

| Bridge Culvert Inspection | | | |
|---------------------------|---------------------------------|---------------------|----------------|
| Bridge File Number | 80574 -2 Bridge Culvert | Form Type | CULM |
| Year Built | 2010 | Lot No. | 4 |
| Bridge or Town Name | STRATHMORE | Inspector Name | Garry Roberts |
| Located Over | WID - IRRIGATION C, WATERCRS-IC | Inspector Class | BR CLS A |
| Located On | LOCAL ROAD | Assistant Name | |
| Water Body Cl./Year | | Assistant Class | |
| Navigabil. Cl./Year | | Inspection Date | 17-Jul-2012 |
| Legal Land Location | SW SEC 14 TWP 24 RGE 25 W4M | Data Entry By | Kelsey Roberts |
| Longitude, Latitude | -113:23:26, 51:02:42 | Data Entry Date | 23-Aug-2012 |
| Road Authority | Alberta Transportation (AIT) | Reviewer Name | Ash Morjaria |
| Contract Main. Area | UNDEFINED CMA | Review Date | 28-Jul-2012 |
| Clear Roadway/Skew | 13.3 / 15 deg. (RHF) | Dept. Reviewer Name | Tim Davies |
| AADT/Year | 2,730 / 2007 (E) | Dept. Review Date | 24-Aug-2012 |
| Road Classification | RLU-208-100 | Follow-Up By | |
| Detour Length (km) | 3 | | |

Bridge Culvert Information

| Number of Culverts | 2 | | | | | | | |
|--------------------------|--------|------|----------------|------|--------|---------------|--------------------|-------|
| Pipe # | Barrel | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
| 1 | MAIN | - | 2400 | MP | 31 | 125X26 | 2.8 | ROUND |
| 2 | MAIN | - | 2400 | MP | 31 | 125X26 | 2.8 | ROUND |
| Special Features | | | | | | | | |
| Special Features Comment | | | | | | | | |

Utilities (Located at)

| | | | |
|---------------------|-----------------------|---------------|---------|
| Utility Attachments | | | |
| Telephone | In area | Gas | In area |
| Power | 20 m North | Municipal | |
| Others | | Problem (Y/N) | |
| Remarks | In town of Strathmore | | |

Approach Road / Embankment

| | Last | Now | Explanation of Condition |
|--|--------|----------|---|
| Horizontal Alignment | | 5 | Residential access 30 m West. 20 m East |
| Vertical Alignment | | 7 | |
| Roadway Width (m) | 13.300 | | |
| Embankment | | 6 | |
| Sideslope (__:1) | 2.0 | | |
| (Height of Cover(m) : 1.5) | | | |
| Guardrail (Y/N) | Yes | | |
| Approach Road / Embankment General Rating | | 5 | |

Upstream End

| Culvert Component | Last | Now | Explanation of Condition |
|---|-------|-----|--------------------------|
| (Pipe # : 1, Span Type: Primary Span) | | | |
| Direction | | N | |
| End Treatment (Concrete, Steel, Others, None) | STEEL | | |
| Headwall | | X | |
| Collar | | X | |
| Wingwalls | | X | |
| (Shape :) | | | |

| Upstream End | | | | |
|--|----|------|----------|--------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Span Type: Primary Span) | | | | |
| Cutoff Wall | | | X | |
| Bevel End | | | 8 | |
| Heaving (mm) | | | | |
| Invert Above/Below Stream Bed | | | | |
| Above/Below (mm) | | | | |
| Scour Protection | | | 8 | |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 300) | | | | |
| Scour/Erosion | | | 8 | |
| Beavers (Y/N) | No | | | |
| Upstream End General Rating | | | 8 | |

| Bridge Culvert Barrel | | | | |
|--|--|------|-----|--|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP) | | | | |
| Barrel Last Accessible Date | | | | Water too deep - not accessible |
| Special Features | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | | N | Viewed from ends - shape appears good. |
| Measured Rise (mm) | | | | |
| Measured At Ring No. | | | | |
| Sag (mm) | | | | |
| Percent Sag | | | | |
| Sidewall | | | N | |
| Measured Span (mm) | | | | |
| Measured At Ring No. | | | | |
| Deflection (mm) | | | | |
| Percent Deflection | | | | |
| Floor | | | N | |
| Bulge (mm) | | | | |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | | | | |
| Circumferential Seams | | | N | |
| Separation (mm) | | | | |
| Longitudinal Seams | | | 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 | | | N | |
| Corrosion By Soil (Y/N) | | | | |
| Corrosion By Water (Y/N) | | | | |

| Bridge Culvert Barrel | | | | |
|--|--|------|----------|--------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP) | | | | |
| Camber POS/ZERO/NEG | | | | |
| Ponding (Y/N) | | | | |
| Fish Passage Adequacy | | | 7 | |
| Baffle | | | X | |
| (Type :) | | | | |
| Waterway Adequacy | | | 7 | |
| Icing (Y/N) | | | | |
| Siltng (Y/N) | | | | |
| Drift (Y/N) | | | | |
| Barrel General Rating | | | N | |

| Downstream End | | | | |
|---|-------|------|----------|--------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Span Type: Primary Span) | | | | |
| Direction | | S | | |
| End Treatment (Concrete, Steel, Others, None) | STEEL | | | |
| Headwall | | | X | |
| Collar | | | X | |
| Wingwalls | | | X | |
| (Shape :) | | | | |
| Cutoff Wall | | | X | |
| Bevel End | | | 8 | |
| Heaving (mm) | | | | |
| Invert Above/Below Stream Bed | | | | |
| Above/Below (mm) | | | | |
| Scour Protection | | | 8 | |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 300) | | | | |
| Scour/Erosion | | | 8 | |
| Beavers (Y/N) | No | | | |
| Downstream End General Rating | | | 8 | |

| Upstream End | | | | |
|--|-------|------|-----|--------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 2, Span Type: Secondary Span) | | | | |
| Direction | | N | | East pipe |
| End Treatment (Concrete, Steel, Others, None) | STEEL | | | |
| Headwall | | | X | |
| Collar | | | X | |
| Wingwalls | | | X | |
| (Shape :) | | | | |
| Cutoff Wall | | | X | |

| Upstream End | | | | |
|--|----|------|----------|--------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 2, Span Type: Secondary Span) | | | | |
| Bevel End | | | 8 | |
| Heaving (mm) | | | | |
| Invert Above/Below Stream Bed | | | | |
| Above/Below (mm) | | | | |
| Scour Protection | | | 8 | |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 300) | | | | |
| Scour/Erosion | | | 8 | |
| Beavers (Y/N) | No | | | |
| Upstream End General Rating | | | 8 | |

| Bridge Culvert Barrel | | | | |
|--|--|------|-----|---------------------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP) | | | | |
| Barrel Last Accessible Date | | | | Water too deep - not accessible |
| Special Features | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | | N | Viewed from ends - shape appears good |
| Measured Rise (mm) | | | | |
| Measured At Ring No. | | | | |
| Sag (mm) | | | | |
| Percent Sag | | | | |
| Sidewall | | | N | |
| Measured Span (mm) | | | | |
| Measured At Ring No. | | | | |
| Deflection (mm) | | | | |
| Percent Deflection | | | | |
| Floor | | | N | |
| Bulge (mm) | | | | |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | | | | |
| Circumferential Seams | | | N | |
| Separation (mm) | | | | |
| Longitudinal Seams | | | 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 | | | N | |
| Corrosion By Soil (Y/N) | | | | |
| Corrosion By Water (Y/N) | | | | |
| Camber POS/ZERO/NEG | | | | |

| Bridge Culvert Barrel | | | | |
|--|-------|------|----------|---------------------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP) | | | | |
| Ponding (Y/N) | | | | |
| Fish Passage Adequacy | | | 7 | |
| Baffle | | | X | |
| (Type :) | | | | |
| Waterway Adequacy | | | 7 | |
| Icing (Y/N) | No | | | |
| Silting (Y/N) | | | | |
| Drift (Y/N) | No | | | |
| Barrel General Rating | | | N | |
| Downstream End | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 2, Span Type: Secondary Span) | | | | |
| Direction | | S | | |
| End Treatment (Concrete, Steel, Others, None) | STEEL | | | |
| Headwall | | | X | |
| Collar | | | X | |
| Wingwalls | | | X | |
| (Shape :) | | | | |
| Cutoff Wall | | | X | |
| Bevel End | | | 8 | |
| Heaving (mm) | | | | |
| Invert Above/Below Stream Bed | | | | |
| Above/Below (mm) | | | | |
| Scour Protection | | | 8 | |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 300) | | | | |
| Scour/Erosion | | | 8 | |
| Beavers (Y/N) | No | | | |
| Downstream End General Rating | | | 8 | |
| Structure Usage | | | | |
| | | Last | Now | Explanation of Condition |
| Channel (U/S and D/S) | | | | |
| Alignment | | | 6 | Canal turns 45 degrees at down stream |
| Bank Stability | | | 8 | |
| HWM (m below Top of Culvert) | | | | |
| Drift (Y/N) | No | | | |
| Channel Bottom Degrading/Aggrading | | | | |
| Beavers (Y/N) | No | | | |
| (Fish Compensation Measure 1 : NONE) | | | | |
| (Fish Compensation Measure 2 : NONE) | | | | |
| Channel General Rating | | | 6 | |

| 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 | Sufficiency Rating (Last/Now) (%) | /65.8 | Est. Repl. Yr | 2065 | Maint. Req. (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 | | | Previous Assistant's Name | | | | |
| Next Inspection Date | 17-Apr-2017 | | Previous Inspection Date | | | | |
| Inspection Cycle (Default) (months) | 57 | | | | | | |
| Comment | | | | | | | |