

Missoula District Office  
2100 W Broadway  
PO Box 7039  
Missoula, MT 59807-7039

August 15, 2014

Ravalli County Commissioners  
215 South 4th Street - Suite A  
Hamilton, MT 59840

RECEIVED CC to  
AUG 13 2014 RD Dept.  
Ravalli County Commissioners

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Subject: 2014 Inspection Cycle.

To Whom It May Concern,

Attached are Bridge Inspection Reports and Pictures for the following bridges.

Please note the addition of the Inspection Work Candidates section on page two. This section includes recommended maintenance actions. Not all reports include comments in this section, as not all structures need attention.

L41611000+02001 Sleeping Child Creek  
Recommended Maintenance: Take appropriate measures to prevent undercutting of the footings and upstream wingwall at the south footing.

If you have any questions, please feel free to contact Jamie Shaw, the Missoula District Bridge Coordinator at (406) 523-5825 or 406 -471-0237.



Jamie Shaw  
Missoula District Bridge Coordinator

copies: Missoula District Bridge File  
Mike Murphy, Bridge Bureau/Bridge Management Section

**INITIAL ASSESSMENT FORM FOR STRUCTURE :**

**L41611000+02001**

Location : 7M SE HAMILTON Structure Name: none

**General Location Data**

District Code, Number, Location : 01 Dist 1 MISSOULA  
 County Code, Location : 081 RAVALLI  
 Kind of Hwy Code, Description : 4 4 County Hwy  
 Str Owner Code, Description : 2 County Highway Agency  
 Intersecting Feature : SLEEPING CHILD CREEK 038

MDT Maintenance Section : None  
 Division Code, Location : 11 MISSOULA  
 City Code, Location : 00000 RURAL AREA  
 Signed Route Number : 41611  
 Maintained by Code, Description : 2 County Highway Agency  
 Kilometer Post, Mile Post : 0.32 km 0.20

Structure on the State Highway System :  Latitude : 46°09'06"  
 Structure on the National Highway System :  Longitude : 114°07'43"  
 Str Meet or Exceed NBIS Bridge Length :

**Construction Data**

Construction Project Number :  
 Construction Station Number : 0+00.00  
 Construction Drawing Number : none  
 Construction Year : 1972  
 Reconstruction Year :

**Traffic Data**

Current ADT : 100 ADT Count Year : 2002 Percent Trucks : 3 %

**Structure Loading, Rating and Posting Data**

**Loading Data :**

Design Loading :		0 Unknown
Inventory Load, Design :	32.6 mton	B ASD Assigned
Operating Load, Design :	32.6 mton	B ASD Assigned
Posting :		5 A/Above Legal Loads

**Rating Data :**

	Operating	Inventory	Posting
Truck 1 Type 3 :	29	18	
Truck 2 Type 3-S3 :	47	28	
Truck 3 Type 3-3 :	50	30	

**Structure, Roadway and Clearance Data**

**Structure Deck, Roadway and Span Data :**

Structure Length : 9.75 m  
 Deck Area : 0.00 m sq  
 Deck Roadway Width : 0.00 m  
 Approach Roadway Width : 9.14 m  
 Median Code, Description : 0 No median

**Structure Vertical and Horizontal Clearance Data :**

Vertical Clearance Over the Structure : 99.99 m  
 Reference Feature for Vertical Clearance : N Feature not hwy or RR  
 Vertical Clearance Under the Structure : 0.00 m  
 Reference Feature for Lateral Underclearance : N Feature not hwy or RR  
 Minimum Lateral Under Clearance Right : 0.00 m  
 Minimum Lateral Under Clearance Left : 0.00 m

**Span Data**

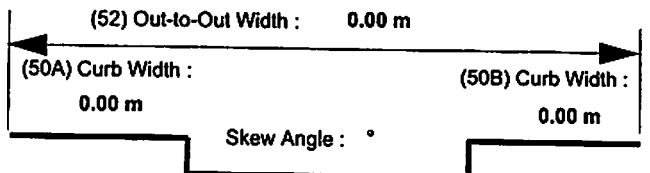
**Main Span**

Number Spans : 1  
 Material Type Code, Description : 3 Steel  
 Span Design Code, Description : 19 Culvert (includes frame culverts)  
 Deck

**Approach Span**

Number of Spans : 0  
 Material Type Code, Description :  
 Span Design Code, Description :

Deck Structure Type : N Not applicable  
 Deck Surfacing Type : N Not Applicable (applies only to structures with no dec  
 Deck Protection Type : N Not applicable (applies only to structures with no de  
 Deck Membrain Type : N Not applicable (applies only to structures with no de



**Structure Vertical and Horizontal Clearance Data Inventory Route :**

Over / Under Direction Name	Inventory Route	South, West or Bi-directional Travel			North or East Travel		
		Direction	Vertical	Horizontal	Direction	Vertical	Horizontal
Route On Structure	L41611	Both	99.99 m	8.75 m	N/A		
LITTLE SLEEPING CHILD							

REVISED 2013 REPORT. SEE ADDITIONAL WORK ITEM GENERAL INSPECTION NOTES, PHOTOS & SKETCH WITH CHANNEL BOTTOM PROFILE MEASUREMENTS AT THE SOUTH FOOTING & UPSTREAM WINGWALL.  
 James S. Shaw  
 8/12/14

L41611000+02001

Continue

**Inspection Data**

Inspection Due Date : 04 August 2015

Sufficiency Rating : \*93.1

(91) Inspection Frequency (months) : 24

Structure Status : Not Deficient

**NBI Inspection Data**

(90) Date of Last Inspection : 06 August 2013

Last Inspected By : James Shaw - 73

(90) Inspection Date :

Inspected By :

(58) Deck Rating : N

(68) Deck Geometry : N

(36A) Bridge Rail Rating : 0

(62) Culvert Rating : 6

(59) Superstructure Rating : N

(67) Structure Rating : 6

(36B) Transition Rating : N

(61) Channel Rating : 8

(60) Substructure Rating : N

(69) Under Clearance : N

(36C) Approach Rail Rating : N

(71) Waterway Adequacy : 8

(72) App Rdwy Align : 8

(41) Posting Status : A

(36D) End Rail Rating : 0

(113) Scour Critical : 8

Unrepaired Spalls : 0 m sq

Deck Surfacing Depth : 0.00 in

**Inspection Hours**

Crew Hours for inspection :	1
Helper Hours :	-1
Special Crew Hours :	-1
Special Equipment Hours :	-1

Snooper Required : N

Snooper Hours for inspection :	-1
Flagger Hours :	-1

Inspection Work Candidates		Status	Priority	Effected Structure Unit	Scope of Work	Action	Covered Condition States
Candidate ID	Date Requested						
D11-FY2014-000064	13 August 2014	Not Approved	Medium	M Main	Bridge	Scour	
Take appropriate measures to prevent undercutting of the footings and upstream wingwall at the south footing. See General Inspection Notes, photos and attached sketch.							

Late Reason:  
Inspection Date: 08/06/2013

**L41611000+02001**  
 Continue

**Element Inspection Data**

\*\*\*\*\* Span : Main-0 --1 \*\*\*\*\*

Element Description										
Smart Flag	Scale Factor	Env	Quantity	Units	Insp Each	Pct Stat 1	Pct Stat 2	Pct Stat 3	Pct Stat 4	Pct Stat 5
Element 240 - Steel Culvert										
	1	3	9	m.		95	5	0	0	
						%	%	%	%	%

Previous Inspection Notes :

08/06/2013 - Minor corrosion and pitting at the edge of the water and the distortion is very minor. GZDZ  
 08/04/2011 - A little deformation on the north side of the barrel. No changes noted. EZCZ  
 07/29/2009 - Some corrosion about waterline. Some deformation of barrel. No significant changes noted. GBIZ  
 01/09/2008 - No significant changes noted. LZBK  
 01/26/2006 - No significant changes noted, see pics.. ZZDE  
 03/09/2004 - Multi plate steel culvert with gravel surface shows some corrosion about footings. /- 1" of concrete curb extends above the gravel surface. Some cracking of headwalls and wingwalls. Barrel shows minor deformation. Footing at B2 left is partially exposed, /- half width of structure. IZEG  
 08/14/2002 - UNCHANGED HSMZ  
 09/11/2000 - MINOR CORROSION ALONG BASE ALJO  
 07/07/1998 - MINOR DEFORMATION. CRACKS IN HEADWALLS. OGIO  
 08/28/1996 - None WHNJ

Inspection Notes:

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Element 334 - Metal Rail Coated										
Smart Flag	Scale Factor	Env	Quantity	Units	Insp Each	Pct Stat 1	Pct Stat 2	Pct Stat 3	Pct Stat 4	Pct Stat 5
	1	3	20	m.		100	0	0	0	0
						%	%	%	%	%

Previous Inspection Notes :

08/06/2013 - No changes. GZDZ  
 08/04/2011 - No rust seen. No changes noted. EZCZ  
 07/29/2009 - No changes noted. GBIZ  
 01/09/2008 - No changes. No problems noted. (9.75 X 2 = 19.50) LZBK  
 01/26/2006 - No changes noted. No problems noted. ZZDE  
 03/09/2004 - Single w-beam bridge rail is Ok, Not To Std. Rail does not extend to end of structure. Semi bull nose terminals Ok, NTS.. Hazard panel posts poured into wingwall tops, not in line with face of curb or rail. IZEG  
 08/14/2002 - WEEDS IN CURB LINES HSMZ  
 09/11/2000 - FEW WEEDS IN CURB LINES. ALJO  
 07/07/1998 - OBJECT MARKERS NOT IN LINE WITH RAILS. OGIO  
 08/28/1996 - None WHNJ

Inspection Notes:

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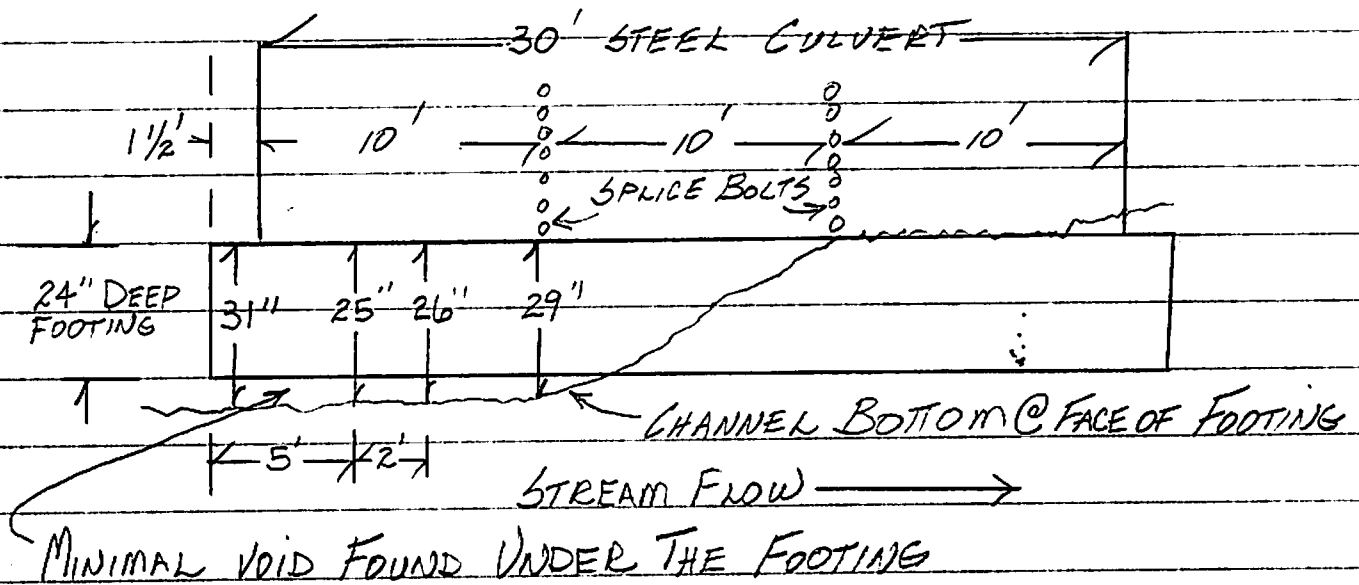


7/31/14

L41 611 000+02001

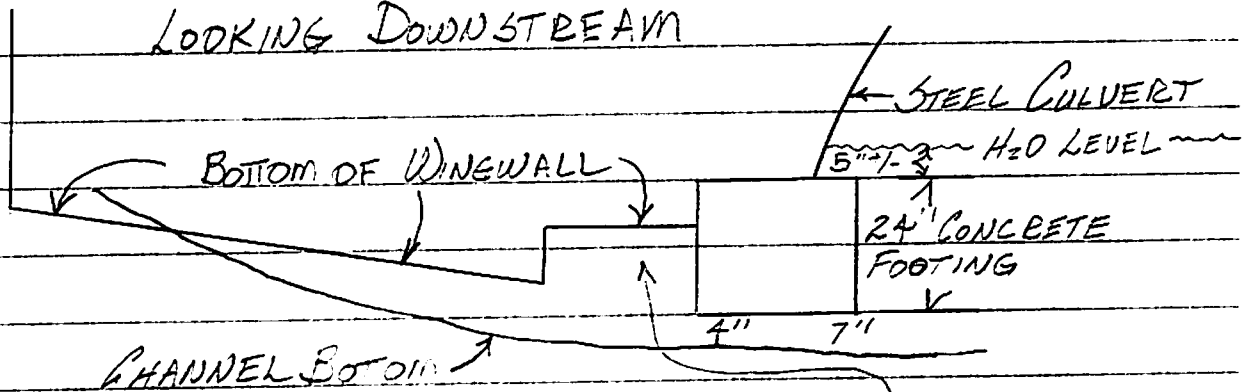
SLEEPING CHILD CREEK ON LITTLE SLEEPING CHILD ROAD  
CHANNEL BOTTOM PROFILE AT THE SOUTH FOOTING.

LOOKING AOL & SOUTH



CHANNEL BOTTOM PROFILE AT THE UPSTREAM  
WINGWALL OF THE SOUTH FOOTING.

LOOKING DOWNSTREAM



THE VOID UNDER THE WINGWALL AT FILL SIDE OF THE  
FOOTING MEASURED 1 1/2' FROM THE STREAM FACE  
OF THE WINGWALL

J Shaw 8/1/14

## Inspection Photos

**L41611000+02001**

Location 7M SE HAMILTON Structure Name: none



**AOL**

### Notes

Looking south. Stream flow is from left to right.



**Left side**

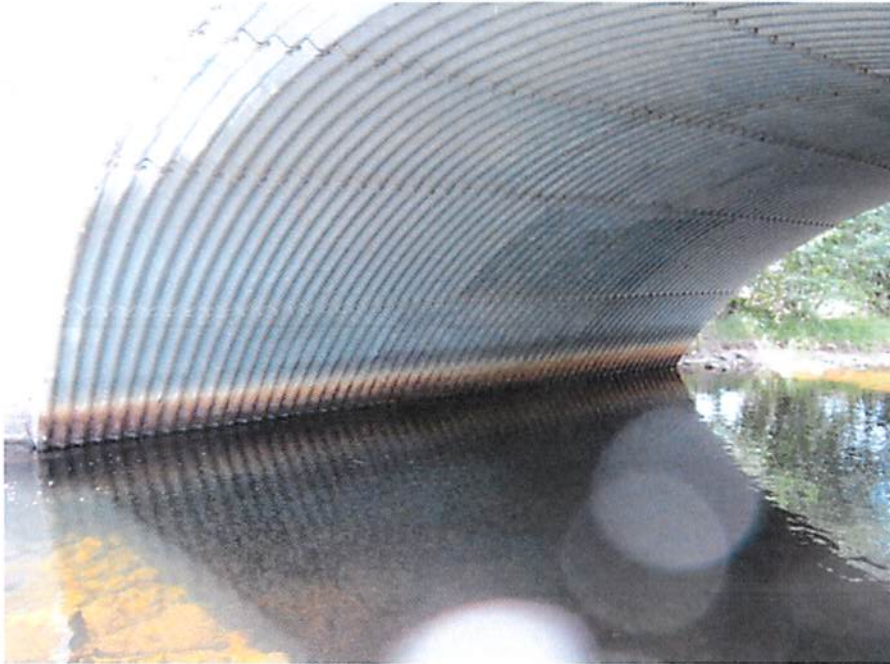
### Notes

Looking downstream.

## Inspection Photos

**L41611000+02001**

Location 7M SE HAMILTON Structure Name: none



Typical staining  
Notes

None



Typical rust  
Notes

None

## Inspection Photos

**L41611000+02001**

Location 7M SE HAMILTON Structure Name: none



7/31/2014 photo

### Notes

South abutment wingwall and end of footing on the upstream end.



7/31/2014 photo

### Notes

Looking downstream at the upstream end of the south abutment footing and wingwall.

## Inspection Photos

**L41611000+02001**

Location 7M SE HAMILTON Structure Name: none



7/31/2014 photo

### Notes

Same as the previous photo. In this photo, you can see the notch in the bottom of the wingwall at the footing. There is a small void under this notch along the fill face of the footing for approximately 1 1/2 feet. The bottom of the wing is exposed for most of its length.



7/31/2014 photo

### Notes

Looking downstream along the south bank.