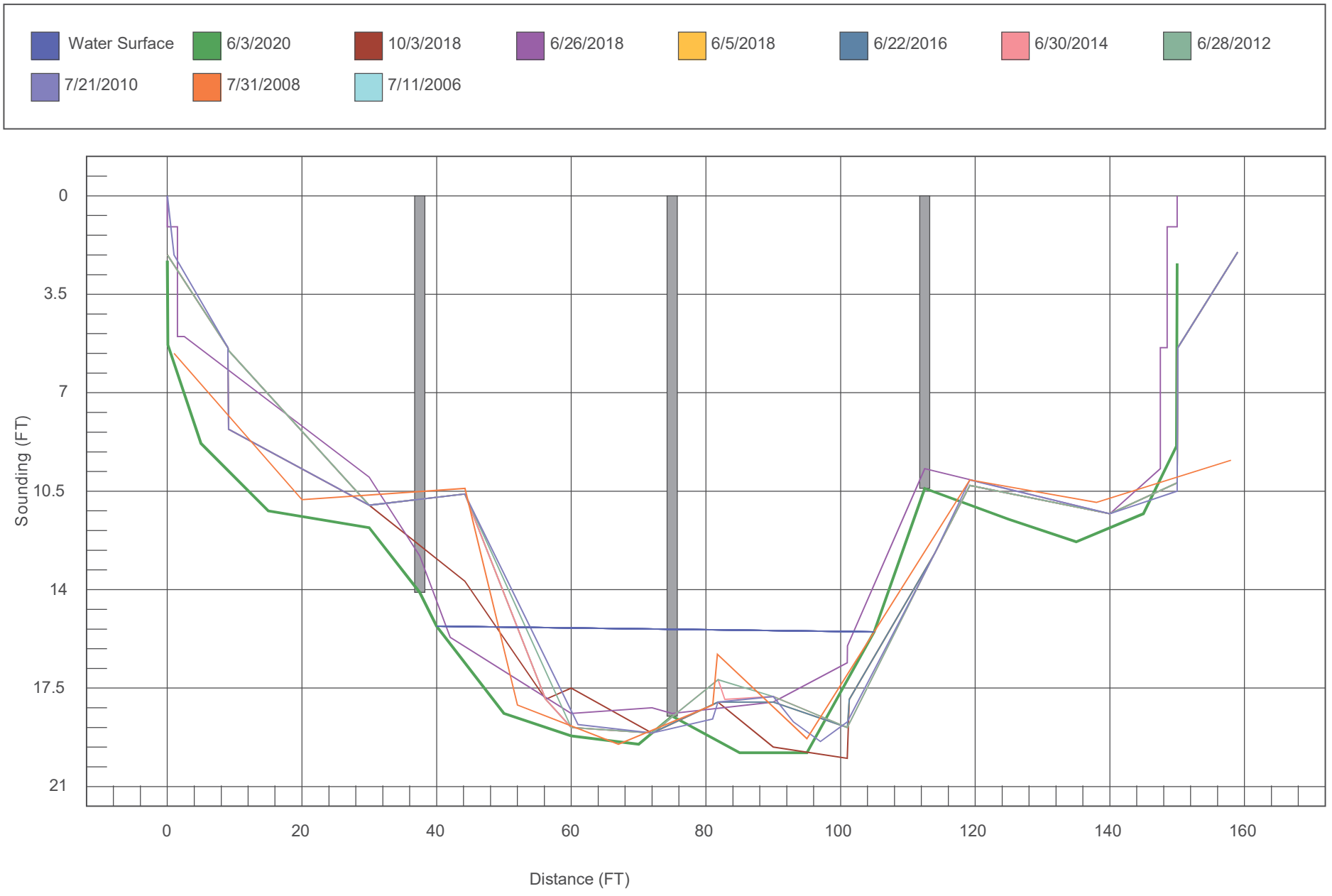
Highwater Mark Distance **5** Location of Highwater Mark **DRIFT ON CAP**

Distance (Station) ft.	Downstream Sounding ft.	Upstream Sounding ft.	Description
0.000	2.300	0.000	TOP OF WINGWALL
0.100	5.300	10.500	GROUND AT WINGWALL
5.000	8.800	0.000	GROUND
15.000	11.200	0.000	GROUND
30.000	11.800	0.000	GROUND
37.500	14.100	12.200	PIER 1
40.000	15.300	0.000	WSWE
50.000	18.400	0.000	STREAMBED
60.000	19.200	0.000	STREAMBED
70.000	19.500	0.000	STREAMBED
75.000	18.500	19.000	PIER 2
85.000	19.800	0.000	STREAMBED
95.000	19.800	0.000	STREAMBED
105.000	15.500	0.000	WSWE
112.500	10.400	12.000	PIER 3
125.000	11.500	0.000	GROUND
135.000	12.300	0.000	GROUND
145.000	11.300	0.000	GROUND
149.900	8.900	11.300	GROUND AT WINGWALL
150.000	2.400	0.000	TOP OF WINGWALL

Bridge: 230005 County: COLUMBUS Date: 06/03/2020

STREAMBED PROFILE (Downstream)

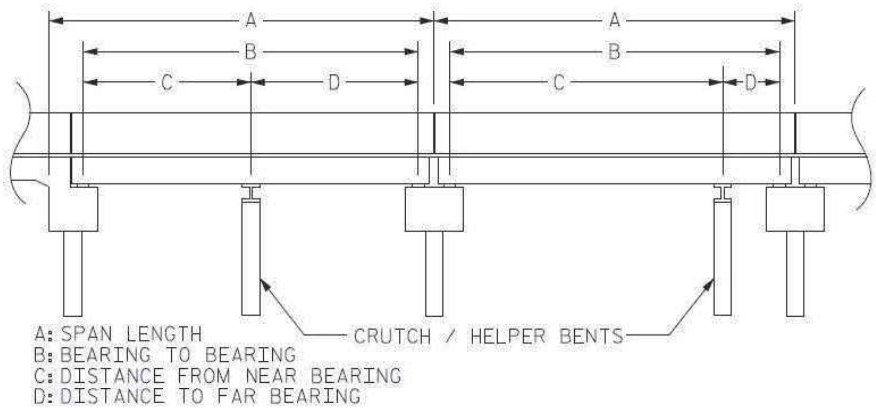
Top of Rail = 0FT (Sounding)



Structure Data Worksheet

Span Profile

County: **COLUMBUS** Structure Number: **230005**



Span Number	Span Length	Bearing to Bearing	Crutch/ Helper Bent	Distance to Near Bearing	Distance to Far Bearing
1	37.500	34.083			
2	37.500	36.667			
3	37.500	36.667			
4	37.500	34.083			

GUARDRAIL END TREATMENT AT SOUTHEAST CORNER, OTHERS SIMILAR

SOUTHEAST APPROACH GUARDRAIL POST SPACING AT MID LENGTH, OTHERS SIMILAR

EAST APPROACH, LOOKING WEST

NORTHEAST APPROACH GUARDRAIL POST SPACING AT BRIDGE, OTHERS SIMILAR

TRANSITION ALONG ABUTMENT 2 FILL FACE, TRANSITION ALONG ABUTMENT 1 FILL FACE SIMILAR

EAST APPROACH

WEST APPROACH

LOOKING DOWNSTREAM, NORTH

LOOKING UPSTREAM, SOUTH

PIER 1 JOINT, OTHERS SIMILAR

RIGHT RAIL, LEFT RAIL SIMILAR

GUARDRAIL TO BRIDGE RAIL CONNECTION AT SOUTHWEST CORNER, OTHERS SIMILAR

LOOKING EAST

ABUTMENT 1, ABUTMENT 2 SIMILAR

SPAN 1 DOWNSTREAM PROFILE, LOOKING SOUTH

DOWNSTREAM PROFILE, LOOKING SOUTHEAST

PIER 2, OTHERS SIMILAR

SPAN 2 UNDERDECK, OTHERS SIMILAR

LOOKING UPSTREAM, SOUTHEAST

LOOKING DOWNSTREAM, NORTHWEST

SPAN 2 DOWNSTREAM PROFILE, LOOKING SOUTH

SPAN 3 DOWNSTREAM PROFILE, LOOKING SOUTHEAST

SPAN 4 UPSTREAM PROFILE, LOOKING NORTHWEST

UPSTREAM PROFILE, LOOKING NORTHWEST

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 230005 County COLUMBUS Date:

These Repairs Should Be Made Within Twelve Months From Date Of This Inspection

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
0	No Maintenance Required	NA	1	MISSING DELINEATOR AT NORTHWEST CORNER.	
0	No Maintenance Required	NA	1	MISSING DELINEATOR AT NORTHEAST CORNER.	
3306	Maintain Concrete Superstructure Components	SF	1	Span 1 Beam 1: 21" X 10" X 4" DEEP SPALL WITH EXPOSED REBAR IN LEFT FACE OF GIRDER AT PIER 1.	
3306	Maintain Concrete Superstructure Components	SF	1	Span 1 Beam 3: 11" X 6" X 3" DEEP SPALL WITH EXPOSED REBAR IN RIGHT FACE OF GIRDER AT PIER 1.	
3306	Maintain Concrete Superstructure Components	SF	1	Span 3 Beam 2: 9" X 2" X 2" DEEP SPALL WITH EXPOSED REBAR IN LEFT FACE OF GIRDER AT PIER 3.	
3326	Maintain Concrete Deck	SF	1	Span 4 Deck: 8" X 3" X 1/2" DEEP SPALL WITH EXPOSED REBAR IN TOP OF DECK IN WHEEL LINE OF EASTBOUND LANE, APPROXIMATELY 16" FROM END BENT 2 FILL FACE.	
3350	Maint R C Wings and Walls	SF	250	50' SECTION WITH AREAS OF DECAY UP TO FULL DEPTH WITH EXPOSED FILL THROUGHOUT FACE OF SOUTHEAST WINGWALL, BEGINNING APPROXIMATELY 18' FROM NEAR END OF WINGWALL.	

Key

Priority Maintenance Item Critical Finding Item Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 230005 County COLUMBUS

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
0	No Maintenance Required	1 NA

Location:		
	Bent/Span No.	

Priority Level	Status
Priority Maintenance	Division Maintenance Work In Process

Submitted Date:	Submitted By:	Assisted By:
06/04/2020	D. Curtis	

Details
MISSING DELINEATOR AT NORTHWEST CORNER.

MMS Code	MMS Description	Quantity
0	No Maintenance Required	1 NA

Location:		
	Bent/Span No.	

Priority Level	Status
Priority Maintenance	Division Maintenance Work In Process

Submitted Date:	Submitted By:	Assisted By:
06/04/2020	D. Curtis	

Details
MISSING DELINEATOR AT NORTHEAST CORNER.

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 230005 County COLUMBUS

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	1 SF

Location:		
	Bent/Span No.	
Priority Level	Status	
Priority Maintenance	Division Maintenance Work In Process	
Submitted Date:	Submitted By:	Assisted By:
06/04/2020	D. Curtis	

Details

Span 1 Beam 1: 21" X 10" X 4" DEEP SPALL WITH EXPOSED REBAR IN LEFT FACE OF GIRDER AT PIER 1.

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	1 SF

Location:		
	Bent/Span No.	
Priority Level	Status	
Priority Maintenance	Division Maintenance Work In Process	
Submitted Date:	Submitted By:	Assisted By:
06/04/2020	D. Curtis	

Details

Span 1 Beam 3: 11" X 6" X 3" DEEP SPALL WITH EXPOSED REBAR IN RIGHT FACE OF GIRDER AT PIER 1.

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 230005 County COLUMBUS

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3306	Maintain Concrete Superstructure Components	1 SF

Location:		
Bent/Span No.		
Priority Level	Status	
Priority Maintenance	Division Maintenance Work In Process	
Submitted Date:	Submitted By:	Assisted By:
06/04/2020	D. Curtis	

Details

Span 3 Beam 2: 9" X 2" X 2" DEEP SPALL WITH EXPOSED REBAR IN LEFT FACE OF GIRDER AT PIER 3.

MMS Code	MMS Description	Quantity
3326	Maintain Concrete Deck	1 SF

Location:		
Bent/Span No.		
Priority Level	Status	
Priority Maintenance	Division Maintenance Work In Process	
Submitted Date:	Submitted By:	Assisted By:
06/04/2020	D. Curtis	

Details

Span 4 Deck: 8" X 3" X 1/2" DEEP SPALL WITH EXPOSED REBAR IN TOP OF DECK IN WHEEL LINE OF EASTBOUND LANE, APPROXIMATELY 16" FROM END BENT 2 FILL FACE.

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 230005 County COLUMBUS

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3350	Maint R C Wings and Walls	250 SF

Location:
Bent/Span No.

Priority Level	Status
Priority Maintenance	Division Maintenance Work In Process

Submitted Date:	Submitted By:	Assisted By:
06/04/2020	D. Curtis	

Details
50' SECTION WITH AREAS OF DECAY UP TO FULL DEPTH WITH EXPOSED FILL THROUGHOUT FACE OF SOUTHEAST WINGWALL, BEGINNING APPROXIMATELY 18' FROM NEAR END OF WINGWALL.

Bridge Inspection Field Sketch

Roadway	20.75ft Wide	2 Paved Lanes	Looking East
Left Shoulder	2.75ft Wide	2.00ft Paved	0.75ft Unpaved
Right Shoulder	4.92ft Wide	1.67ft Paved	3.25ft Unpaved
Left Guardrail	2.75ft from road		
Right Guardrail	4.92ft from road		

Measurements recorded approximately 20ft from End Bent 1 fill face along centerline of roadway.

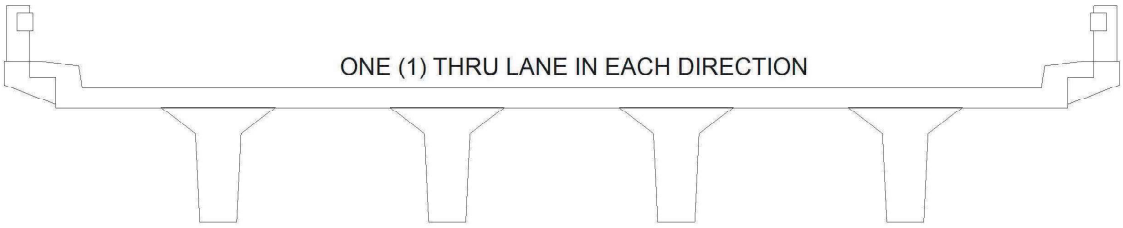
SKETCH REVISED BY RKW ON 6.3.20

Title	**Description**
APPROACH ROADWAY	LOOKING EAST

Bridge No: 230005	**Drawn By:** RLK	**Date:** 07/21/2010	**File Name:** S0326000031

Bridge Inspection Field Sketch

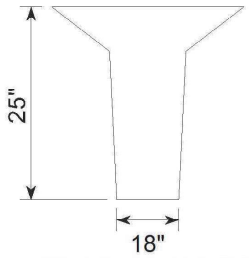
Deck Width/Out to Out	33.50ft*	Between Rails			31.333ft
Clear Roadway	28.00ft	Wearing Surface			
Median Width		Median Height			
Curb Height		Left	0.792ft	Right	0.792ft
Curb Width		Left	1.75ft	Right	1.75ft
Clear Roadway (Rail to Median)		Left		Right	
Guardrail Width		Left	0.667ft	Right	0.667ft
Top of Rail to Deck/Wearing Surface		Left	2.50ft	Right	2.50ft
Bridge Rail		Left	Type 11	Right	Type 11



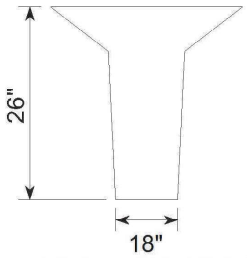
Measurements for Spans	1 thru 4		
Deck Thickness	0.562	Left Overhang	4.75*
Top of Rail to Bottom of Beam	5.229	Right Overhang	4.75*

Beam Number	Beam Type	Spacing	Comments
1	RC Deck Girder	8.00ft	
2	RC Deck Girder	8.00ft	
3	RC Deck Girder	8.00ft	
4	RC Deck Girder		

*Measurements including brackets, measurements without brackets: Out to Out = 31.50ft and Overhangs 3.75ft



GIRDER DETAILS
Girders 1 and 4



GIRDER DETAILS
Girders 2 and 3

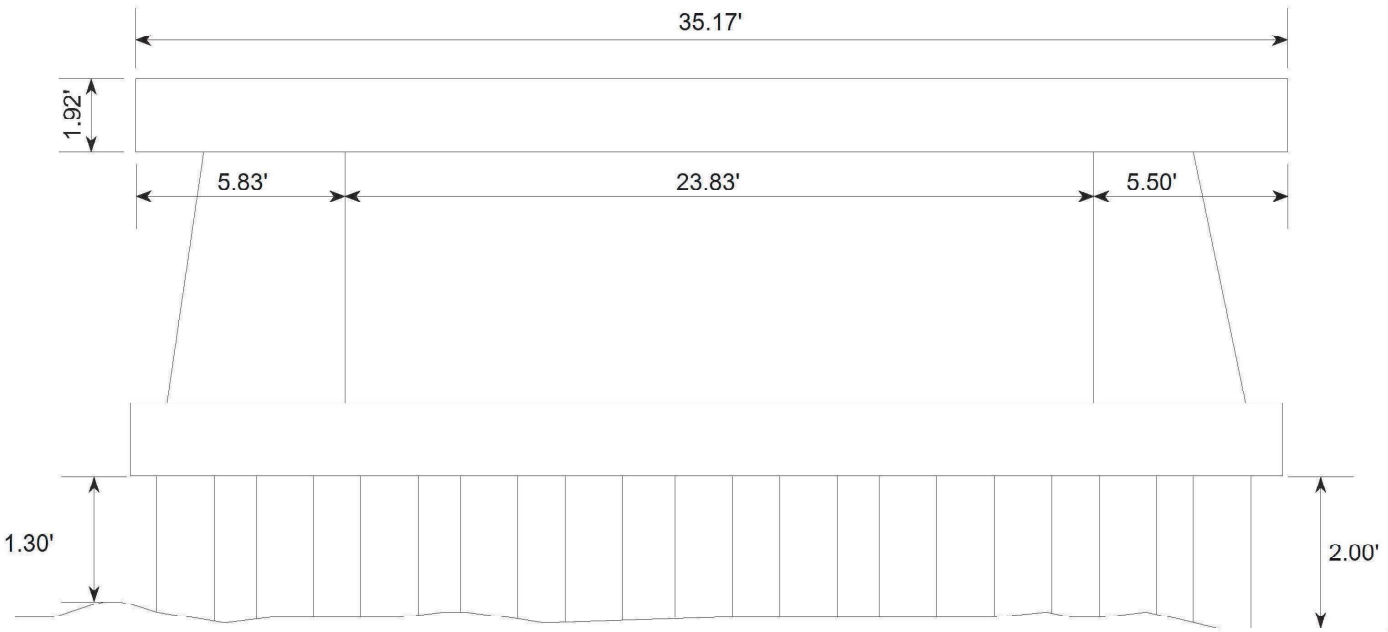
SKETCH REVISED BY RKW ON 6.3.20 (CHANGES IN RED)

Title	Description
TYPICAL SECTION	4 LINES OF RC DECK GIRDERS

Bridge No:	Drawn By:	Date:	File Name:
230005	SLK	06/07/2006	S0326000032

Bridge Inspection Field Sketch

PIER 2 (WEST SIDE)



NOTE: TIMBER PILE SPACINGS NOT VISIBLE DUE TO WATERLEVEL

Cap Width: 1.917ft
Beam to end of Cap: Left: 3.75ft
Right: 3.75ft

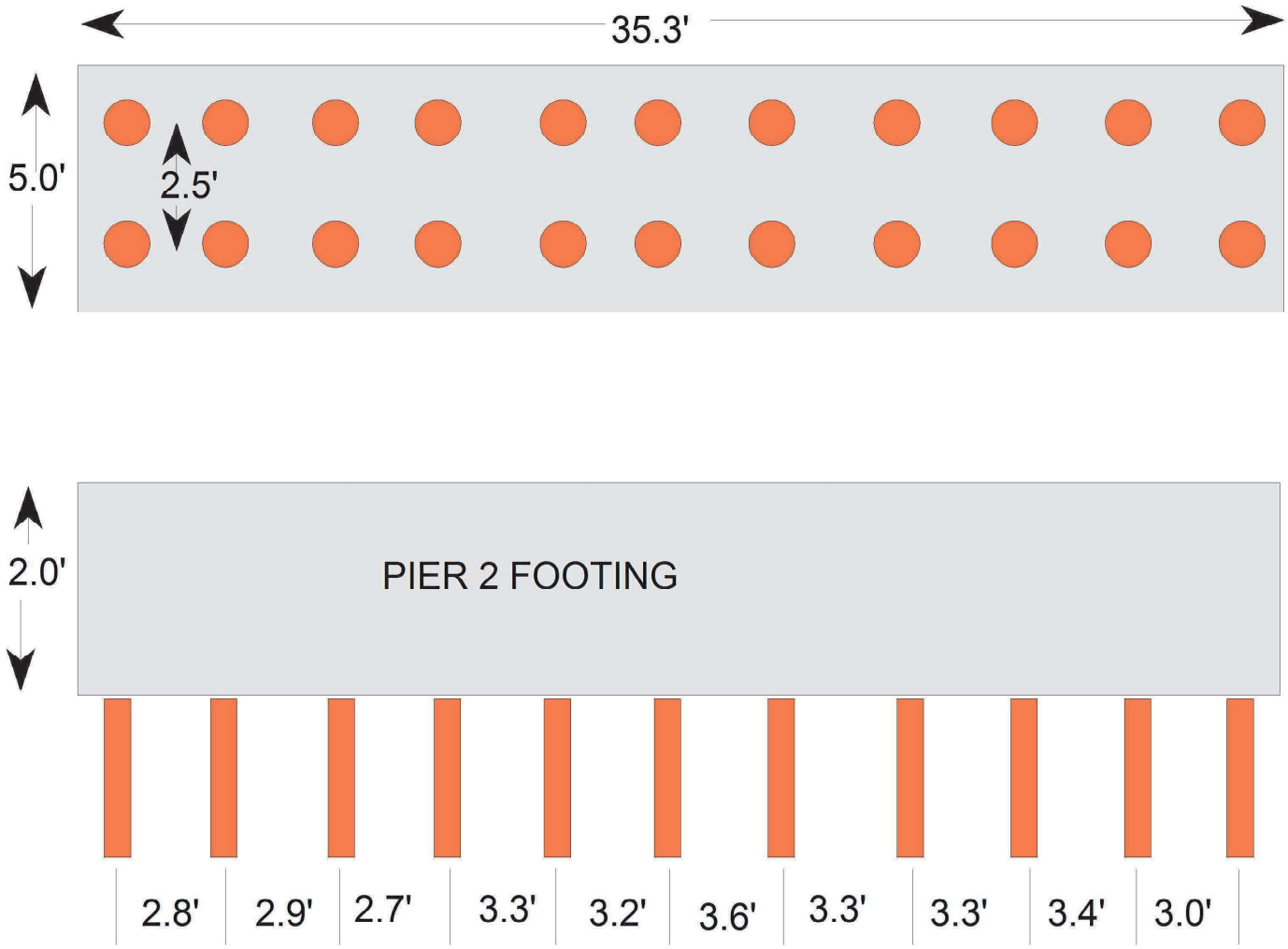
SKETCH VERIFIED BY RKW ON 6.3.20

Title	Description
PIER PROFILE	PIERS 1 THRU 3

Bridge No:	Drawn By:	Date:	File Name:
230005	PGR	4/28/2008	S0174012406

Bridge Inspection Field Sketch

PIER 2 FOUNDATION PILE LAYOUT

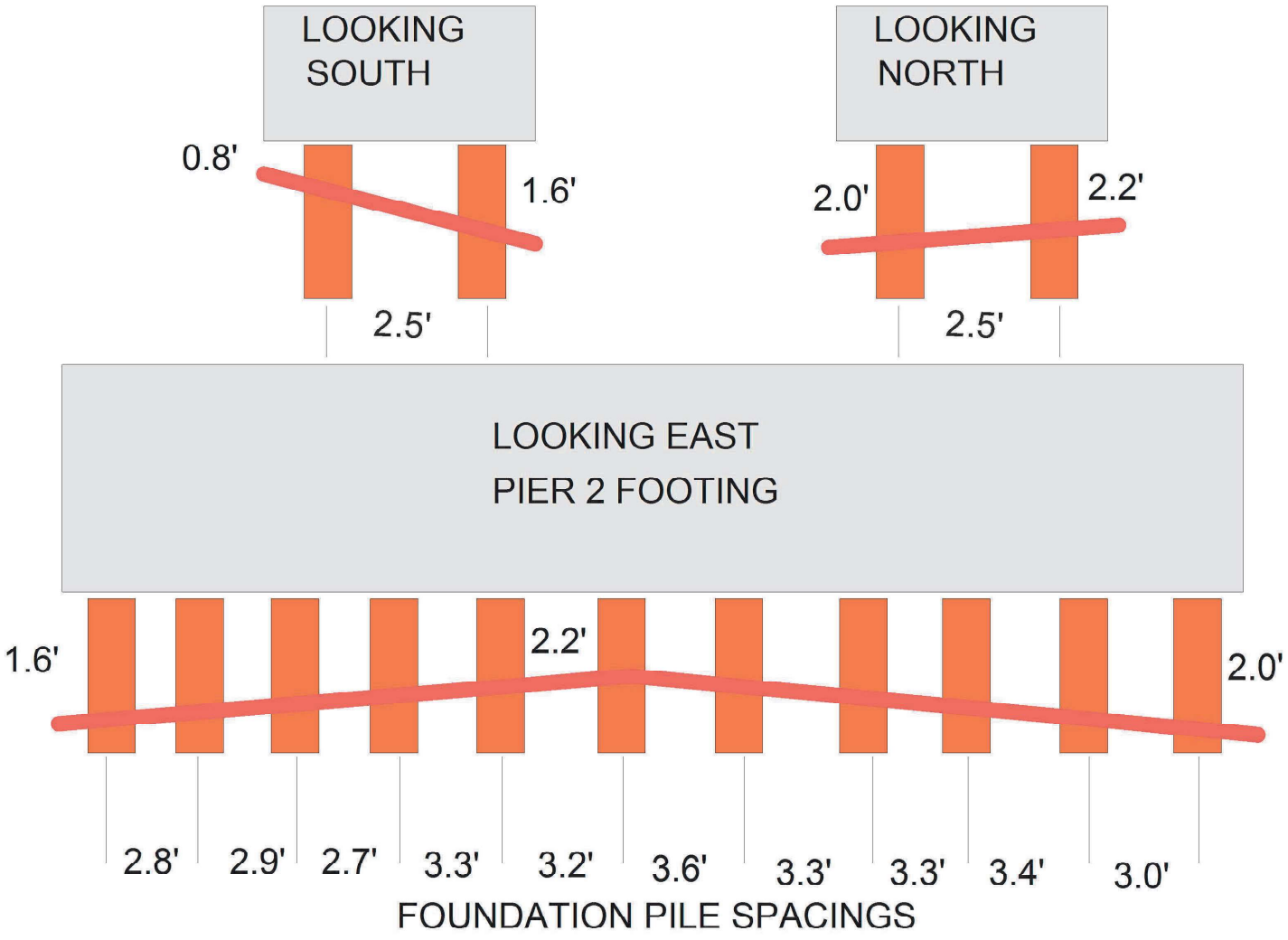


NOT TO SCALE

Title	Description
FOOTING PILE LAYOUT	TOP VIEW

Bridge No:	Drawn By:	Date:	File Name:
230005	PGR	3/9/2016	S0174013219

Bridge Inspection Field Sketch



FOUNDATION PILE SPACINGS

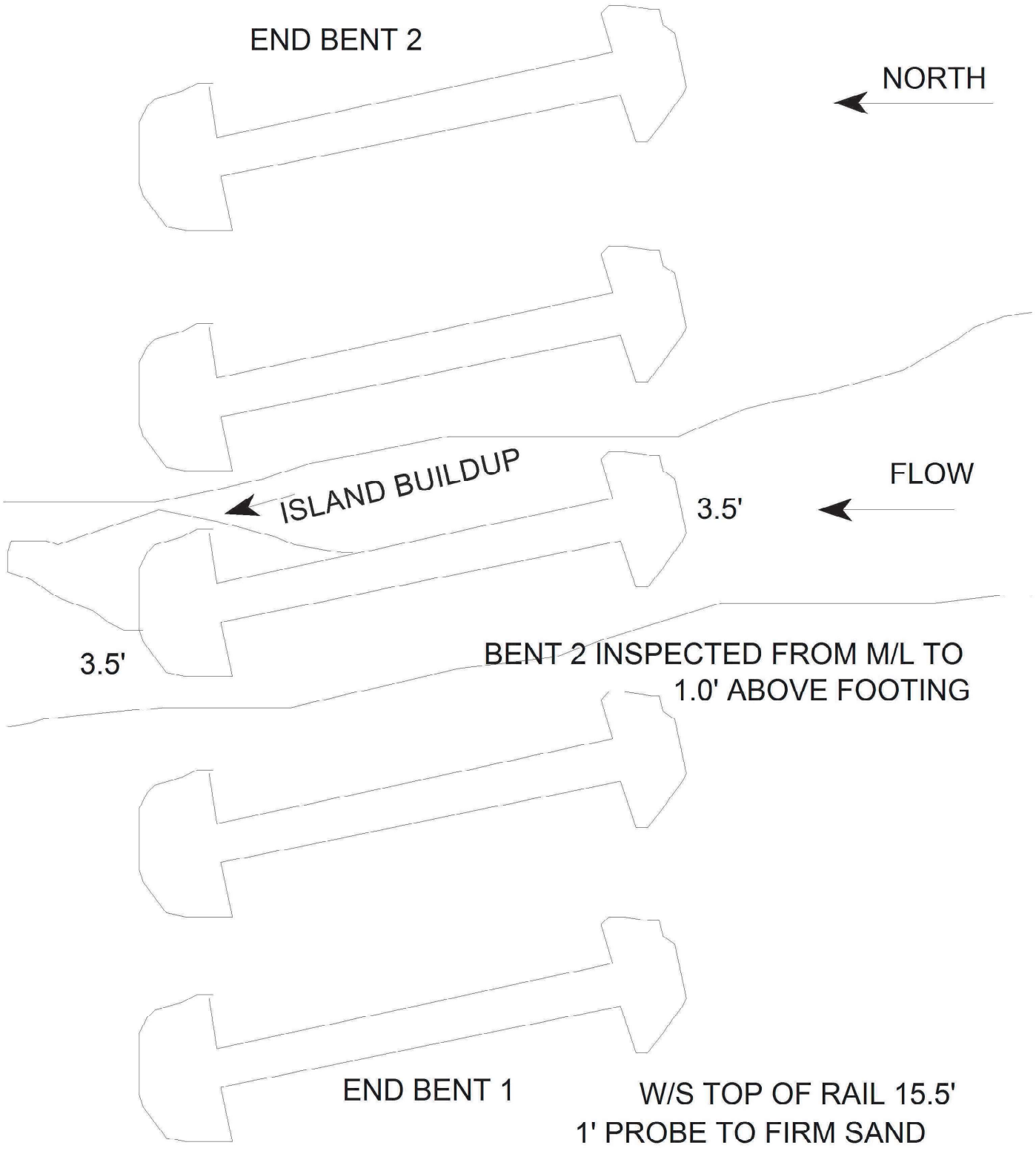
= BOTTOM CONTOUR OF SCOUR

UPDATED 3/9/20 BY PGR

Title	Description
SCOUR CONTOUR	SIDE VIEW

Bridge No:	Drawn By:	Date:	File Name:
230005	PGR	3/9/2016	S0174013220

Bridge Inspection Field Sketch



Title	Description
PLAN VIEW	TOP VIEW

Bridge No:	Drawn By:	Date:	File Name:
230005	PGR	3/9/20	S0174012405