



SGS MUSCOWPETUNG

ABORIGINAL CONSTRUCTION MONITORING

WEEKLY REPORT

SPREAD 6

FEBRUARY 4TH TO FEBRUARY 10TH, 2019

Social and Cultural Features

Field Observation	# of occurrences	Description and Mitigation Measures	Mitigation Status	Further Action Required (Yes/No)
Traditional Use Area (hunting, fishing, gathering, trapping)	2	SSKP 805.63 – 805.93 Heritage Resource TLU 132,133,134,135 Her 140 and area of interest 787 + 500	Re/restoration of creek ditch and banks. Excavated ditch lower in pipe tie in and backfill.	Yes - Continue to Monitor
Rock Formations (rocks of significance, tipi rings, etc.)				
Artifacts				
Bones	Many	805 + 800 Bison bone located	Archeologist on site	No
Potential Gravesites				

Environmental Features

Field Observation	# of occurrences	Description and Mitigation Measures	Mitigation Status	Further Action Required (Yes/No)
Medicinal or Cultural Plants				
Aquatic Life				
Animal Observations or Burrows				
Bird Nests				
Trees (Red Willow)				
Wetlands	4	767 + 400 SK 902 and 768 + 300 SK 902-2. 772 + 200 SK 909 and 773 + 350 SK 911.	Restoration	Monitor until completion
Watercourse Crossing	2	MB 1010 Pipestone Creek Class V (FB) Backfill and restoration of the Creek and creek beds Stony Creek SK WC 89 open cut excavation through the Creek lowered in pipe and started to backfill.	Backfill and restoration completed at the Pipestone Creek Backfilling continues at Stoney Creek.	Continue to Monitor

Additional Observations and Summary of Activities or Concerns

This week safety focussed on working in congested areas. Various stages of construction were completed within one right of way which made the area congested. Our team parked our trucks and walked into these areas for observations. Driving to sites and on the right of way is an on-going safety topic. The roads are slippery, and we travel through winter weather (snow conditions) Our team uses extra caution when driving and routinely conducts preventative maintenance and safety equipment checks on our trucks.

This week our team continued to monitor at the Pipestone Creek. Crews prepping for the isolated crossing at the creek MB1010 805 + 770 SSKP 805.63 – 805.93 Heritage Resource TLU 132,133,134,135 Crews completed setting up all the pumps for dewatering. The bag weights were installed and poly isolation. Biologist conducted a fish salvage; no fish were found during the process. Archaeologists ICM's and the ICL were on site all week observing/monitoring the construction. Two steel plates were installed on the downstream crossing to ensure isolation. Excavation was completed of the ditch through the Creek. Before the pipe was installed the ditch was pumped out. The section of pipe to be installed across the creek had been cemented and weighed over 30 tons. Eight side booms moved the pipe to the ditch on the east side. On the west side a winch was hooked up to the pull head on the section. The side booms lowered the pipe and the winch pulled the pipe across the creek. Installing the pipe across the creek was completed. The ditch water was pumped out again. And surveyors scanned the ditch for proper alignment. Back fill was completed with pipe sand shaded and backfill material was filled to one foot below creek line. Creek bottom material was placed back and 4"-10" inch cobble was placed on top. The creek banks restoration was completed with the creek bed filled with clay one foot from the creek line. Creek vegetation was placed back in the Creek and then 4" – 10"-inch cobble was placed on top. The banks were coir wrapped (biodegradable) on lower openings. Seed mix was placed with the top soil. Geocoir wrap was placed tucked and keyed under at the banks. 6x6 untreated wood posts were installed along the front of the banks, ECB (blanket in stalled on both sides with 12" bio stakes. Cobble was placed at the foot of the bank along the Creek. Willow cutting were installed at the riparian lowest point. A second wrap was done and completed with a soft wrap. Environmental monitoring personnel was on site throughout the week monitoring the process.

Clean up of the area was completed with rolling up all the hoses, gen sets, equipment and supplies used for the open cut and were loaded and hauled off site. From 805 + 690 – 805 + 740 excavation began of the tie in ditch between the creek and CN rail bore bay. An area of this tail ditch had been excavated prior when the bore under the tracks was completed. This excavation will accommodate the pipe for tie in to the creek section. The spoil pile from the ditch was loaded onto rock trucks and hauled across the tracks to the west side. A trench box was set in the ditch due to the width and depth of the ditch. A trench box is a steel structure used for protecting workers while performing their duties working in a ditch and avoids cave-ins. By the end of the week three separate sections including the bend section were placed in the excavated ditch.

Additional monitoring at Stony Creek SK WC 89 Excavating bell hole at 788 + 170 cable crossing complete, At SK WC 89 Track hoe stripped topsoil on both east and west sides of creek the soil was piled on geo teck on the work side. Track hoe excavating SK WC 90 the vegetation material was loaded onto rock trucks and placed on the geo teck and marked with stakes. 788 + 350 Topsoil was stripped at the seasonal drainage ditch, dozer ripped the ditch line and track hoe excavated tie in ditch. Pipe section lowered in sand padded under the seasonal drainage section shaded and covered with sand. Rock shield was placed on the five joint section that was lowered in across Stony Creek. Welders set up to complete the tie ins. The area of interest was not disturbed by the construction.

This week excavating ditches and bell holes, lowering in pipe for tie ins and backfilling continued. Our team travelled from site to site observing and monitoring various stages of construction. At 786 + 500 crews were removing snow from ditch and pipe TLU - Her 50 At 786 + 450 track hoe completed cleaning out ditch. Travelled the right of way and observed 796+ 100 welders completing tie in MB 1021 HER 188. At 795 + 900 Track hoe excavated/Extending the ditch for tie in. At 794 + 000 Observed welders completing tie in. Track hoe was Excavating/ digging out bell hole at 791 + 870 and welders completing overlap cut out tie in at 779 + 450. Track hoe was moving backfill material, dozer built up roach on ditch line at 781 + 300. Heritage area #51 TLU. 794 + 000 Observed welders welding tie in bend, side booms assisting welders cradling product pipe.

Night shift continues to pump water, maintain right of way clean up and monitor slash burning. The night shift crew also continued checking and moving of light plants and heaters to different locations.

Our team continued to monitor the wetland restorations and clean up of the right of way 767 + 400 SK 902 and 768 + 300 SK 902-2 were completed. 772 + 200 SK 909 and 773 + 350 SK 911 are still in process of restoration. Our team will continue to monitor the completion of wetland restorations and right of way construction activities.

Photos of Sites Visited & Topics Discussed This Week



805 + 700 Lowering pipe across the Pipestone Creek MB 1010



805 + 720 Track hoes backfilling open ditch at the Pipestone



Restoration of the Pipestone Creek MB 1010





Stony Creek SK WC 89 Excavating ditch line, placing WC material on geo & sand shading pipe.



787 + 700 Track hoe stripping wetland SK – 944

787 +500 Track hoe to digging at Stony Creek

Approvals

Prepared by

D. Masney

Darlene Masney
Senior Construction Monitor

February 11th, 2019

Reviewed by

A handwritten signature in black ink, appearing to read 'J Roach', is shown within a light grey rectangular box.

Joseph Roach
Project Manager

February 12th, 2019

Approved by

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Emmanuel Olotu, P.Eng.
Technical Manager, Geotechnical

February 12th, 2019

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