Bridge Culvert Inspection

Bridge File Number	77044 -1 Bridge Culvert	Form Type	CUL1
Year Built	1969	Lot No.	4
Bridge or Town Name	HIGHRIDGE	Inspector Name	Melanie Johnson
Located Over	TRIBUTARY TO NEWTON CREEK, 8.11.84.33.2, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	777:03 C1 5.302	Assistant Class	
Water Body Cl./Year		Inspection Date	23-Aug-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 7 TWP 58 RGE 1 W5M	Data Entry Date	14-Sep-2011
Longitude, Latitude	-114:09:03, 53:59:46	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	07-Sep-2011
Contract Main. Area	CMA10	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	8.1 /	Dept. Review Date	15-Sep-2011
AADT/Year	130 / 2010 (A)	Follow-Up By	
Road Classification	RCU-209G-90		
Detour Length (km)	32		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1800	MP	20.7	68X13	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West r/w.	Gas	Crossing 120m North.
Power	2 wires East r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks	BF tag installed @ East roof.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Resident access to NE. In bottom of sag curve.
Vertical Alignment		6	6	
Roadway Width (m)	8.100			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **1.2**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		E		Pipe totally submerged.
End Treatment (Concrete, Steel, Others, None)	NONE			
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		N	N	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	N	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		**6**	**N**	Appears to be constantly submerged, wide flood plain. Previous GR was 6

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP**)				
Barrel Last Accessible Date				Pipe in low area, constantly under water. Pipe totally submerged.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)				
Longitudinal Seams		N	N	
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		4	N	Pitting rust most of pipe.-05-May-2008
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	NEG			(1m. 22/Feb/2005)

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP)				
Ponding (Y/N)	Yes			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	N	(22/Feb/2005)
Icing (Y/N)	No			
Silting (Y/N)				
Drift (Y/N)	No			
Barrel General Rating		**N**	**N**	Previous G.R. was "5" from 22-Feb-2005

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		(0.6m ice to cover. 22/Feb/2005)
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	N	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			(22/Feb/2005)
Above/Below (mm)	300			
Scour Protection		N	N	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		**4**	**4**	G.R. carried forward.

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		5	5	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(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) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	56.4/67.5	Est. Repl. Yr	2015	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	(Program to replace when Hwy 777 upgraded.-22-Feb-2005	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	23-Nov-2014	Previous Inspection Date	05-May-2008
Inspection Cycle (Default) (months)	39		
Comment			