## Montgomery County Department of Transportation Division of Transportation Engineering



2023 BIENNIAL BRIDGE INSPECTION REPORT July 26, 2023



## BRIDGE NO. M-0194001 DENNIS AVENUE OVER SLIGO CREEK TRIBUTARY

Prepared by



## **Montgomery County**

Department of Transportation

Division of Transportation Engineering
2023 BIENNIAL BRIDGE INSPECTION REPORT

## **BRIDGE NO. M-0194001**

DENNIS AVENUE
OVER
SLIGO CREEK TRIBUTARY

Prepared by



Losly C. Juman	8/25/2023
Inspection Team Leader: Wesley C. Furman, P.E.	Date

**Quality Assurance:** 

David L. McDonald, P.E.

Professional Engineer: David L. McDonald, P.E.

8/25/2023

Date

8/25/2023

Date

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 45659. Expiration Date: July 31, 2024.

M-0194001 07/26/2023

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## **BRIDGE DESCRIPTION SUMMARY**

Roadway DENNIS AVENUE

Bridge Orientation East-West

Crossing Sligo Creek Tributary

Crossing OrientationNorth-SouthInspection Date7/26/2023Inspected ByVolkert, Inc.

Spans 1

Type Prestressed Voided Slab Beams

Structure Organization The numbering convention for reporting purposes is from the south and the

east

Deck N/A

Railing Metal Railing

Abutments Concrete Cantilever

Wing Walls Concrete
Piers N/A

 Overall Length
 34'-0"+/ 

 Clear Roadway
 36'-0"+/

No. of Lanes 2

Out-to-Out Width 47'-4"+/Year Built 1961
Year Reconstructed N/A

**Approach Section** 36'-0" **Shoulders** No

Alignment The west and east approaches are tangent. There is an intersection at the

east approach.

**Profile** The bridge is located at the bottom of a vertical curve.

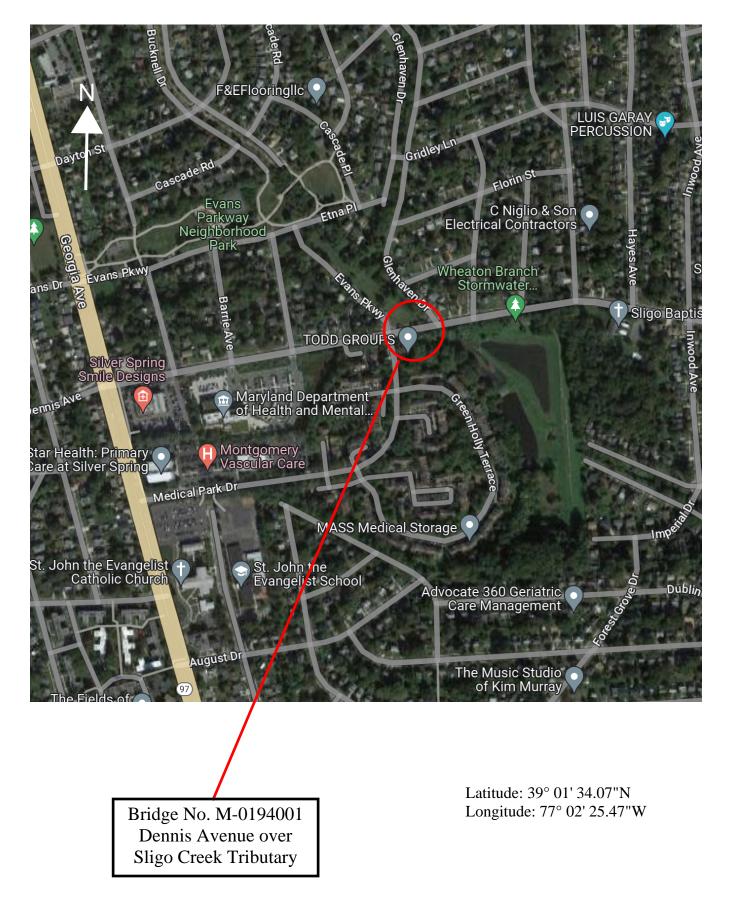
Guardrail None

Current Postings 52,000 lbs. G.V.W.

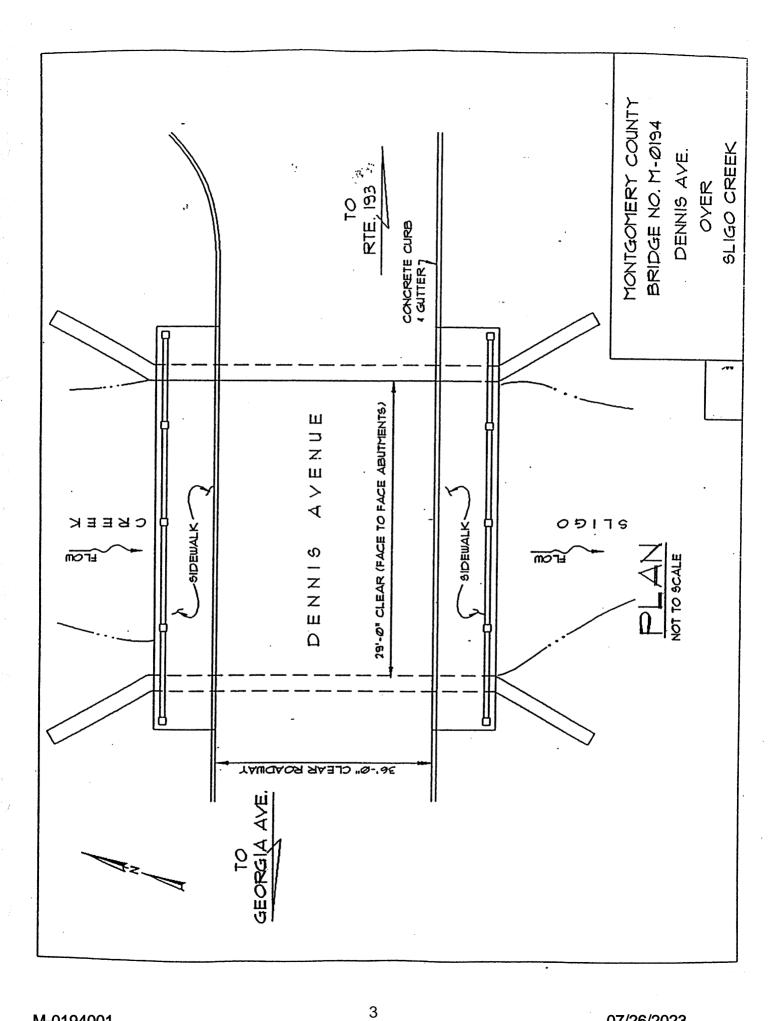
80,000 lbs. G.C.W.

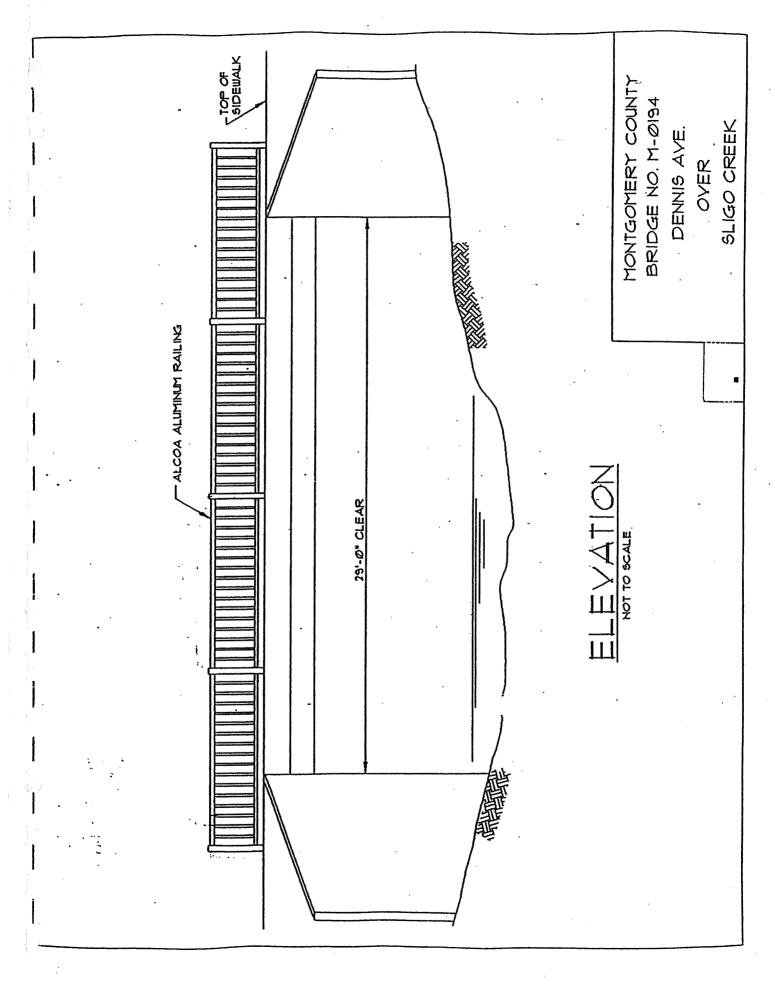
Overall Condition Fair

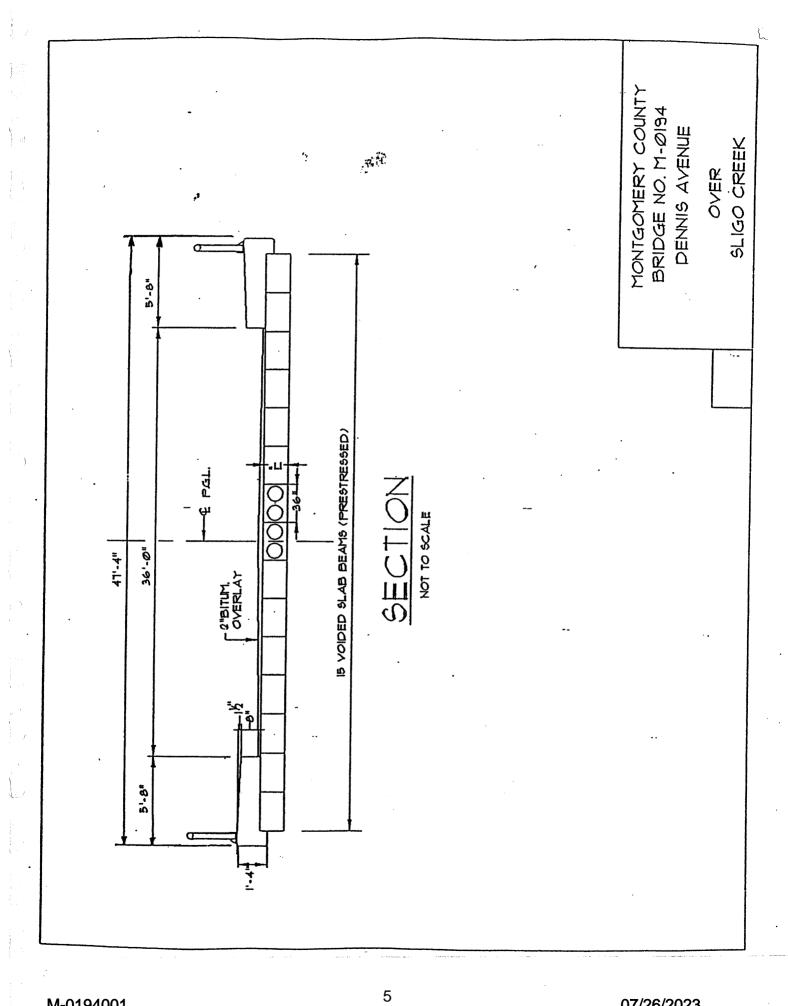
Remarks None



## **LOCATION MAP**

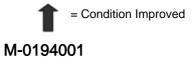




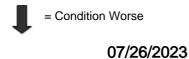


## **COMPARATIVE EVALUATION SUMMARY TABLE**

PONTIS ELEMENT	<u>STATUS</u>	CONDITION	<u>REMARKS</u>
Roadway Approach (8322)	$\Leftrightarrow$	Good	
Prestressed Concrete Top Flange (015)	$\leftrightarrow$	Good	
Sidewalks (8062)	$\leftrightarrow$	Fair	
Metal Bridge Railings (330)	$\Leftrightarrow$	Fair	
Prestressed Concrete Closed Girder (104)	$\Leftrightarrow$	Poor	
Abutments (215)	$\Leftrightarrow$	Fair	
Wingwalls (8251)	$\Leftrightarrow$	Fair	
Channel (8345)	$\Leftrightarrow$	Satisfactory	
Elastomeric Bearings (310)	$\Leftrightarrow$	Good	
Overall	$\iff$	Fair	







### **CONDITION SUMMARY**

### Roadway Approach (8322)

Asphalt roadway

The approach roadways are in good condition.

Load posting signs for 52,000 lbs GVW and 80,000 GCW are in place at both approaches and in advance of the structure.

## Prestressed Concrete Top Flange (015)

Prestressed concrete with asphalt wearing surface

The prestressed concrete top flanges are in good condition. The tops of the prestressed concrete beams are covered with an asphalt wearing surface and are not visible for inspection.

Wearing surface is in good condition.

Sidewalks (8062) Reinforced concrete

The sidewalks overt the bridge are in fair condition. Both sidewalks have moderate wear, scaling, and isolated hairline cracking. There is a vertical differential at the west end of the north sidewalk and both ends of the south sidewalk. The fascia and soffit of the south sidewalk have hairline map cracking with efflorescence.

## Metal Bridge Railings (330)

Metal bridge rail

The bridge railings are in fair condition. The north railing has cracked and missing nuts and a sheared bolt. The south railing has movement due to missing washers and loose nuts. The west section of the south railing has moderate corrosion and the west two (2) baseplates are lifted.

## Prestressed Concrete Closed Girder (104)

Prestressed concrete voided slab

The prestressed concrete beams are in poor condition. There are hairline longitudinal cracks in most beams, especially near the abutments. There is water leakage and efflorescence between the last four (4) beams on the north and south ends of the bridge. All the beams have spalls with exposed and corroded reinforcement and areas of delamination.

Abutments (215) Reinforced concrete

The abutments are in fair condition. The abutment stems have heavy scaling and water leakage stains with moderate efflorescence. There are up to 1/16" wide vertical and horizontal cracks with efflorescence and corrosion staining throughout both abutment stems. There are areas of delamination below the beams along both abutments. There are spalls with exposed and corroded reinforcement at the interface of the northwest, southwest, and northeast wing walls.

Wingwalls (8251) Reinforced concrete

The wing walls are in fair condition. The wing walls have isolated hairline cracking and the joint material is missing or deteriorated at the interfaces with the abutments. The northwest wing wall has a moderate spall and is separated from the west abutment.

## **CONDITION SUMMARY**

Channel (8345) Concrete Invert

The stream channel is in satisfactory condition. The channel protection is typically fractured along the south embankments and scaled and uneven below the structure. The upstream end of the channel protection is vertically exposed up to 1'-4" with no undermining.

**Elastomeric Bearings (310)** 

Neoprene

The elastomeric bearing pads are in good condition with no defects observed. Only the front faces of the bearings are visible for inspection.

### BRIDGE DESCRIPTION SUMMARY

### LOAD RATING SUMMARY

Bridge No. M-0194001 is currently posted at 52,000 lbs for Single Unit Vehicles and 80,000 lbs for Combination Unit Vehicles. The current load rating analysis was performed by The Wilson T. Ballard Company in July 2014. The load ratings for the Maryland Legal Load Vehicles are as follows:

Vehicle	Gross Vehicle Weight (Tons)	Inventory Rating (Tons)	Operating Rating (Tons)
H-15	15	30	50
HS-20	36	47	78
MD Type 3	33	N/A	N/A
MD Type 3S2	40	61	99

Note: MD Type 3 is no longer considered for posting.

Vehicle	Gross Vehicle Weight (Tons)	Inventory Rating (Tons)	Operating Rating (Tons)
MD Type 4	35	36	60

Based on the above chart and in accordance with Montgomery County's current posting policy, no posting is required.

Volkert, Inc. recommends removing the posting signs at the bridge and in advance of the bridge.

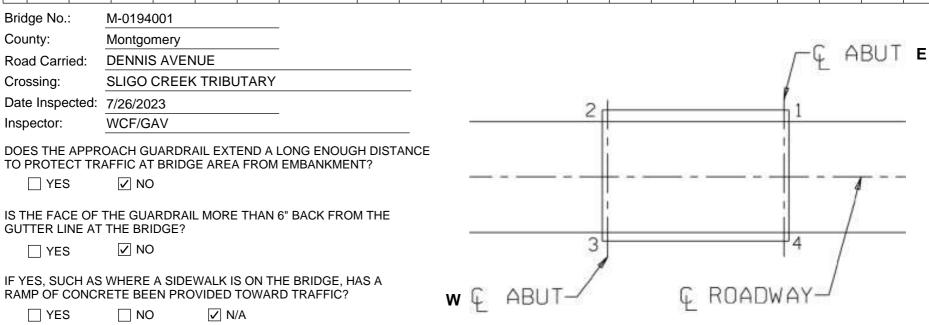
After reviewing the existing bridge conditions, it was determined that no significant changes in condition have occurred to the rated elements since the last rating calculations were performed; therefore, re-rating of the structure is not warranted at this time. Our review was not a check of the means or methods used to determine the load ratings but was limited to a comparison of present-day to previous structural condition. Volkert, Inc. assumes no responsibility for the correctness or accuracy of these previous load rating calculations.

## **REVIEW OF ITEM 113 - SCOUR POTENTIAL RATING**

The last Scour Evaluation Item 113 was rated an 8P. This implies a structure with a paved invert. Based on the observed conditions, this rating is still valid and does not require reevaluation.

## **GUARDRAIL REQUIREMENT FORM**

					Trans	sition			Approach Guardrail			Approach Rail Ends									
	Brid Railing SHA St	s Meet	Guard Corn	oach drail at ers of uct.		hed to dge	Average Post Spacing Near Struct.	Ту	pe of Po	osts	Ty	/pe of R	ail	Spacir	ng of Ap Guardra	proach il	Flared	Buried	Shielded	Hazard	Breakaway
Corners	Yes	No	Yes	No	Yes	No		Timber	Steel	Jersey	Cable	Steel	Timber	12'-6"	6'-3"	Other					
-		<b>✓</b>		✓																	
7		✓		✓																	
က		✓		✓																	
4		<b>✓</b>		✓																	



Comments: There are no approach traffic barriers at this bridge and traffic barriers should be in place. The bridge railings are a substandard height and do not meet current MDOT SHA standards.

# Montgomery County, MD Dept. of Transportation Bridge Coating Rating Form Bridge No. M-0194001 Name DENNIS AVENUE Date 7/26/2023 Weathering Steel No Crossing SLIGO CREEK TRIBUTARY Inspectors WCF/GAV COMPONENTS

	% Rating 1	% Rating 2	% Rating 3	% Rating 4	Total
Girders					
Fascias					
Bearings					
Edges					
End Dam					
Deck Pans					
(□Galv □Paint)					
Railings	75	10	0	15	1.55
Other					
1)					
2)					
3)					
4)					
5)					
				Overall Rating	1.55

Comments:		
None.		
Recommendations:		
None.		

## **BRIDGE INSPECTION NOTES**

### **VISUAL INSPECTION NOTE**

The condition report and evaluation presented herein are based upon a visual/hands-on inspection of accessible portions of the existing structure. No responsibility is assumed by Volkert, Inc. for the presence of any latent structural defects that cannot be detected by such visual/hands-on inspection.

### **BRIDGE SKETCHES NOTE**

The bridge sketches included in this report were previously prepared by others and reproduced herein from materials furnished by Montgomery County. No responsibility is assumed by Volkert, Inc. for the accuracy of these sketches and the correctness of any detail dimensions.

## **INSPECTION ACCESS NOTE**

The following equipment was used to access Bridge No. M-0194:

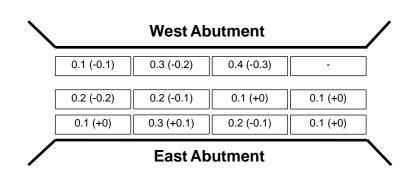
Waders

## SOUNDING REPORT

**BRIDGE: M-0194001 INSPECTION DATE:** 26/07/2023 **Base Sounding Date:** 06/05/1997

5.3' CLEAR, AT Bottom of the North beam at midspan to top of water

30'	20'	10'
-	-	
-	-	-
1.2 (-0.2)	0.6 (+0.1)	0.1 (+0)
1.1 (-1.1)	-	0.1 (-0.1)
-	-	
30'	20'	10'



10'	20'	30'
	-	-
-	-	-
2.1 (-0.7)	2.1 (-0.6)	1.9 (-0.5)
-	-	-
	-	-
10'	20'	30'

## BASE SOUNDING REPORT

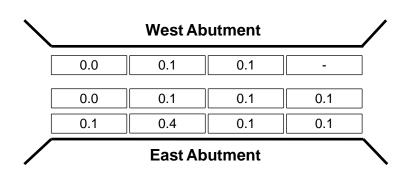
BRIDGE: M-0194001

**INSPECTION DATE:** 26/07/2023

Base Sounding Date: 06/05/1997

5.2' CLEAR, AT east end of north fascia Beam

30'	20'	10'
-	-	
-	-	-
1.0	0.7	0.1
0.0	-	0.0
_	-	
30'	20'	10'



10'	20'	30'
	-	-
-	-	-
1.4	1.5	1.4
-	-	-
	-	-
10'	20'	30'

Bridge	No.	M-0194001	Inspection Crew	WCF/GAV	1	Date	7/26/2023	
Name	DEN	INIS AVENUE		Crossing	SLIGO CREEK TRIBU	TARY		
Bridge	Type	Prestressed Vo	oided Slab Beams			Year E	Built 1961	

## BRIDGE INSPECTOR'S RECOMMENDATIONS FOR MAINTENANCE REPAIRS

	DESCRIPTION	PRIORITY	QUANTITY	UNIT COST	TOTAL COST
1.	Install new bridge railings in accordance to MDOT SHA standards.	1	68 L.F.	\$222/L.F.	\$15096
2.	Install approach W-beam traffic barriers at the four (4) corners of the bridge.	1	200 L.F.	\$55/L.F.	\$11000
3.	Install W-beam end treatments at all four (4) ends of the traffic barriers.	1	4 Ea.	\$2327/Ea.	\$9308
4.	Repair the spalls in the abutment stems and the northwest and southwest wing walls.	3	33 S.F.	\$160/S.F.	\$5280
5.	Repair spalls and delaminations in the beams.	2	96 S.F.	\$75/S.F.	\$7200
6.	Remove the load posting signs.	2	4 Ea.	\$100/Ea.	\$400
7.	Repair settlement at approach sidewalk transitions.	3	32 S.F.	\$14/S.F.	\$448
8.	Repair fractured channel concrete lining along south banks.	3	LS	\$5000	\$5000
			1	Total:	\$ 53732



1. West Approach (Looking East)



2. East Approach (Looking West)



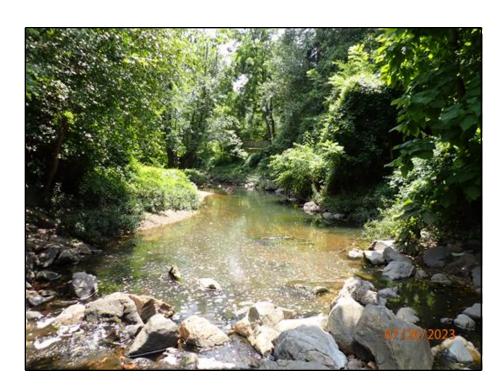
3. North Elevation (Upstream)



4. South Elevation (Downstream)



5. Looking North (Upstream)



6. Looking South (Downstream)



7. Vertical differential of the north sidewalk at the west end (looking east)



8. Vertical differential on the south sidewalk at the east end (looking west)



9. Sheared bolt, cracked and missing nut at Post 5 of the north railing (looking east)



10. Moderate corrosion at the west section of the south railing (looking east)



11. West baseplate of the south railing is lifted up (looking east)



12. Water leakage and efflorescence between Beams 1 and 2 (looking east)



13. Spall with exposed reinforcement along Beams 3 and 4 near the east abutment (looking east)



14. Spall with exposed reinforcement along the north edge of Beam 5 near the west abutment (looking west)



15. Delamination and spalling with exposed corroded reinforcement at the end of Beam 6 near the east abutment (looking east)



16. Spalls with exposed reinforcement at Beams 7 and 8 near mid-span (looking east)



17. Spall/delamination with exposed reinforcement at Beam 9 starting at the east abutment (looking east)



18. Spall with exposed reinforcement along the south edge of Beam 13 near midspan (looking west)



19. Spalls with exposed reinforcement along the south edge of Beam 14 near midspan (looking east)



20. Spall with exposed reinforcement in the east abutment at the interface with the northeast wing wall (looking east)



21. Spall with exposed and corroded reinforcement in the west abutment below Beams 14 and 15 (looking west)



22. Spall with exposed reinforcement and fill infiltration in the west abutment at the interface with the northwest wing wall (looking west)



23. Fractured channel protection along the southeast embankment (looking east)



24. Load posting sign at the east approach (looking west)



25. Load posting sign at the west approach (looking east)



26. Advanced load posting sign on Dennis Avenue, east of Julep Avenue. Note sign is covered by vegetation.

Bridge No. M-0194001	Inspection Crew	WCF/GAV <b>Date</b> 7/26/2023					
Name DENNIS AVENUE		Crossing SLIGO CREEK TRIBUTARY					
Bridge Type Prestressed Vo	ided Slab Beams	Year Built 1961					
58 DECK CONDITION							
58 DECK	RATING						
1. Wearing Surface (302)	8	Asphalt					
2. Deck - Topside (301)	-	Not visible					
3. Deck - Underside (301)	4	Prestressed concrete voided slab beams					
4. Curbs (304)	7	Concrete					
5. Median (304)	-						
6. Sidewalks (304)	5	Concrete					
7. Parapets (303)	-						
8. Railing (303)	5	Steel handrail					
9. Roadway Joints	NV						
10. Drainage System (314)	-						
11. Lighting Standards	-						
12. Utilities 7		Overhead					
13. Other -							
Inspector's Condition Ra							

- 58.1 The wearing surface is in very good condition. Wearing surface has been repaved. There is minor vegetation growth and debris accumulation along the north curb line.
- 58.2 The topside of the prestressed concrete voided slabs is not visible due to the presence of the asphalt wearing surface.
- 58.3 See Item 59.2
- 58.6 The sidewalks are in fair condition. The north sidewalk has moderate wear, scaling, and random hairline cracks. There is a 2" vertical differential at the west end of the north sidewalk (see Photo 7). The south sidewalk has moderate wear and hairline map cracking throughout and minor isolated edge spalling up to 1/2" deep along the joints. Panel 3 of the south sidewalk has several up to 1/4" deep surface spalls. There is a 1 1/2" vertical differential at both ends of the south sidewalk (see Photo 8).

The fascia and soffit of the north sidewalk are in good condition. The fascia and soffit of the south sidewalk have hairline map cracking with efflorescence.

58.8 - The metal railings are in fair condition. There is a metal railing on both sides of the bridge. The bridge railings are a substandard height and do not meet current MDOT SHA standards. The top of the railing is set at 3'-1 1/2" above the sidewalk. Both railings have minor scrapes and minor corrosion on some of the fasteners. The baseplate connections at Posts 1 and 5 of the north railing have a sheared bolt and cracked and missing nuts (see Photo 9). At Post 2, one (1) bolt is loose with the nut missing. At Post 4, six (6) anchor bolt nuts missing.

The south railing has movement due to missing washers and loose nuts throughout. The west section

Bridge	No.	M-0194001	Inspection Crew	WCF/GAV	Date	7/26/2	2023
Name	DEN	NIS AVENUE		Crossing SLIGO CREEK TRI	BUTARY		
Bridge	Туре	Prestressed Vo	oided Slab Beams		Year E	Built 1	961

of the south railing has moderate corrosion (see Photo 10). The west baseplate of this section is lifted 1 1/4" high and the end post is out of plumb (see Photo 11). The base plate of Post 4 is lifted 1/2" high. Baseplate 4 of the south railing has a missing nut and only three (3) bolts holding the connection in place. Post 2 of the south railing has one (1) missing nut for the bolts connected to the post. The base plate of Post 2 is lifted 5/8" high. Posts 2 and 3 of the south railing have missing bolts and nuts at the bottom railing. Post 4 on the south rail has two (2) bolts missing on the bottom horizontal rail.

58.12 - There are overhead utilities running along the south side of the roadway.

Bridge No. M-0194001	Inspection Crew	WCF/GAV	Date 7/26/2023
Name DENNIS AVENUE		Crossing SLIGO CRE	EK TRIBUTARY
Bridge Type Prestressed V	oided Slab Beams		Year Built 1961
59 SUPERSTRUCTUR	E		
Number of Spans	1		
Type of Construction	n Simple	e Span	
	CONDITION RATING		
1. Bearing Devices (311)	7	Neoprene	
2. Girders or Beams (312)	4	15 voided slab pres	tressed concrete beams
3. Stringers (312)	-		
4. Floor Beams (312)	-		
5. Diaphragms/Crossframes	_		
6. Paint (313)	_		
7. Other	_		
8. Rivets or Bolts	_		
9. Welds - Cracks	-		
10. Rust	_		
11. Timber Decay	_		
12. Concrete Cracking	5		
13. Collision Damage	_		
14. Deflection Under Load	7		
15. Alignment of Members	7		
16. Vibrations Under Load	6		
17. Fracture Critical Member	s (325) -		
Inspector's Condition	Rating (59) 4		

- 59.1 The bearing devices are in good condition. Only the front faces of the bearing pads are visible for inspection. The visible portions of the bearing pads are in good condition with no defects observed.
- 59.2 The concrete beams are in poor condition. There are hairline longitudinal cracks in most beams especially near the abutments. There is water leakage and efflorescence with stalactites between the last four (4) beams on the north and south ends of the bridge.

Beam 1 has several patches throughout. There is graffiti along the Beam 1 fascia. There is a 6'-0" long x 3" wide x 1/2" deep spall with exposed corroded reinforcement along the south edge approximately 4' from the east abutment. There is a 1'-8" long x 3" wide x 1/2" deep spall/delamination with exposed corroded reinforcement along the south edge adjacent to the west abutment. There is water leakage and heavy efflorescence between Beams 1 and 2 (see Photo 12).

Bridge	<b>No.</b> M-0194001	Inspection Crew WC	F/GAV	Date 7/26	6/2023
Name	DENNIS AVENUE	Cro	ssing SLIGO CREEK TRIBU	TARY	
Bridge	Type Prestressed Vo	ided Slab Beams		Year Built	1961

Beam 2 has a 2'-2" long x 1" wide x 1/4" deep spall/delamination along the south edge near the east abutment. The full-length patches on both sides of the beam are delaminated with isolated corrosion staining adjacent to Beam 3. There is water leakage with heavy efflorescence between Beams 2 and 3. There is a spall 1-3" long x 5" wide x 1/2" deep with exposed rebar, 12'-0' from the east abutment.

Beam 3 has patches on the south side and spalls on the north edge along the full length. There is an 9'-0" long x 5" wide x 1/2" deep spall/delamination with exposed reinforcement along the north edge starting at the east abutment (see Photo 13). There is a 12'-0" long x 5" wide x 3/4" deep spall/delamination with exposed corroded reinforcement and 1/16" wide longitudinal cracks extending from both ends of the spall along the north edge near midspan.

Beam 4 has a full-length x 7" wide x up to 1 1/2" deep spall/delamination along the south edge with exposed corroded reinforcement at the east abutment (see Photo 13). At midspan, there is a 3'-0" long x 7" wide delamination on the north edge.

Beam 5 has three (3) 3'-6" long x 7" wide x 1/2" deep areas of spall/delamination with hairline cracking along the south edge at midspan, two (2) with exposed rebar. There is a 2'-6" long x 5" wide x 1/2" deep spall/delamination with exposed corroded reinforcement along the north edge 7' from the west abutment (see Photo 14).

Beam 6 has a 1'-10" long x up to 3'-0" wide x 1/2" deep spall/delamination with exposed corroded reinforcement along the south edge at the beam end near the east abutment (see Photo 15). There is a 1'-6" long x 7" wide delaminated patch adjacent to the west abutment. There is a 2" diameter x 1/2" deep edge spall in the midspan.

Beam 7 has a 3'-0" long x 7" wide x 1/2" deep spall with exposed and corroded reinforcement along the north edge 3' from the east abutment and a 5'-0" long x 8" wide x 2 1/2" deep spall with exposed and corroded reinforcement along the north edge near midspan (see Photo 16). There is a full-length x 7" wide delamination with a 1'-2" long x 6" wide x 1/2" deep spall along the north edge. There is a 1'-2" long x 9" wide delamination on the east abutment.

Beam 8 has 7" wide x up to 3/4" deep spall/delaminated areas with exposed reinforcement along the full length of both edges with isolated shallow spalling and corrosion staining (see Photo 16). There is up to 2'-7" long x 7" wide x 1/2" deep spall with exposed reinforcement along the south edge near midspan and one along the north edge. There is a 12' long x 6" wide x 1/2" deep spall/delamination with exposed and corroded reinforcement, 3 ft from the west abutment.

Beam 9 has 7" wide intermittent delaminated areas with isolated patches, corrosion staining, and efflorescence along the east half of the south edge. There is a full-width x up to 1'-6" long x 1/2" deep spall with exposed reinforcement at midspan. There is a 7'-0" long x 8" wide x 3/4" deep spall/delamination with exposed reinforcement along the north edge, starting right from the east abutment (see photo 17).

Beam 10 has two (2) 1'-0" diameter x 3/4" deep spalls with exposed reinforcement, 4 '-0" from the west abutment.

Beam 11 has a 1'-6" long x 5" wide x 1-1/2" deep spall and a 2'-0" long x 6" wide x 1-1/2" deep spall with exposed rebar near the east abutment. There is a 2'-6" long x 7" wide x 1/2" deep spall with exposed and corroded reinforcement along the south edge and a 3'-6" long x 7" wide x 1-1/2" deep spall with exposed rebar along the north edge near the west abutment. There is a 9" long x 6" wide x 3/4" deep spall with exposed reinforcement at midspan.

Bridge	No.	M-0194001	Inspection Crew	WCF/GAV	Date	7/26/2023
Name	DEN	INIS AVENUE		Crossing SLIGO CREEK TRIBU	ITARY	
Bridge	Туре	Prestressed Vo	ided Slab Beams		Year F	Built 1961

Beam 12 has a 1'-8" long x 4" wide x 1/2" deep spall with exposed and corroded reinforcement along the south edge near the east abutment. There is a 4'-2" long failed patch with 10" long x 2" wide x 1/2" deep spalls with exposed and corroded reinforcement along the south edge just east of midspan with isolated delamination and hairline cracking. There is a 7'-0" long x 5" wide x 1/2" deep spall/delamination with exposed corroded reinforcement along the north edge starting 4' from the west abutment. There is a 3'-0" long x 5" wide x 1/2" deep spall/delamination with exposed corroded reinforcement near the west abutment.

Beam 13 has a 10'-0" long x 7" wide delaminated area along the south edge with water staining, corrosion staining, and hairline cracks. There is a 2'-3" long x 7" wide x 1/2" deep spall with exposed and corroded reinforcement along the south edge near midspan (see Photo 18). There is a 2'-0" long x 7" wide x 1/2" deep spall with delamination, 3ft from the west abutment.

Beam 14 has heavy efflorescence and corrosion staining with hairline longitudinal cracks throughout. There are three (3) spalls, 1'-0" long x 5" wide x 3/4" deep each, with exposed reinforcement and delaminated areas 8ft from the west abutment. There is a 1'-6" long x 5" wide x 1" deep spall with exposed reinforcement along the south edge at midspan (see Photo 19).

Beam 15 has full-length intermittent longitudinal hairline cracks. There are two (2) spalls up to 1'-1" long x 4" wide x 1/2" deep with exposed reinforcement and a 2'-6" long x 4" wide delaminated area near midspan. There is efflorescence and corrosion staining along the south edge.

Bridge No. M-0194001 Inspection Crew		WCF/GAV	Date 7/26/2023	
Name DENNIS A	VENUE		Crossing SLIGO CREEK 1	RIBUTARY
Bridge Type Pres	tressed Voided Slat	Beams		Year Built 1961
60 SUBSTRUC	TURE	CONDIT	ION	
		RATIN		
1. Abutments	-Wingwalls	5		
	-Backwalls	-		
	-Stems	5		
	-Footings	-		
	-Piles	-		
	-Scour/Erosion	7		
	-Settlement	7		
Overall Abutme	ent Rating (322)	5	Abutment Type Cor	ncrete
2. Piers or Bents	-Caps	-	None	
	-Columns	-		
	-Footings	-		
	-Piles	-		
	-Scour/Erosion	-		
	-Settlement	-		
Overall Pier Ra	ating	-	Pier Type	
3. Pile Bents	-Caps	-		
	-Piles (324)	-		
4. Concrete Cracki	ng or Spalling	5		
5. Steel Corrosion		-		
6. Timber Decay		-		
7. Other		-	Conduit Removed	
8. Debris on Seats		-		
9. Paint		-		
10. Collision Dama	ge	-		
11. Overall Undern	nining/Scour	7		
Inspector's	s Condition Rating	(60)	5	

60.1 - Abutments: The abutments are in fair condition. The abutment stems have heavy scaling and water leakage stains with moderate efflorescence. There are hairline to 1/16" wide vertical and horizontal cracks with heavy efflorescence and corrosion staining throughout both abutment stems.

Bridge	<b>No.</b> M	-0194001	Inspection Crew	WCF/GAV		Date 7/26	/2023
Name	DENNI	S AVENUE		Crossing S	SLIGO CREEK TRIBUTA	RY	
Bridge	Type F	Prestressed Vo	ided Slab Beams		Y	ear Built	1961

The east abutment has minor abrasion up to 2" along the waterline. There is a 3'-6" high x 1'-8" wide hollow sounding patch at the interface with the southeast wing wall that is starting to fail at the bottom. There is delaminated concrete below Beams 1, 2, 4, 8, 10-12, and 15 along the top 2'-0" of the stem. There is a 5'-0" long x 1'-0" high area of delaminated concrete below Beams 10,11, and 12 and heavy efflorescence below Beams 1 to 4, 14, and 15. There is a 5'-0" high x 2'-0" wide x 4" deep spall with exposed corroded reinforcement at the interface with the northeast wing wall (see Photo 20).

The west abutment has 1/16" to 1/8" wide horizontal cracks with delamination and exposed aggregate. There is graffiti throughout the west abutment. There is a 5'-0" high x 2'-0" long x 4" deep spall with exposed reinforcement at the interface with the southwest wing wall. There is delaminated concrete below Beams 1, 2, 4-10, and 12-15 along the top 2'-0" of the stem. There is a 10" high x 5" wide x 1/2" deep spall below Beam 6 and a 4" high x 8" wide x 1/2" deep spall with exposed reinforcement under Beam 8. There is 2'-0" wide x 5" high x 3" deep spall with exposed reinforcement below Beam 13. There is a 3'-0" wide x 9" high x 4" deep spall with two (2) exposed and corroded reinforcing bars below Beams 14 and 15 (see Photo 21). There is a 6'-0" high x 2'-0" wide x up to 1'-11" deep spall with exposed reinforcement and fill infiltration through the joint at the interface with the northwest wing wall (see Photo 22).

Wing walls: The wing walls are in fair condition. The joint material is missing or deteriorated at the four (4) corners of the abutments. The southeast wing wall has hairline vertical cracks. The southwest wing wall has a spall 1'-0" high x 9" wide x 1-1/2" deep at mid-height. The southwest wing wall has graffiti throughout. The northeast wing wall has irregular hairline cracking. The northwest wing wall has a 3'-5" high x 5" wide x 1" deep spall and is separated from the west abutment up to 1" (see Photo 22).

Bridge	No.	M-0194001	Inspection Crew	WCF/GAV		Date	7/26/20	)23
Name	DEN	NIS AVENUE		Crossing S	SLIGO CREEK TRIBUTA	RY		
Bridge	Туре	Prestressed Vo	oided Slab Beams		Y	ear B	uilt 19	61

### 61 CHANNEL AND CHANNEL PROTECTION

	CONDITION RATING						
1. Channel Scour	7						
2. Embankment Erosion	7						
3. Drift/Debris	7						
4. Vegetation	7						
5. Channel Alignment	7						
6. Fender System	-						
7. Spur Dikes and Jetties	-						
8. Riprap/Slope Protection	6						
Inspector's Condition Rating (61) 6							

- Inspector's Condition Rating (61)
- 61.2 There are 3'-0" natural cut banks along the upstream end of the channel.
- 61.3 The channel drift and debris are in good condition.
- 61.4 There is heavy vegetation growth at the northeast and northwest wing walls. There is vegetation along both the upstream and downstream embankments.
- 61.5 Sligo Creek Tributary flows from north to south under the bridge. The upstream alignment turns slightly to the west and there is stagnant water. The downstream alignment slightly meanders after a small waterfall. The streambed consists of silty sand. There are two concrete stormwater structures south of the bridge, one on each embankment, and one outlet pipe on the southeast embankment.
- 61.8 The slope protection is in satisfactory condition. There is large riprap along the full-width of the channel at the downstream end. There is a concrete channel under the bridge and along the adjacent downstream embankments. The channel protection is typically fractured along the south embankments (see Photo 23). The concrete is scaled and uneven with exposed reinforcement below the structure. The upstream concrete apron is vertically exposed up to 1'-4" with no undermining. There are two (2) storm pipes with end sections on the ends of the northwest and southwest wing walls.

Bridge No.	M-0194001	nspection Crew	WCF/GAV		Date 7/26/2023
Name DEN	INIS AVENUE		Crossing SLIGO C	REEK TRIBUT	ARY
Bridge Type	Prestressed Void	ded Slab Beams			Year Built 1961
71 WATER	RWAY ADEQU	ACY			
Opening		Good	Fair	Poor	
Alignment		Good	Fair	Poor	
Frequency o	f Overtopping	Remote	Slight	Occasional	Frequent
Inspecto	r's Condition Rat	ng (71) 7			

<b>Bridge No.</b> <u>M</u> -0194001	Inspection Crew	WCF/GAV	Date 7	7/26/2023
Name DENNIS AVENUE		Crossing S	LIGO CREEK TRIBUTARY	
Bridge Type Prestressed V	oided Slab Beams		Year Bu	uilt <u>1961</u>
72 APPROACH ROAI	DWAY ALIGNME	ENT APPR	AISAL RATING	
1. Vertical Alignment	E Good Fai	ir Poor	At the sump of a vertical cur	ve
1	N Good Fai	ir Poor		
2. Horizontal Alignment	E Good Fai	ir Poor	Tangent	
1	N Good Fai	ir Poor		
3. Speed Limit Reduction	None Minor	Substantial		
4. Sight Distance	Adequate Not	Adequate		
Inspector's Condition Ratir	ng (72) 8			
APPROACH ROADW	MAY			
, in the state of	CONDITION RATING			
5. Approach Guardrail	_			
6. Approach Pavement	8			
7. Approach Embankments	7			
8. Approach Slabs	_			
9. Relief Joints	_			
10. Signing - Legibility and Vi	sibility Good F	air Poor	Bridge Posting Signs, Object	t Markers
11. Posted Load Limits	52,000 G.V.V	V. Po	osted Bridge Speed Limit	- MPH
	80,000 G.C.V	V. N	ormal Roadway Speed Limit	30 MPH
12. Traffic Safety Features (3	36)			
a. Bridge Railing	0 1	N Stee	l handrail	
b. Transitions	0 1	N None	e	
c. Approach Traffic Barrier	0 1	N None	9	
d. Approach Traffic Barrier	Ends 0 1	N None	9	
70 C. The approach reviews		d aanditian	A no reach no remark has been	

72.6 - The approach pavements are in very good condition. Approach pavement has been repaved.

Sidewalks: Both approach sidewalks have moderate wear with exposed aggregate and vegetation growth through the joints at all four (4) transitions. The northeast approach sidewalk has a 1/8" wide x full-width transverse crack and up to 3/4" of settlement with vegetation growth in Panel 2. The northwest approach sidewalk has 3/4" settlement around the manhole cover and four (4) panels with full-width x up to 1/8" wide transverse cracks with adjacent delamination. The northwest and southeast approach sidewalks have settled 1-1/4" at the curb. The southwest sidewalk has up to 1" settlement

Bridge	<b>No.</b> <u>M-0194001</u>	Inspection Crew	WCF/GAV	Date 7/26/2023
Name	DENNIS AVENUE		Crossing SLIGO CREE	K TRIBUTARY
Bridge	Type Prestressed \	/oided Slab Beams		Year Built 1961

between concrete panels and curb at the north end.

72.10 - Load posting signs are in place at both approaches (see Photos 24 and 25) and in advance of the east abutment on Dennis Avenue, east of Julep Avenue (see Photo 26), sign is covered by vegetation. The bridge is posted at 52,000 lbs. GVW and 80,000 lbs. GCW.

There are object markers at all four (4) corners of the bridge. There are minor scrapes and graffiti on the southeast object marker. There is vegetation partially blocking the southeast object marker. The northwest object marker is leaning away from the road.

72.12 a - The bridge railings are a substandard height and do not meet current MDOT SHA standards.

72.12 b, c, d - There are no approach traffic barriers at this bridge and traffic barriers should be in place.

### Bridge Inspection Report Element Form

Bridge No: M-0194001 Inspection Date: 07/26/2023 DENNIS AVENUE OVER SLIGO CREEK TRIBUTARY 0001620 Milepoint: (58) Deck (59) Superstructure 4 (60) Substructure 5 (61) Channel (62) Culvert Ν Condition Condition Condition Condition **Total** Environment Units **Element** Quantity State 1 State 2 State 3 State 4 15 - Prestressed Concrete Top Flange 1 - Ben. 1530 sq. ft. 1530 0 0 ☐ Eng Req □FYI District ☐ Inaccessible? ☐ Eng Comments 510 - Wearing Surfaces 1224 1224 sq. ft. 0 0 0 ☐ Eng Req FYI District Inaccessible? ☐ Eng Comments 104 - Prestressed Concrete Closed Web/Box 1 - Ben. 450 ft. 140 227 0 83 Girder ☐ Eng Req FYI District Inaccessible? ☐ Eng Comments 215 - Reinforced Concrete Abutment 1 - Ben. ft. 16 District ☐ Inaccessible? ☐ Eng Req FYI ☐ Eng Comments 310 - Elastomeric Bearing 1 - Ben. 30 each 30 0 0 0 ☐ Eng Req FYI District Inaccessible? ☐ Eng Comments 330 - Metal Bridge Railing 1 - Ben. 74 ft. 55 8 1 10 ☐ Eng Req FYI District Inaccessible? ☐ Eng Comments 515 - Steel Protective Coating 296 sq. ft. 233 0 District ☐ Inaccessible? ☐ Eng Req □ FYI ☐ Eng Comments 8062 - Sidewalk, Reinforced Concrete 1 - Ben. 74 Ft. 62 12 0 ☐ Eng Req **□FYI** District Inaccessible? ☐ Eng Comments

# Bridge Inspection Report Element Form

Bridge No: M-0194001					Inspection	on Date: 0	7/26/2023
DENNIS AVENUE OVER SLIG	GO CREEK TRIBUTA	RY			Milepoin	<b>t:</b> 0	001620
(58) Deck 4 (61) Channel 6	]	(59) Superstructure (62) Culvert	4 N	(6	0) Substru	cture 5	i i
8251 - Wingwalls, Reinf	orced Concrete	1 - Ben.	52 Ft.	45	5	2	0
☐Eng Req	□FYI	District	Inaccess	ible?		Eng Com	nments
8309 - Paved-Over Road	dway Joints	1 - Ben.	2 Each	2	0	0	0
☐Eng Req	□FYI	District	□Inaccess	ible?		Eng Com	nments
8322 - Roadway Approa	ch Transition	1 - Ben.	2 Each	2	0	0	0
☐Eng Req	□FYI	District	□Inaccess	ible?		Eng Com	nments
8345 - Stream Channel		1 - Ben.	1 Entire Bridge	0	1	0	0
☐Eng Req	□FYI	District	□Inaccess	ible?		Eng Com	ments

## STRUCTURE INVENTORY AND APPRAISAL REPORT

BRIDGE NUMBER: M-0194001

IDENTIFICATION			FORM 1 OF 13
(8) STRUCTURE NUMBER:	2 00000 Major Structure M	- 0194 01 Major Structure >	20' 0" 0 Single Structure
(8) FHWA NUMBER:			
(7) FACILITY CARRIED:	DENNIS AVENUE		
(6) FEATURE INTERSECTED:	SLIGO CREEK TRIBUTARY		
(255) FEDERAL SUBMITTAL INDICA	ATOR: Y Yes		
(262) NAME OF STRUCTURE:			
(27) YEAR BUILT:	1961 (106) YE	EAR RECONSTRUCTED: 0000	
(263) ADDITIONAL RECONSTRUCT	ION YEARS: N N		
(1) STATE CODE:	243 Maryland <b>(2) DIST</b>	RICT CODE: 03	03
(3) COUNTY CODE:	031 Y (4) PLA	<b>CE CODE</b> : 43500	
(5) INVENTORY ROUTE:	1 Route carried "on" 4 County the structure (Route Prefix	Route 1 Mainline 00793  (Level of Service) (Number)	0 Always (Direction)
(9) LOCATION:	0.32 MI E OF JCT SR 97		
(11) MILEPOINT:	0001620		
(12) BASE HIGHWAY NETWORK:	0 Inv. Route is NOT on the Base Net	work	
(266) GIS ROUTE ID:	15000CO00793 01WW******	*****	
(267) GIS MILEPOINT:	1.62		
(268) SCENIC ROUTE: N			
(13) LRS INVENTORY ROUTE, SUBI	ROUTE NUMBER:		
(16) LATITUDE: (A)	(B) 39013407	3363 <b>(C)</b> 39013368	<b>(D)</b> 39013414
(17) LONGITUDE: (A)	(B) 077022547	22529 <b>(C)</b> 077022471	( <b>D</b> ) 077022502
(28) LANES ON: 02 LANES U	NDER: 00		
(42) TYPE OF SERVICE ON: 5	Highway-Pedestrian		
TYPE OF SERVICE UNDER: 5	Waterway		
(98) BORDER STATE:		PRDER STATE'S SHARE %:	
(99) BORDER STATE'S NUMBER:			
CLASSIFICATION			FORM 2 OF 13
(104) HWY SYSTEM:	No, Inventory Route is not on the NHS	(103) TEMPORARY STRUCTURE:	
(105) FEDERAL LANDS HWYS:	0 Not applicable	(110) NATIONAL NETWORK:	No, the inventory route is not part of the national network for trucks.
(26) FUNCTIONAL CLASS:	19 Urban Local	(20) TOLL:	3 On free road
(100) DEFENSE HWY:	The inventory route is not a STRAHNET route	(21) MAINTENANCE:	02 County Highway Agency
(101) PARALLEL STRUCTURE:	No parallel structure	(22) OWNER:	02 County Highway Agency
(102) DIRECTION:	2 2-way traffic	(37) HISTORICAL SIGNIFICANCE:	5 Not eligible

M-0194001 42 07/26/2023

(345) YEARS PAINTED:

**TRAFFIC FORM 3 OF 13** (19) **DETOUR**: (109) TRUCK ADT %: 03 05 (30) ADT YEAR: (29) ADT: 008590 2023 (114) FUTURE ADT: (115) FUTURE ADT YEAR: 010492 2043 STRUCTURE TYPE AND MATERIAL **FORM 4 OF 13** (43) STRUCT TYPE: Prestressed concrete Slab 01 (44) STRUCT TYPE - APPR: Not Applicable Other 0 00 Entire Structure (232) BOX CULVERT ON PILES: None 0 0 (208) STRUCT TYPE -Ν Ν Ν WIDENED/EXTENDED: (219) SLOPE PROTECTION: None 0 (228) FOOTING - ABUTMENT: Concrete 3 CIP Pile Entire Structure 0 (229) SUBSTRUCT ABUTMENT: Concrete Cantilever **Entire Structure** 1 3 0 (230) FOOTING - PIER: Ν Not Applicable Not Applicable (231) PIER TYPE: Ν Elastomeric-Plain None or N/A None or N/A (242) BEARING TYPE: Н Ν Ν (108) WEARING SURFACE: 6 Bituminous 0 None 0 None (243) JOINT TYPE: Ν None Ν None Ν None (206) STRUCT SUBTYPE - MAIN: Voided Slab Panel or (207) STRUCT SUBTYPE - APPR: 00 00 07 Box Beam (257) SCOUR PROTECTION: 3 (270) CONC. DECK SPECIAL TYPE: Not Applicable Ν Not Applicable Non-Composite (221) STRUCTURAL STEEL: Ν (233) DECK - COMP/NON-COMP: 0 (107) DECK STRUCTURE TYPE: Concrete Precast (259) STAY-IN-PLACE FORMS: 2 Ν Panels (235) PARAPET: None 00 0 None (236) RAILING: Aluminum - Picket - None 4 2 0 (237) FENCING: 0 None 0 None Not Applicable (278) PAINT SYSTEM: N (344) PAINT COLOR/NUMBER: Not Applicable Ν

Ν

GEOMETRICS								FOR	M 5 OF 13
(112) NBIS BRIDGE LENGTH:	Υ			(49) STRUCT	TURE LENGTH:	00003	40		
(210) NUMBER OF SPANS:	0001			(45) # SPAN	S IN MAIN UNIT:	001			
(46) # APPROACH SPANS:	0000			(209) CONTI	NUOUS SPANS:	N			
(48) LENGTH MAX SPAN:	0030			(238) # STRI	NGERS - ORIGINAL	: 15			
(240) SPACING - ORIGINAL:	0			(239) # STRI	NGERS - WIDENED:	: 00			
(241) SPACING - WIDENED:	N			(33) BRIDGE	MEDIAN:	0	Ī		
(50) CURB/SIDEWALK WIDTHS:	057	057		(205) MEDIA	N WIDTH:	000			
(51) DECK CURB-CURB WIDTH:	0360			(32) APPRO	ACH ROAD WIDTH:	00	036	00	
(52) DECK OUT-OUT WIDTH:	0474			(10) INVENT	ROUTE, MIN VERT	CLEAR:	9	999	
(53) BRIDGE ROADWAY, MIN VE	RTCLEAR:	9999		(47) INVENT	ROUTE, TOTAL HO	RIZ CLEA	<b>.R</b> : 3	60	
(54) MIN. VERT. UNDERCLEARA	NCE:	N	Feature	not a highway	y or a railroad	Α		< 10'	
(55) MIN. LAT. CLEARANCE (RIG	HT):	N	Feature	not a highway	y or a railroad	999			
(56) MIN. LAT. CLEARANCE (LEF	T):	000	0	(342) HORIZ	CLEARANCE (ON):		0	3600	
(34) SKEW, IN DEGREES: 0	0			(280) HORIZ	CLEARANCE (UND	ER):	N	I	
(35) STRUCTURE FLARED:	1			(253) NUMBI	ER OF CELLS:		N	1	
(256) SPAN OF CELLS:	N			(254) RISE:			N	1	
				(258) EARTH	I FILL:		N	1	
				(343) CENTE	RLINE LENGTH (Cu	ılverts/Pip	oes): N	1	
(223) SHOULDER WIDTHS:	N	N	N	N					
(264) TYPE AND SPAN:	SCVS 30'								

#### **LOAD RATINGS AND POSTINGS**

**FORM 6 OF 13** 

(41) STATUS:	P Posted for load	(224) WEIGHT POSTED:	52 80
(31) DESIGN LOAD:	5 HS 20		(New Split)
(398) PEDESTRIAN LOADING:	N	(66) INVENTORY RATING:	470
(399) RAILROAD LOADING:	N	(64) OPERATING RATING:	785
(70) POSTING:	5 Equal to or above legal loads	(400) DATE OF RATING:	07 2014

(65) METHOD USED TO DETERMINE INVENTORY RATING: 1 1 Load Factor (LF) (63) METHOD USED TO DETERMINE OPERATING RATING: 1 Load Factor (LF)

	INVENTORY RATING		OPERAT	ING RATING
HL-93 Vehicle	(402)		(401)	
H-15 Vehicle	(404)	300	(403)	500
T3 (Dump Truck) Vehicle	(406)	335	(405)	560
T4 Reduced Lift Axle Vehicle	(408)	360	(407)	605
HS Vehicle	(410)	470	(409)	785
3S2 Vehicle	(412)	610	(411)	999
150K Vehicle	(414)	585	(413)	980
90K Permit Combination Vehicle	(416)	460	(415)	770
90K Mobile Crane Vehicle	(418)	375	(417)	630
90K Cargo Vehicle	(420)	565	(419)	945
80K Cargo Vehicle	(422)	600	(421)	999
120K Vehicle	(424)	585	(423)	975
108K Mobile Crane Vehicle	(426)	400	(425)	670
120K Mobile Crane Vehicle	(428)	480	(427)	800

(225) SPEED LIMIT ON STRUCTURE: Ν

(226) MIN VERT CLEARANCE OVER ROADWAY POSTED: Χ Posting signs not required

(227) MIN VERT UNDERCLEARANCE POSTED:

Posting signs not required

### **CONDITION INSPECTION**

### **FORM 7 OF 13**

	Inspection Month	(91) Frequency	Due Date	(90) Inspection Date	te (290) Inspection Report Completion Date
Routine Inspection	07	24	07/26/2025	07/26/2023	10/07/2019
Critical Feature Inspections	(291) Inspection Month	(92) Frequency	Due Date	(93) Critical Featur Inspection Date	е
(A) Fracture Critical Members		N			
(B) Underwater Inspection		N			
(C) Special Inspection		N			
(D) Hands-on Railroad		N			
(E) Confined Space		N			
(F) Ultrasonic Testing (UT) Pin		N			
(G) Ultrasonic Testing (UT) Anchol		N			
(H) Post Tensioning Bar		N			
(I) Cathodic Protection		N			
(J) Consultant		N			
(K) Movable Bridge		N			
(L) Suspension Bridge		N			
(M) Cable		N			
(N) Monitor		N			
(P) Flood					
(Q) Damages					
(R) Inquires	<u> </u>				
(58) DECK:	4 Poor Condition	(59) S	SUPERSTRUCT	URE: 4 P	oor Condition
(60) SUBSTRUCTURE:	5 Fair Condition	(61) C	HANNEL/PRO	TECTION: 6 B	ank slump. widespread iinor damage
(62) CULVERTS:	Not Applicable				
(310) INSPECTION DATA UPDATE	DATE: 03/25/2016	(312)	LEAD INSPEC	TOR: Wesley C.	Furman, P.E.
(311) INSPECTION TEAM:	YVOL	(313)	BRIDGE INSPE	CTOR: Gonzalo A	. Vargas, E.I.T.
(314) HOURS TO INSPECT: 010	(316) DECK P	PLANKING %:	N (31	5) DECK PUNCTUR	ES %: 00
(317) DECK PATCHING %: 00	(318) BLOCK	ING:	00 (31	9) POWER WASHIN	IG: N
(320) IDENTIFICATION NO.:	(321) INVENT	ORY DIRECTION:	WEST (32	3) PERMIT:	N
(324) NIGHT WORK:	(325) WEEKE	ND WORK:	N		
(322) LOOKING TOWARD: EVA	EVANS PARKWAY				
(326) MAINTENANCE OF TRAFFIC STANDARDS: N					
(327) MOT COMMENTS:					
(328) LOCATION OF MIN. VERT. UNDERCLEARANCE:					

(329A) CRITICAL FINDINGS: N (329B) CRITICAL FINDINGS DATE:
(330) CRITICAL FINDINGS COMMENTS:
(331) CAUTION COMMENTS: N
(332) UNDERCLEARANCE POSTING SIGNS: X Posting signs not required
(340) INSPECTION EQUIPMENT:
W Waders
(333) MHOI: N (334) MHOI LOCATIONS:
(335) ADVANCED NOTIFICATION: N
(336) ADVANCED NOTIFICATION COMMENTS:

APPRAISAL								FORM 8 OF 13
(67) STRUCTURAL EVAL	UATION:	4	BSR	(68) DECK GEOM	METRY:		4	
(69) UNDERCLEARANCE		N		(72) APPROACH		IENT:	8	
` '		7	61.8					
(36) TRAFFIC SAFETY	RAILINGS:	0	Does NOT meet Standards					
FEATURES	TRANSITIONS:	0	Does NOT m	eet Standards				
APPI	ROACH BARRIER:	0	Does NOT meet Standards					
APPROACE	H BARRIER ENDS:	0	Does NOT meet Standards					
(113) SCOUR EVALUATION	ON:	8P	Bridge is a culvert-type structure with paved bottom.					
(DT) DEDUCT CODE: Z								
(STAT) STATUS:		1	Structural	ly Deficient				
NAVIGATION								FORM 9 OF 13
(38) NAVIGATION CONTROL: 0 (39) NAV VERT CLEARANCE: 000					000			
(40) NAV HORIZONTAL C	LEARANCE:	000	00					
(111) PIER/ABUTMENT PI	ROTECTION:							
(116) MIN NAV VERT CLE	ARANCE, VER	T LIFT E	BRIDGE:					
(247) DESIGN YEAR STO	RM:			(248) RUN	l-OFF Q:			
(249) DRAINAGE AREA: (250) STRUCTURE IN TIDAL AREA: N No								
(251) HIGH WATER ELEVATION:								
(252) YEAR HIGH WATER ELEVATION - LATEST: N								
HISTORY AND PR	ROPOSED	IMPR	OVEME	NTS			I	FORM 10 OF 13
(201) CONTRACT NUMBE	RS:				]			
					]			
(203) SHA SPEC- YEAR:	19	57	N I	N N				
(204) AASHTO SPEC-YEA	<b>NR</b> : 19	57	N	N N				
(75) TYPE OF PROPOSED	) WORK: 35	1	(76	) LENGTH OF IMPROVE	MENT:	000040		
(94) BRIDGE IMPROVE C	OST: 000	)375	(95	) ROADWAY IMPROVE (	COST:	000038		
(96) TOTAL PROJECT CO	OST: 000	)563	(97	) YEAR OF IMPROVEME	NT:	2017	Ī	

(558) WITH NOISE BARRIER:

(260) UTILITIES - ON:  (261) UTILITIES - ON:  (261) UTILITIES - UNDER:  (261) Not Applicable  (261) Not Applic	MISCELLANEOUS (244) SIGNS ON STRUCTURE:  (246) PROVISION FOR ROADWAY LIGHTING:  N No	FORM 11 OF 13 (245) BRIDGE ROADWY LIGHTING:  N No
2022 ADT = 8,504; 2023 estimated ADT and Future ADT values were revised based on a annual growth rate of 1.00%.  NOISE BARRIER  (501) TYPE: N_ N_ N_ N_ (502) ALIGNMENT: N N N N N (503) LENGTH: (505) FOUNDATION TYPES: N N N N (506) FOUNDATION LENGTH: (507) PANEL WIDTH: (508) NUMBER OF SPECIAL PANEL(S): (509) PANEL MATERIAL: N N N N (510) FACING (Acoustic Treatment): N (511) PANEL FINISH: N_ N_ (512) PANEL COLOR: N_ N_ (513) FEDERAL COLOR: (514) STACKED PANELS: X (515) NOISE BARRIER POST MATERIAL: N (516) ACCESS DOORS: (517) FIRE HYDRANTS: (518) RETROFITS: X  RETAINING WALL  FORM 13 OF 13 (550) TYPE: N_ N_ N_ (551) ALIGNMENT: N_ N_ N_ N_ (552) SEGMENT LENGTH(S): (553) MAX. EXPOSED HEIGHT:	(260) UTILITIES - ON:  O Not Applicable	O Not Applicable O Not Applicable O Not Applicable O Not Applicable
(501) TYPE: N_ N_ N_ N_ (502) ALIGNMENT: N N N N N (503) LENGTH: (504) MAXIMUM HEIGHT: (505) FOUNDATION TYPES: N N N N N (506) FOUNDATION LENGTH: (507) PANEL WIDTH: (508) NUMBER OF SPECIAL PANEL(S): (509) PANEL MATERIAL: N N N N (510) FACING (Acoustic Treatment): N (511) PANEL FINISH: N N (512) PANEL COLOR: N N (513) FEDERAL COLOR: (514) STACKED PANELS: X (515) NOISE BARRIER POST MATERIAL: N (516) ACCESS DOORS: (517) FIRE HYDRANTS: (518) RETROFITS: X (518) RETROFITS: X (550) TYPE: N N N N N N N N N N N N N N N N N N N		values were revised based on a annual growth rate of 1.00%.
(550) TYPE: N_ N_ N_ N_ (551) ALIGNMENT: N N N N (552) SEGMENT LENGTH(S): (553) MAX. EXPOSED HEIGHT:	(501) TYPE: N_ N_ N_ N_ (504) MAXIMUM H (505) FOUNDATION TYPES: N N N N N (507) PANEL WIDTH:	(502) ALIGNMENT: N N N N  EIGHT:   (506) FOUNDATION LENGTH:   (508) NUMBER OF SPECIAL PANEL(S):   (510) FACING (Acoustic Treatment): N  (512) PANEL COLOR: N N N N N N N N N N N N N N N N N N N
	(550) TYPE: N_ N_ N_ N_ (552) SEGMENT LENGTH(S):	(551) ALIGNMENT: N N N N  (553) MAX. EXPOSED HEIGHT:

Χ

(559) PURPOSE:

Montgomery County, Maryland
Department of Transportation
Division of Transportation Engineering
100 Edison Park Drive, 4th Floor
Gaithersburg, Maryland 20878