

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

INDIGENOUS CONSTRUCTION MONITORING

WEEKLY REPORT

SPREAD 7

AUGUST 27TH TO SEPTEMBER 1ST

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 August 27th to September 1st, 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)	N/A			
Rock Formations (rocks of significance, tipi rings, etc.)	N/A			
Artifacts	1	SSKP 908+000 Arrowhead discovered on ROW Archaeologist estimates 3500 years old		
Bones	N/A			
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	N/A			
Aquatic Life	N/A			
Animal Observations or Burrows	N/A			
Bird Nests	N/A			
Trees (Red Willow)	N/A			
Wetlands	N/A			

Watercourse Crossing	N/A			
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Additional Observations and Summary of Activities or Concerns

Weekly activity included checking access points on the ROW and checking Roads.

August 27, 2018 - Safety included: Watch for wide loads. Pay attention to road conditions. Work is getting more congested and crews can be busier, need to give them space. Be aware of surroundings and have good communication with workers. Obey all traffic signs, slow down when passing on gravel roads, use spotter when backing and make sure spotter in safe spot, kids will be going back to school soon slow down and stop for bus on gravel roads. Wet ground watch slippery slopes and uneven ground on ROW. Weather forecast: Cloudy. Visibility 16. humidity 82% Got company vehicle washed, cleaned and bleached the tires. Went to Treherne, MB to get the vehicle inspected and oil change. RD#23 re-accessed the birds' nest and the Leopard Frogs. RD#21 tractor pulling disc breaking top-soil. 5 -Dozers removing top soil. Drove to the Ducks Unlimited Project on our ROW. At KP 886+910 I found an Indigenous plant that was medicinal called Grandfathers Beard (picture below) they are quite common and they are used for infections or fevers. When cut and boiled it's used as a drink. Came across another rare plant called the Eastern Yellow Star Grass at KP 886+720. NLF (Northern Leopard Frog's) supposed to be in area but couldn't locate any as the wetlands have dried up due to lack of rain. At KP 886+700 I noticed 5 Cedar Waxwing birds displaying signs of aggression and trying to lead me away from a possible nest on ROW. Their nesting habits are from June-August. Spoke to environmental coordinator and they should be fledging and gone by the time construction starts as there about 2/3 weeks away. They will sweep area before work starts as there is lots of rare plants, wildlife and wetland features in area. In this area as well around KP 886+000 I noticed lots of rocks on surface of ground. Checked construction alignment sheets and there is plans for rock shield to be attached around the pipe to protect it from potential gouges and scratch's that can lead to corrosion causing leaks. Work Forecast: Going to monitor construction and access new job sites. Will monitor construction in sensitive areas tomorrow and would like to monitor coating crew to see if they clean their coating from spills on the ground as they have been known to leave coating on ground and contaminate soil. As for the junior monitors they will try to see if bores crew is doing any welding. Also I feel that I'm getting more comfortable as a senior monitor with planning and organizing, The way it was done before I arrived here wasn't organized or planned properly. It's much better now and the coming days I'm really looking forward too.

August 28, 2018 – Safety included: Slips, trips, falls, holes in certain places from badgers and other animals. Dusty roads, smoke and haze. Be aware of surroundings and give operators space, anyone can stop an operator if they see something unsafe. Give the signal to stop if necessary. When driving do a circle check before leaving, slow down when passing vehicles on gravel roads, obey all traffic signs. If unsure of the task ask someone that knows and be 100% on knowing your task. Slippery conditions with mud and uneven ground, also use 3-point contact when entering and exiting vehicle. Have good communication with others and know the hazards of work being done. If you

see any type of unsafe work being done intervene. Proper PPE at all times when on ROW, and exceed PPE when required for certain tasks, like rubber gloves when using bleach. All hazards involving Slips, Electrical, Noise, Working Alone, Environment, Biological, Chemical, Kinetic, Pressure, ergonomics, Physical and Personal Factors will be mitigated.

Weather forecast: High of 16, smoky and hazy out.

SF31 Stripping topsoil on ridge. SF35 Stripping topsoil, placing culverts for approaches, placing pads and geo-tec. Tractor discing, Excavator cutting edges. Another excavator removing stumps and rocks from river bank. Crews putting up silt fences. SF36 Approach done and silt fences are good. SF37 Caterpillar stripping topsoil for approach. SF38 Logging in progress. SF40A Hydrovacing, erecting goal posts, stripping topsoil and transition. Also put down geo-tec and made approach on east side. My first objective for the day was to monitor coating crew, when I arrived they cancelled the weld because conditions were too wet on the ROW. So I decided to monitor the work being done on wetlands at SSKP 817+200, but before I arrived I noticed a lot of people including environmentalists, Inspectors and the Construction Specialist gathered in one area. What happened was miscommunication, as the 10m buffer stakes were extended an additional 10m for a total of 20m buffer (see previous reports) the old stakes were taken out and the new stakes made it look like the buffer was breached and cleared into the wetland area which would be non-compliance. It was resolved by confirming the date with clearing crew and the date the NEB mandated their policy for the wetland extension of buffers. It was mitigated by putting a stake indicating where the old buffer stakes were so there's no confusion about it looking like we cleared wetlands past the buffer.

SSKP 817+200 where the Grade crew was building ramps and installing protective cover for the wetlands. What I observed was good (picture below) except I noticed a T-post that wasn't installed properly as it was pounded into the ground upside down. I talked to the straw and politely asked him to install the T-post properly as he was unaware one of his crew members installed it incorrectly. When you install them upside down its a safety issue as it can be an impaling object and the safety mushroom caps won't fit properly because the tip of t-post is pointed sharply (picture below). The straw took it out and did it properly.

Rd # 16 low bed to unloaded a Dozer. When the driver was done he took off and I noticed he was dragging a 12 foot chain that wasn't properly put away. A worker noticed and stopped him and he got out and put his chain away properly. Rd # 17 and observed the welders welding a bore section (picture below). Requested a couple of drivers to put up their flags and also notified safety for Enbridge about the safety issues I seen today and she said she would address them and make sure there brought up in their morning meetings.

Work forecast: Continue to monitor Wetland Habitat, Traditional Land Use, Water course crossings and Heritage sites.

August 29, 2018 – Safety Included: Driving in morning foggy so slow down drive with care. Weather forecast: Mix of sun and clouds. Fog patches dissipating in the morning, wind southwest 20 km/h. high of 23. uv index 6

Discussed daily objectives with monitors after toolbox meeting, all of us would go to Rd#15 KP 822+125 to monitor the coating crew coat a weld. Had to tell foreman to put his flag up on truck as he was on ROW, also seen the same foreman walk backwards in ruts and mud while spotting picker truck (picture below). The truck got stuck in the mud and they decided to try and reach with the boom that was holding an induction coil used to heat the pipe. The operator extended the boom out to max and the 2 workers had to push and force the coil over the weld. They were rushing and it ended up taking them longer and was unsafe. I let the safety people at Enbridge know of what I observed and they will be addressed. During their coating application I received a call from the archaeologist letting me know I could come take a look at the arrowhead that was found at Souris River at SSKP 904+320. So I headed there and took a picture of the discovery, the archaeologist estimates its roughly 3500 years old (picture below).

Work Forecast: Monitor the clearing crew and see the access crew

August 30, 2018 - Safety Included:

Weather forecast: Sunny with a mix of sun and cloud. 30% chance of showers late in the afternoon. Wind south west 30 km/h gusting to 50. High 26

SF # 15, men working at open pit. Excavator trenching. Banister semi-truck unloading decking with the excavator. SF # 22. Workers laying down g.t.o. for the bridging on the wet lands. SSKP 817+900 the welders welded 2 joint section and also welded bore head for pull to do road bore. SSKP 818+450 the access crew was finishing off protective ramp for wetlands. SSKP 820+842 A dozer D8T was stripping top soil and the 350G excavator was stripping corners, in this area they also made a ramp over hotline.

SSKP 822+000 Excavator was digging entry pit on north side of Rd# 15 for road bore and on the south side of Rd# 15 two side booms were holding 2 joint section to be ready for bore. SSKP 823+430 Also doing entry pit for bore but on west side of Rd# 16 was an excavator, once complete they'll ream it with 24" bit than switch to 38" bit to bore the 36" pipe under the road. SSKP 827+900 Strip and grade east towards Rd# 21. SSKP 834+040 Trees were cleared on the south boundary.

Work forecast: Search for rare plants, wetlands

August 31, 2018 – Safety Included: Driving, slow down obey all traffic signs where men are at work. Slips, Trips, Falls. Watch your footing and pay attention as to where you are walking.

Weather forecast: Mix of sun and cloud 30% chance of showers. Wind at 20/km. High of 24. Follow all bio-securities measures.

SF # 5 no activity, unorganized spoke to jack the workers back their to do the clean-up.

SF # 17 no activity. Clean and organized.

SF # 10 no activity. Clean and organized

SF # 7 metal debris near the pipe. Workers went to clean it up, all good no issues.

Senior and junior monitor headed out on 3km walk on ROW as there is no road access at the moment. First stop at SSKP 846+350 was at Rare plant Nuttall's Sunflower is a herbaceous perennial plant growing to 50-400 cm. On our way to next rare plant the junior monitor came across a garter snake on ROW, I asked our environmental coordinator about it and there not endangered and is quite common for them to cross ROW. At SSKP 844+950 I noticed a rusted car in our ROW that was blended into trees and let the land agent know so the clearing crew is aware of it so they can mitigate around it when they start to cut trees. At SSKP 844+720 arrived at another rare plant called Schweinitz's Flatsedge and there was about 30 plants. After assessment we went back to truck walked another 3km we came upon the Wetland Specialist and her helpers were extending the buffers 10m. It was a good walk today and we were able to assess new rare plants.

With the remainder of our day we went to Rd # 21 and monitored an excavator finishing up a road ramp to access the ROW from road.

Work forecast: Going to look for rare plants, wetlands

September 1, 2018 - Safety Included: Driving conditions. Pay attention to the road signs and construction, communication. Let the supervisor know your whereabouts. Slips, Trips, Falls, watch your footing pay full attention to the terrain where your walking

Weather forecast: High of 26*c with Wind south 30 km/h.

SF # 5, workers returned to clean-up hoses off side of road. Environmentally clean and safe. SF # 9. Observed excavator loading a green track machine. SF # 7, Observed the workers and equipment. Environmentally safe no concerns. SF # 10, Observed workers in the wet lands. Clean and organized.

Work Forecast: Monitor construction and access new job sites.

Photos of Sites Visited & Topics Discussed This Week

August 27, 2018



Description & Location KP826+745
Photo facing east
Picker truck unloading

August 27, 2018



Description & Location KP 327+340
Photo facing east
Back Hoe just unloaded



August 27, 2018
Description & Location KP 831-200
Photo facing east
of the disturbed area

Lat / Long	INR 16-34-0-24-W1	UTM N/E
49.709092	74 m South, 31 m West	5507586 m
-100.644842	Bearing: 270° (TN); GPS: ±5 m	381412 m
Elev: 426 m	August 27, 2018 14:53:04	CM: 99



August 27, 2018
Description & Location: KP 836+400
Banister Environment/Utilities
Setting up wetland signs

Lat / Long	INR 16-21-0-22-W1	UTM N/E
49.677075	378 m South, 13 m West	5503661 m
-100.394661	Bearing: 285° (TN); GPS: ±5 m	399382 m
Elev: 431 m	August 27, 2018 14:01:28	CM: 99



August 27, 2018
Description & Location: KP 841+650
Grandfather's Beard

Lat / Long	INR 16-21-0-22-W1	UTM N/E
49.677075	378 m South, 13 m West	5503661 m
-100.394661	Bearing: 285° (TN); GPS: ±5 m	399382 m
Elev: 431 m	August 27, 2018 14:01:28	CM: 99



August 27, 2018
Description & Location: KP 886+910
Indigenous Medicinal Plant on ROW
(Dark Brown color)



August 27, 2018
Description & Location: KP 886+700
Cedar Waxwing Bird on ROW
Ducks Unlimited Project area



August 28, 2018
Description & Location: SF35 facing North East



August 28, 2018
Description & Location: SSKP 824+350
Bore section
Welders doing the cap on their weld
Facing NE



August 28, 2018
Description & Location: SSKP 816+650
Protective barrier for wetlands



August 28, 2018
Description & Location: SSKP 816+650
Improperly installed T-Post
Facing SE



August 28, 2018
Description & Location: SSKP 825+310
Banister truck on ROW with flag down



August 29, 2018
Description & Location: SSKP 908+000
Arrowhead discovered on ROW
Archaeologist estimates 3500 years old



August 30, 2018
Description & Location KP 832+300
Open Pit - Photo taken facing south



August 30, 2018
Description & Location KP 829+253
Workers laying G.T.O
Facing North



August 30, 2018
Description & Location: SSKP 820+842
Dozer/Hoe stripping topsoil
Workers getting ramp set up to protect hotline
Photo taken facing north



August 30, 2018
Description & Location: SSKP 823+430
Excavator digging entry pit for road bore
Facing NW



August 31, 2018
Rare Plant - Schweinitz's Flatsedge
Occurrence located approximately
39m north of the trench line



August 31, 2018
Description & Location: SSKP 846+350
Rare Plant - Nuttall's Sunflower Var. Rydbergii
Occurrence is located approximately
24m south of trench line



August 31, 2018
Description & Location: SSKP 827+400
Excavator finishing road ramp to access Rd # 21



August 31, 2018
Description & Location: SSKP 844+950
Old car in our ROW in trees



September 1, 2018
Description & Location KP 817 + 789
Workers using excavator to pound steel pipes into ground
Photo facing west



September 1, 2018
Description & Location: SSKP 899+125
Picker truck helping set up of side boom
Worker by boom tracks installing pin
Facing North East



September 1, 2018
Description & Location: SSKP 900+300
Skid piles left by low bed truck
Used to crotch pipe securely
Piles are 20m apart 2 crotches per pipe
Facing West



September 1, 2108
Description & Location: Nesbitt Stockpile Yard
Excavator with pipe claw attachment
This way is safer before it was suction grip
Loading Heavy wall 19.1mm pipe
Facing South



September 1, 2018
Description & Location: SSKP 900+300
Side Boom unloading Premay truck
Side Boom lifts pipe on last one and pulls ahead
then its lowered into crotch
Facing South East

APPROVALS



Lee Bear
Construction Monitor

October 19, 2018

Date



Daniel Tober
Senior Environmental Scientist

October 19, 2018

Date