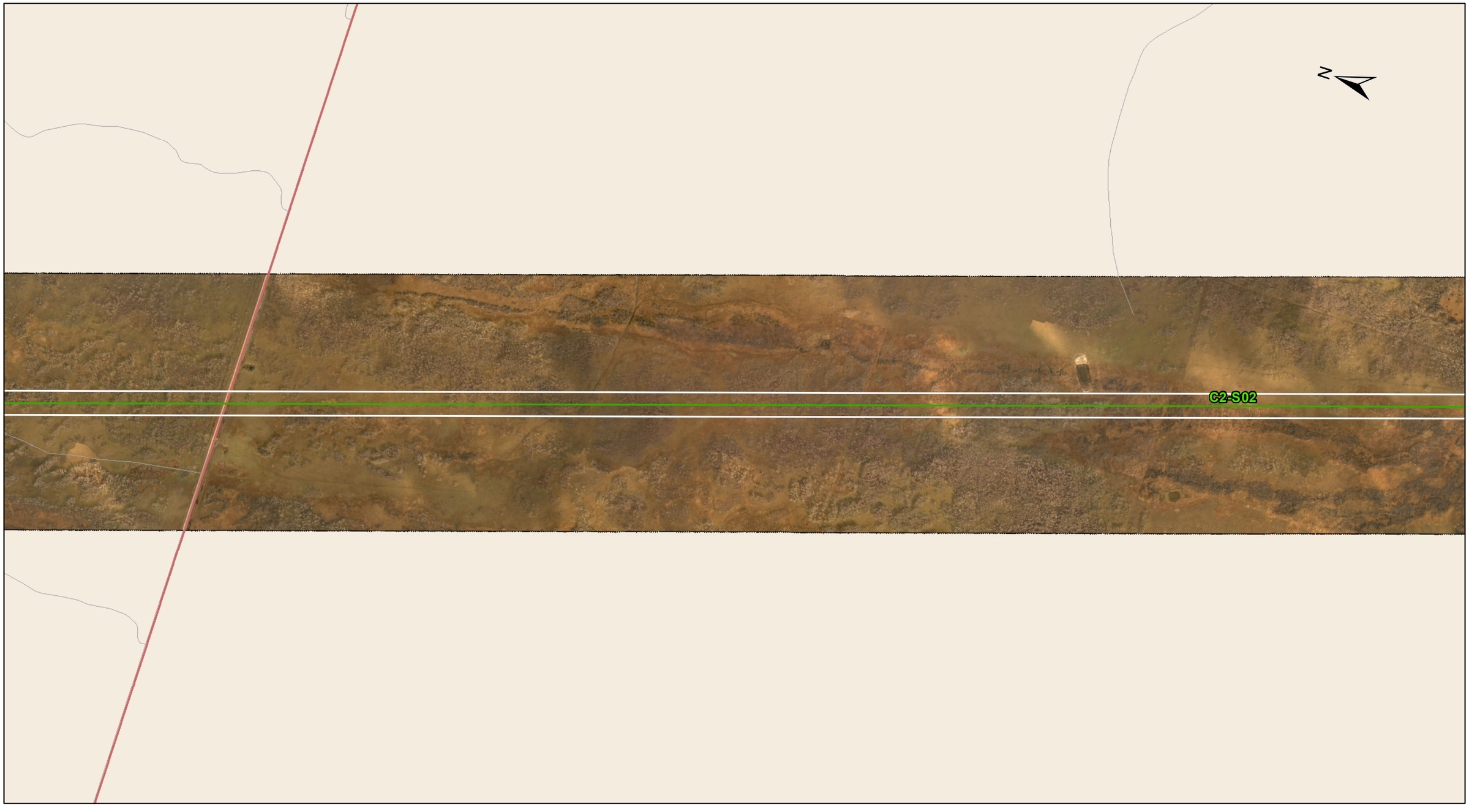

Manitoba Hydro

Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, ProvMB, NRCAN
Date Created: April 12, 2014
Version: Draft

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Land Base
- Transmission Line
- Highway
- Major Road
- Local Road
- Winter Road
- Railway (Operational)
- Railway (Discontinued)
- First Nation
- Mining
- Provincial Forest

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

Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N4
Environmentally Sensitive Site Locations

Draft: For Discussion Purposes Only

Map 248

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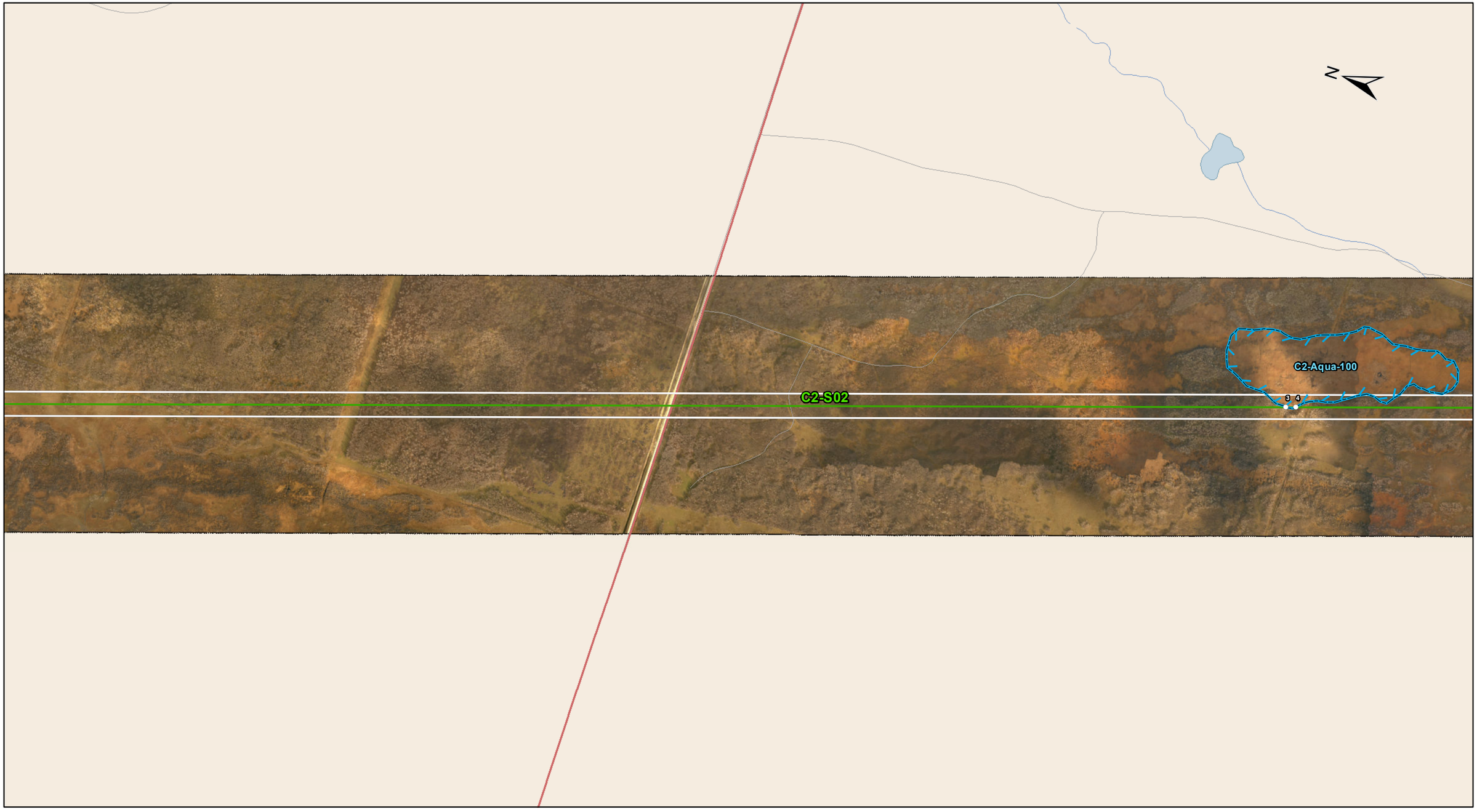

Manitoba Hydro

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ESS Features
Water
- Water Crossing

Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N4
Environmentally Sensitive Site Locations

Draft: For Discussion Purposes Only

Map 249

ESS Group: Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S02	C2-Aqua-100	Unnamed wetland	Site: 3 to 4	E-487196 N-5662226	E-487204 N-5662201	14N	26m

Potential Effects:

Increased erosion and sedimentation; rutting of floodplains; loss of riparian vegetation

Specific Mitigation:

- 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.

Manitoba Hydro

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Date Created: April 12, 2014
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Land Base
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Project Infrastructure
- Angle Tower Locations
- BPIII Final Preferred Route
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Points of Access*
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- Major Stream Crossing
- Abandoned Rail Crossing
- Rail Crossing
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- Proposed Access Route

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ESS Features
Ecosystem
- Habitat

Land Use
- Residential

Water
- Water Crossing

Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N4
Environmentally Sensitive Site Locations

Draft: For Discussion Purposes Only

Map 250

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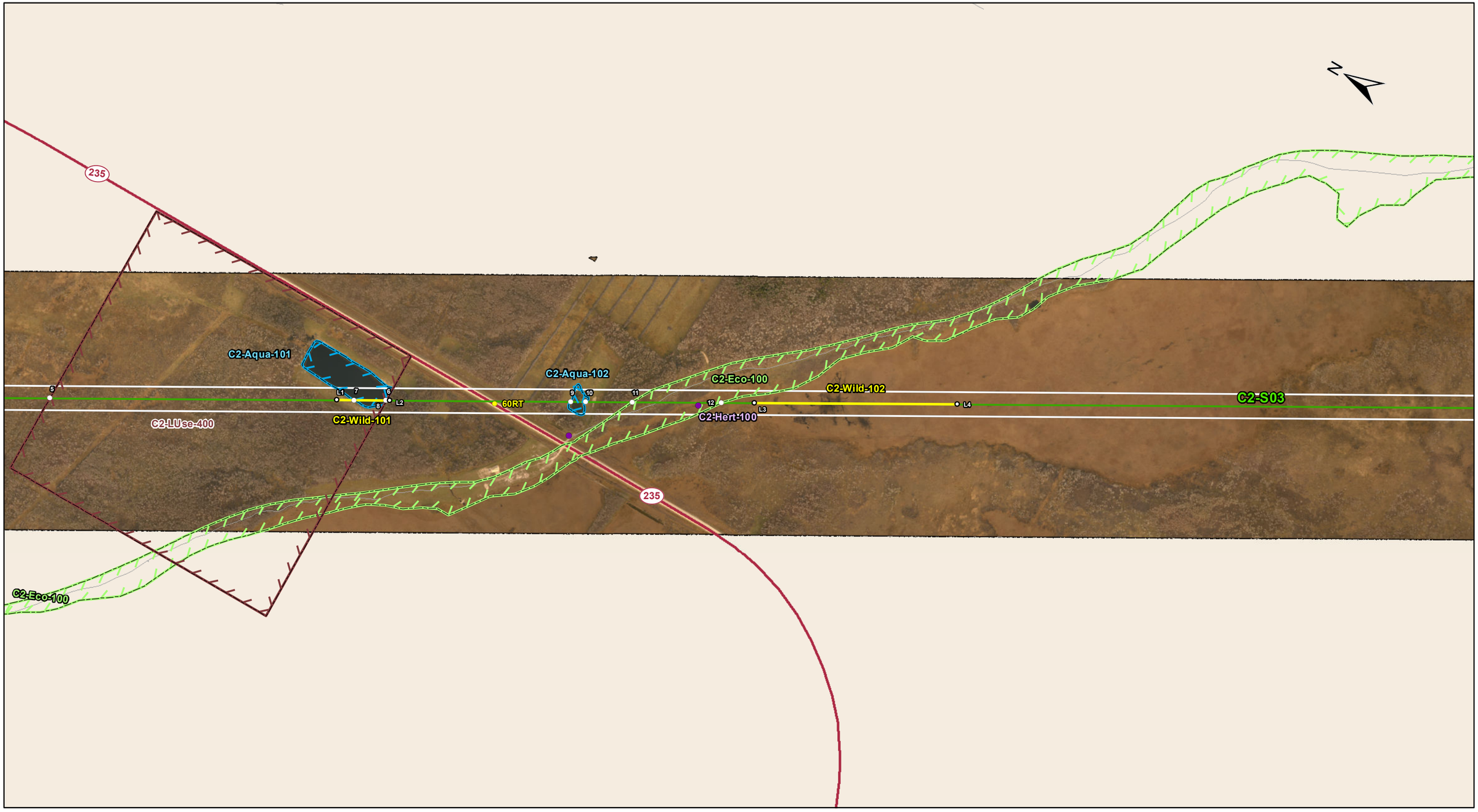

Manitoba Hydro

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Land Base
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Project Infrastructure
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- Abandoned Rail Crossing
- Rail Crossing
- Transmission Line Crossing
- Proposed Access Route

*Labels correspond to BPIII Access Management Database

ESS Features
Heritage
- Archaeological

Wildlife
- Birds and Habitat

Ecosystem
- Habitat

Land Use
- Residential

Water
- Water Crossing

Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N4
Environmentally Sensitive Site Locations

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Map 251

ESS Group: Archaeological

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone
C2-S03	C2-Hert-100	Creek near PTH 235	489800	5656547	14N

Potential Effects:

Potential disturbance to Heritage Resource

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Identify and flag prior to start of work
- Conduct site investigation with Archaeologist post clearing and prior to construction
- Minimize surface disturbance around the site to the extent possible
- Inspect excavated materials or surface disturbance for heritage resources and report any finds to Environmental Inspector
- Implement additional mitigation from site investigation

ESS Group: Birds and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S03	C2-Wild-101	Lagoon	Site: L1 to L2	E-489320 N-5657406	E-489391 N-5657281	14N	143m
C2-S03	C2-Wild-102	Waterfowl sensitivity area	Site: L3 to L4	E-489881 N-5656418	E-490154 N-5655938	14N	552m

Potential Effects:

Higher risk of wire collision, Risk of wire collision is localized to the right-of-way

Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain applicable setback during nesting and breeding 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	Location	Start	Stop	UTM Zone	Distance
C2-S03	C2-Aqua-101	Small, unnamed waterbody	Site: 7 to 8	E-489343 N-5657365	E-489386 N-5657289	14N	87 m
C2-S03	C2-Aqua-102	Small, unnamed waterbody	Site: 9 to 10	E-489634 N-5656853	E-489654 N-5656817	14N	41 m

Potential Effects:

Increased erosion and sedimentation; rutting of floodplains; loss of riparian vegetation

Specific Mitigation:

- 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.

ESS Group: Residential

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S03	C2-LUse-400	Recreational Development – Crown land encumbrance	Site: 5 to 6	E-488933 N-5658085	E-489386 N-5657289	14N	916m

Potential Effects:

Potential disruption to recreational use activities

Specific Mitigation:

- Notify Manitoba Conservation, local authorities and operator regarding construction activities and schedule, and address concerns prior to construction
- Observe municipal and local by-laws and protocols including noise and work scheduling
- Minimize noise, dust and other emissions from work activities and maintain clean and aesthetic appearance of work site
- Provide warning signage for vehicle traffic and public safety

ESS Group: Habitat

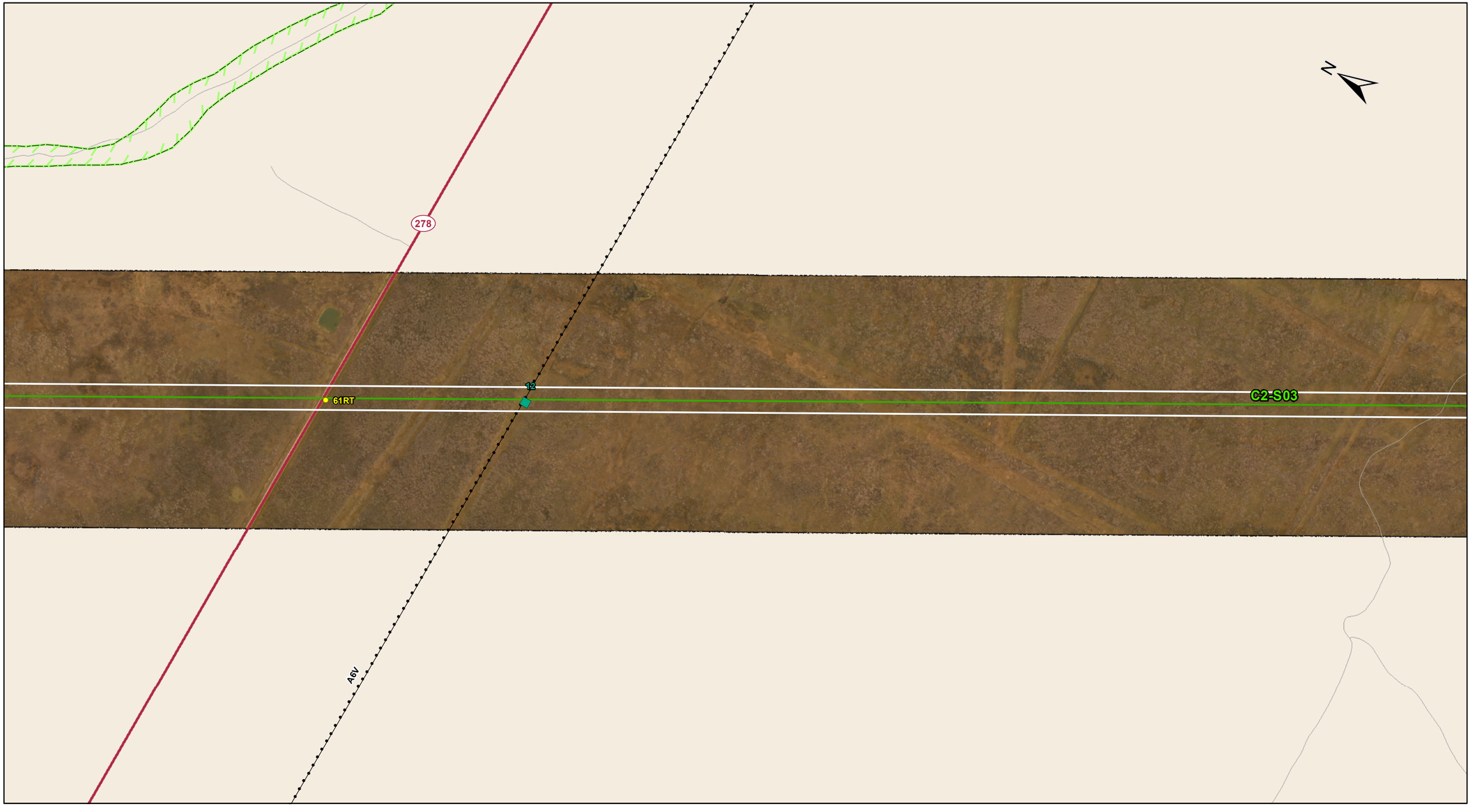
Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S03	C2-Eco-100	Dry Upland Prairie	Site: 11 to 12	E-489717 N-5656707	E-489837 N-5656496	14N	242 m

Potential Effects:

Potential loss of plants of conservation concern and grassland species/communities from clearing, construction, maintenance and decommissioning activities if route is moved to include this site.

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Use existing access roads and trails to the extent possible
- Remove trees by low-disturbance methods
- Confine vehicle traffic to established trails to the extent possible
- Stabilize sites immediately after construction and re-vegetate disturbed areas in accordance with site Rehabilitation Plan



Manitoba Hydro

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Version: Draft

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Land Base
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- Local Road
- Winter Road
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- Railway (Discontinued)
- First Nation
- Mining
- Provincial Forest

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
Ecosystem
- Habitat

Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N4
Environmentally Sensitive Site Locations

Draft: For Discussion Purposes Only

Map 252

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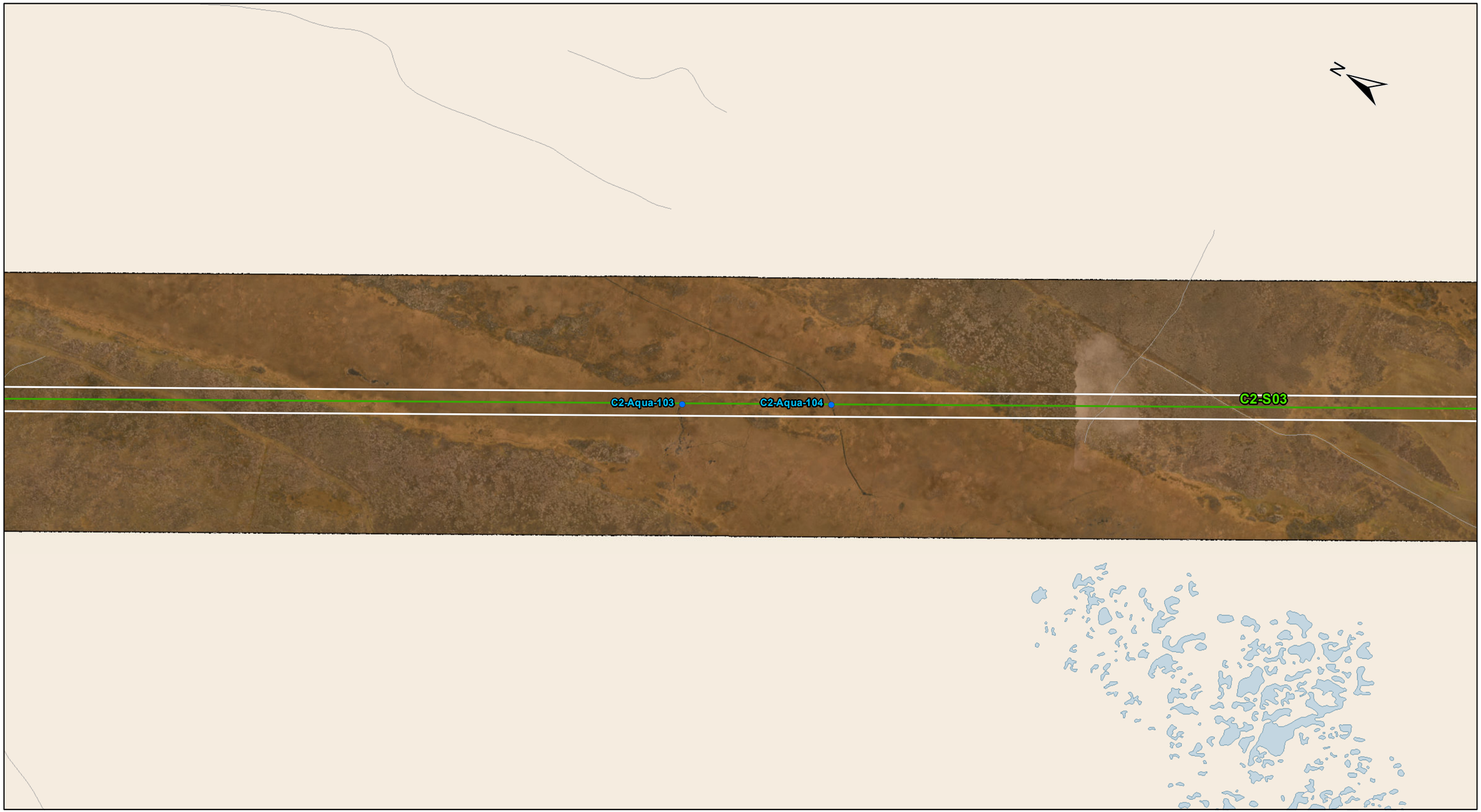

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- Rail Crossing
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*Labels correspond to BPIII Access Management Database

ESS Features
Water
- Water Crossing

Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N4
Environmentally Sensitive Site Locations

Draft: For Discussion Purposes Only

Map 253

ESS Group: Water Crossing

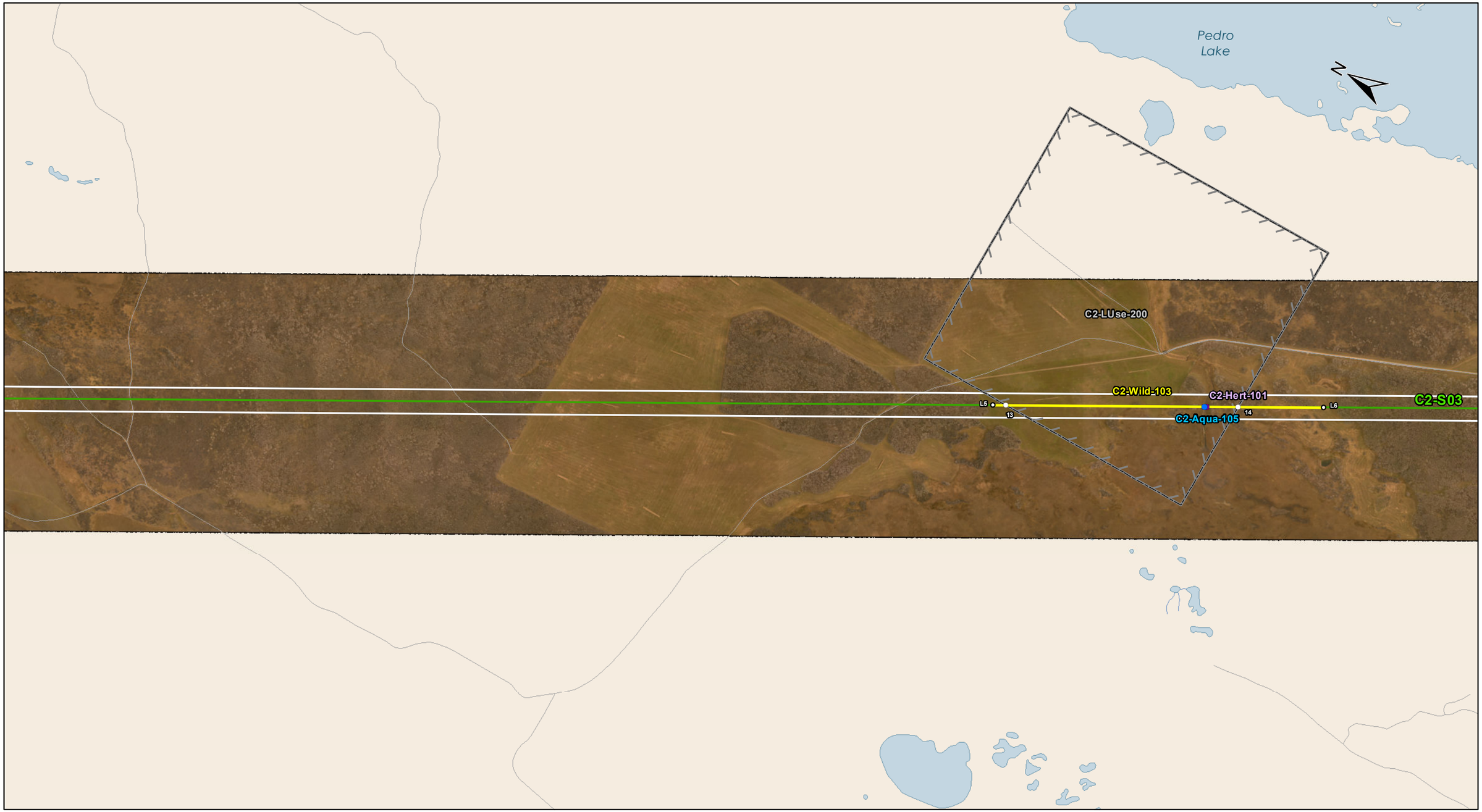
Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
C2-S03	C2-Aqua-103	Unnamed Creek	493688	5649707	14N	N/A	N/A	N/A	N/A
C2-S03	C2-Aqua-104	Unnamed Creek	493891	5649349	14N	N/A	N/A	N/A	N/A

Potential Effects:

Habitat loss and contamination from structure foundations & installations; increased erosion & sedimentation of streams; Damage to stream banks; Loss of riparian vegetation; Fish habitat disturbances and impeded fish movement; Rutting of floodplain

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



Manitoba Hydro

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Land Base
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Points of Access*
- Proposed Access Point
- Major Stream Crossing
- Abandoned Rail Crossing
- Rail Crossing
- Transmission Line Crossing
- Proposed Access Route

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ESS Features
Heritage
- Archaeological

Water
- Water Crossing

Wildlife
- Birds and Habitat

Land Use
- Crown Land Encumbrance

Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N4
Environmentally Sensitive Site Locations

Draft: For Discussion Purposes Only

Map 254

ESS Group: Archaeological

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone
C2-S03	C2-Hert-101	Creek west of Pedro Lake	496345	5645030	14N

Potential Effects:

Potential disturbance to Heritage Resource

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Identify and flag prior to start of work
- Conduct site investigation with Archaeologist post clearing and prior to construction
- Minimize surface disturbance around the site to the extent possible
- Inspect excavated materials or surface disturbance for heritage resources and report any finds to Environmental Inspector
- Implement additional mitigation from site investigation

ESS Group: Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
C2-S03	C2-Aqua-105	Unnamed Creek	493891	5649349	14N	N/A	N/A	N/A	N/A

Potential Effects:

Habitat loss and contamination from structure foundations & installations; increased erosion & sedimentation of streams; Damage to stream banks; Loss of riparian vegetation; Fish habitat disturbances and impeded fish movement; Rutting of floodplain

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

ESS Group: Birds and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S03	C2-Wild-103	Waterfowl sensitivity area	Site: L5 to L6	E-496068 N-5645531	E-496512 N-5644751	14N	897m

Potential Effects:

Higher risk of wire collision, Risk of wire collision is localized to the right-of-way

Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain applicable setback during nesting and breeding 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: Crown Land Encumbrance

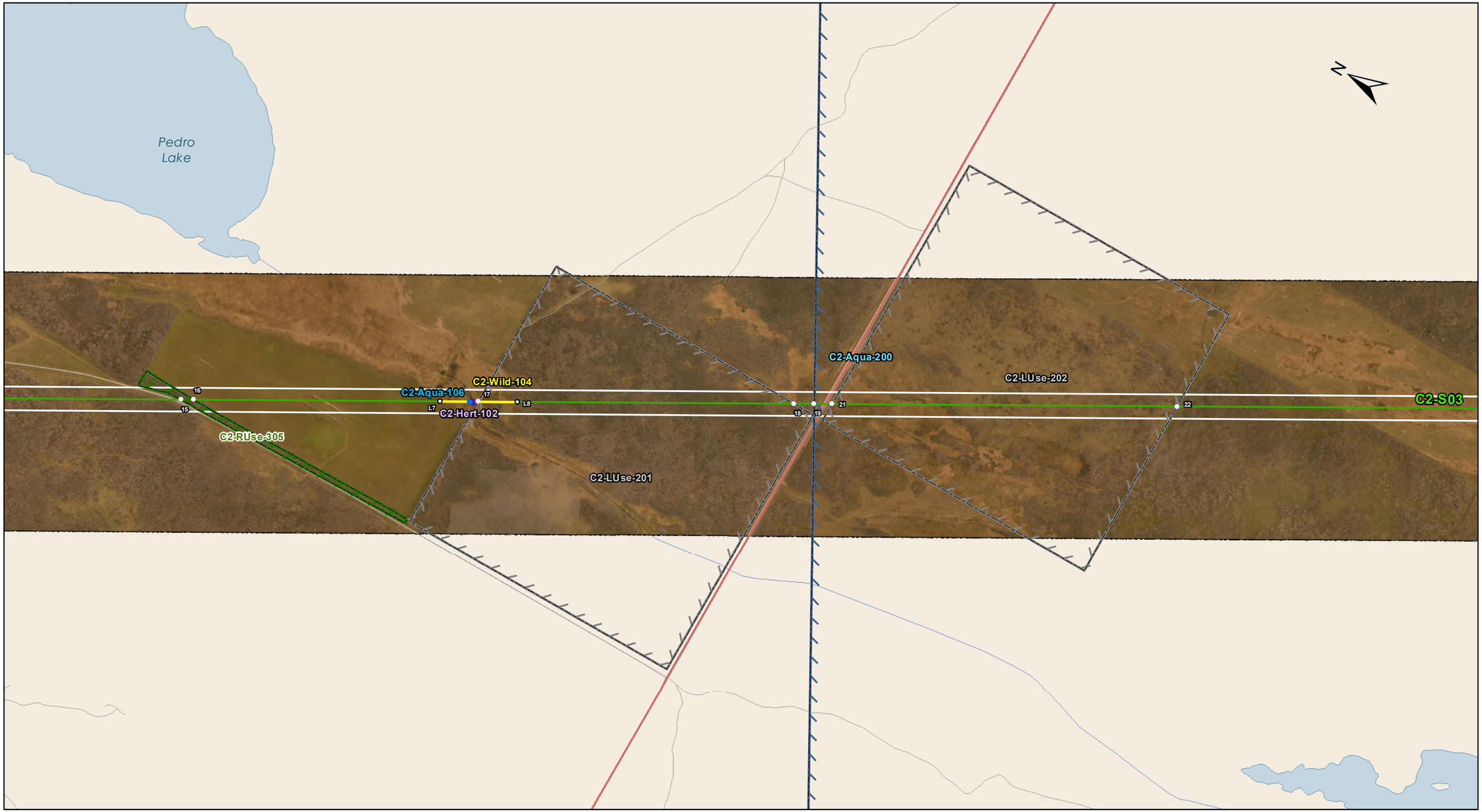
Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S03	C2-LUse-200	DU Canada Project – Crown land encumbrance	Site: 13 to 14	E-496086 N-5645501	E-496397 N-5644953	14N	629m

Potential Effects:

Potential disturbance effects to conservation land

Specific Mitigation:

- Notify Crown Lands and permittee with respect to clearing and construction schedules; adhere to Manitoba Hydro's standard environmental protection practices in wetland areas
- Clearing and construction to occur in the winter months; install bird diverters if a waterfowl sensitive area; adhere to seasonally limited maintenance times



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Date Created: April 12, 2014
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Land Base
- Transmission Line
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- Mining
- Provincial Forest

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

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ESS Features
Heritage
- Archaeological

Water
- Water Crossing

Wildlife
- Birds and Habitat

Land Use
- Crown Land Encumbrance

Resource Use
- Forestry

Water
- Groundwater

Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N4
Environmentally Sensitive Site Locations

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Map 255

ESS Group: Archaeological

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone
C2-S03	C2-Hert-102	Creek south of Pedro Lake	497321	5643312	14N

Potential Effects:

Potential disturbance to Heritage Resource

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Identify and flag prior to start of work
- Conduct site investigation with Archaeologist post clearing and prior to construction
- Minimize surface disturbance around the site to the extent possible
- Inspect excavated materials or surface disturbance for heritage resources and report any finds to Environmental Inspector
- Implement additional mitigation from site investigation

ESS Group: Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
C2-S03	C2-Aqua-106	Unnamed tributary from Pedro Lake	497321	5643312	14N	N/A	N/A	TBD	TBD

Potential Effects:

Habitat loss and contamination from structure foundations & installations; increased erosion & sedimentation of streams; Damage to stream banks; Loss of riparian vegetation; Fish habitat disturbances and impeded fish movement; Rutting of floodplain

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

ESS Group: Birds and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S03	C2-Wild-104	Waterfowl sensitivity area	Site: L7 to L8	E-497283 N-5643394	E-497387 N-5643211	14N	209m

Potential Effects:

Higher risk of wire collision, Risk of wire collision is localized to the right-of-way

Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain applicable setback during nesting and breeding 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: Groundwater

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S03	C2-Aqua-200	Artesian areas with uncertain water quality	Site: 19 to 20	E-497785 N-5642511	E-499686 N-5639166	14N	3847 m

Potential Effects:

Potential increase in salinity of soils and surface water in case where aquifer is saline and groundwater discharges to the surface; wetting the surficial environment (ground saturation)

Specific Mitigation:

- Qualified driller with appropriate experience will be contracted to work in areas affected by artesian conditions.
- Emergency response plans for sealing/grouting and pumping will be implemented as required.
- Follow up inspections of installed foundations will be undertaken to monitor for excess moisture.

ESS Group: Forestry

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S03	C2-RUse-305	Shelterbelt	Site: 15 to 16	E-496936 N-5644005	E-496953 N-5643975	14N	33 m

Potential Effects:

Removal in area of ROW intersect

Specific Mitigation:

• Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
• Identify and flag prior to start of work
• Burn clearing debris during winter months only and ensure that all fires are extinguished prior to spring break-up
• Notify landowner regarding construction activities and schedule, and address concerns prior to start of work
• Where applicable, ensure compensation agreement is in place prior to start of work
• Use existing access trails, roads or cut lines whenever possible as access routes
• Limit all equipment to project footprint only, where possible

ESS Group: Crown Land Encumbrance

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S03	C2-LUse-201	DU Canada Project – Crown land encumbrance	Site: 17 to 18	E-497334 N-5643303	E-497758 N-5642559	14N	856 m

Potential Effects:

Potential disturbance effects to conservation land

Specific Mitigation:

• Notify Crown Lands and permittee with respect to clearing and construction schedules; adhere to Manitoba Hydro's standard environmental protection practices in wetland areas
• Clearing and construction to occur in the winter months; install bird diverters if a waterfowl senstive area; adhere to seasonally limited maintenance times

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MAP SHEET FULLY WITHIN THE C2-AQUA-200 FEATURE

C2-Aqua-200

Jarvies Lake

C2-LUse-203

N

Tower 111
E-499686, N-5639166

C2-S03

C2-S04

L9

20

L11

23

L10

C2-Aqua-107

C2-Aqua-108

C2-Hert-103

25

26

C2-Wild-105

C2-Aqua-109

North Round Lake

Manitoba Hydro

Coordinate System: UTM Zone 14N NAD83
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Date Created: April 12, 2014
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Metres

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Land Base
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Project Infrastructure
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- Rail Crossing
- Transmission Line Crossing
- Proposed Access Route

*Labels correspond to BPIII Access Management Database

ESS Features

Heritage
- Archaeological

Water
- Water Crossing

Wildlife
- Birds and Habitat

Land Use
- Crown Land Encumbrance

Water
- Groundwater

Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N4
Environmentally Sensitive Site Locations

Map 256

Draft: For Discussion Purposes Only

ESS Group: Archaeological

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone
C2-S04	C2-Hert-103	Creek near Jarvies Lake	500119	5638626	14N

Potential Effects:

Potential disturbance to Heritage Resource

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Identify and flag prior to start of work
- Conduct site investigation with Archaeologist post clearing and prior to construction
- Minimize surface disturbance around the site to the extent possible
- Inspect excavated materials or surface disturbance for heritage resources and report any finds to Environmental Inspector
- Implement additional mitigation from site investigation

ESS Group: Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
C2-S04	C2-Aqua-107	Drain	500119	5638626	14N	N/A	N/A	N/A	N/A
C2-S04	C2-Aqua-108	Unnamed tributary from Jarvies Lake	500152	5638584	14N	N/A	N/A	N/A	N/A
C2-S04	C2-Aqua-109	Unnamed stream between Jarvies Lake and an unnamed lake	500784	5637795	14N	N/A	3m	Low	Marginal

Potential Effects:

Habitat loss and contamination from structure foundations & installations; increased erosion & sedimentation of streams; Damage to stream banks; Loss of riparian vegetation; Fish habitat disturbances and impeded fish movement; Rutting of floodplain

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 work or fording from April 1 to June 30

ESS Group: Birds and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S04	C2-Wild-105	Waterfowl sensitivity area	Site: L9 to L10	E-499622 N-5639279	E-499686 N-5639166	14N	129m
C2-S04	C2-Wild-105	Waterfowl sensitivity area	Site: L11 to L12	E-499686 N-5639166	E-500907 N-5637641	14N	1953m

Potential Effects:

Higher risk of wire collision, Risk of wire collision is localized to the right-of-way

Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain applicable setback during nesting and breeding 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: Crown Land Encumbrance

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S04	C2-LUse-203	DU Canada Project – Crown land encumbrance	Site: 25 to 26	E-500229 N-5638487	E-500305 N-5638393	14N	121m

Potential Effects:

Potential disturbance effects to conservation land

Specific Mitigation:

- Notify Crown Lands and permittee with respect to clearing and construction schedules; adhere to Manitoba Hydro's standard environmental protection practices in wetland areas
- Clearing and construction to occur in the winter months; install bird diverters if a waterfowl sensitive area; adhere to seasonally limited maintenance times

ESS Group: Groundwater

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S03	C2-Aqua-200	Artesian areas with uncertain water quality	Site: 19 to 20	E-497785 N-5642511	E-499686 N-5639166	14N	3847 m
C2-S04	C2-Aqua-200	Artesian areas with uncertain water quality	Site: 23 to 24	E-499686 N-5639166	E-501935 N-5636356	14N	3598 m

Potential Effects:

Potential increase in salinity of soils and surface water in case where aquifer is saline and groundwater discharges to the surface; wetting the surficial environment (ground saturation)

Specific Mitigation:

- Qualified driller with appropriate experience will be contracted to work in areas affected by artesian conditions.
- Emergency response plans for sealing/grouting and pumping will be implemented as required.
- Follow up inspections of installed foundations will be undertaken to monitor for excess moisture.

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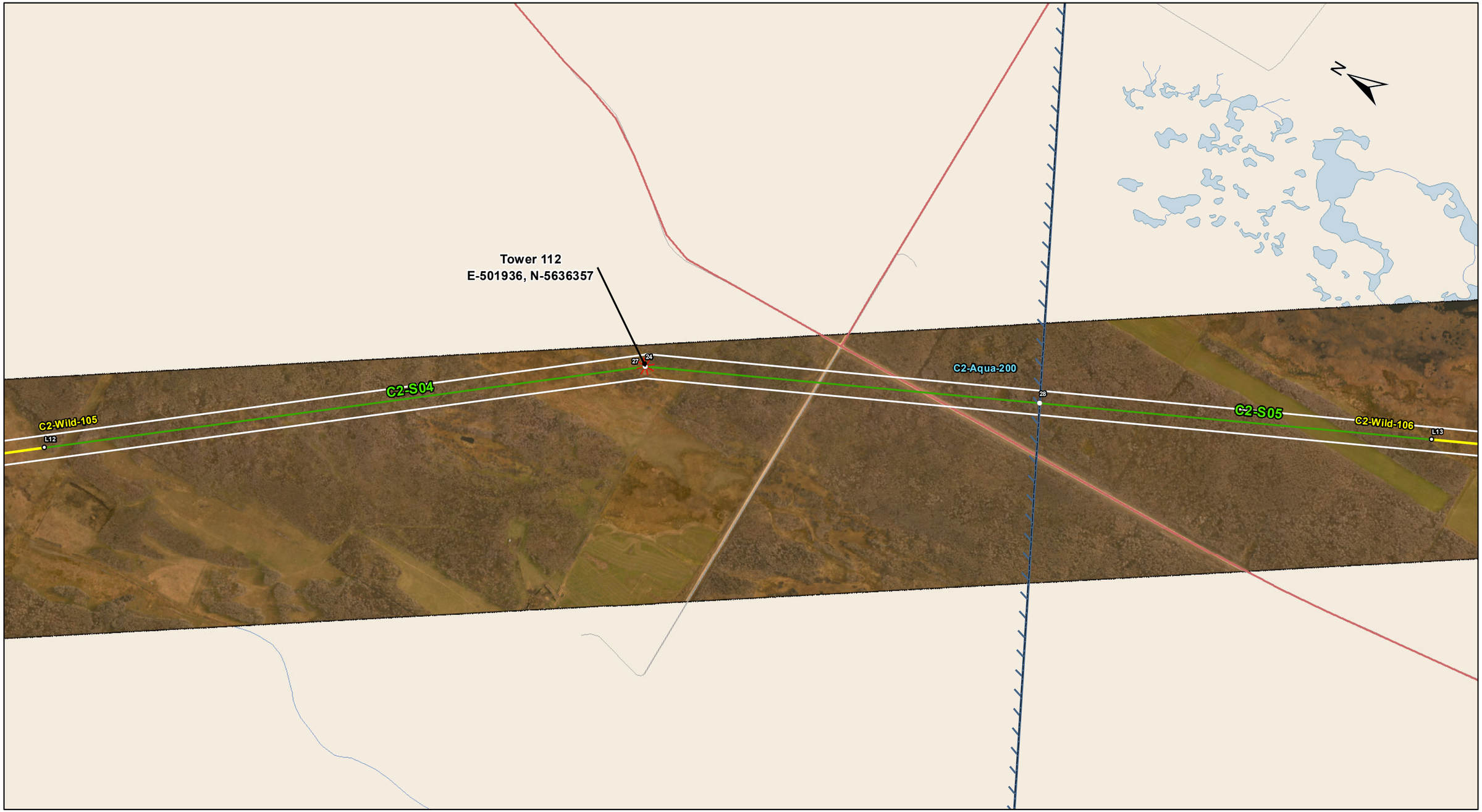

Manitoba Hydro

Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, ProvMB, NRCAN
Date Created: April 12, 2014
Version: Draft

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Land Base
- Transmission Line
- Highway
- Major Road
- Local Road
- Winter Road
- Railway (Operational)
- Railway (Discontinued)
- First Nation
- Mining
- Provincial Forest

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

Water
- Groundwater

Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N4
Environmentally Sensitive Site Locations

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Map 257

ESS Group: Birds and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S04	C2-Wild-105	Waterfowl sensitivity area	Site: L11 to L12	E-499686 N-5639166	E-500907 N-5637641	14N	1953m
C2-S05	C2-Wild-106	Waterfowl sensitivity area	Site: L13 to L14	E-502864 N-5634426	E-503326 N-5633466	14N	1065m

Potential Effects:

Higher risk of wire collision, Risk of wire collision is localized to the right-of-way

Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain applicable setback during nesting and breeding 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: Groundwater

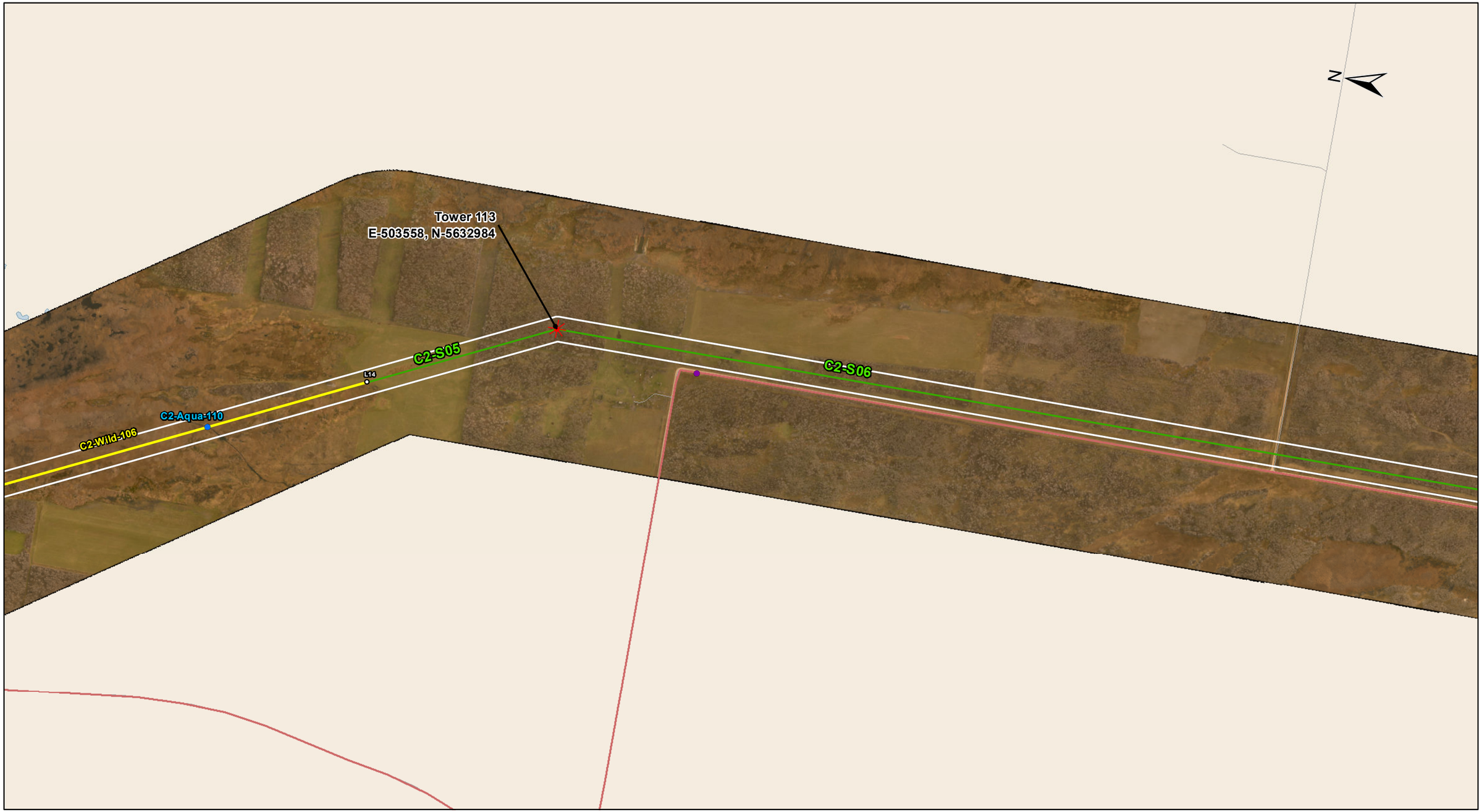
Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S04	C2-Aqua-200	Artesian areas with uncertain water quality	Site: 23 to 24	E-499686 N-5639166	E-501935 N-5636356	14N	3598m
C2-S05	C2-Aqua-200	Artesian areas with uncertain water quality	Site: 27 to 28	E-501935 N-5636356	E-502400 N-5635389	14N	1073m

Potential Effects:

Potential increase in salinity of soils and surface water in case where aquifer is saline and groundwater discharges to the surface; wetting the surficial environment (ground saturation)

Specific Mitigation:

- Qualified driller with appropriate experience will be contracted to work in areas affected by artesian conditions.
- Emergency response plans for sealing/grouting and pumping will be implemented as required.
- Follow up inspections of installed foundations will be undertaken to monitor for excess moisture.



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*Labels correspond to BPIII Access Management Database

ESS Features
Heritage
- Archaeological

Water
- Water Crossing

Wildlife
- Birds and Habitat

Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N4
Environmentally Sensitive Site Locations

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Map 258

ESS Group: Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
C2-S05	C2-Aqua-110	Unnamed Creek	503131	5633872	14N	N/A	N/A	N/A	N/A

Potential Effects:

Habitat loss and contamination from structure foundations & installations; increased erosion & sedimentation of streams; Damage to stream banks; Loss of riparian vegetation; Fish habitat disturbances and impeded fish movement; Rutting of floodplain

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

ESS Group: Birds and Habitat

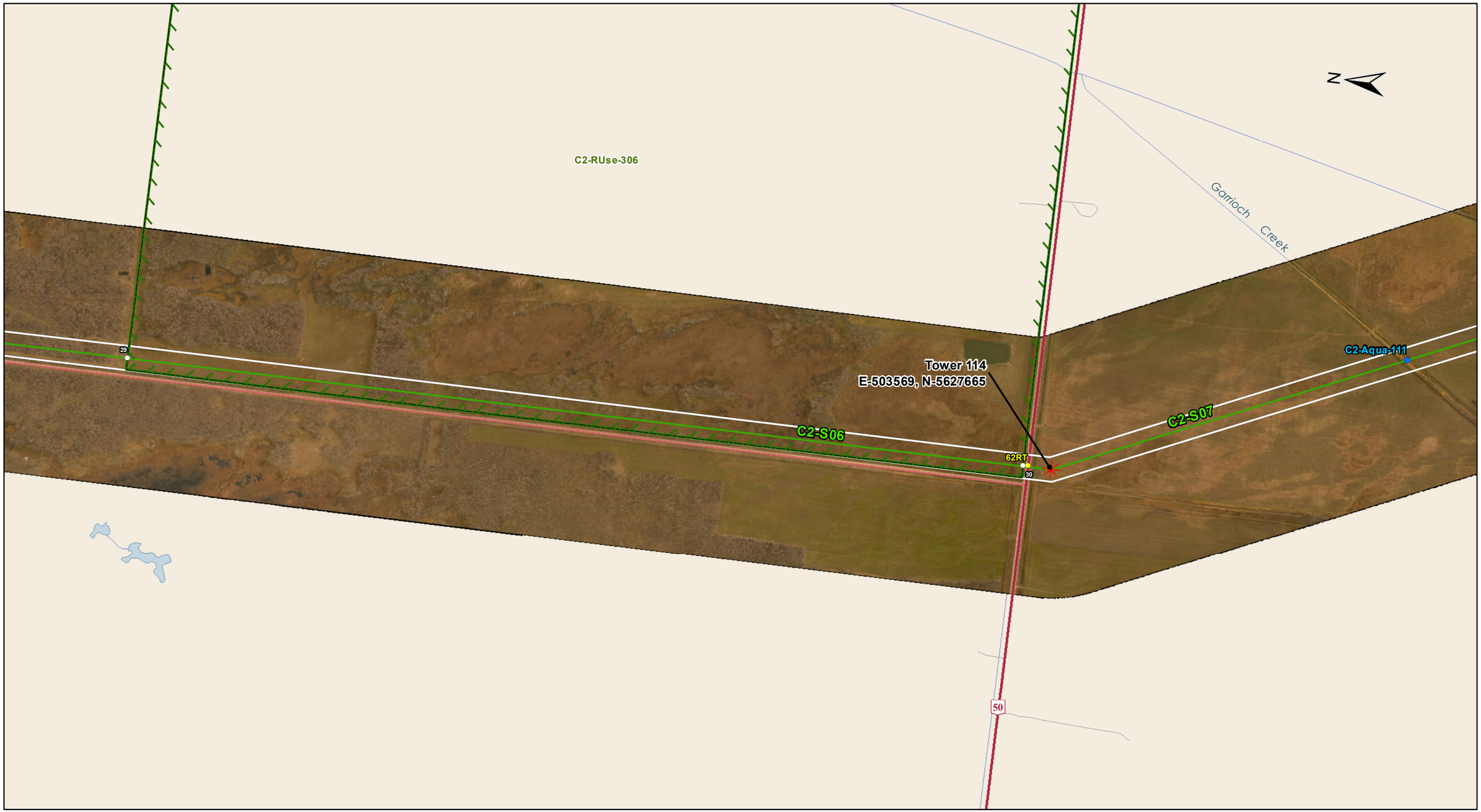
Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S05	C2-Wild-106	Waterfowl sensitivity area	Site: L13 to L14	E-502864 N-5634426	E-503326 N-5633466	14N	1065m

Potential Effects:

Higher risk of wire collision, Risk of wire collision is localized to the right-of-way

Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain applicable setback during nesting and breeding 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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- Proposed Access Point
- Major Stream Crossing
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*Labels correspond to BPIII Access Management Database

ESS Features
Water
- Water Crossing

Resource Use
- Forestry

Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N4
Environmentally Sensitive Site Locations

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Map 259

ESS Group: Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
C2-S07	C2-Aqua-111	Garrioch Creek	503982	5626741	14N	N/A	3m	Low	Marginal

Potential Effects:

Habitat loss and contamination from structure foundations & installations; increased erosion & sedimentation of streams; Damage to stream banks; Loss of riparian vegetation; Fish habitat disturbances and impeded fish movement; Rutting of floodplain

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 work or fording from April 1 to June 30

ESS Group: Forestry

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
C2-S06	C2-RUse-306	Alonsa Woodlots	Site: 29 to 30	E-503563 N-5630190	E-503569 N-5627740	14N	2449m

Potential Effects:

Potential for additional damage outside of ROW

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Identify and flag prior to start of work
- Burn clearing debris during winter months only and ensure that all fires are extinguished prior to spring break-up; pile debris Xm away from ROW edge
- Notify landowner regarding construction activities and schedule, and address concerns prior to start of work
- Where applicable, ensure compensation agreement is in place prior to start of work
- Use existing access trails, roads or cut lines whenever possible as access routes
- Limit all equipment to project footprint only, where possible clear trees only