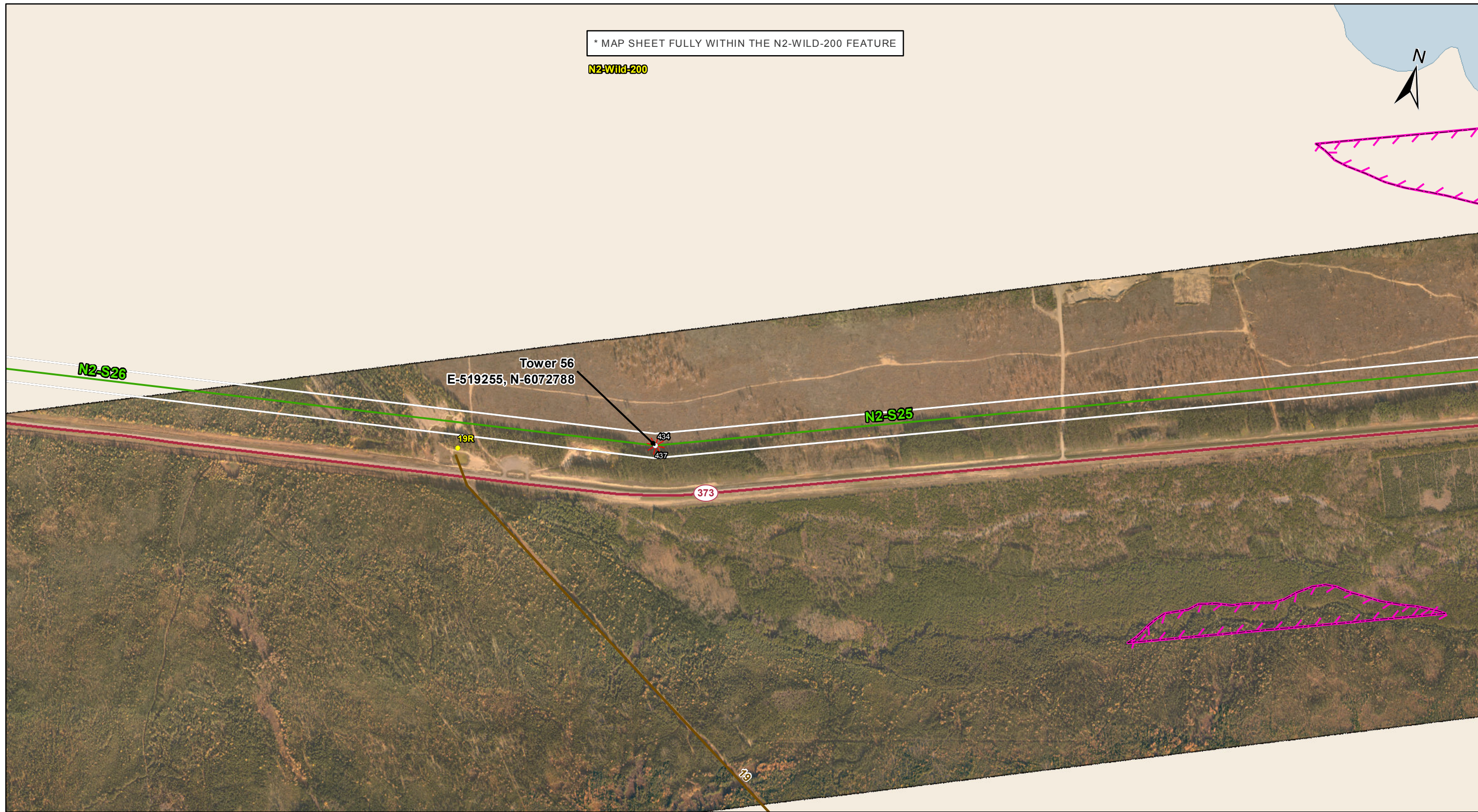


DOCUMENT PATH: G:_GIS_PROJECT_FOLDER001\1440054_BPIII_EPPARCMAPIESS_N2\BPIII_CENVPP_NIN2\N3\4C1\SECTIONBASEMAP_MAPBOOK_BTIB_STANTEC_20131201.MXD

* MAP SHEET FULLY WITHIN THE N2-WILD-200 FEATURE

N2-Wild-200



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

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
 - BP III 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 BP III Access Management Database

- ESS Features**
- Wildlife**
- Mammals and Habitat
- Soils and Terrain**
- Permafrost

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

MAP NUMBER : 105

ESS Group : Mammals

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S25	N2-Wild-200	MCWS Caribou Sensitive Area	Site: 433 to 434	E- 522779 N-6074015	E-519255 N-6072788	14N	3731 m
N2-S26	N2-Wild-200	MCWS Caribou Sensitive Area	Site: 437 to 438	E- 519255 N-6072788	E-513131 N-6072016	14N	6173 m

Potential Effects:

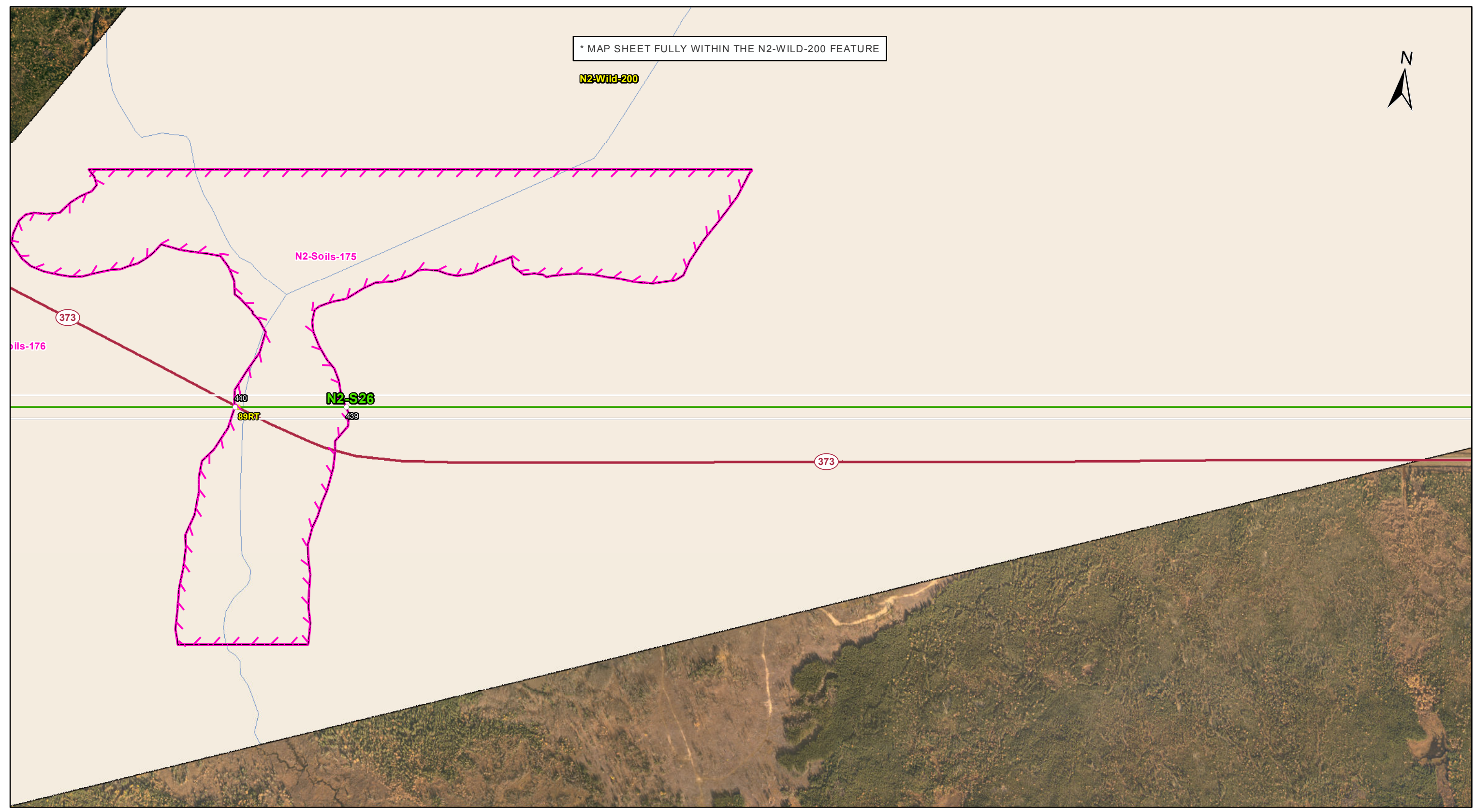
Potential disturbance to and loss of sensitive caribou habitat

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.
- 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.

DOCUMENT PATH: G:_GIS_PROJECT_FOLDER001\1440054_BPIII_EPP\ARCMAPIESS_N2\BPIII_CENVPP_NTIN2\N3\N4\CISECTIONBASEMAP_MAPBOOK_BTIB_STANTEC_20131201.MXD

* MAP SHEET FULLY WITHIN THE N2-WILD-200 FEATURE



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

0 120 240 480
 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

Wildlife

- Mammals and Habitat

Soils and Terrain

- Permafrost

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

MAP NUMBER : 106

ESS Group : Mammals

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S26	N2-Wild-200	MCWS Caribou Sensitive Area	Site: 437 to 438	E- 519255 N-6072788	E-513131 N-6072016	14N	6173 m

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.
- 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.

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S26	N2-Soils-175	Permafrost	Site: 439 to 440	E-514496 N-6072188	E-514193 N-6072150	14N	305 m

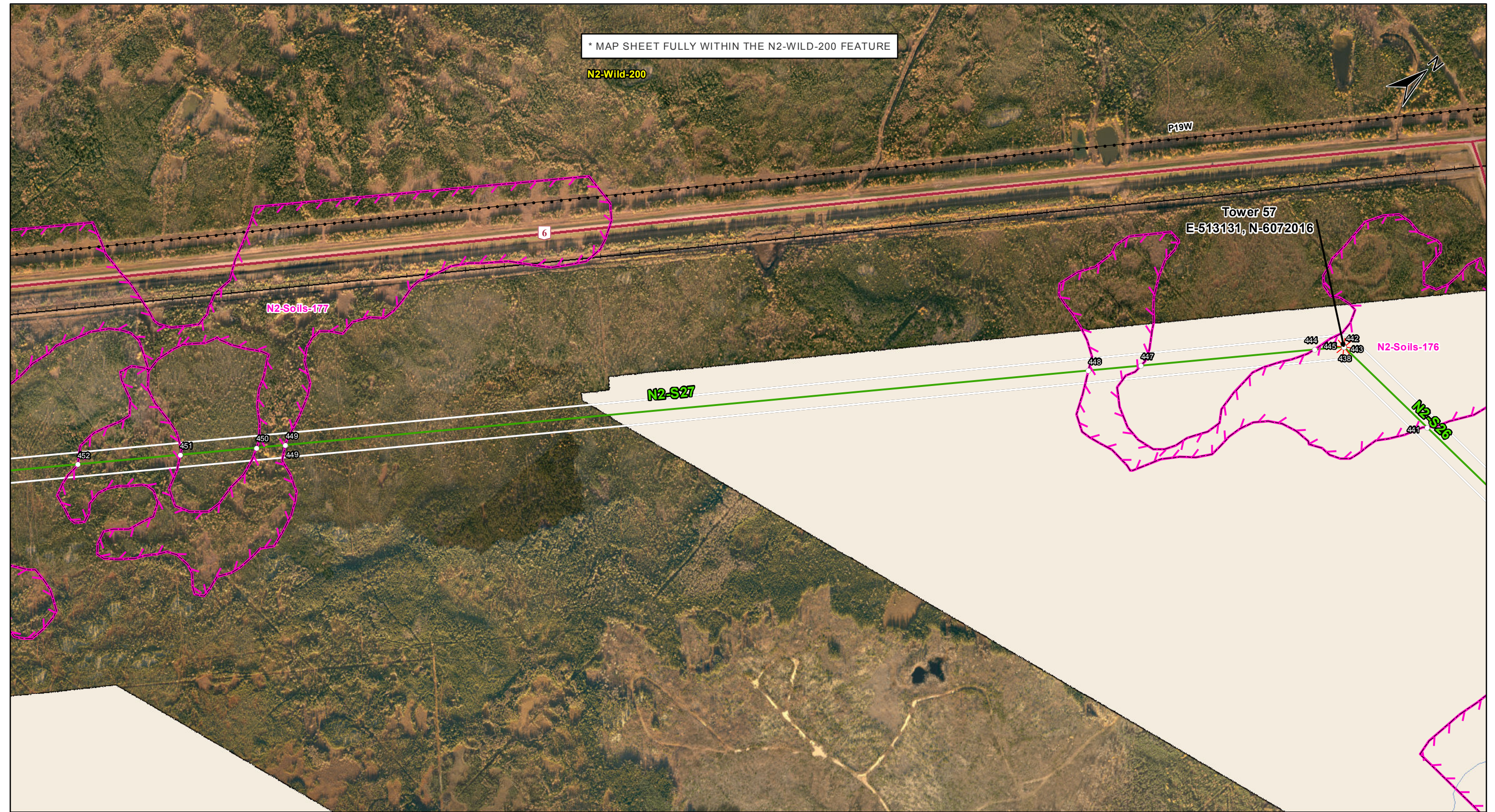
Potential Effects:

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

DOCUMENT PATH: G:_GIS_PROJECT_FOLDER0011440054_BPIII_EPPARCMAPIESS_N2\BPIII_CENVPP_NIN2\N3\N4\C1\SECTIONBASEMAP_MAPBOOK_BTIB_STANTEC_20131201.MXD



	<p>Coordinate System: UTM Zone 14N NAD83 Data Source: MB Hydro, ProvMB, NRCAN Date Created: December 02, 2013</p>	<p>Land Base</p> <ul style="list-style-type: none"> — Transmission Line — Highway — Major Road — Local Road — Winter Road — Railway (Operational) — Railway (Discontinued) — Mining — Provincial Park 	<p>Project Infrastructure</p> <ul style="list-style-type: none"> * Angle Tower Locations — BPIII Final Preferred Route — 66 m Right of Way 	<p>Points of Access*</p> <ul style="list-style-type: none"> ● Proposed Access Point ● Major Stream Crossing ▲ Abandoned Rail Crossing ▲ Rail Crossing ■ Transmission Line Crossing — Proposed Access Route <p><small>*Labels correspond to BPIII Access Management Database</small></p>	<p>ESS Features</p> <p>Wildlife</p> <ul style="list-style-type: none"> ■ Mammals and Habitat <p>Soils and Terrain</p> <ul style="list-style-type: none"> ■ Permafrost 	<p>Bipole III Transmission Project Construction Environmental Protection Plan Construction Section N2 Environmentally Sensitive Site Locations</p> <p>Map 107</p>
	<p>0 120 240 480</p> <p style="text-align: center;">Metres</p> <p style="text-align: center;">1:10,000</p>					

MAP NUMBER : 107

ESS Group : Mammals

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S26	N2-Wild-200	MCWS Caribou Sensitive Area	Site: 437 to 438	E- 519255 N-6072788	E-513131 N-6072016	14N	6173 m
N2-S27	N2-Wild-200	MCWS Caribou Sensitive Area	Site: 445 to 446	E- 513131 N-6072016	E-504973 N-6059662	14N	14805 m

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.
- 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.

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S26	N2-Soils-176	Permafrost	Site: 441 to 442	E-513441 N-6072056	E-513131 N-6072016	14N	313 m
N2-S27	N2-Soils-176	Permafrost	Site: 443 to 444	E-513131 N-6072016	E-513087 N-6071950	14N	80 m
N2-S27	N2-Soils-176	Permafrost	Site: 447 to 448	E-512826 N-6071556	E-512748 N-6071437	14N	142 m
N2-S27	N2-Soils-177	Permafrost	Site: 449 to 450	E-511543 N-6069613	E-511500 N-6069547	14N	79 m
N2-S27	N2-Soils-177	Permafrost	Site: 451 to 452	E-511386 N-6069374	E-511232 N-6069141	14N	279 m

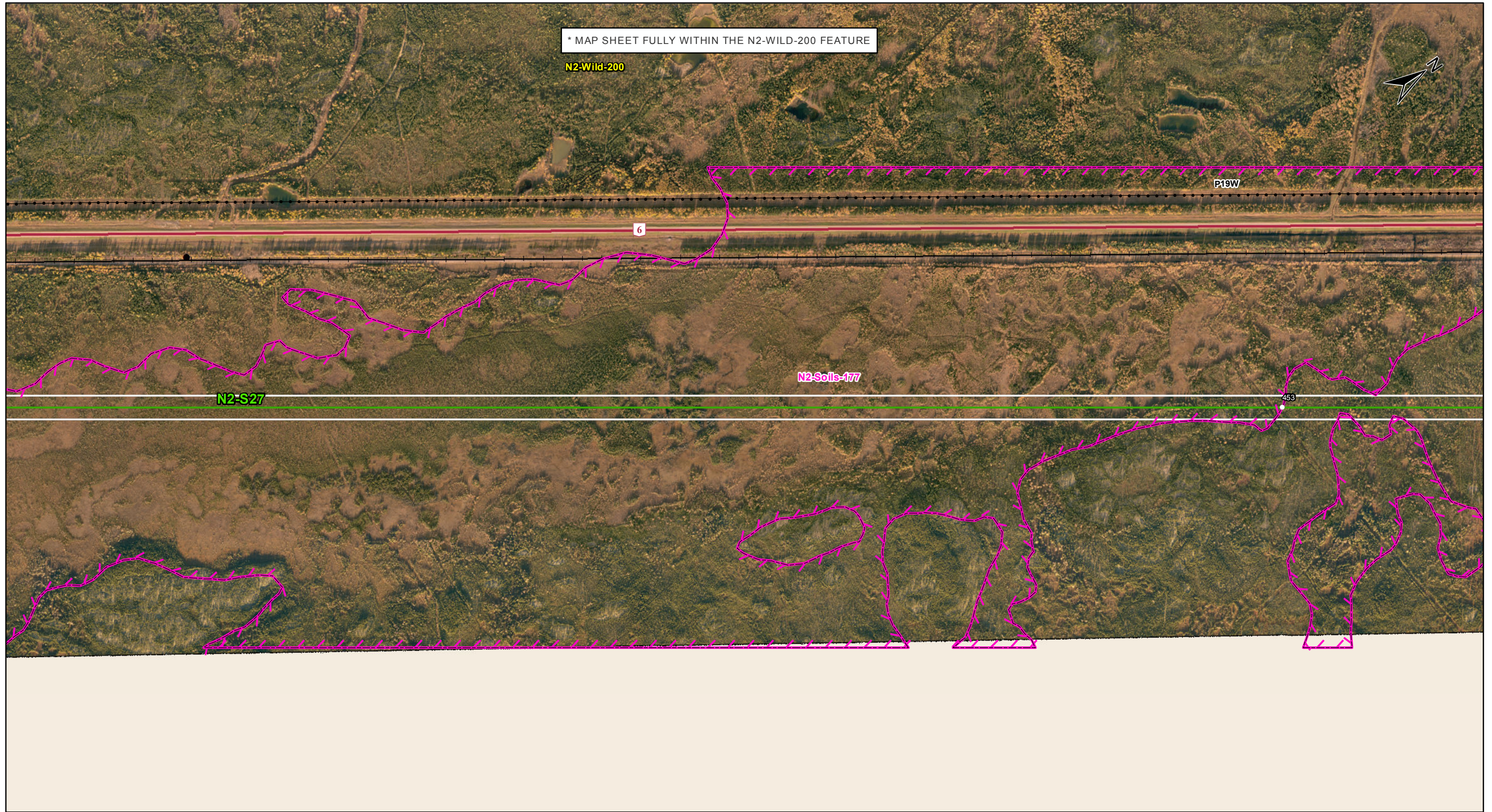
Potential Effects:

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

DOCUMENT PATH: G:_GIS_PROJECT_FOLDER\011440054_BPIII_EPP\ARCMAPIESS_N2\BPIII_CENVPP_NIN2\N3\N4\C1\SECTION\BASEMAP_MAPBOOK_BTIB_STANTEC_20131201.MXD



* MAP SHEET FULLY WITHIN THE N2-WILD-200 FEATURE

N2-Wild-200

P19W

6

N2-Soils-177

N2-S27

453



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

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

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

MAP NUMBER : 108

ESS Group : Mammals

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S27	N2-Wild-200	MCWS Caribou Sensitive Area	Site: 445 to 446	E- 513131 N-6072016	E-504973 N-6059662	14N	14805 m

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.
- 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.

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S27	N2-Soils-177	Permafrost	Site: 453 to 454	E-510866 N-6068587	E-508885 N-6065587	14N	3594 m

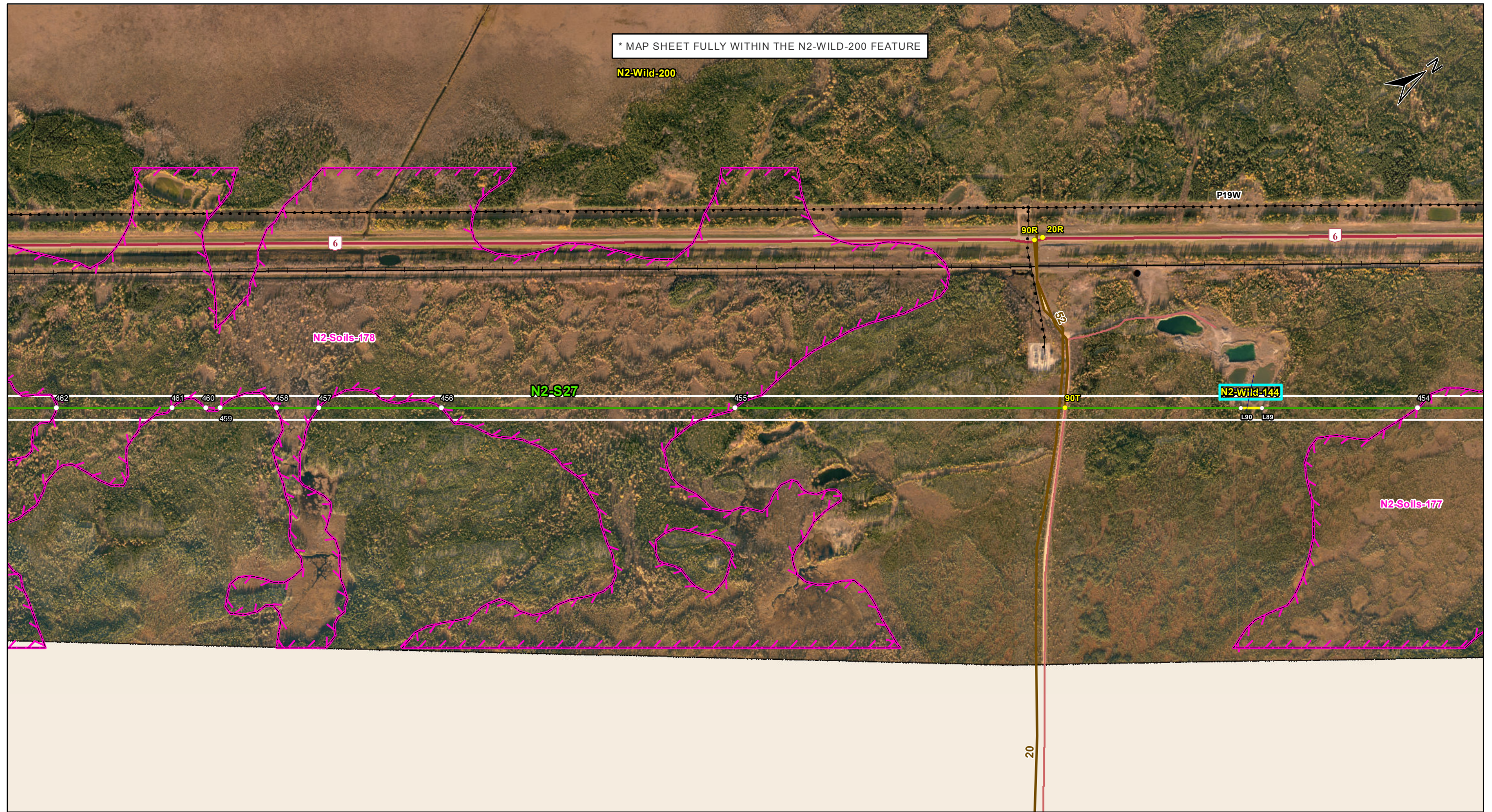
Potential Effects:

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 Erosion/Sediment Control Plan

DOCUMENT PATH: G:_GIS_PROJECT_FOLDER00_HYDRO\11440054_BPIII_EPPARCMAPIESS_N2\BPIII_CENVPP_NIN2\N3\N4\CISECTIONBASEMAP_MAPBOOK_BTIB_STANTEC_20131201.MXD



* MAP SHEET FULLY WITHIN THE N2-WILD-200 FEATURE

N2-Wild-200

N2-Soils-178

N2-S27

N2-Wild-144

N2-Soils-177



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

0 120 240 480
 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

- Wildlife**
- Birds and Habitat
- Wildlife**
- Mammals and Habitat
- Soils and Terrain**
- Permafrost

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

MAP NUMBER : 109

ESS Group : Mammals

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S28	N2-Wild-200	MCWS Caribou Sensitive Area	Site: 445 to 446	E- 513131 N-6072016	E-504973 N-6059662	14N	14805 m

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.
- 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.

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S27	N2-Soils-177	Permafrost	Site: 453 to 454	E-510866 N-6068587	E-508885 N-6065587	14N	3594 m
N2-S27	N2-Soils-178	Permafrost	Site: 455 to 456	E-507866 N-6064043	E-507427 N-6063379	14N	796 m
N2-S27	N2-Soils-178	Permafrost	Site: 457 to 458	E-507245 N-6063103	E-507181 N-6063006	14N	116 m
N2-S27	N2-Soils-178	Permafrost	Site: 459 to 460	E-507097 N-6062879	E-508885 N-6065587	14N	40 m
N2-S27	N2-Soils-178	Permafrost	Site: 461 to 462	E-507025 N-6062770	E-506852 N-6062509	14N	313 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-S24	N2-Wild-144	Waterfowl sensitivity area	Site: L89 to L90	E- 508653 N-6065236	E-508621 N-6065187	14N	201 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