BRIDGE INSPECTION REPORT

SPRING GUT CREEK BRIDGE

ROUTE 85 OVER SPRING GUT CREEK

USVI (ST CROIX) - DEPARTMENT OF PUBLIC WORKS

APPROACH LOOKING NORTH

STRUCTURE NO. 2902-022P

INSPECTION TYPE: ROUTINE AND FRACTURE CRITICAL

INSPECTION DATE: 2/28/2024

EAST (UPSTREAM) SIDE

Report prepared by:

Federal Highway Administration

FLH Office of Bridges and Structures
Bridge Inspection Program
22001 Loudoun County Parkway, Building E2, Suite 200
Ashburn, VA 20147

https://bridge.flhd.fhwa.dot.gov

STRUCTURE SUMMARY
SPRING GUT CREEK BRIDGE

STRUCTURE NO. 2902-022P
INSPECTION DATE: 02/28/2024

BRIDGE IDENTIFICATION AND DESCRIPTION

MAIN SPAN MATERIAL: ..... 3 - STEEL
MAIN SPAN TYPE: ..... 03 - GIRDER AND FLOORBEAM
OF BEAMS, MAIN SPAN: . 5
DECK TYPE: ..... 1 - CONCRETE CAST-IN-PLACE
WEARING SURFACE: ..... 6 - BITUMINOUS
ABUT. FOUNDATIONS: .....
PIER FOUDNATION(S): ..... 0 - UNKNOWN
ABUTMENT / PIER MAT'L: .. 1 - CONCRETE
PROJ./PLAN REF. NO: .....
NPS ROAD CLASS: .....

NO. OF MAIN SPANS: 001
NO. OF APPR. SPANS: 0
STRUCT. TOTAL LENGTH: . 23.0 FT (7 M)
MAX. SPAN LENGTH: ..... 19 FT (5.8 M)
DECK WIDTH: ..... 18.9 FT (5.8 M)
CURB TO CURB WIDTH: .... 16.8 FT (5.1 M)
YEAR BUILT: 1904
YEAR RECONSTRUCTED: .
SKEW ANGLE: ..... 0 °
FRACTURE CRITICAL: ..... Y

STRUCTURE HISTORY: .....

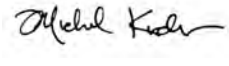
LOCATION

USVI (ST CROIX) - DEPARTMENT OF PUBLIC WORKS
STATE: ..... 781 - VIRGIN ISLANDS
FACILITY CARRIED: ..... ROUTE 85
FEATURE INTERSECTED: SPRING GUT CREEK

MILE POINT: .. 0 (KM PT 0)
LOCATION: .... ROUTE 85

INSPECTION TEAM: M. Kreider, J. Voight

CONDITION ASSESSMENT:



Micheal Kreider

REPORT REVIEW:

Marcus Miller

REPORT APPROVAL:

Date: 08/02/2024

Jorgomai Ceesay

STRUCTURE EVALUATION SUMMARY

This concrete tee beam bridge is in fair to poor condition overall. The main problems include cracking and spalling of the beams, with several reinforcing steel bars rusted completely through; deterioration of the bridge parapets; severe deterioration of the approach guardwalls and deck wearing surface; and severe deterioration of the asphalt approaches with deep potholes.

A temporary steel structure is in place over the existing concrete tee beam bridge. The steel structure consists of a steel plate deck supported by steel floor beams. The floor beams are welded to the bottom flanges of two exterior through-girders. The though-girders are supported by timber sills that sit on the existing bridge ends. Heavy pitting and rust perforations <1" diameter were noted on top of the steel deck plate, with cracks forming between the perforations. Also, a transverse crack in the steel deck was observed near the south end. Corrosion was noted on the floor beams and unpainted portions of the through-girders. Cracked welds in south approach steel plate results in

slamming when vehicles cross.

There is a 5-ton weight limit sign at the north approach, but no similar sign is in place at the south approach. Numerous local residents stopped to inquire when the bridge would be replaced, and it was noted that water delivery and garbage trucks are seen to cross the bridge daily.

This inspection report also constitutes the non-redundant steel tension member (NSTM) inspection of this bridge.

Due to the advanced deterioration of the structure, consideration should be given to the replacement of the structure in the near future. Until the bridge is replaced, the steel deck should be repaired. It is also recommended that the inspection cycle be reduced to 12 months.

RECOMMENDATIONS AND ESTIMATED COSTS STRUCTURE NO. 2902-022P

SPRING GUT CREEK BRIDGE INSPECTION DATE : 02/28/2024

226 PRIORITY OF IMPROVEMENT B

A (Critical) - Structure is closed, in immediate damage of collapse, or presents a critical safety danger.
B (Major) - Structure is seriously deficient or presents a safety hazard, but can remain open at reduced loads or with frequent inspections.
C (Moderate) - Structure is deficient, functionally obsolete, or requires substantial repairs to prevent a serious deficiency or unsafe condition.
D (Minor) - Structure is generally in good condition. Preventive maintenance may be required.
E (Special) - Structure is under construction or reconstruction.

Item No.	Maintenance Recommendations (GENERALLY NOT FLHP ELIGIBLE)	QTY.	UNIT	UNIT COST	PRELIM. COST ESTIMATE
58.1	REPAIR CRACKED WELDS IN STEEL PLATE AT SOUTH APPROACH TO PREVENT SLAMMING WHEN VEHICLES CROSS TEMPORARY STRUCTURE.	1	LS	1000	1000
222.7, 222.7	INSTALL ONE LANE BRIDGE SIGNS AT BOTH APPROACHES. INSTALL 5-TON WEIGHT LIMIT SIGN AT SOUTH APPROACH.	1	LS	1000	1000
36.A	INSTALL TEMPORARY BARRIERS TO ALIGN WITH BLUNT ENDS OF TEMPORARY STRUCTURE TO PROTECT BRIDGE ENDS.	1	LS	5000	5000
				PRELIM. MAINTENANCE TOTAL :	7000

Item No.	REHABILITATION/RECONSTRUCTION (TYPICALLY NEEDED WITHIN 5 YEARS)	QTY.	UNIT	UNIT COST	PRELIM. COST ESTIMATES	
					REHAB	RECONSTR
58,59,60	REPLACE STRUCTURE.	1	LS	600000	600000	
222.4,60	REPAVE APPROACHES.	1	LS	10000	10000	
				PRELIM. REHABILITATION/RECONSTRUCTION TOTAL :	610000	

COST ESTIMATE SUMMARY

PRELIM. MAINTENANCE TOTAL : 7000

PRELIM. REHABILITATION TOTAL : 610000

PRELIM. RECONSTRUCTION TOTAL : .. 0

TOTAL ITEMIZED COSTS: 617000

PRELIMINARY ESTIMATE TOTAL * : 617000

(*Includes typical contract costs for mobilization, traffic control and design/construction engineering: but does not include detour bridges, work beyond the bridge limits, or work not listed above. Estimates are approximate and are for planning purposes only; they should not be used as a complete or final engineers estimate.)

Remarks : Cost estimates are based on historical data, including costs for similar projects when available.

FIELD INSPECTION REPORT

SPRING GUT CREEK BRIDGE

STRUCTURE NO. 2902-022P

INSPECTION DATE: 02/28/2024

CONDITION RATING CODES FOR ITEMS 58 - 62, 222, 223

N	NOT APPLICABLE
9	EXCELLENT CONDITION
8	VERY GOOD CONDITION - no problems noted.
7	GOOD CONDITION - some minor problems.
6	SATISFACTORY CONDITION - structural elements show some minor deterioration.
5	FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour.
4	POOR CONDITION - advanced section loss, deterioration, spalling, or scour.
3	SERIOUS CONDITION - loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.
2	CRITICAL CONDITION - advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the structure until corrective action can be taken.
1	"IMMINENT" FAILURE CONDITION - major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Structure is closed to
0	FAILED CONDITION - out of service; beyond corrective action.

CONDITION RATING CODE EQUIVALENTS FOR SUB-ELEMENTS

G = GOOD (CODES 7 - 9) F = FAIR (CODES 5 - 6) P = POOR (CODES 0 - 4)

58. DECK	4
1. DECK SLAB	P
2. EXPANSION JOINTS	N
3. WEARING SURFACE	P
4. RIDEABILITY	P
5. CURBS, SIDEWALKS, AND MEDIAN	N
6. PARAPETS AND/OR RAILINGS	P
7. DRAINS AND DRAINAGE	P
8. UTILITIES	F
9. DEFLECTION AND/OR VIBRATION	P
10.OTHER:	N

59. SUPERSTRUCTURE	5
1. BEARING DEVICES	F
2. GIRDERS OR BEAMS	P
3. ARCH(ES) OR SLAB(S)	N
4. FLOOR BEAMS AND STRINGERS	F
5. TRUSSES	N
6. DIAPHRAGMS AND BRACING	N
7. PAINT	F
8. FASCIA(E)	N
9. DEFLECTION AND/OR VIBRATION	P
10.ALIGNMENT	G
11.OTHER	N

60. SUBSTRUCTURE	6
ABUTMENTS	
1. BREASTWALLS OR COLUMNS	F
2. PILE BENTS	N
3. CAPS AND/OR BEARING SEATS	P
4. BACKWALLS AND/OR BULKHEADS	N
5. FOUNDATIONS	G
6. WINGWALLS	G
7. WEEP HOLES	N
8. EXPANSION JOINTS	N
9. EROSION AND/OR SCOUR	G
10.SETTLEMENT OR DEFLECTION	G
11.SLOPE PROTECTION	N
12.OTHER	N
PIER(S)	
13. WALLS AND/OR COLUMNS	
14.PILE BENTS	
15.CAPS AND/OR BEARING SEATS	
16.FOUNDATIONS	
17.EROSION AND/OR SCOUR	
18.SETTLEMENT OR DEFLECTION	
19.OTHER	

61. CHANNEL	6
1. ALIGNMENT	F
2. EROSION AND/OR SCOUR	F
3. CHANNEL PROTECTION	F
4. WATERWAY OBSTRUCTIONS	G
5. OTHER	N
6. ADEQUACY OF OPENING	1- SUFF
7. NORMAL VELOCITY	5 - DRY
8. AVERAGE CLEAR OPENING	18 FT
9. STREAMBED COMPOSITION:	
	SAND, CLAY

222. APPROACHES	4
1. APPROACH SLABS	N
2. RELIEF JOINTS	N
3. APPROACH GUARDRAIL	P
4. SURFACING	P
5. EROSION	G
6. SETTLEMENT	P
7. SIGNS	P
8. ALIGNMENT	G
9. OTHER	N

223. RETAINING WALL	7
1. WALL	G
2. WEEP HOLES	N
3. FOUNDATION	N
4. EROSION AND/OR SCOUR	G
5. SETTLEMENT OR DEFLECTION	G
6. OTHER	N

36. TRAFFIC AND SAFETY FEATURES	
A. BRIDGE RAILINGS:	0
B. TRANSITIONS:	0
C. APPROACH GUARDRAILS:	0
D. APPROACH GUARDRAIL ENDS:	0

TRAFFIC SAFETY RATING CODES

0 - Does not meet standards or a safety features is required and none is provided.

1 - Meets currently acceptable standards.

N - Not applicable or a safety features is not required.

ITEM REFERENCE AND REMARKS

58.1 58.4	HEAVY PITTING WITH <1" DIAMETER HOLES OF TEMPORARY STEEL DECK THROUGHOUT. MULTIPLE RUST PERFORATIONS IN STEEL DECK, WITH CRACKS FORMING BETWEEN PERFORATIONS. TRANSVERSE CRACK, 1.2'L IN STEEL DECK, APPROXIMATELY 1.5' FROM SOUTH END.
58.7	CRACKED WELDS ON SOUTH APPROACH STEEL PLATE RESULTS IN SLAMMING WHEN VEHICLES CROSS. 5'L X 8"H X 8"D SPALL ALONG WEST SIDE OF CONCRETE DECK NEAR NORTH END. HEAVY SOIL AND DEBRIS ACCUMULATION IN CURB LINES ALONG CONCRETE PARAPET, MINOR ALONG CURB LINE OF THROUGH-BEAMS.
58.3	PREVIOUSLY NOTED ASPHALT WEARING SURFACE IS SEVERELY DETERIORATED, EXPOSING TIMBER RUNNERS MEASURING 9" THICK OVER 8" CONCRETE DECK, NOT VISIBLE DUE TO TEMPORARY BRIDGE.
58.6	STEEL HAND RAILING PLACED ON TOP OF TEMPORARY STEEL THROUGH-GIRDERS. MODERATE TO SEVERE DETERIORATION OF CONCRETE BRIDGE PARAPETS. WEST PARAPET: 5' MISSING SECTION NEAR NORTH END. EXPOSED TREE ROOT GROWING ALONG BASE OF PARAPET. EAST PARAPET: VISIBLE BOWING OUT OF PARAPET.
58.8	19" DIA. AND 5" DIA. UTILITY ALONG EAST SIDE AND 7" DIA. ALONG WEST SIDE. MINOR CORROSION TO PIPES. WEST SIDE UTILITY SAGGING.
58.9 59.9	EXISTING BRIDGE EXHIBITS A VISIBLE SAG. FREE ENDS OF STEEL DECK PRODUCE LOUD SOUND WHEN THEY HIT SILLS AS VEHICLES TRANSITION ON/OFF BRIDGE.
59.2 59.4 59.7	TEMPORARY STEEL STRUCTURE: METAL DECK PLATE ON FLOOR BEAMS WELDED TO BOTTOM FLANGES OF THROUGH-GIRDERS. THROUGH-GIRDERS SIT ON TIMBER SILLS PLACED ON ORIGINAL STRUCTURE. CORROSION THROUGHOUT FLOOR BEAMS AND UNPAINTED PORTIONS OF THROUGH-BEAMS. CRACKED WELD BETWEEN TOP FLANGE OF NORTHERNMOST FLOOR BEAM AND METAL DECK, AT 4TH WELD FROM EAST END. ORIGINAL BEAM #2 (FROM WEST): SPALL WITH 2 REINFORCING BARS SEVERED DUE TO CORROSION AT SOUTH ABUTMENT. ORIGINAL BEAM#3: SPALL WITH 1 REINFORCING BAR SEVERED DUE TO CORROSION AT NORTH ABUTMENT. ORIGINAL BEAM#4: SPALL WITH 4 REINFORCING BAR SEVERED DUE TO CORROSION AT NORTH ABUTMENT. ORIGINAL BEAM #5: SPALL WITH 4 EXPOSED AND SEVERED REINFORCING BARS DUE TO CORROSION NEAR NORTH ABUTMENT. SPALL ALONG EXTERIOR EDGE 5' FROM NORTH ABUTMENT WITH 3 EXPOSED REINFORCING BARS.

59.6	MODERATE HONEYCOMBING OF END DIAPHRAGMS.
60.1	MODERATE CRACKING AND DELAMINATION OF BREASTWALLS. WIDESPREAD CRACKING AND DELAMINATING OF NORTH ABUTMENT AT WEST END. 2'L X 1'H SPALL AT WEST EDGE OF NORTH BREASTWALL. SPALL WITH EXPOSED REBAR NEAR EAST END OF SOUTH ABUTMENT BEARING SEAT.
60.9	MINOR SCOUR ALONG SOUTH ABUTMENT WITH NO FOOTING EXPOSED.
61.3	ALL CHANNEL BANKS ARE LINED WITH STEPPED GABION BASKETS, FULL HEIGHT OF CHANNEL. MINOR TO MODERATE VEGETATION THROUGHOUT.
61.4	HEAVY DEBRIS IN UPSTREAM AND DOWNSTREAM CHANNELS.
222.3	APPROACH GUARDWALLS ARE MASONRY COVERED WITH A FASCIA COATING. SOUTHWEST WALL: THREE SPALLED SECTIONS. SOUTHEAST WALL: TWO DAMAGED AND MISSING SECTIONS MEASURING 4' AND 8' LONG, FULL HEIGHT. NORTHEAST WALL: DAMAGED AND MISSING SECTION MEASURING 10' LONG, FULL HEIGHT. NORTHWEST WALL: MINOR TO MODERATE CRACKING, DELAMINATION AND SPALLING OF FINISH COAT.
222.4 222.6	SEVERE DETERIORATION OF APPROACH PAVEMENT. POTHOLES, UP TO 4"D, IN BOTH NORTH AND SOUTH APPROACHES. SETTLEMENT UP TO 3" HIGH FROM TOP FACE OF STEEL PLATE TO ASPHALT SURFACE AT SOUTH END OF STEEL PLATE DECK.

222.7	10 MPH SPEED LIMIT SIGN AT NORTH APPROACH. "NO TRUCKS OVER 5 TONS" SIGN INSTALLED AT NORTH APPROACH, BUT NO SIGN AT SOUTH APPROACH. "ONE LANE BRIDGE" SIGN IS NOT INSTALLED AT EITHER APPROACH. OBJECT MARKERS NOT INSTALLED AT APPROACHES. REFLECTORS ON GIRDER ENDS ARE DULL.
36	PARAPETS AND APPROACH GUARDWALLS DO NOT MEET CURRENT SAFETY STANDARDS. BLUNT ENDS OF TEMPORARY STRUCUTURE ARE NOT PROTECTED WITH TEMPORARY BARRIERS.
59.1 60.3	CRUSHING OF NORTH TIMBER BEARING SILL, 36" L, STARTING 2' FROM EAST END. NORTH TIMBER BEARING EXHIBITS SATURATION AND DETERIORATION.
61.1 61.2	CHANNEL HAS 20° ANGLE OF ATTACK WITH SUBSTRUCTURE. MINOR SCOUR UNDER BRIDGE.
59	THIS INSPECTION CONSTITUTES NON-REDUNDANT STEEL TENSION MEMBER (NSTM) INSPECTION.

STRUCTURE LOAD RATING

SPRING GUT CREEK BRIDGE

STRUCTURE NO. 2902-022P

INSPECTION DATE: 02/28/2024

TRUCK TYPE	INVENTORY RATING (NORMAL TRAFFIC)		OPERATING RATING (MAXIMUM LOAD)	
	TONS	METRIC TONS	TONS	METRIC TONS
H	4	4	6	5
HS	7	6	12	11
TYPE 3	9	8	16	15
TYPE 3S2	15	14	17	15
TYPE 3-3	19	17	31	28

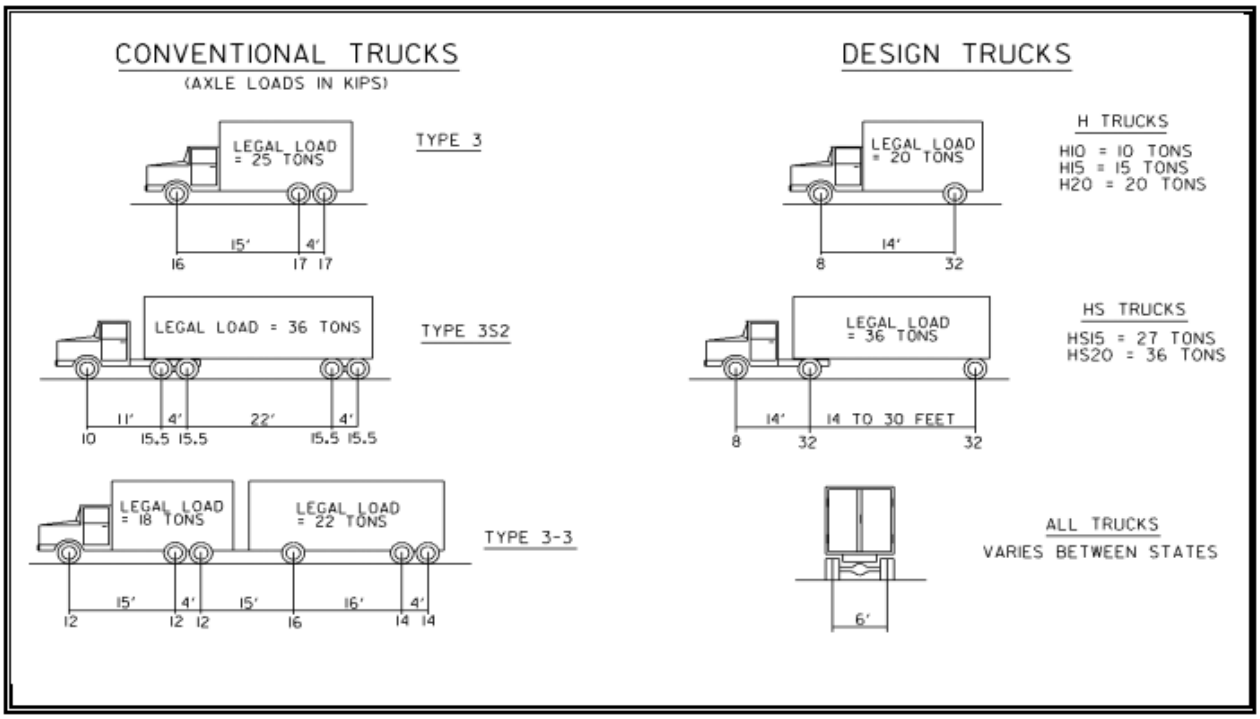
DESIGN LOADING: 0 - UNKNOWN

	CAPACITY MEETS OR EXCEEDS DESIGN LOAD
	CAPACITY IS LESS THAN DESIGN LOAD
	ORIGINAL LOAD RATING CALCULATION APPLICABLE
	ORIGINAL LOAD RATING CALCULATION REVISED

DATE OF LOAD RATING CALCULATION: 02/07/2022

LOAD RATING CONTROLLED BY: ENGINEERING JUDGMENT

REMARKS: PLANS NOT AVAILABLE. RATING BASED ON ENGINEERING JUDGMENT IN ACCORDANCE WITH AASHTO MANUAL FOR BRIDGE EVALUATION (MBE). BRIDGE IS POSTED FOR A 5-TON WEIGHT LIMIT AT NORTH APPROACH.



STRUCTURE INVENTORY AND APPRAISAL

SPRING GUT CREEK BRIDGE

STRUCTURE NO. 2902-022P

INSPECTION DATE: 02/28/2024

STRUCTURE IDENTIFICATION

(201) PARK: USVI (ST CROIX) - DEPARTMENT OF PUBLIC WORKS

(202) STRUCTURE NAME:.....SPRING GUT CREEK BRIDGE

(203) STRUCTURE KIND:..... 1 - BRIDGE

(204) STRUCTURE NUMBER:.....2902-022 P

(205) NPS REGION:.....

(206) ROUTE CODE NUMBER:.....

(207) ROAD SECTION NO:.....

(208) NPS ROAD CLASS:.....

(209) WITHIN NPS BNDRY?:..... Yes

(210) OPERATING UNIT:.....

(211) PROJECT NO(S):.....

(212) DRAWING NUMBERS:.....

(21) MAINTAINED BY:.....01 - STATE HIGHWAY AGENCY

(22) OWNER:..... 01 - STATE HIGHWAY AGENCY

(1) STATE:..... 781 - VIRGIN ISLANDS

(2) STATE HWY. AGENCY DIST:.....00

(3) COUNTY CODE:..... 78010 ST CROIX

(4) CITY / PLACE CODE:..... 14046

(5) INVENTORY ROUTE:..... 1 4 1 00000 0

(6) FEATURES INTERSECTED:..... SPRING GUT CREEK

(7) FACILITY CARRIED:..... ROUTE 85

(8) STATE STRUCTURE NO:..... SPRING GUT

(9) LOCATION:..... ROUTE 85

(10) INV. RTE. - MIN. VERT. CLR:..... 99.99 FT (99.99 M)

(11) MILE POINT:..... 0 (KM PT: 0)

(27) YEAR BUILT:..... 1904

(106) YEAR RECONSTRUCTED:.....

(20) TOLL:..... 3 - ON FREE ROAD

(37) HISTORIC DESIGNATION:..... 5 - NOT ELIGIBLE

STRUCTURE DESCRIPTION, FOUNDATION, AND DECK TYPE

(43A) MAIN STR. MATERIAL:.....3 - STEEL

(43B) MAIN STR. TYPE:..... 03 - GIRDER AND FLOORBEAM SYSTEM

(45) NO. OF MAIN SPANS:.....001

(48) MAX. SPAN LENGTH:.....19 FT (5.8 M)

(49) STRUCTURE LENGTH:..... 23.0 FT (7 M)

(216A) ABUTMENT #1 FDN:.....

(216B) ABUTMENT #2 FDN:..... 0 - UNKNOWN

(217A) PREDOM. PIER FDN:.....0 - UNKNOWN

(217B) SECOND. PIER FDN:..... 0 - UNKNOWN

(107) DECK TYPE:..... 1 - CONCRETE CAST-IN-PLACE

(44A) APPR. STR. MATERIAL:..... 0 - Other

(44B) APPR. STR. TYPE:..... 00 - OTHER

(46) NO OF APPROACH SPANS:.....0

(108) WEAR SURFACE/PROTECT SYSTEM:

A) TYPE WEARING SURFACE:.. 6 - BITUMINOUS

B) TYPE MEMBRANE:..... 8 - UNKNOWN

C) TYPE PROTECTION:..... 8 - UNKNOWN

(218) IS SALT USED?..... NO

LOAD RATING AND POSTING

(31) DESIGN LOAD:.....0 - UNKNOWN

(66) INVENTORY RATING:.....7.0 TONS (6.4 METRIC TONS)

(64) OPERATING RATING:.....12.0 TONS (10.9 METRIC TONS)

(41) LOAD RESTRICTION:..... B - OPEN, POSTING REQUIRED

(70) BRIDGE POSTING:..... 0 - MORE THAN 39.9% BELOW LEGAL LOADS (0 TONS)

INSPECTION DATES

(90) INSPECTION DATE: 02/28/2024 (91) FREQ. OF INSP: 24 MONTHS

(219) ADD. STUDIES NEEDED: N - 0 - NONE

(220) SPECIAL STUDY TYPE:

(221) SPECIAL STUDY DATE:

(92 / 93) CRITICAL FEATURE INSPECTION (CFI):

(A) FRACTURE CRITICAL:..... Y

INSP. EVERY 12 MONTHS - LAST INSP: 02/28/2024

(B) UNDERWATER:..... N

INSP. EVERY MONTHS - LAST INSP:

(C) SPECIAL INSPECTION:..... N

INSP. EVERY MONTHS - LAST INSP:

STRUCTURE INVENTORY AND APPRAISAL

SPRING GUT CREEK BRIDGE

STRUCTURE NO. 2902-022P

INSPECTION DATE: 02/28/2024

GEOMETRY, TRAFFIC, AND NAVIGATIONAL DATA

(16) LATITUDE:..... 17° 44'27.70" N

(17) LONGITUDE:..... 64°41'32.40" W

(19) DETOUR LENGTH:..... 0 MI (0 KM)

(28A) LANES ON STRUCT:.....01

(28B) LANES UNDER STRUCT:.....00

(42A) SERVICE ON:.....1 - HIGHWAY

(42B) SERVICE UNDER:.....5 - WATERWAY

(29) AVG DAILY TRAFFIC:.....100

(30) YEAR OF ADT:.....2019

(114) FUTURE ADT:.....120

(115) YEAR OF FUTURE ADT:.....2029

(101) PARALLEL STRUCTURE:.....N - NO PARALLEL STRUCTURE

(38) NAVIGATION CONTROL:.....0

(39) VERTICAL CLEARANCE:.....0 FT (0 M)

(40) HORIZ. CLEARANCE:.....0 FT (0 M)

(111) ABUT OR PIER PROT:.....1 - NAVIGATION PROTECTION NOT REQUIRED

LATERAL UNDERCLEARANCE:

(55) RIGHT:.....00 FT (0 M)

(56) LEFT:.....0 FT (0 M)

(51) CURB TO CURB WIDTH:..... 16.8 FT (5.1 M)

(52) DECK WIDTH:..... 18.9 FT (5.8 M)

(32) APPR. ROADWAY WIDTH:..... 18.9 FT (5.8 M)

(213) APPR. PAVEMENT WIDTH:... FT (0 M)

LEFT SHOULDER:..... FT (0 M)

RIGHT SHOULDER:..... FT (0 M)

(33) BRIDGE MEDIAN:..... 0 - NO MEDIAN

(34) SKEW ANGLE:..... 0 °

(35) STRUCTURE FLARED:..... 0 - NO FLARE

(47) TOTAL HORIZ. CLEARANCE:.. 16.8 FT (5.1 M)

(50) CURB OR SIDEWALK WIDTHS:

LEFT:..... 0.0 FT (0 M)

RIGHT:..... 0.0 FT (0 M)

(214) BRIDGE RAIL TYPE

RAIL CONFIGURATION:..... 3 - PARAPET ONLY

MATERIAL:..... 1 - CONCRETE

DESIGN TYPE:..... 5 - OTHER

(215) BRIDGE RAIL HEIGHT:..... 2.60 FT (0.79 M)

(53) MIN. VRT. CLR. OVER DECK: 99.99 FT (99.99 M)

(54) MIN. VRT. UNDRCLRANCE:... .00 FT (0 M)

CONDITION AND APPRAISAL DATA, PROPOSED IMPROVEMENTS, AND COST

(58) DECK:.....4

(59) SUPERSTRUCTURE:.....5

(60) SUBSTRUCTURE:..... 6

(61) CHANNEL:.....6

(62) CULVERT:.....N

(222) APPROACHES:.....4

(223) RETAINING WALL:.....7

(36) TRAFFIC SAFETY FEAT: 0 0 0 0

(75A) TYPE OF WORK:.....35 - REHABILITATION - DETERIORATION

(75B) WORK DONE BY:..... 1 - WORK TO BE DONE BY CONTRACT

(76) IMPROVEMENT LENGTH:..... FT (0 M)

(67) STRUCTURAL EVALUATION:..... 3

(68) DECK GEOMETRY:.....3

(69) UNDERCLEARANCES:..... N

(71) WATERWAY ADEQUACY:..... 7

(72) APPROACH ALIGNMENT:..... 8

(113) SCOUR CRITICAL:..... 5 - SCOUR WITHIN LIMITS OF FOOTING OR PILES

(225) PURPOSE OF IMPROVEMENT: 3 - CONSTRUCTION

(226) PRIORITY OF IMPROVEMENT: B - MAJOR

(227) MAINTENANCE COST:.....$ 7000

(228) REHAB / RECNSTR COST:..... $ 610000

(229) CONSTRUCTION COST:.....$ 0

ADDITIONAL INFORMATION

(230) STRUCTURE HISTORY:

(231) ADDITIONAL CONSIDERATIONS:

(330) ADDITIONAL CONFIGURATION INFORMATION:

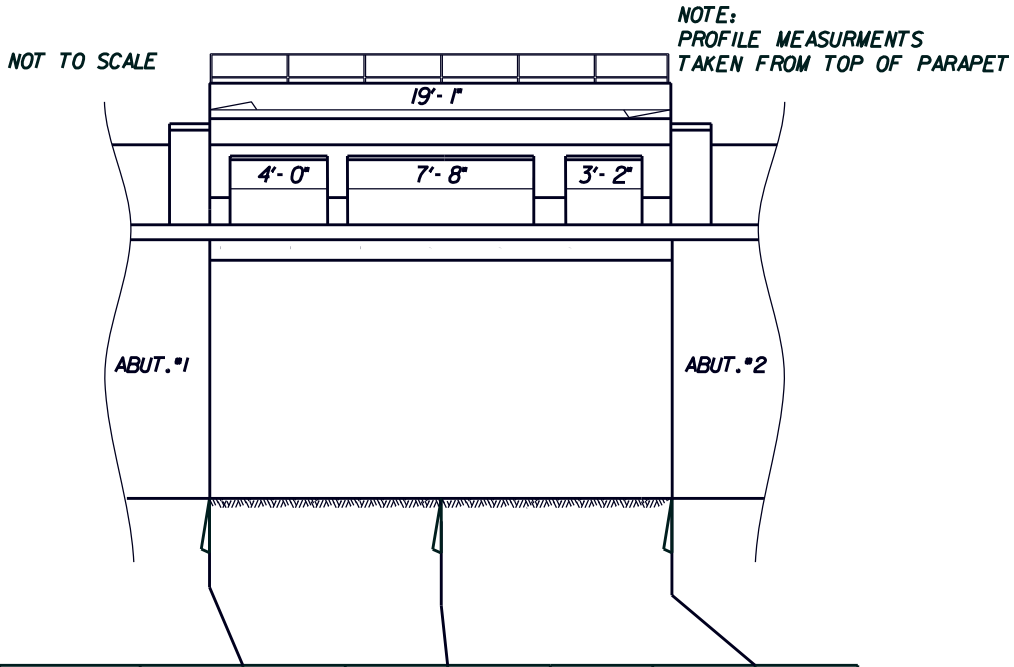
PROFILE SHEET **STRUCTURE NO. 2902-022P**

ROUTE 85 OVER SPRING GUT

EAST (UPSTREAM) SIDE

NORTH TOWARD ROUTE 75

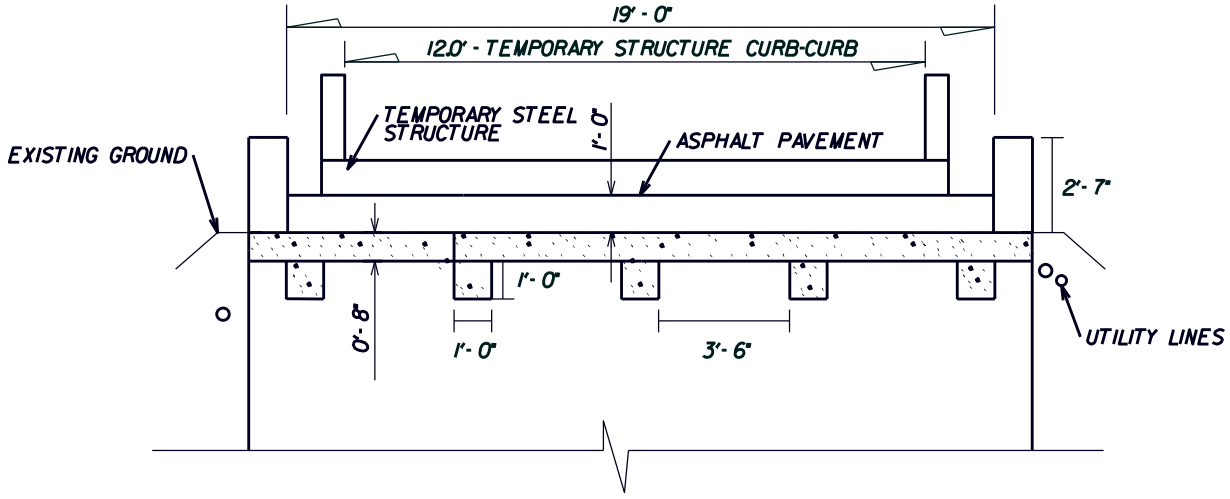
SOUTH TOWARD HOLGERS HOPE ROAD



DATE	U/S	D/S	U/S	D/S	T.O.W.	U/S	D/S
7/15	9.57'	———	9.84'	———	———	9.83'	———
1/22	13.9'	12.0'	14.5'	14.3'	DRY	14.1'	13.2'
2/24	13.8'	13.6'	14.2'	14.5'	DRY	14.1'	12.4' *

——— DATA UNAVAILABLE

* TOP OF CONCRETE DECK



TYPICAL SECTION

Pictures

PHOTO 3

Description APPROACH LOOKING SOUTH; NOTE POTHOLES IN NORTH APPROACH AND MISSING OPBJECT MARKERS AT BLUNT ENDS OF TEMPORARY STRUCTURE

PHOTO 4

Description WEST (DOWNSTREAM) SIDE

Pictures

PHOTO 5

Description GENERAL TOPSIDE LOOKING NORTH

PHOTO 6

Description UP TO 3" ELEVATION DROP FROM STEEL DECK PLATE TO ROADWAY SURFACE AT SOUTH APPROACH

Pictures

PHOTO 7

Description TYPICAL DEEP PITTING WITH NUMEROUS UP TO 1" DIAMETER HOLES OF 100% SECTION LOSS, AREA AT MID-SPAN SHOWN

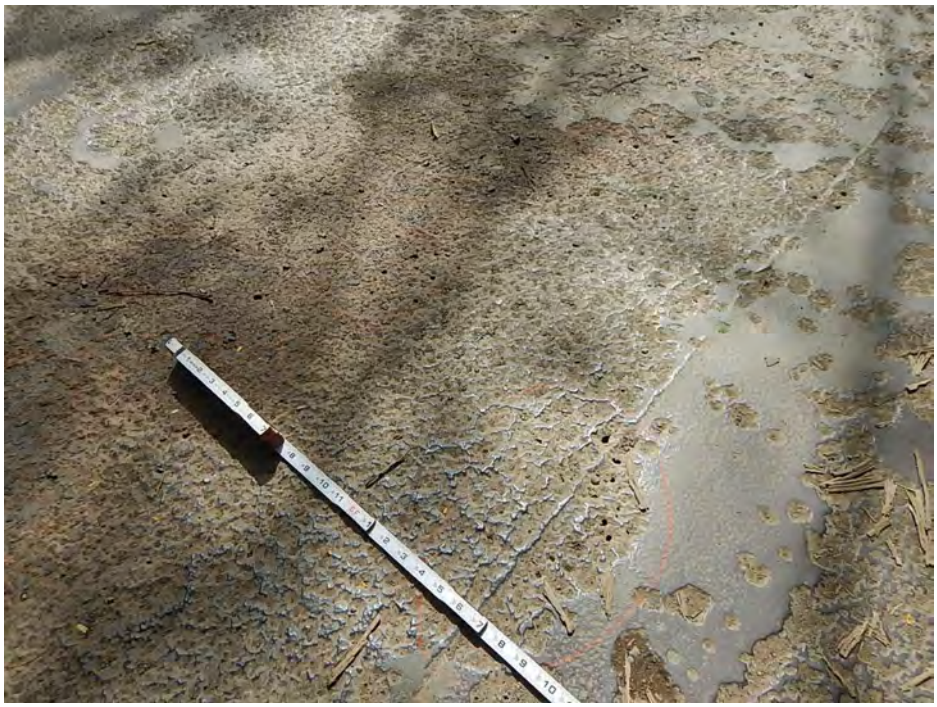


PHOTO 8

Description TYPICAL DEEP PITTING WITH NUMEROUS UP TO 1" DIAMETER HOLES OF 100% SECTION LOSS, SOUTH END SHOWN

Pictures

PHOTO 9

Description GENERAL UNDERSIDE VIEW OF DECK AT NORTH END; NOTE AREAS OF 100% SECTION LOSS IN STEEL DECK

PHOTO 10

Description BROKEN WELD AT WEST SIDE OF STEEL DECK PLATE AT SOUTH END; NOTE SLAMMING OCCURS WHEN VEHICLES CROSS BRIDGE

Pictures

PHOTO 11

Description BLUNT ENDS OF TEMPORARY STRUCTURE ARE NOT PROTECTED AND MISSING OBJECT MARKERS AT CORNERS

PHOTO 12

Description POTHOLE IN SOUTHBOUND LANE AT SOUTH END

Pictures

PHOTO 13

Description EAST PARAPET AT SOUTH END EXHIBITS DAMAGE AND MISSING SECTIONS

PHOTO 14

Description SOUTHWEST CONCRETE APPROACH CURB EXHIBITS AREAS OF SPALLING

Pictures

PHOTO 15

Description TREE ROOT GROWTH ALONG WEST PARAPET, LOOKING SOUTH

PHOTO 16

Description GENERAL VIEW OF EAST PARAPET; NOTE MISSING SECTIONS AND SLIGHT OUTWARD ROTATION OF EXISTING SECTIONS PARAPET

Pictures

PHOTO 17

Description WEST PARAPET AT NORTH END IS FRACTURED AND EXHIBITS DISPLACEMENT AT FRACTURE, LOOKING SOUTH

PHOTO 18

Description EAST PARAPET AT NORTH END EXHIBITS DAMAGE AND A MISSING SECTION

Pictures

PHOTO 19

Description "NO TRUCKS OVER 5 TONS" POSTING SIGN AT NORTH APPROACH; NOTE NO SIGN IS AT SOUTH APPROACH

PHOTO 20

Description GENERAL VIEW OF EAST SIDE OF TEMPORARY STRUCTURE, LOOKING NORTH

Pictures

PHOTO 21

Description GENERAL VIEW OF TIMBER MEMBER ACTING AS A BEARING DEVICE AT EAST SIDE OF NORTH BEARING AREA; NOTE TIMBER IS SATURATED AND EXHIBITS DETERIORATION

PHOTO 22

Description TYPICAL DEEP PITTING AT BOTTOM OF VERTICAL STIFFENERS ON EXTERIOR FACE OF EAST GIRDER AT NORTH END

Pictures

PHOTO 23

Description TYPICAL VIEW OF TRANVERSE BEAM, SECOND TRANSVERSE BEAM FROM NORTH SHOWN LOOKING WEST

PHOTO 24

Description GENERAL UNDERSIDE VIEW LOOKING NORTH

Pictures

PHOTO 25

Description SPALLING WITH EXPOSED REINFORCEMENT WITH UP TO 100% SECTION LOSS AT BEAM ENDS AT NORTH ABUTMENT

PHOTO 26

Description TYPICAL SPALLING WITH EXPOSED REINFORCEMENT WITH SECTION LOSS IN BEAMS, UPSTREAM BEAM NEAR NORTH ABUTMENT SHOWN

Pictures

PHOTO 27

Description GENERAL VIEW OF NORTH ABUTMENT

PHOTO 28

Description FULL-HEIGHT AREA OF CRACKING AND DELAMINATION AT DOWNSTREAM SIDE OF NORTH ABUTMENT BREASTWALL

Pictures

PHOTO 29

Description SPALL WITH EXPOSED REINFORCEMENT IN DECK UNDERSIDE IN DOWNSTREAM BAY AT NORTH ABUTMENT

PHOTO 30

Description GENERAL VIEW OF SOUTH ABUTMENT; NOTE SPALLING BELOW BEARING SEAT AND IN BACKWALL

Pictures

PHOTO 31

Description HONEYCOMB AND CRACKING OF CONCRETE IN SOUTH ABUTMENT BACKWALL; NOTE SPALLING WITH EXPOSED REINFORCEMENT IN BEAM ENDS AND SIDES

PHOTO 32

Description SPALLING WITH EXPOSED REINFORCEMENT BELOW BEARING AREA AT UPSTREAM END OF SOUTH ABUTMENT BREASTWALL

Pictures

PHOTO 33

Description LOOKING UPSTREAM

PHOTO 34

Description LOOKING DOWNSTREAM