

| Bridge Inspection      |                                |               |      |                     |                    |               |   |
|------------------------|--------------------------------|---------------|------|---------------------|--------------------|---------------|---|
| Bridge File Number     | 08342 -1 Bridge                |               |      | Form Type           | PCS                |               |   |
| Year Built/Year Supstr | 1959/1959                      |               |      | Lot No.             | 2                  |               |   |
| Bridge or Town Name    | ORION                          |               |      | Inspector Name      | Jon Davies         |               |   |
| Located Over           | CANAL CREEK, 11.3, WATERCRS-ST |               |      | Inspector Class     | BR CLS B           |               |   |
| Located On             | 887:02 C1 3.933                |               |      | Assistant Name      |                    |               |   |
| Water Body Cl./Year    |                                |               |      | Assistant Class     |                    |               |   |
| Navigabil. Cl./Year    |                                |               |      | Inspection Date     | 20-Jun-2012        |               |   |
| Legal Land Location    | SW SEC 6 TWP 4 RGE 6 W4M       |               |      | Data Entry By       | Lauren Korte       |               |   |
| Longitude, Latitude    | -110:48:47, 49:16:03           |               |      | Data Entry Date     | 25-Jul-2012        |               |   |
| Road Authority         | Alberta Transportation (AIT)   |               |      | Reviewer Name       | Garry Roberts      |               |   |
| Contract Main. Area    | CMA24                          |               |      | Review Date         | 01-Jul-2012        |               |   |
| Clear Roadway/Skew     | 8.3 /                          |               |      | Dept. Reviewer Name | Tim Davies         |               |   |
| AADT/Year              | 90 / 2011 (A)                  |               |      | Dept. Review Date   | 30-Jul-2012        |               |   |
| Road Classification    | RCU-208-110                    |               |      | Follow-Up By        |                    |               |   |
| Detour Length (km)     | 10                             |               |      |                     |                    |               |   |
| Allowable Load (t):    | Single                         | CS1 28 GIRDER | Semi | CS2 49 GIRDER       | Train              | CS3 62 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   | NB | At Junction (Y/N) | No | In Advance (Y/N) | No | At Bridge (Y/N) | No |
| Posted:                       | Lane   | SB | At Junction (Y/N) | No | In Advance (Y/N) | No | At Bridge (Y/N) | No |
| Remarks                       | Not req.   |    |                   |    |                  |    |                 |    |
| Hazard Marker At Bridge (Y/N) | Yes  |    |                   |    |                  |    |                 |    |
| Remarks                       |  |    |                   |    |                  |    |                 |    |
| Other Sign Types              | "Slippery when wet" Caution signs North and South. |    |                   |    |                  |    |                 |    |

| Utilities (Located at) |                     |  |               |    |
|------------------------|---------------------|--|---------------|----|
| Utility Attachments    |                     |  |               |    |
| Telephone              | Conduit West side.  |  | Gas           |    |
| Power                  | One line East side. |  | Municipal     |    |
| Others                 |                     |  | Problem (Y/N) | No |
| Remarks                |                     |  |               |    |

| Approach Road                       |           |          |          |                          |
|-------------------------------------|-----------|----------|----------|--------------------------|
|                                     |           | Last     | Now      | Explanation of Condition |
| Horizontal Alignment                |           | 9        | 9        |                          |
| Vertical Alignment                  |           | 8        | 8        |                          |
| Roadway Width (m)                   | 8.300     |          |          | Gravel road.             |
| Approach Bump                       |           | 6        | 6        |                          |
| Guardrail (Y/N)                     | Yes       |          |          |                          |
| Guardrail                           |           | X        | 8        |                          |
| Length (m)                          | 15.200    |          |          | Not thriebeam.           |
| Current Standard (Y/N)              | No        |          |          |                          |
| Termination Type                    | TURN DOWN |          |          |                          |
| Drainage                            |           | 7        | 7        |                          |
| <b>Approach Road General Rating</b> |           | <b>8</b> | <b>8</b> |                          |

| Superstructure  |           |             |           |                          |  |  |
|---|-----------|-------------|-----------|--------------------------|--|--|
| Bridge Component  |           | Last        | Now       | Explanation of Condition |  |  |
| (Primary Span : PG, 2 Spans, Lengths(m): 6.1-6.1, 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>   | 0         | 0           | 0         | 0                        |  |  |
| <b>Now</b>  | 0.0       | 0.0         | 0.0       | 0.0                      |  |  |
| Wearing Surface   |           |             | X         | X                        |  |  |
| (Material Type : )  |           |             |           |                          |  |  |
| (Thickness(mm) : )  |           |             |           |                          |  |  |
| Lateral Connection Problem (Y/N)                                    |           |             |           |                          |  |  |
| Deck Top  |           |             | 6         | 6                        |  |  |
| Deck Rideability  |           |             | 6         | 6                        |  |  |
| Deck Joints   |           |             | 7         | 3                        | Buffer angles at abut. only. Damaged buffer angle and loose at G4 South.   |  |
| Bump (Y/N)  |           | No          |           |                          |  |  |
| Deck Drainage   |           |             | 7         | 7                        |  |  |
| Drains Clogged (Y/N)  |           | No          |           |                          |  |  |
| Curbs/Median  |           |             | 4         | 5                        |  |  |
| (Curb Type : <b>Standard</b> )                                      |           |             |           |                          |  |  |
| Scaling (Percent Area)  |           | 1           |           |                          |  |  |
| Bridge Rail   |           |             | 5         | 8                        | 2 Layers.  |  |
| (Type : <b>STEEL FLEX BEAM</b> )                                    |           |             |           |                          |  |  |
| Bridge Rail Posts   |           |             | 6         | 6                        | Paint is peeling on the posts.   |  |
| (Type : <b>POST STEEL;POST STEEL</b> )                              |           |             |           |                          |  |  |
| Bridge Rail/Posts Coating   |           |             | 4         | 4                        |  |  |
| (Type : <b>PAINT</b> )  |           |             |           |                          |  |  |
| Sidewalk  |           |             | X         | X                        |  |  |
| Girder Detail Ratings   |           |             |           |                          |  |  |
|   | N (count) | 1 (count)   | 2 (count) | 3 (count)                |  |  |
| <b>Last</b>   | 0         | 0           | 0         | 0                        |  |  |
| <b>Now</b>  | 10        | 0           | 0         | 0                        |  |  |
| Girders   |           |             | 6         | 5                        | Wide cracks in 2 legs on the SE curb unit with unsound concrete.<br>(130MM x 40MM SPALL ON #2 FROM W).<br>14-June-2009 |  |
| Last Complete Inspection Date                                       |           | 14-Jun-2009 |           |                          |  |  |
| Cracking (Y/N)  |           | Yes         |           |                          | Span 2 not accessible due to high water level.   |  |
| Spalling (Percent Area)   |           | 1           |           |                          |  |  |
| Lift or Connector Pocket Grouted (Y/N)                              |           | Yes         |           |                          |  |  |
| (Number Of Girders : <b>20</b> )                                    |           |             |           |                          |  |  |
| <b>Span Alignment Problems</b>                                      |           |             |           |                          |  |  |
| Vertical (Y/N)  |           | No          |           |                          |  |  |
| Horizontal (Y/N)  |           | No          |           |                          |  |  |
| <b>Superstructure General Rating</b>                                |           |             | <b>6</b>  | <b>5</b>                 |  |  |

| Substructure                                 |           |           |           |                          |                         |
|--|-----------|-----------|-----------|--------------------------|-------------------------|
| Bridge Component                             |           | Last      | Now       | Explanation of Condition |                         |
| <b>Abutments</b>                             |           |           |           |                          |                         |
| (Extended Backwall Piles (Y/N) : Y)          |           |           |           |                          |                         |
| (Extended Backwall Piles Spacing(mm) : 1500) |           |           |           |                          |                         |
| (Total Number of Caps/Corbels : 1:1)         |           |           |           |                          |                         |
| Bearing Seats/Caps/Corbels Detail Ratings    |           |           |           |                          |                         |
|  | N (count) | 1 (count) | 2 (count) | 3 (count)                |                         |
| <b>Last</b>                                  | 0         | 0         | 0         | 0                        |                         |
| <b>Now</b>                                   | 0         | 0         | 0         | 0                        |                         |
| Bearing Seats/Caps/Corbels                   |           |           |           | 6                        | 5                       |
| (Type : TREATED TIMBER)                      |           |           |           |                          |                         |
| (Depth(mm) : 300)                            |           |           |           |                          |                         |
| (Width(mm) : 305)                            |           |           |           |                          |                         |
| Backwalls/Breastwalls                        |           |           | 7         | 6                        | Driven sheathing.       |
| Greatest Height (m)                          |           | 2.90      |           |                          |                         |
| Wingwalls                                    |           |           | 7         | 6                        |                         |
| (Total Number of Bearing Piles : 7:7)        |           |           |           |                          |                         |
| Piles Detail Ratings                         |           |           |           |                          |                         |
|  | N (count) | 1 (count) | 2 (count) | 3 (count)                |                         |
| <b>Last</b>                                  | 0         | 0         | 0         | 0                        |                         |
| <b>Now</b>                                   | 0         | 0         | 0         | 0                        |                         |
| Piles  |           |           |           | 6                        | 5                       |
| Paint/Coating                                |           |           |           | X                        | X                       |
| Abutment Stability                           |           |           |           | 7                        | 6                       |
| Scour/Erosion                                |           |           |           | 5                        | 5                       |
| <b>Piers/Bents</b>                           |           |           |           |                          |                         |
| (Type : PIER-COLUMN)                         |           |           |           |                          |                         |
| (Total Number of Caps/Corbels : 1)           |           |           |           |                          |                         |
| Bearing Seats/Caps/Corbels Detail Ratings    |           |           |           |                          |                         |
|  | N (count) | 1 (count) | 2 (count) | 3 (count)                |                         |
| <b>Last</b>                                  | 0         | 0         | 0         | 0                        |                         |
| <b>Now</b>                                   | 0         | 0         | 0         | 0                        |                         |
| Bearing Seats/Caps/Corbels                   |           |           |           | 6                        | 6                       |
| (Type : TREATED TIMBER)                      |           |           |           |                          |                         |
| (Depth(mm) : 300)                            |           |           |           |                          |                         |
| (Width(mm) : 356)                            |           |           |           |                          |                         |
| (Total Number of Bearing Piles : 7)          |           |           |           |                          |                         |
| Piles Detail Ratings                         |           |           |           |                          |                         |
|  | N (count) | 1 (count) | 2 (count) | 3 (count)                |                         |
| <b>Last</b>                                  | 0         | 0         | 0         | 0                        |                         |
| <b>Now</b>                                   | 0         | 0         | 0         | 0                        |                         |
| Pier Shaft/Piles                             |           |           |           | 6                        | 5                       |
| Greatest Height (m)                          |           | 2.75      |           |                          |                         |
| Bracing/Struts/Sheathing                     |           |           | 6         | 5                        | 2 struts in North span. |
| Nose Plate                                   |           |           | X         | X                        |                         |
| Paint/Coating                                |           |           | X         | X                        |                         |
| (Colour Description : )                      |           |           |           |                          |                         |
| (Colour Code : )                             |           |           |           |                          |                         |

| Substructure                                 |    |          |          |   |
|--|----|----------|----------|---|
| Bridge Component                             |    | Last     | Now      | Explanation of Condition  |
| Pier Stability                               |    | 6        | 6        |   |
| Scour  |    | 5        | 5        |   |
| Debris (Y/N)                                 | No |          |          |   |
| <b>Substructure General Rating</b>           |    | <b>6</b> | <b>5</b> |   |
| Structure Usage                              |    |          |          |   |
|  |    | Last     | Now      | Explanation of Condition  |
| <b>Channel</b>                               |    |          |          |   |
| (U/S Direction : <b>E</b> )                  |    |          |          | Water comes off dyke fields into road ditch at numerous places at 90 degrees U/S. |
| (D/S Direction : <b>W</b> )                  |    |          |          |   |
| Alignment                                    |    | 4        | 4        |   |
| Bank Stability                               |    | 5        | 5        |   |
| HWM (m below Top of Curb)                    |    |          |          | No HWM visible.   |
| Drift (Y/N)                                  | No |          |          |   |
| Slope Protection                             |    | 5        | 5        |   |
| (Type : <b>NATURAL; NATURAL</b> )            |    |          |          |   |
| Guidebank/Spurs                              |    | X        | X        |   |
| Adequacy of Opening                          |    | 5        | 5        |   |
| (Fish Compensation Measure 1 : <b>NONE</b> ) |    |          |          |   |
| (Fish Compensation Measure 2 : <b>NONE</b> ) |    |          |          |   |
| <b>Channel General Rating</b>                |    | <b>4</b> | <b>4</b> |   |

| Maintenance Recommendations                       |                  |  |                           |               |           |                   |     |
|---|------------------|--|---------------------------|---------------|-----------|-------------------|-----|
| Inspector Recommendations                         | Year             | Inspector Comments                       | Department Comments       | Target Year   | Est. Cost | Cat #             |     |
| REPAIR/REPLACE BRIDGE RAIL                        |                  |  |                           |               |           |                   |     |
| SEAL CURBS  |                  |  |                           |               |           |                   |     |
| PATCH DECK  |                  |  |                           |               |           |                   |     |
| OVERLAY DECK                                      |                  |  |                           |               |           |                   |     |
| STRAIGHTEN/REPLACE MEMBERS                        |                  |  |                           |               |           |                   |     |
| WASHING   |                  |  |                           |               |           |                   |     |
| SHOTCRETE REPAIRS                                 |                  |  |                           |               |           |                   |     |
| CORE TIMBER CAPS/CORBELS                          |                  |  |                           |               |           |                   |     |
| REPAIR/REPLACE TIMBER CAPS                        |                  |  |                           |               |           |                   |     |
| REPAIR ABUTMENT SCOUR/EROSION                     |                  |  |                           |               |           |                   |     |
| PLACE ADDITIONAL RIP RAP                          |                  |  |                           |               |           |                   |     |
| REMOVE DRIFT ACCUMULATION                         |                  |  |                           |               |           |                   |     |
| INSTALL STRUTS                                    |                  |  |                           |               |           |                   |     |
| OTHER ACTION                                      | 2012             | Replace or remove buffer angle at G4 A1. |                           |               |           |                   |     |
| OTHER ACTION                                      |                  |  |                           |               |           |                   |     |
| OTHER ACTION                                      |                  |  |                           |               |           |                   |     |
| OTHER ACTION                                      |                  |  |                           |               |           |                   |     |
| <b>Structural Condition Rating (Last/Now) (%)</b> | <b>66.7/55.6</b> | <b>Sufficiency Rating (Last/Now) (%)</b> | <b>68.3/64.9</b>          | Est. Repl. Yr | 2025      | Maint. Req. (Y/N) | Yes |
| 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                         | Garry Roberts    |  | Previous Assistant's Name |               |           |                   |     |
| Next Inspection Date                              | 20-Sep-2015      |  | Previous Inspection Date  | 14-Jun-2009   |           |                   |     |
| Inspection Cycle (Default) (months)               | 39               |  |                           |               |           |                   |     |
| Comment   |                  |  |                           |               |           |                   |     |