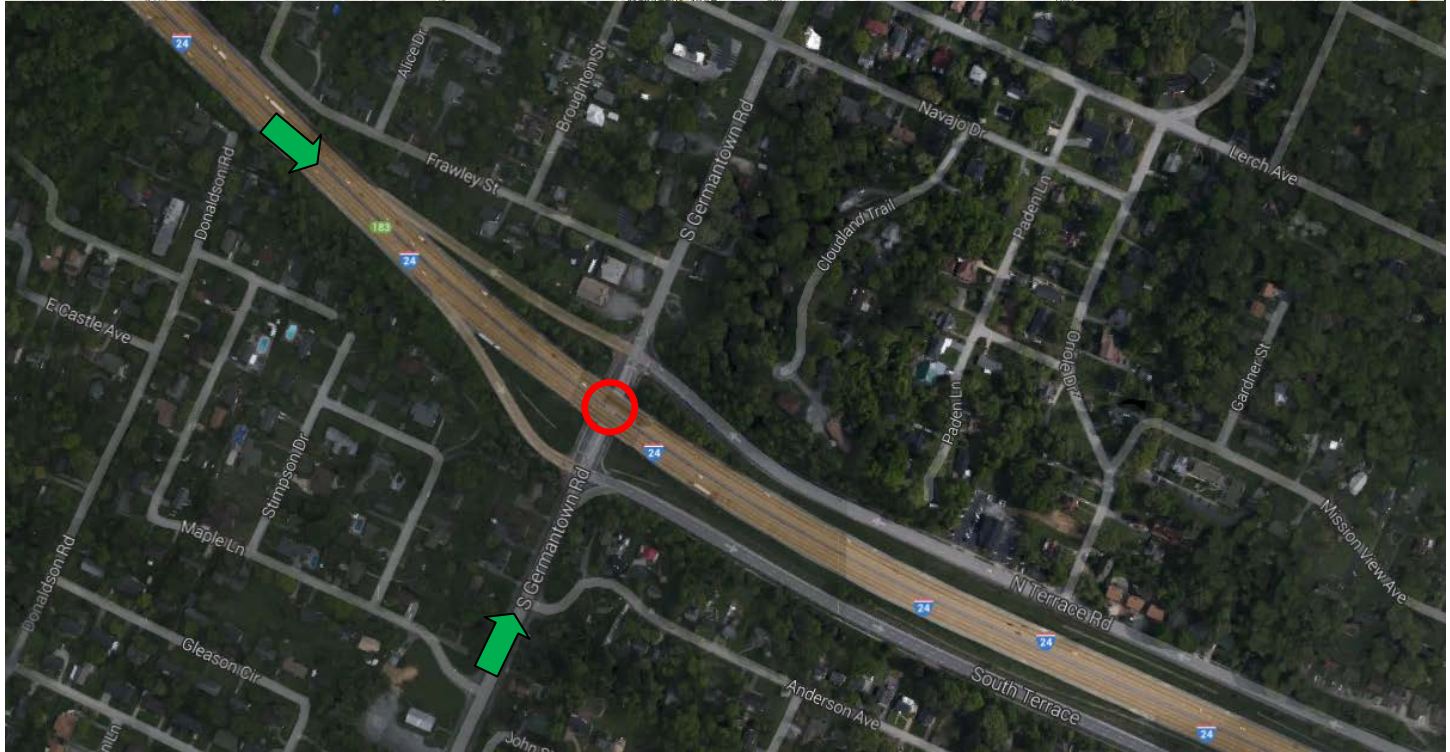
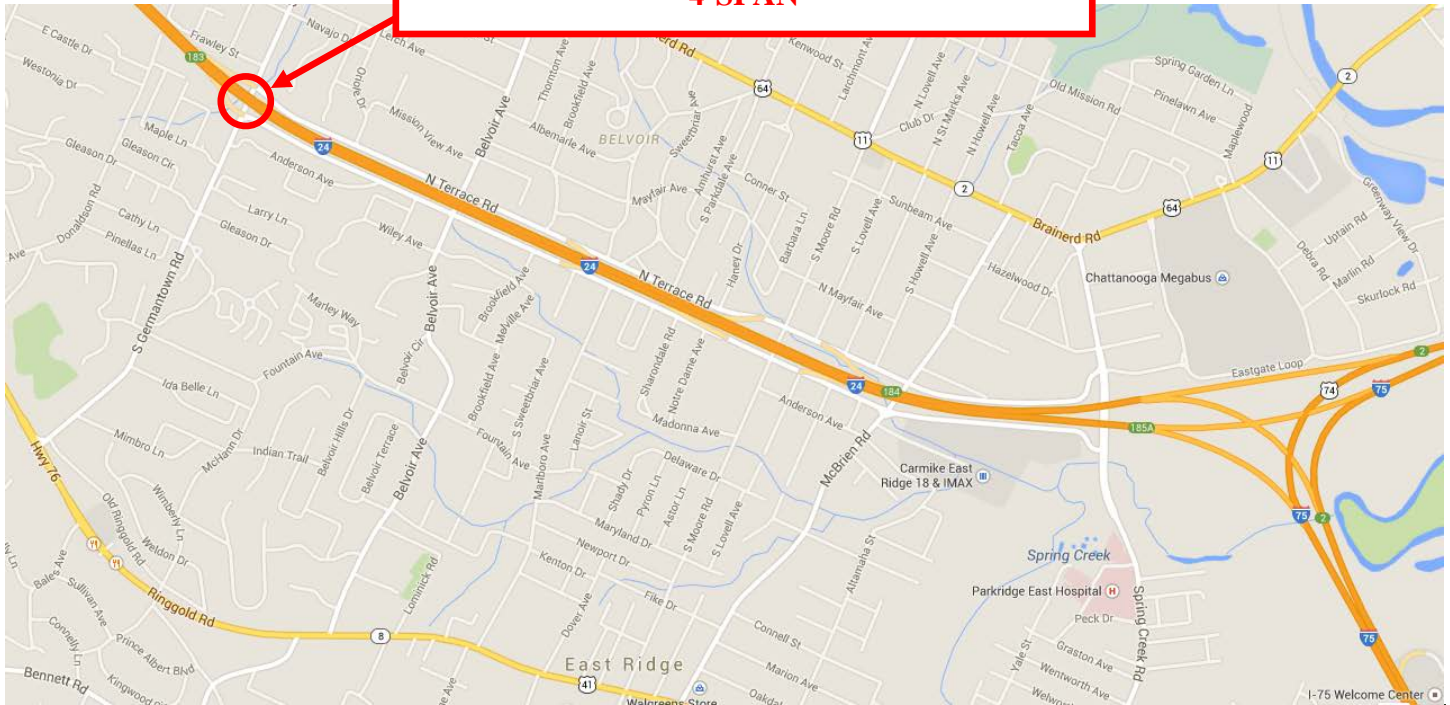




# HAMILTON COUNTY



**33-I0024-12.08**  
**33I00240055**  
**I-24 EB/WB OVER S. Germantown Road**  
**(FAU 3577 LM 0.90)**  
**4-SPAN**



**PRODUCED PURSUANT TO  
 PUBLIC RECORDS REQUEST  
 This document is covered by 23 USC §409  
 And its production pursuant to a public  
 document records request does not  
 waive the provisions of §409**

INDICATES ROUTE DIRECTION

INDICATES WATERFLOW DIRECTION

**BRIDGE MAINTENANCE RECOMMENDATIONS**



Tennessee Department  
of Transportation

COUNTY: HAMILTON  
 LOCATION: 33-I0024-12.08-  
 CO. SEQ.: 2 SPEC. CASE: 0  
 MILEPOST: 183.05

CROSSING: GERMANTOWN RD (FAU 3577)  
 FED. BRIDGE NO.: 33I00240055  
 MAINT. DIST.: 33

REPAIR LIST NO.: 2  
 DATE ADDED: 07/08/2014  
 REVISED: 10/06/2016

FACILITY CARRIED:	I24	NUMBER OF MAIN SPANS:	4
HIGHWAY SYSTEM:	02-INTERSTATE URBAN	NUMBER OF APPROACH SPANS:	0
BRIDGE WIDTH (CURB TO CURB):	78 FT 1 IN	BRIDGE LENGTH (FT):	166
BRIDGE WIDTH (OUT TO OUT):	100 FT 4 IN	MAXIMUM SPAN LENGTH (FT):	46
APPROACH ROADWAY (W/SHOULDERS):	78 FT 1 IN	SKEW ANGLE (DEGREES):	79
MAINTAINED BY:	STATE HIGHWAY AGENCY		
MAIN SPAN MATERIAL:	CONCRETE		
MAIN SPAN DESIGN TYPE:	TEE BEAM		
APPROACH SPAN MATERIAL:	OTHER OR NOT APPLICABLE		
APPROACH SPAN DESIGN TYPE:	OTHER OR NOT APPLICABLE		
INSPECTION DATE:	10/04/2016	GENERAL CONDITION:	GOOD
EVALUATION DATE:	11/04/2014	STRUCTURALLY DEFICIENT:	YES
PPRM PIN NUMBER:		SUFFICIENCY RATING:	30.9
H TRUCK RATING @ INV.:	20 TONS		

<b>SUGGESTED ROUTINE MAINTENANCE AND COMMENTS</b>
LEVEL THE WEARING SURFACE
LEVEL THE WEARING SURFACE AT APPROACH NO. 1 & 2 - WESTBOUND

<b>GENERAL COMMENTS:</b>
BRIDGE REPAIR WAS LET ON 02/03/2006 (CONTRACT # CNE084, PIN # 105708.00)



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

# Bridge Condition Coding Form

Revised 10/06/2016

Bridge Number: 33I002400551  
(Includes Item 5A)

Feature Intersected: GERMANTOWN RD (FAU 3577)

Evaluation Status: CONDITION ITEM CHANGE

County: 33

Route: I0024

Special Case: 0

County Sequence: 2

Log Mile: 12.08

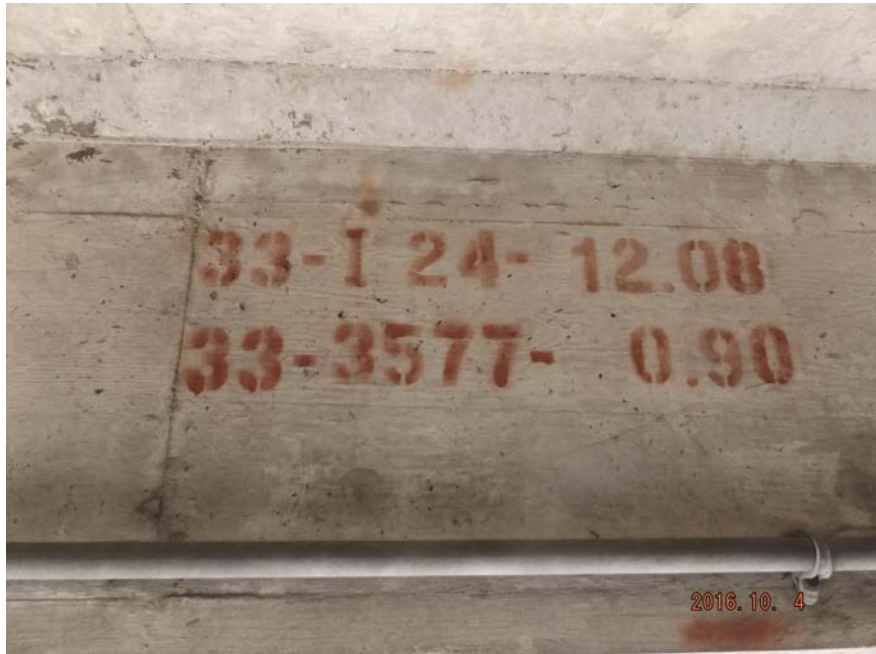
## CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	CONDITION CODING GUIDELINES
90	LAST INSPECTION DATE	<b>10/04/2016</b>	(Values for Coding Items 58, 59, 60 and 62)
	EARLIEST DATE OF NEXT REGULAR INSPECTION	<b>08/05/2018</b>	
		<u>    /    /    </u>	
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	99 FT. 99 IN.	N NOT APPLICABLE
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	99 FT. 99 IN.	9 EXCELLENT CONDITION
36	TRAFFIC SAFETY FEATURES		8 VERY GOOD CONDITION - NO PROBLEMS NOTED.
	Br. Rail	1	7 GOOD CONDITION - SOME MINOR PROBLEMS.
	Trans.	0	6 SATISFACTORY CONDITION - MINOR DETERIORATION OF STRUCTURAL ELEMENTS.
	Appr. Rail	0	5 FAIR CONDITION - ALL PRIMARY STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS, CRACKING, SPALLING OR SCOUR.
	Terminal	0	4 POOR CONDITION - ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.
	SPEED LIMIT	55	3 SERIOUS CONDITION - LOSS OF SECTION, DETERIORATION, SPALLING OR SCOUR HAVE SERIOUSLY AFFECTED PRIMARY STRUCTURAL COMPONENTS. LOCAL FAILURES ARE POSSIBLE. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT.
41	STRC OPEN/CLOSED/POSTED	A	2 CRITICAL CONDITION - ADVANCED DETERIORATION OF PRIMARY STRUCTURAL ELEMENTS. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT OR SCOUR MAY HAVE REMOVED SUBSTRUCTURE SUPPORT. UNLESS CLOSELY MONITORED IT MAY BE NECESSARY TO CLOSE THE BRIDGE UNTIL CORRECTIVE ACTION IS TAKEN.
	A		1 "IMMINENT" FAILURE CONDITION - MAJOR DETERIORATION OR SECTION LOSS PRESENT IN CRITICAL STRUCTURAL COMPONENTS OR OBVIOUS VERTICAL OR HORIZONTAL MOVEMENT AFFECTING STRUCTURAL STABILITY. BRIDGE IS CLOSED TO TRAFFIC BUT CORRECTIVE ACTION MAY PUT IT BACK IN LIGHT SERVICE.
	K		0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.
	P		
58	DECK	7	
59	SUPERSTRUCTURE	6	
60	SUBSTRUCTURE	7	
61	CHANL/CHANL PROTECTION	N	
62	CULVERT AND RETAIN WALL	N	
71	WATERWAY ADEQUACY	N	
72	APPROACH RDWY ALIGNMENT	8	
521	OVERALL CONDITION	GOOD	
16	LATITUDE	N 35° .8590'	
17	LONGITUDE	W 85° 15.1300'	
		<u>    /    /    </u>	
	TEAM LEADER SIGNATURE	REVIEW DATE	

# Photographs

Bridge ID#: 33I00240055

Date: 10/04/2016



#1 RIGHT SIDE



LOOKING AHEAD ON STRUCTURE

# Photographs



CLEARANCE AHEAD



CLEARANCE-BACK

# Photographs



RIGHT SIDEVIEW - AHEAD



LEFT SIDEVIEW - BACK

# Photographs



SUPER/SUB STRUCTURE - SPAN 2 - TYPICAL



SUPER/SUB STRUCTURE - ABUTMENT 1 - TYPICAL

# Photographs



BEARINGS - ABUTMENT - ABUTMENT 1



BEARINGS - BENT 1



# Photographs



BEARINGS - BENT 2



APPROACH 1

# Photographs



WEARING SURFACE



TRAFFIC SAFETY FEATURES - GUARD RAIL

# Photographs



BENT 1 - NEW - REINFORCEMENTS - TYPICAL



BENT 1 - SPALL - REBAR

# BRIDGE INSPECTION REPORT

Form BIR 3.0  
(Rev. 9-22-98)  
DT-0069

Field Report No. 23 Date 10/4/2016  
Previous Report No. 22 Date 10/21/2014  
Plans: DESIGN

Bridge No. 33100240055  
Eleven Digit No.

Bridge Location No. 33 - 10024 - 1208  
Co. Route Log Mile

I 24 EBL & WBL over \_\_\_\_\_  
Road Name Crossing Structure Name (If Named)  
Year Constructed 1964 - ACTUAL County Hamilton Maintenance District: 29  
Year Widened 1983 - ACTUAL Year Rehabilitated 1983 - ACTUAL

## FEATURES

Wearing Surface ASPHALT Depth 3.0 in  
 Flared Width Median Width OPEN ft  
 Navigation Control Bridge Skew 9° - RT  
Structure Type (Main) | CDG  
Structure Type (Appr.) | NA  
No. Main Spans 4 No. Approach Spans 0  
Maximum Span Length 46.0 ft  
Total Length 166.0 ft

## TEAM LEADER

F. Watkins

## INSPECTORS

G. Haas  
M. Shelton  
J. Edwards

## WIDTHS (\*.\* ft.)

Deck Out-to-Out 100.2 ft  
Roadway Curb/Curb NA ft  
Roadway Rail/Rail 2@45 ft  
Sidewalk Rt. NONE ft Lt. NONE ft  
\*Approach Roadway \_\_\_\_\_  
\*(Does Not Include Shoulders)  
Approach Shoulder Rt. \_\_\_\_\_  
Lt. \_\_\_\_\_

## CLEARANCES

Min. Vertical Clearance over Deck \_\_\_\_\_  
Min. Vertical Under Clearance \_\_\_\_\_  
Min. Lateral Under Clearance Rt. 39 ft  
Min. Lateral Under Clearance Lt. \_\_\_\_\_  
 Fracture Critical Bridge \_\_\_\_\_  
(If Yes, Include BIR 3.9)  
 NBIS Bridge (Length > 20ft)

## UNDERWATER INSPECTION

To Be Performed By: \_\_\_\_\_ Date \_\_\_\_\_

Change in Structural Condition  Major Repairs Made BRIDGE is: OPEN

## COORDINATES

Latitude: N ° '  
Longitude: W ° '  
Date Collected:

## EQUIPMENT + RESOURCES

Tape / Laser  Reach All  Big Boat  Traffic Control - TDOT  
 Ladder  Bucket Truck  Little Boat  Traffic Control - Bridge  
 Flashlight Other::

## General Inspection Comments:

Supervising Bridge Inspector: F. Watkins

BRIDGE RATING: GOOD

**PERFORMANCE EVALUATION**

Time of Day Inspected PM Weather Conditions ° - CLEAR 72F  
Vehicles Observed ALL TYPES

**LIVE LOAD BEHAVIOR**

Substructure	Yes/No	Comments
Horiz./ Vert. Defl.	NO	
Vibration	NO	
Superstructure		
Horiz./ Vert. Defl.	NO	
Vibration	NO	

**APPROACH**

Alignment: TRIMS Item72

	Rating	Comments
Alignment	GOOD	
Slab	NV	OVERLAYED
Joints	NV	OVERLAYED
Pavement	POOR	ASPHALT BREAKING UP, ROUGH
Slope	GOOD	
Drains	GOOD	

**TRAFFIC SAFETY FEATURES**

TRIMS Item 36	Rating	Standard/ NonStandard	Comments
A - Bridgerailing	GOOD	STANDARD	
B - Transitions	GOOD	NONSTANDARD	METAL BLOCKS
C - Approach Rail	GOOD	NONSTANDARD	METAL BLOCKS
D - Guardrail Termin	GOOD	NONSTANDARD	
Median	GOOD		

**SIGNS POSTED ON ROUT**

Weight Limit Posted

Paddleboards NO Gross.....          Tons  
 Vertical Clearance (<14'-6") YES Height Posted 2 Axle.....          Tons  
 Narrow Bridge Signs NO 3 or more Axles.          Tons  
 One Lane Bridge Signs NO  
 Other Signs or Plaques:

**ATTACHED SIGNS**

Sign Number: | 1. | | 2. | | 3.  
 Location: | | | | |  
 Directions: | | | | |

Problems with Signs:

**DECK**

	Rating	Comments
Wearing Surface	GOOD	<i>ROUGH, UNEVEN, ESPECIALLY WBL. MULTIPLE PATCHES</i>
Deck - TRIMS Item 58	5	
Deck - Structural Condition	FAIR	<i>HL CRACKS W/ EFF, PATCHES, DELAMS, SPALLS, HL MAP-CRACKING</i>
Curbs	NONE	
Median	GOOD	
Sidewalks	NONE	
Paint	NA	
Drains	G-P	<i>WBL ARE OPEN. EBL ARE COVERED.</i>
Lighting Standards	GOOD	
Utilities	NONE	
Joint Leakage	FAIR	<i>LEAKAGE ONTO BENT CAPS.</i>
Expansion Joints	NV	<i>OVERLAYED</i>

**SUPERSTRUCTURE**

Super: TRIMS Item 59	6	
Bearing Devices	GOOD	
Girders or Beams	G-F	<i>HL-SM CRACKS, DELAMS, SPALLS, PATCHES, LARGE CRACK @ ENDS.</i>
Floor Beams	NA	
Stringers	NA	
Diaphragms	GOOD	
Bracing	NA	
Paint	NA	
Alignment of Members	GOOD	
Trusses - General	NA	
Portals	NA	
Bracing	NA	

**TEXTURE COAT**

Condition Rating	<u>FAIR</u>	Needs Spot Painting	<u>NO</u>
Overall Appearance	<u>FAIR</u>	Needs Repainting	<u>YES</u>
Staining Rating	<u>GOOD</u>	Comments	
Fading Rating	<u>GOOD</u>		
Scaling Rating	<u>GOOD</u>		

**SUBSTRUCTURE**

Substructure - TRIMS Item 60	6	
---------------------------------	---	--

<b><u>ABUTMENTS</u></b>	Rating	Comments
Caps	GOOD	
Stem:	GOOD	<i>TEXTURE COATED.</i>
Wings	GOOD	<i>TEXTURE COATED</i>
Backwall	GOOD	
Plumb	GOOD	
Footing	NV	
Piles	NV	
Embankment	GOOD	
Bridge Seat:	GOOD	
Rip Rap	NA	

**BENTS**

Bridge Seat:	POOR	<i>SPAN 1 - BENT 1 - SIGNIFICANT LOSS OF ORIGINAL BEARING AREA</i>
Caps	POOR	<i>SPAN 1 - BENT 1 - SIGNIFICANT REBAR SPALLS</i>
Columns / Shaft	FAIR	<i>SPALLS, DELAMS</i>
Pier / Crash Walls:		
Plumb	GOOD	
Footings	NV	
Piles	NV	

Piles Need Replacement: NO

Piles To Be Replaced:

## Inspection Team's Summary

### Structure ID

Federal ID:	33I00240055
Location:	33 - I0024 - 1208
Road Carried:	I 24 EBL & WBL
Direction of Route Carried:	
Traffic Direction on Bridge:	

### Featured Intersection

Waterway:	
Underpass A:	03577
Underpass B:	03577
Overpass:	I0024

### Ratings and Comments

Overall Bridge Rating:	GOOD
	Span 1 - Bent 1 - Cap - Steel reinforcement installed on beams
Approach Roadway Alignment: TRIMS Item 72	

### Traffic Safety Features

Bridge Rail: Item 36 A	Approach Rail: Item 36 C
Transitions: Item 36 B	Terminals: Item 36 D

Deck: TRIMS Item 58	5
Superstructure: TRIMS Item 59	6
Substructure: TRIMS Item 60	6
Culvert: TRIMS Item 62	
Waterway Channel: TRIMS Item 61	N
Waterway Adequacy: TRIMS Item 71	
Overall Channel Rating:	
General Inspection Comments:	

Inspection Date:	10/4/2016
County:	Hamilton
Closeout Agency:	State/Federal
Bridge Is:	OPEN

Structure is Fracture Critical

### Underwater Inspection

Underwater Inspection Required

Inspection Date
Inspector:
Report Comments:



**ELEVATIONS OF DECK**

PAGE NO. \_\_\_\_\_

BRIDGE LOCATION NO. 33 I24 12.08L (19.44)  
COUNTY ROUTE LOG MILE (LOG km)

DATE: =

STATION/ LOCATION	TOP OF LT. CURB/RAIL	GUTTER/ EDGE DECK	CENTERLINE	GUTTER/ EDGE DECK	TOP OF RT. CURB/RAIL
ABUT # 1					
BENT # 1					
BENT # 2					
BENT # 3					
ABUT # 2					

BENCH MARK LOCATION \_\_\_\_\_  
\_\_\_\_\_

BENCH MARK ELEVATION \_\_\_\_\_

Top of Deck Span No. 1

Date 10/04/2016

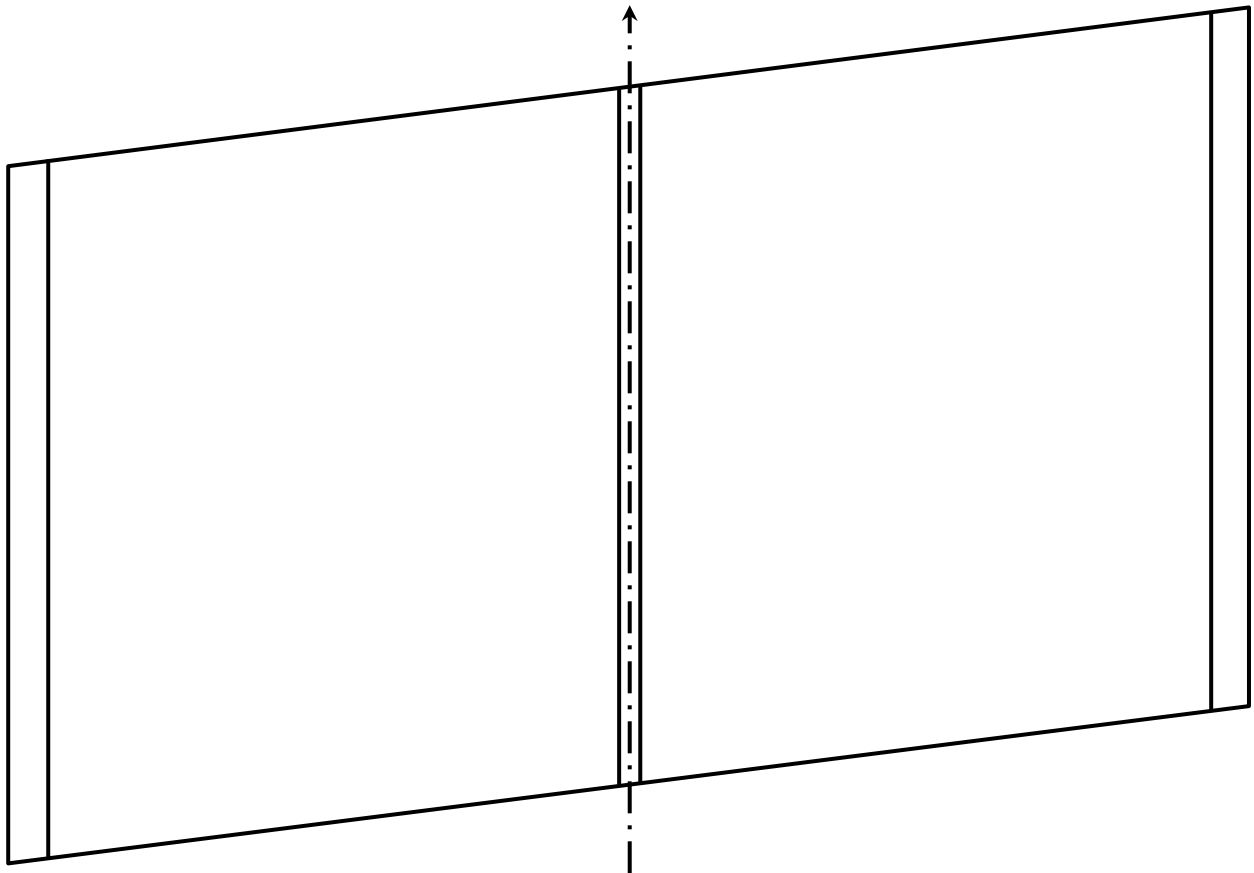
Bridge Location No. 33 I0024 12.08 **over** 33 03577 0.90  
County Route Log Mile County Route Log Mile

App Pvmt: G

App Rail: G

Wearing surface: F

Bridge Rail: G



EBL

WBL

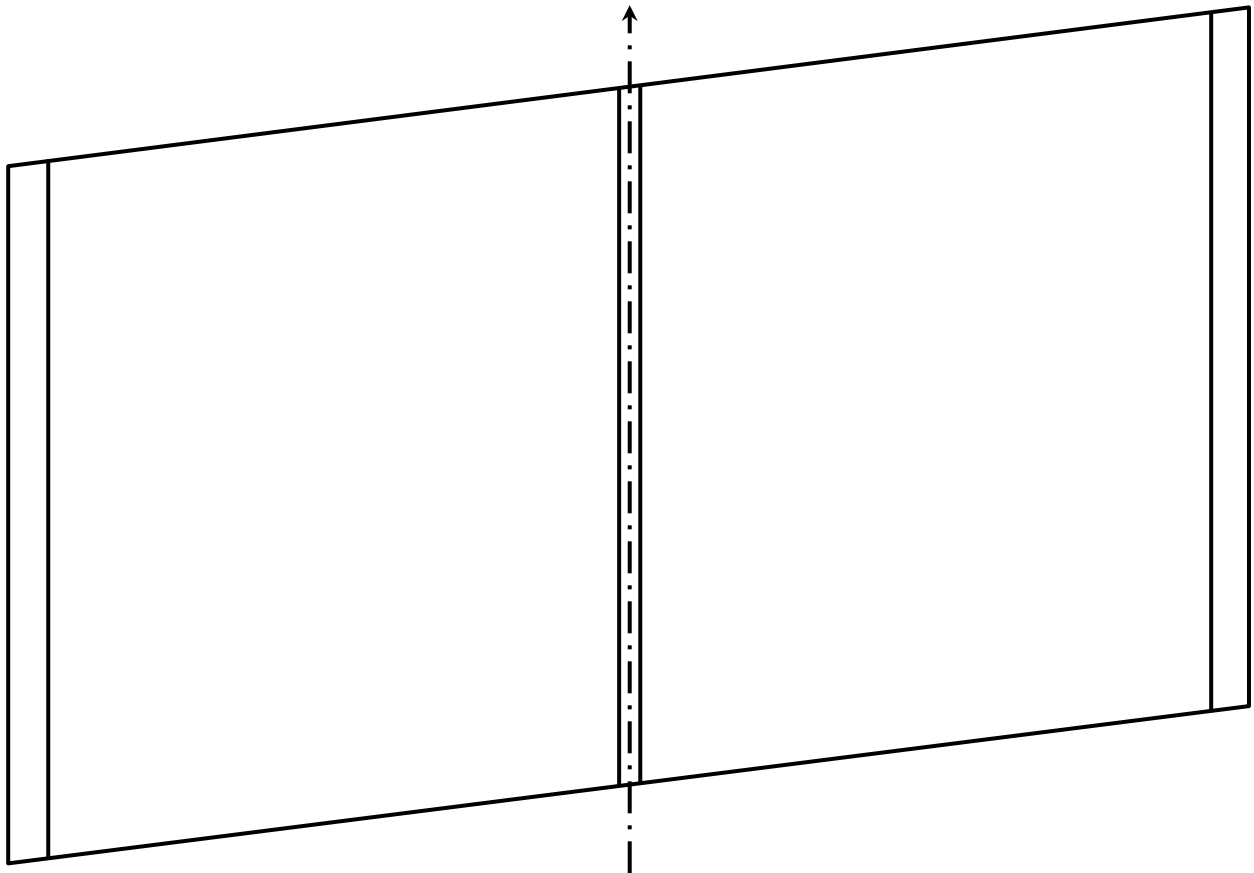
Top of Deck Span No. 2

Date 10/04/2016

Bridge Location No. 33 I0024 12.08 **over** 33 03577 0.90  
County Route Log Mile County Route Log Mile

Wearing Surface: F

Bridge Rail: G



EBL

WBL

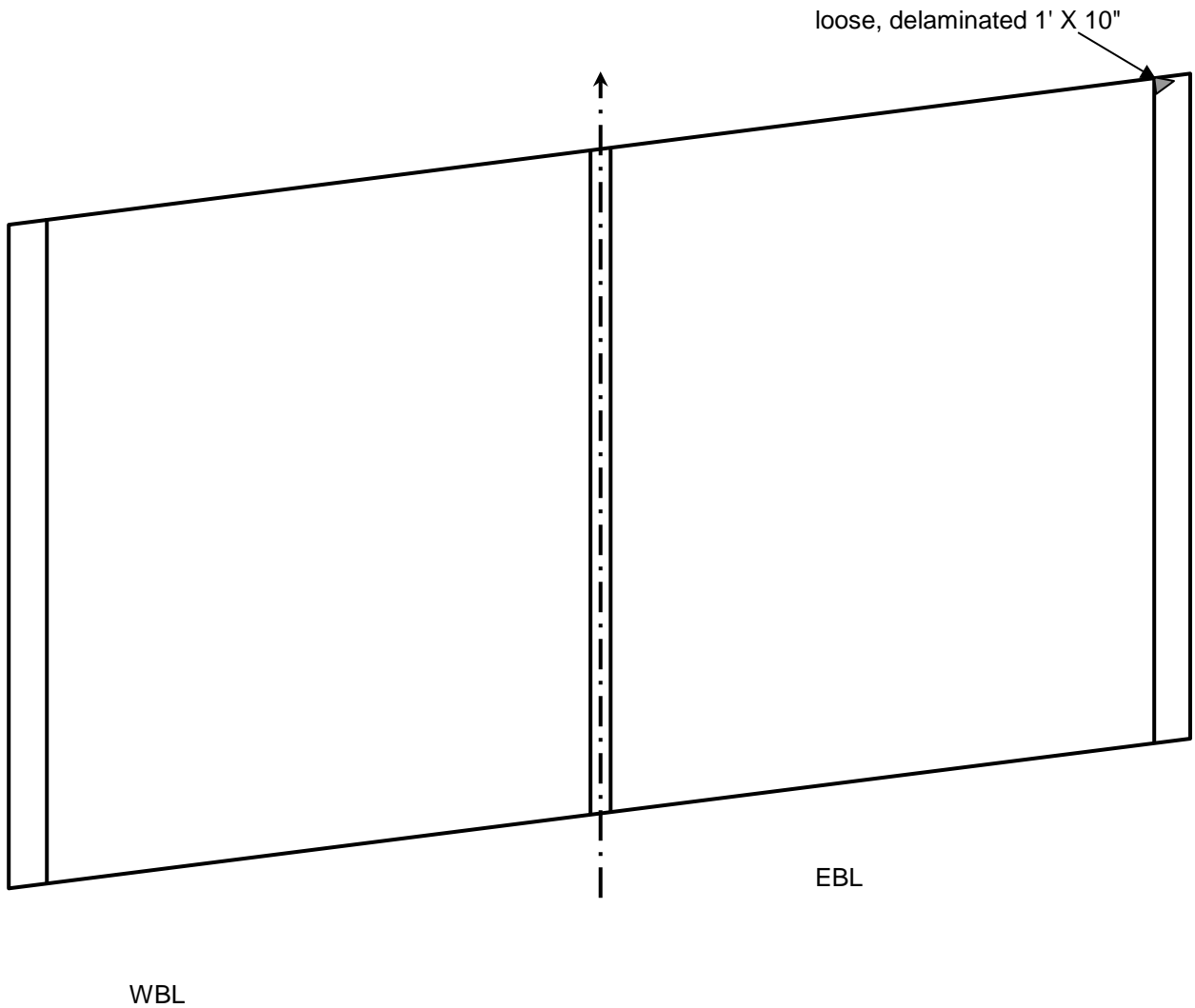
Top of Deck Span No. 3

Date 10/04/2016

Bridge Location No. 33 I0024 12.08 **over** 33 03577 0.90  
County Route Log Mile County Route Log Mile

Wearing Surface: P

Bridge Rail: G



Top of Deck Span No. 4

Date 10/04/2016

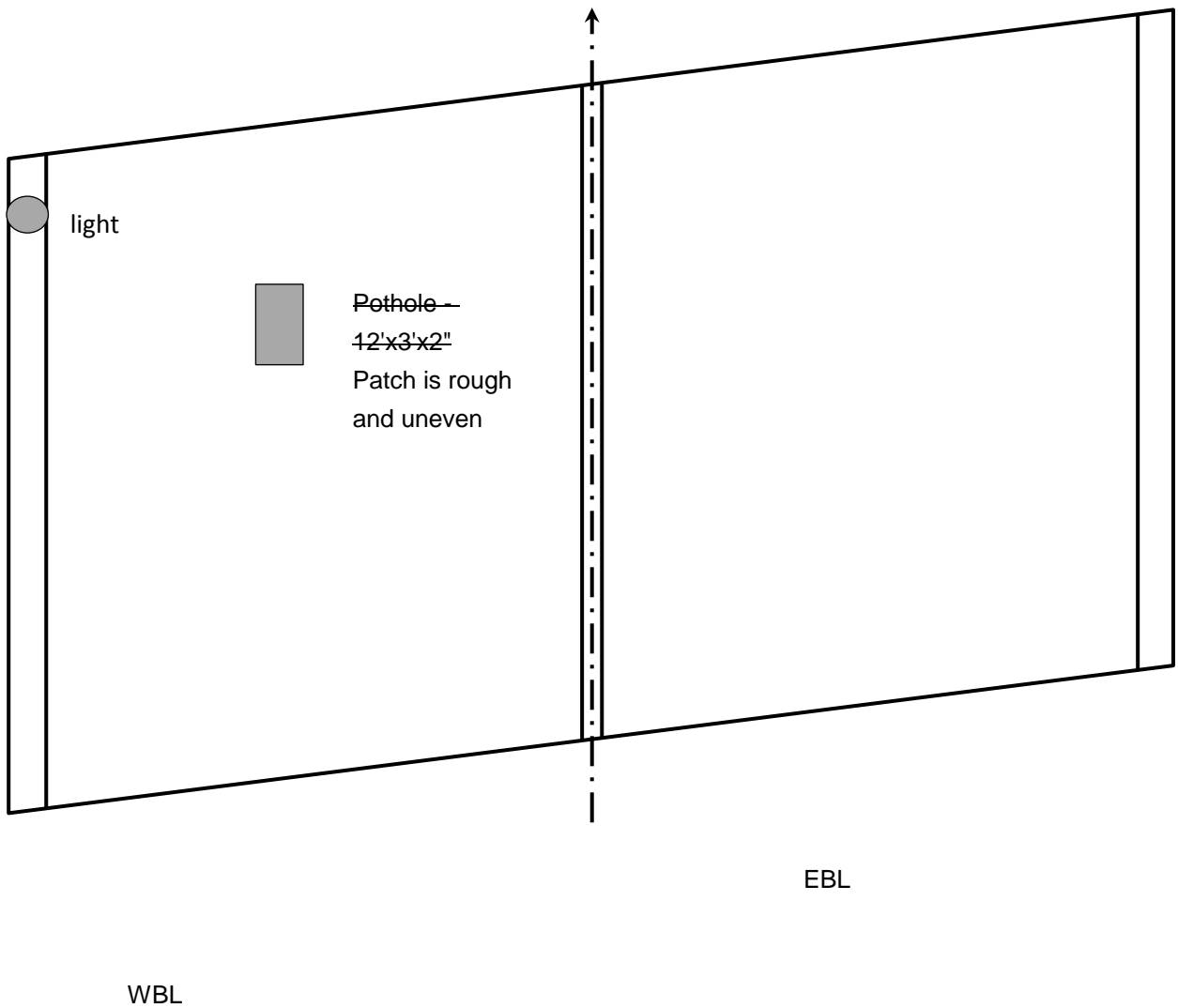
Bridge Location No. 33 I0024 12.08 **over** 33 03577 0.90  
County Route Log Mile County Route Log Mile

App Pvmnt: G

App Rail: G

Wearing surface: P

Bridge Rail: G



# Bottom of Deck Span No. 1

Date 10/04/2016

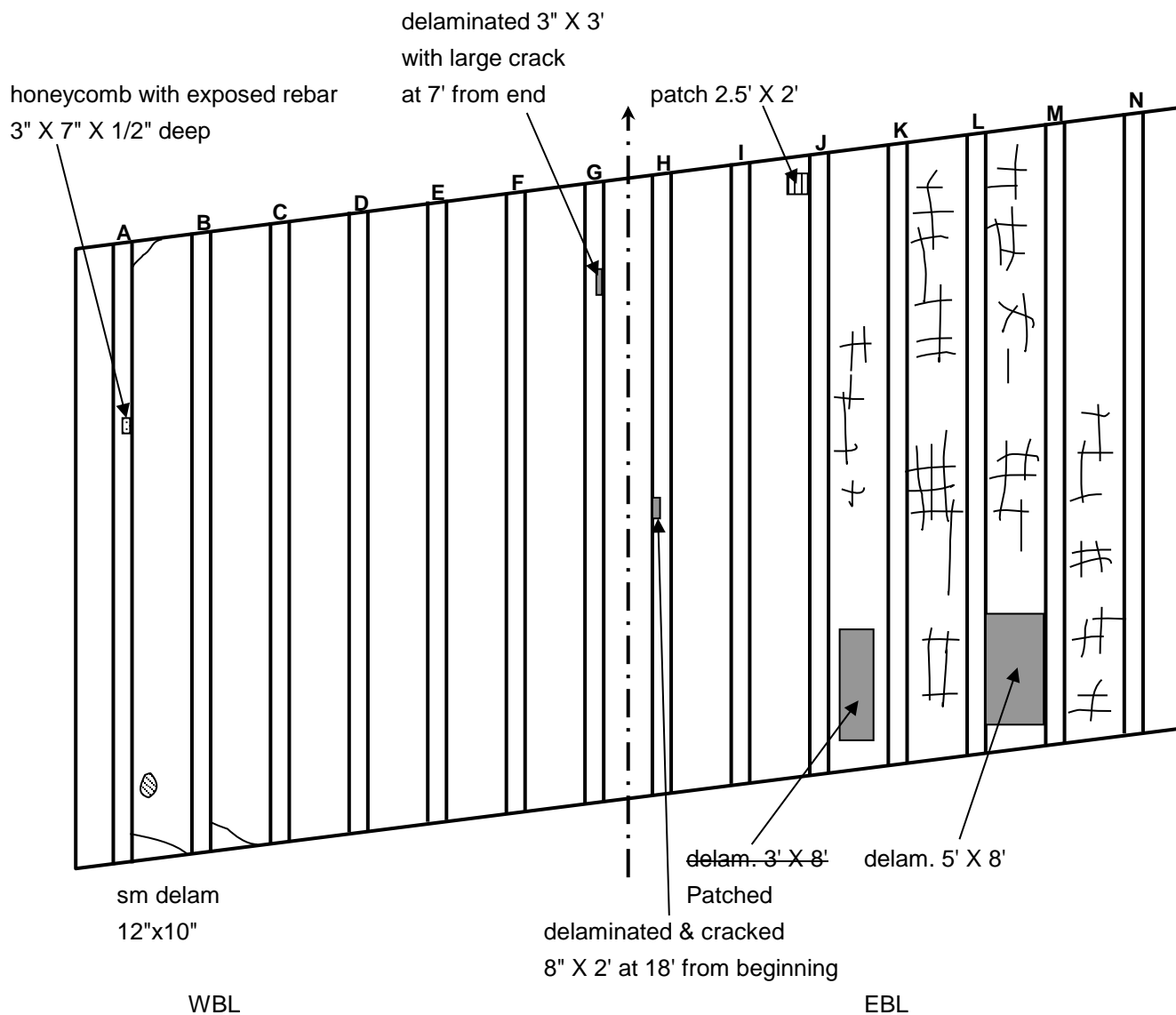
Bridge Location No. 33 I0024 12.08 **over** 33 03577 0.90  
 County Route Log Mile County Route Log Mile

Beams: GF beams A-G have steel reinforcement repairs at bent 1

Deck: G

cracks are hairline, some with efflorescence

surface cracks on sides of beams in e.b.l.



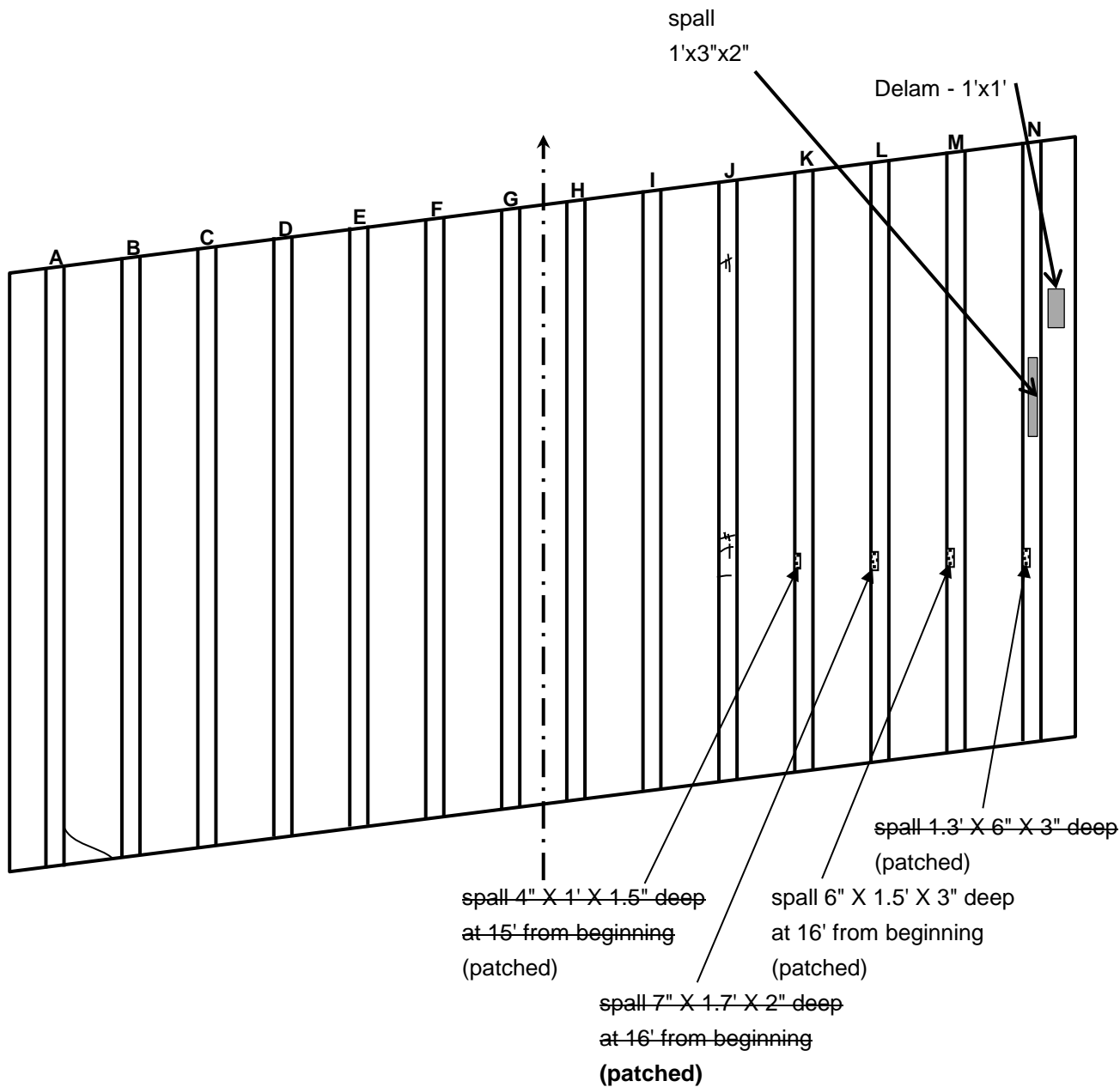
Bottom of Deck Span No. 2

Date 10/04/2016

Bridge Location No. 33 I0024 12.08 **over** 33 03577 0.90  
County Route Log Mile County Route Log Mile

Beams: GF

Deck: F



# Bottom of Deck Span No. 3

Date 10/04/2016

Bridge Location No. 33 I0024 12.08 **over** 33 03577 0.90  
 County Route Log Mile County Route Log Mile

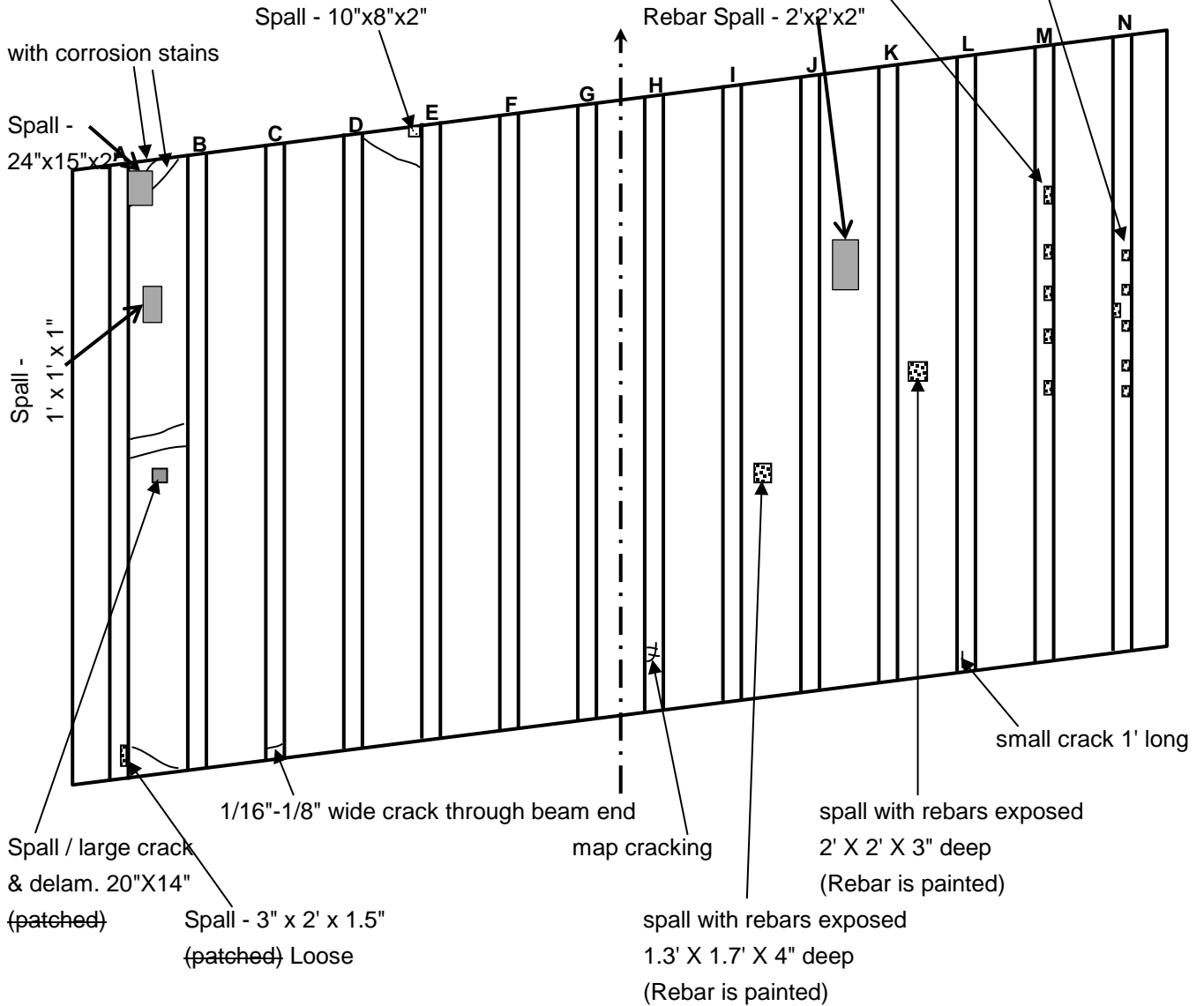
Beams: F

Deck: F

cracks are hairline  
 unless noted otherwise  
 some with efflorescence

spalls along edge of beam M  
 3" X 1' X 1" deep, 4" X 6" X 2" deep,  
 4" X 5" X 1" deep, 6" X 7" X 1" deep  
 & 6" X 8" X 1" deep

spalls in beam N  
 2" X 3"-9"





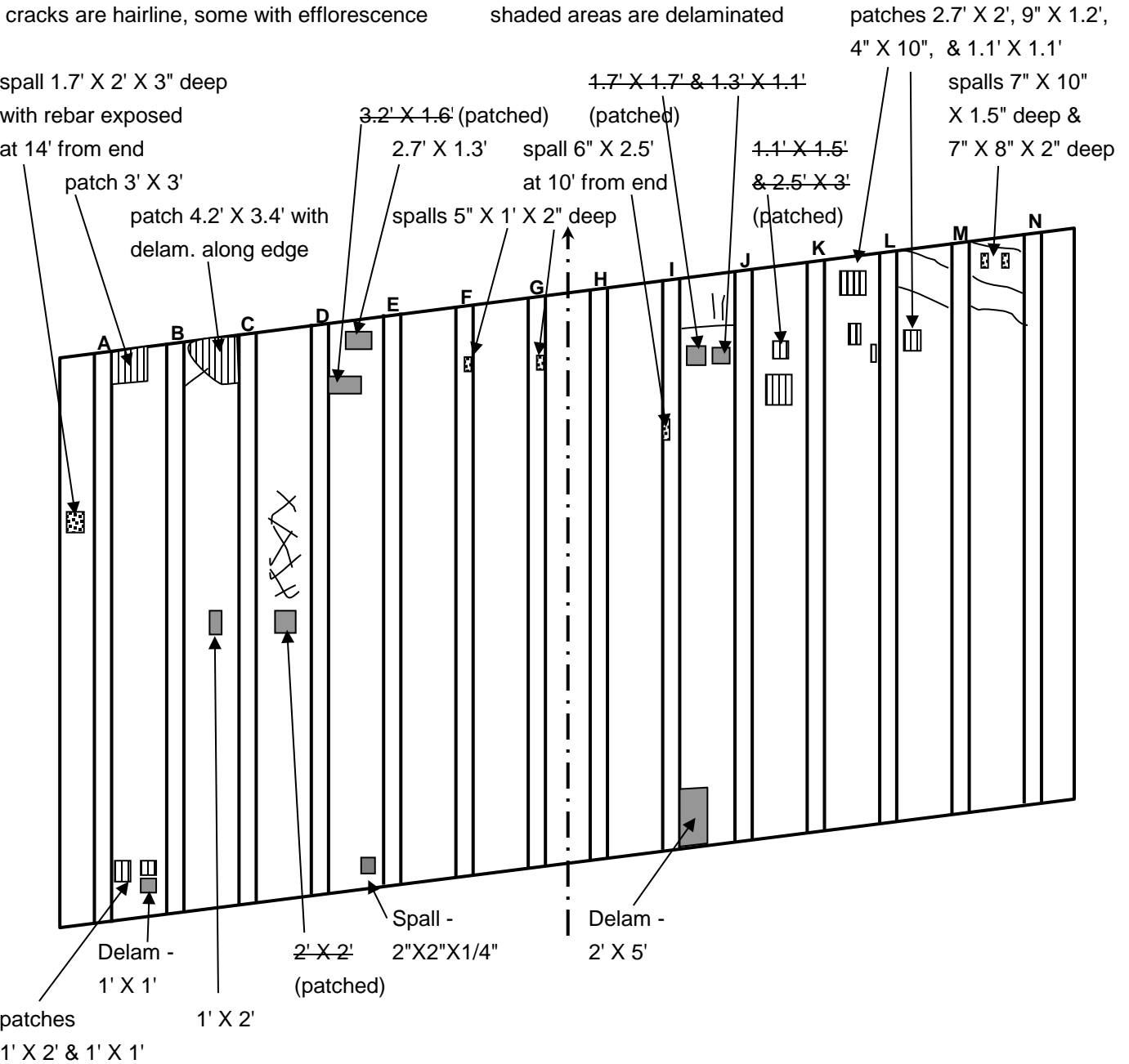
# Bottom of Deck Span No. 4

Date 10/04/2016

Bridge Location No. 33 I0024 12.08 **over** 33 03577 0.90  
 County Route Log Mile County Route Log Mile

Beams: GF

Deck: F



Abutment No. 1

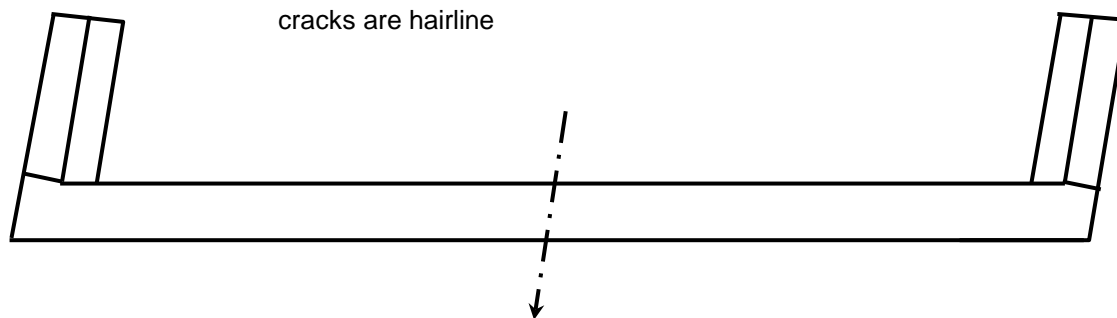
Date 10/04/2016

Bridge Location No. 33 I0024 12.08 **over** 33 03577 0.90  
County Route Log Mile County Route Log Mile

Wings: G

Walls: G

Bearings: G



# Bent No. 1

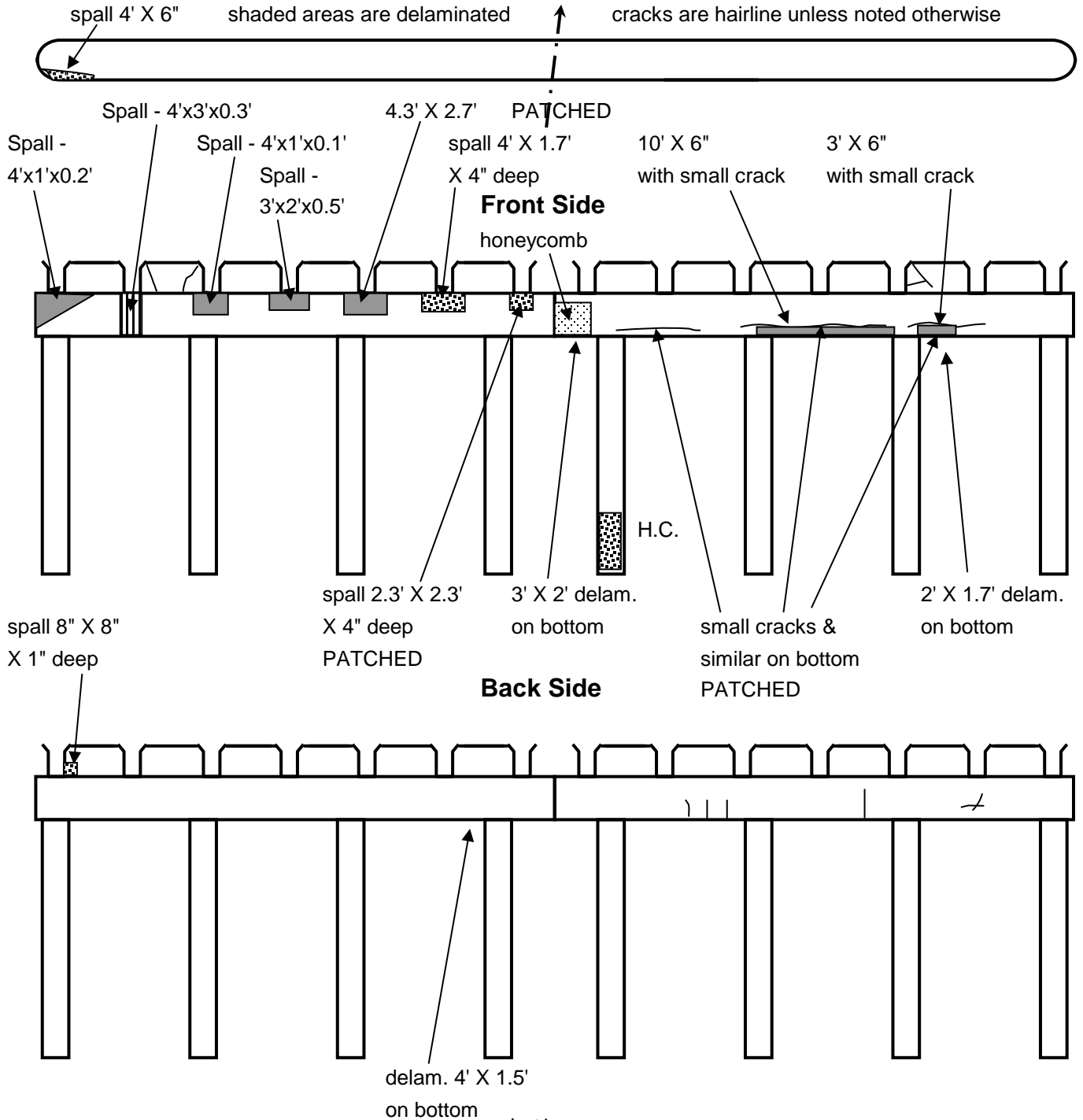
Date 10/04/2016

Bridge Location No. 33 I0024 12.08 **over** 33 03572 1.18  
 County Route Log Mile County Route Log Mile

Columns: F

Cap: P Span 1 face - Rebar spalls

Bearings: P Cap rebar spalls have significantly reduced original bearing area



Bent No. 2

Date 10/04/2016

Bridge Location No. 33 I0024 12.08 **over** 33 03572 1.18  
 County Route Log Mile County Route Log Mile

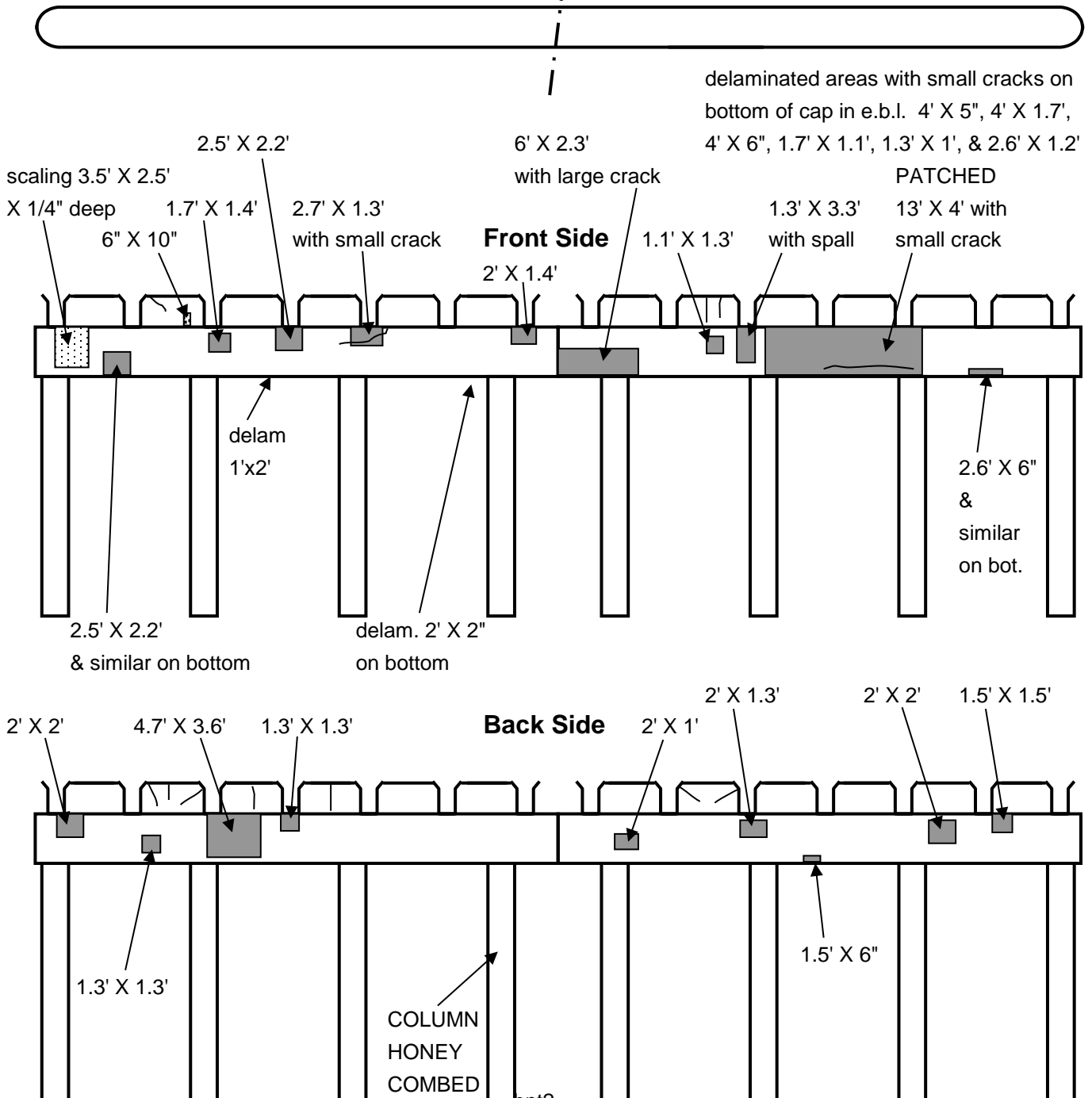
Columns: G

Cap: G

Bearings: G

shaded areas are delaminated

cracks are hairline unless noted otherwise



Bent No. 3

Date 10/04/2016

Bridge Location No. 33 I0024 12.08 **over** 33 03572 1.18  
County Route Log Mile County Route Log Mile

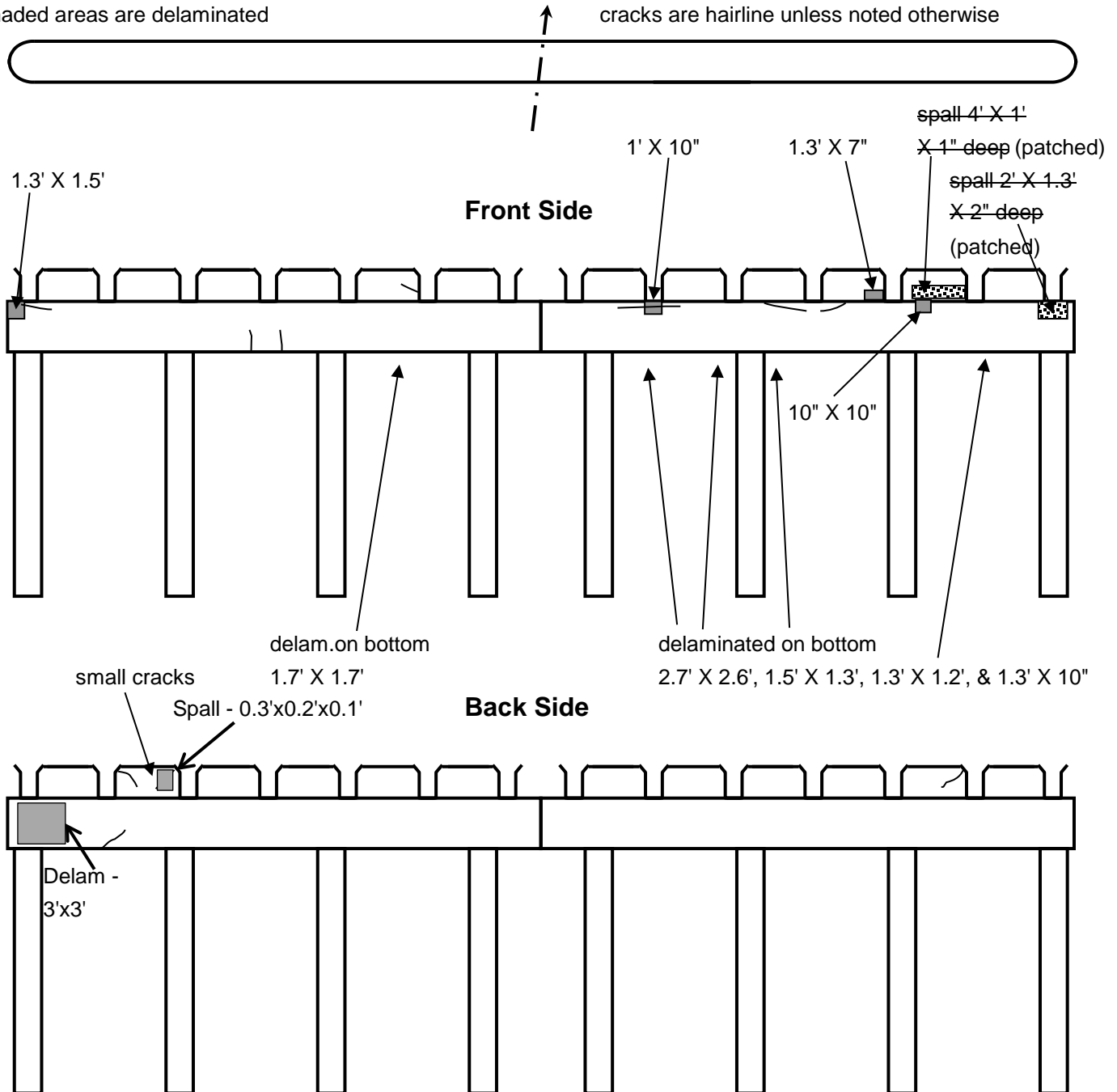
Columns: G

Cap: G

Bearings: G

shaded areas are delaminated

cracks are hairline unless noted otherwise



Abutment No. 2

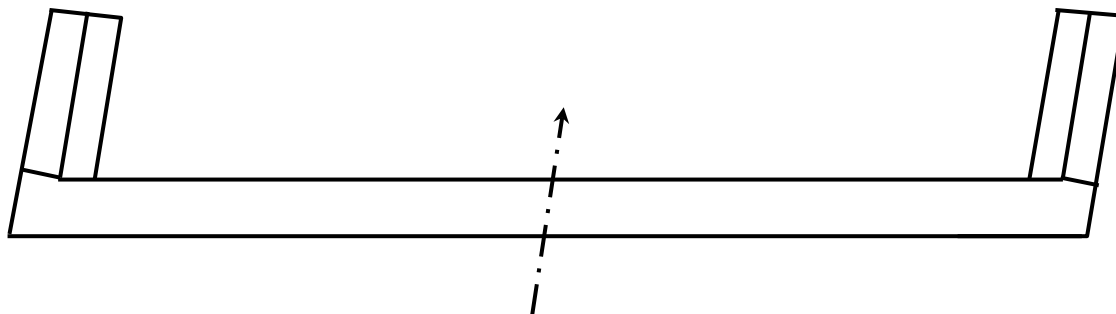
Date 10/04/2016

Bridge Location No. 33 I0024 12.08 **over** 33 03577 0.90  
County Route Log Mile County Route Log Mile

Wings: G

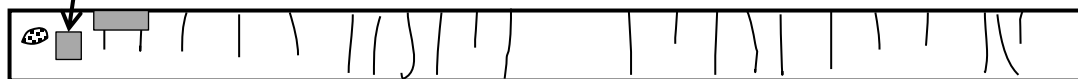
Walls: G

Bearings: G



Delam - 0.7'x0.6'

Delam - 8"x1'

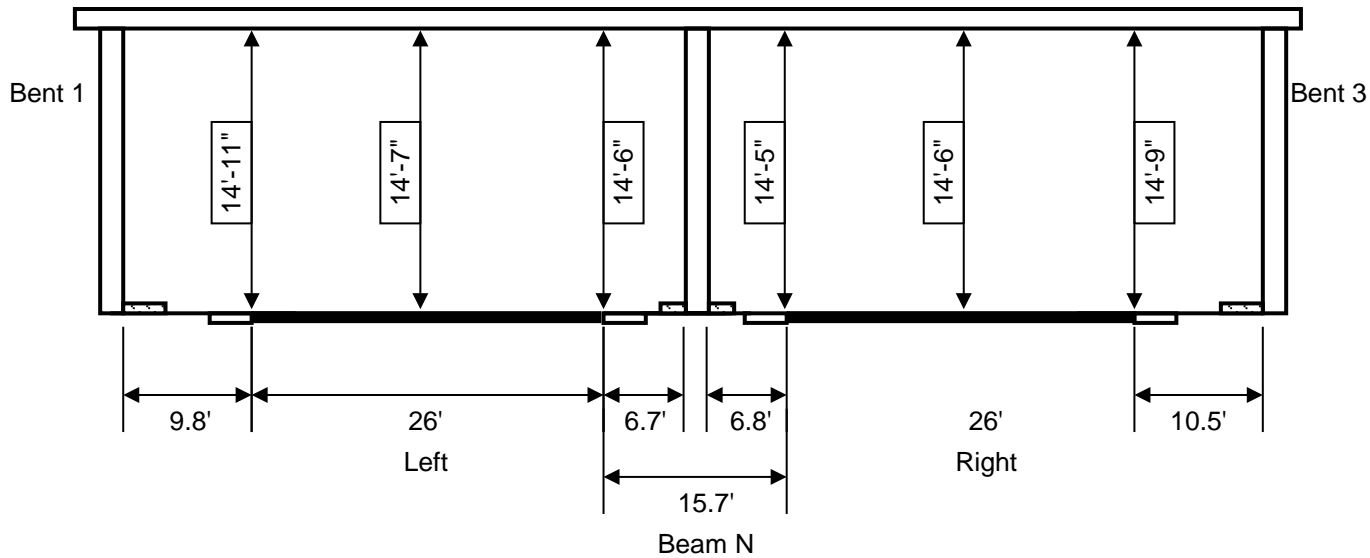


# Horizontal and Vertical Clearances

Date 10/04/2016

Bridge Location No. 33 I0024 12.08 **over** 33 03577 0.90  
County Route Log Mile County Route Log Mile

I 24 WBL & EBL



clearance

**BRIDGE MAINTENANCE RECOMMENDATIONS**



Tennessee Department  
of Transportation

COUNTY: HAMILTON  
CITY: CHATTANOOGA  
LOCATION: 33-03577-00.90-  
CO. SEQ.: 1 SPEC. CASE: 0

CROSSING: I24

FED BRIDGE NO.: 33I00240055

REVISED: 10/06/2016

FACILITY CARRIED:	I24	NUMBER OF MAIN SPANS:	_____
HIGHWAY SYSTEM:	18-STP URBAN, NON-STATE SYS.	NUMBER OF APPROACH SPANS:	_____
BRIDGE WIDTH (CURB TO CURB):	N/A FT _____ IN	BRIDGE LENGTH (FT):	166
BRIDGE WIDTH (OUT TO OUT):	N/A FT _____ IN	MAXIMUM SPAN LENGTH (FT):	46
APPROACH ROADWAY (W/SHOULDERS):	71 FT 10 IN	SKEW ANGLE (DEGREES):	N/A
MAINTAINED BY: _____			
MAIN SPAN MATERIAL:	_____	CONCRETE	_____
MAIN SPAN DESIGN TYPE:	_____	TEE BEAM	_____
APPROACH SPAN MATERIAL:	_____	_____	_____
APPROACH SPAN DESIGN TYPE:	_____	_____	_____
INSPECTION DATE:	10/04/2016	GENERAL CONDITION:	FAIR
PPRM PIN NUMBER:	_____	STRUCTURALLY DEFICIENT:	_____
H TRUCK RATING @ INV.:	_____ TONS	SUFFICIENCY RATING:	_____

**SUGGESTED ROUTINE MAINTENANCE AND COMMENTS**

INSTALL CLEARANCE POSTING SIGN AT RIGHT SIDE OF THE BRIDGE TO WARN EXITING I-24

**GENERAL COMMENTS:**

ADVANCE CLEARANCE POSTINGS ARE UP ON GERMANTOWN ROAD. CLEARANCES NEED TO BE POSTED AT THE STRUCTURE TO WARN TRAFFIC EXITING OFF OF I-24.



# Underpass Condition Coding Form

Bridge Number: 33I002400552  
(Includes Item 5A)

Feature Intersected: I24

County: 33

Route: 03577

Special Case: 0

County Sequence: 1

Log Mile: 0.90

**CODE ONLY THOSE VALUES WHICH HAVE CHANGED**

ITEM #	DESCRIPTION	VALUE	UNDERPASS SAFETY FEATURES
90	LAST INSPECTION DATE	<b>10/04/2016</b>	
	EARLIEST DATE OF NEXT REGULAR INSPECTION	<b>08/05/2018</b>	515 (A) TYPE UNDERPASS BARRIER NONE NEEDED OR NOT APPLICABLE
		<u> / /</u>	
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	14 FT. 5 IN.	Revised Barrier Type
		<u> FT. IN.</u>	(B) ADEQUACY OF BARRIER OR RAIL N
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	14 FT. 5 IN.	
		<u> FT. IN.</u>	(C) ADEQUACY OF TRANSITIONS N
47	TOTAL HORIZONTAL UNDERCLEARANCE	28 FT. 0 IN.	
		<u> FT. IN.</u>	(D) ADEQUACY OF TERMINALS N
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS)		
	Circle One: H R	<u> FT. IN.</u>	554 VERTICAL CLEARANCE LISTED ON HEIGHT POSTING
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE		14 FT. 3 IN.
	Circle One: H R	<u> FT. IN.</u>	<u> FT. IN.</u>
56	MINIMUM LATERAL UNDERCLEARANCE ON LEFT SIDE	<u> FT. IN.</u>	16 LATITUDE N 35° .8590'
			17 LONGITUDE W 85° 15.1300'
521	OVERALL CONDITION	FAIR	HEIGHT POSTED AT BOTH APPROACHES? YES [ ] NO [ ] N/A [ ]
555	COMMENTS		

\_\_\_\_\_  
TEAM LEADER SIGNATURE

/ /  
REVIEW DATE

# Underpass Inspection Report

Form BIR 3.0A  
(Rev. 9-22-98)  
DT-1443

Field Report No. 23      Date 10/4/2016  
Previous Report No. 22      Date 10/21/2014

Bridge No. 33I00240055  
Eleven Digit No. \_\_\_\_\_

\_\_\_\_\_ or \_\_\_\_\_ over \_\_\_\_\_  
Railroad/Walkway                      Bridge Location                      Underpass Location No.

County \_\_\_\_\_

Year Constructed 1964 - ACTUAL

Year Widened 1983 - ACTUAL                      Year Rehabilitated 1983 - ACTUAL

**GEOMETRIC FEATURES UNDER BRIDGE**

(\*.\* ft. unless otherwise noted)

Divided Highway Left - SBL                      Type of Wearing Surface ASPHALT

Width of Approach Traveled Roadway 26.0 ft. (Does Not Include Shoulders)

Width of Median if Divided Highway 15.7 ft.

Approach Shoulder Width 0 ft. Right      0 ft. Left

\*Horizontal Clearance Under Bridge 28 ft.

\*Distance Between Pier Protection Guardrail and Substructure NA ft. Right      NA ft. Left

\*Width of Sidewalk Under Bridge 7.0 ft. Right      NA ft. Left

\*Minimum Vertical Clearance: 14 ft 6 in      Location: \_\_\_\_\_

**TRAFFIC SAFETY FEATURES**

Barrier Type: TRIMS Item 515A

	Adequacy	Rating	Standard / Nonstandard
Pier Protection	Item 515B -	N/A	
Transitions	Item 515C -	N/A	
Approach Rail		N/A	
Terminal	Item 515D -	N/A	

**TEAM LEADER**

F. Watkins

**INSPECTORS**

G. Haas

M. Shelton

J. Edwards

**SIGNING**

Yes/ No/ Needed

Paddleboards	NO
Vertical Clearance (<14'-6")	YES
Narrow Passage	NO
One Lane Passage	NO

Other Signs or Plaques:

Other Underpass Signs Needed

Problems with Signs:

**BRIDGE FEATURES** (\*.\* ft.)

Bridge Skew	<u>79° - RT</u>	Number of Lanes/Tracks on Bridge	<u>6</u>
Structure Type (Main Span)	<u>CDG</u>	No. Main Spans	<u>4</u>
Structure Type (Appr.Spans)	<u>NA</u>	No. Appr. Spans	<u>0</u>
Maximum Span Length	<u>46.0</u> (ft.)	Total Length	<u>166.0</u> (ft.)
Width of Bridge Out-to-Out	<u>100.2</u> (ft.)	Right Angle to Centerline of Bridge)	
Width of Bridge Along Skew	<u>NA</u> (ft.)	(If Unable to Measure at Right Angle to Centerline of Bridge)	

BRIDGE CONDITION: GOOD

**UNDERPASS RATING:** \_\_\_\_\_ TRIMS Item 521

- Potential for bridge elements falling on to roadway below
- Potential is due to failure of major members

Underpass Inspection Comments

Advanced clearance postings are present both Northbound and Southbound on Germantown, however traffic exiting from I-24 has no advanced warning of the underpass clearance. Clearance postings should be posted at the structure or on North and South Terrace to warn traffic exiting from I-24 of the clearance.

Although all loose concrete was removed by bridge inspection crews, potential exists for future loosed concrete to fall at Spane 1 - Bent 1.

Note: If Underpass Route is Divided Highway, Use Two of These Forms, One for Each Roadway.

**MINIMUM PICTURES REQUIRED**

1. Elevation View of Bridge on Both Sides Showing Underpass
2. View Showing Both Approaches to Bridge
3. View Showing Safety Features
4. View Showing Any Problems

# Underpass Inspection Report

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DT-1443

Field Report No. 23      Date 10/4/2016  
Previous Report No. 22      Date 10/21/2014

Bridge No. 33I00240055  
Eleven Digit No.

\_\_\_\_\_ or \_\_\_\_\_ over \_\_\_\_\_  
Railroad/Walkway                      Bridge Location                      Underpass Location No.

County \_\_\_\_\_

Year Constructed 1964 - ACTUAL

Year Widened 1983 - ACTUAL

Year Rehabilitated 1983 - ACTUAL

**GEOMETRIC FEATURES UNDER BRIDGE**

*(\*.\* ft. unless otherwise noted)*

Divided Highway	<u>Right - NBL</u>	Type of Wearing Surface	<u>ASPHALT</u>
Width of Approach Traveled Roadway	<u>26.0</u> ft.	(Does Not Include Shoulders)	
Width of Median if Divided Highway	_____ ft.		
Approach Shoulder Width	<u>0</u> ft.	Right	<u>0</u> ft. Left
*Horizontal Clearance Under Bridge	<u>28.0</u> ft.		
*Distance Between Pier Protection Guardrail and Substructure	<u>NA</u> ft.	Right	<u>NA</u> ft. Left
*Width of Sidewalk Under Bridge	<u>7.0</u> ft.	Right	<u>NA</u> ft. Left
*Minimum Vertical Clearance:	<u>14 ft 5 in</u>	Location:	_____

**TRAFFIC SAFETY FEATURES**

Barrier Type: TRIMS Item 515A

	Adequacy	Rating	Standard / Nonstandard
Pier Protection	Item 515B -	NA	NONEX
Transitions	Item 515C -	NA	NONEX
Approach Rail		NA	NONEX
Terminal	Item 515D -	NA	NONEX

TEAM LEADER

F. Watkins

INSPECTORS

G. Haas

M. Shelton

J. Edwards

**SIGNING**

Yes/ No/ Needed

Paddleboards	NO
Vertical Clearance (<14'-6")	YES
Narrow Passage	NO
One Lane Passage	NO

Other Signs or Plaques:

Other Underpass Signs Needed

vertical clearance needed right side and ramp

Problems with Signs:

**BRIDGE FEATURES** (\*.\* ft.)

Bridge Skew	<u>79° - RT</u>	Number of Lanes/Tracks on Bridge	<u>6</u>
Structure Type (Main Span)	<u>CDG</u>	No. Main Spans	<u>4</u>
Structure Type (Appr.Spans)	<u>NA</u>	No. Appr. Spans	<u>0</u>
Maximum Span Length	<u>46.0</u> (ft.)	Total Length	<u>166.0</u> (ft.)
Width of Bridge Out-to-Out	<u>100.2</u> (ft.)	Right Angle to Centerline of Bridge)	
Width of Bridge Along Skew	<u>NA</u> (ft.)	(If Unable to Measure at Right Angle to Centerline of Bridge)	

BRIDGE CONDITION: **GOOD**

**UNDERPASS RATING:** \_\_\_\_\_ TRIMS Item 521

- Potential for bridge elements falling on to roadway below
- Potential is due to failure of major members

Underpass Inspection Comments

Advanced clearance postings are present Southbound on Germantown, however traffic exiting from I-24 has no advanced warning of the underpass clearance. Clearance postings should be posted at the structure or on North and South Terrace to warn traffic exiting from I-24 of the clearance.

Note: If Underpass Route is Divided Highway, Use Two of These Forms, One for Each Roadway.

**MINIMUM PICTURES REQUIRED**

1. Elevation View of Bridge on Both Sides Showing Underpass
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3. View Showing Safety Features
4. View Showing Any Problems

### Structure Inventory and Appraisal Sheet (English Units)

ELEMENT CONDITION STATE DATA												
Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4
0	12/1	Re Concrete Deck	sq.ft	16,600	98%	16,300	1%	200	1%	100	0%	0
0	110/1	Re Conc Opn Girder/Beam	ft	2,324	97%	2,250	3%	70	0%	4	0%	0
0	205/1	Re Conc Column	each	24	96%	23	0%	0	4%	1	0%	0
0	215/1	Re Conc Abutment	ft	253	100%	253	0%	0	0%	0	0%	0
0	234/1	Re Conc Pier Cap	ft	300	77%	230	7%	20	0%	0	17%	50
0	301/1	Pourable Joint Seal	ft	308	100%	308	0%	0	0%	0	0%	0
0	311/1	Moveable Bearing	each	28	100%	28	0%	0	0%	0	0%	0
0	313/1	Fixed Bearing	each	56	100%	56	0%	0	0%	0	0%	0
0	316/1	Other Bearing	each	28	50%	14	0%	0	25%	7	25%	7
0	331/1	Re Conc Bridge Railing	ft	498	100%	498	0%	0	0%	0	0%	0