

SGS MUSCOWPETUNG

ABORIGINAL CONSTRUCTION MONITORING

WEEKLY REPORT

SPREAD 6

JANUARY 7TH TO JANUARY 13TH, 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)	Many	SSKP 805.63 – 805.93 HER 150, 151 798 + 700 Her 146 Dkmh-41 802 + 500 Her 147,148,149 DkMh-37, DkMh -40 and DkMh- 39. 803 + 500 Her 189 Dkmh -42. 802 + 550 Her 189 802 + 562 Her 149. 752 + 400 Her138, 139 DiMi - 4, DiMi-3	Excavating ditch line, lowering pipe and tie ins.	Continue to Monitor
Rock Formations (rocks of significance, tipi rings, etc.)				
Artifacts				
Bones				
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	9	SK 771 Class V (Pond) SK 799 Class IV Marsh SK 805.class V (Pond) SK 825 Class III marsh SK 826 Class III, SK 828, Class IV SK 847 Shrubby swamp wetland complex SK 851Class IV SK wetland 851 Class III	Stripping/excavating ditch line though wetlands	Monitoring
Watercourse Crossing	2	MB 1010 (FB) SK - WC 85 (NFB)	Excavating ditch at SK WC 85 – Pre-test for pipe MB 1010	Continue to Monitor



Additional Observations and Summary of Activities or Concerns

The safety topics for this week included load securement and ground disturbance. Items that are not secured properly end up on the right of way, in ditches and are major hazards. The most common causes of load securement incidents are related to improper hazard identification, load securement loading and unloading. Everyone is to make sure items they are hauling on the back of the trucks are properly secured even if only travelling a short distance. Ground disturbance – Mainline activities ground disturbance is defined as: Any work operation or activity that results in penetration of the ground deeper than one foot. Any penetration to the ground at any depth above a facility, utility whose depth is not known. Any ground disturbance requires a permit and can only be performed by trained qualified personal. Ground disturbance refresher course is facilitated at site throughout the pipeline construction.

This week environment focussed on proper soil separation for all the tie in wetland excavations. The bio security must be completed for all trucks hauling sand and for all hydro vacs. The buckets on equipment must continue to be cleaned before digging at each location. Wash bays still in use must be maintained and kept clean. Around the yard and on right of ways all garbage must be cleaned up daily. Recycling of plastics and steel/wood products must be placed in the appropriate marked containers. Inside the office trailers paper products must be placed in separate recycle containers.

Our team continued to monitor the Pipe pre-test at 806 + 540 East side of the Pipestone Creek Pre-test pipe section was hoarded in along the matted area, two heaters were placed at location and started up to heat the hoarded area. Pipe was prepped with test heads attached, equipment and instrumentation were set up, Signage for everyone to stay clear of the area was posted. The test was completed using water hauled into site. Surveyors stake out the area where the water would be pumped to. The test pressured to 25% and then a leak check was done. One leak was repaired, and test continued. Pressured to 50%, no leaks were detected. Pressured to 11820kPa and held for one hour, the test passed. Blew down to 50% for calibration check then continued and completed the pre-test. (Pipe string tested is for MB 1010 isolated crossing). De watering of the test section completed. Test heads and pups were cut off and the hoarding was dismantled and hauled off site. The area was cleaned up of broken skids and hoarding material, all equipment was moved off site. A second test will be completed once the pipe is lowered in the ditch and tied in.

Our team monitored the west side of the Pipestone Creek this week SSKP 805.63 - 805.93 HER 150, 151 excavating ditch lines 805 + 300 - 805 + 500 working west. The area is very rocky. Dozers moved roach and cut/ripped ditch line, track hoes excavated ditch and bell holes at the piles for the block valves. The dozers moved the rocks and soils into piles on work side and opposite side of the right of way. Archaeologist and ICM's were on site for the excavations. The roped off area around the area of interest was extended to include the west side. The no foot traffic signage remains in place. This week our team monitored ditch excavation and pipe lowered in at 798 + 200 - 798 + 700 Her 146 Dkmh-41 Pipe was lowered in at 801 + 500 - 802 + 500 Her 147,148,149 DkMh-37, DkMh 40 and DkMh-39. Track hoes excavated ditch through 802 + 500 - 802 + 550 Her 189 area and excavating ditch at 802 + 550 - 803 + 500 Her 189 Dkmh 40. Archaeologist and ICM's were on site to monitor excavation of ditch at 802 + 562 Her 149.

Spread six of the pipeline has many wetlands that crews must excavate through to place the pipe in the ground. Mainline ditching is completed for strings of product pipe to be lowered in the ditch. These strings of pipe are completed before the WC and wetland areas are excavated. The wetland areas are tie in points and throughout spread six there are over four hundred tie ins to be completed. All the wetlands tie in locations are monitored closely by the environment to ensure the proper EPP procedures are followed. Our team followed up on tie in / wetland excavated through wetlands SK 825 Class III marsh - 725 + 940, SK 826 Class III, - 736 + 260 SK 828, Class IV - 737 + 610 SK 847 Shrubby swamp wetland complex- 740 + 660, and SK 851 Class IV 780 + 700. Ditch lines excavated with soil separated properly. Pipe lowered in for tie ins. backfilled completed with

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seed mix and coconut bedding. Wetland restorations were also followed up at SK 771 Class V (Pond) WC 81 Drainage (NFB) 725 + 225 & SK 799 Class IV Marsh at 730 +000 and SK 805 Class V pond. This week our team continued monitoring excavating of ditch through SK- WC 85 and SK wetland 851.

Stoney Creek Archaeological site HER 140 our team followed up on mainline ditching activities completed through the area. Sections of pipe were lowered in where ditching was completed. Sand bedding was placed in ditch bed before backfilling completion. Dozers moved roach back on ditch line and cleaned up the right of way. The roped off area of interest and Heritage sites adjacent to the right of way were not disturbed by the construction. At the end of the week crews started to ditch the creeks west side valley at Little Pipestone Creek 751 + 400 - 752 + 400 Her 138, 139 DiMi - 4, DiMi-3 Dozer ripped ditch, followed by track hoe excavating soil, placed on work side. 751 + 700 utility crew Installed sand pipe for pumping water (water table high in this location adjacent to the creek) Hose was strung across right of way pumping from inside the pipe to the south side. The hose was extended to pump further due to freeze up and water pooling in one area.

Additional observations included crews pumping water out of bell holes and ditches, skid crew picking up skids. Dozers maintaining right of way. Trucks hauling sand in to various sites for sand bedding. Side booms cradling pipe for tie in welds and lowering in. The night shift continued to maintain right of way, signage and general clean up.



Photos of Sites Visited & Topics Discussed This Week





Eco bag weights placed on pipe in wetlands and coconut matting placed on top for wetland restoration



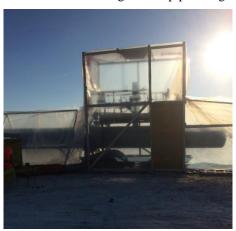








East side of the Pipestone Creek – Hoarding for test pipe string & removing test head.











742 + 101 welder tying in pipe & 741 + 779 coating pipe



721 + 632 lowering pipe





735 + 081 Lowering pipe into ditch



802 + 562 ditch wheel





784 + 842 Excavating ditch lines





755 + 066 Pipe strung and prepped for lowering in



Excavating ditch line 802 + 562



Stoney Creek HD Bore at access road





West Pipestone Creek Excavating ditch









East side of the Pipestone Creek area of interest roped off









The Little Pipestone Creek Excavating ditch, Pumping water and sand pipe installation







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