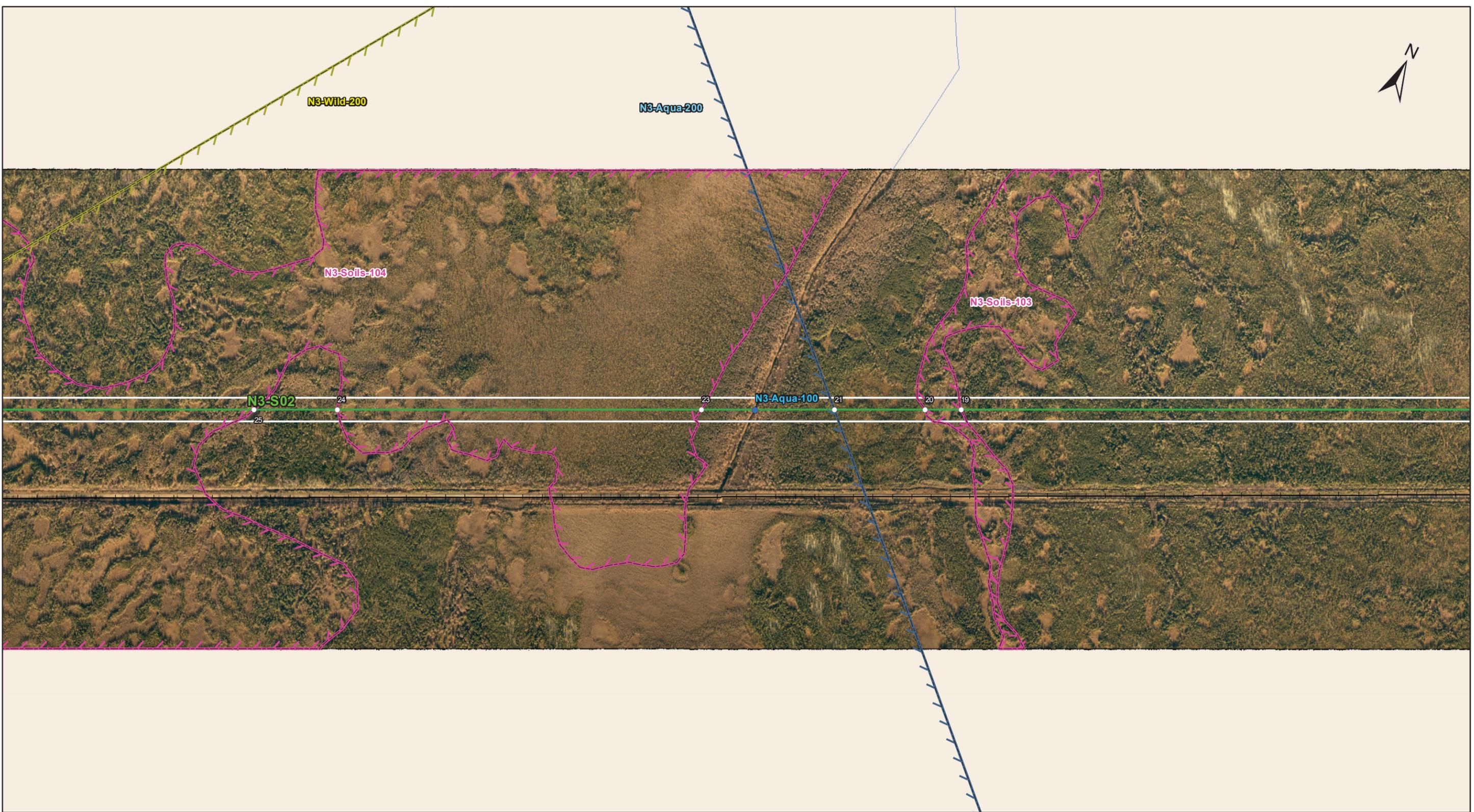


DOCUMENT PATH: G:\GIS\PROJECT_FOLDER00_HYDRO\11440054_BPIII_EPPARCMAPIESS_N3\BPIII_CENVPP_NIN2N3N4C1SECTIONBASEMAP_MAPBOOK_BTIB_STANTEC_20131128A.MXD



Coordinate System: UTM Zone 14N NAD83
 Data Source: MB Hydro, ProvMB, NRCAN
 Date Created: November 29, 2013

0 125 250 500
 Metres
 1:10,000

- Land Base**
- Transmission Line
 - Highway
 - Major Road
 - Local Road
 - Winter Road
 - Railway (Operational)
 - Railway (Discontinued)
 - Mining
 - Provincial Park

- Project Infrastructure**
- Angle Tower Locations
 - BPIII Final Preferred Route
 - 66 m Right of Way

- Points of Access***
- Proposed Access Point
 - Major Stream Crossing
 - Abandoned Rail Crossing
 - Rail Crossing
 - Transmission Line Crossing
 - Proposed Access Route
- *Labels correspond to BPIII Access Management Database

- ESS Features**
- Water**
 - Water Crossing
 - Wildlife**
 - Mammals and Habitat
 - Soils and Terrain**
 - Permafrost
 - Water**
 - Groundwater

**Bipole III Transmission Project
 Construction Environmental Protection Plan
 Construction Section N3
 Environmentally Sensitive Site Locations**

MAP NUMBER : 115

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N3-S02	N3-Soils-103	Permafrost	Site: 19 to 20	E-487766 N-6054445	E-487677 N-6054403	14N	98 m
N3-S02	N3-Soils-104	Permafrost	Site: 23 to 24	E-487130 N-6054137	E-486237 N-6053705	14N	992m
N3-S02	N3-Soils-104	Permafrost	Site: 25 to 26	E-486031 N-6053606	E-482493 N-6051892	14N	3931m

Potential Effects:

Melting or loss of permafrost due to disturbance of the active layer

Specific Mitigation:

- Carry out construction activities on frozen ground to minimize surface damage and rutting
- Use existing trails, roads or cut lines whenever possible as access routes
- Avoid organic soils containing permafrost to the extent possible
- Maintain shrub and herbaceous vegetation to the extent possible
- Remove trees by low-disturbance methods
- Confine vehicle traffic to established trails to the extent possible
- Implement erosion protection before commencing construction in accordance with Erosion/Sediment Control Plan

ESS Group : Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
N3-S02	N3-Aqua-100	Unnamed Tributary into Mitishto River	487260	6054201	14N	8m	8m	Marginal	Moderate

Potential Effects:

Habitat loss & contamination from structure foundations & installations; increased erosion & sedimentation of streams; damage to stream banks; loss of riparian vegetation; fish habitat disturbance & impeded fish movement

Specific Mitigation:

- Carry out construction activities on frozen ground to minimize surface damage, rutting and erosion
- Use existing trails, roads or cut lines whenever possible as access routes
- Identify and flag buffer areas prior to start of work
- Riparian Buffers shall be a minimum of 30m and increase in size based on slope of land entering waterway. Within these buffers shrub and herbaceous understory veg will be maintained along with trees that do not violate MH Veg Clearance Requirements
- 7m no machine zone will restrict equipment in close proximity to the waterbody except at the trail crossing.

- Adhere to Department of Fisheries and Oceans (DFO) Operational Statements for Temporary Stream Crossings, Ice Bridges and Snow Fills, and Overhead Line Construction
- No instream works or fording from April 15 - July 15

ESS Group : Groundwater

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N3-S02	N3-Aqua-200	Aquifers Vulnerable to contamination	Site: 21 to 22	E-487455 N-6054295	E-479552 N-6050468	14N	8780m

Potential Effects:

Potential groundwater contamination from a contingency event (e.g., spill)

Specific Mitigation:

- Marshaling yards will be located on upland sites where possible
- An Emergency Preparedness and Spill Response Plan will be developed and an emergency response spill kit will be kept on-site at all times in case of fluid leaks or spills from machinery

ESS Group : Mammals and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N3-S02	N3-Wild-200	Sensitive Caribou Range	Site: 17 to 18	E-491200 N-6056106	E-484798 N-6053008	14N	7112m

Potential Effects:

Potential disturbance to and loss of sensitive caribou habitat

Specific Mitigation:

- Harvest within caribou range boundary will not include shear blading except for access, conductor stringing trails, and tower footprints.
- No shear blading to clear the right of way (ROW) in the sensitive range. Selective cutting methods will only be used to remove danger trees, vegetation within tower footprint, access route, and helicopter access points, to maintain low tree, shrub and herb plant communities on the ROW. Use existing access roads and trails to the extent possible
- Maintenance trails to be maintained to reduce line of sight for hunters and predators. Remove trees by low-disturbance methods
- Annual ground inspection of towers to occur late in winter season to avoid creating packed snow trails that facilitate predator use of the ROW.

MAP NUMBER : 115 cont'd

- Any Manitoba Hydro constructed or improved access routes used to access the ROW for construction that will not be needed for future maintenance will be decommissioned on completion of construction. Any culverts or road improvements will be removed and the first 100 m from of the trail dug up to the extent possible. Available slash <1 m in height will also be evenly distributed over the access route to reduce the possibility of use by ATV traffic.

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* MAP SHEET FULLY WITHIN THE N3-AQUA-200 FEATURE
N3-Aqua-200



Coordinate System: UTM Zone 14N NAD83
 Data Source: MB Hydro, ProvMB, NRCAN
 Date Created: November 29, 2013

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- Wildlife**
- Mammals and Habitat
- Soils and Terrain**
- Permafrost
- Water**
- Groundwater

**Bipole III Transmission Project
 Construction Environmental Protection Plan
 Construction Section N3
 Environmentally Sensitive Site Locations**

MAP NUMBER : 116

ESS Group : Groundwater

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N3-S02	N3-Aqua-200	Aquifers Vulnerable to contamination	Site: 21 to 22	E-487455 N-6054295	E-479552 N-6050468	14N	8780m

Potential Effects:

Potential groundwater contamination from a contingency event (e.g., spill)

Specific Mitigation:

- Marshaling yards will be located on upland sites where possible
- An Emergency Preparedness and Spill Response Plan will be developed and an emergency response spill kit will be kept on-site at all times in case of fluid leaks or spills from machinery

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N3-S02	N3-Soils-104	Permafrost	Site: 25 to 26	E-486031 N-6053606	E-482493 N-6051892	14N	3931m

Potential Effects:

Melting or loss of permafrost due to disturbance of the active layer

Specific Mitigation:

- Carry out construction activities on frozen ground to minimize surface damage and rutting
- Use existing trails, roads or cut lines whenever possible as access routes
- Avoid organic soils containing permafrost to the extent possible
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- Remove trees by low-disturbance methods
- Confine vehicle traffic to established trails to the extent possible
- Implement erosion protection before commencing construction in accordance with Erosion/Sediment Control Plan

ESS Group : Mammals and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N3-S01	N3-Wild-200	Sensitive Caribou Range	Site: 17 to 18	E-491200 N-6056106	E-484798 N-6053008	14N	7112m

Potential Effects:

Potential disturbance to and loss of sensitive caribou habitat

Specific Mitigation:

- Harvest within caribou range boundary will not include shear blading except for access, conductor stringing trails, and tower footprints.
- No shear blading to clear the right of way (ROW) in the sensitive range. Selective cutting methods will only be used to remove danger trees, vegetation within tower footprint, access route, and helicopter access points, to maintain low tree, shrub and herb plant communities on the ROW. Use existing access roads and trails to the extent possible
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Potential disturbance to and loss of sensitive caribou habitat