

**SWAN LAKE FIRST NATION – MATRIX SOLUTIONS
INC. PARTNERSHIP**

INDIGENOUS CONSTRUCTION MONITORING

WEEKLY REPORT

SPREAD 7

SEPTEMBER 24TH TO SEPTEMBER 30TH

1. PURPOSE OF THIS REPORT

The report is a weekly summary of the daily reports submitted by the Indigenous Construction Monitors that are working on spread seven. The social and cultural findings have been tabulated with locations and mitigation measures below. A summary of the construction activities has been summarized for the weeks of September 24th to September 30th, 2018.

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)	1	1 Heritage site HER-160 SSKP 863+050	Archaeologists working in area	yes
Rock Formations (rocks of significance, tipi rings, etc.)	N/A			
Artifacts	3	3 Found various Bones, Flakes and burnt wood (charcoal) with Archaeologists work ongoing in area SSKP 863+371		
Bones	1	1 Found Deer bones at SSKP 863+330		no further action required
Potential Gravesites	N/A			

Environmental Features

Field Observation	# of occurrences	Description and Mitigation Measures	Mitigation Status	Further Action Required (Yes/No)
Medicinal or Cultural Plants	1	Medicinal Indigenous Plants: Many Sage plants over 100 on our ROW at SSKP 863+365		further action yes will ask if I can pick some for

				Indigenous people that we deal with. We have an Elder coming today will ask what he thinks.
Aquatic Life	N/A			
Animal Observations or Burrows	7	Northern Flicker (Woodpecker) SSKP 836+270 observed 7 of them eating ants on our ROW status	Grade crew will reach this area end of week possibly.	
	1	A Killdeer bird spotted eating snails on our ROW at SSKP 848+400 Animal Observation : 1	status most likely bein area for 2 or 3 days.	
	6	6 Mallard ducks on our ROW in the pond at aqua dam SSKP 848+400	status two days in a row ducks spotted in area they most likely will be back as the feeding is good for them.	
Bird Nests	N/A			
Trees (Red Willow)	N/A			
Wetlands	1	SSKP 855+115 Broad-Leaf	status started	

		Treed Swamp Wetland MB-081	stripping topsoil work ongoing.	
	1	SSKP 817+665 Semi-Permanent Marsh Class 4 Wetland MB-1039	Coaters working on pipe in wetland status work is ongoing.	
	1	Semi-Permanent Marsh Class 4 MB-054 SSKP 841+727	status work can't go any further at this time.	
	1	Semi-Permanent Marsh Class 4 MB-1039 SSKP 823+025	Pipe Gang finished in this wetland, Status ongoing as more crews will come through.	
	1	Ephemeral/Temporary Marsh Class 1 & 2 MB-078 SSKP 853+700	status Grade crew stripping work ongoing.	
	1	Seasonal Marsh Class 3 MB-079 SSKP 853+940	status Grade crew stripping work ongoing.	

	1	Seasonal Marsh Class 3 MB-079 SSKP 853+940 status	Grade crew stripping work ongoing.	
	1	Seasonal Marsh Class 3 Wetland Complex MB-080 SSKP 854+260	Grade crew stripping work ongoing.	
	1	Semi-Permanent Marsh Class 4 Wetland Complex MB-071 SSKP 848+400	status work on wetland ramp should be completed tomorrow, work will be ongoing with other crews.	
	1	MB 071. Wetlands KP- 848+350 Semi- Permanent Marsh Class 4 Wetland Complex		
	1	MB 071. Wetlands complex. Class 4	status work ongoing.	
	1	MB-1039 Semi-Permanent Marsh Class 4 work ongoing SSKP 813+025		yes
Watercourse Crossing	N/A			

Additional Observations and Summary of Activities or Concerns

Weekly activity included attending daily tailgate meetings and continue to check access points on the ROW and checking, SF,

September 24, 2018 - Safety included: Vehicles or equipment. Follow rules and regulations, spotter if needed. Focus on job, eyes and mind on task, good view of work. Be aware of students and children in Brandon area and gravel roads as school is in season. Dress in layers cold weather season here and drink plenty of water as dehydration can happen when cold out. Muddy conditions be aware of surroundings on foot and when driving.

Weather forecast: Cloudy with 30 % chance of rain. Fog patches in the morning. Wind northwest 20 km/h late in the afternoon. High 8. UV index 4.

We met in morning for objectives, after meeting decided we would monitor who was working as we received a lot of rain on Saturday and Sunday. SSKP 817+665 Coating was being done on off sections in a Semi-Permanent Marsh Class 4 Wetland MB-1039. SSKP 820+850 Also working in the Semi-Permanent Marsh Class 4 Wetland was Pipe Gang and Poor Boy welding crews. SSKP 821+100 There is a Native Prairie and Wetland MB-1039, in this area the Stripping, Stringing, End Prep and Bore under the crossing is complete. Mainline welding will reach this location later this week. SSKP 855+115 The Grade crew has started stripping topsoil by the Broad-Leaf Treed Swamp Wetland, conditions weren't as wet here and the soil characteristics in this area are Scarth a loamy fine sand which isn't too bad to work with when wet. SSKP 899+250 Set up tank along the road at Rd # 60 because of the wet conditions, trucks couldn't fill water for test and the priority to get it done they set up tank for water. They would string hoses to the test head and begin filling. Test will now be done tomorrow on the Black Creek HDD section. The Coating for the Black Creek HDD section will start on Wednesday with the weather conditions pending work being done as its really muddy already. The soil is Hilton in this area and is loam to clay loam which makes it bad when wet for driving and working. SSKP 899+250 Also in same area SA Energy's HDD site is also prepping for the bore pull. We will monitor the bore pull when it takes place as Black Creek is high priority for us monitors.

SF # 12 Pipe gang continue mainline welding between SF # 12 to SF # 13. SF # 13 Side booms moving welding shacks from SF # 13 to SF # 14. Continue mainline welding. SF # 28 Two rock trucks hauling sand from east of SF # 28, 2 D8-dozers building the wet land ramps west of SF # 28.

Wetland: 1 SSKP 855+115 Broad-Leaf Treed Swamp Wetland MB-081 status started stripping topsoil work ongoing.

Wetland: 1 SSKP 817+665 Semi-Permanent Marsh Class 4 Wetland MB-1039 Coaters working on pipe in wetland status work is ongoing.

Work Forecast: Monitor sensitive areas we can access and Black Creek.

September 25, 2018 – Safety included: Muddy sites, Slips, trips, falls. Wear the proper footwear. Watch out for pot holes, gopher holes, skids, garbage. Heavy equipment, keep eye contact with operator at all times. Wear proper P.P.E. Be aware of students and children in Brandon area and gravel roads as school is in season. Dress in layers cold weather season here and drink plenty of water as dehydration can happen when cold out. Muddy conditions be aware of surroundings on foot and when driving. Weather forecast: A mix of sun and cloud. 30 percent chance of showers late in the afternoon. Fog patches dissipating in the morning. Wind becoming northwest 20 km/h early in the afternoon. High 9. UV index 4 or moderate. After our morning meeting the senior and junior monitors would go monitor areas with priority in sensitive areas. In the Bone yard they are preparing to coat mainline welds sometime in the afternoon I was told and the Lower-in Crew was rigging up there equipment. Pending rain the trenching crew should start tomorrow as they are behind schedule because of rain conditions. SSKP 823+025 The mainline welders were finishing up there welding in Wetland MB-1039. SSKP 835+735 The Grade crew was stripping top soil in 3 wetlands MB-078/079/080. By the road crossing they day lighted the most lines I've seen so far as there was over 10 buried facility's in the area. I checked the Construction Alignment Sheets and a lot of the lines buried were MTS. SSKP 863+270 Here there was a lot of sensitive areas as well as several birds I observed eating ants on our ROW the bird was called the Northern Flicker its in the Woodpecker family. This area has a Heritage/native Prairie, 5 wetlands MB- 090/091/092/093/094 and also a water drainage inside our crossing that has water in it as well. Just east of this location is the Enbridge's West Souris Pumping Station. SSKP 873+000 The Grade crew was stripping by Souris Pumping station and they will cross Rd # 44 today. SSKP 899+760 At Black Creek Badger and Banister were cleaning up some frack fluid from HDD that come up through the surface in Black Creek. SF # 28, Contaminated soil well contained, Wrapped and covered. No concerns. Banisters excavator laying topsoil at the beginning of the wetlands 10 m buffer, Semi-Permanent Marsh Class 4 MB-054, wetland complex marsh. Sf # 23, Excavator digging up open ditch. Rig # 3, will run the pilot holes. clean and tidy. No concerns. SF # 22, Few broken stakes. Workers picking up skids. clean and organized. SF # 16, Observed the poor boy welders doing the side wells, clean and organized, no issues. The foreman of the welders on SF # 15 explained to us why they are called poor boys and how they work.

Wetland : 1 Semi-Permanent Marsh Class 4 MB-054 SSKP 841+727 status work can't go any further at this time.

Animal Observation : 1 Northern Flicker (Woodpecker) SSKP 836+270 observed 7 of them eating ants on our ROW status Grade crew will reach this area end of week possibly.

Wetland : 1 Semi-Permanent Marsh Class 4 MB-1039 SSKP 823+025 Pipe Gang finished in this wetland, Status ongoing as more crews will come through.

Wetland : 1 Ephemeral/Temporary Marsh Class 1 & 2 MB-078 SSKP 853+700 status Grade crew stripping work ongoing.

Wetland : 1 Seasonal Marsh Class 3 MB-079 SSKP 853+940 status Grade crew stripping work ongoing.

Wetland : 1 seasonal Marsh Class 3 Wetland Complex MB-080 SSKP 854+260 Grade crew stripping work ongoing.

Work forecast: Going to Souris river to monitor SF # 64. Monitor Black Creek with monitors tomorrow.

September 26, 2018 – Safety included: Driving conditions. Pay attention to the road conditions. Good housekeeping. Keep windshield and lights clean at all times. Muddy roads. Slips trips falls. Pay attention to the terrain that you are walking on.

Mainly cloudy. 60 percent chance of rain showers or flurries this morning. Clearing this afternoon. Risk of freezing rain this morning. Risks of thunderstorms this afternoon. Wind becoming northwest 40 km/h gusting to 60 early this afternoon. High 15. UV index 4 or moderate.

After our morning meeting we decided that we would go to Black Creek. In order to get access right into Black Creek we will need to get the orientation done so we can see the drilling up close. But to also have access to the Souris River HDD as well. I let my supervisor know that Enbridge safety will set us up for orientation. For now, we will try are best to assess crews that are working as it is raining. As I said in previous reports rain would play a role with monitoring crews. Headed to the Bone yard when I arrived found out the Trenching and Coating crews were shut down due to rain. SSKP 841+750 Ephemeral/Temporary Marsh Class 1 & 2 MB-056 the road bore section was being welded east of Rd # 28. SSKP 848+750 Semi-Permanent Marsh Class 4 Wetland Complex MB-071 The Access crew is stripping between the ponds and installing wetland ramps with Dozers, Excavators and Rock Trucks and also prepping for aqua dam installation. In the pond south of wetland ramp observed 4 mallard ducks feeding in pond within our ROW. SSKP 873+800 Grade Crew stripping by Enbridge Souris Station working in the rain doing a safe and great job, they also have the flume pipe in place and will be doing the road approach once the Caepila Carpet is laid out. SSKP 899+760 Went to ask about orientation for junior monitors. Was told by Enbridge safety that they will get a hold of supervisor to let him know when it starts. SF # 28 Two dozers pushing sand at the wet lands complex east of SF # 28. MB-060. SF # 13 Excavator pulling a tank truck from SF # 12 to SF # 13. SF # 44 observed a excavator digging top soil . Very muddy.

Work forecast: Monitor Enbridge Souris Station and sensitive areas tomorrow.

September 27, 2018 – Safety included: Be aware of students and children in Brandon area and gravel roads as school is in season. Dress in layers cold weather season here and drink plenty of water as dehydration can happen when cold out. Muddy conditions be aware of surroundings on foot and when driving.

Weather forecast: Cloudy 60 % chance of showers. Wind at 20 km/h. High of 7. UV Index 2. After the meeting in morning we headed out to monitor areas on ROW. SSKP 873+696 went to Rd # 44 to see the status of Grade crew as they were building road approaches and crossing equipment to start stripping on east side of Rd # 44. SSKP 848+400 The Access crew was working in a Semi-Permanent Marsh Class 4 Wetland Complex MB-071. Finished filling the aqua dam and the water is being pumped into south side of aqua dam. I observed 6 Mallard ducks eating snails. The water was getting lower and they were able to get them easily. Observed a Killdeer bird also eating snails as the water drained. Just east of aqua dam they began pushing the ramp material across the pond. Will come back here to monitor next week. SSKP 812+700

Monitored the mainline coating crew and they did good as they welded over 40 today the most done so far on this job for one day. Only concern I had I addressed it, the repair crew for coating missed a repair and I reminded the contractor worker for banister who is also my friend of 9 years to make sure you double check before going forward. 10 minutes later the foreman called them back about 150 m to fix a repair they missed. It's day one for coating and they will get better as they go along. Also noticed they designated a worker to pick up any coating on the ground that was missed by spill board that was caused by mainline paints, as it was windy today the coating can blow away from spill board and unto the ground. The repair crew was using a new device called the Isolated Induction heat. It's like the mainline coil used for induction hit but this new device is smaller and made for repairs and is a lot more efficient than using a torch, as a torch can burn coating and make it brittle. SF # 5 Water pump and fuel jugs are well contained. Crew workers cleaning up west side of SF # 5. No concerns SF # 21 Welding gang near the entrance of SF # 21. Prep crew are at SF # 21 entrance. SF # 28 West side clean and tidy. No concerns. SF # 29 Workers at the aqua dam pumping water out of north side of the wetlands of SF # 29 to the south side of the wetlands of SF # 29. MB 071.

Wetland : 1 Semi-Permanent Marsh Class 4 Wetland Complex MB-071 SSKP 848+400 status work on wetland ramp should be completed tomorrow, work will be ongoing with other crews. MB 071.

Wetlands KP- 848+350 Semi-Permanent Marsh Class 4 Wetland Complex

Animal Observation : 1 A Killdeer bird spotted eating snails on our ROW at SSKP 848+400 status most likely be in area for 2 or 3 days.

Animal Observation : 1 Seen 6 Mallard ducks on our ROW in the pond at aqua dam SSKP 848+400 status two days in a row ducks spotted in area they most likely will be back as the feeding is good for them.

Work forecast: Snow in forecast will have to drive slower and give time to slow down tomorrow. Monitor sensitive areas.

September 28, 2018 – Safety included: Driving conditions. Pay attention to the road conditions. Good housekeeping. Keep windshield and lights clean at all times. Muddy roads. Slips trips falls. Pay attention to the terrain that you are walking on. Be aware of students and children in Brandon area and gravel roads as school is in season. Dress in layers cold weather season here and drink plenty of water as dehydration can happen when cold out. Muddy conditions and snow be aware of surroundings on foot and when driving.

Weather forecast: Sun and cloud. High 5. UV index 3.

Before morning meeting talked with safety for Enbridge and they gave me contact to get a hold of Somerville safety to do the Orientation for the Black Creek and Souris River HDD sites. After our morning meeting when would meet at Black Creek HDD site to take our orientation. Once we arrived the orientation started, it wasn't long. Once finished we were escorted around the HDD platform and the type of work being done was explained to us. They showed us the mixing of material and how it's used to make drilling easier. The hydro-vac trucks dumped contaminated soil into designated bins. The drill is currently reaming with a 42" inch bit. Also was showed the process of how they connect the rods and disconnect when pulling and pushing. The rods for drilling

into ground are heavy and they use a hoist built into unit to help. Overall the site was clean besides the muddy conditions from the rain we received. I had asked to go into Black Creek area to assess it. While we walked down I noticed stakes that were green and labelled SMR which stands for Surface Mud Release. There was over a dozen of them lots of areas that had fracking. The SMR in black creek was one of the bad ones and was told the soil was possibly contaminated from past jobs. While there I noticed someone sweeping the area to find more SMR and the Hydro-vac operator was ready to go if needed to clean up. They've been really busy over a week now and there doing a great job containing the release. The pipe section for the HDD pull head on the east side of Black Creek still needs to be welded, but the conditions have been muddy to get access as well as Test being done. Today I came in office earlier as my General Manager for Matrix Solutions is giving me a ride to Spread 9 to pick up my personal truck that I had to leave there in order to bring work truck to Spread 7. SF # 29 Wash station progress. Hydro vac truck being washed. 1 dozer waiting in line to be washed. They are continuing to push ramp material across the pond west of SF # 29. SF # 20 Excavator moving trench box. Hydro vac worker spraying down the hydro vac truck. Sf # 4 Ditch wheel digging the soil, excavator flattening down the sand that is coming out the side of the ditch wheel.

Deficiencies:

Highway # 2 Rd# 60 sign west knocked down. Also on highway # 2 Rd # 58 sign east is damaged.

MB 071. Wetlands complex. Class 4 status work ongoing.

Work forecast: Monitor Souris River HDD bore and the Trenching and Lower in crews that will be working out of Bone yard.

September 29, 2018 – Safety included: Driving conditions. Pay attention to the road conditions. Good housekeeping. Keep windshield and lights clean at all times. Muddy roads. Slips trips falls. Pay attention to the terrain that you are walking on. Be aware of students and children in Brandon area and gravel roads as school is in season. Dress in layers cold weather season here and drink plenty of water as dehydration can happen when cold out. Muddy conditions and snow be aware of surroundings on foot and when driving.

Weather forecast: Sun and cloud. High 10, UV index 4

During our morning meeting our supervisor said the archaeologists were going to be doing work at a Heritage site HER-160. It's an area I assessed on previous reports and an area I wanted to monitor later on. We went to meet the archaeologists at Rd # 38 SSKP 863+371. When we arrived we met with them and signed on their Job Hazard analysis (JHA) and also their daily safety tailgate meeting. They were waiting on their supervisor, so I decided to do a sweep of the area to see if I could find anything. They stripped some of the heritage area already on the west side of Rd # 38. I while walking in that area I noticed some bones on the ROW that I thought were cattle. I showed an archaeologist the bones and he determined they were deer bones. Also on my way back to truck on ROW I came upon Indigenous Medicinal Plants called Sage that were also on the west side. My previous visit to Rd # 38 I found sage on the east side. Once everyone was ready to go, we went to a dug out slurry pit on ROW that was about 1.2 m deep. There was over 40'000 artifacts found here from what I've been told by the

archaeologists and I learnt that most were from a time period in our timeline dating back to 2200 to 2500 BC. I helped the archaeologists screen for artifacts and we found several within a few hours. There were petrified bones, burnt wood and flakes from making tools and weapons. It's amazing the detail if you look closely at the flakes. I spent most of the day here and I really wanted to see the Trenching/Lower in crew so I left to finish off the day monitoring them. SSKP 813+025 Arrived at bone yard towards end of shift to monitor Trenching/Lower-in crews. The ditcher was on stand-by because there was a lot of cave ins due to the soft sand and water running through below that were coming from wetlands MB-1039 Semi-Permanent Marsh Class 4. The excavators were digging out the fallen trench walls in ditch so the pipe could be lowered properly. Overall, they were doing a great job and everyone was doing a safe job. SF # 29 Ramping the pond west of SF # 29 than they will install a small ramp east of SF # 29. MB 26. SF # 38 Old campsite, 5000 years old. Workers roping off the sensitive area off.

Wetlands: 1 MB-1039 Semi-Permanent Marsh Class 4 work ongoing SSKP 813+025 further action required yes

Artifacts: 3 Found various Bones, Flakes and burnt wood (charcoal) with Archaeologists work ongoing in area SSKP 863+371

Bones: 1 Found Deer bones at SSKP 863+330 no further action required

Traditional Use Area: 1 Heritage site HER-160 Archaeologists working in area further action required yes SSKP 863+050

Medicinal Indigenous Plants: Many Sage plants over 100 on our ROW at SSKP 863+365 further action yes will ask if I can pick some for Indigenous people that we deal with. We have an Elder coming today will ask what he thinks.

Work forecast: The archaeologist will be at Spread 7 all week so I will be monitoring and helping them throughout the week to sweep areas being dug out and stripped.

Photos of Sites Visited & Topics Discussed This Week



Sept 24/18 Description & Location KP- 821+006.251N
Photo taken west.
Side booms moving welding shacks.
Very congested and muddy



Sept 24/18 Description & Location KP-819+432.5 148 west
Photo taken facing east.
Pipe gang continuing welding



Sept 24/18 Description & Location: SSKP 855+115
Broad-Leaf Treed Swamp Wetland MB-081
Grade crew has started to strip by wetland
This area wasn't bad for rain
Facing East



Sept 24/18 Description & Location: SSKP 899+250
Somerville HDD site on Banister ROW
Banister is prepping pipe to be pulled
Once they weld pull head on bore section they will pull it from here. Facing SE



Sept 24/18 Description & Location: SSKP 821+100
Native Prairie and Wetland
Work in area is ongoing
Bore pipe installed under road- Facing North



Sept 24/18 Description & Location: SSKP 817+665
Coating off sections at Rd # 6
Blasting pipe on left side
Coater in white waiting to paint – Facing West



Sept 25/18 Description & Location: KP 830 + 899
Photo taken facing west
Excavator digging the open ditch ay SF # 23



Sept 25/18 Description & Location: KP 811 + 300
Photo taken facing south.
Excavator removed the contaminated soil, than replaced it with fresh top soil at SF # 28



Sept 25/18 Description & Location: SSKP 899+760
Frack fluid coming through surface in Black Creek,
Environmental Inspector at left
Badger worker middle using suction & water
Operator to right, facing east



Sept 25/18 Description & Location: SSKP 835+735
Grade Crew stripping around wetlands
Dozers and Excavators Stripping soil
Lots of buried facility's mostly MTS
Facing south east



Sept 25/18 Description & Location: SSKP 863+270
Northern Flicker (Woodpecker)
Eating ants on our ROW
Pink broken stake 5 m buffer
Close to north boundary, facing west



Sept 25/18 Description & Location: SSKP 823+025
Pipe Gang Welders in Wetland MB-1039
Just finishing there welding in wetland
Soil condition was starting to dry more
Facing west



Sept 26/18
Description & Location KP-873+696.2 118 west
Photo taken facing west
Prepping to build a ramp under the road way



Sept 26/18
Description & Location: 819+432.5 148 west
Photo taken facing south
Excavator pulling tank truck from SF # 13 to SF # 12



Sept 26/18 Description & Location: SSKP 841+750
Welding a bore section in wetland
Bus parked close to crossing as ROW is wet
Side Boom waiting to be loaded Facing east



Sept 26/18 Description & Location: SSKP 848+ 750
Semi-Permanent Marsh Class 4 MB-071
A small pond south of wetland ramp
Facing north west



Sept 26/18 Description & Location: SSKP 873+800
Grade crew stripping by road crossing
Flume pipe ready for road approach
Enbridge Souris Station in upper right
Facing north west



Sept 27/18 Description & Location KP-821-200
Photo taken facing west.
Prep gang preping the pipe for the welders
Main gang welding the pipe.



Sept 27/18 Description & Location KP-848+350
Photo taken facing west.
Generator and fuel jugs are well contained.
At SF # 29 wetlands complex MB 0571.
Semi permanent class four.



Sept 27/18 Description & Location: SSKP 848+400
6 Mallard ducks on ROW
Eating was easier due to lowered water
These ducks left once water drained
Facing west



Sept 27/18 Description & Location: SSKP 848+400
Aqua Dam just completed
Draining water to left of dam
If you zoom in you can see 6 ducks to right
Facing west



Sept 27/18
Killdeer bird on ROW
Water was drained attracted wildlife
This bird was eating snails
Facing west



Sept 27/18 Description & Location: SSKP 812+700
Isolated Induction Coil for repairs
This device is much more safe for repairs
Worker heating repair at 6'o clock, Device in hands on pipe



Sept 28/18 Description & Location KP-826 + 745
Photo taken facing west.
Worker spraying down his truck.
Dozer parked



Sept 28/18 Description & Location KP- 848 + 400
Workers putting up the fence
Clean and tidy
MB 071. Wetlands complex. Class 4

Lat / Long	(SW) 5-25-7-18-W1	UTM N/E
49.598197	717 m North 79 m East	5494266 m
-99.801358	Bearing: 227° (TN) GPS: ±5 m	442092 m
Elev: 410 m	September 28, 2018 11:04:46	CM: -99



Sept 28/18 Description & Location: SSKP 899+350
HDD Bore site Black Creek
Currently reaming with 42" bit
Operator in dog house with windows - Facing SW

Lat / Long	(SW) 5-25-7-18-W1	UTM N/E
49.598161	713 m North 57 m East	5494263 m
-99.801657	Bearing: 178° (TN) GPS: ±5 m	442070 m
Elev: 411 m	September 28, 2018 11:03:08	CM: -99



Sept 28/18 Description & Location: SSKP 899+350
HDD Bore site Black Creek
This is where they store rods for bore
They use hoist for hooking up and
dismantling rods, facing east

Lat / Long	(SW) 5-25-7-18-W1	UTM N/E
49.597655	657 m North 332 m East	5494203 m
-99.797863	Bearing: 43° (TN) GPS: ±5 m	442344 m
Elev: 404 m	September 28, 2018 11:13:40	CM: -99



Sept 28/18 Description & Location: SSKP 899+650
Location in Black Creek
Frack fluid came through surface here
They did a good job containing it
Very good work by Enbridge & Badger

Lat / Long	(SW) 5-25-7-18-W1	UTM N/E
49.597853	678 m North 46 m East	5494229 m
-99.801812	Bearing: 315° (TN) GPS: ±5 m	442059 m
Elev: 411 m	September 28, 2018 10:54:31	CM: -99



Sept 28/18 Description & Location: SSKP 899+350
HDD Bore site Black Creek
Badger hydro-vac dumping bad soil in bin
Conditions on site still slippery



Sept 29/18 Description & Location MB-071
Photo taken facing east
Dozers pushing sand onto the wetlands
ramp at SF # 29 west.

Facing north west



Sept 29/18 Description & Location 863+300)(864+000 Her-160
Photo taken facing east.
Archaeologist found old traditional (heritage site) 5000 years old.
Workers roping off the sensitive area off west



Sept 29/18 Description & Location: SSKP 863+371
Archeologists Screening for artifacts
Tarp on ground to keep soil off topsoil
Found several items while screening Facing north



Sept 29/18 Description & Location: SSKP 863+371
Archeologist displaying the found flake
Was piece of a rock used to shape tools
Found Bones, flakes and burnt wood
Facing north



Sept 29/18 Description & Location: SSKP 863+050
Heritage Resource area
Only can strip soil with Archeologist present
Some already stripped to the right - Facing East



Sept 29/18 Description & Location: SSKP 863+300
In Heritage area found Deer bones
They were scattered over our ROW
I let the archeologists know their location

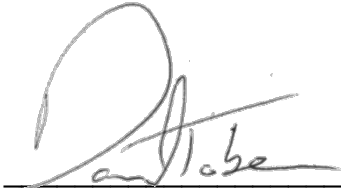
APPROVALS



Lee Bear
Senior Construction Monitor

November 26, 2018

Date



Daniel Tober
Senior Environmental Scientist

November 26, 2018

Date