

Bridge Culvert Inspection				
Bridge File Number	06751 -1 Bridge Culvert		Form Type	CULM
Year Built	1960		Lot No.	2
Bridge or Town Name	SUNNYBROOK		Inspector Name	Todd Warshawski
Located Over	SUNNYBROOK CREEK, 6.112.9, WATERCRS-ST		Inspector Class	BR CLS B
Located On	39:08 C1 15.249		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	10-Jan-2013
Legal Land Location	SW SEC 4 TWP 49 RGE 2 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:14:15, 53:11:33		Data Entry Date	22-Jan-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA11		Review Date	16-Jan-2013
Clear Roadway/Skew	11.2 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	2,800 / 2011 (A)		Dept. Review Date	23-Jan-2013
Road Classification	RAU-210-110		Follow-Up By	
Detour Length (km)	6			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	3656	2438	BP	78			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments							
Telephone	South & North			Gas			
Power	3 wires North r/w.			Municipal			
Others				Problem (Y/N)	No		
Remarks							

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Entrances both directions. At bottom of sag, limited sight distance. No passing.
Vertical Alignment		6	6	
Roadway Width (m)	11.200			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 9.6)				
Guardrail (Y/N)	Yes			Strike damage to noe sections along N rail.
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		X	X	
Wingwalls		4	4	Wingwall pulled away from barrel up to 60mm and pushed inward up to 70mm wide. Random narrow to medium diagonal cracks in both wingwalls. Concrete spall, SE wingwall & exposed rebar 200 x 200mm.
(Shape : FLARE)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		N	N	Snow covered
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1828, Rise (mm): 2438, Type: BP, Cell Sequence: 1)				
Barrel Last Accessible Date	10-Jan-2013			East cell.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		4	5	Narrow longitudinal cracks continuous the length of the box. 5 mm cracks on roof and sidewalls.
Measured Rise (mm)				
Measured At Ring No.				est
Sag (mm)				
Percent Sag	0			
Sidewall		4	4	Medium vertical cracks 1.5, 2.0m apart, with efflorescence in East wall.
Measured Span (mm)	1838			
Measured At Ring No.				Bottom 400 abraided 75mm deep.-11-Jan-2011
Deflection (mm)				At c/l.
Percent Deflection	0			
Floor		N	N	Wide crack across culvert. 27-May-2009
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		4	4	Joint at mid length South end 60mm lower than North side end. Fill exposed.
Separation (mm)	60			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1828, Rise (mm): 2438, Type: BP, Cell Sequence: 1)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			Drift at inlet
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		4	4	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1828, Rise (mm): 2438, Type: BP, Cell Sequence: 2)				
Barrel Last Accessible Date	10-Jan-2013			West cell.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		4	5	Transverse medium cracks in roof running length of pipe. est
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag	0			
Sidewall		4	4	Wide cracks in roof and walls @ 45m from U/S. Worst cracks extend from sidewall to roof to sidewall 5mm wide. Concrete spall 10m from U/S. Wide crack 60m from U/S. Wide to narrow crack 50m from U/S. Lower 300 abraided upto 50mm deep.-27-May-2009 Measured at c/l.
Measured Span (mm)	1840			
Measured At Ring No.				
Deflection (mm)	8			
Percent Deflection	0			
Floor		N	N	Silt/ice covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		3	3	South end settled 70mm. 350 x 800 x 800mm void behind West wall @ connection.
Separation (mm)	70			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1828, Rise (mm): 2438, Type: BP, Cell Sequence: 2)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	Drift at inlet
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		4	4	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		X	X	
Wingwalls		5	5	Separating from barrel 75mm. Pushed inward at top 40mm.
(Shape : FLARE)				
Cutoff Wall		N	N	
Bevel End		X	X	(Floor is heaving at c/l, cracked in many places. 15/Aug/2007)
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			(Waterfall off end - photos 15 & 16. 15/Aug/2007)
Above/Below (mm)	500			
Scour Protection		N	N	Snow covered
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	Scoured 1m along sides of channel, 10m long.-27-May-2009
Beavers (Y/N)	No			
Downstream End General Rating		4	4	GR carried fwd.
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	
Bank Stability		5	5	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	Yes			200m diameter drift.
Channel Bottom Degrading/Aggrading	DEGRADING			Downstream.-27-May-2009
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	2013	Remove drift at inlet.					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Repair void at circumferential joint.					
OTHER ACTION	2013	Fill circumferential joints.					
OTHER ACTION	2013	Repair guardrail(9 sections)					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	45.3/45.0	Est. Repl. Yr	2030	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	Wade Nanninga		Previous Assistant's Name				
Next Inspection Date	10-Oct-2014		Previous Inspection Date	26-Jan-2011			
Inspection Cycle (Default) (months)	21						
Comment							