



Latitude:33.87974, Longitude:-93.29941

Route:67 Section:04 Log:0.31

Arnold Road ID:10x67x4xA, Arnold Log mile:0.293

District 07, 19 - Clark County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

Bridge Posting Information

41 - Structure Open/Posted/Closed: A - Open, no restriction

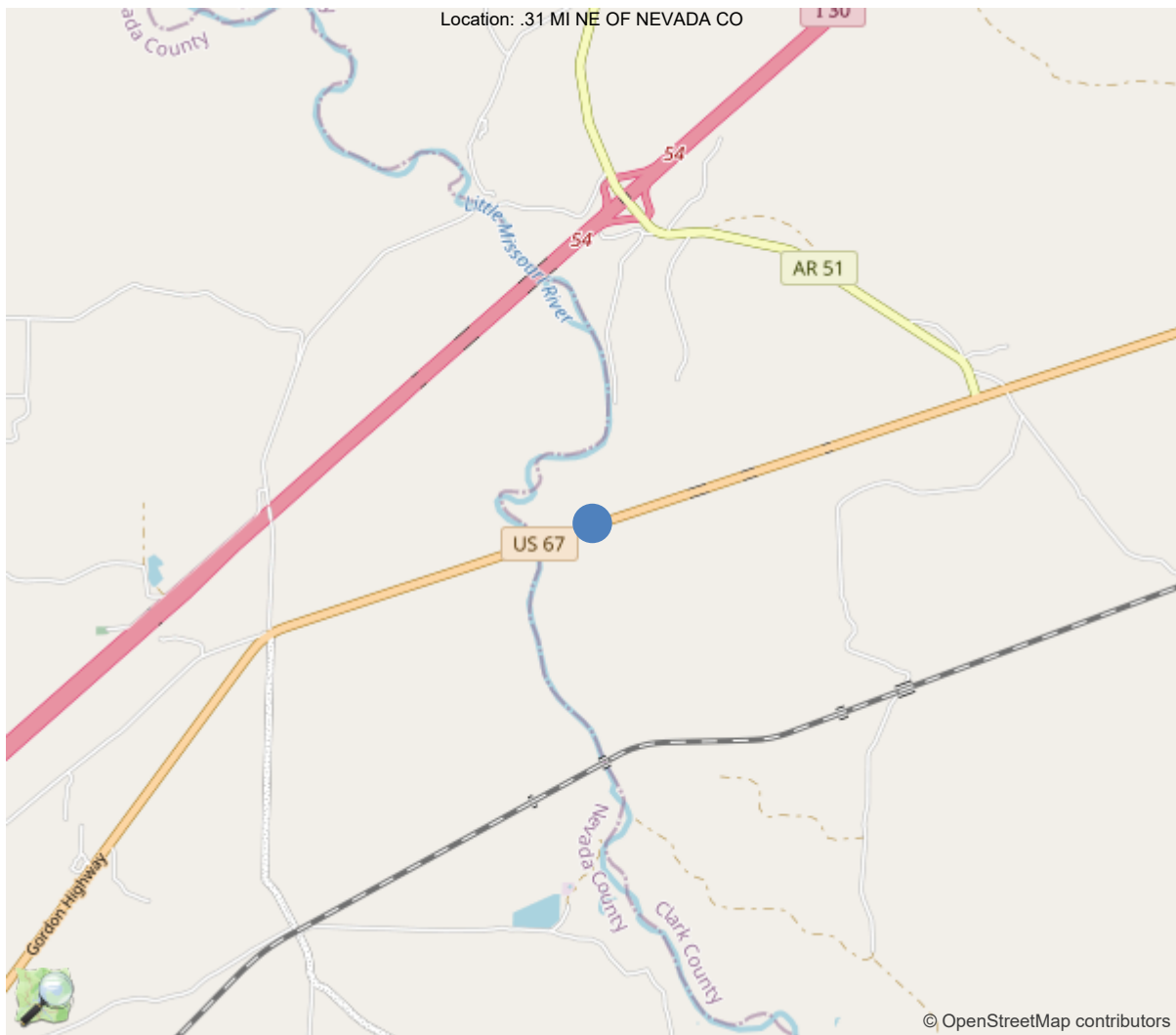
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	39		
Code 9 (31 Tons)	43		
Code 5 (40 Tons)	51		

If calculated Capacity is less than the Legal Load Listed, the Bridge Legally Requires Posting Signs to be installed by the Bridge Owner



30"x36" AR



33.87974, -93.29941



Asset #01382(Routine)

US 67 S-4 LM 0.31 over MOON LAKE

Location: .31 MI NE OF NEVADA CO

Team Lead: John Parks Inspection Date: 01/09/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	01382
(5) Inventory Route	1
(2) Highway Agency District	07 - District 07
(3) County Code	19 - Clark County
(4) Place Code	0
(6) Features Intersected	MOON LAKE
(7) Facility Carried	US 67 S-4 LM 0.31
(9) Location	.31 MI NE OF NEVADA CO
(11) Mile Point	0.31 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	33.8797439189387
(17) Longitude	-93.2994075580438
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	14
Material	1 - Concrete
Type	4 - Tee beam
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	5
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1931
(106) Year Reconstructed	0
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	1400
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	3 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	36 ft
(49) Structure Length	181 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	24.3 ft
(52) Deck Width Out to Out	26.1 ft
(32) Approach Roadway Width (W/Shoulders)	41 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	24.3 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	99.9 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	1 - Navigation protection not
(39) Navigation Vertical Clearance	0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	0 ft
(40) Navigation Horizontal Clearance	0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	0
(26) Functional Class	7 - Rural Major Collector
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exists
(102) Direction of Traffic	2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	1 - The inventory route is par
(20) Toll	3 - On free road. The structu
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	6
(59) Superstructure	6
(60) Substructure	6
(61) Channel & Channel Protection	7
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	2 - M 13.5 / H 15
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	57
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	34
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(72) Approach Roadway Alignment	7
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	5 - Bridge foundations determined t
PROPOSED IMPROVEMENTS	
(75) Type of Work	
(76) Length of Structure Improvement	0 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 0
(97) Year of Improvement Cost Estimate	
(114) Future ADT	1207
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	01/09/2023		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	No		
* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.			



Asset #01382(Routine)

US 67 S-4 LM 0.31 over MOON LAKE

Location: .31 MI NE OF NEVADA CO

Team Lead: John Parks Inspection Date: 01/09/2023

General Observation

01/09/2019 JPR -- This structure is logged from Southwest to Northeast.

58 - Deck (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Normal wear with some stained cracks in soffit.

59 - Superstructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Numerous spalled areas with some exposed steel, G1 bent 2 spalled with exposed steel, also G1 Bt 5 Girder 1 bent 3 back has failed , this bent has helper piles supporting the girders(ahead and back).

60 - Substructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Able to observe channel bottom at all piles, no scour noted. Wade and probe type 2 UW. Caps have some spalls and cracks, bt 3 cap has spalls at the bearing areas , bt 5 cap has spalls @ bearing areas. 01/09/2019 JPR -- helper footing (12'w X 30'l X 2'd) reinforced concrete footing was placed around original Bt.3 and 5 (12" X 12") H-beam columns (65#/ft.)/ahead and back side of original Bt. 3 were placed under each girder both ahead and back of Bt. 3.



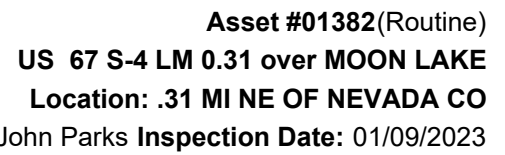
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Team Lead: John Parks Inspection Date: 01/09/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	4724	4621	103	0	0
1090	Exposed Rebar	SF	18	0	18	0	0
1120	Efflorescence/Rust Staining	SF	85	0	85	0	0
510	Wearing Surfaces	SF	4398	4378	0	20	0
3210	Delam/Spall/Patched Area/Pothole	SF	4	0	0	4	0
3220	Crack (Wearing Surface)	SF	16	0	0	16	0
(16) Normal wear with some stained cracks in soffit.							
110	Reinforced Concrete Open Girder/Beam	LF	905	839	32	34	0
1080	Delamination/Spall/Patched Area	LF	22	0	12	10	0
1090	Exposed Rebar	LF	24	0	0	24	0
1130	Cracking (RC and Other)	LF	20	0	20	0	0
(110) Girder 1 and 5 in all spans, outsides of the girders have spalls with exposed rebar at the beam ends. Span 3 & 4 @ Bent 3 have supplemental columns supporting the girders that have spalls with loss of bearing.							
202	Steel Column	EA	10	0	10	0	0
1000	Corrosion	EA	10	0	10	0	0
515	Steel Protective Coating	SF	600	520	0	80	0
3440	Effectiveness (Steel Protective Coatings)	EA	80	0	0	80	0
(202) Added for supplemental support @ Bent 3 (ahead and back)							
215	Reinforced Concrete Abutment	LF	52	46	6	0	0
4000	Settlement	LF	6	0	6	0	0
(215) Bt. 1 abutment, embankment has settled below the abutment.							
220	Reinforced Concrete Pile Cap/Footing	LF	100	100	0	0	0
(220) Bt 3 helper Pile Cap/ Footing. For details of the footing size see Substructure in Notes.							
227	Reinforced Concrete Pile	EA	20	10	10	0	0
1190	Abrasion/Wear (PSC/RC)	EA	10	0	10	0	0
234	Reinforced Concrete Pier Cap	LF	93	76	2	15	0
1080	Delamination/Spall/Patched Area	LF	10	0	2	8	0
1090	Exposed Rebar	LF	7	0	0	7	0
(234) Bent 3 cap has spalls at the bearing areas supplemental bent in place to support the girders.							
304	Open Expansion Joint	LF	96	48	0	48	0



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
2360	Adjacent Deck or Header	LF	24	0	0	24	0
7000	Damage	LF	24	0	0	24	0
(304) Bent 3 joint has failed and the adjacent deck is chipped. Water and debris are soaking and covering the cap.							
331	Reinforced Concrete Bridge Railing	LF	362	187	155	20	0
1080	Delamination/Spall/Patched Area	LF	45	0	25	20	0
1130	Cracking (RC and Other)	LF	100	0	100	0	0
7000	Damage	LF	30	0	30	0	0
(331) Numerous old traffic strikes, repaired posts and rails.							



Elevation



Span 5 girder 2. Spall with exposed rebar.



Name plate



Overview



Underview



Typical view of the superstructure



Typical view of the substructure



Approach



Downstream



Upstream

Maintenance Needs

Date Reported: 01/18/2011

Priority: D- Routine

Type of Work: Miscellaneous

Status: Monitor

Component: Deck

Deficiency Description

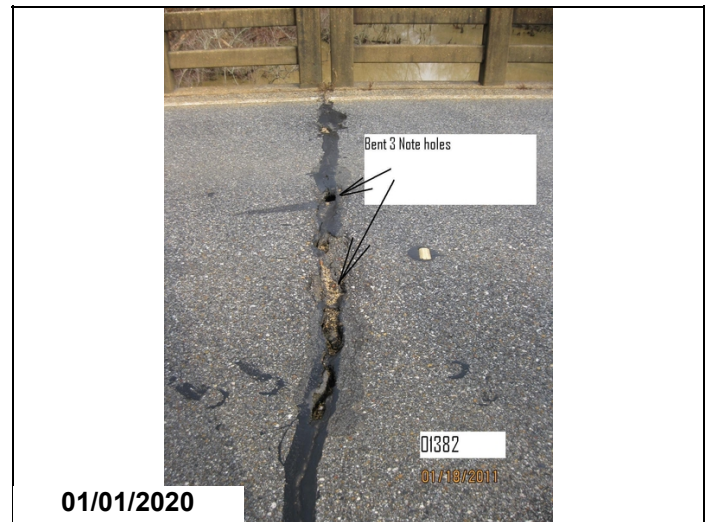
Bent 3 deck @ Joint between Spans 2 & 3, there are holes in the overlay @ the deck joint between Spans 2 & 3, with dirt and debris built up on the cap @ Bt. 3, also there is significant salt contamination to the ahead side of Bt. 3 cap.

01/09/2019 JPR -- there are holes in each travel lane that are allowing dirt, debris, and road salts to get onto the cap.

Remarks



Bent 3 joint looking from Lt. to Rt.



Bent 3, joint between spans 2 & 3 there are holes in the overlay and joint.



Bent 3, joint between spans 2 & 3 there are holes in the overlay and joint.

Maintenance Needs

Date Reported: 01/09/2023

Priority: D- Routine

Type of Work: Repair (General)

Status: Open

Component: Superstructure

Deficiency Description

Girder 1 and 5 in all spans, outsides of the girders have spalls with exposed rebar at the beam ends.

Remarks



Span 2, girder 1, exposed rebar on both ends.



Span 1 & 2, girder 5, @ Bt. 2, spalls with exposed rebar.



Span 5 girder 1, spall with exposed rebar.



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Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	
A-55 - Deck Washing Needed	
A-56 - Joint Cleaning/Flushing Needed	
A-57 - Beam End and Bearing Paint Needed	
A-58 - Cap Cleaning/Flushing Needed	
A-59 - Joint Repair Needed	
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	
A-62 - Hydro and LMC Advised	
A-63 - Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	

A-54 - Sealable Deck Cracks

A-55 - Deck Washing Needed

A-56 - Joint Cleaning/Flushing Needed



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A-57 - Girder End and Bearing Painting Needed

A-58 - Cap Cleaning/Flushing Needed

A-59 - Joint Repair Needed

A-60 - Full Girder Painting Needed

A-61 - Polymer Overlay Advised

A-62 - Hydro and LMC Advised

A-63 - Missing/Incorrect Log Mile Signage

A-64 - Vegetation Removal Requested



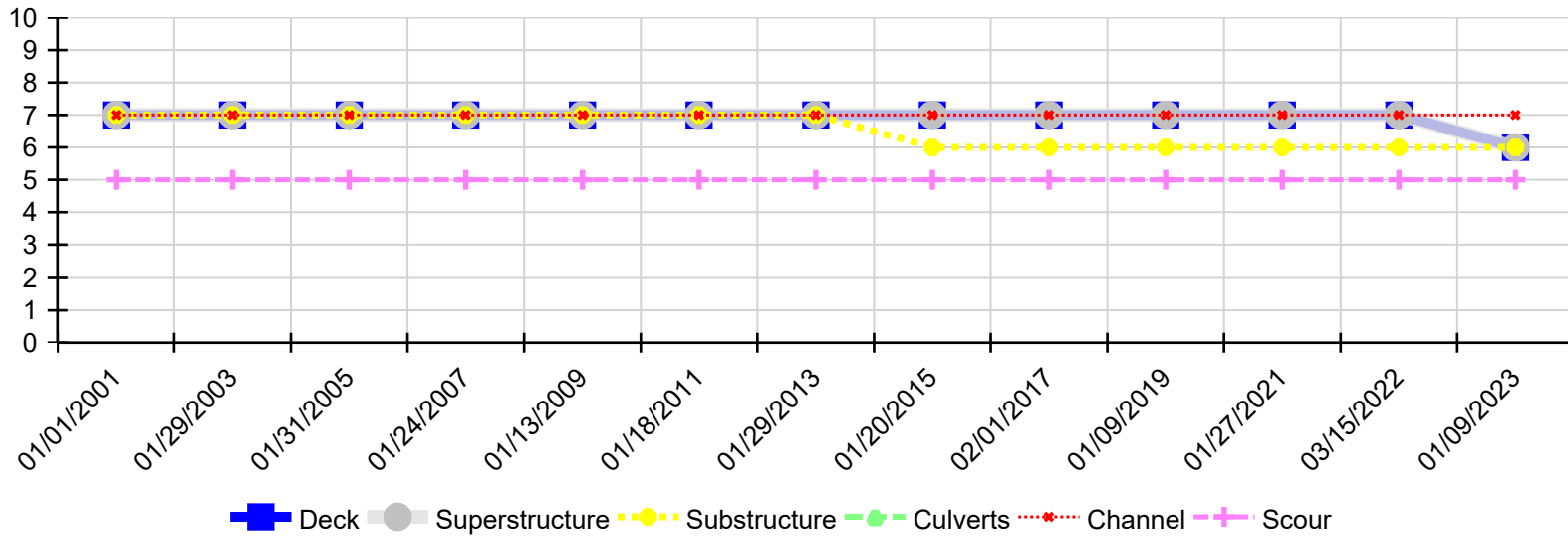
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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
01/09/2023	6	6	6	N	7	5
03/15/2022	7	7	6	N	7	5
01/27/2021	7	7	6	N	7	5
01/09/2019	7	7	6	N	7	5
02/01/2017	7	7	6	N	7	5
01/20/2015	7	7	6	N	7	5
01/29/2013	7	7	7	N	7	5
01/18/2011	7	7	7	N	7	5
01/13/2009	7	7	7	N	7	5
01/24/2007	7	7	7	N	7	5
01/31/2005	7	7	7	N	7	5
01/29/2003	7	7	7	N	7	5
01/01/2001	7	7	7	N	7	5