Bridge Culvert Inspection

Bridge File Number	75924 -1 Bridge Culvert	Form Type	CULM
Year Built	1997	Lot No.	4
Bridge or Town Name	TILLEY	Inspector Name	Jason Rusu
Located Over	EID - IRRIGATION C, WATERCRS-IC	Inspector Class	BR CLS A
Located On	875:04 C1 45.347	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	18-Mar-2012
Legal Land Location	SW SEC 5 TWP 18 RGE 13 W4M	Data Entry By	Erin Roberts
Longitude, Latitude	-111:46:07, 50:29:20	Data Entry Date	11-Apr-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA23	Review Date	23-Mar-2012
Clear Roadway/Skew	9 / 45 deg. (RHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	630 / 2011 (A)	Dept. Review Date	17-Apr-2012
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	8		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	4800	2400	PCB	28			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

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

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	
Vertical Alignment		9	9	
Roadway Width (m)	9.000			
Embankment		8	8	
Sideslope (__:1)	10.0			
(Height of Cover(m) : **0.1**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**8**	**8**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction				Northwest
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		8	8	Wingwall only on the NW and SW corner. H pile with timber planking
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		**8**	**8**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2400, Rise (mm): 2400, Type: PCB, Cell Sequence: 1**)				
Barrel Last Accessible Date	18-Mar-2012			North barrel
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	@ midspan
Measured Rise (mm)	2400			
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		8	8	@ midspan
Measured Span (mm)	2400			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		8	8	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
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			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2400, Rise (mm): 2400, Type: PCB, Cell Sequence: 1**)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**8**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2400, Rise (mm): 2400, Type: PCB, Cell Sequence: 2**)				
Barrel Last Accessible Date	18-Mar-2012			South Barrel
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	@ midspan
Measured Rise (mm)	2400			
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		8	8	@ Midspan
Measured Span (mm)	2400			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		8	8	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	8	
Separation (mm)				
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			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2400, Rise (mm): 2400, Type: PCB, Cell Sequence: 2**)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**8**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				Southeast
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		8	8	Wingwall only on SE and NW corner.
(Shape :)				H pile with timber planking.
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Culvert)	0.8			Staining in barrels - 20090408
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**8**	**8**	

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) (%)	**88.9/88.9**	**Sufficiency Rating (Last/Now) (%)**	**91.0/91.0**	Est. Repl. Yr	2055	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	Tim Davies	Previous Assistant's Name	
Next Inspection Date	18-Jun-2015	Previous Inspection Date	08-Apr-2009
Inspection Cycle (Default) (months)	39		
Comment			