Bridge Number:	Route/County:
K098Z	67 / Butler
Yes:	ng Material Present?  No: 💢 rt for location(s).
Structural	teel Present?  No: $\chi$ If No, then skip the following.
Lead-Based Pair Yes:	nt (LBP) Present? No:
Trusses LBP?	Girder LBP?
Yes: No:	Yes: No:
Railing LBP?	Pile LBP?
Yes: No:	Yes: No:

### MEMORANDUM



### Missouri Department of Transportation **Construction and Materials Central Laboratory**

TO:

FROM:

Leonard Vader Leonar Wader **Environmental Chemist** 

DATE:

May 15, 2019

**SUBJECT:** 

Materials

Asbestos Inspection & Heavy Metal Paint Survey

Route 67

Bridge K-0982 **Butler County** 

We are providing you with the results of the inspection on the above referenced bridge. The inspection report contains an asbestos and a heavy metals survey. The asbestos inspection included identifying suspect asbestos-containing material and NVLAP accredited testing to confirm the presence of asbestos.

Form T746 – This will show if samples were taken, where from, and, if the sample was found to contain asbestos, our estimated quantity of material present. Under the column "Friability Category" this is the meaning for the following:

N-ACM – No asbestos detected.

I NF – Asbestos is present. Material shall be handled carefully by a licensed abatement worker and kept wet if removing as part of a maintenance activity.

II NF – Asbestos is present. If removal is required for the maintenance activity, use an abatement contractor.

In accordance with Missouri Department of Natural Resources' Technical Bulletin "Managing Construction and Demolition Waste" dated January 31, 2003, a heavy metal paint survey has been performed on the above referenced bridge. This survey includes locating concrete which has been painted with something other than traffic paint or graffiti, and testing the painted surface(s) to determine if hazardous heavy metals are present. If the bridge is being removed completely, or the maintenance repairs include removing the painted concrete, then, nonhazardous painted concrete may be used as clean fill materials, if properly handled. You must contact the Central Office Design Division for proper handling of the reported painted surfaces.

Although our survey included observing and sampling all accessible areas, it is possible that potentially hidden asbestos-containing materials may exist within the structure. Should you have any questions regarding these reports, please contact me at (573) 751-9252.

### sm/lv

http://sharepoint/systemdelivery/cm/chemicallab/environmental/shared documents/asbestos/districts/southeast (se)/mt/k0982/k0982 asbestos cover letter.docx

Attachments

### Form T746 Rev. 08/2012

## MISSOURI DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS

Asbestos Survey Report

All Suspect ACM

CERTIFICATION #: CERTIFICATION #: SURVEYED BY:

Robert Marshall and Leonard Vader 7020101818MOIR18860, R.M.

7020101818MOIR2672, L.V. Over Hart Drain Ditch Field

Friability

TYPE(S) OF STRUCTURE(S): Bridge SITE ADDRESS:

> April 23, 2019 Bridge K-0982

DATE OF SURVEY:

PARCEL NO.:

Butler

N/A SE

MODOT JOB NO:

ROUTE:

DISTRICT: COUNTY:

29

Measure Category N-ACM N-ACM N-ACM Location of Material 4-Wall, 4-Deck and 2-Curb 2-Abutment 10-Wall Bridge Paint is not a suspect ACM per MSDS's Type of Materials Asphalt Joint Material Asphalt Joint Material Asphalt Joint Material on file. 19MLAV 060 19MLAV 061 19MLAV 062 Sample ID

I NF = Category I Nonfriable \* = Tested By Point Count Procedure N-ACM = Non-Asbestos Containing Material NAFD = No Asbestos Fiber Detected

II NF = Category II Nonfriable

F = Friable

### **Form T747** Rev. 08/2012

# MISSOURI DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS

Asbestos Survey Report
Nonfriable Asbestos-Containing Materials

(Abatement not required if not made friable during demolition.)

7020101818MOIR2672 Over Hart Drain Ditch Leonard Vader Bridge TYPE(S) OF STRUCTURE(S): CERTIFICATION #: SITE ADDRESS: TESTED BY: Bridge K-0982 May 17, 2019 Butler 67 N/A SE MODOT JOB NO.: DATE OF TESTS: PARCEL NO.: DISTRICT: COUNTY: ROUTE:

Percent												
Asbestos Type												
Field Measure												
Friability Category	INF											
Location of Material	None Located											
Type of Material												
Sample ID												

All necessary work to handle this material is the contractor's responsibility.

# MISSOURI DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS Asbestos Survey Report All materials requiring removal or special handling.

ROUTE:	29	TESTED
MODOT JOB NO.:	N/A	CERTIF
DISTRICT:	SE	SITE AD
COUNTY:	Butler	TYPE(S)
DATE OF TESTS:	May 17, 2019	,
PARCEL NO.	Bridge K-0982	

D BY:	Leonard Vader
FICATION #:	7020101818MOIR2672
DDRESS:	Over Hart Drain Ditch
3) OF STRUCTURE(S):	Bridge

r	r	r	 T	ı	r	r	r	·				,	 	 r	r	·	 ·
Percent																	
Asbestos Type																	
Field Measure																	
Friability Category	II NF	H															
Location of Material	None Located	None Located															
Type of Material																	
Sample ID																	
Bid Item No.																	

Page 1 of 1

Form C760 Rev. 08/2012

# MISSOURI DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS Metals Survey Report of Painted Concrete, Block, Brick Surfaces for Clean Fill Purposes

		Ag											
		Hg				5							
		Ba											
) Ditch	als m)	Se					-						
N/A N/A Bridge K-0982 Over Hart Drair Bridge	Metals (ppm)	PO											
N/A N/A Brid Over		Pb											
Y: FESTS: O.: RESS: F STRUCTI		Ċ											
DATE OF TESTS:  PARCEL NO.: SITE ADDRESS:  Cover Hart Drain Ditch TYPE(S) OF STRUCTURE(S):  DATE OF STRUCTURE(S):  N/A  Bridge K-0982  Over Hart Drain Ditch Bridge		As											
67 N/A SE Butler Robert Marshall RM		Color/Location of Material/Substrate	No samples taken. No painted surfaces located.										
KOUTE: 4ODOT JOB NO.: 0ISTRICT: COUNTY: URVEYED BY: 0ATE OF SURVEY:		Sample ID						77,70		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			

All results are by XRF unless otherwise indicated: a = USEPA SW-846 Method 3050 b = USEPA SW-846 Method 7471 CERTIFICATION NUMBER:

### 7020101818MOIR2672

THIS CERTIFIES

Leonard A. Vader

HAS COMPLETED THE CERTIFICATION

REQUIREMENTS FOR

Inspector

APPROVED: 10/22/2018

EXPIRES: 10/22/2019

TRAINING DATE: 10/18/2018

Director of Air Pollution Control Program

CERTIFICATION NUMBER:

### 7020101818MOIR18860

THIS CERTIFIES

### **Robert S Marshall**

HAS COMPLETED THE CERTIFICATION

REQUIREMENTS FOR

Inspector

APPROVED: 10/22/2018

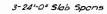
EXPIRES: 10/22/2019

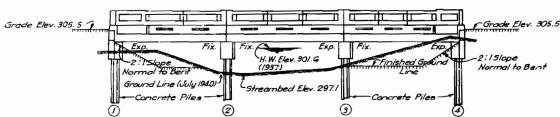
TRAINING DATE: 10/18/2018

Director of Air Pollution Control Program

### MISSOURI STATE HIGHWAY DEPARTMENT

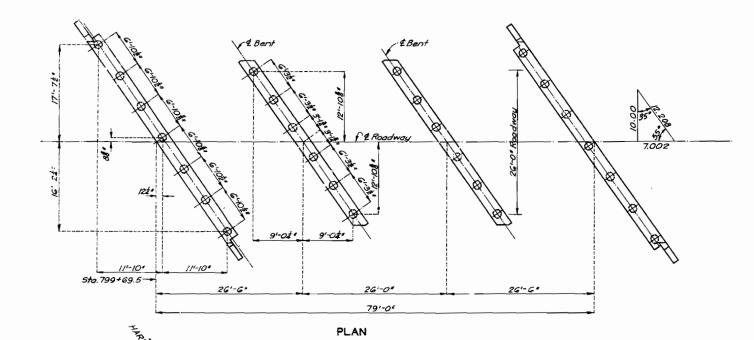
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL
5	MO.	FA58-C/(2)	19		





GENERAL ELEVATION

Note: All piling shall be reinforced concrete and shall conform with details and notes shown on Stal.P3. All piling shall be driven to sustain a load of 30ton per pile and with tips to at least Elev. 282.0.



Droinage Area = 2.7 Sq. Miles - Flat.

No.	Size	Length	Mark	Location	Bending Sket	ches & Cutting D	liagroms	No.	Size	Length	Mark	Location
		uperstruc				/8½·C2				Bents No.		
8	214	91-0"	R/	Roi/		2-21-02 88	12"	32	200	6'-9"	HI	Wing
48	216	91	R2	,	4'-78"		31.74	32	214	24'-5"	H2	Beam
52	200	9'-9"	,23	Sub Post	R3	177.2	21-21	8	216	23'-6"	H3	•
32	210	4'-0"	R4	Post	K3		المسلب					_
464	老岭	18"	R5	Bolusters	-	C2-U2	UI	6	214	8'-6"	VI	Wing
8	24	6'-6"	RG	Roil	١,		6'	72	±0€	10'-9"	UI	Beam
8	216	7'-9"	R7		% <del>≥</del> = - \	747	<del>,==</del>	14	216	7'-6"	U2	,
24	200	8'-9"	R8	•	2-94 7 22-34 7	prof.	5'-82' 56	8	200	10'-9"	71	Wing
8	\$14	7'-6"	R9	,		2-92	23'-22 H2					
12	200	7'-0"	RIO	Post	53		56-H2	<u> </u>				
12	200	6'-0"	RII	,	P. 4'-01'	Varies 7º 2'-92"	502			r Bents .		
8	200	10-01	RI2	Rail	<del></del>	Varies 7 2-92	6° i	16	310	37'-6"	G/	Begm
64	214	4'-0"	R/3	•	4-08 27-88		<u> </u>	4	216	35'-6"	G2	,
6	200	28'-3"	CI	Curb	3/1-9"	54	34'-1/"	L	1			
116	\$16	4'-0"	C2		23-54 CUT 69 84	RS & Send as shown.	G/	54	200	10'-9"	UI	Beam
6	216	25'-9"	C3	•	25 54 657 65 57	2'-3'	O,	16	210	71-6"	U2	,
6	316	23'-6"	C4	•	G# 3'82"	- R-6			Ь_			
						3 2					L	
150_	100	25'-9"	5/	Slob	3'-82" 4'-92"	9-01			-			
36	1810	25'-9"	52	•	8'-6"	w		<u> </u>			<u> </u>	
27_	800	29'-6"	53		3-VICUT GBARS	7/			↓			
<i>69</i>	\$16	311-9"	54		- 1, co. C2ms	.,		<u> </u>	4—	<u> </u>		
6	816	2'-9"	55	-				<u> </u>	_			
24	810	7'-0"	56	•						L		
6	219	35'-3"	57							<u>!</u>		L

ESTIMATED QUANTITIES												
Item		SUL	perstructure	Substructure	Total							
Class I Excavation for Structur	es Cu Yak			80	80							
Clase 'B' Concrete (Handrail)	Cu. Yas.	L	11-1		17.1							
Class'3' Concrete	Qu. Vols		166.6	47.4	2:4.0							
Reinforcing Steel	Lbs.		20290	4/20	24410							
Concrete Piles in Place	Lin.Ff.			840	840							

GENERAL NOTES:

Design Specifications A.A.S.H.O.-1935. Loading H-15 Reinforcing Steel Stress 18,000\*/\*\*. Concrete Class'8\* 900\*/\*\*. All concrete shall be Class'8\*.

BM. Elev. 301.20 N.I.R., 24° Elm., 80 'Rt. Sta. 800+05. M.S.L. Dotum.

BRIDGE OVER HART DRAINAGE DITCH

STATE ROAD FROM JUNCTION ROUTE 14 SOUTH ABOUT 2.0 MILES NORTHWEST OF NEELYVILLE PROJECT SN-FA56-CI(3) (US67) STA. 799+69.5

BUTLER

COUNTY

SUBMITTED BY M.R. Sach DATE 12/6/40
APPROVED BY CW. Brown DATE 12/6/40
CHIEF THEIRER

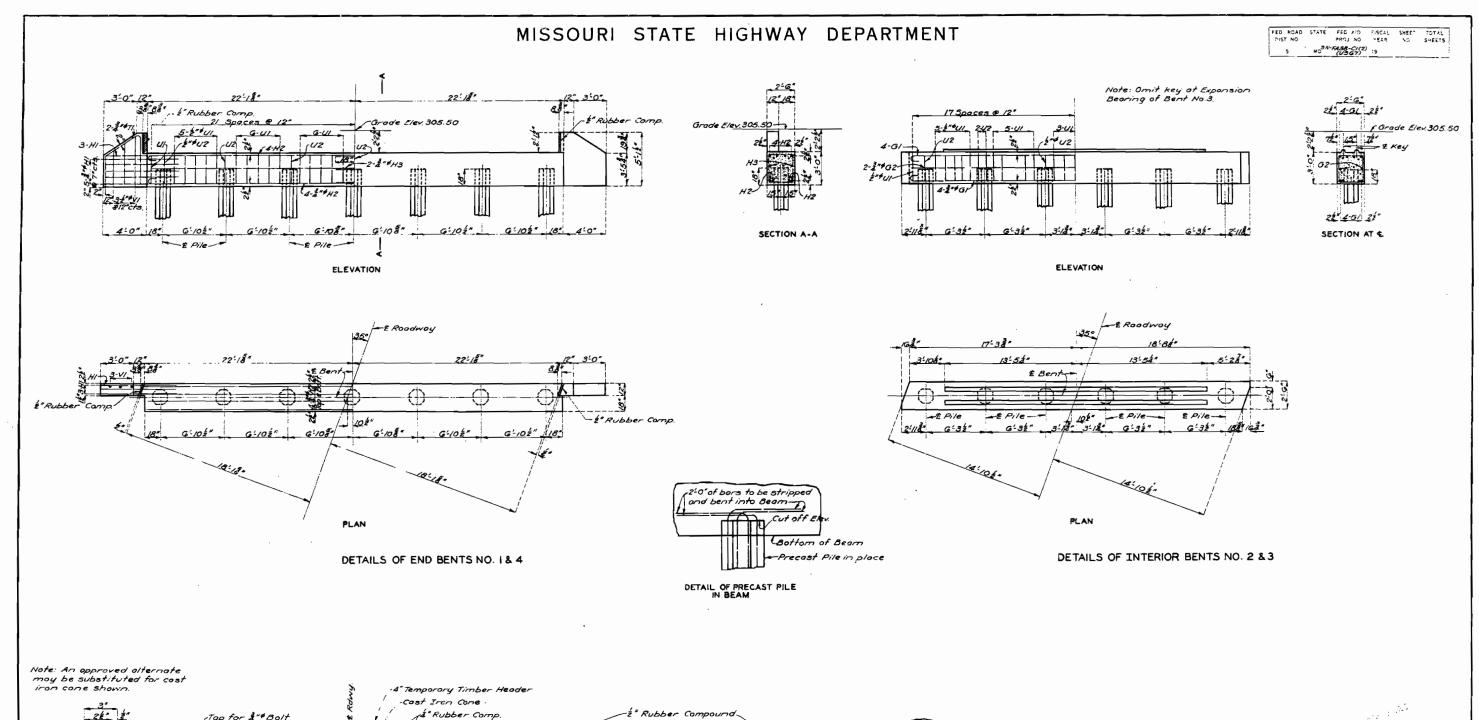
STD. P3 STD. C-IIOR2 K-982

Sheet No. 1 of 3.

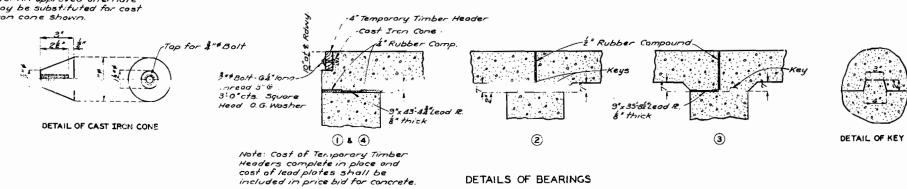
Drown Nov. 1940 by U.G. Traced Nov. 1940 by U.T. F. Checked Dec. 1940 by N.W.R. 5ta.799+69.5

LOCATION SKETCH

Note: This drawing is not to scale. Follow dimensions.







BRIDGE OVER HART DRAINAGE DITCH

STATE ROAD FROM JUNCTION ROUTE I4 SOUTH ABOUT 2.0 MILES NORTHWEST OF NEELYVILLE PROJECT SN-FA58-CIGN (US67) STA.799+69.5

BUTLER

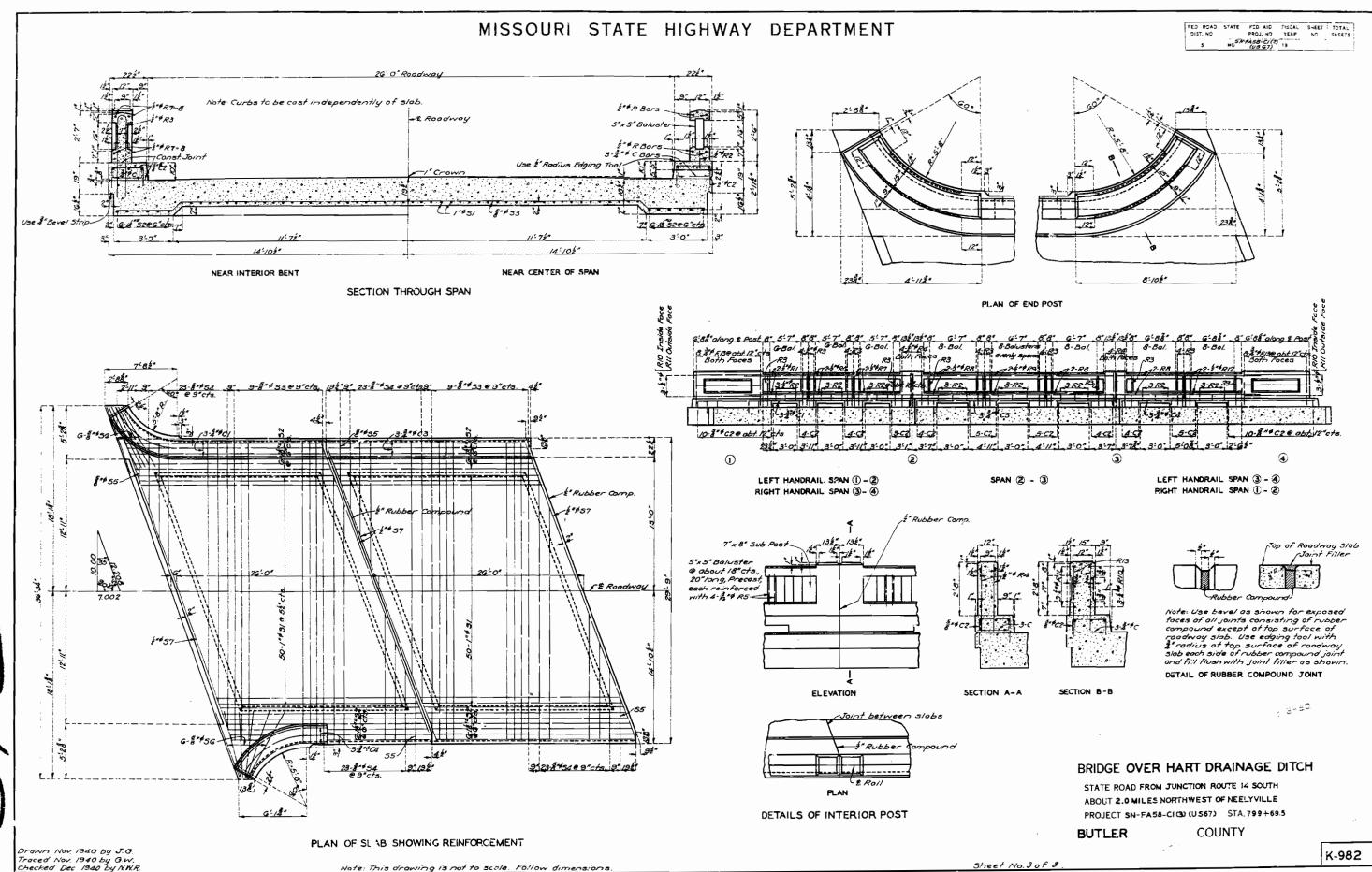
COUNTY

Drown Nov. 1940 by J.G. Troced Nov. 1940 by G.W. Checked Dec. 1940 by N.M.R.

Note: This drawing is not to scale. Follow dimensions

DETAILS OF BEARINGS

K-982



**BRIDGE: K0982** 

### Missouri Department of Transportation State Bridge Inspection Report

COUNTY: BUTLER DISTRICT: SE CLASS: STATBR FED-ID: 6012

\*\*\*GENERAL STRUCTURE INFORMATION\*\*\* \*\*\*BRIDGE INSPECTION INFORMATION\*\*\* **ROUTE: US67S** # **SPANS**: 3 PLACE CODE: 51392 NEELY **DATE:** 02/21/2023 **RESPONSIBILITY: DISTRICT** LANES ON: 2 FEATURE: HART DRAIN DTCH LENGTH: 79 FT 0 IN FREQUENCY: 24 **CALCULATED INTERVAL\*\*: 24** LANES UNDER: 0 STATUS: A-OPEN **MAXIMUM SPAN: 26 FT 6 IN TEAM LEADER: ELEMENT: YES LOG MILE:** 190.625 **COMPASS DIRECTION: NORTH to SOUTH** APPROACH ROADWAY: 24 FT 0 IN **INSPECTOR 2:** STEVE RIGHTNOWAR **INSPECTOR 4: DETOUR: 26.00 MILES DIRECTION OF TRAFFIC: 2-WAY TRAF CURB TO CURB: 26 FT 0 IN INSPECTOR 3:** NHS: YES **FUNCTIONAL CLASS: RL-PRINCIPAL ARTERIAI OUT TO OUT: 29 FT 10 IN** \*\* When calculated interval exceeds the frequency, a justification comment per BIRM is required. **BUILT:** 1941 **NBI OWNER: MODOT AADT:** 7121 **GENERAL INSPECTION COMMENTS** REHAB: **NBI MAINTAINED: MODOT AADT YEAR: 2023** MAINTENANCE DISTRICT: SE LOCATION: S3 T22 R5 E **AADT TRUCK: 26.7% LATITUDE:** 36 35 8.44 (DMS) **MAINTENANCE COUNTY: BUTLER FUTURE AADT: 12462 LONGITUDE:** 90 31 13.96 (DMS) SUB AREA: 7H38 **FUTURE AADT YEAR: 2043** \*\*\*INDEPTH INSPECTION INFORMATION\*\*\* \*\*\*FRACTURE CRITICAL INSPECTION INFORMATION\*\*\* DATE: RESPONSIBILITY: **CATEGORY: CATEGORY:** DATE: **RESPONSIBILITY: FREQUENCY: CALCULATED INTERVAL\*\*: NBI**: **FREQUENCY: CALCULATED INTERVAL\*\*: NBI**: **TEAM LEADER: INSPECTOR 3: METHOD: TEAM LEADER: INSPECTOR 3: METHOD: INSPECTOR 2: INSPECTOR 4: INSPECTOR 2: INSPECTOR 4:** \*\* When calculated interval exceeds the frequency, a justification comment per BIRM is required. \*\* When calculated interval exceeds the frequency, a justification comment per BIRM is required. FRACTURE CRITICAL INSPECTION COMMENTS **INDEPTH INSPECTION COMMENTS** \*\*\*SPECIAL INSPECTION INFORMATION\*\*\* \*\*\*UNDERWATER INSPECTION INFORMATION\*\*\* **CATEGORY: DAMAGE POST INCIDE CATEGORY: DRY DATE:** 05/09/2017 **RESPONSIBILITY: DISTRICT DATE:** 02/21/2023 **RESPONSIBILITY: DISTRICT NBI:** NO NBI: NO FREOUENCY: 999 **CALCULATED INTERVAL\*\*:** FREQUENCY: 60 CALCULATED INTERVAL\*\*: 24 **TEAM LEADER: INSPECTOR 3:** JERRY GOODMAN **METHOD:** VISUAL **TEAM LEADER: INSPECTOR 3: METHOD:** VISUAL **INSPECTOR 2:** TERRY WILSON **INSPECTOR 4: INSPECTOR 2:** STEVE RIGHTNOWAR **INSPECTOR 4:** \* When calculated interval exceeds the frequency, a justification comment per BIRM is required. \*\* When calculated interval exceeds the frequency, a justification comment per BIRM is required. SPECIAL INSPECTION COMMENTS **UNDERWATER INSPECTION COMMENTS** OTHER SPECIAL INSPECTIONS OTHER UNDERWATER INSPECTIONS DATE **FREQUENCY CATEGORY** CALCULATED INTERVAL RESPONSIBILITY **METHOD** DATE **FREQUENCY CATEGORY** NBI CALCULATED INTERVAL RESPONSIBILITY **METHOD** NO WT TAPE 04/23/2014 CHANNEL CROSS DISTRICT 120 SECTIONS

MoDOT

MoDOT

### **Missouri Department of Transportation State Bridge Inspection Report**

November 26, 2024 6:54:06AM

**CLASS: STATBR COUNTY: BUTLER DISTRICT: SE FED-ID: 6012 BRIDGE: K0982** 

\*\*\*STRUCTURE POSTING\*\*\*

APPROVED CATEGORY: S-1 NO POSTING REQUIRED

> **Ton 1: Ton 2:**

**Ton 3:** 

**COMMENTS:** 

**COMMENTS:** 

FIELD CATEGORY: S-1

NO POSTING REQUIRED

**Ton 1: Ton 2:**  **Ton 3:** 

**PROBLEM:** 

PROBLEM DIRECTION:

\*\*\*GENERAL COMMENTS/MAJOR RATED ITEMS\*\*\* **GENERAL COMMENTS:** (BOWDEJ1, 09/05/2008)--(26'-26'-26') CONC SOLID SLAB SPANS

[ITEM 58] DECK: 5-FAIR CONDITION

COMMENTS: (RACKEM, 08/11/2011)--GENERAL DETER

**RATING:** 05/18/2001

[ITEM 59] SUPER: 5-FAIR CONDITION

COMMENTS: (RACKEM, 08/11/2011)--INTEGRAL DECK, 1" + SUPERSTRUCTURE MOVEMENT.

**RATING:** 05/18/2001

[ITEM 60] SUB: 6-SATISFACTORY CONDITION

**RATING:** 05/18/2001

COMMENTS: (DENNIB1, 09/29/2016)--MOD SPALLING.

[ITEM 61] BANK/CHANNEL: 6-WIDESPREAD MINOR DAMAGE

**RATING:** 09/24/2014

[ITEM 113] SCOUR: 8-STABLE FOR CALCULATED **COMMENTS:** 

**RATING:** 05/18/2001

**EVALUATION TYPE:** 

[ITEM 72] APPRRDWY ALIGNMENT: 8-VERYGOOD

[ITEM 71] WATERWAY ADEQUACY: DECK ABOVE FLOOD ELEV

**RATING:** 05/18/2001

**RATING:** 05/18/2001

**COMMENTS:** 

**DIRECTION** 

**BOTH** 

**COMMENTS:** 

**COMMENTS:** 

\*\*\*RAILING AND APPROACH PAVEMENT COMPONENTS AND RATINGS\*\*\* **COMMENTS:** 

[ITEM 36A] BRIDGE RAILING RATING: DOESNT MEET CURRNT STND-0

**CONSTRUCTION** 

**RATING:** 01/11/2007

REINFORCED CONCRETE **CURB** 

**BOTH** 

**COMMENTS** 

REINFORCED CONCRETE

**MATERIAL** 

**BALUSTER** 

**RATING:** 01/11/2007

[ITEM 36B] TRANSITION RAILING RATING: DOESNT MEET CURRNT STND-0

**COMMENTS:** 

MATERIAL **GALVANIZED STEEL**  **CONSTRUCTION** W-BEAM

**DIRECTION** ALL

**COMMENTS** 

[ITEM 36C] APPROACH RAILING RATING: MEETS CURRENT STANDARDS-1

**RATING:** 05/18/2001

**COMMENTS:** 

**MATERIAL** GALVANIZED STEEL **CONSTRUCTION** W-BEAM

**DIRECTION** 

**COMMENTS** 

ALL

 $Design_No = k0982$ 

**Missouri Department of Transportation State Bridge Inspection Report** 

**COUNTY: BUTLER DISTRICT: SE CLASS: STATBR FED-ID: 6012 BRIDGE: K0982** 

[ITEM 36D] RAIL END TREATMENT RATING: MEETS CURRENT STANDARDS-1

**RATING:** 01/11/2007

**DIRECTION CONSTRUCTION** 

MATERIAL **GALVANIZED STEEL** 

MODOT

**BREKAWAY SYSTEM** 

ALL

**COMMENTS** 

APPROACH PAVEMENT: \*Overall condition assigned for each approach pavemenet component is shown below.

**MATERIAL ASPHALT** 

**CONSTRUCTION BITUMINOUS MAT**  **DIRECTION** BOTH

**CONDITION\*** GOOD

**COMMENTS** 

**COMMENTS:** 

\*\*\*DRAINAGE, EXPANSION DEVICES, BANK/SLOPE, AND DECK PROTECTIVE COMPONENTS\*\*\*

**DECK PROTECTIVE COMPONENTS:** 

SERIES TYPE-# **COMPONENT** MAIN SERIES-1 WEARING SURFACE **MATERIAL** ASPHALT

**CONSTRUCTION** BITUMINOUS MAT **THICKNESS** 

YEAR APPLIED **MANUFACTURE**  **OVERALL CONDITION** 

**FAIR** 

**COMMENT:** 

**CONDITION** 

**OTHER** 

**LOCATION 1 THROUGHOUT**  **LOCATION 2** 

**SEVERITY** NOT APPLICABLE **COMMENT** 

(REHAGM, 02/12/2004)--CHIPS

**DECK PROTECTION** 

*NOTAPPLICABLE* 

**NONE** 

**COMMENT:** 

*MEMBRANE* 

*NOTAPPLICABLE* 

**NONE** 

**COMMENT:** 

**DRAINAGE COMPONENTS:** 

**COMPONENT DRAINAGE** 

**MATERIAL** REINFORCED CONCRETE **CONSTRUCTION** CURB OUTLET

**DIRECTION** 

**COMMENTS** 

**EXPANSION DEVICE COMPONENTS:** 

SUB UNIT-#

SUB LABEL

**COMPONENT** 

**MATERIAL** 

**CONSTRUCTION** 

GAP

YEAR APPLIED **MANUFACTURE**  **OVERALL CONDITION** 

**COMMENT:** 

**BANK/SLOPE PROTECTION COMPONENTS:** 

**COMPONENT** 

**MATERIAL** 

**CONSTRUCTION** 

**CONSTRUCTION** 

**DIRECTION** 

**COMMENTS** 

\*\*\*DECK COMPONENTS\*\*\*

SPAN TYPE-# **COMPONENT** 

DECK

**MATERIAL** REINFORCED CONCRETE

CAST-IN-PLACE

**COMMENTS** 

**CONDITION** DIAGONAL CRACKS LOCATION 1 **ENDS** 

LOCATION 2

**SEVERITY** 

**MEASUREMENT COMMENT** 

**MINOR** 

MAIN SPANS-2

MAIN SPANS-1

DECK

REINFORCED CONCRETE

CAST-IN-PLACE

(REHAGM, 02/12/2004)--SHIFTED ONE (1) INCH **MEASUREMENT COMMENT** 

**CONDITION DETERIORATION** REBAR EXPOSED

LOCATION 1 **EDGE** 

**ENDS** 

LOCATION 2

**SEVERITY** 

**MINOR MODERATE** 

Design  $N_0 = k0982$ 

This report contains information that is protected from disclosure by federal law, 23 USC Section 409 and the Missouri Open Records Law (Sunshine Act), Section 610.021 RSMo. Please review MoDOT's policy and procedure manual on the Sunshine Act before releasing any of the information contained herein.

### **Missouri Department of Transportation State Bridge Inspection Report**

**CLASS: STATBR COUNTY: BUTLER DISTRICT: SE FED-ID: 6012 BRIDGE: K0982** 

REINFORCED CONCRETE MAIN SPANS-3 DECK

CAST-IN-PLACE

(REHAGM, 02/12/2004)--SHIFTED ONE (1) INCH ---- SOUTH

**CONDITION** DIAGONAL CRACKS EFFLORESCENCE

MODOT

**LOCATION 1** ENDS

REINFORCED CONCRETE

**LOCATION 2** 

**SEVERITY** 

**MEASUREMENT COMMENT** 

MINOR MINOR

EFFLORESCEN			OGE			MINOR					
	· - <del>-</del>										
							MPONENTS***				
SERIES TYPE-#	SPAN TYPE	_	MATER		<u>CONSTRUCTIO</u>	<u>'N</u>	<u>LABEL</u>	<u>COMMEN</u>	<u>TS</u>		
MAIN SERIES-1	SIMPLE SPA		REINFORCED		SOLID SLAB						
<u>SPAN</u>	<u>COMPOSITE I</u>		<u>LENGTH</u>	<b>WEATHERING STEEL</b>	<u>COMMENTS</u>						
MAIN SPANS-1	NON-COM		26 FT 6 IN	NO	_						
<u>CONDITION</u>		<u>LOCAT</u>	<u> </u>	<u>LOCATION 2</u>	<u>2</u>	<u>SEVERITY</u>	<u>MEASUREME</u>	<u>COMME</u>	<u>VT</u>		
MAIN SPANS-2	NON-COM	POSITE	26 FT 0 IN	NO							
<u>CONDITION</u>		<u>LOCAT</u>	<u> </u>	<u>LOCATION 2</u>	<u>2</u>	<u>SEVERITY</u>	<u>MEASUREME</u>	<u>VT</u> <u>COMME</u>	<u>VT</u>		
SPALLS		AT BEA	ARING			MINOR					
MAIN SPANS-3	NON-COM	POSITE	26 FT 6 IN	NO							
<u>CONDITION</u>		<u>LOCAT</u>	<u> </u>	<b>LOCATION</b> 2	<u>2</u>	<u>SEVERITY</u>	<b>MEASUREME</b>	VT COMME	<u>VT</u>		
				*:	**SURSTRUC	TURE COM	PONENTS***				
SUBSTRUCTURE	SKEW	LENGTH	MATERIA		TRUCTION	LABEL	COMMENTS				
		44 FT 3 IN	REINFORCED CO		INTEGRAL	<del></del>					
	CONDITION		<b>LOCATION</b>		LOCATION 2	,	<u>SEVERITY</u> <u>MI</u>	EASUREMENT	<b>COMMENT</b>		
ASSOCIATED COM	<i>IPONENT</i>	<u>MATE</u>	ERIAL	<del>-</del>	<u>ONSTRUCTION</u>						
BEAM CAP		REINI	FORCED CONCRE	ETE C.	AST-IN-PLACE						
<u>(</u>	CONDITION		<b>LOCATION</b>	<u>1</u>	LOCATION 2	<u>s</u>	<u>SEVERITY</u> <u>MI</u>	EASUREMENT	<u>COMMENT</u>		
PILING		REINI	FORCED CONCRE		AST-IN-PLACE						
<u>(</u>	<u>CONDITION</u>		<b>LOCATION</b>	<u>1</u>	LOCATION 2	<u>s</u>	SEVERITY MI	EASUREMENT	<u>COMMENT</u>		

BEAM CAP	REINFORCED CONCRETE	CAST-IN-PLACE		
<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<b>SEVERITY</b>	<u>MEASUREMENT</u> <u>COMMENT</u>
PILING	REINFORCED CONCRETE	CAST-IN-PLACE		
<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
STRAIGHT WINGS	REINFORCED CONCRETE	CAST-IN-PLACE		
<u>CONDITION</u>	<u>LOCATION 1</u>	LOCATION 2	<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
EXPANSION BEARING	TARPAPER	SLIDING LAYERS		
<u>CONDITION</u>	<u>LOCATION 1</u>	LOCATION 2	<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
BENT-2 RA-35 DEGREES	37 FT 5 IN REINFORCED CONCRETE	PILE CAP		
<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
ASSOCIATED COMPONENT	<u>MATERIAL</u>	<b>CONSTRUCTION</b>		
BEAM CAP	REINFORCED CONCRETE	CAST-IN-PLACE		
<u>CONDITION</u>	<u>LOCATION 1</u>	LOCATION 2	<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
SPALLS	ENDS		MODERATE	
PILING	REINFORCED CONCRETE	CAST-IN-PLACE		
<u>CONDITION</u>	<u>LOCATION 1</u>	LOCATION 2	<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
SCALING	WATERLINE		MODERATE	
EXPANSION BEARING	TARPAPER	SLIDING LAYERS		
<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
BENT-3 RA-35 DEGREES	37 FT 5 IN REINFORCED CONCRETE	PILE CAP		
<u>CONDITION</u>	<u>LOCATION 1</u>	LOCATION 2	<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
ASSOCIATED COMPONENT	<u>MATERIAL</u>	<u>CONSTRUCTION</u>		

 $Design_No = k0982$ 

BEAM CAP

CAST-IN-PLACE

### **Missouri Department of Transportation State Bridge Inspection Report**

MoDOT			Missouri Department of T	<b>Fransportation</b>			November 26, 2024 6:54:06AM
			State Bridge Inspecti	on Report			0.34.00AW
CO	UNTY: BUTLER	DISTRICT: SE	CLASS: STATBR	FED-II	D: 6012	BRIDGE: K0982	
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<b>MEASUREMENT</b>	<u>COMMENT</u>	
	EFFLORESCENCE			MINOR			
	VERTICAL CRACK			MINOR			
PILING		REINFORCED CONCRETE	CAST-IN-PLACE				
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
	SCALING	WATERLINE		MODERATE			
EXPANSIO	ON BEARING	TARPAPER	SLIDING LAYERS				
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
ABUTMENT-4	RA-35 DEGREES	44 FT 3 IN REINFORCED CONCRETE	NON-INTEGRAL				
	<b>CONDITION</b>	LOCATION 1	LOCATION 2	<b>SEVERITY</b>	MEASUREMENT	COMMENT	
ASSOCIAT	TED COMPONENT	MATERIAL	<i>CONSTRUCTION</i>				
BEAM CA	.P	REINFORCED CONCRETE	CAST-IN-PLACE				
	<b>CONDITION</b>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<b>MEASUREMENT</b>	<u>COMMENT</u>	
	VERTICAL CRACK	RANDOM		MINOR			
PILING		REINFORCED CONCRETE	CAST-IN-PLACE				
	<b>CONDITION</b>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<b>MEASUREMENT</b>	<u>COMMENT</u>	
STRAIGH	T WINGS	REINFORCED CONCRETE	CAST-IN-PLACE				
	<b>CONDITION</b>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<b>MEASUREMENT</b>	<u>COMMENT</u>	
EXPANSIO	ON BEARING	TARPAPER	SLIDING LAYERS				
	<b>CONDITION</b>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<b>MEASUREMENT</b>	<u>COMMENT</u>	
		***	OVER/UNDER ROUTES CL	EARANCE INFOR	MATION***		
	N#7						
<b>CLEARANCES OVER DEC</b>	<u>**</u>	NOTE: Vertical clearances for permitting purposes are taken as 2 i	inches less than the actual field measured cleara	nce.			

ARANCES OVER DECK

VERTICAL CLEARANCE TYPE\*\*

**VALUE** 

**DIRECTION** 

**DATE** 

**COMMENT** 

CLEARANCES UNDER BRIDGE

RECORD #

\*\*NOTE: Vertical clearances for permitting purposes are taken as 2 inches less than the actual field measured clearance. # LANES

**DIRECTION OF TRAFFIC** 

RIGHT LATERAL CLEARANCE

**LEFT LATERAL CLEARANCE** 

UR-ID

**VERTICAL CLEARANCE TYPE\*\*** 

**ROUTE** 

**VALUE** 

**DIRECTION** 

**DATE** 

**COMMENT** 

\*\*\*STRUCTURE PAINT INFORMATION\*\*\*

### **Missouri Department of Transportation State Bridge Inspection Report**

November 26, 2024 6:54:06AM

**COUNTY: BUTLER** 

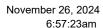
**DISTRICT: SE** 

**CLASS: STATBR** 

FED-ID: 6012

**BRIDGE: K0982** 

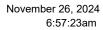
**CONDITION: RUST AMOUNT:** STEEL TONS: 0 **ORIGINAL PAINT CONTRACT REPAINT DEPARTMENT REPAINT PAINT TYPE: PAINT TYPE: PAINT TYPE: MANUFACTURE:** NAME: NAME: **SURFACE PREP:** NAME: **PAINT COLOR: PAINT COLOR: PAINT COLOR: PAINT YEAR: PAINT YEAR: PAINT YEAR:** MILS: MILS: MILS: \*\*\*REQUESTED WORK ITEMS\*\*\* **GENERAL WORK COMMENTS:** RESPONSIBILITY **LOCATION ITEM WORK ITEM COMMENT CATEGORY PRIORITY DATE** \*\*\*UTILITY ATTACHMENTS\*\*\* UTILITY **OWNER METHOD MEASUREMENT TYPE NUMBER** UTILITY ATTACHMENT COMMENT **VALUE** \*\*\*PROGRAM NOTES INFORMATION\*\*\* MONTH LET PROJECT# YEAR LET **ITEMS COMMENT YEAR** SE0140 REPLACE BRIDGE 2027 \*\*\*COMPUTER GENERATED RATINGS AND DEFICIENCY ITEMS\*\*\* \*\*\*ADVANCED SIGN INFORMATION\*\*\* NOTE: The items listed in this section are updated whenever computer edits are ran on a structure after the inspection updates have been entered in to TMS. **SIGN TYPE** PROBLEM DIRECTION SIGN# **PROBLEM Rated Item** Rating **Rating Date** [Item 67] Structure Evaluation Rating: 5-BETTER THAN MINIMUM 10/1/2014 2/23/2015 [Item 68] Deck Geometry Rating: 2-BASICALLY INTOLRBLE REQ [Item 69] Underclearance: N-NOT APPLICABLE 5/18/2001 **Sufficiency Rating:** 2/7/2022 48.9% 3/22/2002 **FUNCTIONAL Deficiency: Funding Eligibility: FULL** \*\*\*OUTFALL INSPECTION INFORMATION\*\*\* 85 FT. **Estimated New Structure Length: # OUTFALLS: INSPECTOR: Estimated Structure Cost:** \$755,892 **STATUS:** DATE: **Estimated Total Project Cost:** \$1,133,838 2024 **Year of Cost Estimate: NOTES:** NOTE: The above structure length and cost estimates are computer generated using algorithms in the TMS system. These algorithms are generalized to use NBI items to come up with a new structure length and width to calculate a new area which is taken times a representative cost per square foot. The actual structure size and cost may vary significantly from these numbers once site specific engineering is done.





### Missouri Department of Transportation Bridge Inventory and Inspection System Structural Inventory & Appraisal Sheet

COUNTY: BUTLER K0982 REVIEW STATUS: APPROVED T **BRIDGE:** NBI STATUS: 3/15/2024 2024 ROUTE CARRIED 'ON' STRUCT **RECORD TYPE: RUN DATE: SUBMITTAL YEAR:** GENERAL STRUCTURE INFORMATION ROUTE DESIGNATION INFORMATION ROUTE CARRIED 'ON' STRUCT State MISSOURI 5A Record Type LIS District 5B SE Route Signing Prefix MAINLINE **BUTLER** County 5C Designated Level of Service 00067 6012 8 Federal ID No. 5D Route Number 1941 NOT APPLICABLE 27 5E Year Built Directional Suffix US 67 S 106 0 7 Year Reconstructed Facility Carried YES HIGHWAY Type of Service On 12 Base Hwv. Network STATE HIGHWAY AGENCY 000000015 21 Structure Maintenance 13A LRS Inventory Route No. 00 STATE HIGHWAY AGENCY 22 Structure Owner 13B Subroute No. 33 NO MEDIAN Toll Status ON FREE ROAD Br. Median Code 20 02-RU PRINCPL ARTRIAL-OTH 37 Historical Significance NOT ELIGIBLE FOR NR OF HP 26 Functional Classification NONE EXISTS 101 28A Parallel Struc Desg Lanes on Structure NOT TEMPORARY Temporary Structure 103 RTE NOT A DEFENSE HWY 100 STRAHNET Designation NBIS Bridge Length YES ON NHS National Highway System 104 NOT APPLICABLE 105 Federal Lands Highway YES 110 Designated Nat. Network STRUCTURE LOCATION INFORMATION STRUCTURE TRAFFIC INFORMATION 7121 4 Place NEELY 29 AADT 51392 2023 Code 30 AADT Year 2-WAY TRAFFIC S 3 T 22 N R 5 E Location 102 Direction of Traffic 11 Milepoint 191.74 miles 27% 109 AADT Truck Percent 16 Latitude 36 D 35 M 8 S 12462 114 Future AADT 17 Longitude 90 D 31 M 14 S 2043 115 Future AADT Year UNDERRECORD INFORMATION STRUCTURE GEOMETRIC INFORMATION 6 HART DRAIN DTCH 10 99 Ft. 99 In. Features Intersected Inventory Rte. Vert. Clear 42B WATERWAY 19 26.25 miles Type of Service Under By pass Detour Length 00 28B Lanes Under Structure 32 Approach Roadway Width 23 Ft. 11 In. N/A 35.00 Degrees 54A Vert. Clearance Ref. 34 Skew 54B Vert. Clearance 0 Ft. 0 In. 35 Struct. Flared Rt. Lat Clear Ref. N/A Total Horiz. Clear 25 Ft. 11 In. 55A 47 55B Rt. Lat Clearance 0 Ft. 0 In. 48 Maximum Span Length 26 Ft. 7 In. 79 Ft. 1 In. Left Lat Clearance 0 Ft. 0 In. 49 Structure Length PERMIT NOT REQ Navigation Control 50A 0 Ft. 0 In. Left Curb/Sidewalk Width Nav Vertical Clear 0 Ft. 0 In. 39 50B Right Curb/Sidewalk Width 0 Ft. 0 In. 0 Ft. 0 In. Curb to Curb Br. Width 25 Ft. 11 In. 40 Nav Horizontal Clear 51 29 Ft. 10 In. Nav. Pier Protection Deck Width (Out-Out) 111 52 99 Ft. 99 In. Nav. Cl. Vert. Clear 53 Vert.Clearance Over Deck





### Missouri Department of Transportation Bridge Inventory and Inspection System Structural Inventory & Appraisal Sheet

COUNTY: BUTLER BRIDGE: K0982 REVIEW STATUS: APPROVED NBI STATUS: T

RECORD TYPE: ROUTE CARRIED 'ON' STRUCT RUN DATE: 3/15/2024 SUBMITTAL YEAR: 2024

RECORD TYPE: ROUTE CARRIED ON STRUCT	RUN DATE: 3/13/2024 SUBMITTAL TEAR: 2024
LOAD RATING AND POSTING INFORMATION	MATERIAL/CONSTRUCTION INFORMATION
31 Design Load H 15 41 Structure Status OPEN NO RESTRICTIONS 63 Oper. Rating Meth. LOAD FACTOR 64 Operating Rating 48 Tons. 65 Inventory Rating Meth LOAD FACTOR 66 Inventory Rating 29 Tons. 70 Bridge Posting Code =>LEGAL LOADS  PROPOSED IMPROVEMENT INFORMATION	43A Main Struc. Mat type CONCRETE  43B Main struc Constr. Type SLAB  45 # of Main Spans 3  44A Appr Struc. Mat type 000  44B Appr Struc. Cnstr. type 000  46 # of Approach Span 0  107 Deck Mat/Constr. 1 CONCRETE CIP  108A Wear Surf Mat/Constr. 6 BITUMINOUS
Sufficiency Rating 48.9 Percent Deficiency Rating FUNCTIONAL	108B Membrane Mat/Constr. 0 NONE  108C Deck Protect Mat/Constr. 0 NONE
Funding Eligibility FULL  75A Proposed Work REPLACEMENT SUBSTND LOAD  75B Work Done By Contract  76 New Struc Length 108 Ft. 3 In.  94 Struc Improve Cost \$ 756,000  95 Roadway Improve Cost \$ 76,000	CONDITION RATING INFORMATION           58         Deck Cond. Rating         5           59         Superstructure Cond. Rating         5           60         Substructure Cond. Rating         6           61         Channel /Channel Protection Cond. Rating         6           62         Culvert Cond. Rating         N
96 Total Project Cost \$ 1,134,000 97 Year of Cost Estimates 2024	INSPECTION INFORMATION
APPRAISAL RATING INFORMATION  36A Br. Rail App. Rating DOES NOT MEET ACCEPT STND  36B Transition Rail App. Rating DOES NOT MEET ACCEPT STND  36C Approach Rail App. Rating MEETS ACCEPTBLE STND  36D Rail End Treat. App. Rating MEETS ACCEPTBLE STND  67 Struc Eval App. Rating 5  68 Deck Geometry App. Rating 2  69 Underclearance App. Rating N  71 Waterway Adeq. App. Rating 8  72 Approach Road App. Rating 8  113 Scour Assess App. Rating 8	90 Gen. Insp Date 2 / 23 91 Gen. Insp. Frequency 24 Months  92A Frac. Critical Inspection N Months  93A Frac. Critical Insp. Date  92B Underwater Inspection N Months  93B Underwater Insp. Date  92C Special Inspection N Months  93C Special Inspection Date  BORDER BRIDGE INFORMATION  98 Neighboring State Code  98B Neighboring State % Respon  99 Neighboring State Struc. No.
APPROVED POSTING INFORMATION	FIELD POSTING INFORMATION
Approved Posting Category S-1  Ton1 Ton2 Ton3  Tonnage Values for Posting Sign  General Text for Posting Sign  NO POSTING REQUIRED	Field Posting Category S-1  Ton1 Ton2 Ton3  Tonnage Values for Posting Sign  General Text for Posting Sign  NO POSTING REQUIRED

Design\_No = K0982 and Inventory\_Appraisal\_Submittal\_Year = 2024