

Bridge Culvert Inspection				
Bridge File Number	02346 -1 Bridge Culvert		Form Type	CUL1
Year Built	1983		Lot No.	2
Bridge or Town Name	LINDBERGH		Inspector Name	Kris Bosters
Located Over	MIDDLE CREEK, 6.9, WATERCRS-ST		Inspector Class	BR CLS A
Located On	646:04 C1 21.177		Assistant Name	Brian Cote
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	10-Dec-2012
Legal Land Location	NW SEC 19 TWP 56 RGE 4 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-110:35:23, 53:51:33		Data Entry Date	15-Jan-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA08		Review Date	19-Dec-2012
Clear Roadway/Skew	9.6 / -25 deg. (LHF)		Dept. Reviewer Name	Paul Catt
AADT/Year	1,650 / 2011 (A)		Dept. Review Date	18-Jan-2013
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	20			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	2610	2877	SP	66.5	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	East r/w.	Gas	
Power		Municipal	
Others		Problem (Y/N)	
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Pipe located on a curve. N.P both directions.
Vertical Alignment	7	7	
Roadway Width (m)	9.600		
Embankment	7	4	Erosion scars showing through snow in NW quadrant.-photos
Sideslope (__:1)	3.0		
(Height of Cover(m) : 6.5)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	N		East
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	N	Snow covered
Heaving (mm)	200			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		6	N	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	N	
Beavers (Y/N)	Yes			5m u/s of inlet.
Upstream End General Rating		6	6	Carried over
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2610, Rise (mm): 2877, Type: SP)				
Barrel Last Accessible Date	10-Dec-2012			Only u/s half accessible d/s half -half full of water.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	U/S half rating only. Remaining section looks good.
Measured Rise (mm)	2811			
Measured At Ring No.	8			
Sag (mm)	66			
Percent Sag	2			
Sidewall		7	7	
Measured Span (mm)	2690			
Measured At Ring No.	8			
Deflection (mm)	80			
Percent Deflection	3			
Floor		8	8	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			D/S HALF ONLY

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2610, Rise (mm): 2877, Type: SP)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		West
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	N	Snow covered
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	250			
Scour Protection		6	N	Snow covered
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	Carried over
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				Not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	50m Class 1m ditch drain in NW.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	72.4/72.3	Est. Repl. Yr	2033	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Shane Hall		Previous Assistant's Name				
Next Inspection Date	10-Mar-2016		Previous Inspection Date	07-Oct-2009			
Inspection Cycle (Default) (months)	39						
Comment							