



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION: **STREAM ALIGNMENT SKETCH REVISED, PRIORITY MAINTENANCE**

Structure Safety Report

Routine Element Inspection - Contract

COUNTY: DAVIDSON STRUCTURE NUMBER: 280082 FREQUENCY: 24 MONTHS

FACILITY CARRIED: NC47 MILE POST:

LOCATION: 0.1 MI. W. JCT. SR2335

FEATURE INTERSECTED: LICK CREEK

LATITUDE: 35° 39' 49.43" LONGITUDE: 80° 7' 15.07"

SUPERSTRUCTURE: REINFORCED CONCRETE DECK ON I-BEAMS

SUBSTRUCTURE: END BENTS:RC CAPS ON TIMBER PILES,INT.BENTS:RC POST & BEAM

SPANS: 3@35'0

☐ FRACTURE CRITICAL ☐ TEMPORARY SHORING ☐ SCOUR CRITICAL ☐ SCOUR PLAN OF ACTION

PRESENT CONDITION: Poor INSPECTION DATE: 02/10/2016

POSTED SV: 22 POSTED TTST: 28

OTHER SIGNS PRESENT: (4) DELINEATORS



WEST APPROACH

Sign noticed issued for		Number Required
<u>NO</u>	WEIGHT LIMIT	<u>0</u>
<u>NO</u>	DELINEATORS	<u>0</u>
<u>NO</u>	NARROW BRIDGE	<u>0</u>
<u>NO</u>	ONE LANE BRIDGE	<u>0</u>
<u>NO</u>	LOW CLEARANCE	<u>0</u>

INSPECTED BY RAY D. ELLIOTT, PE	SIGNATURE <i>Roy D. Elliott</i>	ASSISTED BY BCH,JWD,MTC
------------------------------------	------------------------------------	----------------------------

Span Element Report

Structure Number: 280082

Inspection Date: 02/10/2016

Span Number 1

Span Length 35 Feet

Number of Beams/Girders: 4

Element Number	Parent Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code
12		Reinforced Concrete Deck	887	881	6	0	0	6	3326
107		Steel Open Girder/Beam	140	0	140	0	0	140	3314
515	107	Steel Protective Coating	996	0	996	0	0	996	3342
215		Reinforced Concrete Abutment	41	41	0	0	0	0	3350
234		Reinforced Concrete Pier Cap	29	29	0	0	0	0	3348
311		Movable Bearing	4	0	4	0	0	4	3334
515	311	Steel Protective Coating	4	0	4	0	0	4	3342
313		Fixed Bearing	4	0	4	0	0	4	3334
515	313	Steel Protective Coating	4	0	4	0	0	4	3342
331		Reinforced Concrete Bridge Railing	70	0	70	0	0	70	3318
510		Wearing Surface	840	0	815	25	0	840	2816

"Near" Approach and Substructure quantities have been include for reporting purposes. The last span will also include End Bent 2 and Far Approach quantities where applicable

Span Number 2

Span Length 35 Feet

Number of Beams/Girders: 4

Element Number	Parent Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code
12		Reinforced Concrete Deck	887	877	10	0	0	10	3326
107		Steel Open Girder/Beam	140	0	140	0	0	140	3314
515	107	Steel Protective Coating	996	0	996	0	0	996	3342
205		Reinforced Concrete Column	2	2	0	0	0	0	3348
220		Reinforced Concrete Pile Cap/Footing	4	4	0	0	0	0	3348
234		Reinforced Concrete Pier Cap	27	0	26	1	0	27	3348
301		Pourable Joint Seal	30	30	0	0	0	0	3310
311		Movable Bearing	4	0	4	0	0	4	3334
515	311	Steel Protective Coating	4	0	4	0	0	4	3342
313		Fixed Bearing	4	0	4	0	0	4	3334
515	313	Steel Protective Coating	4	0	4	0	0	4	3342
331		Reinforced Concrete Bridge Railing	70	0	69	1	0	70	3318
510		Wearing Surface	840	0	790	50	0	840	2816

"Near" Approach and Substructure quantities have been include for reporting purposes. The last span will also include End Bent 2 and Far Approach quantities where applicable

Span Number 3

Span Length 35 Feet

Number of Beams/Girders: 4

Element Number	Parent Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code
12		Reinforced Concrete Deck	887	870	11	6	0	17	3326
107		Steel Open Girder/Beam	140	0	140	0	0	140	3314
515	107	Steel Protective Coating	996	0	996	0	0	996	3342
205		Reinforced Concrete Column	2	2	0	0	0	0	3348
215		Reinforced Concrete Abutment	41	41	0	0	0	0	3350
220		Reinforced Concrete Pile Cap/Footing	4	4	0	0	0	0	3348
227		Reinforced Concrete Pile	4	4	0	0	0	0	3348
234		Reinforced Concrete Pier Cap	56	28	27	1	0	28	3348
301		Pourable Joint Seal	30	30	0	0	0	0	3310

Structure Number: 280082

Inspection Date: 02/10/2016

311		Movable Bearing	4	0	4	0	0	4	3334
515	311	Steel Protective Coating	4	0	4	0	0	4	3342
313		Fixed Bearing	4	0	4	0	0	4	3334
515	313	Steel Protective Coating	4	0	4	0	0	4	3342
331		Reinforced Concrete Bridge Railing	70	0	69	1	0	70	3318
510		Wearing Surface	840	0	765	75	0	840	2816

"Near" Approach and Substructure quantities have been include for reporting purposes. The last span will also include End Bent 2 and Far Approach quantities where applicable

Superstructure Detailed Element Quantities

Structure Number: 280082

Inspection Date: 02/10/2016

Span Number 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Deck	1	12	Reinforced Concrete Deck	887	881	6	0	0	6	3326	☐ Requested
☒ Bridge Rail	1	331	Reinforced Concrete Bridge Railing	35	0	35	0	0	35	3318	☐ Requested
☒ Bridge Rail	2	331	Reinforced Concrete Bridge Railing	35	0	35	0	0	35	3318	☐ Requested
☒ Wearing Surfaces		510	Wearing Surface	840	0	815	25	0	840	2816	☐ Requested
☒ Beam	1	107	Steel Open Girder/Beam	35	0	35	0	0	35	3314	☐ Requested
Protective System		515	Steel Protective Coating	249	0	249	0	0	249	3342	
☒ Beam	2	107	Steel Open Girder/Beam	35	0	35	0	0	35	3314	☐ Requested
Protective System		515	Steel Protective Coating	249	0	249	0	0	249	3342	
☒ Beam	3	107	Steel Open Girder/Beam	35	0	35	0	0	35	3314	☐ Requested
Protective System		515	Steel Protective Coating	249	0	249	0	0	249	3342	
☒ Beam	4	107	Steel Open Girder/Beam	35	0	35	0	0	35	3314	☐ Requested
Protective System		515	Steel Protective Coating	249	0	249	0	0	249	3342	
☒ Bearing Device	1	313	Fixed Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	1	311	Movable Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	2	313	Fixed Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	2	311	Movable Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	3	313	Fixed Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	3	311	Movable Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	4	313	Fixed Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	4	311	Movable Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Deck	1	12	Reinforced Concrete Deck	887	877	10	0	0	10	3326	☐ Requested
☒ Bridge Rail	1	331	Reinforced Concrete Bridge Railing	35	0	35	0	0	35	3318	☐ Requested
☒ Bridge Rail	2	331	Reinforced Concrete Bridge Railing	35	0	34	1	0	35	3318	☐ Requested
☒ Wearing Surfaces		510	Wearing Surface	840	0	790	50	0	840	2816	☐ Requested
☒ Beam	1	107	Steel Open Girder/Beam	35	0	35	0	0	35	3314	☐ Requested
Protective System		515	Steel Protective Coating	249	0	249	0	0	249	3342	
☒ Beam	2	107	Steel Open Girder/Beam	35	0	35	0	0	35	3314	☐ Requested
Protective System		515	Steel Protective Coating	249	0	249	0	0	249	3342	
☒ Beam	3	107	Steel Open Girder/Beam	35	0	35	0	0	35	3314	☐ Requested
Protective System		515	Steel Protective Coating	249	0	249	0	0	249	3342	
☒ Beam	4	107	Steel Open Girder/Beam	35	0	35	0	0	35	3314	☐ Requested
Protective System		515	Steel Protective Coating	249	0	249	0	0	249	3342	
☒ Bearing Device	1	313	Fixed Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	1	311	Movable Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	2	313	Fixed Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	2	311	Movable Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	3	313	Fixed Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	3	311	Movable Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	4	313	Fixed Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	4	311	Movable Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☐ Expansion Joints	1	301	Pourable Joint Seal	30	30	0	0	0	0	3310	☐ Requested

Structure Number: 280082

Inspection Date: 02/10/2016

Span Number 3

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Deck	1	12	Reinforced Concrete Deck	887	870	11	6	0	17	3326	☐ Requested
☒ Bridge Rail	1	331	Reinforced Concrete Bridge Railing	35	0	34	1	0	35	3318	☐ Requested
☒ Bridge Rail	2	331	Reinforced Concrete Bridge Railing	35	0	35	0	0	35	3318	☐ Requested
☒ Wearing Surfaces		510	Wearing Surface	840	0	765	75	0	840	2816	☐ Requested
☒ Beam	1	107	Steel Open Girder/Beam	35	0	35	0	0	35	3314	☐ Requested
Protective System		515	Steel Protective Coating	249	0	249	0	0	249	3342	
☒ Beam	2	107	Steel Open Girder/Beam	35	0	35	0	0	35	3314	☐ Requested
Protective System		515	Steel Protective Coating	249	0	249	0	0	249	3342	
☒ Beam	3	107	Steel Open Girder/Beam	35	0	35	0	0	35	3314	☐ Requested
Protective System		515	Steel Protective Coating	249	0	249	0	0	249	3342	
☒ Beam	4	107	Steel Open Girder/Beam	35	0	35	0	0	35	3314	☐ Requested
Protective System		515	Steel Protective Coating	249	0	249	0	0	249	3342	
☒ Bearing Device	1	311	Movable Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	1	313	Fixed Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	2	311	Movable Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	2	313	Fixed Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	3	311	Movable Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	3	313	Fixed Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	4	311	Movable Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☒ Bearing Device	4	313	Fixed Bearing	1	0	1	0	0	1	3334	☐ Requested
Protective System		515	Steel Protective Coating	1	0	1	0	0	1	3342	
☐ Expansion Joints	1	301	Pourable Joint Seal	30	30	0	0	0	0	3310	☐ Requested

Superstructure Element Defect Descriptions

Structure Number: 280082

Inspection Date: 02/10/2016

Span Number 1

Span	1	Deck	1	Component Name:	Reinforced Concrete Deck					
------	---	------	---	-----------------	--------------------------	--	--	--	--	--

Element: 12 Name Reinforced Concrete Deck Qty: 887 Lvl 2: 6 Lvl 3: 0 Lvl 4: 0 Maint. Qty 6

Defect Description:

6" DIAMETER X .5" DEEP POPOUTS IN EACH OVERHANG

Span	1	Bridge Rail	1	Component Name:	Concrete Railing					
------	---	-------------	---	-----------------	------------------	--	--	--	--	--

Element: 331 Name Reinforced Concrete Bridge Ra Qty: 35 Lvl 2: 35 Lvl 3: 0 Lvl 4: 0 Maint. Qty 35

Defect Description:

3/64" CRACKING IN CURB AND DRAIN #2
SURFACE SCALING ALONG ENTIRE RAIL

Span	1	Bridge Rail	2	Component Name:	Concrete Railing					
------	---	-------------	---	-----------------	------------------	--	--	--	--	--

Element: 331 Name Reinforced Concrete Bridge Ra Qty: 35 Lvl 2: 35 Lvl 3: 0 Lvl 4: 0 Maint. Qty 35

Defect Description:

SURFACE SCALING ALONG ENTIRE RAIL

Span	1	Wearing Surfaces		Component Name:	Asphalt Wearing Surface					
------	---	------------------	--	-----------------	-------------------------	--	--	--	--	--

Element: 510 Name Wearing Surface Qty: 840 Lvl 2: 815 Lvl 3: 25 Lvl 4: 0 Maint. Qty 840

Defect Description:

1/8" CRACKING ALONG END BENT 1 FILL FACE
MINOR MAP CRACKING COVERING ENTIRE SPAN

Span	1	Beam	1	Component Name:	Plate Girder					
------	---	------	---	-----------------	--------------	--	--	--	--	--

Element: 107 Name Steel Open Girder/Beam Qty: 35 Lvl 2: 35 Lvl 3: 0 Lvl 4: 0 Maint. Qty 35

Defect Description:

SURFACE RUSTING AT ENDS OVER BENTS
SURFACE RUSTING ALONG ENTIRE GIRDER SPAN

Span	1	Beam	2	Component Name:	Plate Girder					
------	---	------	---	-----------------	--------------	--	--	--	--	--

Element: 107 Name Steel Open Girder/Beam Qty: 35 Lvl 2: 35 Lvl 3: 0 Lvl 4: 0 Maint. Qty 35

Defect Description:

SURFACE RUSTING AT ENDS OVER BENTS
SURFACE RUSTING ALONG ENTIRE GIRDER SPAN

Span	1	Beam	3	Component Name:	Plate Girder					
------	---	------	---	-----------------	--------------	--	--	--	--	--

Element: 107 Name Steel Open Girder/Beam Qty: 35 Lvl 2: 35 Lvl 3: 0 Lvl 4: 0 Maint. Qty 35

Defect Description:

SURFACE RUSTING AT ENDS OVER BENTS
SURFACE RUSTING ALONG ENTIRE GIRDER SPAN

Span	1	Beam	4	Component Name:	Plate Girder					
------	---	------	---	-----------------	--------------	--	--	--	--	--

Element: 107 Name Steel Open Girder/Beam Qty: 35 Lvl 2: 35 Lvl 3: 0 Lvl 4: 0 Maint. Qty 35

Defect Description:

SURFACE RUSTING AT ENDS OVER BENTS
SURFACE RUSTING ALONG ENTIRE GIRDER SPAN

Span	1	Bearing Device	1	Component Name:	Movable Bearing					
------	---	----------------	---	-----------------	-----------------	--	--	--	--	--

Element: 311 Name Movable Bearing Qty: 1 Lvl 2: 1 Lvl 3: 0 Lvl 4: 0 Maint. Qty 1

Defect Description:

FLAKING RUST ON PLATES

Span	1	Bearing Device	1	Component Name:	Fixed Bearing					
------	---	----------------	---	-----------------	---------------	--	--	--	--	--

Element: 313 Name Fixed Bearing Qty: 1 Lvl 2: 1 Lvl 3: 0 Lvl 4: 0 Maint. Qty 1

Defect Description:

FLAKING RUST ON PLATES

Span	1	Bearing Device	2	Component Name:	Fixed Bearing					
------	---	----------------	---	-----------------	---------------	--	--	--	--	--

Element: 313 Name Fixed Bearing Qty: 1 Lvl 2: 1 Lvl 3: 0 Lvl 4: 0 Maint. Qty 1

Defect Description:

FLAKING RUST ON PLATES

Span	1	Bearing Device	2	Component Name:	Movable Bearing								
Element:	311	Name	Movable Bearing	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0	Maint. Qty	1
Defect Description:													

FLAKING RUST ON PLATES

Span	1	Bearing Device	3	Component Name:	Movable Bearing								
Element:	311	Name	Movable Bearing	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0	Maint. Qty	1
Defect Description:													

FLAKING RUST ON PLATES

Span	1	Bearing Device	3	Component Name:		Fixed Bearing							
Element:	313	Name	Fixed Bearing	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0	Maint. Qty	1
Defect Description:													

FLAKING RUST ON PLATES

Span	1	Bearing Device	4	Component Name:	Fixed Bearing								
Element:	313	Name	Fixed Bearing	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0	Maint. Qty	1
Defect Description:													

FLAKING RUST ON PLATES

Span	1	Bearing Device	4	Component Name:	Movable Bearing								
Element:	311	Name	Movable Bearing	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0	Maint. Qty	1
Defect Description:													

FLAKING RUST ON PLATES

Span Number 2

Span	2	Deck	1	Component Name:		Reinforced Concrete Deck							
Element:	12	Name	Reinforced Concrete Deck	Qty:	887	Lvl 2:	10	Lvl 3	0	Lvl 4	0	Maint. Qty	10
Defect Description:													

6" DIAMETER X .5" DEEP POPOUTS IN EACH OVERHANG

Span	2	Bridge Rail	1	Component Name:		Concrete Railing							
Element:	331	Name	Reinforced Concrete Bridge Ra	Qty:	35	Lvl 2:	35	Lvl 3	0	Lvl 4	0	Maint. Qty	35
Defect Description:													

1/32" CRACK IN POST 4

SURFACE SCALING ALONG ENTIRE RAIL

Span	2	Bridge Rail	2	Component Name:		Concrete Railing							
Element:	331	Name	Reinforced Concrete Bridge Ra	Qty:	35	Lvl 2:	34	Lvl 3	1	Lvl 4	0	Maint. Qty	35
Defect Description:													

1/16" CRACKING IN POST 4

1/32" CRACK BETWEEN POST 4 AND 5

1/32" CRACK AT POST 5

SURFACE SCALING ALONG ENTIRE RAIL

Span	2	Wearing Surfaces		Component Name:		Asphalt Wearing Surface							
Element:	510	Name	Wearing Surface	Qty:	840	Lvl 2:	790	Lvl 3	50	Lvl 4	0	Maint. Qty	840
Defect Description:													

1/8" CRACKING ALONG BENT 1

MINOR MAP CRACKING ALONG ENTIRE SPAN

Span	2	Beam	1	Component Name:		Plate Girder							
Element:	107	Name	Steel Open Girder/Beam	Qty:	35	Lvl 2:	35	Lvl 3	0	Lvl 4	0	Maint. Qty	35
Defect Description:													

SURFACE RUSTING AT ENDS OVER BENTS

SURFACE RUSTING ALONG ENTIRE GIRDER SPAN

Span 2	Beam 2	Component Name:	Plate Girder						
---------------	---------------	------------------------	--------------	--	--	--	--	--	--

Element: 107 **Name** Steel Open Girder/Beam **Qty:** 35 **Lvl 2:** 35 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 35

Defect Description:

SURFACE RUSTING AT ENDS OVER BENTS
SURFACE RUSTING ALONG ENTIRE GIRDER SPAN

Span 2	Beam 3	Component Name:	Plate Girder						
---------------	---------------	------------------------	--------------	--	--	--	--	--	--

Element: 107 **Name** Steel Open Girder/Beam **Qty:** 35 **Lvl 2:** 35 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 35

Defect Description:

SURFACE RUSTING AT ENDS OVER BENTS
SURFACE RUSTING ALONG ENTIRE GIRDER SPAN

Span 2	Beam 4	Component Name:	Plate Girder						
---------------	---------------	------------------------	--------------	--	--	--	--	--	--

Element: 107 **Name** Steel Open Girder/Beam **Qty:** 35 **Lvl 2:** 35 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 35

Defect Description:

SURFACE RUSTING AT ENDS OVER BENTS
SURFACE RUSTING ALONG ENTIRE GIRDER SPAN

Span 2	Bearing Device 1	Component Name:	Movable Bearing						
---------------	-------------------------	------------------------	-----------------	--	--	--	--	--	--

Element: 311 **Name** Movable Bearing **Qty:** 1 **Lvl 2:** 1 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 1

Defect Description:

FLAKING RUST ON PLATES

Span 2	Bearing Device 1	Component Name:	Fixed Bearing						
---------------	-------------------------	------------------------	---------------	--	--	--	--	--	--

Element: 313 **Name** Fixed Bearing **Qty:** 1 **Lvl 2:** 1 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 1

Defect Description:

FLAKING RUST ON PLATES

Span 2	Bearing Device 2	Component Name:	Fixed Bearing						
---------------	-------------------------	------------------------	---------------	--	--	--	--	--	--

Element: 313 **Name** Fixed Bearing **Qty:** 1 **Lvl 2:** 1 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 1

Defect Description:

FLAKING RUST ON PLATES

Span 2	Bearing Device 2	Component Name:	Movable Bearing						
---------------	-------------------------	------------------------	-----------------	--	--	--	--	--	--

Element: 311 **Name** Movable Bearing **Qty:** 1 **Lvl 2:** 1 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 1

Defect Description:

FLAKING RUST ON PLATES

Span 2	Bearing Device 3	Component Name:	Movable Bearing						
---------------	-------------------------	------------------------	-----------------	--	--	--	--	--	--

Element: 311 **Name** Movable Bearing **Qty:** 1 **Lvl 2:** 1 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 1

Defect Description:

FLAKING RUST ON PLATES

Span 2	Bearing Device 3	Component Name:	Fixed Bearing						
---------------	-------------------------	------------------------	---------------	--	--	--	--	--	--

Element: 313 **Name** Fixed Bearing **Qty:** 1 **Lvl 2:** 1 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 1

Defect Description:

FLAKING RUST ON PLATES

Span 2	Bearing Device 4	Component Name:	Fixed Bearing						
---------------	-------------------------	------------------------	---------------	--	--	--	--	--	--

Element: 313 **Name** Fixed Bearing **Qty:** 1 **Lvl 2:** 1 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 1

Defect Description:

FLAKING RUST ON PLATES

Span 2	Bearing Device 4	Component Name:	Movable Bearing						
---------------	-------------------------	------------------------	-----------------	--	--	--	--	--	--

Element: 311 **Name** Movable Bearing **Qty:** 1 **Lvl 2:** 1 **Lvl 3** 0 **Lvl 4** 0 **Maint. Qty** 1

Defect Description:

FLAKING RUST ON PLATES

Span Number 3

Span 3	Deck 1	Component Name:	Reinforced Concrete Deck						
---------------	---------------	------------------------	--------------------------	--	--	--	--	--	--

Element: 12 **Name** Reinforced Concrete Deck **Qty:** 887 **Lvl 2:** 11 **Lvl 3** 6 **Lvl 4** 0 **Maint. Qty** 17

Defect Description:

TRANSVERSE CRACKING WITH LIGHT EFFLORESCENCE AND RUST STAINING IN BAY 1 NEAR END BENT 2
 TRANSVERSE CRACKING IN BAY 2 NEAR END BENT 2
 6" DIAMETER X .5" DEEP POPOUTS IN EACH OVERHANG

Span	3	Bridge Rail	1	Component Name:		Concrete Railing							
Element:	331	Name	Reinforced Concrete Bridge Ra	Qty:	35	Lvl 2:	34	Lvl 3	1	Lvl 4	0	Maint. Qty	35
Defect Description:													

Defect Description:

SPALLING WITH EXPOSED REBAR IN POST 4
 1/32" CRACK IN POST 5
 SURFACE SCALING ALONG ENTIRE RAIL

Span	3	Bridge Rail	2	Component Name:		Concrete Railing							
Element:	331	Name	Reinforced Concrete Bridge Ra	Qty:	35	Lvl 2:	35	Lvl 3	0	Lvl 4	0	Maint. Qty	35
Defect Description:													

Defect Description:

1/32" CRACK IN POST 5
 SURFACE SCALING ALONG ENTIRE RAIL

Span 3		Wearing Surfaces		Component Name:		Asphalt Wearing Surface							
Element: 510		Name Wearing Surface		Qty: 840		Lvl 2: 765		Lvl 3 75		Lvl 4 0		Maint. Qty 840	
Defect Description:													

Defect Description:

1/8" CRACKING ALONG BENT 2
 1/8" CRACKING ALONG END BENT 2 FILL FACE
 MINOR MAP CRACKING ALONG ENTIRE SPAN

Span	3	Beam	1	Component Name:		Plate Girder							
Element:	107	Name	Steel Open Girder/Beam	Qty:	35	Lvl 2:	35	Lvl 3	0	Lvl 4	0	Maint. Qty	35
Defect Description:													

Defect Description:

SURFACE RUSTING AT ENDS OVER BENTS
 SURFACE RUSTING ALONG ENTIRE GIRDER SPAN

Span	3	Beam	2	Component Name:		Plate Girder							
Element:	107	Name	Steel Open Girder/Beam	Qty:	35	Lvl 2:	35	Lvl 3	0	Lvl 4	0	Maint. Qty	35
Defect Description:													

Defect Description:

SURFACE RUSTING AT ENDS OVER BENTS
 SURFACE RUSTING ALONG ENTIRE GIRDER SPAN

Span	3	Beam	3	Component Name:		Plate Girder							
Element:	107	Name	Steel Open Girder/Beam	Qty:	35	Lvl 2:	35	Lvl 3	0	Lvl 4	0	Maint. Qty	35
Defect Description:													

Defect Description:

SURFACE RUSTING AT ENDS OVER BENTS
 SURFACE RUSTING ALONG ENTIRE GIRDER SPAN

Span	3	Beam	4	Component Name:		Plate Girder							
Element:	107	Name	Steel Open Girder/Beam	Qty:	35	Lvl 2:	35	Lvl 3	0	Lvl 4	0	Maint. Qty	35
Defect Description:													

Defect Description:

SURFACE RUSTING AT ENDS OVER BENTS
 SURFACE RUSTING ALONG ENTIRE GIRDER SPAN

Span 3		Bearing Device 1		Component Name:		Movable Bearing							
Element: 311		Name Movable Bearing		Qty: 1		Lvl 2: 1		Lvl 3: 0		Lvl 4: 0		Maint. Qty: 1	
Defect Description:													

Defect Description:

FLAKING RUST ON PLATES

Span 3		Bearing Device 1		Component Name:		Fixed Bearing							
Element: 313		Name Fixed Bearing		Qty: 1		Lvl 2: 1		Lvl 3: 0		Lvl 4: 0		Maint. Qty: 1	
Defect Description:													

Defect Description:

FLAKING RUST ON PLATES

Span 3		Bearing Device 2		Component Name:		Fixed Bearing							
Element: 313		Name Fixed Bearing		Qty: 1		Lvl 2: 1		Lvl 3: 0		Lvl 4: 0		Maint. Qty: 1	
Defect Description:													

Defect Description:

FLAKING RUST ON PLATES

Structure Number: 280082

Inspection Date: 02/10/2016

Span	3	Bearing Device	2	Component Name:	Movable Bearing					
------	---	----------------	---	-----------------	-----------------	--	--	--	--	--

Element:	311	Name	Movable Bearing	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0	Maint. Qty	1
----------	-----	------	-----------------	------	---	--------	---	-------	---	-------	---	------------	---

Defect Description:

FLAKING RUST ON PLATES

Span	3	Bearing Device	3	Component Name:	Movable Bearing					
------	---	----------------	---	-----------------	-----------------	--	--	--	--	--

Element:	311	Name	Movable Bearing	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0	Maint. Qty	1
----------	-----	------	-----------------	------	---	--------	---	-------	---	-------	---	------------	---

Defect Description:

FLAKING RUST ON PLATES

Span	3	Bearing Device	3	Component Name:	Fixed Bearing					
------	---	----------------	---	-----------------	---------------	--	--	--	--	--

Element:	313	Name	Fixed Bearing	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0	Maint. Qty	1
----------	-----	------	---------------	------	---	--------	---	-------	---	-------	---	------------	---

Defect Description:

FLAKING RUST ON PLATES

Span	3	Bearing Device	4	Component Name:	Fixed Bearing					
------	---	----------------	---	-----------------	---------------	--	--	--	--	--

Element:	313	Name	Fixed Bearing	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0	Maint. Qty	1
----------	-----	------	---------------	------	---	--------	---	-------	---	-------	---	------------	---

Defect Description:

FLAKING RUST ON PLATES

Span	3	Bearing Device	4	Component Name:	Movable Bearing					
------	---	----------------	---	-----------------	-----------------	--	--	--	--	--

Element:	311	Name	Movable Bearing	Qty:	1	Lvl 2:	1	Lvl 3	0	Lvl 4	0	Maint. Qty	1
----------	-----	------	-----------------	------	---	--------	---	-------	---	-------	---	------------	---

Defect Description:

FLAKING RUST ON PLATES

Substructure Detailed Element Quantities

Structure Number: 280082

Inspection Date: 02/10/2016

End Bent 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Abutments	1	215	Reinforced Concrete Abutment	41	41	0	0	0	0	3350	☐ Requested
☒ Caps	1	234	Reinforced Concrete Pier Cap	29	29	0	0	0	0	3348	☐ Requested

Bent 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☐ Footing	1	220	Reinforced Concrete Pile Cap/Footing	4	4	0	0	0	0	3348	☐ Requested
☒ Caps	1	234	Reinforced Concrete Pier Cap	27	0	26	1	0	27	3348	☒ Requested
☒ Piles and Columns	1	205	Reinforced Concrete Column	1	1	0	0	0	0	3348	☐ Requested
☒ Piles and Columns	2	205	Reinforced Concrete Column	1	1	0	0	0	0	3348	☐ Requested

Bent 2

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☐ Footing	1	220	Reinforced Concrete Pile Cap/Footing	4	4	0	0	0	0	3348	☐ Requested
☒ Caps	1	234	Reinforced Concrete Pier Cap	27	0	27	0	0	27	3348	☒ Requested
☒ Piles and Columns	1	205	Reinforced Concrete Column	1	1	0	0	0	0	3348	☐ Requested
☒ Piles and Columns	2	205	Reinforced Concrete Column	1	1	0	0	0	0	3348	☐ Requested

End Bent 2

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Caps	1	234	Reinforced Concrete Pier Cap	29	28	0	1	0	1	3348	☐ Requested
☐ Piles and Columns	1	227	Reinforced Concrete Pile	1	1	0	0	0	0	3348	☐ Requested
☐ Piles and Columns	2	227	Reinforced Concrete Pile	1	1	0	0	0	0	3348	☐ Requested
☐ Piles and Columns	3	227	Reinforced Concrete Pile	1	1	0	0	0	0	3348	☐ Requested
☐ Piles and Columns	4	227	Reinforced Concrete Pile	1	1	0	0	0	0	3348	☐ Requested
☒ Abutments	1	215	Reinforced Concrete Abutment	41	41	0	0	0	0	3350	☐ Requested

Substructure Element Defect Descriptions

Structure Number: 280082

Inspection Date: 02/10/2016

Bent 1

Bent 1	Row 1	Caps	1									
Element: 234	Name	Reinforced Concrete Pier Cap	Qty:	27	Lvl 2:	26	Lvl 3	1	Lvl 4	0	Maint. Qty	27
Defect Description:												
12" X 4" X 1" DEEP SPALL WITH EXPOSED REBAR ON WEST FACE AT GIRDER 4												
12" X 6" X 2" DEEP CORNER SPALL ON EAST FACE ON SOUTH END												
3/64" CORNER CRACKING AT EACH BOTTOM CORNER												
FINE TRANSVERSE CRACKING ON BOTTOM BETWEEN COLUMNS												
Bent 1	Row 1	Piles and Columns	1									
Element: 205	Name	Reinforced Concrete Column	Qty:	1	Lvl 2:	0	Lvl 3	0	Lvl 4	0	Maint. Qty	0
Defect Description:												
LIGHT SURFACE SCALING												
Bent 1	Row 1	Piles and Columns	2									
Element: 205	Name	Reinforced Concrete Column	Qty:	1	Lvl 2:	0	Lvl 3	0	Lvl 4	0	Maint. Qty	0
Defect Description:												
LIGHT SURFACE SCALING												
Bent 2	Row 1	Caps	1									
Element: 234	Name	Reinforced Concrete Pier Cap	Qty:	27	Lvl 2:	27	Lvl 3	0	Lvl 4	0	Maint. Qty	27
Defect Description:												
SPALLING ON EAST FACE WITH EXPOSED STEEL												
3/64" CORNER CRACKING ON TOP AND BOTTOM ON EAST FACE												
End Bent 2	Row 1	Caps	1									
Element: 234	Name	Reinforced Concrete Pier Cap	Qty:	29	Lvl 2:	0	Lvl 3	1	Lvl 4	0	Maint. Qty	1
Defect Description:												
1/8" CRACKING AT SOUTHEAST WING												

National Bridge and NC Inspection Items

Structure Number: 280082

Inspection Date: 02/10/2016

National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	5
Item 59: Superstructure	0 - 9 , N	4
Item 60: Substructure	0 - 9 , N	6
Item 61: Channel and Channel Protection	0 - 9 , N	6
Item 62: Culvert	0 - 9 , N	
Item 71: Waterway Adequacy	0 - 9 , N	7
Item 72: Approach Roadway Alignment	0 - 9 , N	8

Note: If NBI Inspection Item is not present, code NBI item with "N"

NC SMU Inspection Items

Item	Grade Scale	Grade	Maint. Qty.	Maint. Code
Deck Debris	G, F, P, or C	G	0	3376
Drainage System	G, F, P, or C	G	0	3332
Utilities	G, F, P, or C			
Slope Protection	G, F, P, or C	G	0	3352
Scour	G, F, P, or C	F		
Wingwall	G, F, P, or C	G	0	3350
Field Scour Evaluation		O		
Drift	G, F, P, or C	G	0	3366
Fender System	G, F, P, or C		0	3364
Movable Span Machinery	G, F, P, or C			
Response to Live Load	G, F, P, or C	G		
Estimated Remaining Life	0 - 100 Years	12		

Note: If NC SMU Inspection Item is not present, leave NC SMU item blank

Inspection Information

Item	Grade Scale	Grade
Regulatory Sign Noticed Issued	YES/NO	N
Priority Maintenance Request Submitted	YES/NO	N
Inspection Time	Hours	4
Traffic Control Time	Hours	0
Snooper Time	Hours	0
Ladder Used	YES/NO	Y
Bucket Truck Used	YES/NO	N
Boat Used	YES/NO	N
Other Equipment Used	YES/NO	N

National Bridge and NC SMU Inspection Item Details

Structure Number: 280082

Inspection Date: 02/10/2016

Item	Superstructure - Item 59	Grade	4	Maint Code		Qty.	0
-------------	--------------------------	--------------	---	-------------------	--	-------------	---

Details	SPALLED END DIAPHRAGM IN BAY 1 - SPAN 1 OVER BENT 1 (36" L X 6" W X 1.5 D) SPALLED END DIAPHRAGM IN BAY 2 - SPAN 1 OVER BENT 1 (24" L X 6" W X 1.5 D) SPALLED END DIAPHRAGM IN BAY 3 - SPAN 1 OVER BENT 1 (2 @ 24" L X 6" W X 1.5 D) SPALLED END DIAPHRAGM IN BAY 2 - SPAN 2 OVER BENT 2 (36" L X 6" W X 1.5 D) CRACKED END DIAPHRAGM IN BAY 2 - SPAN 3 OVER BENT 2
----------------	---

EXTERIOR GIRDERS OVER EACH BENT HAVE WEB AND BOTTOM FLANGE REPAIRS

Item	Approach Roadway Alignment - Item 72	Grade	8	Maint Code		Qty.	0
-------------	--------------------------------------	--------------	---	-------------------	--	-------------	---

Details	CRACKING AND MINOR SETTLEMENT AT EACH BRIDGE APPROACH
----------------	---

Item	Scour	Grade	F	Maint Code		Qty.	0
-------------	-------	--------------	---	-------------------	--	-------------	---

Details	SLOPE SETTLEMENT AT END BENT 1 (15' L X 2.5' W X 6" D) AT SOUTH HALF SLOPE SETTLEMENT AT END BENT 2 (2' L X 2.5' W X 3" D) AT NORTH FACE SLOPE SETTLEMENT AT NORTHEAST WING (2' L X 1' W X 3" D)
----------------	--



DAMAGED SOUTHEAST DELINEATOR



1" MAXIMUM SETTLEMENT AND CRACKING IN WEST APPROACH



DAMAGED NORTHWEST DELINEATOR



MINOR SETTLEMENT AND CRACKING IN EAST APPROACH



CRACKING AND DEVELOPING POTHOLE IN EAST BOUND LANE OF EAST APPROACH-80 SQUARE FEET



SLOPE SETTLEMENT 2.5' X 6" AT END BENT 1 - 15 FEET



1' DEEP UNDERMINE 2' LONG X 3" HIGH AT NORTHEAST WING



Span 1 Wearing Surface: 1/8" CRACKING ALONG END BENT 1 FILL FACE



Span 1 Wearing Surface: MINOR MAP CRACKING COVERING ENTIRE SPAN



Span 2 Wearing Surface: 1/8" CRACKING ALONG BENT 1



Span 3 Wearing Surface: 1/8" CRACKING ALONG BENT 2



Span 3 Wearing Surface: 1/8" CRACKING ALONG END BENT 2 FILL FACE



Span 1 Left Bridge Rail: 3/64" CRACKING IN CURB AND DRAIN #2



Span 1 Left Bridge Rail: SURFACE SCALING ALONG ENTIRE RAIL



Span 2 Left Bridge Rail: 1/32" CRACK IN POST 4



Span 2 Right Bridge Rail: 1/16" CRACKING IN POST 4



Span 2 Right Bridge Rail: 1/32" CRACK BETWEEN POST 4 AND 5



Span 2 Right Bridge Rail: 1/32" CRACK AT POST 5



Span 3 Left Bridge Rail: SPALLING WITH EXPOSED REBAR IN POST 4



Span 3 Left Bridge Rail: 1/32" CRACK IN POST 5



Span 3 Right Bridge Rail: 1/32" CRACK IN POST 5



Span 1 Deck: 6" DIAMETER X .5" DEEP POPOUTS IN EACH OVERHANG



Span 2 Deck: 6" DIAMETER X .5" DEEP POPOUTS IN EACH OVERHANG



Span 3 Deck: TRANSVERSE CRACKING WITH LIGHT EFFLORESCENCE AND RUST STAINING IN BAY 1 NEAR
END BENT 2



Span 3 Deck: TRANSVERSE CRACKING IN BAY 2 NEAR END BENT 2



Span 3 Deck: 6" DIAMETER X .5" DEEP POPOUTS IN EACH OVERHANG



Bent 1 Cap : 12" X 4" X 1" DEEP SPALL WITH EXPOSED REBAR ON WEST FACE AT GIRDER 4



Bent 1 Cap : 12" X 6" X 2" DEEP CORNER SPALL ON EAST FACE ON SOUTH END



Bent 1 Cap : 3/64" CORNER CRACKING AT EACH BOTTOM CORNER



Bent 2 Cap : SPALLING ON EAST FACE



Bent 2 Cap : 3/64" CORNER CRACKING ON TOP AND BOTTOM ON EAST FACE



Bent 2 Cap : 1/8" CRACKING ON SOUTHEAST WING



Span 1 Beam 1: SURFACE RUSTING AT ENDS OVER BENTS



Span 1 Beam 2: SURFACE RUSTING ALONG ENTIRE GIRDER SPAN



Span 1 Beam 3 Near Bearing : BEARINGS SHOW RUST WITH FLAKING SECTION LOSS



Span 1 Beam 3 Far Bearing : BEARINGS SHOW RUST WITH FLAKING SECTION LOSS



Span 2 Beam 4 Near Bearing : BEARINGS SHOW RUST WITH FLAKING SECTION LOSS



Span 3 Beam 1 Far Bearing : BEARINGS SHOW RUST WITH FLAKING SECTION LOSS



SPALLED END DIAPHRAGM-BAY 1-SPAN 1 AT BENT 1 (36" L X 6" X 1.5" D)



SPALLED END DIAPHRAGM-BAY 2-SPAN 1 AT BENT 1 (24" L X 6" X 1.5" D)



SPALLED END DIAPHRAGM-BAY 3-SPAN 1 AT BENT 1 (24" L X 6" X 1.5" D)



SPALLED END DIAPHRAGM-BAY 2-SPAN 2 AT BENT 2 (36" L X 6" X 1.5" D)



CRACKED END DIAPHRAGM- BAY 2- SPAN 3 AT BENT 2



SLOPE SETTLEMENT 2' LONG X 2.5' UNDER X 3" HIGH AT NORTH END OF END BENT 2



EAST APPROACH



WEST APPROACH



LOOKING NORTH, UPSTREAM



LOOKING SOUTH, DOWNSTREAM



EAST POSTING SIGN



BRIDGE PLAQUE AT NORTHWEST CORNER



WEST POSTING SIGN



BRIDGE PLAQUE AT SOUTHEAST CORNER



TYPICAL END BENT



TYPICAL UNDERDECK



TYPICAL UNDERSIDE



TYPICAL BENT



TYPICAL EXTERIOR GIRDER REPAIR



SOUTH ELEVATION



NORTH ELEVATION

NATIONAL BRIDGE INVENTORY----- STRUCTURE INVENTORY AND APPRAISAL

Run Date: 06/30/2016

IDENTIFICATION					
(1) STATE NAME -NORTH CAROLINA	BRIDGE	280082		SUFFICIENCY RATING =	21.88
(8) STRUCTURE NUMBER(FEDERAL)		00000000570082		STATUS =	Structurally Deficient
(5) INVENTORY ROUTE (ON/UNDER) - ON		31000470			
(2) STATE HIGHWAY DEPARTMENT DISTRICT		1		CLASSIFICATION	
(3) COUNTY CODE 57	(4) PLACE CODE	0		(112)NBIS BRIDGE SYSTEM -	YES
(6) FEATURE INTERSECTED - LICK CREEK				(104)HIGHWAY SYSTEM Is not on NHS	0
(7) FACILITY CARRIED NC47				(26) FUNCTIONAL CLASS - Major Collector	07
(9) LOCATION 0.1 MI. W. JCT. SR2335				(100)STRAHNET HIGHWAY - Not a STRAHNET Route	0
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE - No Parallel Structure	N
(16)LAT 35° 39' 49.43"	(17)LONG 80° 7' 15.07"			(102)DIRECTION OF TRAFFIC - 2-way Traffic	2
(98)BORDER BRIDGE STATE CODE	PCT SHARE			(103)TEMPORARY STRUCTURE - Temporary Structure/Conditions	T
(99)BORDER BRIDGE STRUCTURE NO				(110)DESIGNATED NATIONAL NETWORK - Not on the National Network	0
				(20) TOLL On Free Road	3
				(31) MAINTAIN - State Highway Agency	01
				(22) OWNER - State Highway Agency	01
				(37) HISTORICAL SIGNIFICANCE - Not Eligible	5
STRUCTURE TYPE AND MATERIAL					
(43) STRUCTURE TYPE MAIN: Steel					
TYPE - Stringer Mutlibeam or Girder		CODE 302			
(44) STRUCTURE TYPE APPR :				CONDITION	
TYPE -		CODE 000		(58) DECK	5
(45) NUMBER OF SPANS IN MAIN UNIT		3		(59) SUPERSTRUCTURE	3
(46) NUMBER OF APPROACH SPANS				(60) SUBSTRUCTURE	6
(107)DECK STRUCTURE TYPE - 1		CODE		(61) CHANNEL & CHANNEL PROTECTION	6
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(62) CULVERTS	N
(A) TYPE OF WEARING SURFACE -		CODE			
(B) TYPE OF MEMBRANE -		CODE		LOAD RATING AND POSTING	
(C) TYPE OF DECK PROTECTION -		CODE		(31) DESIGN LOAD H 15	2
				(63) OPERATING RATING METHOD - Load Factor	1
				(64) OPERATING RATING - HS-18	32
				(65) INVENTORY RATING METHOD - Load Factor	1
				(66) INVENTORY RATING - HS-11	19
				(70) BRIDGE POSTING - Posting Required	2
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED	P
				DESCRIPTION - Posted for Load	
AGE AND SERVICE					
(27) YEAR BUILT		1951		APPRAISAL	
(106)YEAR RECONSTRUCTED				(67) STRUCTURAL EVALUATION	3
(42) TYPE OF SERVICE : ON - Highway				(68) DECK GEOMETRY	4
UNDER - Waterway		CODE 15		(69) UNDERCLEARANCES,VERTI & HORIZ	N
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE		0		(71) WATERWAY ADEQUACY	7
(29) AVERAGE DAILY TRAFFIC		1400		(72) APPROACH ROADWAY ALIGNMENT	8
(30) YEAR OF ADT 2013	(109) TRUCK ADT PCT	7%		(36) TRAFFIC SAFETY FEATURES	0000
(19) BYPASS OR DETOUR LENGTH		1 MI		(113)SCOUR CRITICAL BRIDGES	8
GEOMETRIC DATA					
(48) LENGTH OF MAXIMUM SPAN		34 FT		PROPOSED IMPROVEMENTS	
(49) STRUCTURE LENGTH		105 FT		(75) TYPE OF WORK -	CODE
(50)CURB OR SIDEWALK: LEFT 1 FT RIGHT		1 FT		(76) LENGTH OF STRUCTURE IMPROVEMENT	
(51) BRIDGE ROADWAY WIDTH CURB TO CURB		24 FT		(94) BRIDGE IMPROVEMENT COST	
(52) DECK WIDTH OUT TO OUT		25.333 FT		(95) ROADWAY IMPROVEMENT COST	
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)		22 FT		(96) TOTAL PROJECT COST	
(33) BRIDGE MEDIAN - No Median		CODE 0		(97) YEAR OF IMPROVEMENT COST ESTIMATE	
(34) SKEW 30°	(35) STRUCTURE FLARED	0		(114)FUTURE ADT 2800	(115) YEAR FUTURE ADT 2025
(10) INVENTORY ROUTE MIN VERT CLEAR		999.9 FT		INSPECTIONS	
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		24 FT		(90) INSPECTION DATE	02/10/2016
(53) MIN VERT CLEAR OVER BRIDGE RDWY		999.9 FT		(92) CRITICAL FEATURE INSPECTION :	(93) CFI DATE
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad		0 FT		A) FRACTURE CRIT DETAIL - NO	A)
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad		000 FT		B) UNDERWATER INSP - NO	B)
(56) MIN LAT UNDERCLEAR LT REF -		000 FT		C) OTHER SPECIAL INSP NO	C)
				SCOUR	
NAVIGATION DATA					
(38) NAVIGATION CONTROL - No Navigational Control		CODE 0			
(111)PIER PROTECTION -		CODE			
(39) NAVIGATION VERTICAL CLEARANCE		0			
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR		FT			
(40) NAVIGATION HORIZONTAL CLEARANCE		0 FT			

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 06/30/2016

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :
DAVIDSON	9	1	280082	105 FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
NC47	LICK CREEK

LOCATED :	BRIDGE NAME :	CITY :
0.1 MI. W. JCT. SR2335		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
07	FA	NFA	1400 2013	LT 181 RT 181

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1951	SHPWC	6-156		H 15

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :	UNDER :
			TAN	60	ON 2	0

NAVIGATION :	HT. CRN. TO BED :	WATER DEPTH :
VC 0 FT HC 0 FT	14 FT	1 FT

SUPERSTRUCTURE : REINFORCED CONCRETE DECK ON I-BEAMS

SUBSTRUCTURE : END BENTS:RC CAPS ON TIMBER PILES,INT.BENTS:RC POST & BEAM

SPANS : 3@35'0

BEAMS OR GIRDERS : 4 LINES OF W24X76 I-BEAMS @ 6'9 CENTERS

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
5.75 RC, 3.5" AWS		25.333 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
24 FT	26 FT	LT 1 FT RT 1 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	DATE
HS-11	HS-18	int.bmB	SV 22	28	03/30/2010

SYSTEM :	GREEN LINE ROUTE :
Primary N.C. Route	N

UNDER ROUTES AND CLEARANCES

REMARKS :

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 280082

County DAVIDSON

Date:

These Repairs Should Be Made Within Twelve Months From Date Of This Inspection

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
 3348	Maintain Concrete Substructure Components	LF	1	12" X 4" X 1" DEEP SPALL WITH EXPOSED REBAR ON WEST FACE AT GIRDER 4 ON BENT 1	
 3348	Maintain Concrete Substructure Components	LF	1	12" X 6" X 2" DEEP CORNER SPALL WITH EXPOSED REBAR ON EAST FACE OF BENT 1 AT SOUTH END	
 3348	Maintain Concrete Substructure Components	LF	10	SPALLING WITH EXPOSED REBAR ON EAST FACE OF BENT 2 CAP	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 280082 County DAVIDSON

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3348	Maintain Concrete Substructure Components	1 LF
Location:		
Pier Cap	Bent/Span No. 1	BENT CAP 1
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification	
Submitted Date:	Submitted By:	Assisted By:
02/23/2016	R. D. ELLIOTT	B. C. HOUSER
Details		
12" X 4" X 1" DEEP SPALL WITH EXPOSED REBAR ON WEST FACE AT GIRDER 4 ON BENT 1		

MMS Code	MMS Description	Quantity
3348	Maintain Concrete Substructure Components	1 LF
Location:		
Pier Cap	Bent/Span No. 1	BENT 1 CAP
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification	
Submitted Date:	Submitted By:	Assisted By:
02/23/2016	R. D. ELLIOTT	B. C. HOUSER
Details		
12" X 6" X 2" DEEP CORNER SPALL WITH EXPOSED REBAR ON EAST FACE OF BENT 1 AT SOUTH END		

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 280082 County DAVIDSON

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3348	Maintain Concrete Substructure Components	10 LF
Location:		
Pier Cap	Bent/Span No. 2	BENT 2 CAP
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification	
Submitted Date:	Submitted By:	Assisted By:
02/23/2016	R. D. ELLIOTT	B. C. HOUSER
Details		
SPALLING WITH EXPOSED REBAR ON EAST FACE OF BENT 2 CAP		



12" X 4" X 1" DEEP SPALL WITH EXPOSED REBAR ON WEST FACE AT GIRDER 4 ON BENT 1



12" X 6" X 2" DEEP CORNER SPALL WITH EXPOSED REBAR ON EAST FACE OF BENT 1 AT SOUTH END

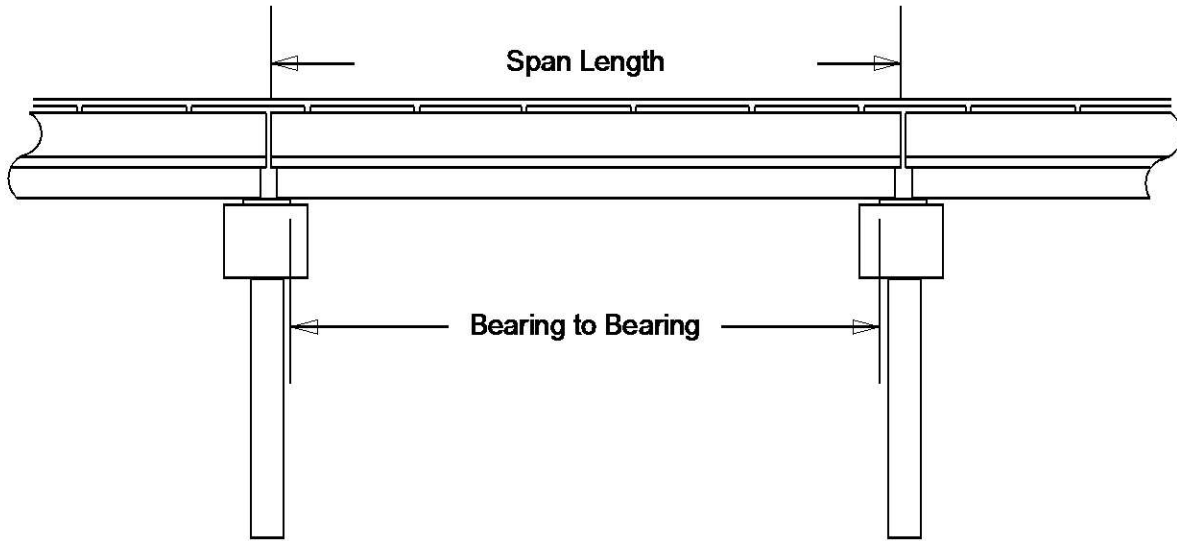


SPALLING WITH EXPOSED REBAR ON EAST FACE OF BENT 2 CAP

Structure Data Worksheet

Spans

County: **DAVIDSON** Structure No: **280082** Date: Inspected By: **RDE**



Span No	Span Length	Bearing to Bearing	Comments
1	35.0	33.25	NBIS BL: 99.833 FT.
2	35.0	34.0	
3	35.0	33.25	

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 280082 County: DAVIDSON Date: _____ By: RDE

Record sounding from top of rail. Other location if needed: _____

Distance from Highwater Mark to top of rail: _____ Location of Highwater Mark: _____

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	2.7	TOP OF WING			
1	2.7	TOP OF WING			
1.1	4.9	Top of Cap			
2.1	4.9	Top of Cap			
2.2	6.3	FACE OF CAP	2.2	6	FACE OF CAP
6	8.4	N/G			
18	10.5	N/G			
30	12.5	N/G			
35	12.8	PIER 1	35	15.5	PIER 1
48	15	Water Surface/Water Edge (WSWE)			
53	15.8	Water Surface (WS)			
65	16.1	CL CREEK			
70	15.9	PIER 2	70	15.6	PIER 2
75	15	Water Surface/Water Edge (WSWE)			
78	14.3	N/G			
80	10.3	N/G			
90	9.7	N/G			
100	6.4	N/G			
104	6	FACE OF CAP	104	6.2	FACE OF CAP
104.1	4.9	Top of Cap			
105	4.9	Top of Cap			
105.1	2.7	TOP OF WING			
106	2.7	TOP OF WING			

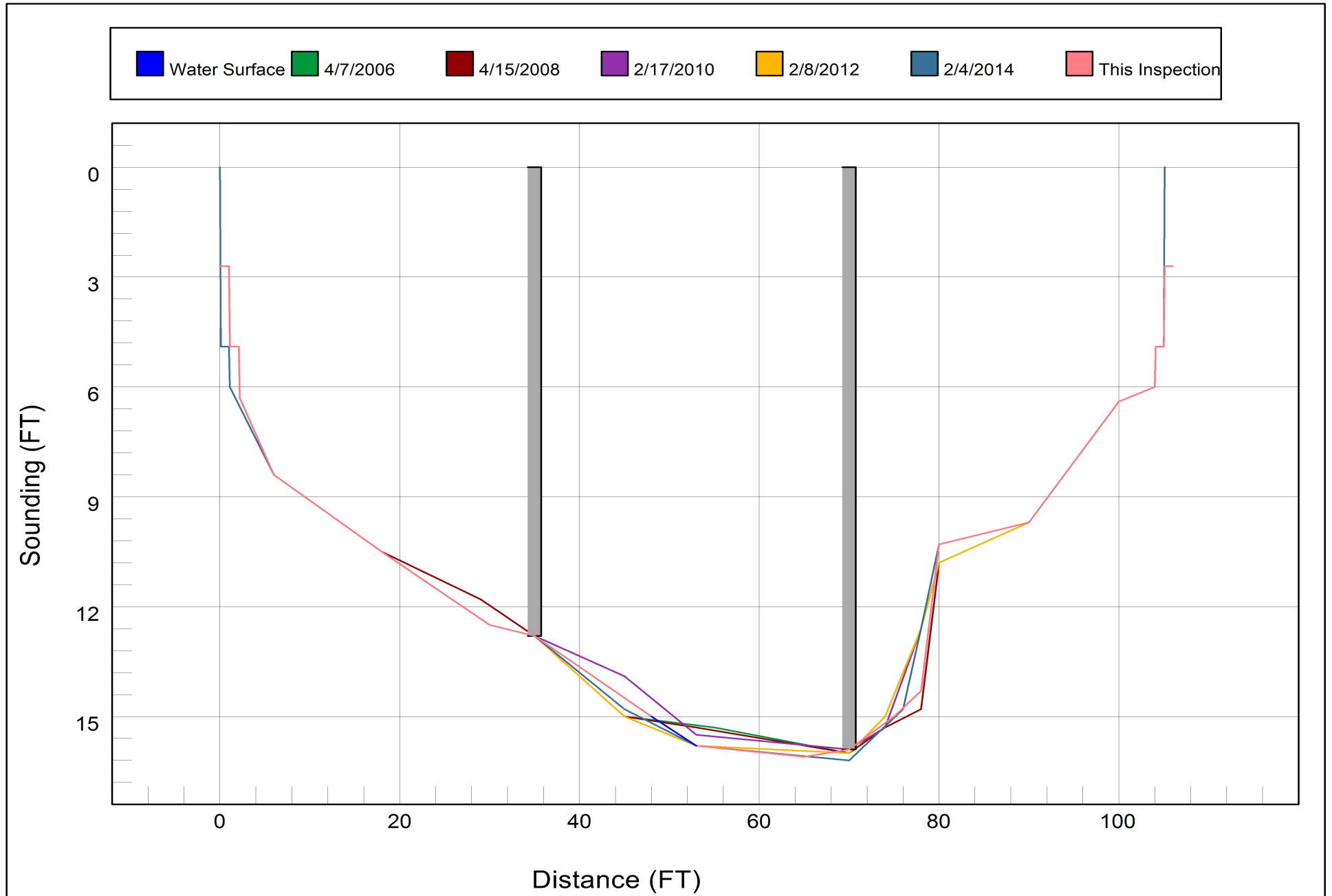
Bridge: 280082

County: DAVIDSON

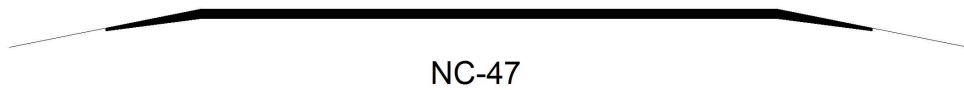
Date:

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch



Roadway	22ft Wide	2 Paved Lanes	Looking East
Left Shoulder	4ft Wide		4ft Unpaved
Right Shoulder	4ft Wide		4ft Unpaved
Left Guardrail			
Right Guardrail			

MEASUREMENTS VERIFIED 2-10-16 BCH
MEASUREMENTS VERIFIED 2-4-14 JER
MEASUREMENTS VERIFIED 2-8-12 BTH
MEASUREMENTS VERIFIED 2-17-10 BTH

Title

APPROACH ROADWAY

Description

SHEET 1

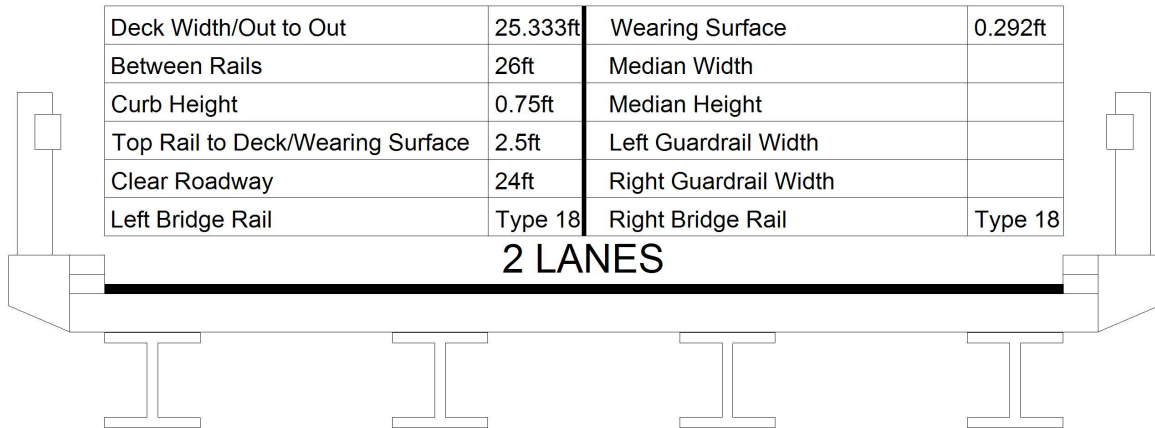
Bridge No: 280082

Drawn By: BTH

Date: 04/15/08

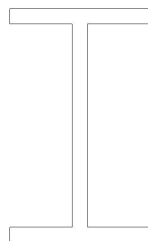
File Name: S0090001102

Bridge Inspection Field Sketch



Beam No	Beam Type	Spacing	Comments
1	Steel I Beam	6.75 ft.	
2	Steel I Beam	6.75 ft.	
3	Steel I Beam	6.75 ft.	
4	Steel I Beam		

ABUTS: RC CAP & TIMBER PILES. PIERS: 2 COLUMN RCP&B PIERS.

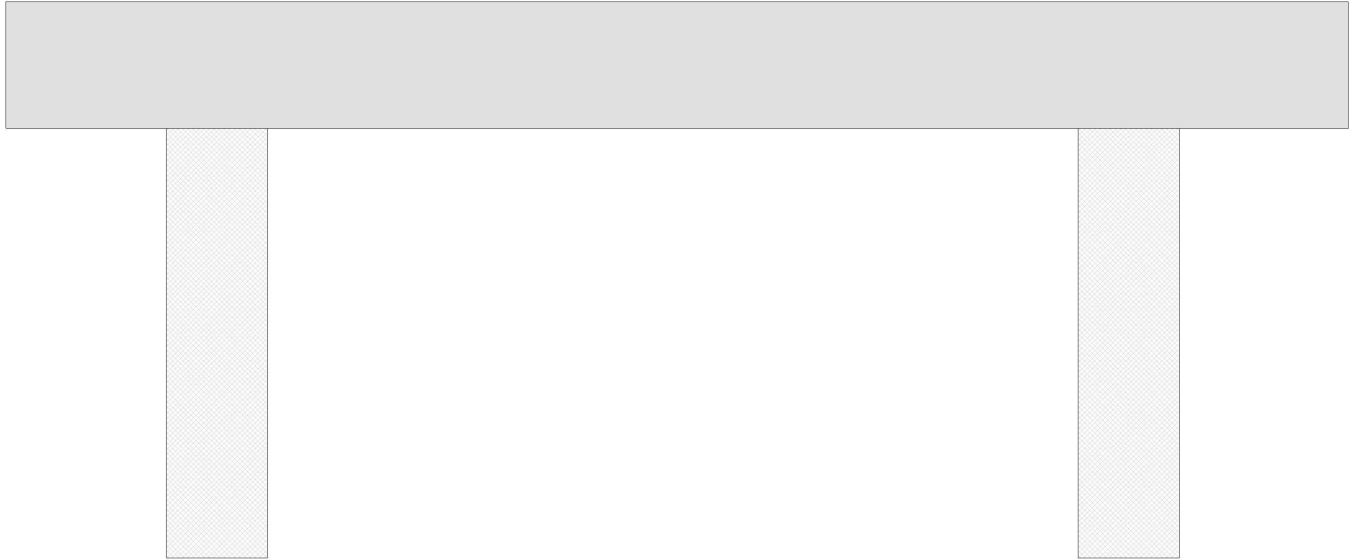


I-BEAMS	WIDTH	HEIGHT	WEB	FLANGE
ALL	.75 ft.	2.0 ft.	.042 ft.	.052 ft.

MEASUREMENTS VERIFIED 2-10-16 BCH
 MEASUREMENTS VERIFIED 2-4-14 JER
 MEASUREMENTS VERIFIED 2-8-12 BTH
 MEASUREMENTS VERIFIED 2-17-10 BTH

Title		Description	
SUPERSTRUCTURE		SHEET 2	
Bridge No:	280082	Drawn By:	BTH
Date:	04/15/08	File Name:	S0090001103

Bridge Inspection Field Sketch



Cap Information			Material Cast-in-Place Concrete							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.				
26.500 ft.	2.500 ft.	2.500 ft.	4.25 ft.	4.25 ft.	1.563 ft.	1.563 ft.				
Subcap Information			Material							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
Sill Information			Material							
Length	Width	Height								
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Concrete	18.0 ft.	2.0 ft.	2.0 ft.		Vertical	No	No	No	No
2	Concrete		2.0 ft.	2.0 ft.		Vertical	No	No	No	No
MEASUREMENTS REVISED 2-10-16 BCH MEASUREMENTS REVISED 2-4-14 JER										
Bent/Abutment #: 1			Similar Bents: 1							

Title

PIERS

Description

SHEET 3

Bridge No: 280082

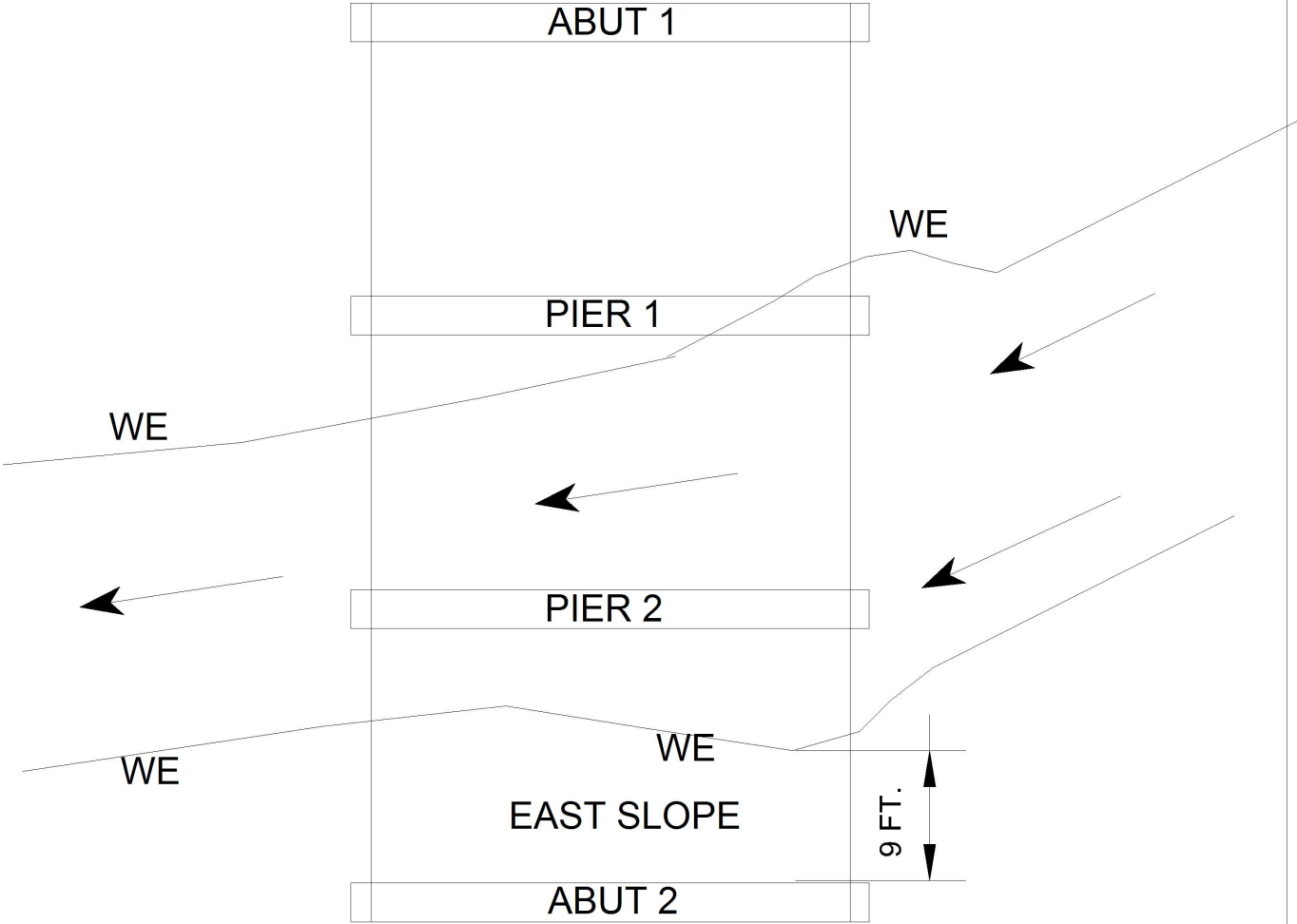
Drawn By: BTH

Date: 4/15/2008

File Name: S0090002765

Bridge Inspection Field Sketch

STREAM ALIGNMENT



MEASUREMENTS REVISED 2-10-16 BCH

Title		Description	
STREAM ALIGNMENT		SHEET 4	
Bridge No:	280082	Drawn By:	JER
		Date:	2/5/2014
		File Name:	S0090003466