|   |            |                             |               |          | Brida                      | e Culve                    | ert Insn                       | ection                      |                |                       |       |  |  |
|---|------------|-----------------------------|---------------|----------|----------------------------|----------------------------|--------------------------------|-----------------------------|----------------|-----------------------|-------|--|--|
| Bridge File Number 72079 -2 Bridge Culvert          |            |                             | Bridg         | o ourv   | Ivert Inspection Form Type |                            | CUL1                           | CUL 1                       |                |                       |       |  |  |
| Year Built 2010                                     |            |                             | •             |          |                            |                            | Lot No                         |                             | 4              |                       |       |  |  |
| Bridge or Town                                      | n Name     |                             |               |          |                            |                            |                                | tor Name                    | Diego Alvarez  | <u> </u>              |       |  |  |
| Located Over  | 1111441110 | 2ND ORDER TRIBUTARY TO M    |               |          |                            | /ATZHIW/IN                 |                                | tor Class                   | BR CLS B       |                       |       |  |  |
| Located Over  |            | CREEK, 3.14.3.1, WATERCRS-S |               |          |                            |                            |                                | ant Name                    | DIX GEO D      |                       |       |  |  |
| Located On  |            | 862:04 C                    | 1 13.560      |          |                            |                            |                                | ant Class                   |                |                       |       |  |  |
| Water Body Cl                                       | I./Year    |                             |               |          |                            |                            |                                | Inspection Date 27-Jan-2011 |                |                       |       |  |  |
| Navigabil. Cl./                                     | Year       |                             |               |          |                            |                            |                                | intry By                    | Erin Roberts   |                       |       |  |  |
| Legal Land Lo                                       | cation     | SW SEC                      | 1 TWP 24 R    | 3E 16 W4 | М                          |                            |                                | ntry Date                   |                | 04-Mar-2011           |       |  |  |
| Longitude, Lat                                      | itude      | -112:06:4                   | 45, 51:00:31  |          |                            |                            | Reviewer Name                  |                             |                | Garry Roberts         |       |  |  |
| Road Authority                                      | /          | Alberta T                   | ransportation | (AIT)    |                            |                            | Review                         |                             | 08-Feb-2011    | -                     |       |  |  |
| Contract Main.                                      | . Area     | CMA23                       |               |          |                            |                            |                                |                             | e Lorenz Bohne |                       |       |  |  |
| Clear Roadwa  | y/Skew     | 8.6 / -5 d                  | 5 deg. (LHF)  |          |                            |                            |                                |                             | 07-Mar-2011    |                       |       |  |  |
| AADT/Year 110                                       |            | 110 / 200                   | 09 (A)        |          |                            |                            | Dept. Review Date Follow-Up By |                             | or mar zorr    |                       |       |  |  |
| Road Classification RCU-20                          |            | RCU-209                     | 09-110        |          |                            |                            | - Silow-Op By                  |                             |                |                       |       |  |  |
| Detour Length                                       | (km)       | 10                          |               |          |                            |                            |                                |                             |                |                       |       |  |  |
| Bridge Culver                                       |            | nation                      |               |          |                            |                            |                                |                             |                |                       |       |  |  |
| Number of Cul                                       | lverts     | 1                           |               |          |                            |                            |                                |                             |                |                       |       |  |  |
| Pipe #  | Barrel     | Span Ris                    |               | Rise (or | Rise (or Dia.)             |                            |                                | Length                      | Corr. Profile  | PI./Slab<br>Thickness | Shape |  |  |
| 1   | MAIN       | -                           |               | 2200     |                            | MP                         |                                | 34                          | 125X26         | 2.8                   | ROUND |  |  |
| Special Featur                                      | res        |                             |               |          |                            |                            |                                |                             |                |                       |       |  |  |
| Special Featur                                      |            | ment                        |               |          |                            |                            |                                |                             |                |                       |       |  |  |
| •   |            |                             |               |          |                            |                            |                                |                             |                |                       |       |  |  |
|   |            |                             |               |          | Uti                        | lities (L                  | ocated                         | at)                         |                |                       |       |  |  |
| Utility Attachm                                     |            |                             |               |          |                            |                            |                                |                             |                |                       |       |  |  |
| Telephone   |            | R.O.W.                      |               |          |                            |                            | Gas                            |                             |                |                       |       |  |  |
| Power   | 2 Wire     | e North, 3                  | st            |          |                            | Municipal Problem (Y/N) No |                                |                             |                |                       |       |  |  |
| Others  |            |                             |               |          |                            |                            | Proble                         | m (Y/N) No                  |                |                       |       |  |  |
| Remarks   |            |                             |               | Α.       |                            | .b. D                      | .l / El                        |                             |                |                       |       |  |  |
|   |            |                             |               | A        |                            |                            |                                | ankment                     | dition         |                       |       |  |  |
| Horizontal Alignment                                |            |                             |               | Lasi     | 9                          | Explanation of Condition   |                                |                             |                |                       |       |  |  |
| Vertical Alignment                                  |            |                             |               |          | 8                          |                            |                                |                             |                |                       |       |  |  |
| Roadway Width (m)                                   |            |                             | 8.600         |          | 0                          |                            |                                |                             |                |                       |       |  |  |
| Troadway Widi                                       |            |                             | 0.000         |          |                            |                            |                                |                             |                |                       |       |  |  |
| Embankment  |            |                             |               |          |                            | 9                          |                                |                             |                |                       |       |  |  |
| Sideslope (:1)                                      |            |                             | 4.0           |          |                            |                            |                                |                             |                |                       |       |  |  |
| (Height of Co                                       | over(m)    | <b>2.1</b> )                |               |          |                            |                            |                                |                             |                |                       |       |  |  |
| Guardrail (Y/N                                      | )          |                             | No            |          |                            |                            |                                |                             |                |                       |       |  |  |
| Approach Ro   | ad / Eml   | bankmen                     | t General Rat | ing      |                            | 8                          |                                |                             |                |                       |       |  |  |
|   |            |                             |               |          |                            | Unstre                     | am End                         |                             |                |                       |       |  |  |
| Culvert Comp  | onent      |                             |               |          | Last                       | Now                        |                                | nation of Con               | dition         |                       |       |  |  |
| -   |            |                             | N             | 111011   |                            |                            | SP 3.0m North                  |                             |                |                       |       |  |  |
| End Treatment (Concrete, Steel, STEEL Others, None) |            |                             | STEEL         |          |                            |                            |                                |                             |                |                       |       |  |  |
| Headwall  |            |                             |               |          |                            | Х                          |                                |                             |                |                       |       |  |  |
| Collar  |            |                             |               |          |                            | X                          |                                |                             |                |                       |       |  |  |
| Wingwalls   |            |                             |               |          |                            | X                          |                                |                             |                |                       |       |  |  |
| (Shape :  | )          |                             |               |          |                            |                            |                                |                             |                |                       |       |  |  |
| Cutoff Wall   |            |                             |               |          |                            | Х                          |                                |                             |                |                       |       |  |  |
|   |            |                             |               |          |                            |                            |                                |                             |                |                       |       |  |  |

| Upstream End                                |                      |              |           |                              |  |  |  |  |  |
|---|----------------------|--------------|-----------|------------------------------|--|--|--|--|--|
| Culvert Component                           |                      | Last         | Now       | Explanation of Condition     |  |  |  |  |  |
| Bevel End                                   |                      |              | 9         |                              |  |  |  |  |  |
| Heaving (mm)                                | 0                    |              |           |                              |  |  |  |  |  |
| Invert Above/Below Stream Bed               | BELOW                |              |           |                              |  |  |  |  |  |
| Above/Below (mm)                            | 500                  |              |           |                              |  |  |  |  |  |
| Scour Protection                            |                      |              | 9         |                              |  |  |  |  |  |
| (Type : RIP RAP)                            |                      |              |           |                              |  |  |  |  |  |
| (Avg. Rock Size(mm) : 450)                  |                      |              |           |                              |  |  |  |  |  |
| Scour/Erosion                               |                      |              | 9         |                              |  |  |  |  |  |
| Beavers (Y/N)                               | No                   |              |           |                              |  |  |  |  |  |
| Upstream End General Rating                 |                      |              | 9         |                              |  |  |  |  |  |
| Opstream End General Rating                 |                      |              | 9         |                              |  |  |  |  |  |
|   |                      | lvert Barrel |           |                              |  |  |  |  |  |
| Culvert Component                           |                      | Last         | Now       | Explanation of Condition     |  |  |  |  |  |
| (Pipe # : 1, Primary Span, Loca             | tion Code: MAIN, Spa | n (mm        | <u>):</u> | , Rise (mm): 2200, Type: MP) |  |  |  |  |  |
| Barrel Last Accessible Date                 | 27-Jan-2011          |              |           |                              |  |  |  |  |  |
| Special Features                            |                      |              |           |                              |  |  |  |  |  |
| Special Feature                             |                      |              |           |                              |  |  |  |  |  |
| (Type:)                                     |                      |              |           |                              |  |  |  |  |  |
| Special Feature                             |                      |              |           |                              |  |  |  |  |  |
| (Type:)                                     |                      |              |           |                              |  |  |  |  |  |
| Roof  |                      |              | 9         |                              |  |  |  |  |  |
| Measured Rise (mm)                          | 2000                 |              |           |                              |  |  |  |  |  |
| Measured At Ring No.                        |                      |              |           |                              |  |  |  |  |  |
| Sag (mm)                                    | 0                    |              |           |                              |  |  |  |  |  |
| Percent Sag                                 | 0                    |              |           |                              |  |  |  |  |  |
| Sidewall                                    |                      |              | 9         |                              |  |  |  |  |  |
| Measured Span (mm)                          | 2215                 |              |           |                              |  |  |  |  |  |
| Measured At Ring No.                        | -                    |              |           | 3/4 from U/S                 |  |  |  |  |  |
| Deflection (mm)                             | 15                   |              |           |                              |  |  |  |  |  |
| Percent Deflection                          | 1                    |              |           |                              |  |  |  |  |  |
| Floor                                       |                      |              | 9         |                              |  |  |  |  |  |
| Bulge (mm)                                  | 0                    |              |           |                              |  |  |  |  |  |
| Measured At Ring No.                        |                      |              |           |                              |  |  |  |  |  |
| Abrasion (Y/N)                              | No                   |              |           |                              |  |  |  |  |  |
| Circumferential Seams                       |                      |              | 9         |                              |  |  |  |  |  |
| Separation (mm)                             | 40                   |              |           |                              |  |  |  |  |  |
| Longitudinal Seams                          |                      |              | Х         |                              |  |  |  |  |  |
| Total No. of Cracked Rings                  |                      |              |           |                              |  |  |  |  |  |
| Total No. of Rings with Two Cracked Seams   |                      |              |           |                              |  |  |  |  |  |
| Min. Remaining Steel<br>Between Cracks (mm) |                      |              |           |                              |  |  |  |  |  |
| Proper Lap (Y/N)                            |                      |              |           |                              |  |  |  |  |  |
| Longitudinal Stagger (Y/N)                  |                      |              |           |                              |  |  |  |  |  |
| Coating                                     |                      |              | 9         |                              |  |  |  |  |  |
| Corrosion By Soil (Y/N)                     | No                   |              |           |                              |  |  |  |  |  |
| Corrosion By Water (Y/N)                    | No                   |              |           |                              |  |  |  |  |  |
| Camber POS/ZERO/NEG                         | ZERO                 |              |           |                              |  |  |  |  |  |
| Ponding (Y/N)                               | No                   |              |           |                              |  |  |  |  |  |

72079 -2 Bridge Culvert

| Bridge Culvert Barrel                         |                      |       |                              |                          |  |  |  |  |  |
|---|----------------------|-------|------------------------------|--------------------------|--|--|--|--|--|
| Culvert Component                             |                      | Last  | Now                          | Explanation of Condition |  |  |  |  |  |
| (Pipe # : 1, Primary Span, Locat              | tion Code: MAIN, Spa | n (mm | , Rise (mm): 2200, Type: MP) |                          |  |  |  |  |  |
| Fish Passage Adequacy                         |                      |       | 9                            |                          |  |  |  |  |  |
| Baffle  |                      |       | X                            |                          |  |  |  |  |  |
| (Type:)                                       |                      |       |                              |                          |  |  |  |  |  |
| Waterway Adequacy                             |                      |       | 8                            |                          |  |  |  |  |  |
| Icing (Y/N)                                   | No                   |       |                              |                          |  |  |  |  |  |
| Silting (Y/N)                                 | No                   |       |                              |                          |  |  |  |  |  |
| Drift (Y/N)                                   | No                   |       |                              |                          |  |  |  |  |  |
| Barrel General Rating                         |                      |       | 9                            |                          |  |  |  |  |  |
| Downstream End                                |                      |       |                              |                          |  |  |  |  |  |
| Culvert Component                             |                      | Last  | Now                          | Explanation of Condition |  |  |  |  |  |
| Direction                                     |                      | S     |                              |                          |  |  |  |  |  |
| End Treatment (Concrete, Steel, Others, None) | STEEL                |       |                              |                          |  |  |  |  |  |
| Headwall                                      |                      |       | X                            |                          |  |  |  |  |  |
| Collar  |                      |       | X                            |                          |  |  |  |  |  |
| Wingwalls                                     |                      |       | Х                            |                          |  |  |  |  |  |
| (Shape: )                                     |                      |       |                              |                          |  |  |  |  |  |
| Cutoff Wall                                   |                      |       | Х                            |                          |  |  |  |  |  |
| Bevel End                                     |                      |       | 9                            |                          |  |  |  |  |  |
| Heaving (mm)                                  | 0                    |       |                              |                          |  |  |  |  |  |
| Invert Above/Below Stream Bed BELOW           |                      |       |                              |                          |  |  |  |  |  |
| Above/Below (mm)                              | 500                  |       |                              |                          |  |  |  |  |  |
| Scour Protection                              |                      |       | 9                            |                          |  |  |  |  |  |
| (Type: RIP RAP)                               |                      |       |                              |                          |  |  |  |  |  |
| (Avg. Rock Size(mm) : 450)                    |                      |       |                              |                          |  |  |  |  |  |
| Scour/Erosion                                 |                      |       | 9                            |                          |  |  |  |  |  |
| Beavers (Y/N)                                 | No                   |       |                              |                          |  |  |  |  |  |
| Downstream End General Rating                 |                      |       | 9                            |                          |  |  |  |  |  |
|   |                      | S     | Structu                      | re Usage                 |  |  |  |  |  |
|   |                      | Last  | Now                          | Explanation of Condition |  |  |  |  |  |
| Channel (U/S and D/S)                         |                      |       |                              |                          |  |  |  |  |  |
| Alignment                                     |                      |       | 8                            |                          |  |  |  |  |  |
| Bank Stability                                |                      |       | 9                            |                          |  |  |  |  |  |
| HWM (m below Top of Culvert)                  |                      |       |                              | HWM not visible          |  |  |  |  |  |
| 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                        |                      |       | 8                            |                          |  |  |  |  |  |

| Maintenance Recommendations                |         |                         |  |                                   |          |                        |                    |           |               |           |    |
|--|---------|-------------------------|--|-----------------------------------|----------|------------------------|--------------------|-----------|---------------|-----------|----|
| Inspector Recommendations                  |         | Year Inspector Comments |  |                                   |          | Department Com         | Target Year        | Est. Cost | Cat #         |           |    |
| SHOTCRETE REPAIRS                          |         |                         |  |                                   |          |                        |                    |           |               |           |    |
| PLACE ADDITIONAL RIP RAP                   |         |                         |  |                                   |          |                        |                    |           |               |           |    |
| REMOVE DRIFT ACCUMULATION                  |         |                         |  |                                   |          |                        |                    |           |               |           |    |
| INSTALL CONCRETE/STEEL LINING              |         |                         |  |                                   |          |                        |                    |           |               |           |    |
| INSTALL STRUTS                             |         |                         |  |                                   |          |                        |                    |           |               |           |    |
| INSTALL CONCRETE COLLAR/CUTC               | )FF     |                         |  |                                   |          |                        |                    |           |               |           |    |
| REPAIR SEAMS                               |         |                         |  |                                   |          |                        |                    |           |               |           |    |
| OTHER ACTION                               |         |                         |  |                                   |          |                        |                    |           |               |           |    |
| OTHER ACTION                               |         |                         |  |                                   |          |                        |                    |           |               |           |    |
| OTHER ACTION                               |         |                         |  |                                   |          |                        |                    |           |               |           |    |
| OTHER ACTION                               |         |                         |  |                                   |          |                        |                    |           |               |           |    |
| Structural Condition Rating (Last/No. (%)  | ow)     | /100.0                  |  | Sufficiency Rating (Last/Now) (%) |          | /95.7                  | Est. Repl. Yr 2060 |           | Maint. Re     | qd. (Y/N) | No |
| Special<br>Comments for<br>Next Inspection |         |                         |  |                                   |          | Department<br>Comments |                    |           |               |           |    |
| Maintenance Reviewed By                    |         |                         |  |                                   |          | Date                   |                    | E         | Stimated Tota | 0         |    |
| Proposed Long-Term Strategy                |         |                         |  |                                   |          |                        |                    | ·         |               |           |    |
| On 3-Year Program (Y/N)                    |         |                         |  |                                   |          |                        |                    |           |               |           |    |
| Proposed Action                            |         |                         |  |                                   |          |                        |                    |           |               |           |    |
| Previous Inspector's Name                  |         |                         |  |                                   | Previous | Assistant's Name       |                    |           |               |           |    |
| Next Inspection Date                       | 27-Apr- | 2014                    |  |                                   | Previous | Inspection Date        |                    |           |               |           |    |
| Inspection Cycle (Default) (months)        | 39      |                         |  |                                   |          |                        |                    |           |               |           |    |
| Comment                                    |         |                         |  |                                   |          |                        |                    |           |               |           |    |