



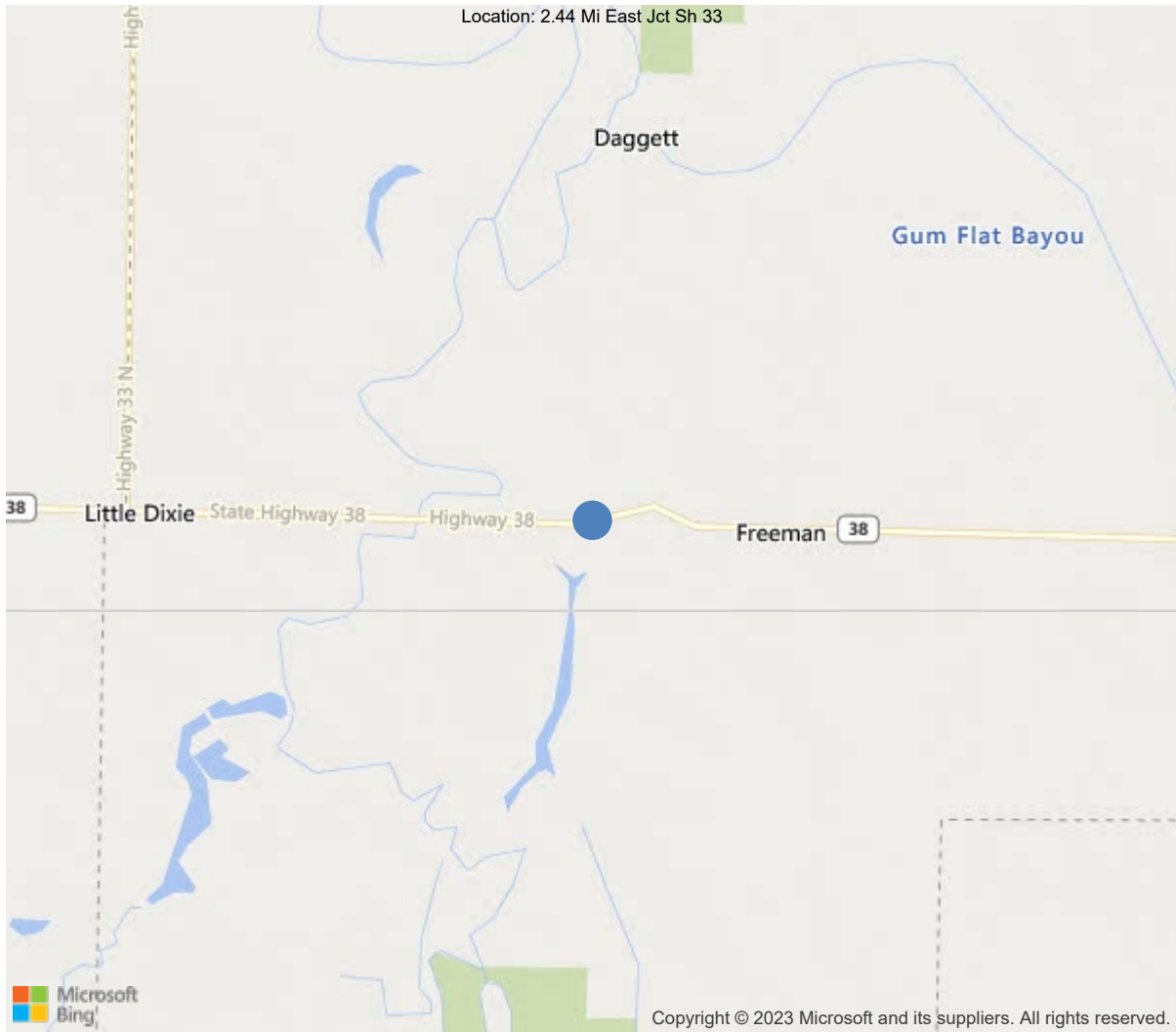
Latitude:35.00652, Longitude:-91.32360

Route:38 Section:02 Log:2.44

Arnold Road ID:74x38x2xA, Arnold Log mile:2.442

District 01, 147 - Woodruff County

Owner: 1 - State Highway Agency



35.00652, -91.32360





Asset #M3138(Routine)

Sh-38/Sec-2/L-2.44 over Grine Lake

Location: 2.44 Mi East Jct Sh 33

Team Lead: Drew Melton, Inspection Date: 08/03/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	M3138
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	147 - Woodruff County
(4) Place Code	0
(6) Features Intersected	Grine Lake
(7) Facility Carried	Sh-38/Sec-2/L-2.44
(9) Location	2.44 Mi East Jct Sh 33
(11) Mile Point	2.44 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000038020
(16) Latitude	35.00652
(17) Longitude	-91.3236
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	122
Material	1 - Concrete
Type	22 - Channel 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	2 - Concrete Precast Panels
(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	1968
(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	740
(30) Year of ADT	2018
(109) Truck ADT	9 %
(19) Bypass, Detour Length	30 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	19 ft
(49) Structure Length	95 ft
(50) Curb or Sidewalk Width	
Left	0.4 ft
Right	0.4 ft
(51) Bridge Roadway Width Curb to Curb	27.7 ft
(52) Deck Width Out to Out	28.7 ft
(32) Approach Roadway Width (W/Shoulders)	27.9 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	27.7 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 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	6 - Rural Minor Arterial
(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	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	7
(59) Superstructure	5
(60) Substructure	5
(61) Channel & Channel Protection	8
(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	41
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	25
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	4
(68) Deck Geometry	5
(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 to
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	855
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	08/03/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
* 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.			



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**59 - Superstructure (5)**

09/25/2018 lowered superstructure from 7 to 5 due to cracks, delaminations and spalls with exposed rebar to superstructure.

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**60 - Substructure (5)**

09/25/2018 lowered substructure from 6 to 4 due to substantial decay to some piles.

8/19/2020-Raised substructure from 4 to 5 due to piles being spliced and encased in concrete.

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**A-46 - Asset Files**

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**General Observation (False)**

Abutment #1 right approach rail has minor collision damage.

Abutment #2 left approach rail has minor collision damage.

Abutment #1 right approach shoulder has eroded at bridge end.

Gutters have dirt debris and vegetation in them.

Abutments #1 and 2 approach roadway has settled up to 1" at bridge end.

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ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	2731	2731	0	0	0
510	Wearing Surfaces	SF	2636	1136	1500	0	0
3220	Crack (Wearing Surface)	SF	1500	0	1500	0	0
(16) Wearing surface has multiple cracks all directions.							
110	Reinforced Concrete Open Girder/Beam	LF	760	409	162	142	47
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
1090	Exposed Rebar	LF	22	0	0	22	0
1120	Efflorescence/Rust Staining	LF	3	0	0	3	0
1130	Cracking (RC and Other)	LF	324	0	160	117	47
(110) All units all spans have vertical hairline flexure cracks in legs spaced six inch's to one foot apart. All units sides of girder legs have vertical hairline flexure cracks.							
Span #2 bolts are missing from unit to unit between units #(2,3),(3,4),(6,7) at bent #3, and loose bolt between unit #7,8 at bent #3.							
Span #1 unit #1 right leg has cs3 cracks and delaminated full length on bottom and side with four feet of exposed rebar in first half of span moderate section loss. Span #1 unit #2 left leg has cs2 cracks 3' on bottom mid span. Span #1 unit #2 right leg has cs2 cracks 2' on bottom mid span. Span #1 unit #3 right leg has cs2, cs3 cracks on bottom for six feet with a 1' spall exposed rebar moderate section loss, and a 1' delamination near bent #2. Span #1 unit #3 left leg has one foot cs3 crack on bottom at bent #1. Span #1 unit #5 left leg has cs2, cs3 cracks on bottom and side full length. Span #1 unit #5 right leg has cs2, cs3 cracks on bottom for full length. Span #1 unit #6 right leg has cs3 crack 1' at 3/4 span, and 1' at 1/4 span. Span #1 unit #7 right leg has cs3 crack on bottom for 8' in center with 1' spall with exposed rebar with moderate section loss. Span #1 unit #8 left leg has cs2, cs3 cracks full length on bottom and side with several delaminations.							
Span #2 unit #1 right leg has cs2 cracks on bottom full length. Span #2 unit #1 left leg has a cs2 crack for 1' at mid span on bottom. Span #2 unit #2 left leg has a 1' cs2 crack on bottom at bent #3. Span #2 unit #3 right leg has cs2 cracks on bottom for 2' at 3/4 span. Span #2 unit #4 left leg has cs4 cracks and delaminated on bottom and side full length with 2' of exposed rebar at 3/4 span with moderate section loss. Span #2 unit #4 right leg has cs4 cracks and delaminated on bottom and side full length with 2' of exposed rebar at 3/4 span with moderate section loss. Span #2 unit #6 right leg has cs2 cracks on bottom and side for 8' at mid span. Span #2 unit #7 left leg has cs2 to cs4 cracks and delaminated 10' at three quarter span. Span #2 unit #8 left leg has cs2 to cs4 cracks and delaminated full length on bottom and side with 2' of exposed rebar at 1/4 span and 1' at 3/4 span with moderate section loss. Span #2 unit #8 right leg has cs2 cracks on bottom and side for 3' mid span.							
Span #3 unit #1 right leg has cs2,cs3 cracks on bottom full length. Span #3 unit #2 left leg has cs2 cracks on bottom with rust stains for 3' starting at mid span. Span #3 unit #2 right leg has has cs2 cracks on bottom for 2' starting mid span. Span #3 unit #3 left leg has cs2 cracks on bottom for 8' starting at 1/4 span. Span #3 unit #4 left leg has cs2 cracks on bottom for 8' last half of span.							



Asset #M3138(Routine)

Sh-38/Sec-2/L-2.44 over Grine Lake

Location: 2.44 Mi East Jct Sh 33

Team Lead: Drew Melton, Inspection Date: 08/03/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
<p>Span #3 unit #5 both legs starting at 1/4 span have cs2 cracks for 6'</p> <p>Span #3 unit #6 left leg has cs2 cracks on bottom for 4' in center.</p> <p>Span #3 unit #6 right leg has cs2 cracks on bottom for 8' starting at bent #3.</p> <p>Span #3 unit #7 right leg has cs2, cs3 cracks on bottom for 12' starting at 1/4 span.</p> <p>Span #3 unit #7 left leg has cs2, cs3 cracks on bottom for 16' starting at 1/4 span.</p> <p>Span #3 unit #8 left leg has cs2, cs3 cracks and delaminated full length on bottom and side.</p> <p>Span #3 unit #8 right leg has 1' cs2 cracks on bottom for 2' just ahead on mid span.</p> <p>Span #4 unit #1 right leg has cs2 to cs4 cracks and delaminated full length on bottom and side with a 1' spall with exposed rebar at quarter span with moderate section loss.</p> <p>Span #4 unit #2 left leg has cs2 crack on bottom for 1' at mid span.</p> <p>Span #4 unit #5 right leg has cs2, cs3 cracks and delaminated on bottom for 8' starting at 1/4 span.</p> <p>Span #4 unit #6 left leg has cs2, cs3 cracks and delaminated for 8' on bottom and side starting at mid span.</p> <p>Span #4 unit #6 right leg has cs2 cracks on bottom for 4' starting at bent #4.</p> <p>Span #4 unit #7 left leg has cs2 cracks on bottom for 4' at center.</p> <p>Span #4 unit #8 left leg has cs2 to cs4 cracks and delaminated on bottom and side full length with a four foot spall with exposed rebar with moderate section loss at quarter span.</p> <p>Span #5 unit #1 right leg has cs2, cs3 cracks and delaminated full length on bottom and side with 3 spalled areas 4' at bent #5, 1' at mid span, and 1' at 3/4 span all with exposed rebar with moderate section loss.</p> <p>Span #5 unit #3 right leg has cs2 cracks on side at mid span for 2'.</p> <p>Span #5 unit #4 right leg has a six inch spall no rebar exposed in center span on bottom.</p> <p>Span #5 unit #6 right leg has cs2 cracks on bottom for 3' at mid span.</p> <p>Span #5 unit #8 left leg has cs2 to cs4 cracks and delaminated on bottom and side full length.</p>							
216	Timber Abutment	LF	82	62	0	0	20
1140	Decay/Section Loss	LF	20	0	0	0	20
(216) Abutment #1 back wall is decayed with areas of 100% section loss behind pile #5.							
228	Timber Pile	EA	30	0	18	11	1
1140	Decay/Section Loss	EA	7	0	0	6	1
1160	Crack (Timber)	EA	17	0	17	0	0
1170	Split/Delamination (Timber)	EA	6	0	1	5	0



Asset #M3138(Routine)

Sh-38/Sec-2/L-2.44 over Grine Lake

Location: 2.44 Mi East Jct Sh 33

Team Lead: Drew Melton, Inspection Date: 08/03/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
<p>(228) All piles have minor cracks.</p> <p>Bent #1 pile #3 has been spliced and encased in concrete. Encasement structural makeup unknown.</p> <p>Bent #2 pile #2 has minor split on right side at top.  Bent #2 pile #3 has moderate split on ahead side at top.  Bent #2 pile #4 has moderate split on back side at top.  Bent #2 pile #5 has moderate split at top right side.</p> <p>Bent #3 pile #3 has outer shell decay with moderate section loss, and core decay with moderate hollow sound.</p> <p>Bent #4 pile #2 is spliced and encased in concrete. Encasement structural makeup unknown.  Bent #4 pile #4 has outer shell and core decay with severe hollow sound.</p> <p>Span #5 pile #1 sounds slightly hollow at top.  Span #5 pile #4 has moderate split at top for two feet on right side.  Span #5 pile #5 has large split at top for 2' on right</p> <p>Bent #6 pile #2 is spliced and encased in concrete. Encasement structural makeup unknown.  Bent #6 pile #4 is spliced and encased in concrete. Encasement structural makeup unknown.</p>							
234	Reinforced Concrete Pier Cap	LF	179	153	8	18	0
1080	Delamination/Spall/Patched Area	LF	24	0	6	18	0
1130	Cracking (RC and Other)	LF	2	0	2	0	0
<p>(234) Abutment #1 cap has hairline vertical crack above pile 4.  Abutment #2 cap has hairline vertical crack above pile #2,3,4.</p> <p>Bent #2 cap back face above pile #2 has a one foot spall with no rebar exposed.  Bent #2 cap ahead face above pile #3 has a one foot spall with no exposed rebar, and a one foot delamination.  Bent #2 cap ahead face has a one foot spall at top above pile #3 and a one foot delamination above pile #1 and 3.right of pile.  Bent #3 cap back face above pile #3,4 each has a one foot spall with no exposed rebar.  Bent #3 cap ahead face near left end has a two foot delamination.  Bent #4 cap back face under first four units each have a one foot spall with no exposed rebar.  Bent #4 cap ahead face has a vertical crack between units #2,3.  Bent #5 cap back face has five one foot spalls with no exposed rebar at top.  Bent #5 cap ahead face has four one foot spalls no rebar exposed at top, and a two foot delamination on the right side of pile #1.</p>							
301	Pourable Joint Seal	LF	115	0	0	115	0
2350	Debris Impaction	LF	115	0	0	115	0
(301) Joint have been overlaid limiting movement.							
330	Metal Bridge Railing	LF	190	177	12	1	0
1020	Connection	LF	1	0	0	1	0
7000	Damage	LF	12	0	12	0	0
515	Steel Protective Coating	SF	570	0	570	0	0
3440	Effectiveness (Steel Protective Coatings)	LF	570	0	570	0	0





Asset #M3138(Routine)

Sh-38/Sec-2/L-2.44 over Grine Lake

Location: 2.44 Mi East Jct Sh 33

Team Lead: Drew Melton, Inspection Date: 08/03/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
	(330) Span #1 first post left side is cracked. Span #2 second post right side is cracked. Span #4 second post is cracked. Span #4 first post right side is spalled. Span #4 third post both sides are cracked. Span #4 right side rail has minor collision damage. Span #3 right side last post bottom nut missing. Paint is chipped and faded no bare steel exposed.						

**Location: 2.44 Mi East Jct Sh 33**

**Team Lead:** Drew Melton, **Inspection Date:** 08/03/2022

## Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	2731	2731	0	0	0
510	Wearing Surfaces	SF	2636	1136	1500	0	0
3220	Crack (Wearing Surface)	SF	1500	0	1500	0	0
(16) Wearing surface has multiple cracks all directions.							

## Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
110	Reinforced Concrete Open Girder/Beam	LF	760	409	162	142	47
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
1090	Exposed Rebar	LF	22	0	0	22	0
1120	Efflorescence/Rust Staining	LF	3	0	0	3	0
1130	Cracking (RC and Other)	LF	324	0	160	117	47

(110) All units all spans have vertical hairline flexure cracks in legs spaced six inch's to one foot apart. All units sides of girder legs have vertical hairline flexure cracks.

Span #2 bolts are missing from unit to unit between units #(2,3),(3,4),(6,7) at bent #3, and loose bolt between unit #7,8 at bent #3.

Span #1 unit #1 right leg has cs3 cracks and delaminated full length on bottom and side with four feet of exposed rebar in first half of span moderate section loss.  
Span #1 unit #2 left leg has cs2 cracks 3' on bottom mid span.  
Span #1 unit #2 right leg has cs2 cracks 2' on bottom mid span.  
Span #1 unit #3 right leg has cs2, cs3 cracks on bottom for six feet with a 1' spall exposed rebar moderate section loss, and a 1' delamination near bent #2.  
Span #1 unit #3 left leg has one foot cs3 crack on bottom at bent #1.  
Span #1 unit #5 left leg has cs2, cs3 cracks on bottom and side full length.  
Span #1 unit #5 right leg has cs2, cs3 cracks on bottom for full length.  
Span #1 unit #6 right leg has cs3 crack 1' at 3/4 span, and 1' at 1/4 span.  
Span #1 unit #7 right leg has cs3 crack on bottom for 8' in center with 1' spall with exposed rebar with moderate section loss.  
Span #1 unit #8 left leg has cs2, cs3 cracks full length on bottom and side with several delaminations.

Span #2 unit #1 right leg has cs2 cracks on bottom full length.  
Span #2 unit #1 left leg has a cs2 crack for 1' at mid span on bottom.  
Span #2 unit #2 left leg has a 1' cs2 crack on bottom at bent #3.  
Span #2 unit #3 right leg has cs2 cracks on bottom for 2' at 3/4 span.  
Span #2 unit #4 left leg has cs4 cracks and delaminated on bottom and side full length with 2' of exposed rebar at 3/4 span with moderate section loss.  
Span #2 unit #4 right leg has cs4 cracks and delaminated on bottom and side full length with 2' of exposed rebar at 3/4 span with moderate section loss.  
Span #2 unit #6 right leg has cs2 cracks on bottom and side for 8' at mid span.  
Span #2 unit #7 left leg has cs2 to cs4 cracks and delaminated 10' at three quarter span.  
Span #2 unit #8 left leg has cs2 to cs4 cracks and delaminated full length on bottom and side with 2' of exposed rebar at 1/4 span and 1' at 3/4 span with moderate section loss.  
Span #2 unit #8 right leg has cs2 cracks on bottom and side for 3' mid span.

Span #3 unit #1 right leg has cs2,cs3 cracks on bottom full length.  
Span #3 unit #2 left leg has cs2 cracks on bottom with rust stains for 3' starting at mid span.  
Span #3 unit #2 right leg has has cs2 cracks on bottom for 2' starting mid span.  
Span #3 unit #3 left leg has cs2 cracks on bottom for 8' starting at 1/4 span.  
Span #3 unit #4 left leg has cs2 cracks on bottom for 8' last half of span.  
Span #3 unit #5 both legs starting at 1/4 span have cs2 cracks for 6'  
Span #3 unit #6 left leg has cs2 cracks on bottom for 4' in center.  
Span #3 unit #6 right leg has cs2 cracks on bottom for 8' starting at bent #3.  
Span #3 unit #7 right leg has cs2, cs3 cracks on bottom for 12' starting at 1/4 span.  
Span #3 unit #7 left leg has cs2, cs3 cracks on bottom for 16' starting at 1/4 span.  
Span #3 unit #8 left leg has cs2, cs3 cracks and delaminated full length on bottom and side.  
Span #3 unit #8 right leg has 1' cs2 cracks on bottom for 2' just ahead on mid span.

Span #4 unit #1 right leg has cs2 to cs4 cracks and delaminated full length on bottom and side with a 1' spall with exposed rebar at quarter span with moderate section loss.  
Span #4 unit #2 left leg has cs2 crack on bottom for 1' at mid span.  
Span #4 unit #5 right leg has cs2, cs3 cracks and delaminated on bottom for 8' starting at 1/4 span.





Asset #M3138(Routine)

Sh-38/Sec-2/L-2.44 over Grine Lake

Location: 2.44 Mi East Jct Sh 33

Team Lead: Drew Melton, Inspection Date: 08/03/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
	<p>Span #4 unit #6 left leg has cs2, cs3 cracks and delaminated for 8' on bottom and side starting at mid span.</p> <p>Span #4 unit #6 right leg has cs2 cracks on bottom for 4' starting at bent #4.</p> <p>Span #4 unit #7 left leg has cs2 cracks on bottom for 4' at center.</p> <p>Span #4 unit #8 left leg has cs2 to cs4 cracks and delaminated on bottom and side full length with a four foot spall with exposed rebar with moderate section loss at quarter span.</p> <p>Span #5 unit #1 right leg has cs2, cs3 cracks and delaminated full length on bottom and side with 3 spalled areas 4' at bent #5, 1' at mid span, and 1' at 3/4 span all with exposed rebar with moderate section loss.</p> <p>Span #5 unit #3 right leg has cs2 cracks on side at mid span for 2'.</p> <p>Span #5 unit #4 right leg has a six inch spall no rebar exposed in center span on bottom.</p> <p>Span #5 unit #6 right leg has cs2 cracks on bottom for 3' at mid span.</p> <p>Span #5 unit #8 left leg has cs2 to cs4 cracks and delaminated on bottom and side full length.</p>						

#### 59 - Superstructure (5)

Comment: 09/25/2018 lowered superstructure from 7 to 5 due to cracks, delaminations and spalls with exposed rebar to superstructure.

## Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
216	Timber Abutment	LF	82	62	0	0	20
1140	Decay/Section Loss	LF	20	0	0	0	20
(216) Abutment #1 back wall is decayed with areas of 100% section loss behind pile #5.							
228	Timber Pile	EA	30	0	18	11	1
1140	Decay/Section Loss	EA	7	0	0	6	1
1160	Crack (Timber)	EA	17	0	17	0	0
1170	Split/Delamination (Timber)	EA	6	0	1	5	0
(228) All piles have minor cracks.							
Bent #1 pile #3 has been spliced and encased in concrete. Encasement structural makeup unknown.							
Bent #2 pile #2 has minor split on right side at top.							
Bent #2 pile #3 has moderate split on ahead side at top.							
Bent #2 pile #4 has moderate split on back side at top.							
Bent #2 pile #5 has moderate split at top right side.							
Bent #3 pile #3 has outer shell decay with moderate section loss, and core decay with moderate hollow sound.							
Bent #4 pile #2 is spliced and encased in concrete. Encasement structural makeup unknown.							
Bent #4 pile #4 has outer shell and core decay with severe hollow sound.							
Span #5 pile #1 sounds slightly hollow at top.							
Span #5 pile #4 has moderate split at top for two feet on right side.							
Span #5 pile #5 has large split at top for 2' on right							
Bent #6 pile #2 is spliced and encased in concrete. Encasement structural makeup unknown.							
Bent #6 pile #4 is spliced and encased in concrete. Encasement structural makeup unknown.							
234	Reinforced Concrete Pier Cap	LF	179	153	8	18	0
1080	Delamination/Spall/Patched Area	LF	24	0	6	18	0
1130	Cracking (RC and Other)	LF	2	0	2	0	0
(234) Abutment #1 cap has hairline vertical crack above pile 4.							
Abutment #2 cap has hairline vertical crack above pile #2,3,4.							
Bent #2 cap back face above pile #2 has a one foot spall with no rebar exposed.							
Bent #2 cap ahead face above pile #3 has a one foot spall with no exposed rebar, and a one foot delamination.							
Bent #2 cap ahead face has a one foot spall at top above pile #3 and a one foot delamination above pile #1 and 3.right of pile.							
Bent #3 cap back face above pile #3,4 each has a one foot spall with no exposed rebar.							
Bent #3 cap ahead face near left end has a two foot delamination.							
Bent #4 cap back face under first four units each have a one foot spall with no exposed rebar.							
Bent #4 cap ahead face has a vertical crack between units #2,3.							
Bent #5 cap back face has five one foot spalls with no exposed rebar at top.							
Bent #5 cap ahead face has four one foot spalls no rebar exposed at top, and a two foot delamination on the right side of pile #1.							

### 60 - Substructure (5)

Comment: 09/25/2018 lowered substructure from 6 to 4 due to substantial decay to some piles.  
8/19/2020-Raised substructure from 4 to 5 due to piles being spliced and encased in concrete.



Asset #M3138(Routine)  
Sh-38/Sec-2/L-2.44 over Grine Lake  
Location: 2.44 Mi East Jct Sh 33

Team Lead: Drew Melton, Inspection Date: 08/03/2022

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4





Side view-elevation

**Maintenance Needs**

**Date Reported:** 09/25/2018  
**Priority:** C - Important  
**Type of Work:** Replace (General)  
**Status:** Monitor  
**Component:** Element

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**Deficiency Description**

Bent #3 pile #3 has outer shell decay with moderate section loss, and core decay with moderate hollow sound.  
Span #5 pile #1 sounds slightly hollow at top.

**Remarks**

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Span #5 piles

**Date Reported:** 09/25/2018  
**Priority:** D- Routine  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Approach

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**Deficiency Description**

Abutment #1 right approach rail has minor collision damage.  
Abutment #2 left approach rail has minor collision damage.

**Remarks**

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Abutment #1 right approach rail turn down has collision damage.



Abutment #1 right approach rail.



**Date Reported:** 09/25/2018  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Approach

---

**Deficiency Description**

Abutment #1 right approach shoulder has eroded at bridge end.

**Remarks**

---



Abutment #1 right approach shoulder has eroded at bridge end.

**Date Reported:** 09/25/2018  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Element

---

**Deficiency Description**

Abutment #1 back wall is decayed with areas of 100% section loss behind pile #5.

**Remarks**

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Abutment #1 back wall decay.

**Date Reported:** 09/25/2018  
**Priority:** D- Routine  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Element

---

#### Deficiency Description

Bent #2 cap back face above pile #2 has a one foot spall with no rebar exposed.  
Bent #2 cap ahead face above pile #3 has a one foot spall with no exposed rebar, and a one foot delamination.  
Bent #2 cap ahead face has a one foot spall at top above pile #1, and a one foot delamination right of pile.  
Bent #3 cap back face above pile #3,4 each has a one foot spall with no exposed rebar.  
Bent #3 cap ahead face near left end has a two foot delamination.  
Bent #4 cap back face under first four units each have a one foot spall with no exposed rebar.  
Bent #4 cap ahead face has a vertical crack between units #2,3.  
Bent #5 cap back face has five one foot spalls with no exposed rebar at top.  
Bent #5 cap ahead face has four one foot spalls no rebar exposed at top, and a two foot delamination on the right side of pile #1.

8/19/2020-No noteworthy changes since last inspection.

#### Remarks

---



Bent #2 cap.



Bent #4 ahead face.





Bent #5 back face.



Bent #4 back face.



Bent #2 ahead face.



Bent #3 back face.





Bent #2 back face.



Bent #3 ahead face.



Bent #5 ahead face.



**Asset #M3138(Routine)**

**Sh-38/Sec-2/L-2.44 over Grine Lake**

**Location: 2.44 Mi East Jct Sh 33**

**Team Lead: Drew Melton, Inspection Date: 08/03/2022**

**Date Reported:** 09/20/2012  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Element

---

**Deficiency Description**

Span #1 first post left side is cracked.  
Span #2 second post right side is cracked.  
Span #4 second post is cracked.  
Span #4 first post right side is spalled.  
Span #4 third post both sides are cracked.  
Span #4 right side rail has minor collision damage.  
Span #3 right side last post bottom nut missing.

**Remarks**

---



Span #1 first post left side is cracked.



Span #2 second post right side is cracked.





Span #4 right side first and second rail posts



Span #4 left side first 3 rail posts.



**Date Reported:** 09/25/2018  
**Priority:** C - Important  
**Type of Work:** Replace (General)  
**Status:** Assigned  
**Component:** Element

---

**Deficiency Description**

Span #2 bolts are missing from unit to unit between units #(2,3),(3,4),(6,7) at bent #3, and loose bolt between unit #7,8 at bent #3.

8/19/2020-No noteworthy changes since last inspection.

**Remarks**

---



Typical bolt missing between units.



**Asset #M3138(Routine)**

**Sh-38/Sec-2/L-2.44 over Grine Lake**

**Location: 2.44 Mi East Jct Sh 33**

**Team Lead:** Drew Melton, **Inspection Date:** 08/03/2022

**Date Reported:** 09/25/2018  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Element

---

**Deficiency Description**



Span #1 unit #1 right leg has cs3 cracks and delaminated full length on bottom and side with four feet of exposed rebar in first half of span moderate section loss.

Span #1 unit #2 left leg has cs2 cracks 3' on bottom mid span.

Span #1 unit #2 right leg has cs2 cracks 2' on bottom mid span.

Span #1 unit #3 right leg has cs2, cs3 cracks on bottom for six feet with a 1' spall exposed rebar moderate section loss, and a 1' delamination near bent #2.

Span #1 unit #3 left leg has one foot cs3 crack on bottom at bent #1.

Span #1 unit #5 left leg has cs2, cs3 cracks on bottom and side full length.

Span #1 unit #5 right leg has cs2, cs3 cracks on bottom for full length.

Span #1 unit #6 right leg has cs3 crack 1' at 3/4 span, and 1' at 1/4 span.

Span #1 unit #7 right leg has cs3 crack on bottom for 8' in center with 1' spall with exposed rebar with moderate section loss.

Span #1 unit #8 left leg has cs2, cs3 cracks full length on bottom and side with several delaminations.

Span #2 unit #1 right leg has cs2 cracks on bottom full length.

Span #2 unit #1 left leg has a cs2 crack for 1' at mid span on bottom.

Span #2 unit #2 left leg has a 1' cs2 crack on bottom at bent #3.

Span #2 unit #3 right leg has cs2 cracks on bottom for 2' at 3/4 span.

Span #2 unit #4 left leg has cs4 cracks and delaminated on bottom and side full length with 2' of exposed rebar at 3/4 span with moderate section loss.

Span #2 unit #4 right leg has cs4 cracks and delaminated on bottom and side full length with 2' of exposed rebar at 3/4 span with moderate section loss.

Span #2 unit #6 right leg has cs2 cracks on bottom and side for 8' at mid span.

Span #2 unit #7 left leg has cs2 to cs4 cracks and delaminated 10' at three quarter span.

Span #2 unit #8 left leg has cs2 to cs4 cracks and delaminated full length on bottom and side with 2' of exposed rebar at 1/4 span and 1' at 3/4 span with moderate section loss.

Span #2 unit #8 right leg has cs2 cracks on bottom and side for 3' mid span.

Span #3 unit #1 right leg has cs2,cs3 cracks on bottom full length.

Span #3 unit #2 left leg has cs2 cracks on bottom with rust stains for 3' starting at mid span.

Span #3 unit #2 right leg has cs2 cracks on bottom for 2' starting mid span.

Span #3 unit #3 left leg has cs2 cracks on bottom for 8' starting at 1/4 span.

Span #3 unit #4 left leg has cs2 cracks on bottom for 8' last half of span.

Span #3 unit #5 both legs starting at 1/4 span have cs2 cracks for 6'

Span #3 unit #6 left leg has cs2 cracks on bottom for 4' in center.

Span #3 unit #6 right leg has cs2 cracks on bottom for 8' starting at bent #3.

Span #3 unit #7 right leg has cs2, cs3 cracks on bottom for 12' starting at 1/4 span.

Span #3 unit #7 left leg has cs2, cs3 cracks on bottom for 16' starting at 1/4 span.

Span #3 unit #8 left leg has cs2, cs3 cracks and delaminated full length on bottom and side.

Span #3 unit #8 right leg has 1' cs2 cracks on bottom for 2' just ahead on mid span.

Span #4 unit #1 right leg has cs2 to cs4 cracks and delaminated full length on bottom and side with a 1' spall with exposed rebar at quarter span with moderate section loss.

Span #4 unit #2 left leg has cs2 crack on bottom for 1' at mid span.

Span #4 unit #5 right leg has cs2, cs3 cracks and delaminated on bottom for 8' starting at 1/4 span.

Span #4 unit #6 left leg has cs2, cs3 cracks and delaminated for 8' on bottom and side starting at mid span.

Span #4 unit #6 right leg has cs2 cracks on bottom for 4' starting at bent #4.

Span #4 unit #7 left leg has cs2 cracks on bottom for 4' at center.

Span #4 unit #8 left leg has cs2 to cs4 cracks and delaminated on bottom and side full length with a four foot spall with exposed rebar with moderate section loss at quarter span.

Span #5 unit #1 right leg has cs2, cs3 cracks and delaminated full length on bottom and side with 3 spalled areas 4' at bent #5, 1' at mid span, and 1' at 3/4 span all with exposed rebar with moderate section loss.

Span #5 unit #3 right leg has cs2 cracks on side at mid span for 2'.

Span #5 unit #4 right leg has a six inch spall no rebar exposed in center span on bottom.

Span #5 unit #6 right leg has cs2 cracks on bottom for 3' at mid span.

Span #5 unit #8 left leg has cs2 to cs4 cracks and delaminated on bottom and side full length.

## Remarks



Span #1 girders



Span #2 girders





Span #3 girders



Span #4 girders



Span #5 girders



**Date Reported:** 08/21/2020  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Approach

---

**Deficiency Description**

Abutments #1 and 2 approach roadway has settled up to 1" at bridge end.

**Remarks**

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Abutment #2 approach roadway.



Abutment #1 approach roadway.

**Date Reported:** 08/21/2020  
**Priority:** C - Important  
**Type of Work:** (Inactive) (Inactive) 1 - Clean  
**Status:** Monitor  
**Component:** Deck

---

**Deficiency Description**

Gutters have debris and vegetation in them.

**Remarks**

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Vegetation growing in gutters.

**Date Reported:** 08/04/2022  
**Priority:** B - Pressing  
**Type of Work:** Replace (General)  
**Status:** Open  
**Component:** Element

---

**Deficiency Description**

Bent #4 pile #4 has outer shell and core decay with severe hollow sound.

**Remarks**

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Bent #4 pile #4 has outer shell and core decay with severe hollow sound.



**Asset #M3138(Routine)**

**Sh-38/Sec-2/L-2.44 over Grine Lake**

**Location: 2.44 Mi East Jct Sh 33**

**Team Lead: Drew Melton, Inspection Date: 08/03/2022**

## **Routine Maintenance**

Check Box Maintenance Items

<b>Data Field</b>	<b>Value</b>
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 - Hydo and LMC Advised	





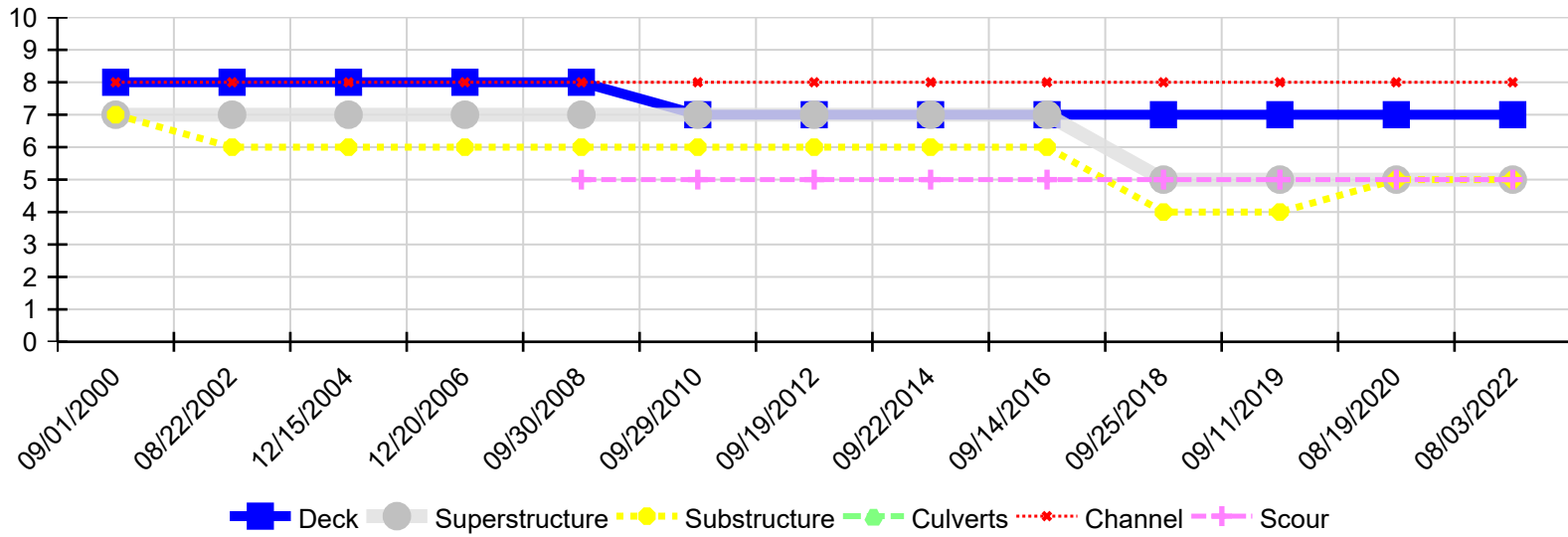
Asset #M3138(Routine)

Sh-38/Sec-2/L-2.44 over Grine Lake

Location: 2.44 Mi East Jct Sh 33

Team Lead: Drew Melton, Inspection Date: 08/03/2022

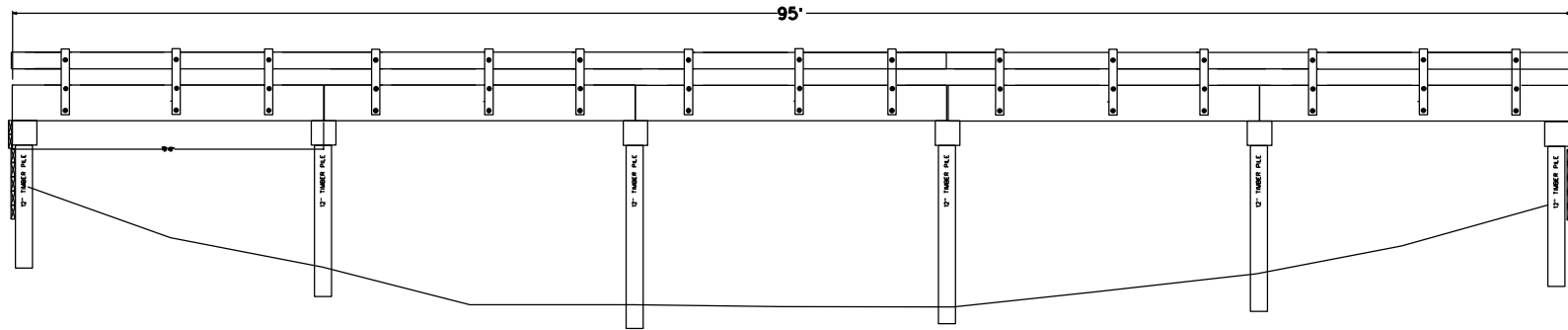
Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
08/03/2022	7	5	5	N	8	5
08/19/2020	7	5	5	N	8	5
09/11/2019	7	5	4	N	8	5
09/25/2018	7	5	4	N	8	5
09/14/2016	7	7	6	N	8	5
09/22/2014	7	7	6	N	8	5
09/19/2012	7	7	6	N	8	5
09/29/2010	7	7	6	N	8	5
09/30/2008	8	7	6	N	8	5
12/20/2006	8	7	6	N	8	N
12/15/2004	8	7	6	N	8	N
08/22/2002	8	7	6	N	8	N
09/01/2000	8	7	7	N	8	N



# BRIDGE #M3138



BENT #1

BENT #2

BENT #3

BENT #4

BENT #5

BENT #6

Piles have unknown depth or length

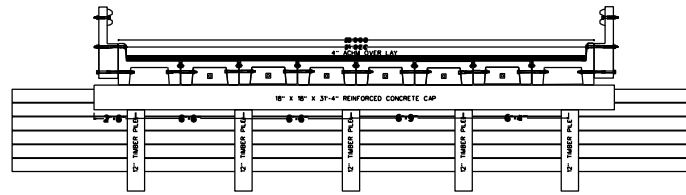
Piles have unknown depth or length

Piles have unknown depth or length

Piles have unknown depth or length

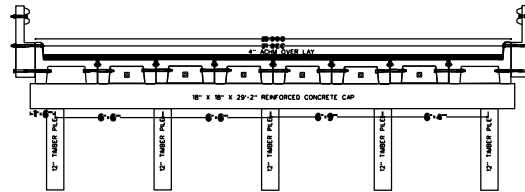
Piles have unknown depth or length

Piles have unknown depth or length

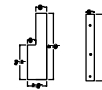


TYPICAL CROSS SECTION AND PILE SPACING AT BENTS #1 AND #4

3"x10" TIMBER BACKWALL



TYPICAL CROSS SECTION AND PILE SPACING AT BENTS #2 AND #3



UNITS ARE BOLTED AND ASSUMED TO BE GROUTED

\*Not to Scale