					Brida		ert Insp	ection					
Bridge File Nu	mber	80882 -1	Bridge Culve	rt	Billag		Form 1			CUL1			
Year Built	Blidge Culvert				Lot No.			3					
Bridge or Town	ELLER	I FR			Inspector Name			Owen Salava					
Located Over	ARY TO RED DEER RIVER, 3.43,				· · ·			BR CLS A					
		CRS-ST				Assistant Name							
Located On 575:04 C1 32.863							Assistant Class						
Water Body Cl							Inspection Date		26-Jan-2011				
Navigabil. Cl./							Data Entry By		Marcia Chavez				
Legal Land Lo	8 TWP 29 RGE 20 W4M					ntry Date		04-Mar-2011					
Longitude, Lat		21 51.20.11					Reviewer Name		John O'Brien				
Road Authority		Transportation (AIT)					v Date		03-Feb-2011				
Contract Main.		CMA21					Dept. F	Dept. Reviewer Name		Chris Black			
Clear Roadwa	y/Skew		leg. (RHF)				Dept. F	Dept. Review Date		06-Mar-2011			
AADT/Year		1,240 / 2	2009 (A)				Follow						
Road Classific	ation	RCU-209	9-110										
Detour Length	(km)	5											
Bridge Culver		nation											
Number of Cul	verts	1		1									
Pipe #	Barrel	5	Span	Rise (or	Dia.) Type			Length		Corr. Profile	PI./Slab Thickness	Shape	
1	MAIN	-		2700		SP		41.5		152X51	3.0	ROUND	
Special Featur	es												
Special Featur	es Com	ment											
-													
					Ut	ilities (l	Located	at)					
Utility Attachm													
Telephone	North	r/w.					Gas						
Power	3 wire	e O/H 20m	n S of C/L				Municipal						
Others	2 wire	es O/H 75	m N of C/L				Problem (Y/N) No						
Remarks													
				Α	pproa	ch Roa		ankment					
						Now	Explanation of Condition						
Horizontal Alig					8	8	Located in curve.						
Vertical Alignm					8	8							
Roadway Widt	th (m)		10.000										
Embankment					8	8							
Sideslope (_	_:1)		4.0										
(Height of Co	over(m) :	: <b>3.2</b> )											
Guardrail (Y/N	)		No										
Approach Roa	ad / Eml	bankmen	t General Rat	ting	8	8							
						Upstre	am End						
Culvert Component					Last			nation of C	ondi	tion			
Direction				S	1								
End Treatment (Concrete, Steel, S		, STEEL											
Others, None)													
Headwall			X	Х									
Collar				X	X								
Wingwalls			X	X									
(Shape : )													
Cutoff Wall					X	X							

Alberta Transportation

Upstream End											
Culvert Component		Last	Now	Explanation of Condition							
Bevel End	1	N	7	Floor silted in 300mm.							
Heaving (mm)	0										
Invert Above/Below Stream Bed	BELOW										
Above/Below (mm)	600										
Scour Protection		N N		Snow covered.							
(Туре:)				-							
(Avg. Rock Size(mm) : )			1								
Scour/Erosion		N	N	Snow covered.							
Beavers (Y/N)	No										
Upstream End General Rating		7	7								
		Bric	dge <u>Cu</u>	lvert Barrel							
Culvert Component		Last		Explanation of Condition							
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa	n (mm	):	, Rise (mm): 2700, Type: SP)							
Barrel Last Accessible Date	26-Jan-2011										
Special Features											
Special Feature											
(Type : )											
Special Feature											
(Туре : )											
Roof		7	7	Not able to measure rise due to silt.							
Measured Rise (mm)											
Measured At Ring No.											
Sag (mm) 100											
Percent Sag											
Sidewall		6	6								
Measured Span (mm)	2831										
Measured At Ring No.	5										
Deflection (mm)	131			4.9%							
Percent Deflection	4										
Floor		N	N	Silted in 300-500mm deep.							
Bulge (mm)	0										
Measured At Ring No.											
Abrasion (Y/N)	No										
Circumferential Seams		8	8								
Separation (mm)	0										
Longitudinal Seams		7	7								
Total No. of Cracked Rings	0										
Total No. of Rings with Two Cracked Seams	0			-							
Min. Remaining Steel Between Cracks (mm)											
Proper Lap (Y/N)	No										
Longitudinal Stagger (Y/N)	No										
Coating		6	6								
Corrosion By Soil (Y/N)	No										
Corrosion By Water (Y/N)	Yes										
Camber POS/ZERO/NEG	ZERO										
Ponding (Y/N)	No										

Alberta Transportation

Bridge Inspection & Maintenance System (Web 2005)

Cuive ComponentLess VouPipalation of Condition(Pipe #: 1, Primary Span, Code: WAIN, SpanRise (mm): 2700, Type: SP)Fish Passage Adequacy77Fish Passage AdequacyXX(Type : )XX(Type : )XX(Indig YM)NoSitting (YM)YesSitting (YM)YesBarrel General RatingYesfeCuiver ComponentClass ModeSeparation of ConditionDirectionYesSeparation of ConditionDirectionNoSeparation of ConditionDirectionNoSeparation of ConditionDirectionNoSeparation of ConditionDirectionNoSeparation of ConditionCollarYesXSeparation of ConditionCollarYesXSeparation of ConditionCollarYesXSeparation of ConditionCollarYesXSeparation of ConditionCollarYesXSeparation of ConditionSour Chardton (Concelles)XXSeparation of ConditionSour Chardton (Co	Bridge Culvert Barrel										
Fish Passage Adequacy    7    7    7      Baffie    X    X    X      Icing (YA)    No    Image (YA)    No      Sitting (YA)    No    Image (YA)    No      Barrel General Rating    6    6    6      Colvert Component    Last    N    Fabre (YA)      Direction    N    N    Fabre (YA)    No      Field Treatment (Concrete, Steel, None)    STEEL    N    Explanation of Condition      Others, None)    N    N    X    X      Headwall    X    X    X      Collar    X    X    X      Goldar    X    X    X      Invert Above/Below (rm)    0    Image (YA)    N      Above/Below (rm)    60    Snow covered.    Image (YA)      Gouv/Ercosion    N    N    N    N      Gouv/Ercosion    N    N    N    Snow covered.      (Type :)    Image (YA)    No    N    Snow covered.      (Type :)    Image (YA)    N    N    Snow c	Culvert Component										
Bartle    X    X      (Type :)    X    X      Value way Adequacy    No    Image (N)    No      Sitting (Y/N)    Yes    Image (N)    No      Barrel General Rating    6    6    6      Colvert Component    Last    Now    Explanation of Condition      Drection    No    X    X      Colvert Component    Last    Now    Explanation of Condition      Drection    N    N      End Trastment (Concrete, Steel, STEEL    Steel    Steel      Others, None)    X    X    X      Headwall $X$ X    X      Collar    X    X    X      Collar    X    X    X      Ming Mails    X    X    X      Ghape : )    X    X    X      Cutoff Wall    0    X    X      Beavel End    FO    7    7      Heaving (mm)    0    Go    Snow covered.      Group Protection    N    N    Snow covered.	(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa	an (mm								
(Type : )  Image (Ambrick (	Fish Passage Adequacy		7	7							
(Type : )  Image (Ambrick (	Baffle		X	Х							
Waterway Adequacy      No      Image of a strain of a	(Type:)										
Ining (YN) Siling (YN) NoNoBarrel General Ratingc6Barrel General RatingcSCulvert ComponentIKDirectionNoSDirectionNoSCulvert ComponentSTEELFylanation of ConditionDirectionNoNoCollarNNoCollarXXCollarXXCollarXXCollarXXKingwallsXXCollarXXKingwallsXXCollarX			7	7	2.1m of opening.						
Siling (Y/N)  Yes  Jork (Y/N)  No    Drift (Y/N)  No  6  6    Barel General Rating  6  6    Culvert Component  Last  Now    Direction  N  Fachanization of Condition    Culvert Component (Concrete, Steel)  STEEL  Explanation of Condition    Collar  X  X  X    Collar  X  X  X    (Shape : )  X  X  X    (Shape : )  X  X  X    (Shape : )  X  X  X    Bevel End  0	· · · · · · · · · · · · · · · · · · ·										
Drift (Y/N)NoImage: Second sec											
Barrel General Rating      6      6      6        Cuivert Component      Last      Now      Explanation of Condition        Direction      N      Stell      Stell        End Treatment (Concrete, Steel, Others, Snoe)      STEEL      X      X        Headwall      STEEL      X      X      X        Collar      X      X      X      X        Kingwalls      X      X      X        Ghape : )      X      X      X        Cutoff Wall      0      X      X        Bevel End      7      7      7        Heaving (mm)      0      -      -        Newt Above/Below Stream Bed BeLCOW      -      -        Above/Below fream Bed Belcow      Feedowall      -        Gour Pertection      N      N      Snow covered.        Gour Pertection      N      N      Snow covered.        Gour Pertection      No      Snow covered.        Beavers (Y/N)      No      N      N        Magment      T      T      T <td></td> <td></td> <td></td> <td></td> <td></td>											
Curve ComponentInstantExplanation of ConditionDirectionNNEnd Trackington ConditionNNEnd ResultantNNEnd ResultantNNColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarInstantXInstantColarInstantXInstantColarInstantXInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstant <t< td=""><td></td><td></td><td>6</td><td>6</td><td></td></t<>			6	6							
Curve ComponentInstantExplanation of ConditionDirectionNNEnd Trackington ConditionNNEnd ResultantNNEnd ResultantNNColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarXXInstantColarInstantXInstantColarInstantXInstantColarInstantXInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstantInstantInstantColarInstant <t< td=""><td></td><td></td><td></td><td></td><td>nom End</td></t<>					nom End						
DirectionNImage: constraint (Concrete, Steel, STEEL)STEELHeadwallXXHeadwallXXCollarXXCollarXX(Shape : )XX(Shape : )XX(Shape : )XXCutoff WallXXBevel End77Heaving (mm)0Image: constraint (Concrete, Steel, Steel	Culvert Component										
End Treatment (Concrete, Steel, STEEL  X  X    Others, Nome)  X  X    Headwall  X  X    Collar  X  X    Wingwalls  X  X    (Shape : )  X  X    Cutoff Wall  X  X    Bevel End  0  X    Heaving (mm)  0  X    Bevel End  600  V    Howing kmm)  600  V    Scour Protection  600  V    Scour Protection  N  N    Scour/ Protection			1	NOW							
Headwall  X  X  X    Collar  X  X  X    Wingwalls  X  X  X    (Shape : )  X  X  X    Cutoff Wall  X  X  X    Bevel End  0  X  X    Invert Above/Below Stream Bed  BELOW  X  X    Scour Protection  N  N  N    (Type :)  X  X  X    (Avg. Rock Size(mm) :)  No  No  Snow covered.    Scour/Prosion  No  No  Snow covered.    Beavers (Y/N)  No  No  Snow covered.    Gammating Cutomation  No  Snow covered.  Snow covered.    Attack  No  No  Snow covered.    Beavers (Y/N)  No  Y  Y    Bank Stability  Y  Y  Y    Migment  X  Y  Y    Drift (Y/N)  No  Y  Y	End Treatment (Concrete, Steel,	STEEL									
Wingwalls (Shape : )XXX(Shape : )XXXBevel End77Heaving (mm)0Invert Above/Below Stream BedBELOWAbove/Below (mm)600Scour Protection600Cour ProtectionNNScour/ProtectionN <t< td=""><td>Headwall</td><td></td><td>Х</td><td>Х</td><td></td></t<>	Headwall		Х	Х							
(Shape : )Cutoff WallXXRevel End77Heaving (mm)07Heaving (mm)0Nove/Below Stream BedBELOWAbove/Below (mm)600Scour ProtectionNNCytype : )NN(Type : )NNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionNNScour/ProtectionTTScour/ProtectionTTScour/ProtectionTTScour/ProtectionTTScour/ProtectionTTScour/ProtectionTTScour/ProtectionTTScour/ProtectionTTScour/ProtectionTTScour/ProtectionScour/Protection <trt< td=""><td>Collar</td><td></td><td>X</td><td>X</td><td></td></trt<>	Collar		X	X							
Cutoff WallXXXBevel End-77Heaving (mm)0Invert Above/Below Stream BedBELOWAbove/Below (mm)600Scour ProtectionNNNChype : )NNSnow covered.(Type : )-NN(Avg. Rock Size(mm) : )NNSnow covered.Scour/ErosionNNNBeavers (Y/N)NoNSnow covered.Downstream End General RatingTTAtament (U/S and D/S)TTAtament (U/S and D/S)-TAtament (V/N)No-Bank StabilityGGMinor erosion on NE corner due to ditch drainage.HWM (m below Top of Culvert)-Drift (Y/N)No-Bank StabilityAGGRADINGChannel Botom Degrading/Aggrading Beavers (Y/N)AGGRADINGFish Compensation Measure 1: NONE:-(Fish Compensation Measure 1: NONE:-(Fis	Wingwalls		X	Х							
Image: ProbabilityImage: ProbabilityImage: ProbabilityBevel End777Heaving (mm)0 $$ Invert Above/Below Stream BedBELOW $$ Above/Below (mm)600 $$ Scour ProtectionNNNChype : ) $$ NN(Avg. Rock Size(mm) : ) $Scour/ErosionNNSnow covered.Beavers (Y/N)NoNoSnow covered.Downstream End General RatingNNSnow covered.Channel (U/S and D/S)LastNowExplanation of ConditionChannel (U/S and D/S)777Bank Stability$	(Shape : )		,								
Heaving (mm)0IInvert Above/Below Stream Bed Above/Below (mm)BELOWI600IIScour ProtectionNN(Type : ) (Avg. Rock Size(mm) : )NNScour/ErosionNNScour/ErosionNNBeavers (Y/N)NoSnow covered.Beavers (Y/N)NoIStatistic Statistic	Cutoff Wall		X	Х							
Invert Above/Below Stream BedBELOWBELOWIAbove/Below (mm)600NNScour ProtectionNNN(Ayg. Rock Size(mm) : )Snow covered.NScour/ErosionNNSnow covered.Beavers (Y/N)NoNSnow covered.Downstream End General RatireTTTTTTTAlignment1VExplanation of ConditionChannel (U/S and D/S)TTTAlignmentTTTBank StabilityNoIHWM not visible.Drift (Y/N)NoIHWM not visible.Channel Bottom Degrading/AggradingAGGRADINGIBeavers (Y/N)NoII(Fish Compensation Measure 1: NONE)II(Fish Compensation Measure 2: NONE)II	Bevel End			7							
Above/Below (mm) $600$ $I$ Scour ProtectionNNN(Type : ) (Avg. Rock Size(mm) : ) $V$ Snow covered.Scour/ErosionNNNBeavers (Y/N)NoNSnow covered.Downstream End General RatizeTTDownstream End General RatizeTTDataLastNowExplanation of ConditionExplanation of ConditionChannel (U/S and D/S)TFAlignmentTTAlignmentTTDrift (Y/N)NoIDrift (Y/N)NoIChannel BottomGFDegrading/Aggrading Beavers (Y/N)NoIMinor erosion on NE corner due to ditch drainage.HWM not visible.If (Y/N)NoIChannel Bottom Degrading/AggradingGGRADINGIFish Compensation Measure 1:NONEIIf (Fish Compensation Measure 2:NONEIIf (Fish Compensation Measure 2:NONEIIf (Artice (Internet in the field of (Internet in the field o	Heaving (mm) 0										
Scour Protection  N  N  N    (Type :) (Avg. Rock Size(mm) :)  N  N  Snow covered.    Scour/Erosion  N  N  Snow covered.    Beavers (Y/N)  No  N  Snow covered.    Downstream End General Ratimetry  7  7  7    Downstream End General Ratimetry  7  7  7    Channel (U/S and D/S)  Last  Now  Explanation of Condition    Channel Kability  6  6  Minor erosion on NE corner due to ditch drainage.    HWM (m below Top of Culvert)  No  Image: Construction on NE corner due to ditch drainage.    HWM (m below Top of Culvert)  AGGRADING  Image: Construction on NE corner due to ditch drainage.    HWM not visible.  Fish Compensation Measure 1 : NONE:  Image: Construction on NE corner due to ditch drainage.    (Fish Compensation Measure 1 : NONE:  Image: Construction on NE corner due to ditch drainage.	Invert Above/Below Stream Bed BELOW										
(Type : ) (Avg. Rock Size(mm) : )    N    N    N    Snow covered.      Beavers (Y/N)    No    V    F    F      Downstream End General Rating    7    7    7      Channel (U/S and D/S)    K    Now    Explanation of Condition      Alignment    7    7    7      Bank Stability    6    6    Minor erosion on NE corner due to ditch drainage.      HWM (m below Top of Culvert)    No    ✓    HWM not visible.      Drift (Y/N)    No    ✓    HWM not visible.      Beavers (Y/N)    No    ✓    HWM not visible.      (Fish Compensation Measure 1 : NONE)    F    F      (Fish Compensation Measure 2 : NONE)    ✓    ✓	Above/Below (mm)	600		-							
(Avg. Rock Size(mm) : )Scour/ErosionNNNSnow covered.Beavers (Y/N)No777Ownstream End General Ratizet777Construction <th< td=""><td>Scour Protection</td><td></td><td>N</td><td>N</td><td>Snow covered.</td></th<>	Scour Protection		N	N	Snow covered.						
Scour/Erosion  N  N  N  Snow covered.    Beavers (Y/N)  No  Image: Constraint of the constraint	(Туре:)				-						
Beavers (Y/N)No $I$ $I$ $I$ Downstream End General Ratio777Downstream End General Ratio777Channel (U/S and D/S)LastNowExplanation of ConditionChannel (U/S and D/S)777Alignment777Bank Stability66Minor erosion on NE corner due to ditch drainage.HWM (m below Top of Culvert)No $I$ $I$ Drift (Y/N)No $I$ $I$ Channel Bottom Degrading/AggradingAGGRADING $I$ Beavers (Y/N)No $I$ $I$ (Fish Compensation Measure 1: NONE: (Fish Compensation Measure 2: NONE) $I$ $I$	(Avg. Rock Size(mm) : )			1							
Downstream End General Rating    7    7    7      Bank Stability    Image: Colspan="4">Image: Colspan="4"      Image: Colspan="4">Image: Colspan="4">Image: Colspan="4">Image: Colspan="4">Image: Colspan="4">Image: Colspan="4">Image: Colspan="4">Image: Colspan="4">Image: Colspan="4">Image: Colspan="4"      Image: Colspan="4">Image: Colspan="4"      Image: Colspan="4" <td <="" colspan="4" td=""><td>Scour/Erosion</td><td></td><td>N</td><td>N</td><td>Snow covered.</td></td>	<td>Scour/Erosion</td> <td></td> <td>N</td> <td>N</td> <td>Snow covered.</td>				Scour/Erosion		N	N	Snow covered.		
Image: Structure Usage    Channel (U/S and D/S)  Explanation of Condition    Alignment  7  7    Bank Stability  6  6  Minor erosion on NE corner due to ditch drainage.    HWM (m below Top of Culvert)  6  6  Minor erosion on NE corner due to ditch drainage.    Drift (Y/N)  No	Beavers (Y/N)	No									
Image:	Downstream End General Ratin	ng	7	7							
Image:			S	Structu	re Usage						
Alignment    7    7      Bank Stability    6    6    Minor erosion on NE corner due to ditch drainage.      HWM (m below Top of Culvert)      +      Drift (Y/N)    No    +    +      Channel Bottom Degrading/Aggrading    AGGRADING    -    +      Beavers (Y/N)    No    -    +      (Fish Compensation Measure 1 : NONE)    -    +      (Fish Compensation Measure 2 : NONE)    -    +			Last	Now	Explanation of Condition						
Bank Stability  6  6  Minor erosion on NE corner due to ditch drainage.    HWM (m below Top of Culvert)    +    Drift (Y/N)  No   +    Channel Bottom Degrading/Aggrading  AGGRADING  -  +    Beavers (Y/N)  No  -  +    (Fish Compensation Measure 1 : NONE)  -  -  +    (Fish Compensation Measure 2 : NONE)  -  -  +	Channel (U/S and D/S)										
HWM (m below Top of Culvert)  No  HWM not visible.    Drift (Y/N)  No  Image: Comparison of Culvert)  No    Channel Bottom Degrading/Aggrading  AGGRADING  Image: Comparison of Culvert)  Image: Comparison of Culvert)    Beavers (Y/N)  No  Image: Comparison of Culvert)  Image: Comparison of Culvert)  Image: Comparison of Culvert)    (Fish Compensation Measure 1 : NONE)  Image: Comparison of Culvert)  Image: Comparison of Culvert)  Image: Comparison of Culvert)	Alignment			7							
Drift (Y/N)  No    Channel Bottom Degrading/Aggrading  AGGRADING    Beavers (Y/N)  No    (Fish Compensation Measure 1 : NONE)    (Fish Compensation Measure 2 : NONE)	Bank Stability			6	Minor erosion on NE corner due to ditch drainage.						
Channel Bottom Degrading/Aggrading    AGGRADING      Beavers (Y/N)    No      (Fish Compensation Measure 1 : NONE)      (Fish Compensation Measure 2 : NONE)	HWM (m below Top of Culvert)				HWM not visible.						
Degrading/Aggrading  Image: Complex and the second	Prift (Y/N) No										
(Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Channel Bottom AGGRADING Degrading/Aggrading										
(Fish Compensation Measure 2 : NONE)	Beavers (Y/N)	No									
	(Fish Compensation Measure 1 :	NONE)									
Channel General Rating 6 7	(Fish Compensation Measure 2 :	NONE)									
	Channel General Rating		6	7							

					Mai	ntenance Re	ecommene	lations						
Inspector Recommendations			Year Inspector Comments				Department Comments					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			2011	Remove silt fences.										
OTHER ACTION														
OTHER ACTION														
OTHER ACTION														
Structural Condition Rating (Last/Now) (%)			66.7/66.7 S		Sufficiency R (%)	ufficiency Rating (Last/Now) %)		70.1/70.5 Est. Repl. Yr		t. Repl. Yr	2034	Maint. Re	qd. (Y/N)	Yes
Special Comments for Next Inspection						Department Comments								
Maintenance Reviewed By								Date				Estimated Tota	I 0	
Proposed Long-Term Strategy														
On 3-Year Program (Y/N)														
Proposed Action														
Previous Inspector's Name Bryan			Bryan Wai Previou				Previous	s Assistant's Name						
Next Inspection Date 26-A			26-Apr-2014 Pre				Previous	evious Inspection Date 22-Feb-2008						
Inspection Cycle (Default) (months) 39														
Comment														