



SGS MUSCOWPETUNG

ABORIGINAL CONSTRUCTION MONITORING

WEEKLY REPORT

SPREAD # 3

OCTOBER 30TH TO NOVEMBER 5TH, 2017

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)	0			
Rock Formations (rocks of significance, tipi rings, etc.)	0			
Artifacts	0			
Bones	1	One Golder Associates staff member found one rib bone that has not been identified at this time. It was found at a known traditional area where the ditching crew were working	Completed	No
Potential Gravesites	0			

Environmental Features

Field Observation	# of occurrences	Description and Mitigation Measures	Mitigation Status	Further Action Required (Yes/No)
Medicinal or Cultural Plants	0			
Aquatic Life	0			
Animal Observations or Burrows	0			
Bird Nests	0			
Trees (Red Willow)	0			
Wetlands	1	Open cut wet land crossing packed the soil on top of the pipe burying it.	Completed	No
Watercourse Crossing	2	South Saskatchewan River Crossing. Horizontal directional drilling and testing the water turbidity.	South Saskatchewan Crossing ongoing.	Ongoing

Additional Observations and Summary of Activities or Concerns

The horizontal directional drilling at the South Saskatchewan River is ongoing. They have started with 36-inch ripper to a 200 metres mark tripped back and installed a 24-inch reamer that will be used to the exit point. As of yesterday, they are at 272 metres in with the 24-inch reamer they are approaching the shore of the South Saskatchewan River.

The result of testing of the water turbidity by Golder Associates remained the same until Friday. The turbidity was a bit high and Golder Associates staff member explained that this is due to the weather change (high winds and snow) which has agitated the river bottom causing the change. At this time there is no environmental concerns. We will be watching closely this week as the directional drilling will be going under the river.

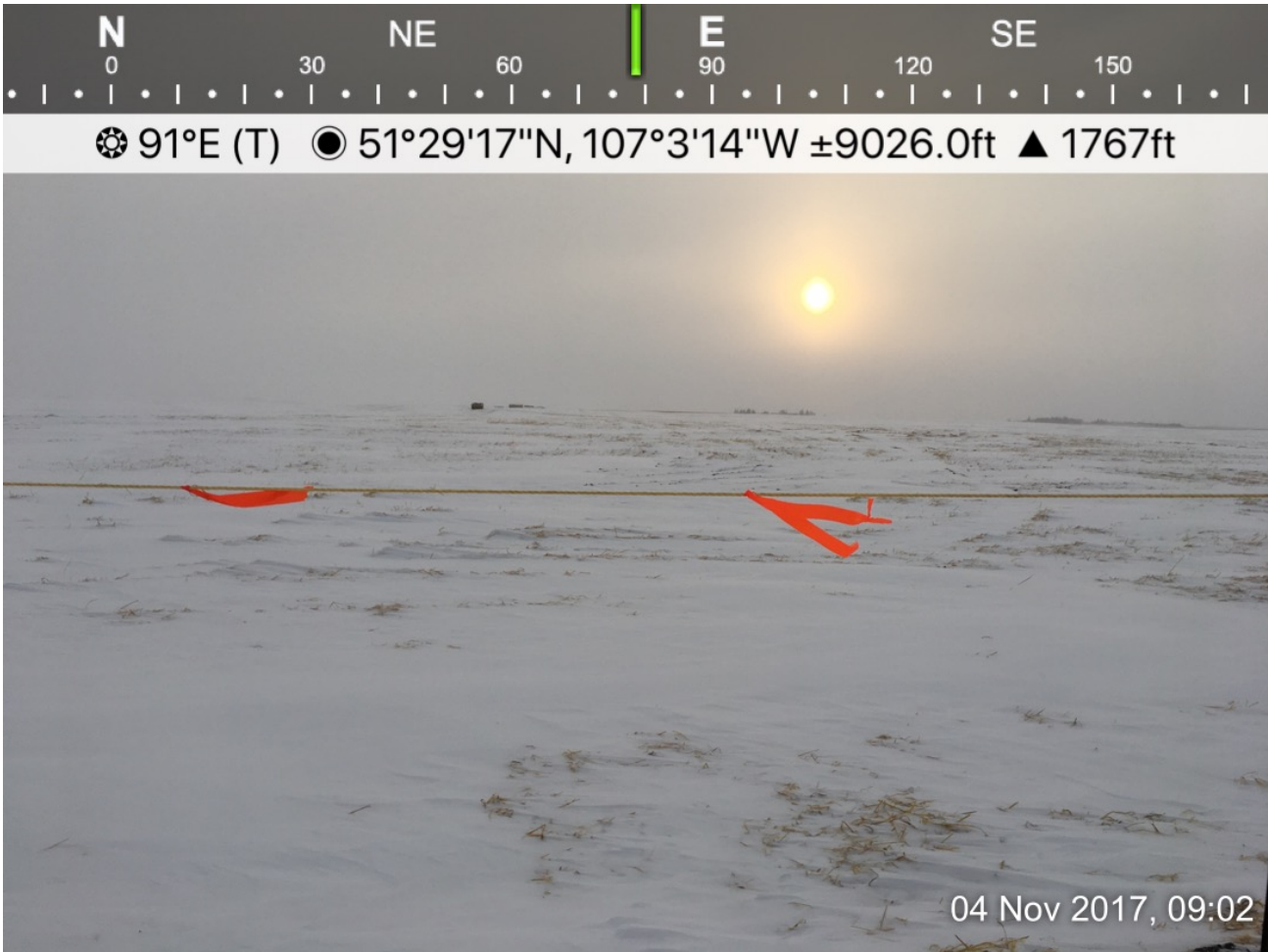
Myself and my colleagues have been observing the back-filling crew and ditching crew for any potential of artifacts or bones and there hasn't been any at this point. One rib bone was found by a Golder Associate staff member at a known traditional area. They have yet to identify the bone.

They have started the final clean up of the right of way from kick off. They have started spreading the straw over the right of way and crimping it into the soil. This is a process to protect the topsoil from wind erosion. As of Saturday, they have stopped the spreading of top soil over the right of way due to the amount of snow that has fallen. I have not come across any environmental issues at this time.

Photos of Sites Visited & Topics Discussed This Week



UNIDENTIFIED RIB BONE



SPREAD AND CRIMPED STRAW ACROSS THE RIGHT OF WAY



COLLECTING WATER SAMPLES AT THE RIVER



DITCHING MACHINE AT KNOWN TRADITIONAL AREA



BACKFILLING CREW



☉ 111°E (T) ● 51°4'15"N, 106°16'15"W ±32.8ft ▲ 1890ft



DITCHING CREW



97°E (T) 51°18'43"N, 106°51'40"W ±16.4ft ▲ 1859ft



EXIT POINT OF CANAL



☼ 140°SE (T) ● 51°31'42"N, 107°42'52"W ±16.4ft ▲ 1949ft



PULLING TOPSOIL BACK ONTO THE RIGHT OF WAY



COATING CREW



HORIZONTAL DIRECTIONAL DRILLING AT SOUTH SASKATCHEWAN RIVER



EXIT POINT OF CANAL



COMPACTION OF SOIL

Approvals

Prepared by



Gary Gopher
Senior Construction Monitor

November 5, 2017

Reviewed by



Joseph Roach
Project Manager

November 7, 2017

Approved by



Emmanuel Olotu, P.Eng.
Technical Manager, Geotechnical

November 7, 2017