STR 4532	BRIDGE SAFETY INSPECTION REPORT					
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	Ŵ		
MILL STREET	42.11 / -84.2457	384093200038B01	Fair Condition(5)			
Feature	Length / Width / Spans	Owner				
SO BRANCH RAISIN RIVER	34.8 / 25.6 / 3	City: BROOKLYN(0932)				
Location	Built / Recon. / Paint / Ovly.	TSC	<b>Operational Status</b>			
0.10 MI E OF M-50	1925 / 1984 / /	Jackson(15)	P Posted for load(17NNNN)			
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation			
University(6) / Jackson(38)	8 Masonry / 11 Arch- Deck, Filled Sp	05/11/2021 / UIYE	5 Stable w/in footing			
NBI INSPECTION				UIYI		
Increator Nome	Agonov / Compony Name	Inon C	reg Inch Date			

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Ryan Lefere	Great Lakes Engineering Group, LLC	4	05/11/2021

# **GENERAL NOTES**

Need advance posting sign east of bridge to allow traffic to detour. Factory in SE quad being converted to restaurant, bar, & retail - traffic and pedestrian traffic projected to increase. Posted at 17 tons. Downstream end of arch repairs completed 2014. 5/11/2021 inspection is to assess condition of structure after vehicular impact into south railing. Adjusted inspection frequency to reset

back on previous cycle.

Weight limit signs in place on both ends of bridge	YES
Weight limit shown on signs at bridge	17_N_N
Required advance warning weight limit signs in place	NO

#### DECK

	11/17	09/19	05/21	
1. Surface (SIA-58A)	5	5	5	HMA surface. Partially sealed block cracks up to 1/4" wide throughout surface. Open map cracking and 1/4" longitudinal cracks along eastbound lane. Other isolated open transverse, longitudinal, diagonal cracking. Tire rutting. (05/21) Large block 1/16" to 1/4" cracking entire surface with shallow rut along centerline - somewhat undulating. (09/19) Large block 1/16" to 1/4" cracking entire surface with shallow spalls along centerline. (11/17)
2. Expansion Joints	Ν	Ν	Ν	(05/21) (09/19) (11/17)
3. Other Joints	Ν	Ν	Ν	(05/21) Paved over with several 1/16" transv cracks full width near ref lines. (09/19) Paved over with several 1/16" transv cracks full width near ref lines. (11/17)
4. Railings	7	7	7	Short height railings. Grouted stone headwalls with concrete cap act as railings. Shallow spall (<1 Sft) in SW as result of vehicular impact. Shallow spall in NW, top of wall. Open (1/16") cracks in mortar, more prevalent in the SE, both sides. (05/21) 2"x4"x14" spall W end S rail top. A few scattered short 1/16" cracks in mortar. A couple shallow spalls on top of rail. NE & SW approach rail moderate corrosion and not attached to bridge. (09/19) A few scattered short 1/16" cracks in mortar. A couple shallow spalls on top of rail. NE & SW approach rail moderate corrosion and not attached to approach rail moderate corrosion and not attached to bridge. (11/17)
5. Sidewalks or Curbs	Ν	Ν	Ν	(05/21) (09/19) (11/17)
6. Deck Bottom Surface (SIA-58B)	Ν	Ν	Ν	(05/21) (09/19) (11/17)
7. Deck (SIA-58)	Ν	Ν	Ν	HMA over earth fill. (05/21) HMA over earth fill. (09/19) HMA over earth fill. (11/17)
8. Drainage				Off in approaches. (05/21) Good. (09/19) Good. (11/17)

STR 4532 BRIDGE SAFETY INSPECTION REPORT						
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	٩Ľ		
MILL STREET	42.11 / -84.2457	384093200038B01	Fair Condition(5)	85		
Feature	Length / Width / Spans	Owner				
SO BRANCH RAISIN RIVER	34.8 / 25.6 / 3	City: BROOKLYN(0932)				
Location	Built / Recon. / Paint / Ovly.	TSC	<b>Operational Status</b>			
0.10 MI E OF M-50	1925 / 1984 / /	Jackson(15)	P Posted for load(17NNNN)			
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation			
University(6) / Jackson(38)	8 Masonry / 11 Arch- Deck, Filled Sp	05/11/2021 / UIYE	5 Stable w/in footing			

### SUPERSTRUCTURE

	11/17	09/19	05/21	
9. Stringer (SIA-59)	5	5	5	3 span concrete stone arch. Walls and soffit previously patched. Span 1w: south end, shallow spalls with open cracks in soffit/walls with leaking stains; 1/8" vertical cracks in west wall/footing. Span 2w: north end, spalls with open cracks in soffit/walls with leaking stains; south end, open cracks with staining in soffit/walls; 1/16" vertical cracks in footings. Span 3w: 6"-8" deep spall (4'x3') with loose fill exposed along south end, west soffit/wall, previous patch material located in bottom of channel; 1/16" vertical cracks in footings; open 1/8" horizontal crack in bottom of east wall, south end, at footing interface. (05/21) Downstream both sides middle arch: 6" x 4" hole and additional spalls in linings. Spandrel walls good - a few scattered hairline to 1/8" cracks in grout, esp. inside near road surface. (09/19) Interior arch lining repair areas OK but many hairline to 1/16" cracks with rust staining. Numerous hairline to 1/8" cracks beyond repaired areas. (11/17)
10. Paint (SIA-59A)	Ν	Ν	Ν	(05/21) (09/19) (11/17)
11. Section Loss	Ν	Ν	Ν	(05/21) (09/19) (11/17)
12. Bearings	Ν	Ν	Ν	(05/21) (09/19) (11/17)

# SUBSTRUCTURE

	11/17	09/19	05/21	
13. Abutments (SIA-60)	6	6	6	Abutments previously patched. Span 1w: south end, shallow spalls with open cracks in walls with leaking stains; 1/8" vertical cracks in west wall/footing. Span 3w: 1/16" vertical cracks in footings; open 1/8" horizontal crack in bottom of east wall, south end, at footing interface. (05/21) Shallow spalling SW corner footing + numerous hairline cracks. Split in NW wing top at 2/3 pt. Footings exhibit hairline to 1/16" vertical cracks with efflorescence at approx. 4' spacing. (09/19) NW wingwall mortar reapaired. Footings exhibit hairline to 1/16" vertical cracks with efflorescence at approx. 4' spacing. (11/17)
14. Piers (SIA-60)	5	5	5	Walls previously patched. Span 1w: south end, shallow spalls with open cracks in walls with leaking stains. Span 2w: north end, spalls with open cracks in walls with leaking stains; south end, open cracks with staining in walls; 1/16" vertical cracks in footings. Span 3w: 6"-8" deep spall (4'x3') with loose fill exposed along south end, west wall, previous patch material located in bottom of channel; 1/16" vertical cracks in footings. (05/21) Footings exhibit small vertical cracks at approx. 4' spacing. Shallow spall and many hairline cracks E face of W pier under downstream end of barrel. (09/19) Footings exhibit small vertical cracks at approx. 4' spacing. Moderate to heavy conc delamination and spalling at east downstream footing face. (11/17)
15. Slope Protection	Ν	Ν	Ν	(05/21) (09/19) (11/17)

STR 4532				BRIDGE SAFETY INS	SPECTION REPORT			
Facility			Latit	ude / Longitude	MDOT Structure ID	Structure Condition		
MILL STREET			42.1 <i>°</i>	/ -84.2457	384093200038B01	Fair Condition(5)		
Feature			Leng	th / Width / Spans	Owner			
SO BRANCH RAISIN	<b>N</b> RIVER		34.8	/ 25.6 / 3	City: BROOKLYN(0932)			
Location			Built	/ Recon. / Paint / Ovly.	TSC	Operational Status		
0.10 MI E OF M-50			1925	/ 1984 / /	Jackson(15)	P Posted for load(17NNNN)		
Region / County			Mate	rial / Design	Last NBI Inspection	Scour Evaluation		
University(6) / Jacks	son(38)			sonry / 11 Arch- Deck,	05/11/2021 / UIYE	5 Stable w/in footing		
			Filled	l Sp				
16. Channel (SIA-61)	6	6	6	Steep banks downstream outlet downstream in tribu Stone lined channel upstr downstream. Old Mill dau downstream in tributary c Stone lined channel upstr downstream. Old Mill dau	<ul> <li>Old Mill dam located upstre tary channel. (05/21) eam, concrete spillway adjace m located upstream of bridge hannel. (09/19) eam, concrete spillway adjace m located upstream of bridge</li> </ul>	oncrete spillway adjacent downstream. eam of bridge. Closed sluice gate with cent downstream. Steep banks c. Closed sluice gate with outlet cent downstream. Steep banks c. Closed sluice gate with outlet but and large stones in NW slope in		
17. Scour Inspection	7	8	8	No scour noted. Downstr No scour noted. Downstr Insignificant scour at upst	ream outlet paved. (05/21) ream outlet paved. (09/19) tream entrance. (11/17)			
APPROACH								
	11/17	09/19	05/21					
18. Approach Pavement	6	6	6	spalling occurring CL of E HMA patching in both app spalling occurring CL of E	B lane both approaches. (05 proaches. Many random 1/8" B lane both approaches. H both approaches. Shallow s	cracks both approaches. Shallow		
19. Approach Shoulders Sidewalks	6	6	6	<ul> <li>Gravel/vegetated shoulder - narrow, slightly raised. (05/21)</li> <li>Gravel/vegetated shoulder - narrow, slightly raised. (09/19)</li> <li>Gravel/vegetated shoulder - narrow, slightly raised. (11/17)</li> </ul>				
20. Approach Slopes				Approach guardrail: NE 8 (05/21) Good - nothing noted. (09 Good. (11/17)		e corrosion and not attached to bridge.		
21. Utilities				Overhead electric+phone+others approx 27' N of CL Manhole approx 60' E of bridge in CL of WB lane. (05/21) Overhead electric+phone+others approx 27' N of CL Manhole approx 60' E of bridge in CL of WB lane. (09/19) Overhead electric+phone+others approx 27' N of CL Manhole approx 60' E of bridge in CL of WB lane. (11/17)				
22. Drainage Culverts				(05/21) Good. SW drainage culv Good. SW drainage culv	ert repaired in 2009. (09/19) ert repaired in 2009. (11/17)			
MISCELLANEOUS	S							
Guard Rail			Б. /·		Other Items			
Item			Rati	<u> </u>	Item	Rating		
36A. Bridge Railing	s		0		71. Water Adequacy	7		
36B. Transitions			0		72. Approach Alignment	6		
36C. Approach Gua			0		Temporary Support	0 No Temporary Supports		
36D. Approach Gua	rdrail En	ds	0		High Load Hit (M) Special Insp. Equipment	No 2		
					Underwater Insp. Method	1		
False Decking (Tim	ber) Rem	oved	to Con	nplete Inspection	N/A - No False Decking			
Critical Feature In	spectio	ns (S	IA-92)					
			Free	<u>Date</u>				
Modified by: LEFERER2005 on 05/26/2021         Printed on 05/27/2021         Page 3 of 15								

STR 4532	BRIDGE SAFETY INS	SPECTION REPORT		
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	Ŷ
MILL STREET	42.11 / -84.2457	384093200038B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
SO BRANCH RAISIN RIVER	34.8 / 25.6 / 3	City: BROOKLYN(0932)		
Location	Built / Recon. / Paint / Ovly.	TSC	<b>Operational Status</b>	
0.10 MI E OF M-50	1925 / 1984 / /	Jackson(15)	P Posted for load(17NNNN)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Jackson(38)	8 Masonry / 11 Arch- Deck, Filled Sp	05/11/2021 / UIYE	5 Stable w/in footing	

92A. Fracture Critical92B. Underwater92C. Other Special92D. Fatigue Sensitive

05/11/2021 / UIYE

STR 4532	BRIDGE SAFETY INS		
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
MILL STREET	42.11 / -84.2457	384093200038B01	Fair Condition(5)
Feature	Length / Width / Spans	Owner	
SO BRANCH RAISIN RIVER	34.8 / 25.6 / 3	City: BROOKLYN(0932)	
Location	Built / Recon. / Paint / Ovly.	TSC	<b>Operational Status</b>
0.10 MI E OF M-50	1925 / 1984 / /	Jackson(15)	P Posted for load(17NNNN)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation

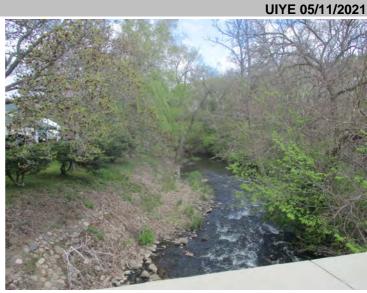
8 Masonry / 11 Arch- Deck, Filled Sp

# SUPPORTING IMAGES

University(6) / Jackson(38)



Document Name: 11.JPG Category: Elevation Span Number: Comments: Looking south off structure



5 Stable w/in footing

Document Name: 12.JPG Category: Elevation Span Number: Comments: Looking north off structure



Document Name: 20.JPG Category: Elevation Span Number: Comments: South



Document Name: 23.JPG Category: Elevation Span Number: Comments: South

STR 4532 BRIDGE SAFETY INSPECTION REPORT						
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition			
MILL STREET	42.11 / -84.2457	384093200038B01	Fair Condition(5)			
Feature	Length / Width / Spans	Owner				
SO BRANCH RAISIN RIVER	34.8 / 25.6 / 3	City: BROOKLYN(0932)				
Location	Built / Recon. / Paint / Ovly.	TSC	<b>Operational Status</b>			

0.10 MI E OF M-50 **Region / County** University(6) / Jackson(38)

1925 / 1984 / 1 Material / Design 8 Masonry / 11 Arch- Deck, Filled Sp Jackson(15) Last NBI Inspection 05/11/2021 / UIYE



P Posted for load(17NNNN) **Scour Evaluation** 5 Stable w/in footing



Document Name: 31.JPG Category: Elevation Span Number: Comments: North



Document Name: 2.JPG Category: Posting Span Number: Comments: Advanced, west



Document Name: 1.JPG Category: Posting Span Number: Comments: East



Document Name: 3.JPG Category: Posting Span Number: Comments: West

STR 4532	BRIDGE SAFETY INS		
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
MILL STREET	42.11 / -84.2457	384093200038B01	Fair Condition(5)
Feature	Length / Width / Spans	Owner	
SO BRANCH RAISIN RIVER	34.8 / 25.6 / 3	City: BROOKLYN(0932)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.10 MI E OF M-50	1925 / 1984 / /	Jackson(15)	P Posted for load(17NNNN)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Jackson(38)	8 Masonry / 11 Arch- Deck, Filled Sp	05/11/2021 / UIYE	5 Stable w/in footing



Document Name: 14.JPG Category: Railing Span Number: Comments: South, open cracks in mortar starting in SW



Document Name: 16.JPG Category: Railing Span Number: Comments: South, top of rail looking east



Document Name: 15.JPG Category: Railing Span Number: Comments: South, impact damage in SW

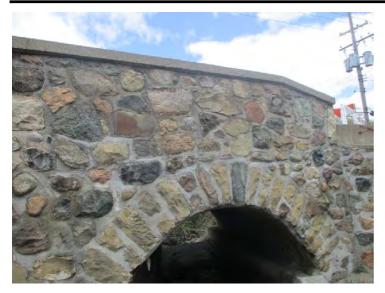


Document Name: 17.JPG Category: Railing Span Number: Comments: South, no separation of railing at impact location.

STR 4532	BRIDGE SAFETY INSPECTION REPORT			
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
MILL STREET	42.11 / -84.2457	384093200038B01	Fair Condition(5)	
Fosturo	Length / Width / Spans	Owner		

Feature SO BRANCH RAISIN RIVER Location 0.10 MI E OF M-50 Region / County University(6) / Jackson(38) 42.11 / -84.2457 Length / Width / Spans 34.8 / 25.6 / 3 Built / Recon. / Paint / Ovly. 1925 / 1984 / / Material / Design 8 Masonry / 11 Arch- Deck, Filled Sp MDOT Structure ID 384093200038B01 Owner City: BROOKLYN(0932) TSC Jackson(15) Last NBI Inspection 05/11/2021 / UIYE





Document Name: 21.JPG Category: Railing Span Number: Comments: South, open crack in mortar in SE



Document Name: 7.JPG Category: Railing Span Number: Comments: South



Document Name: 22.JPG Category: Railing Span Number: Comments: South, open crack in mortar in SE



Document Name: 8.JPG Category: Railing Span Number: Comments: North

tude / Longitude  1 / -84.2457 qth / Width / Spans	MDOT Structure ID 384093200038B01	Structure Condition Fair Condition(5)
	384093200038B01	Fair Condition(5)
ath / Width / Snans		
gui / wiuui / Spalls	Owner	
3 / 25.6 / 3	City: BROOKLYN(0932)	
lt / Recon. / Paint / Ovly.	TSC	<b>Operational Status</b>
5 / 1984 / /	Jackson(15)	P Posted for load(17NNNN)
erial / Design	Last NBI Inspection	Scour Evaluation
	05/11/2021 / UIYE	5 Stable w/in footing
	3 / 25.6 / 3 It / Recon. / Paint / Ovly. 5 / 1984 / / erial / Design asonry / 11 Arch- Deck, ed Sp	It / Recon. / Paint / Ovly.         TSC           5 / 1984 / /         Jackson(15)           Last NBI Inspection           asonry / 11 Arch- Deck,         05/11/2021 / UIYE



Document Name: 10.JPG Category: Deck Span Number: Comments: Deck surface, eastbound lane, open cracks



Document Name: 9.JPG Category: Deck Span Number: Comments: HMA surface



Document Name: 4.JPG Category: Deck Span Number: Comments: Looking west, closed eastbound lane



Document Name: 5.JPG Category: Joints Span Number: Comments: West reference line

BRIDGE SAFETY INS		
Latitude / Longitude	MDOT Structure ID	Structure Condition
42.11 / -84.2457	384093200038B01	Fair Condition(5)
Length / Width / Spans	Owner	
34.8 / 25.6 / 3	City: BROOKLYN(0932)	
Built / Recon. / Paint / Ovly.	TSC	<b>Operational Status</b>
1925 / 1984 / /	Jackson(15)	P Posted for load(17NNNN)
Material / Design	Last NBI Inspection	Scour Evaluation
8 Masonry / 11 Arch- Deck, Filled Sp	05/11/2021 / UIYE	5 Stable w/in footing
	Latitude / Longitude 42.11 / -84.2457 Length / Width / Spans 34.8 / 25.6 / 3 Built / Recon. / Paint / Ovly. 1925 / 1984 / / Material / Design 8 Masonry / 11 Arch- Deck,	42.11 / -84.2457       384093200038B01         Length / Width / Spans       Owner         34.8 / 25.6 / 3       City: BROOKLYN(0932)         Built / Recon. / Paint / Ovly.       TSC         1925 / 1984 / /       Jackson(15)         Material / Design       Last NBI Inspection         8 Masonry / 11 Arch- Deck,       05/11/2021 / UIYE



Document Name: 6.JPG Category: Joints Span Number: Comments: East reference line



Document Name: 25.JPG Category: Superstructure Span Number: Comments: Span 1w, pier 1w, west face, looking north



Document Name: 24.JPG Category: Superstructure Span Number: Comments: Span 1w, arch, looking north



Document Name: 26.JPG Category: Superstructure Span Number: Comments: Span 1w, west abut, looking north

STR 4532	BRIDGE SAFETY INSPECTION REPORT				
<b>—</b>				-	

Facility MILL STREET Feature SO BRANCH RAISIN RIVER Location 0.10 MI E OF M-50 **Region / County** University(6) / Jackson(38)

#### Latitude / Longitude 42.11 / -84.2457 Length / Width / Spans 34.8 / 25.6 / 3 Built / Recon. / Paint / Ovly. TSC 1925 / 1984 / 1 Material / Design 8 Masonry / 11 Arch- Deck,

# **MDOT Structure ID** 384093200038B01 Owner City: BROOKLYN(0932) Jackson(15) Last NBI Inspection 05/11/2021 / UIYE

**Structure Condition** Fair Condition(5)



**Operational Status** P Posted for load(17NNNN) **Scour Evaluation** 5 Stable w/in footing



Filled Sp

Document Name: 27.JPG Category: Superstructure Span Number: Comments: Span 1w, soffit, looking north



Document Name: 28.JPG Category: Superstructure Span Number: Comments: Span 1w, soffit, SE corner, incipient/spalling with open cracks



Document Name: 29.JPG Category: Superstructure Span Number: Comments: Span 1w, west abut, 1/8" open crack in wall/footing



Document Name: 30.JPG Category: Superstructure Span Number: Comments: Typical cracking in arch

STR 4532	BRIDGE SAFETY INSPECTION REPORT	

Facility MILL STREET Feature SO BRANCH RAISIN RIVER Location 0.10 MI E OF M-50 Region / County University(6) / Jackson(38) Latitude / Longitude 42.11 / -84.2457 Length / Width / Spans 34.8 / 25.6 / 3 Built / Recon. / Paint / Ovly. 1925 / 1984 / / Material / Design 8 Masonry / 11 Arch- Deck, Filled Sp MDOT Structure ID 384093200038B01 Owner City: BROOKLYN(0932) TSC Jackson(15) Last NBI Inspection 05/11/2021 / UIYE Structure Condition Fair Condition(5)



Operational Status P Posted for load(17NNNN) Scour Evaluation 5 Stable w/in footing



Document Name: 32.JPG Category: Superstructure Span Number: Comments: Span 2w, pier 1w, north end, east face, open spalls/cracking



Document Name: 33.JPG Category: Superstructure Span Number: Comments: Span 2w, pier 1w, north end, open spalls/cracking



Document Name: 34.JPG Category: Superstructure Span Number: Comments: Span 2w, typical 1/16" cracks in wall



Document Name: 35.JPG Category: Superstructure Span Number: Comments: Span 2w, typical 1/16" cracks in wall

# STR 4532

Facility MILL STREET Feature SO BRANCH RAISIN RIVER Location 0.10 MI E OF M-50 Region / County University(6) / Jackson(38)

### BRIDGE SAFETY INSPECTION REPORT

Latitude / Longitude 42.11 / -84.2457 Length / Width / Spans 34.8 / 25.6 / 3 Built / Recon. / Paint / Ovly. 1925 / 1984 / / Material / Design 8 Masonry / 11 Arch- Deck, Filled Sp MDOT Structure ID 384093200038B01 Owner City: BROOKLYN(0932) TSC Jackson(15) Last NBI Inspection 05/11/2021 / UIYE

Structure Condition Fair Condition(5)





Document Name: 37.JPG Category: Superstructure Span Number: Comments: Span 2w, arch, looking south



Document Name: 39.JPG Category: Superstructure Span Number: Comments: Span 2w, pier 1w, east face



Document Name: 38.JPG Category: Superstructure Span Number: Comments: Span 2w, pier 1w, east face



Document Name: 40.JPG Category: Superstructure Span Number: Comments: Span 2w, soffit, looking south

STR 4532	BRIDGE SAFETY INSPECTION REPORT	

Facility MILL STREET Feature SO BRANCH RAISIN RIVER Location 0.10 MI E OF M-50 Region / County University(6) / Jackson(38)

# Latitude / Longitude MD 42.11 / -84.2457 384 Length / Width / Spans Ow 34.8 / 25.6 / 3 City Built / Recon. / Paint / Ovly. TSG 1925 / 1984 / Jac Material / Design Las 8 Masonry / 11 Arch- Deck, 05/

## MDOT Structure ID 384093200038B01 Owner City: BROOKLYN(0932) TSC Jackson(15) Last NBI Inspection 05/11/2021 / UIYE

Structure Condition Fair Condition(5)





Document Name: 41.JPG Category: Superstructure Span Number: Comments: Span 2w, soffit, south end, open cracks



Document Name: 43.JPG Category: Superstructure Span Number: Comments: Span 3w, east abut, looking north



Document Name: 42.JPG Category: Superstructure Span Number: Comments: Span 3w, arch, looking north



Document Name: 44.JPG Category: Superstructure Span Number: Comments: Span 3w, pier 2w, looking north

# STR 4532

Facility MILL STREET Feature SO BRANCH RAISIN RIVER Location 0.10 MI E OF M-50 Region / County University(6) / Jackson(38)

#### BRIDGE SAFETY INSPECTION REPORT

Latitude / Longitude 42.11 / -84.2457 Length / Width / Spans 34.8 / 25.6 / 3 Built / Recon. / Paint / Ovly. 1925 / 1984 / / Material / Design 8 Masonry / 11 Arch- Deck, Filled Sp

MDOT Structure ID
384093200038B01
Owner
City: BROOKLYN(0932)
TSC
Jackson(15)
Last NBI Inspection
05/11/2021 / UIYE

Structure Condition Fair Condition(5)





Document Name: 46.JPG Category: Superstructure Span Number: Comments: Span 3w, pier 2w, south end, spall in soffit



Document Name: 48.JPG Category: Superstructure Span Number: Comments: Span 3w, pier 2w, south end, spall in soffit



Document Name: 47.JPG Category: Superstructure Span Number: Comments: Span 3w, pier 2w, south end, spall in soffit



Document Name: 50.JPG Category: Superstructure Span Number: Comments: Span 3w, east abut, south end, 1/8" open crack

STR 4532 STRUCTURE INVENTORY AND APPRAISAL				
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
MILL STREET	42.11 / -84.2457	384093200038B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
SO BRANCH RAISIN RIVER	34.8 / 25.6 / 3	City: BROOKLYN(0932)		
Location	Built / Recon. / Paint / Ovly.	TSC	<b>Operational Status</b>	
0.10 MI E OF M-50	1925 / 1984 / /	Jackson(15)	P Posted for load(17NNNN)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Jackson(38)	8 Masonry / 11 Arch- Deck, Filled Sp	05/11/2021 / UIYE	5 Stable w/in footing	

# Bridge History, Type, Materials

27 - Year Built	1925	
106 - Year Reconstructed	1984	
202 - Year Painted		
203 - Year Overlay		
43 - Main Span Bridge Type	8	11
44 - Appr Span Bridge Type		
77 - Steel Type	0	
78 - Paint Type	0	
79 - Rail Type	9	
80 - Post Type		
107 - Deck Type	N	
108A - Wearing Surface	6	
108B - Membrane	N	
108C - Deck Protection	N	

Structure Dimensions				
34 - Skew	25			
35 - Struct Flared	N			
45 - Num Main Spans	3			
46 - Num Apprs Spans	0			
48 - Max Span Length	7.9			
49 - Structure Length	34.8			
50A - Width Left Curb/SW	0			
50B - Width Right Curb/SW	0			
33 - Median	0			
51 - Width Curb to Curb	22			
52 - Width Out to Out	25.6			
112 - NBIS Length	Y			
Inspection Data				
90 - Inspection Date	05/11/2021			
91 - Inspection Freq	4			
92A - Frac Crit Req/Freq	N			
93A - Frac Crit Insp Date				
92B - Und Water Req/Freq	N			
93B - Und Water Insp Date				
92C - Oth Spec Insp Req/Freq	N			
93C - Oth Spec Insp Date				
92D - Fatigue Req/Freq	N			
93D - Fatigue Insp Date				
176A - Und Water Insp Method	1			
58 - Deck Rating	N			
58A/B - Deck Surface/Bottom	5 N			
59 - Superstructure Rating	5			
59A - Paint Rating	N			
60 - Substructure Rating	5			

		-
61	<ul> <li>Channel Rating</li> </ul>	
01		
	J	

62 - Culvert Rating

#### Navigation Data

6

Ν

38 - Navigation Control	0
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brdg Vert Clear	

Route Carried By Structure(ON Record)			
5A - Record Type	1		
5B - Route Signing	5		
5C - Level of Service	0		
5D - Route Number	01404		
5E - Direction Suffix	0	-	
10L - Best 3m Unclr-Lt	0	0	
10R - Best 3m Unclr-Rt	99	99	
PR Number			
Control Section			
11 - Mile Point	0		
12 - Base Highway Network	0		
13 - LRS Route-Subroute	000000	9013 05	
19 - Detour Length	9		
20 - Toll Facility	3		
26 - Functional Class	08		
28A - Lanes On	2		
29 - ADT	600		
30 - Year of ADT	1986		
32 - Appr Roadway Width	27.9	-	
32A/B - Ap Pvt Type/Width	4	27.99	
42A - Service Type On	1		
47L - Left Horizontal Clear	0.0		
47R - Right Horizontal Clear	22.3		
53 - Min Vert Clr Ov Deck	99	99	
100 - STRAHNET	0		
102 - Traffic Direct	2		
109 - Truck %	10		
110 - Truck Network	0		
114 - Future ADT	1100		
115 - Year Future ADT	2010		
Freeway	0		
Structure Appra	i <u>sal</u>		
36A - Bridge Railing	0		
36B - Rail Transition	0		
36C - Approach Rail	0		
36D - Rail Termination	0		
67 - Structure Evaluation	5		
68 - Deck Geometry	4		
69 - Underclearance	Ν		
71 - Waterway Adequacy	7		
72 - Approach Alignment	6		
103 - Temporary Structure	-		
113 - Scour Criticality	5		
Miscellaneous	s		
37 - Historical Significance	1		
98A - Border Bridge State	ļ		
98B - Border Bridge %			
101 - Parallel Structure	Ν		
EPA ID			
Stay in Place Forms			
143 - Pin & Hanger Code	1		
148 - No. of Pin & Hangers			

	5A - Record Type
	5B - Route Signing 5C - Level of Service
	5D - Route Number
	5E - Direction Suffix
0	10L - Best 3m Unclr-Lt
99	10R - Best 3m Unclr-Rt
	PR Number
	Control Section
	11 - Mile Point
	12 - Base Highway Network
09013 05	13 - LRS Route-Subroute
	19 - Detour Length
	20 - Toll Facility
	26 - Functional Class
	28B - Lanes Under
	29 - ADT
	30 - Year of ADT
07.00	42B - Service Type Under
27.99	47L - Left Horizontal Clear 47R - Right Horizontal Clear
	54A - Left Feature
	54B - Left Underclearance
99	54C - Right Feature
100	54D - Right Clearance
	Under Clearance Year
	55A - Reference Feature
	55B - Right Horiz Clearance
	56 - Left Horiz Clearance
	100 - STRAHNET
	102 - Traffic Direct
	109 - Truck %
	110 - Truck Network
	114 - Future ADT
	115 - Year Future ADT
	Freeway
	Proposed Improve
	75 - Type of Work
	76 - Length of Improvement
	94 - Bridge Cost
	95 - Roadway Cost
	96 - Total Cost
	97 - Year of Cost Estimate
	Load Rating and F
	31 - Design Load
-	41 - Open, Posted, Closed
	63 - Fed Oper Rtg Method
	64F - Fed Oper Rtg Load
	64MA - Mich Oper Rtg Method
	CAMP Mish Ones Die

Route Under Structure (UN	DER R	ecord)
5A - Record Type		
5B - Route Signing		
5C - Level of Service		
5D - Route Number		
5E - Direction Suffix		
10L - Best 3m Unclr-Lt		
10R - Best 3m Unclr-Rt		
PR Number		
Control Section		
11 - Mile Point		
12 - Base Highway Network		
13 - LRS Route-Subroute		
19 - Detour Length		
20 - Toll Facility		
26 - Functional Class		
28B - Lanes Under		
29 - ADT		
30 - Year of ADT		
42B - Service Type Under	5	
47L - Left Horizontal Clear	5	
47R - Right Horizontal Clear 54A - Left Feature		
54B - Left Underclearance	00	00
	99	99
54C - Right Feature	00	99
54D - Right Clearance Under Clearance Year	99	99
	NI	
55A - Reference Feature	N	
55B - Right Horiz Clearance	99.9	
56 - Left Horiz Clearance	0	
100 - STRAHNET		
102 - Traffic Direct		
109 - Truck %		
110 - Truck Network		
114 - Future ADT		
115 - Year Future ADT		
Freeway		
Proposed Improver	nents	
75 - Type of Work		

<ul> <li>Length of Improvement</li> </ul>	
- Bridge Cost	
- Roadway Cost	
- Total Cost	
- Year of Cost Estimate	

# ting and Posting

31 - Design Load	2	
41 - Open, Posted, Closed	Р	
63 - Fed Oper Rtg Method	0	
64F - Fed Oper Rtg Load	1.2	5
64MA - Mich Oper Rtg Method	0	
64MB - Mich Oper Rtg	.75	
64MC - Mich Oper Truck	2	
65 - Inv Rtg Method	0	
66 - Inventory Load	.75	
70 - Posting	0	
141 - Posted Loading	171	INNN
193 - Overload Class		

STR 4532 WORK RECOMMENDATIONS			
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
MILL STREET	42.11 / -84.2457	384093200038B01	Fair Condition(5)
Feature	Length / Width / Spans	Owner	
SO BRANCH RAISIN RIVER	34.8 / 25.6 / 3	City: BROOKLYN(0932)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.10 MI E OF M-50	1925 / 1984 / /	Jackson(15)	P Posted for load(17NNNN)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Jackson(38)	8 Masonry / 11 Arch- Deck, Filled Sp	05/11/2021 / UIYE	5 Stable w/in footing

### WORK RECOMMENDATIONS

WORK RECOMMENDATIONS			UIYE
Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Ryan Lefere	Great Lakes Engineering Group, L	LC 4	05/11/2021
RECOMMENDATIONS & ACTION ITEMS			
Recommendation Type	Priority	Description	
Deck Patching	Н	Seal cracks HMA surface. Continue to monitor seal at shoulder/bridge rail interface for leakage into fill.	
Super Repair	Н	Repair spalls	s in soffit/walls.
Other	Н	Install advance posting sig	n to the east of the structure.