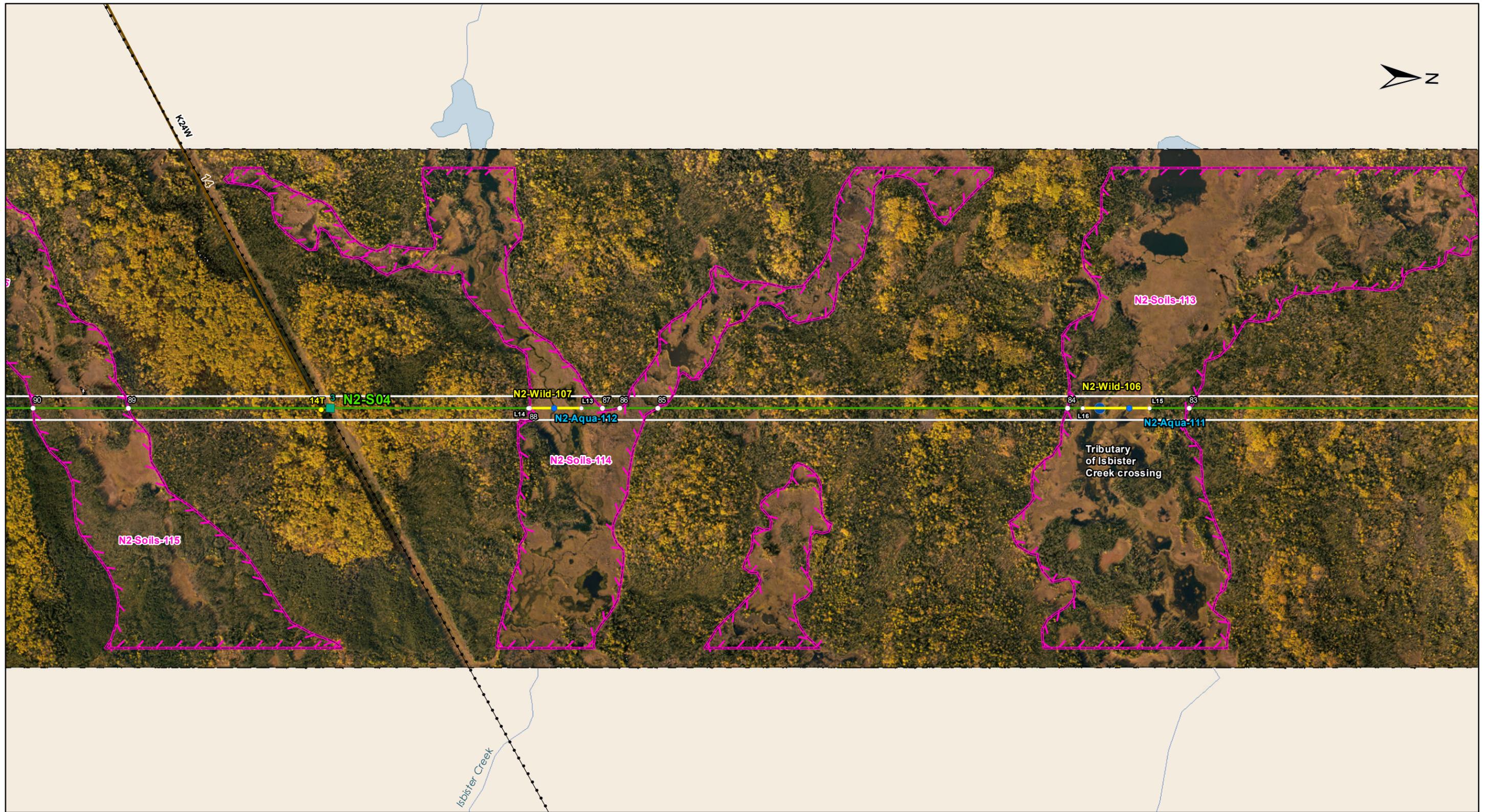


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Coordinate System: UTM Zone 14N NAD83
 Data Source: MB Hydro, ProvMB, NRCAN
 Date Created: December 02, 2013

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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
 - Birds and Habitat
- Soils and Terrain
 - Permafrost

**Bipole III Transmission Project
 Construction Environmental Protection Plan
 Construction Section N2
 Environmentally Sensitive Site Locations**

MAP NUMBER : 68

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S04	N2-Soils-113	Permafrost	Site: 83 to 84	E-596600 N-6187485	E-596610 N-6187154	14N	331 m
N2-S04	N2-Soils-114	Permafrost	Site: 85 to 86	E-596646 N-6186042	E-596649 N-6185939	14N	103 m
N2-S04	N2-Soils-114	Permafrost	Site: 87 to 88	E-596650 N-6185891	E-596657 N-6185693	14N	198 m
N2-S04	N2-Soils-115	Permafrost	Site: 89 to 90	E-596691 N-6184604	E-596700 N-6184346	14N	258 m

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 : Birds and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S04	N2-Wild-106	Waterfowl sensitivity area	Site: L15 to L16	E- 596603 N-6187377	E-596609 N-6187197	14N	180 m
N2-S04	N2-Wild-107	Waterfowl sensitivity area	Site: L13 to L14	E- 417373 N-6017338	E-416672 N-6016719	14N	935 m

Potential Effects:

Higher risk of wire collision, disturbance during breeding and nesting, risk of wire collision is localized to the right-of-way while construction disturbance can effect colonies up to 400 meters away

Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain setback during timing window
- Conduct priority assessment for bird diverters and other measures prior to transmission line stringing
- Install bird diverters or other measures at high priority sites

ESS Group : Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
N2-S04	N2-Aqua-111	Tributary of Isbister Creek	596604	6187322	14N	41m	41m	Marginal	Moderate
N2-S04	N2-Aqua-112	Isbister Creek	596654	6185761	14N	5m	5m	Marginal	Moderate

Potential Effects:

Habitat loss & contamination from structure foundations & installations; increased erosion & sedimentation of streams; damage to stream banks; loss of riparian vegetation.

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

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Coordinate System: UTM Zone 14N NAD83
 Data Source: MB Hydro, ProvMB, NRCAN
 Date Created: December 02, 2013

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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
- Soils and Terrain
- Permafrost

**Bipole III Transmission Project
 Construction Environmental Protection Plan
 Construction Section N2
 Environmentally Sensitive Site Locations**

MAP NUMBER : 69

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S04	N2-Soils-115	Permafrost	Site: 91 to 92	E-596713 N-6183918	E-596719 N-6183735	14N	183 m
N2-S05	N2-Soils-116	Permafrost	Site: 93 to 94	E-596630 N-6183077	E-596613 N-6183030	14N	50 m
N2-S05	N2-Soils-116	Permafrost	Site: 95 to 96	E-596600 N-6182994	E-596530 N-6182808	14N	199 m
N2-S05	N2-Soils-117	Permafrost	Site: 97 to 98	E-595671 N-6180496	E-595653 N-6180448	14N	52 m

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
N2-S05	N2-Aqua-113	Tributary of Isbister Creek	596578	6182939	14N	3m	3m	Marginal	Moderate

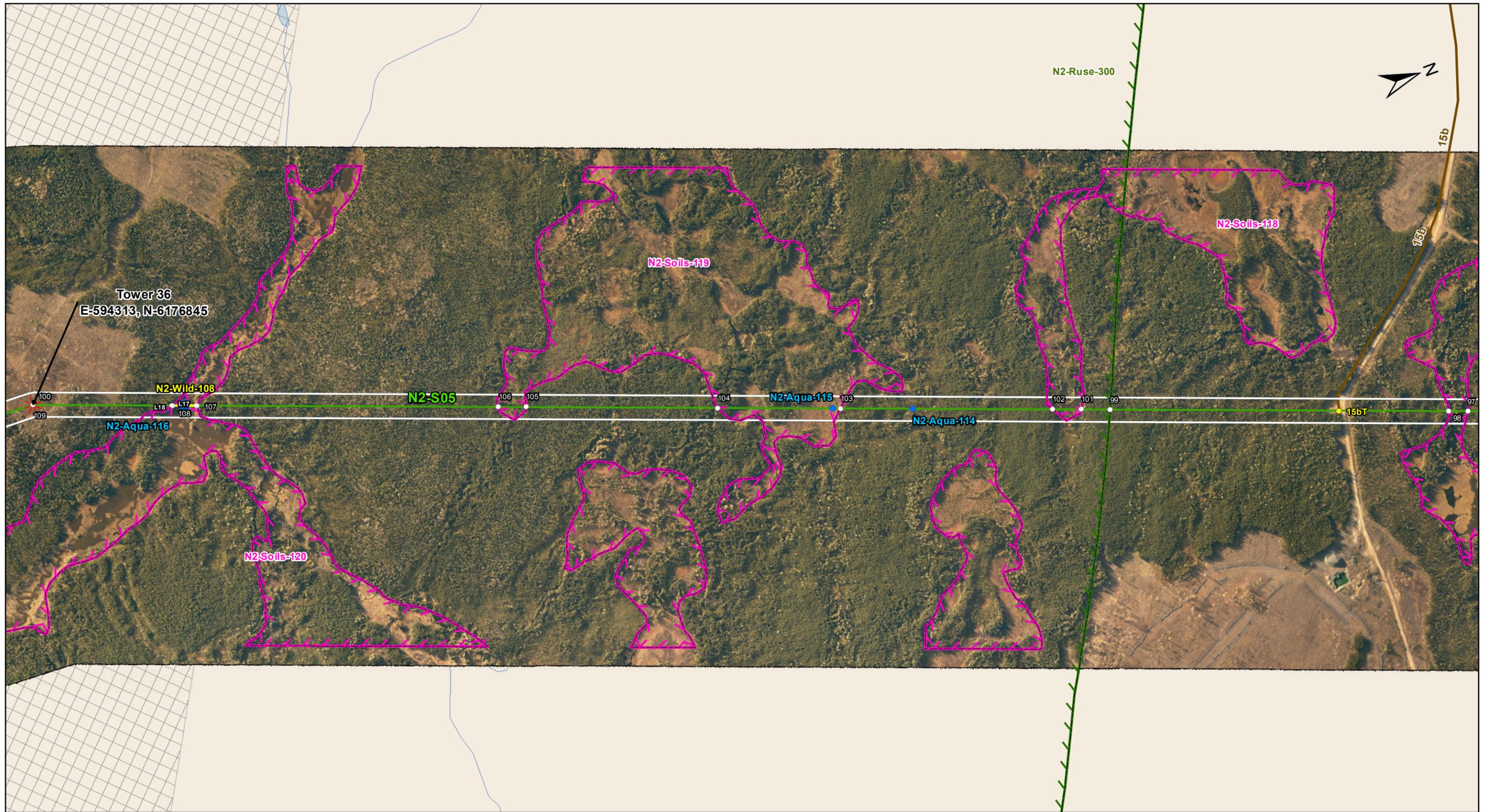
Potential Effects:

Habitat loss & contamination from structure foundations & installations; increased erosion & sedimentation of streams; damage to stream banks; loss of riparian vegetation.

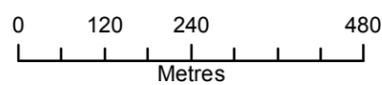
Specific Mitigation:

- 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

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Coordinate System: UTM Zone 14N NAD83
 Data Source: MB Hydro, ProvMB, NRCAN
 Date Created: December 02, 2013



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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
- Birds and Habitat
- Resource Use
- Forestry
- Soils and Terrain
- Permafrost

**Bipole III Transmission Project
 Construction Environmental Protection Plan
 Construction Section N2
 Environmentally Sensitive Site Locations**

MAP NUMBER : 70

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S05	N2-Soils-117	Permafrost	Site: 97 to 98	E-595671 N-6180496	E-595653 N-6180448	14N	52 m
N2-S05	N2-Soils-118	Permafrost	Site: 101 to 102	E-595305 N-6179512	E-595278 N-6179440	14N	77 m
N2-S05	N2-Soils-119	Permafrost	Site: 103 to 104	E-595077 N-6178899	E-594961 N-594961	14N	334 m
N2-S05	N2-Soils-119	Permafrost	Site: 105 to 106	E-594780 N-6178099	E-594753 N-6178029	14N	76 m
N2-S05	N2-Soils-120	Permafrost	Site: 107 to 108	E-594468 N-6177262	E-594445 N-6177199	14N	67 m

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 : Forestry

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S05	N2-Ruse-300	Fuel wood collection area	Site: 99 to 100	E-595332 N-6179586	E-594313 N-6176845	14N	2924 m
N2-S06	N2-Ruse-300	Fuel wood collection area	Site: 109 to 110	E-594313 N-6176845	E-594014 N-6169623	14N	7228 m

Potential Effects:

Potential to disrupt access to fuel wood area

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Avoid surface damage to and obstruction of access route
- Make fuel wood from ROW clearing available to local community where demand exists

ESS Group : Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
N2-S05	N2-Aqua-114	Tributary of Partridge Crop Lake	595145	6179083	14N	N/A	N/A	No Fish Habitat	Low
N2-S05	N2-Aqua-115	Tributary of Partridge Crop Lake	595070	6178880	14N	N/A	N/A	Marginal	Low
N2-S05	N2-Aqua-116	Unnamed Tributary of Partridge Crop Lake	594454	6177224	14N	68m	68m	Marginal	Moderate

Potential Effects:

Habitat loss & contamination from structure foundations & installations; Increased erosion & sedimentation of streams; Damage to stream banks; Loss of riparian vegetation

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

MAP NUMBER : 70 cont'd

ESS Group : Birds and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S05	N2-Wild-108	Waterfowl sensitivity area	Site: L17 to L18	E- 594468 N-6177262	E-594445 N-6177198	14N	67 m

Potential Effects:

Higher risk of wire collision, disturbance during breeding and nesting, risk of wire collision is localized to the right-of-way while construction disturbance can effect colonies up to 400 meters away

Specific Mitigation:

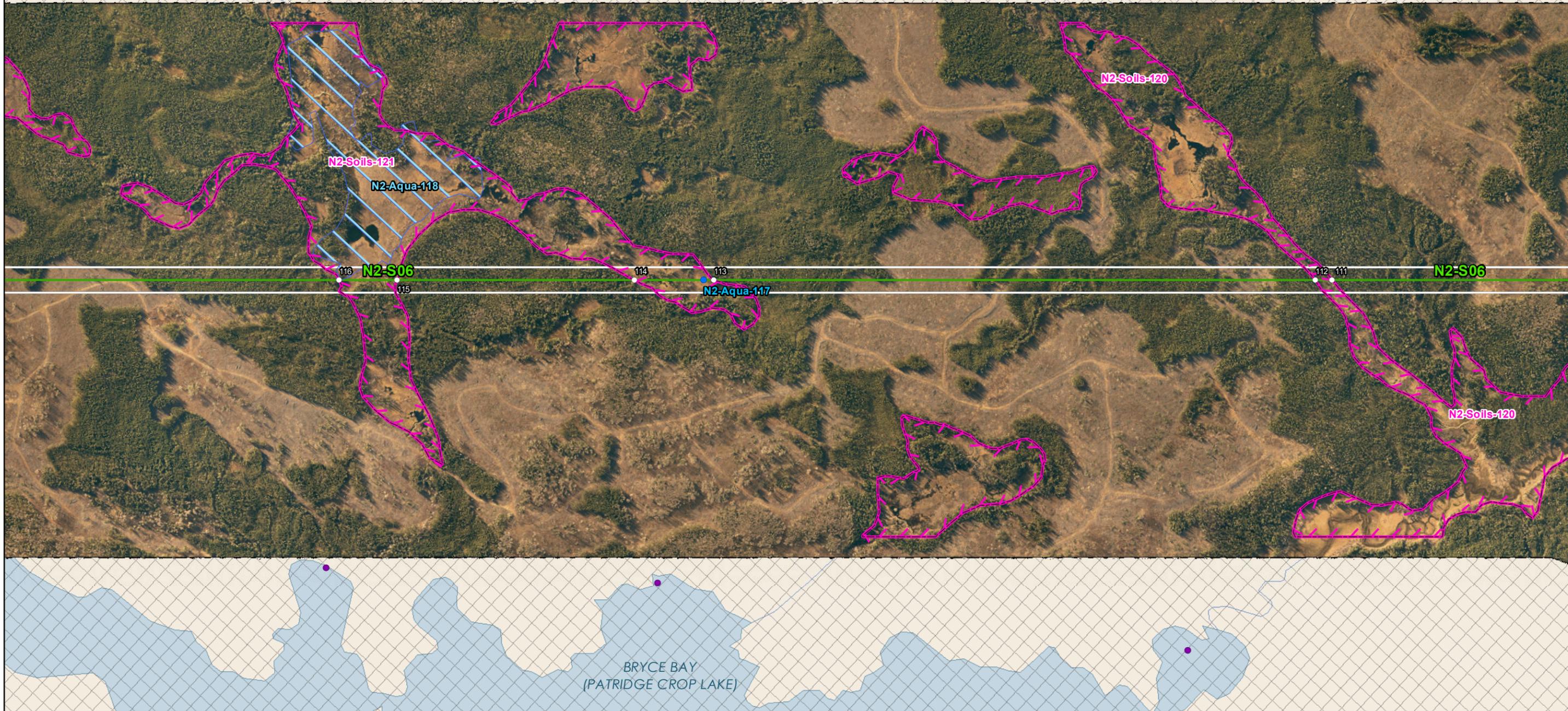
- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain setback during timing window
- Conduct priority assessment for bird diverters and other measures prior to transmission line stringing
- Install bird diverters or other measures at high priority sites

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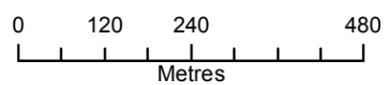
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* MAP SHEET FULLY WITHIN THE N2-RUSE-300 FEATURE

N2-Ruse-300



Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, ProvMB, NRCAN
Date Created: December 02, 2013



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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

- Heritage**
- Archaeological
- Water**
- Water Crossing
- Resource Use**
- Forestry
- Soils and Terrain**
- Permafrost

**Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N2
Environmentally Sensitive Site Locations**

MAP NUMBER : 71

ESS Group : Forestry

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S06	N2-Ruse-300	Fuel wood collection area	Site: 109 to 110	E-594313 N-6176845	E-594014 N-6169623	14N	7228 m

Potential Effects:

Potential to disrupt access to fuel wood area

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Avoid surface damage to and obstruction of access route
- Make fuel wood from ROW clearing available to local community where demand exists

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S06	N2-Soils-120	Permafrost	Site: 111 to 112	E-594286 N-6176182	E-594284 N-6176138	14N	43 m
N2-S06	N2-Soils-121	Permafrost	Site: 113 to 114	E-594221 N-6174612	E-594213 N-6174410	14N	202 m
N2-S06	N2-Soils-121	Permafrost	Site: 115 to 116	E-594188 N-6173809	E-594182 N-6173661	14N	148 m

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
N2-S06	N2-Aqua-117	Tributary of Partridge Crop Lake	594220	6174587	14N	N/A	N/A	Marginal	Low

Potential Effects:

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

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