



# Baffinland Iron Mines Corporation

**August 14, 2023**

Project #: OMGM2212-23

## **Annual Geotechnical Inspections – 2023 Report 1.**

### **APPENDIX "C" – Tote/Haul Road - Photographs**

**Figures 85 to 108**



Aerial view of bridge KM97 and a section of the Tote Road between the Mary River Mine and Milne Inlet Port

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## 4.0 Tote Road – Bridges - Slopes at Former Borrow Areas – Culverts - Section of the Haul Road Between KM-104 and KM-110

### 4.1 Bridges (4)

#### a) Bridge 17 (located approximately 17 km from Milne Inlet port)



Figure 85: View of the north side of "bridge 17", with the bolt-a-bin crib abutment and guardrail.

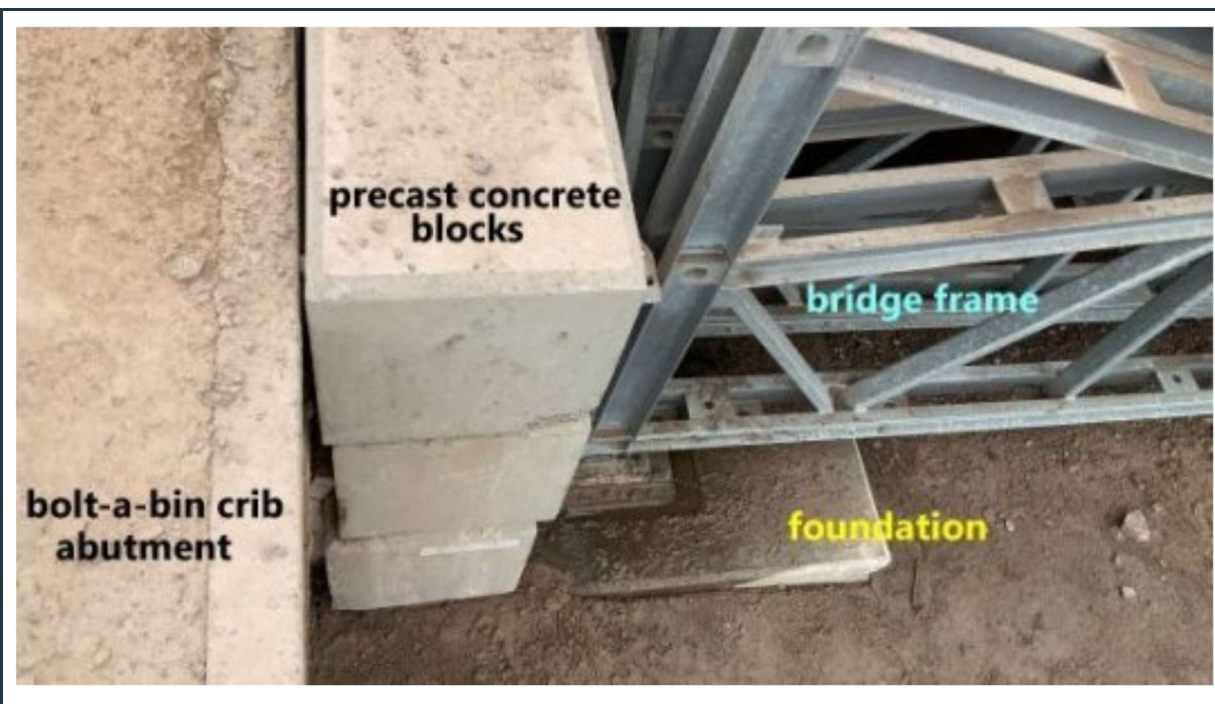


Figure 86: View of the components of the bridge and bridge abutment at KM-17.



Figure 87: View of the stable abutments with riprap erosion protection at the north side of bridge KM17.



Figure 88: View of the stable abutments with riprap scour protection at the south side of bridge KM-17.

**b) Bridge 63 (located approximately 63 km from Milne Inlet port)**



Figure 89: View of the west side of bridge 63, with stable abutments protected against scour.



Figure 90: View of the stable abutments at the east side of bridge 63. Also note one of the two “old” abutments with riprap protection. Snow and ice still present around the abutments.

**c) Bridge 80 (located approximately 80 km from Milne Inlet port)**

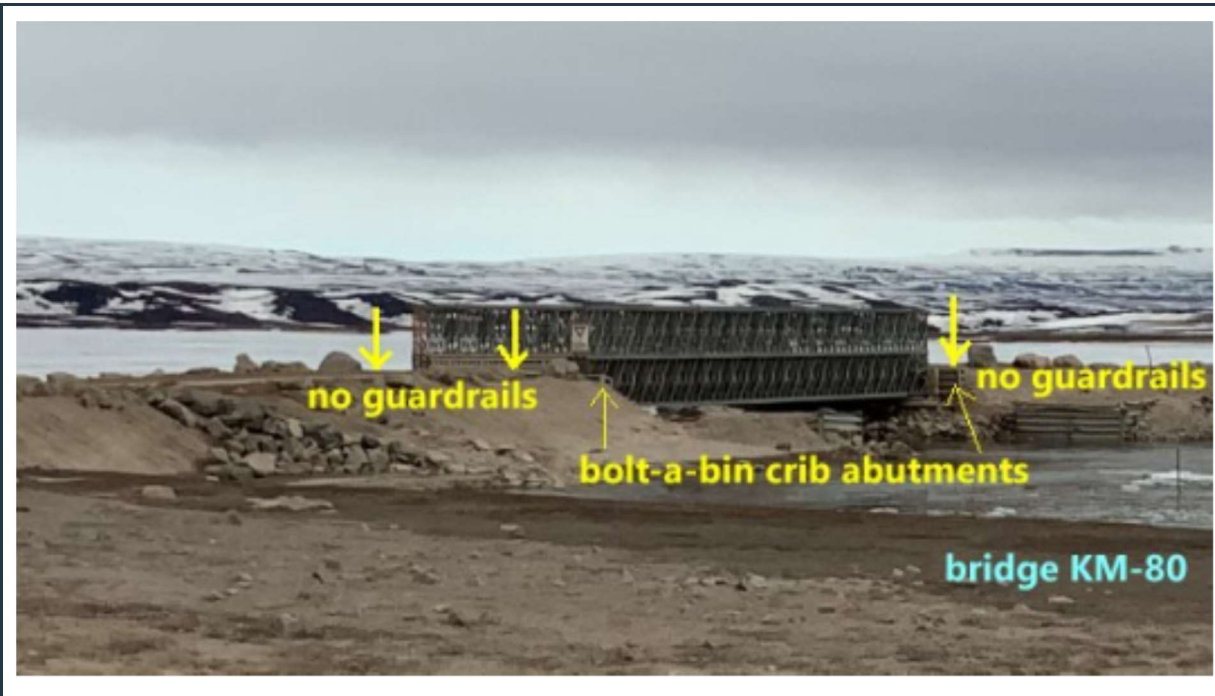


Figure 91: View of the approach embankments with bolt-a-bin cribs at bridge 80. No guardrails adjacent to the cribs at this bridge.



Figure 92: View of the west side of bridge 80, with riprap scour protection around the abutments.



Figure 93: View of abutments with riprap scour protection at the east side of bridge 80.



Figure 94: View of some displacement of the bolt-a-bin crib at one of the abutments at bridge 80.



Figure 95: View of displacement/tilt of the bolt-a-bin crib at one of the abutments at bridge 80.

**d) Bridge 97 (located approximately 97 km from Milne Inlet port)**



Figure 96: View of the approach embankment and abutment at bridge KM 97.



Figure 97: View of the stable abutments with riprap scour protection at the west side of bridge KM 97.



Figure 98: View of the two stable abutments with riprap scour protection at the east side of bridge KM97.

## 4.2 Representative Former Borrow Areas (4) and a Culvert (1)

### a) KM 06+900



Figure 99: View of a section of the tote road around KM 06+900. Excavation of a drainage ditch is suggested to improve drainage of surface water from the road's surface.

### b) KM 07+700

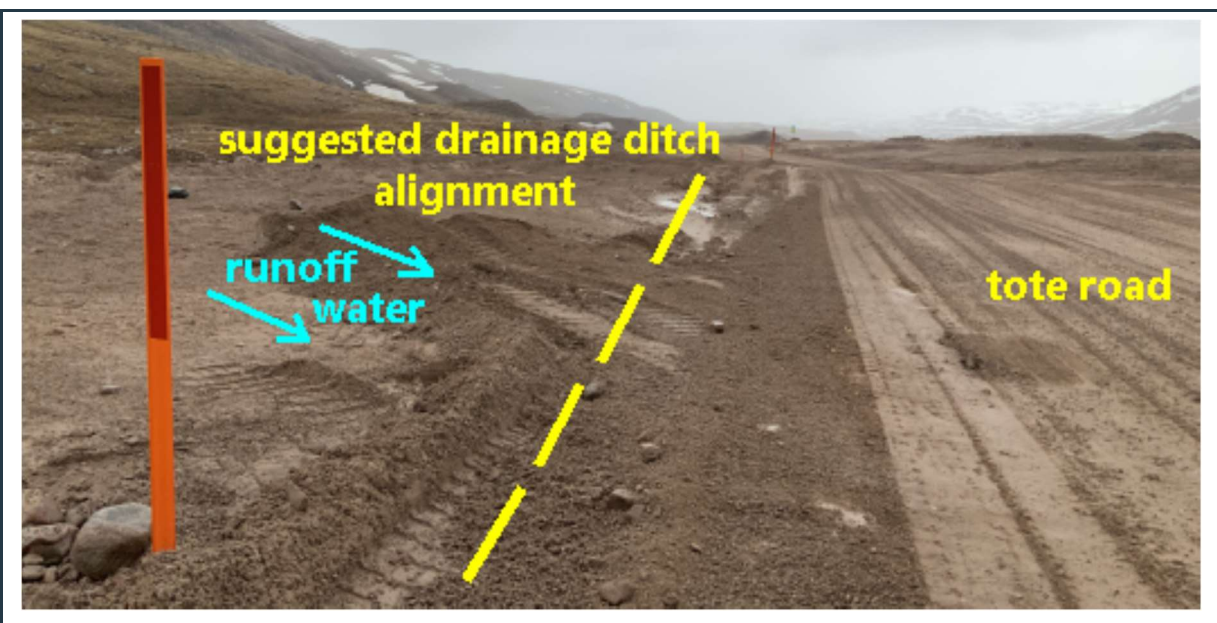


Figure 100: View of a section of the tote road around KM 07+700. No drainage ditch is provided although the ground adjacent to the road is higher than the road level and sloping toward the road.

**c) KM 09+700**



Figure 101: View of the face of the slope in a former borrow area at KM 09+700. Note the large distance of the slope from the tote road.

**d) KM 28+900**



Figure 102: View of the slope at a cut section of the road at KM 28+900. Note the tension cracks on the crest of the slope (yellow arrows) due to freezing and thawing action. The slope should be monitored and reshaped to shallower inclination if necessary.

**e) KM 33+000 Lake access road check dams**



Figure 103: View of the damaged culvert at its inlet at KM 33+000. The culvert should be replaced as soon as practically possible. More rockfill should also be placed around the culvert's inlet.

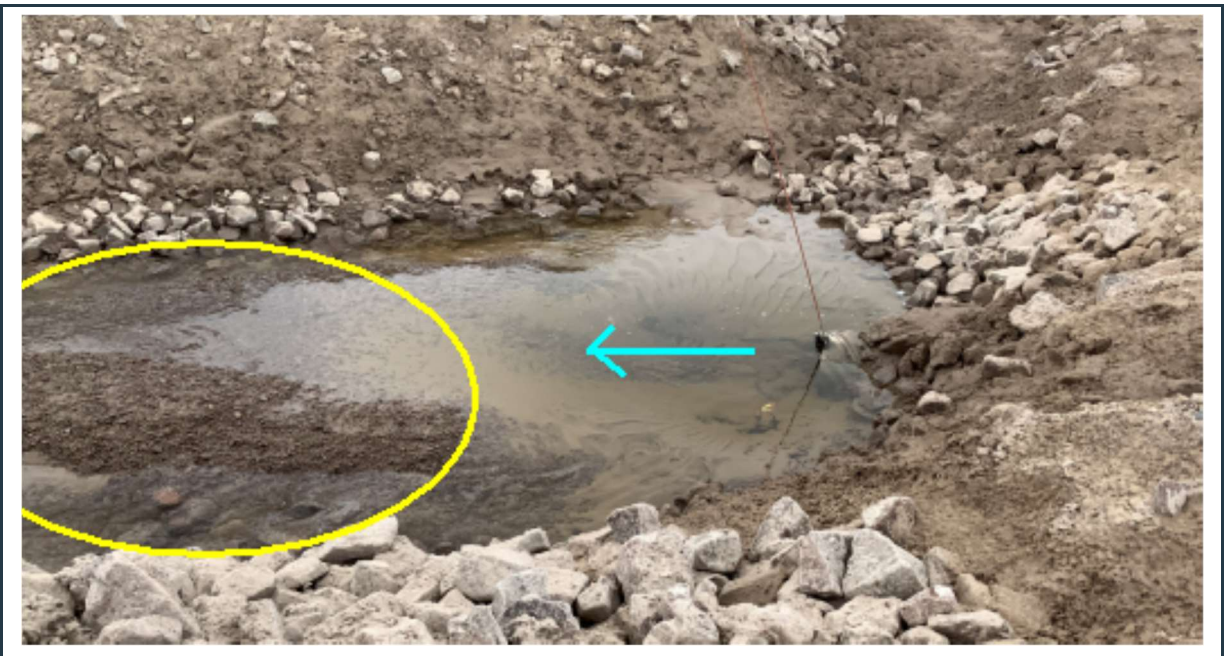


Figure 104: View of the outlet of the culvert at KM 33+000. The ditch at the front of the culvert should be cleaned during culvert replacement.



Figure 105: View of the ditch and check dams at KM 33+000. The ditch should be cleaned (yellow circle) and the crest of the check dams repaired/raised (yellow arrows) during culvert replacement.

#### 4.3 Section of the Haul Road Between the Crusher Pad and the Open Pit (KM104 – KM110)



Figure 106: View of the well-maintained haul road between the crusher pad and the open pit around KM-107. Note the standard road components in the image, the safety berm along the fill (left) side of the road and the upgraded drainage ditch along the cut side (right) of the road.



Figure 107: View of a cross drain (combination of a whoa-boy and shallow ditch) intercepting run-off flowing down the haul road and direct the collected water to the side-ditch. Many of such drains have been formed recently to improve erosion control along the haul road.



Figure 108: View of a section of the haul road near the ore stockpile (KM106) with improved side drainage ditch.