Bridge Culvert Inspection

Bridge File Number	77587 -1 Bridge Culvert	Form Type	CUL1
Year Built	1967	Lot No.	4
Bridge or Town Name	NORDEGG	Inspector Name	Owen Salava
Located Over	LYNX CREEK, 6.161.3, WATERCRS-ST	Inspector Class	BR CLS A
Located On	734:16 C1 39.370	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	01-Dec-2010
Legal Land Location	NE SEC 26 TWP 36 RGE 14 W5M	Data Entry By	Marcia Chavez
Longitude, Latitude	-115:53:32, 52:07:40	Data Entry Date	03-Jan-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA18	Review Date	16-Dec-2010
Clear Roadway/Skew	7 / 20 deg. (RHF)	Dept. Reviewer Name	Chris Black
AADT/Year	60 / 2009 (A)	Dept. Review Date	05-Jan-2011
Road Classification	RLU-208G-90	Follow-Up By	
Detour Length (km)	150		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2438	SP	28	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		4	4	Curve to the North. 8.5km North of BF 76351. Slight sag curve.
Vertical Alignment		5	5	
Roadway Width (m)	7.000			
Embankment		5	5	
Sideslope (__:1)	2.0			
(Height of Cover(m) : **2.1**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**4**	**4**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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	6	Superficial rust at waterline.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		6	N	Snow covered.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
Upstream End General Rating		**6**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2438, Type: SP**)				
Barrel Last Accessible Date	01-Dec-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Estimated due to ice.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	38			(1.6% sag. 22Nov2005).
Percent Sag	2			
Sidewall		7	7	
Measured Span (mm)	2400			
Measured At Ring No.	4			
Deflection (mm)	38			1.6% deflection.
Percent Deflection	2			
Floor		6	6	Superficial rust at waterline. (Gravel washed into barrel floor near D/S 1/3L. 22Nov2005).
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
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)	Yes			
Coating		5	5	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2438, Type: SP**)				
Fish Passage Adequacy		3	3	(Due to perched outlet unless high water. 22Nov2005). Rating carried forward.
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**6**	**6**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		5	N	(Bevel is perched. 22Nov2005). Snow covered.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **200**)				
Scour/Erosion		5	N	(Small scour hole. 22Nov2005).
Beavers (Y/N)	No			
Downstream End General Rating		**5**	**5**	Based on scour from 22Nov2005.

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		5	5	
Bank Stability		5	5	High vertical bank at SE rock.
HWM (m below Top of Culvert)				No HWM evident.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**5**	**5**	

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						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**66.7/66.7**	**Sufficiency Rating (Last/Now) (%)**	**47.7/47.7**	Est. Repl. Yr	2030	Maint. Reqd. (Y/N)	No

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	Dave Lam	Previous Assistant's Name			
Next Inspection Date	01-Mar-2014	Previous Inspection Date	22-Nov-2005		
Inspection Cycle (Default) (months)	39				
Comment					