

| Bridge Inspection                   |   |               |                   |               |   |                     |   |    |  |
|-------------------------------------|---|---------------|-------------------|---------------|---|---------------------|---|----|--|
| Bridge File Number                  | 09908 -1 Bridge                                 |               |                   |               | Form Type   | PCS                 |   |    |  |
| Year Built/Year Supstr              | 1960/1960                                       |               |                   |               | Lot No.   | 1                   |   |    |  |
| Bridge or Town Name                 | ELMWORTH  |               |                   |               | Inspector Name  | Russel Vanderschaaf |   |    |  |
| Located Over                        | DIAMOND DICK CREEK, 8.10.58.18.8.8, WATERCRS-ST |               |                   |               | Inspector Class   | BR CLS B            |   |    |  |
| Located On                          | 722:02 C1 3.257                                 |               |                   |               | Assistant Name  |                     |   |    |  |
| Water Body Cl./Year                 |   |               |                   |               | Assistant Class   |                     |   |    |  |
| Navigabil. Cl./Year                 |   |               |                   |               | Inspection Date   | 14-May-2010         |   |    |  |
| Legal Land Location                 | SW SEC 17 TWP 70 RGE 11 W6M                     |               |                   |               | Data Entry By   | Theresa Lacusta     |   |    |  |
| Longitude, Latitude                 | -119:39:11, 55:03:15                            |               |                   |               | Data Entry Date   | 14-Jun-2010         |   |    |  |
| Road Authority                      | Alberta Transportation (AIT)                    |               |                   |               | Reviewer Name   | Arnold Assenheimer  |   |    |  |
| Contract Main. Area                 | CMA05   |               |                   |               | Review Date   | 07-Jun-2010         |   |    |  |
| Clear Roadway/Skew                  | 9.8 / -45 deg. (LHF)                            |               |                   |               | Dept. Reviewer Name   | Steve Pasquan       |   |    |  |
| AADT/Year                           | 1,080 / 2009 (A)                                |               |                   |               | Dept. Review Date   | 19-Aug-2010         |   |    |  |
| Road Classification                 | RCU-209-110                                     |               |                   |               | Follow-Up By  |                     |   |    |  |
| Detour Length (km)                  | 6   |               |                   |               |   |                     |   |    |  |
| Allowable Load (t):                 | Single  | CS1 29 GIRDER | Semi              | CS2 52 GIRDER | Train   | CS3 74 GIRDER       | ---> On Critical Spans<br>--->Critical Member |    |  |
| Design Loading:                     | HS20  |               |                   |               |   |                     | ---> Primary Span                             |    |  |
| Posting Information                 |   |               |                   |               |   |                     |   |    |  |
| Required Load Posting (t)           | Single  |               |                   |               | Semi  |                     | Truck Train                                   |    |  |
| Posted Loading (t)                  | Single  |               |                   |               | Semi  |                     | Truck Train                                   |    |  |
| Posted:                             | Lane  | EB            | At Junction (Y/N) | No            | In Advance (Y/N)  | No                  | At Bridge (Y/N)                               | No |  |
| Posted:                             | Lane  | WB            | At Junction (Y/N) | No            | In Advance (Y/N)  | No                  | At Bridge (Y/N)                               | No |  |
| Remarks                             |   |               |                   |               |   |                     |   |    |  |
| Hazard Marker At Bridge (Y/N)       | Yes   |               |                   |               |   |                     |   |    |  |
| Remarks                             |   |               |                   |               |   |                     |   |    |  |
| Other Sign Types                    |   |               |                   |               |   |                     |   |    |  |
| Utilities (Located at)              |   |               |                   |               |   |                     |   |    |  |
| Utility Attachments                 |   |               |                   |               |   |                     |   |    |  |
| Telephone                           | North & South r/w.                              |               |                   |               | Gas   |                     |   |    |  |
| Power                               | North side of road single wire                  |               |                   |               | Municipal   |                     |   |    |  |
| Others                              | Pwr X's Hwy 3m fr. W abt.- 3 wire               |               |                   |               | Problem (Y/N)   | No                  |   |    |  |
| Remarks                             |   |               |                   |               |   |                     |   |    |  |
| Approach Road                       |   |               |                   |               |   |                     |   |    |  |
|                                     |   |               | Last              | Now           | Explanation of Condition  |                     |   |    |  |
| Horizontal Alignment                |   |               | 6                 | 6             | Entrances in NW & SE corners.<br><br>Settled at SW corner, patched with ACP and timber.-photo |                     |   |    |  |
| Vertical Alignment                  |   |               | 8                 | 8             |   |                     |   |    |  |
| Roadway Width (m)                   | 10.000  |               |                   |               |   |                     |   |    |  |
| Approach Bump                       |   |               | 4                 | 5             |   |                     |   |    |  |
| Guardrail (Y/N)                     | Yes   |               |                   |               | Guardrail at NW and SE bend around intersecting roads.  |                     |   |    |  |
| Guardrail                           |   |               | 3                 | 5             |   |                     |   |    |  |
| Length (m)                          | 12.000  |               |                   |               |   |                     |   |    |  |
| Current Standard (Y/N)              | No  |               |                   |               |   |                     |   |    |  |
| Termination Type                    | TURNED DOWN                                     |               |                   |               |   |                     |   |    |  |
| Drainage                            |   |               | 7                 | 6             |   |                     |   |    |  |
| <b>Approach Road General Rating</b> |   |               | <b>6</b>          | <b>6</b>      |   |                     |   |    |  |

| Superstructure   |           |             |           |                          |  |
|--|-----------|-------------|-----------|--------------------------|--|
| Bridge Component   |           | Last        | Now       | Explanation of Condition |  |
| (Primary Span : PGO, 3 Spans, Lengths(m): 8.5-8.5-8.5, A-Ident Number: ) |           |             |           |                          |  |
| <b>Special Features</b>  |           |             |           |                          |  |
| Special Feature  |           |             | X         |                          |  |
| (Type : )  |           |             |           |                          |  |
| Special Feature  |           |             | X         |                          |  |
| (Type : )  |           |             |           |                          |  |
| Wearing Surface/Deck Top Detail Ratings                                  |           |             |           |                          |  |
|  | N (%)     | 1 (%)       | 2 (%)     | 3 (%)                    |  |
| <b>Last</b>  | 100       |             |           |                          |  |
| <b>Now</b>   |           |             |           |                          |  |
| Wearing Surface  |           |             | N         | 5                        | (6 wide longitudinal cracks over G3,G4,G5,G6,G7.-2005/06/21)   |
| (Material Type : <b>CONCRETE</b> )                                       |           |             |           |                          |  |
| (Thickness(mm) : <b>50</b> )   |           |             |           |                          |  |
| Lateral Connection Problem (Y/N)   |           | No          |           |                          |  |
| Deck Top   |           |             | N         | N                        |  |
| Deck Rideability   |           |             | 8         | 8                        |  |
| Deck Joints  |           |             | N         | N                        |  |
| Bump (Y/N)   |           | No          |           |                          |  |
| Deck Drainage  |           |             | 8         | 8                        |  |
| Drains Clogged (Y/N)   |           | No          |           |                          |  |
| Curbs/Median   |           |             | N         | 3                        | 2 holes 70mm Wx300mL nd 80mmx400 on S3G1.  |
| (Curb Type : <b>Standard</b> )   |           |             |           |                          |  |
| Scaling (Percent Area)   |           | 0           |           |                          |  |
| Bridge Rail  |           |             | 5         | 5                        | Improper lap for double layer of flexbeam on South side.   |
| (Type : <b>FLEX BEAM</b> )   |           |             |           |                          |  |
| Bridge Rail Posts  |           | 4           | 5         |                          |  |
| (Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )             |           |             |           |                          |  |
| Bridge Rail/Posts Coating  |           | 7           | 7         |                          |  |
| (Type : )  |           |             |           |                          |  |
| Sidewalk   |           |             | X         | X                        |  |
| <b>Girder Detail Ratings</b>   |           |             |           |                          |  |
|  | N (count) | 1 (count)   | 2 (count) | 3 (count)                |  |
| <b>Last</b>  |           |             |           | 12                       |  |
| <b>Now</b>   | 0         | 0           | 0         | 12                       |  |
| Girders  |           |             | 3         | 3                        | 50% girders cracking. S1G2, S1G3,S2G2,5,8,10, wide cracking in the AZ of 2 legs. S3G5,8-10 have spalls in legs above caps-photo. G6,7 are SC girders in all 3 spans. S1G10 has 2 large punch outs and one very poor attempt at a patch-photo S2G9 also has punchout. |
| Last Complete Inspection Date  |           | 14-May-2010 |           |                          |  |
| Cracking (Y/N)   |           | Yes         |           |                          |  |
| Spalling (Percent Area)  |           | 2           |           |                          |  |
| Lift or Connector Pocket Grouted (Y/N)                                   |           |             |           |                          |  |
| (Number Of Girders : <b>33</b> )   |           |             |           |                          |  |
| <b>Span Alignment Problems</b>   |           |             |           |                          |  |
| Vertical (Y/N)   |           | No          |           |                          |  |
| Horizontal (Y/N)   |           | No          |           |                          |  |
| <b>Superstructure General Rating</b>                                     |           |             | <b>3</b>  | <b>3</b>                 |  |

| Substructure                                 |           |           |           |   |     |  |
|--|-----------|-----------|-----------|---|-----|--|
| Bridge Component                             |           |           |           | Last  | Now | Explanation of Condition                     |
| <b>Abutments</b>                             |           |           |           |   |     |  |
| (Extended Backwall Piles (Y/N) : Y)          |           |           |           | NW, NE corner   |     |  |
| (Extended Backwall Piles Spacing(mm) : 1400) |           |           |           |   |     |  |
| (Total Number of Caps/Corbels : 5:5)         |           |           |           | P7 only bearing 180mm of possible 300mm width on West abut.   |     |  |
| Bearing Seats/Caps/Corbels Detail Ratings    |           |           |           |   |     |  |
|  | N (count) | 1 (count) | 2 (count) | 3 (count)   |     |  |
| <b>Last</b>                                  |           |           |           |   |     |  |
| <b>Now</b>                                   |           |           |           |   |     |  |
| Bearing Seats/Caps/Corbels                   |           |           |           | 7   | 5   |  |
| (Type : TREATED TIMBER)                      |           |           |           |   |     |  |
| (Depth(mm) : 300)                            |           |           |           |   |     |  |
| (Width(mm) : 300)                            |           |           |           |   |     |  |
| Backwalls/Breastwalls                        |           |           |           | 4   | 4   | Not low enough, West backwall.-photo         |
| Greatest Height (m)                          |           | 2.20      |           |   |     |  |
| Wingwalls                                    |           |           |           | N   | 7   |  |
| (Total Number of Bearing Piles : 10:10)      |           |           |           | A1P1 not banded, crack 35mm wide.-photo.<br>Pile 6 & 8 are split on E. abut. and banded.<br>Pile 7 & 8 are split on W. abut and banded.<br>Dry rot on P8 West abut.-photo |     |  |
| Piles Detail Ratings                         |           |           |           |   |     |  |
|  | N (count) | 1 (count) | 2 (count) | 3 (count)   |     |  |
| <b>Last</b>                                  |           |           |           | 3   |     |  |
| <b>Now</b>                                   | 0         | 0         | 0         | 2   |     |  |
| Piles  |           |           |           | 3   | 3   |  |
| Paint/Coating                                |           |           |           | X   | X   |  |
| Abutment Stability                           |           |           |           | 5   | 3   | A1 leaning 40mm East-photo                   |
| Scour/Erosion                                |           |           |           | 5   | 5   |  |
| <b>Piers/Bents</b>                           |           |           |           |   |     |  |
| (Type : PIER-COLUMN)                         |           |           |           |   |     |  |
| (Total Number of Caps/Corbels : 4:4)         |           |           |           |   |     |  |
| Bearing Seats/Caps/Corbels Detail Ratings    |           |           |           |   |     |  |
|  | N (count) | 1 (count) | 2 (count) | 3 (count)   |     |  |
| <b>Last</b>                                  |           |           |           |   |     | Deep checks in P2 cap.                       |
| <b>Now</b>                                   | 0         | 0         | 0         | 1   |     | Top cap hang 75mm over bottom cap on pier 2. |
| Bearing Seats/Caps/Corbels                   |           |           |           | 4   | 3   |  |
| (Type : TREATED TIMBER)                      |           |           |           |   |     |  |
| (Depth(mm) : 300)                            |           |           |           |   |     |  |
| (Width(mm) : 350)                            |           |           |           |   |     |  |
| (Total Number of Bearing Piles : 10:10)      |           |           |           | P4 has vertical split, possible rot on pier 1.-photo  |     |  |
| Piles Detail Ratings                         |           |           |           |   |     |  |
|  | N (count) | 1 (count) | 2 (count) | 3 (count)   |     |  |
| <b>Last</b>                                  |           |           |           |   |     |  |
| <b>Now</b>                                   | 0         | 0         | 0         | 1   |     |  |
| Pier Shaft/Piles                             |           |           |           | 6   | 3   |  |
| Greatest Height (m)                          |           | 4.20      |           |   |     |  |

| Substructure                       |     |          |          |  |
|------------------------------------|-----|----------|----------|--|
| Bridge Component                   |     | Last     | Now      | Explanation of Condition                             |
| Bracing/Struts/Sheathing           |     | 4        | 5        |  |
| Nose Plate                         |     | X        | X        |  |
| Paint/Coating                      |     | X        | X        |  |
| (Colour Description : )            |     |          |          |  |
| (Colour Code : )                   |     |          |          |  |
| Pier Stability                     |     | 3        | 3        | Pier 1 leaning 110mm East.                           |
| Scour                              |     | 4        | 5        |  |
| Debris (Y/N)                       | Yes |          |          | Old piles beneath bridge.<br>Minor drift-small size. |
| <b>Substructure General Rating</b> |     | <b>3</b> | <b>3</b> |  |

| Structure Usage                              |    |          |          |                          |
|--|----|----------|----------|--------------------------|
|  |    | Last     | Now      | Explanation of Condition |
| <b>Channel</b>                               |    |          |          |                          |
| (U/S Direction : )                           |    |          |          | Pitrun                   |
| (D/S Direction : )                           |    |          |          |                          |
| Alignment                                    |    | 7        | 7        |                          |
| Bank Stability                               |    | 7        | 7        |                          |
| HWM (m below Top of Curb)                    |    |          |          | HWM not visible.         |
| Drift (Y/N)                                  | No |          |          |                          |
| Slope Protection                             |    | 5        | 5        |                          |
| (Type : )                                    |    |          |          |                          |
| Guidebank/Spurs                              |    | X        | X        |                          |
| Adequacy of Opening                          |    | 6        | 6        |                          |
| (Fish Compensation Measure 1 : <b>NONE</b> ) |    |          |          |                          |
| (Fish Compensation Measure 2 : <b>NONE</b> ) |    |          |          |                          |
| <b>Channel General Rating</b>                |    | <b>6</b> | <b>6</b> |                          |

| Maintenance Recommendations   |      |                               |                     |             |           |       |
|-------------------------------|------|-------------------------------|---------------------|-------------|-----------|-------|
| Inspector Recommendations     | Year | Inspector Comments            | Department Comments | Target Year | Est. Cost | Cat # |
| REPAIR/REPLACE BRIDGE RAIL    |      |                               |                     |             |           |       |
| SEAL CURBS                    | 2010 | Repair holes SE curb.         |                     |             |           |       |
| PATCH DECK                    |      |                               |                     |             |           |       |
| OVERLAY DECK                  |      |                               |                     |             |           |       |
| STRAIGHTEN/REPLACE MEMBERS    |      |                               |                     |             |           |       |
| WASHING                       |      |                               |                     |             |           |       |
| SHOTCRETE REPAIRS             |      |                               |                     |             |           |       |
| CORE TIMBER CAPS/CORBELS      | 2010 | Level 2 Assessment.           |                     |             |           |       |
| REPAIR/REPLACE TIMBER CAPS    | 2010 |                               |                     |             |           |       |
| REPAIR ABUTMENT SCOUR/EROSION |      |                               |                     |             |           |       |
| PLACE ADDITIONAL RIP RAP      |      |                               |                     |             |           |       |
| REMOVE DRIFT ACCUMULATION     |      |                               |                     |             |           |       |
| INSTALL STRUTS                |      |                               |                     |             |           |       |
| OTHER ACTION                  | 2010 | Replace PB on West abutment.  |                     |             |           |       |
| OTHER ACTION                  | 2010 | Band P4 on pier 1 and A1P1.   |                     |             |           |       |
| OTHER ACTION                  | 2010 | Lower West backwall sheeting. |                     |             |           |       |
| OTHER ACTION                  | 2010 | Band A1P1.                    |                     |             |           |       |
| OTHER ACTION                  | 2010 | Repair punchouts in S2G9      |                     |             |           |       |
| OTHER ACTION                  |      |                               |                     |             |           |       |
| OTHER ACTION                  |      |                               |                     |             |           |       |

|   |                  |  |                  |                      |             |                          |            |
|---|------------------|--|------------------|----------------------|-------------|--------------------------|------------|
| <b>Structural Condition Rating (Last/Now) (%)</b> | <b>33.3/33.3</b> | <b>Sufficiency Rating (Last/Now) (%)</b> | <b>59.7/59.2</b> | <b>Est. Repl. Yr</b> | <b>2017</b> | <b>Maint. Req. (Y/N)</b> | <b>Yes</b> |
|---|------------------|--|------------------|----------------------|-------------|--------------------------|------------|

|                                      |  |                     |
|--------------------------------------|--|---------------------|
| Special Comments for Next Inspection | Consider delaying repairs until assement is complete. Monitor girder cracking. | 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 | Colin Roy | Previous Assistant's Name |
|---------------------------|-----------|---------------------------|

|                      |             |                          |             |
|----------------------|-------------|--------------------------|-------------|
| Next Inspection Date | 14-Aug-2013 | Previous Inspection Date | 05-Feb-2007 |
|----------------------|-------------|--------------------------|-------------|

|                                     |    |
|-------------------------------------|----|
| Inspection Cycle (Default) (months) | 39 |
|-------------------------------------|----|

Comment

**Maintenance Recommendations**

| Inspector Recommendations                         | Year  | Inspector Comments                       | Department Comments | Target Year   | Est. Cost | Cat #                 |
|---|---|--|---------------------|---|-----------|-----------------------|
| REPAIR/REPLACE BRIDGE RAIL                        |   |  |                     |   |           |                       |
| SEAL CURBS  | 2010  | Repair holes SE curb.                    |                     |   |           |                       |
| PATCH DECK  |   |  |                     |   |           |                       |
| OVERLAY DECK                                      |   |  |                     |   |           |                       |
| STRAIGHTEN/REPLACE MEMBERS                        |   |  |                     |   |           |                       |
| WASHING   |   |  |                     |   |           |                       |
| SHOTCRETE REPAIRS                                 |   |  |                     |   |           |                       |
| CORE TIMBER CAPS/CORBELS                          | 2010  | Level 2 Assessment.                      |                     |   |           |                       |
| REPAIR/REPLACE TIMBER CAPS                        | 2010  |  |                     |   |           |                       |
| REPAIR ABUTMENT SCOUR/EROSION                     |   |  |                     |   |           |                       |
| PLACE ADDITIONAL RIP RAP                          |   |  |                     |   |           |                       |
| REMOVE DRIFT ACCUMULATION                         |   |  |                     |   |           |                       |
| INSTALL STRUTS                                    |   |  |                     |   |           |                       |
| OTHER ACTION                                      | 2010  | Replace PB on West abutment.             |                     |   |           |                       |
| OTHER ACTION                                      | 2010  | Band P4 on pier 1 and A1P1.              |                     |   |           |                       |
| OTHER ACTION                                      | 2010  | Lower West backwall sheeting.            |                     |   |           |                       |
| OTHER ACTION                                      | 2010  | Band A1P1.                               |                     |   |           |                       |
| OTHER ACTION                                      | 2010  | Repair punchouts in S2G9                 |                     |   |           |                       |
| OTHER ACTION                                      |   |  |                     |   |           |                       |
| OTHER ACTION                                      |   |  |                     |   |           |                       |
| <b>Structural Condition Rating (Last/Now) (%)</b> | <b>33.3/33.3</b>  | <b>Sufficiency Rating (Last/Now) (%)</b> | <b>59.7/59.2</b>    | Est. Repl. Yr   | 2017      | Maint. Req. (Y/N) Yes |
| Special Comments for Next Inspection              | Consider delaying repairs until assement is complete.<br>Monitor girder cracking. |  | Department Comments | On replacement program. Minimum maintenance to be done only as required to keep safe. |           |                       |
| Maintenance Reviewed By                           |   | Date                                     |                     | Estimated Total   | 0         |                       |
| Proposed Long-Term Strategy                       |   |  |                     |   |           |                       |
| On 3-Year Program (Y/N)                           |   |  |                     |   |           |                       |
| Proposed Action                                   |   |  |                     |   |           |                       |
| Previous Inspector's Name                         | Colin Roy   | Previous Assistant's Name                |                     |   |           |                       |

|                                     |             |                          |             |
|-------------------------------------|-------------|--------------------------|-------------|
| Next Inspection Date                | 14-Aug-2013 | Previous Inspection Date | 05-Feb-2007 |
| Inspection Cycle (Default) (months) | 39          |                          |             |
| Comment                             |             |                          |             |