## Bridge Inspection

| | | | |
|---|---|---|---|
| Bridge File Number | 00358 -1 Bridge | Form Type | PSR |
| Year Built/Year Supstr | 1958/1958 | Lot No. | 2 |
| | | Inspector Name | Garry Roberts |
| Bridge or Town Name | PARKLAND BEA | Inspector Class | BR CLS A |
| Located Over | MOSQUITO CREEK, 2.12.12.12, WATERCRS-ST | Assistant Name | |
| | | Assistant Class | |
| Located On | WAS 529:02 | Inspection Date | 26-Nov-2012 |
| Water Body Cl./Year | | Data Entry By | Lauren Korte |
| Navigabil. Cl./Year | | Data Entry Date | 01-Jan-2013 |
| Legal Land Location | SE SEC 18 TWP 15 RGE 26 W4M | Reviewer Name | Tom Carey |
| Longitude, Latitude | -113:33:15, 50:15:06 | Review Date | 05-Dec-2012 |
| Road Authority | Alberta Transportation (AIT) | Dept. Reviewer Name | Tim Davies |
| Contract Main. Area | UNDEFINED CMA | Dept. Review Date | 08-Jan-2013 |
| Clear Roadway/Skew | 7.9 / | Follow-Up By | |
| AADT/Year | 48 / 2012 (E) | | |
| Road Classification | RCU-209-110 | | |
| Detour Length (km) | 5 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Allowable Load (t): | Single | CS1 35 GIRDER | Semi | CS2 49 | 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 | 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 | Not required. | | | | | | | |

| | |
|---|---|
| Hazard Marker At Bridge (Y/N) | Yes |
| Remarks | Minor damage at SE. |
| Other Sign Types | |

## Utilities (Located at)

| | | | |
|---|---|---|---|
| Utility Attachments | | | |
| Telephone | South ROW. | Gas | |
| Power | North ROW. | Municipal | |
| Others | NW corner WSC gauge. | Problem (Y/N) | Yes |
| Remarks | The elbows of the conduit are detached at both ends. | | |

## Approach Road

| | | Last | Now | Explanation of Condition |
|---|---|---|---|---|
| Horizontal Alignment | | 7 | 6 | In sag curve. Intersects with local road 100m East. |
| Vertical Alignment | | 6 | 6 | |
| Roadway Width (m) | 7.000 | | | Gravel. |
| Approach Bump | | 5 | 5 | |
| Guardrail (Y/N) | Yes | | | Wrong lap at NW. Minor damage at SW wing end and 1 cracked post.<br><br>Not thriebeam. |
| Guardrail | | 4 | 4 | |
| Length (m) | 4.000 | | | |
| Current Standard (Y/N) | No | | | |
| Termination Type | FLARE END | | | |
| Drainage | | 5 | 6 | |
| **Approach Road General Rating** | | **6** | **6** | |

## Superstructure

| Bridge Component | | Last | Now | Explanation of Condition |
|---|---|---|---|---|
| (Primary Span : **PO, 2 Spans, Lengths(m): 19.8-19.8, A-Ident Number:** ) | | | | |
| **Special Features** | | | | |
| Special Feature | | | X | |
| (Type : ) | | | | |
| Special Feature | | | X | |
| (Type : ) | | | | |
| Wearing Surface/Deck Top Detail Ratings | | | | |

| | N (%) | 1 (%) | 2 (%) | 3 (%) |
|---|---|---|---|---|
| **Last** | 0 | 0 | 0 | 0 |
| **Now** | 10.0 | 0.0 | 0.0 | 0.0 |

| | | | | |
|---|---|---|---|---|
| Wearing Surface | | X | X | |
| (Material Type : ) | | | | |
| (Thickness(mm) : ) | | | | |
| Lateral Connection Problem (Y/N) | No | | | |
| Deck Top | | 4 | 4 | Medium scaling - total area = 120m2<br>Wide random cracking - total area - 25m2.<br>Wide transverse cracks - .5m in length<br>and spaced 0.5m apart throughout. 1 isolated scaled area at SE with exposed rebar- other wise deck rates 5. |
| Deck Rideability | | 6 | 6 | |
| Deck Joints | | 7 | 7 | |
| Temperature (deg. C) | -2 | | | |
| (Expansion Type : **SLIDING PLATES**) | | | | |
| (Fixed Type : **BUFFER ANGLES**) | | | | |

| Gap Size (mm) | Gap Location |
|---|---|
| 50 | Pier |
| 15 | W ABUT 1 |
| 20 | E ABUT 2 |
| | |
| | |
| | |

| | | | | |
|---|---|---|---|---|
| Deck Drainage | | 4 | 4 | Joints all leak onto substructure and bearings- causing minor corrosion of bearings. |
| Drains Clogged (Y/N) | | | | |
| Curbs/Median | | X | X | |
| (Curb Type : **Standard**) | | | | |
| Scaling (Percent Area) | | | | |
| Bridge Rail | | 6 | 6 | Single layer.<br>6 Posts with wide cracks.<br>10% Minor corrosion. |
| (Type : **FLEX BEAM**) | | | | |
| Bridge Rail Posts | | 5 | 5 | |
| (Type : **CONCRETE;CONCRETE**) | | | | |
| Bridge Rail/Posts Coating | | 4 | 4 | |
| (Type : **PAINT**) | | | | |
| Sidewalk | | X | X | |
| Girder Detail Ratings | | | | |

| | N (count) | 1 (count) | 2 (count) | 3 (count) |
|---|---|---|---|---|
| **Last** | 0 | 0 | 0 | 0 |
| **Now** | 0 | 0 | 0 | 0 |

| Superstructure | | | | |
|---|---|---|---|---|
| **Bridge Component** | | **Last** | **Now** | **Explanation of Condition** |
| (Primary Span : **PO, 2 Spans, Lengths(m): 19.8-19.8, A-Ident Number:** ) | | | | |
| Girders | | 6 | 6 | |
| Cracking (Y/N) | No | | | |
| Spalling (Percent Area) | 0 | | | |
| (Number Of Girders : **15**) | | | | |
| Diaphragms/Cross Frame | | 6 | 6 | |
| Bearings | | 6 | 6 | All bearings at abuts 50% and piers 100% surface corrosion. |
| Temperature (deg. C) | -2 | | | |
| (Expansion Type : ) | | | | |
| (Fixed Type : ) | | | | |
| Coating Adequate (Y/N) | No | | | |
| Functioning (Y/N) | Yes | | | |
| Deck Underside | | 6 | 6 | |
| Stains (Percent Area) | 0 | | | |
| **Span Alignment Problems** | | | | |
| Vertical (Y/N) | No | | | |
| Horizontal (Y/N) | No | | | |
| **Superstructure General Rating** | | **6** | **6** | |

| Substructure | | | | |
|---|---|---|---|---|
| **Bridge Component** | | **Last** | **Now** | **Explanation of Condition** |
| **Abutments** | | | | |
| Bearing Seats/Caps | | 6 | 6 | Gravel on both abut seats. |
| (Type : **CONCRETE**) | | | | |
| Backwalls/Breastwalls | | 6 | 6 | |
| Wingwalls | | 6 | 6 | |
| Piles | | N | N | Buried. |
| Paint/Coating | | X | X | |
| Abutment Stability | | 7 | 7 | |
| Scour/Erosion | | 6 | 6 | |
| **Piers/Bents** | | | | |
| (Type : **PIER-SOLID**) | | | | |
| Bearing Seats/Caps | | 6 | 6 | |
| (Type : **CONCRETE**) | | | | |
| (Total Number of Bearing Piles : **0**) | | | | Massive pier. |
| Pier Shaft/Piles | | 7 | 7 | |
| Bracing/Struts/Sheathing | | X | X | |
| Nose Plate | | 6 | 6 | |
| Paint/Coating | | 4 | 4 | Tight corrosion at nose plate. |
| (Colour Description : ) | | | | |
| (Colour Code : ) | | | | |
| Pier Stability | | 7 | 7 | |
| Scour | | 6 | 6 | |
| Debris (Y/N) | No | | | |

| Substructure | | | | |
|---|---|---|---|---|
| **Bridge Component** | | **Last** | **Now** | **Explanation of Condition** |
| **Substructure General Rating** | | **6** | **6** | |

| Structure Usage | | | | |
|---|---|---|---|---|
| | | **Last** | **Now** | **Explanation of Condition** |
| **Channel** | | | | |
| (U/S Direction : **N**) | | | | |
| (D/S Direction : **S**) | | | | |
| Alignment | | 6 | 6 | |
| Bank Stability | | 5 | 5 | Erosion D/S @ both banks. |
| HWM (m below Top of Curb) | 1.4 | | | HWM from Deck to top of pier.<br>Drift on top of pier and under East span. |
| Drift (Y/N) | Yes | | | |
| Slope Protection | | 4 | 5 | |
| (Type : **BAGGED CONC; BAGGED CONC**) | | | | |
| Guidebank/Spurs | | X | X | |
| Adequacy of Opening | | 4 | 4 | Based on HWM. |
| (Fish Compensation Measure 1 : **NONE**) | | | | |
| (Fish Compensation Measure 2 : **NONE**) | | | | |
| **Channel General Rating** | | **4** | **4** | |

## Maintenance Recommendations

| Inspector Recommendations | Year | Inspector Comments | Department Comments | Target Year | Est. Cost | Cat # |
|---|---|---|---|---|---|---|
| REPAIR/REPLACE BRIDGE RAIL | | | | | | |
| GALVANIZE/PAINT BRIDGE RAIL | | | | | | |
| SEAL CURBS | | | | | | |
| PATCH DECK | 2013 | Patch SE deck fascia 6m2. | | | | |
| SEAL DECK | | | | | | |
| OVERLAY DECK | | | | | | |
| REPAIR/REPLACE DECK JOINTS | | | | | | |
| RESET/ PAINT BEARINGS | | | | | | |
| WASHING | 2013 | Abut seats. | | | | |
| SHOTCRETE REPAIRS | | | | | | |
| REPAIR ABUTMENT SCOUR/EROSION | | | | | | |
| PLACE ADDITIONAL RIP RAP | | | | | | |
| REMOVE DRIFT ACCUMULATION | 2013 | Remove drift @ East span and @ Pier. | | | | |
| OTHER ACTION | 2013 | Straighten SE HM. | | | | |
| OTHER ACTION | 2013 | Reattach conduit joints- by utility company. | | | | |
| OTHER ACTION | | | | | | |
| OTHER ACTION | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Structural Condition Rating (Last/Now) (%)** | **66.7/66.7** | **Sufficiency Rating (Last/Now) (%)** | **66.3/66.5** | Est. Repl. Yr | 2030 | Maint. Reqd. (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 | 26-Feb-2016 | Previous Inspection Date | 24-Oct-2009 |
| Inspection Cycle (Default) (months) | 39 | | |
| Comment | | | |