

Bridge Culvert Inspection			
Bridge File Number	75380 -1 Bridge Culvert	Form Type	CUL1
Year Built	1961	Lot No.	1
Bridge or Town Name	FAIRVIEW	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO HINES CK, 8.10.80.5, WATERCRS-ST	Inspector Class	BR CLS B
Located On	682:02 C1 12.746	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Jun-2012
Legal Land Location	NE SEC 35 TWP 81 RGE 5 W6M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-118:39:22, 56:04:08	Data Entry Date	10-Jul-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA04	Review Date	09-Jul-2012
Clear Roadway/Skew	8.6 / -15 deg. (LHF)	Dept. Reviewer Name	David Morrison
AADT/Year	220 / 2011 (A)	Dept. Review Date	01-Nov-2012
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1429	1575	SPE	107.9	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	15m South	Gas	
Power	15m North, 2 wire	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		4	4	Closed road, Intersection 15m west.
Vertical Alignment		6	6	No passing, Steep grade to East.
Roadway Width (m)	8.600			
Embankment		4	2	70x1.0x1.0m (lwd) ditch erosion NE.-photo
Sideslope (__:1)	3.5			Near outlet active slide, entire d/s end, causing elevation change of pipe invert, 60mm wide cracks 6m-10m above slide on d/s end.-photo
(Height of Cover(m) : 18.5)				d/s 10.0m u/s.
Guardrail (Y/N)	Yes			S. rail is loose. Both rails are dented & scraped. roken post SW.
Approach Road / Embankment General Rating		4	2	

Upstream End

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		2	3	Bevel end torn off and sides pushed in.-photo
Heaving (mm)	15			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		3	3	Channel banks & road embankment sliding & eroding around inlet.-photo
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		3	3	Scour & erosion around inlet. NE embankment sliding into stream.-photo
Beavers (Y/N)	No			
Upstream End General Rating		2	2	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1429, Rise (mm): 1575, Type: SPE)				
Barrel Last Accessible Date	19-Jun-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		4	2	Roof pushed in 1m at u/s end. photo
Measured Rise (mm)	1300			
Measured At Ring No.	33			10 rings from d/s end pipe has dropped in elevation down due to active bank erosion.-photo
Sag (mm)	275			
Percent Sag	18			
Sidewall		4	2	Corrugations are buckled at rings 15-24 at 8 oclock. Sidewall pushed in 1m at u/s end. photo
Measured Span (mm)	1620			
Measured At Ring No.	33			7 rings from d/s end. Severe deformation due to pipe dropping in elevation, due to active slide.-photo
Deflection (mm)	191			
Percent Deflection	13			
Floor		4	2	Corrugations on floor are deformed from gravel abrasion or excessive velocities-photo
Bulge (mm)				
Measured At Ring No.				Severe deformation in floor due to pipe dropping in elevation due to active slide.
Abrasion (Y/N)	Yes			730mm void under rings 32-39 (approx) with running water under pipe.-photo
Circumferential Seams		7	2	Severe deformation to pipe at rings 33-39 due to drop in pipe elevation due to active slide on d/s end.-photo
Separation (mm)				
Longitudinal Seams		7	2	Corrugations are buckled at rings 125-24 8 oclock.
Total No. of Cracked Rings	0			Severe deformation to pipe at rings 33-39 due to drop in pipe elevation due to active slide on d/s end.-photo
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				1N
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1429, Rise (mm): 1575, Type: SPE)				
Coating		4	4	Rust on bottom plate. 400mm wide with perforations throughout pipe.photo Perforations at outlet floor.-07-Oct-2009 under silt.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	Non fish bearing stream
Baffle		X	X	
(Type :)				
Waterway Adequacy		3	3	Bevel wrecked at inlet.-photo Bevel silted in at outlet due to slide.-photo
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		3	2	

Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
Direction		S			
End Treatment (Concrete, Steel, Others, None)	STEEL				
Headwall		X	X		
Collar		X	X		
Wingwalls		X	X		
(Shape :)					
Cutoff Wall		X	X		
Bevel End		2	2	(50mm rust holes in invert. -07-Oct-2009)	
Heaving (mm)	0			Bevel is silted in due to slide.-photo	
Invert Above/Below Stream Bed	ABOVE			Bevel is 30m above streambed.	
Above/Below (mm)	3000				
Scour Protection		2	2	40m wide x 10m high slumps on both sides. photo Active slides present, d/s end has dropped in elevation from previous inspection.-photo	
(Type : NONE)					
(Avg. Rock Size(mm) :)					
Scour/Erosion		2	2	Active slide present, d/s end has dropped in elevation from previous inspection.-photo	
Beavers (Y/N)	No				
Downstream End General Rating		2	2		

Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	
Bank Stability		3	3	High vertical banks d/s are sloughing.(Photo).
HWM (m below Top of Culvert)				Drift 2.5m above invert at u/s end. However opening very restricted by drift & damage.
Drift (Y/N)	Yes			

Structure Usage				
		Last	Now	Explanation of Condition
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		3	3	

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	2012	Replace structure.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
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Structural Condition Rating (Last/Now) (%)	33.3/22.2	Sufficiency Rating (Last/Now) (%)	23.4/15.1	Est. Repl. Yr	2012	Maint. Reqd. (Y/N)	Yes
Special Comments for Next Inspection	Sent low rating advisory to Shahid Gill 21-Jun-2012. Shown on wrong location on BF map. Assessment completed March 2010.		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	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	09-Sep-2015		Previous Inspection Date	07-Oct-2009			
Inspection Cycle (Default) (months)	39						
Comment							