

SWAN LAKE FIRST NATION – MATRIX SOLUTIONS INC. PARTNERSHIP

INDIGENOUS CONSTRUCTION MONITORING

WEEKLY REPORT

SPREAD 7

OCTOBER 1ST TO OCTOBER 6TH



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 October 1st to October 6th, 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)	4	1 HER-160	archeologists will be working throughout the week.	
Traditional Use Area (hunting, fishing, gathering, trapping)		Heritage site HER-160	being stripped by Grade crew with archaeologists present work ongoing will continue to help them.	
Traditional Use Area (hunting, fishing, gathering, trapping)		SSKP 879+610		
Traditional Use Area (hunting, fishing, gathering, trapping)		Heritage Sensitive Area HER-155 SSKP 835+480		
Rock Formations (rocks of significance, tipi rings, etc.)	N/A			
Artifacts	N/A			
Bones	1	Cattle bones on ROW SSKP 907+150.	no further action required	
Potential Gravesites	N/A			

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Environmental Features

Field Observation	# of occurrences	Description and Mitigation Measures	Mitigation Status	Further Action Required (Yes/No)
Medicinal or Cultural Plants	1	Rare Plant: 10 plants observed of the American Lopseed SSKP 835+330		
Aquatic Life	1	Northern Leopard Frog	Grade crew stripping through feature. no frogs area swept	No further action required.
Animal Observations or Burrows	1	2 Coyotes on ROW SSKP 847+500		no further action required.
Bird Nests	N/A			
Trees (Red Willow)	N/A			
Wetlands	22	MB-1039 Semi- Permanent Marsh Class 4 Wetland Complex	Coating/Trenching/Lower in working in wetlands work ongoing.	
Wetlands		MB-091 Seasonal Marsh Class 3 Wetland Complex	Grade crew stripping around wetlands work will be ongoing.	
Wetlands		MB-092 Semi-Permanent Marsh Class 4 wetland Complex	Grade crew stripping around wetlands work will be ongoing.	



MB-080 Seasonal Marsh Class 3 Wetland Complex SSKP 854+260 - MB-081 Broad-Leaf Treed Swamp Wetland Complex SSKP 854+650 - MB-082 Broad-Leaf Treed Swamp Wetland Complex SSKP 855+150 - MB-083 Semi- Permanent Marsh Class 4 Wetland Complex SSKP 855+730 - MB-084 Seasonal Marsh Class 3 Wetland Complex SSKP 857+130 - MB-085 Broad-Leaf Treed Swamp Wetland Complex SSKP 857+770 -MB-090 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 862+900 -MB-091 Seasonal Marsh Class 3 Wetland Complex SSKP 863+460 -MB-092 Semi- Permanent Marsh Class 4 Wetland Complex SSKP 864+210 MB-046 Open Water	All wetlands will require further action throughout various stages of construction on ROW.	
Pond Class 5 Wetland		

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Complex SSKP 835+810 -MB-1048B Seasonal Marsh Class 3 SSKP 836+350 -MB-1049C Seasonal Marsh Class 3 SSKP 836+420 -MB-048 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 837+040		
Broad leave treed swamp wetland complex. MB-085		
MB-071 Semi-Permanent Marsh Class 4 Wetland Complex SSKP 849+650 MB-072 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 849+850 MB-073 Seasonal Marsh Class 3 Wetland Complex SSKP 850+340 MB-074 Seasonal Marsh Class 3 Wetland Complex SSKP 850+890 MB-075 Ephemeral/Temporary Marsh Class 1 & 2 SSKP	All wetlands will be worked on throughout the project.	

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		851+550 MB-1039 Semi- Permanent Marsh Class 4 Wetland Complex SSKP 820+400		
Watercourse Crossing	1	Souris River Somerville SSKP 907+000.	HDD site is drilling and will be ongoing	



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 monitor Spread 7.

October 1, 2018- Safety included: Weather, pay attention to road conditions. Keep lights and brake lights clean at all times. Obey all construction signs and drive slowly. All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled. As a Senior Monitor I'm accountable for safety performance. All employees are responsible for safety. Safety is 24/7 and benefits family, friends, coworkers and community. 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/Environment: Cloudy. Light snow beginning in the morning then changing to periods of rain late in the morning. High 6 UV Index 1 or low.

Keep all areas of work clean and gravel roads travelled as well. Minimize the number of environmental non-compliances. Provides Environmental Due diligence. Increase and strengthen the communication links between Contractors and Enbridge Construction and Environmental staff regarding environmental considerations and mitigation. Provide daily on the job awareness/education through assessment and communication of the environmental considerations and mitigation.

General: After meeting the junior monitors would go get oil change and head to Rd # 38 where the archaeologists would be watching Grade crew strip topsoil. The senior monitor would go assess Souris River HDD first than head down ROW towards Rd # 38 as well. SSKP 907+000 went to Souris River Somerville HDD site. Did a sweep of the area and it looks really good no signs of Frack fluid. Came across some cattle bones close to the river on the ROW and no further action will be required as we won't strip this area. SSKP 813+200 Went to Bone Yard to monitor the Trenching and Lower in crews. There still slowly making progress as the wetlands and sand are making it difficult. The Trenching crew made it to the east side of bone yard and the Lower in crew is just on the west side of bone yard. SSKP 816+600 Coating mainline crew was slowed by rains as they can't coat because it can cause corrosion. They were working between Rd # 5 and Rd # 6. Also working through a Semi-Permanent Marsh Class 4 Wetland Complex. SSKP 863+350 Went back to Rd # 38 to monitor with the archaeologists watch the Grade crew strip the topsoil. It's the most significant Heritage Site on our ROW HER-160. We will aid them as it's important to the local Indigenous people if we were to find anything. The archaeologist I talked to, said the more people they have watching and looking the better the chances to find artifacts. SF # 38 Archaeologist found 3 flakes and 12 small bone fragments. He suspects it could be bison bones. 3 dozers pushing topsoil west of SF # 38. SF # 37 Dozers stripping topsoil east and west side of SF # 37. Building ramps west side of SF # 37 SF # 23 Main gang parked on the ROW, cigarette butts on the ground near the pipes. 3 Poor boy shacks up in the air on the side booms.



Work Forecast: Continue to aid archaeologists, monitor sensitive areas and return back to SF # 38.

October 2, 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. All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled. As a Senior Monitor I'm accountable for safety performance. All employees are responsible for safety. Safety is 24/7 and benefits family, friends, co-workers and community. 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/Environment: Cloudy with 60 percent chance of showers in the morning and early in afternoon. Periods of rain beginning early in the afternoon. Fog patches dissipating in the morning. High 7. UV index 2 or low. Keep all areas of work clean and gravel roads travelled as well. Minimize the number of environmental non-compliances. Provides Environmental Due diligence. Increase and strengthen the communication links between Contractors and Enbridge Construction and Environmental staff regarding environmental considerations and mitigation. Provide daily on the job awareness/education through assessment and communication of the environmental considerations and mitigation.

General:

The senior and junior monitors would go to Rd # 38 to aid the archaeologists with sweeping the area for any findings and to also monitor sensitive areas on ROW. SSKP 863+400 went to HER-160 Traditional Land Use area with archaeologists. No findings as of today. The Grade crew stripped low enough for the archaeologists to examine a layer with a black strip which is 1.2 m below topsoil. They are also stripping in 3 different wetlands.

- -MB-090 Ephemeral/Temporary Marsh Class 1 & 2
- -MB-091 Seasonal Marsh Class 3 Wetland Complex SSKP 863+460
- -MB-092 Semi-Permanent Marsh Class 4 Wetland Complex SSKP 864+210 Will return possibly tomorrow if archaeologists still in area.

There was 2 Access crews installing wetland ramps through 6 wetlands.

- MB-080 Seasonal Marsh Class 3 Wetland Complex SSKP 854+260
- MB-081 Broad-Leaf Treed Swamp Wetland Complex SSKP 854+650
- MB-082 Broad-Leaf Treed Swamp Wetland Complex SSKP 855+150
- MB-083 Semi-Permanent Marsh Class 4 Wetland Complex SSKP 855+730
- MB-084 Seasonal Marsh Class 3 Wetland Complex SSKP 857+130
- MB-085 Broad-Leaf Treed Swamp Wetland Complex SSKP 857+770

SSKP 877+130 to 877+780 is a Wildlife Feature which had the Northern Leopard Frog. Area was swept and no frogs in area. The Power Dozer was stripping in this area today. No further action required for frogs. SSKP 879+610 Traditional Land Use area. The tractor was disking topsoil near a hunting area that's north of ROW. As in previous reports there's increased Moose population in this area. SSKP 899+760 on east side of Black Creek (WC) they have finished welding pull head and were lining up the drilling



rods. They will set up Side-Booms to Put the Black Creek HDD section on rollers in the next couple of days. SF # 4 Bone yard. Lower in crew trenching out the water of the open-end ditch west. Heating the pipe to dry. SF # 6 Side booms lowering in the pipe near the entrance of SF # 6 south side. No concerns. SF # 11 Coating being done. Worker raking and picking up debris from that has fallen from the pipe. SF # 38 Dozers stripping topsoil west of SF# 38, 2 dozers stripping topsoil east of SF # 38.

Archaeologist and environmental going through topsoil with shovels looking for bone fragments or artifacts.

Work Forecast: Going to check SF # 38

October 3, 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. Congested sites, pay attention to moving equipment, keep eye contact with operators at all times. Communication, staying in touch with the supervisor at all times now that the weather is unpredictable, let your co-workers know what your plans are for the day and what time you are leaving and what time you are returning. All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled. As a Senior Monitor I'm accountable for safety performance. All employees are responsible for safety. Safety is 24/7 and benefits family, friends, co-workers and community. 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/Environment: Periods of rain changing to snow this morning. Risk of freezing rain this morning. Snowfall amount 5 to 10 cm. Wind northeast 20 km/h becoming northwest 30 gusting to 50 this afternoon. High plus 2. UV index 1 or low. Keep all areas of work clean and gravel roads travelled as well. Minimize the number of environmental non-compliances. Provides Environmental Due diligence. Increase and strengthen the communication links between Contractors and Enbridge Construction and Environmental staff regarding environmental considerations and mitigation. Provide daily on the job awareness/education through assessment and communication of the environmental considerations and mitigation.

General: After morning meeting discussed road conditions before we headed out as there is freezing rain in forecast and turning into snow. Drive safe and assess crews that are working. Rd # 28 at SSKP 842+800 Bending crew shut down. SSKP 836+000 Pipegang shut down, but there currently working in several sensitive areas including 4 wetlands, 1 TLU and 1 Rare plant. The areas are.

Wetland:

- -MB-046 Open Water Pond Class 5 Wetland Complex SSKP 835+810
- -MB-1048B Seasonal Marsh Class 3 SSKP 836+350
- -MB-1049C Seasonal Marsh Class 3 SSKP 836+420
- -MB-048 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 837+040

TLU: Heritage Sensitive Area HER-155 SSKP 835+480

Rare Plant: 10 plants observed of the American Lopseed SSKP 835+330



SSKP 863+500 Archaeologists sweeping area at Heritage Sensitive area. Around 11am they headed in as the snow fall covered the ground making it more difficult to locate any artifacts. SF # 4 Banister truck loading steel. Stopped the work at the boneyard SF # 4. muddy for the workers and equipment to do work for the day. SF # 6 Shut down. No activity. SF # 23 Banister worker waiting at the site for banister semi-truck.

Work Forecast: Will monitor sensitive areas where work is being done. As of now the conditions are really wet as we had rain last night as well as today. Return to SF # 37 and SF # 38.

October 4, 2018 - Safety included: Heavy equipment, maintain good eye contact with the heavy equipment operator. Keep a fair distance away from moving equipment. Slips, trips, falls. Pay attention to where you are walking, pick up fallen debris, garbage, tools etc. All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled. As a Senior Monitor I'm accountable for safety performance. All employees are responsible for safety. Safety is 24/7 and benefits family, friends, co-workers and community. 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/Environment:

Mainly sunny. High plus 4. UV index 4 or moderate. Keep all areas of work clean and gravel roads travelled as well. Minimize the number of environmental non-compliances. Provides Environmental Due diligence. Increase and strengthen the communication links between Contractors and Enbridge Construction and Environmental staff regarding environmental considerations and mitigation. Provide daily on the job awareness/education through assessment and communication of the environmental considerations and mitigation.

General: Crews would be working today as we had our first frost on the ground. After meeting we decided to monitor sensitive areas where there is work going on. SSKP 847+500 on my way to monitor the stringing crew going through wetlands I noticed lots of tracks Moose, Deer and smaller tracks. In this area I also had an animal observation as I came up on a hill seeing two Coyotes below on the ROW they started running as soon as they seen me I grabbed my camera. I howled and one of them stopped broad side. I was able to get a good picture. The Stringing crew wasn't far from where I seen the two Coyotes, they were working through 5 different wetlands today.

MB-071 Semi-Permanent Marsh Class 4 Wetland Complex SSKP 849+650

MB-072 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 849+850

MB-073 Seasonal Marsh Class 3 Wetland Complex SSKP 850+340

MB-074 Seasonal Marsh Class 3 Wetland Complex SSKP 850+890

MB-075 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 851+550

This was the wettest part of the ROW I've been on so far. They did a good job placing pipe safely with the slippery conditions.

SSKP 820+400 Semi-Permanent Marsh Class 4 Wetland Complex MB-1039 Coating crew working through wetlands. Rd # 64 Moving Souris River HDD section into place and welding. SF # 1 Clean and organized. No concerns. No activity. SF # 4 Bone yard. Very muddy and congested at the sf entrance. SF # 26 Hydro vac truck pumping up



water and muck out of the trench box at the entrance of SF # 26 west side. Poor boy welders shacks being moved from SF # 26 west Across to SF # 26 east side. SF # 34 fencing crew putting in the stakes before they start laying the geotec. Excavator loading rock truck with sand to haul to the ramps.

Deficiencies

Rd # 54 & # 64 Sign broken 150 m north of highway 10 & 2

Work Forecast: Wet weather forecast tomorrow will monitor what we can. Tomorrow we have a video meeting with other monitors from other spreads from 2-3pm.

October 5, 2018 - Safety included: Heavy equipment, maintain good eye contact with the heavy equipment operator. Keep a fair distance away from moving equipment. Slips, trips and falls. Pay attention to where you are walking, pick up fallen debris, garbage, tools etc. Keep vehicle clean. Weather, dress warm and wear the proper P.P.E. All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled. As a Senior Monitor I'm accountable for safety performance. All employees are responsible for safety. Safety is 24/7 and benefits family, friends, co-workers and community. 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/Environment:

Periods of snow ending in the afternoon the cloudy. Amount 5 to 10 cm. High plus 2. UV index 1 or low. Keep all areas of work clean and gravel roads travelled as well. Minimize the number of environmental non-compliances. Provides Environmental Due diligence. Increase and strengthen the communication links between Contractors and Enbridge Construction and Environmental staff regarding environmental considerations and mitigation. Provide daily on the job awareness/education through assessment and communication of the environmental considerations and mitigation.

General: After our meeting we were told there might not be many crews working, so we headed out to see what we could monitor for the day. Went to Rd # 64 to watch the Souris River HDD section welded. The north pipe was welded yesterday and today they did the south section. The archaeologists were present but there wasn't any excavating going on as they were shut down from wet weather. The Test crew will be pulling the pipe at Black Creek HDD in next couple of days. The drilling pipe is through the surface and needs to be connected before the bore pipe is pulled. At Rd # 54 The hydro vac crew is locating the parallel Clipper line. At Rd # 47 The Grade crew is shut down from weather conditions. SF # 37 Workers waiting for the ok to start work. Equipment parked. No concerns. Workers waiting in the bus for the go ahead to start building the wash station. Snowing and raining at SF # 37, visibility poor. SF # 33 Flaggers on the road, installing wetland ramps west of SF # 33. Maroca machine hauling top soil east of SF # 33 to SF # 33 west. Came in early had our meeting with Matrix Monitors and Enbridge representatives. We talked about Environmental Alignment sheets. Meeting went well was good to hear thoughts and concerns.

Work Forecast: We will monitor what we can tomorrow depending on weather as it's been really wet. Check on SF # 34



October 6, 2018 - Safety included: Good housekeeping. Cover and tape down cords. Mark and identify spills and wet areas. Proper P.P.E. Foot, hand, hearing, head, eye and ear protection. Eliminate- The hazard by redesigning the process. Substitute- with a safer process or product. Control- the hazard at the source. Reduce- exposure through administrative and work practices.

Weather forecast/Environment: Temp 2 . Risk of freezing rain. Cloudy.

Follow all Bio Security, Temp 2. Have your vehicle fine clean and bleach the tires before entering a RESTRICED AREA.

General: Tailgate meeting. Morning meeting with Greg Lewis from Matrix. SF # 46 Equipment parked safely and neat. Very muddy, no activity, no concerns. SF # 47 Very muddy, slippery at the entrance of the SF. Parked equipment. No concerns. SF46 (877+000) Progress is really slow down the ROW today due to poor weather. SF47(878+800) Banister have started to do some stripping down the ROW but had to stop because of wet conditions.

Work Forecast: Monitor the ROW on Tuesday morning.



Photos of Sites Visited & Topics Discussed This Week

October 1, 2018



Description & Location KP 861+702.9

Photo taken facing west.

3 dozers, 1 excavator stripping the topsoil



Description & Location: SSKP 907+000

Souris River HDD (Somerville)
Site wasn't too muddy starting to dry
Swept the area was clean
Facing east



Description & Location: SSKP 863+600

Excavator back filling slurry pit
Disking on the left
Archeologist in middle
Facing north east



Description & Location KP 863+371.9

Photo taken facing east.

SF #38 heritage site. Sensitive area



Description & Location: SSKP 907+150

Bones on ROW (Cattle)
Pink north boundary picture top of photo

Was taken close to Souris River



Description & Location: SSKP 864+210

Dozer stripping topsoil
Archeologists in left side in picture
Helped them scan the area
Photo facing east



October 2, 2018



Description & Location KP 812+100

Photo taken facing east
Lower in crew trenching out the water from the open ditch.



Description & Location: SSKP 863+400

Heritage and Wetland site
Dozer on left back blading ROW
Archeologists assessing ROW
Photo facing east



Description & Location: SSKP 879+610

Traditional Land Use Area (Moose)
Tractor using disc to loosen topsoil
Stakes to the left indicate north boundary
Photo facing east



Description & Location KP-817+741.1 51 N

Photo taken facing south.

Side booms lowering in the pipe at SF # 6 south side.



Description & Location: SSKP 877+780

Power Dozer pushing topsoil on ROW
Pushing soil in Wildlife Feature
The Northren Leopard Frog not in area
Facing south west

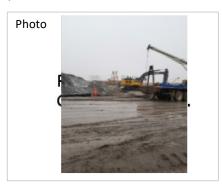


Description & Location: SSKP 899+760

East of Black Creek & the HDD section Excavator on left lining up pipe Pull Head (blue on pipe) welded Facing east



October 3, 2018



Description & Location KP-813 +200.0 Bone

Photo taken facing west.

Workers picking up steel and loading it on the truck.



Description & Location: SSKP 838+500

Rd #38 where the archeologists are Before snow 10am Facing east



Description & Location: SSKP 838+500

Pipegang shut down Working through wetlands Facing Southeast



Description & Location KP-830+923.0

Photo taken facing west.

Banisters workers waiting for the semi

truck.



Rd # 38 where the archeologists are Before after snow 11am

ore after snow 11am Facing east





Description & Location: SSKP 838+220

HD Bore crew at Rd # 27
Also shutdown from wet conditions
Facing east



October 4, 2018



Photo taken facing east.

Poor boy crew moving their welding shacks.

Broad leave treed swamp wetland complex.

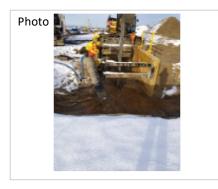


Coyote just north of ROW
There was 2 of them on ROW
Lots of wildlife in this area
Facing north



Description & Location: SSKP 907+900

Souris River HDD section
6 Side-Booms holding pipe
Being held and welded in middle (smoke)
Facing east



Description & Location KP- 836+409

Photo taken facing west.

Workers pumping out trench box. Water and muck



Description & Location: SSKP 820+400

Semi-Permanent Marsh Class 4 Wetland

MB-1039 Blasting the weld

2 Blasters on north and south of pipe

Facing south



Description & Location: SSKP 819+150

Semi-Permanent Marsh Class 4 Wetland

MB-1039 Wetland access ramp

Coating completed welds

Facing West



October 5, 2018



Description & Location KP-861+702.9

Photo taken facing west Parked dozers. Neat and tidy, No concerns



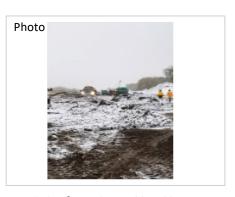
Description & Location: SSKP 899+750

Black Creek Bore exit
Drill pipe ready to hook up
42"inch reamer to left
Facing north



Description & Location: SSKP 840+750

Grade crew is shut down
Conditions are very wet on ROW
Power Dozer's and Grader in picture
Facing east



Description & Location KP-861+702

Photo taken facing east.

Photo taken facing east.

Workers waiting for the go ahead to start work.



Description & Location: SSKP 900+100

Souris River second bore section Being welded for HDD pull Conditions are slippery Facing east



Description & Location: SSKP 890+850

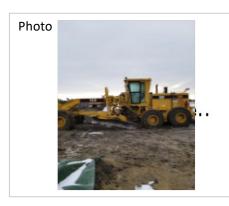
Hydro vac crew starting to work

Daylighting the Clipper line

Facing east

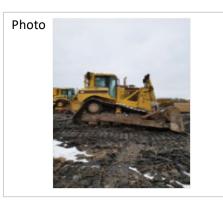


October 6, 2018



Description & Location KP-877+058.7

Photo taken facing east
Checked parked equipment for leaks or spills.
No concerns. Neat and tidy



Description & Location KP-878+739.1

Photo taken facing east.
Equipment parked safely. No concerns.
Checked parked equipment for leaks,
spills, garbage.



SF46(KP877+000)

Banister have started to strip the topsoil but had to stop because of the weather. PHOTO TAKEN FACING EAST



SF47 (KP878+800)

Banister had to stop stripping because of poor weather conditions.

PHOTO TAKEN FACING EAST



Senior Environmental Scientist

APPROVALS

13		
	November 28, 2018	
Lee Bear	Date	
Senior Construction Monitor		
A.Se	November 28, 2018	
Daniel Tober	Date	