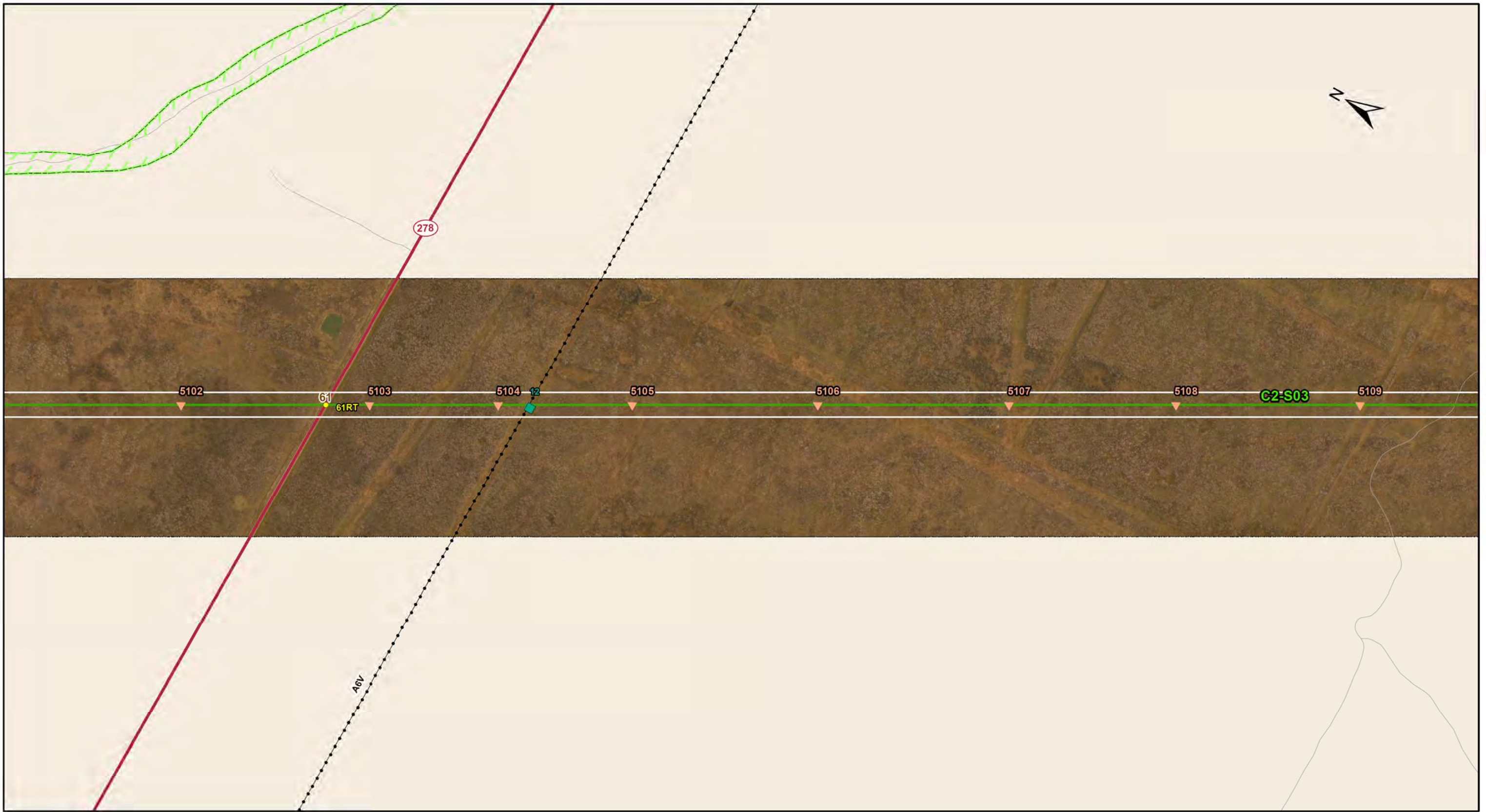
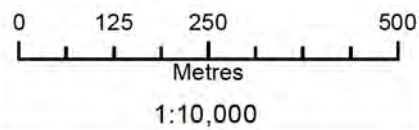




Coordinate System: UTM Zone 14N NAD83  
Data Source: MB Hydro, ProvMB, NRCAN  
Date Created: November 03, 2016  
Version: Final 4.0



**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\*
- Towers (Preliminary)\*
- BPIII Final Preferred Route
- 66 m Right of Way

\*Towers are subject to change, and are only used as a rough guide

**Sensitive Sites\***

- Point Features
- Linear Features
- Area Features

\*Currently outside the Project footprint

**Points of Access\***

- Proposed Access Point
- Major Stream Crossing
- Abandoned Rail Crossing
- Rail Crossing
- Transmission Line Crossing
- Bypass Trails
- Approved Access Route

**ESS Features**

**Ecosystem**

- Habitat

**Bipole III Transmission Project**  
**Construction Environmental Protection Plan**  
**Construction Section C2**  
**Environmentally Sensitive Site Locations**

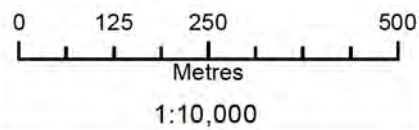
Map 252

No specific mitigation measures for this map, page intentionally left blank





Coordinate System: UTM Zone 14N NAD83  
Data Source: MB Hydro, ProvMB, NRCAN  
Date Created: November 03, 2016  
Version: Final 4.0



**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\*
- Towers (Preliminary)\*
- BPIII Final Preferred Route
- 66 m Right of Way

\*Towers are subject to change, and are only used as a rough guide

**Sensitive Sites\***

- Point Features
- Linear Features
- Area Features

\*Currently outside the Project footprint

**Points of Access\***

- Proposed Access Point
- Major Stream Crossing
- Abandoned Rail Crossing
- Rail Crossing
- Transmission Line Crossing
- Bypass Trails
- Approved Access Route

**ESS Features**

**Water**

- Water Crossing

**Bipole III Transmission Project**  
**Construction Environmental Protection Plan**  
**Construction Section C2**  
**Environmentally Sensitive Site Locations**

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-S3      | C2-Aqua-103 | Unnamed Creek | 493688  | 5649707  | 14N      | No Data       | No Data   | No Data            | No Data             |
| C2-S3      | C2-Aqua-104 | Unnamed Creek | 493891  | 5649349  | 14N      | No Data       | No Data   | No Data            | No Data             |

Potential Effects:

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

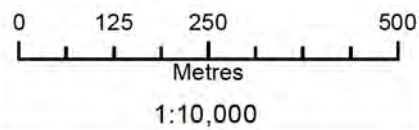
Specific Mitigation:

- 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.





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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\*
- Towers (Preliminary)\*
- BPIII Final Preferred Route
- 66 m Right of Way
- \*Towers are subject to change, and are only used as a rough guide

**Sensitive Sites\***

- Point Features
- Linear Features
- Area Features
- \*Currently outside the Project footprint

**Points of Access\***

- Proposed Access Point
- Major Stream Crossing
- Abandoned Rail Crossing
- Rail Crossing
- Transmission Line Crossing
- Bypass Trails
- Approved Access Route

**ESS Features**

**Heritage**

- Archaeological

**Water**

- Water Crossing

**Land Use**

- Crown Land Encumbrance

**Bipole III Transmission Project**  
**Construction Environmental Protection Plan**  
**Construction Section C2**  
**Environmentally Sensitive Site Locations**

Map 254



ESS Group: Archaeological

| Sec-Seg ID | ESS ID      | ESS Name                 | Easting | Northing | UTM Zone |
|------------|-------------|--------------------------|---------|----------|----------|
| C2-S3      | 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-S3      | C2-Aqua-105 | Unnamed Creek | 493891  | 5649349  | 14N      | No Data       | No Data   | No Data            | No Data             |

Potential Effects:

Habitat loss and 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.

ESS Group: Crown Land Encumbrance

| Sec-Seg ID | ESS ID      | ESS Name                                   | Location       | Start              | Stop               | UTM Zone | Distance |
|------------|-------------|--------------------------------------------|----------------|--------------------|--------------------|----------|----------|
| C2-S3      | C2-LUse-200 | DU Canada Project – Crown land encumbrance | Site: 13 to 14 | E-496086 N-5645501 | E-496397 N-5644953 | 14N      | 629m     |

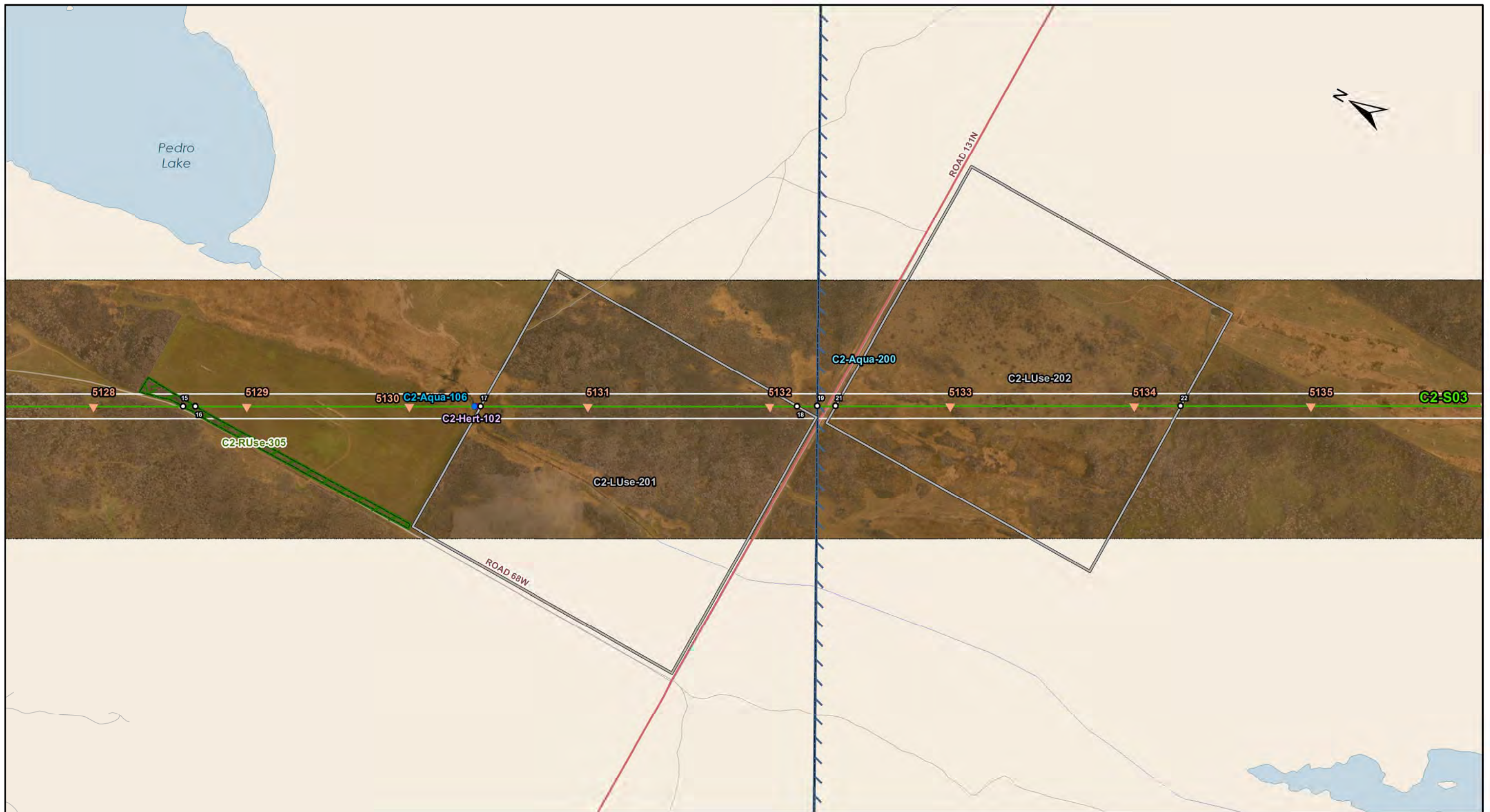
Potential Effects:

Potential disturbance effects to conservation land

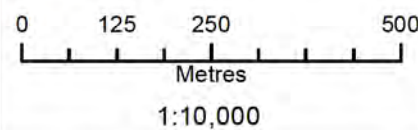
Specific Mitigation:

- 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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- 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\*
  - ▲ Towers (Preliminary)\*
  - BPIII Final Preferred Route
  - 66 m Right of Way
  - \*Towers are subject to change, and are only used as a rough guide
- Sensitive Sites\***
- Point Features
  - Linear Features
  - Area Features
  - \*Currently outside the Project footprint

- Points of Access\***
- Proposed Access Point
  - Major Stream Crossing
  - ▲ Abandoned Rail Crossing
  - ▲ Rail Crossing
  - Transmission Line Crossing
  - Bypass Trails
  - Approved Access Route

- ESS Features**
- Heritage**
- Archaeological
- Water**
- Water Crossing
- Land Use**
- Crown Land Encumbrance
- Resource Use**
- Forestry

- Water**
- Groundwater

**Bipole III Transmission Project**  
**Construction Environmental Protection Plan**  
**Construction Section C2**  
**Environmentally Sensitive Site Locations**

Map 255



ESS Group: Archaeological

| Sec-Seg ID | ESS ID      | ESS Name                  | Easting | Northing | UTM Zone |
|------------|-------------|---------------------------|---------|----------|----------|
| C2-S3      | 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       | No Data            | No Data             |

Potential Effects:

Habitat loss and 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.

ESS Group: Crown Land Encumbrance

| Sec-Seg ID | ESS ID      | ESS Name                                   | Location       | Start                 | Stop                  | UTM Zone | Distance |
|------------|-------------|--------------------------------------------|----------------|-----------------------|-----------------------|----------|----------|
| C2-S3      | C2-LUse-201 | DU Canada Project – Crown land encumbrance | Site: 17 to 18 | E-497334<br>N-5643303 | E-497758<br>N-5642559 | 14N      | 856 m    |
| C2-S3      | C2-LUse-202 | DU Canada Project – Crown land encumbrance | Site: 21 to 22 | E-497809<br>N-5642468 | E-498271<br>N-5641655 | 14N      | 935 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 sensitive area; adhere to seasonally limited maintenance times

ESS Group: Forestry

| Sec-Seg ID | ESS ID      | ESS Name    | Location       | Start                 | Stop                  | UTM Zone | Distance |
|------------|-------------|-------------|----------------|-----------------------|-----------------------|----------|----------|
| C2-S3      | C2-RUse-305 | Shelterbelt | Site: 15 to 16 | E-496936<br>N-5644005 | E-496953<br>N-5643975 | 14N      | 33m      |

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
- If Burning of clearing debris is required it must be conducted 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
- Use existing access trails, roads or cut lines whenever possible as access routes
- Limit all equipment to project footprint only, where possible
- No damage to Vegetation on the edge of the Right of Way
- No pushing debris into adjacent timber



ESS Group: Groundwater

| Sec-Seg ID | ESS ID      | ESS Name                                    | Location       | Start                  | Stop                   | UTM Zone | Distance |
|------------|-------------|---------------------------------------------|----------------|------------------------|------------------------|----------|----------|
| C2-S3      | C2-Aqua-200 | Artesian areas with uncertain water quality | Site: 19 to 20 | E-497785<br>N- 5642511 | E-499686<br>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.

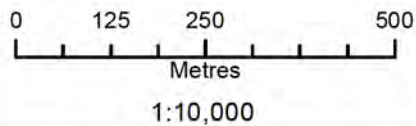


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Coordinate System: UTM Zone 14N NAD83  
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- Land Base**
- Transmission Line
  - Highway
  - Major Road
  - Local Road
  - Winter Road
  - Railway (Operational)
  - Railway (Discontinued)
  - First Nation
  - Mining
  - Provincial Forest

- Project Infrastructure**
- Angle Tower Locations\*
  - Towers (Preliminary)\*
  - BPIII Final Preferred Route
  - 66 m Right of Way
  - \*Towers are subject to change, and are only used as a rough guide
- Sensitive Sites\***
- Point Features
  - Linear Features
  - Area Features
  - \*Currently outside the Project footprint

- Points of Access\***
- Proposed Access Point
  - Major Stream Crossing
  - Abandoned Rail Crossing
  - Rail Crossing
  - Transmission Line Crossing
  - Bypass Trails
  - Approved Access Route

- ESS Features**
- Heritage**
- Archaeological
- Water**
- Water Crossing
- Land Use**
- Crown Land Encumbrance
- Water**
- Groundwater

**Bipole III Transmission Project**  
**Construction Environmental Protection Plan**  
**Construction Section C2**  
**Environmentally Sensitive Site Locations**



ESS Group: Archaeological

| Sec-Seg ID | ESS ID      | ESS Name                | Easting | Northing | UTM Zone |
|------------|-------------|-------------------------|---------|----------|----------|
| C2-S4      | C2-Hert-103 | Creek near Jarvies Lake | 500124  | 5638620  | 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      | No Data       | No Data   | No Data            | No Data             |
| C2-S04     | C2-Aqua- 108 | Unnamed tributary from Jarvies Lake | 500152  | 5638584  | 14N      | No Data       | No Data   | No Data            | No Data             |

Potential Effects:

Habitat loss and 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.
- No instream works or fording from April 1 - July 15

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- 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:

- 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: Crown Land Encumbrance

| Sec-Seg ID | ESS ID      | ESS Name                                   | Location       | Start               | Stop                | UTM Zone | Distance |
|------------|-------------|--------------------------------------------|----------------|---------------------|---------------------|----------|----------|
| C2-S4      | C2-LUse-203 | DU Canada Project – Crown land encumbrance | Site: 25 to 26 | E-500229 N- 5638487 | E-500305 N- 5638393 | 14N      | 120 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 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-S3      | C2-Aqua-200 | Artesian areas with uncertain water quality | Site: 19 to 20 | E-497785<br>N- 5642511 | E-499686<br>N- 5639166 | 14N      | 3847m    |
| C2-S4      | C2-Aqua-200 | Artesian areas with uncertain water quality | Site: 23 to 24 | E-499686<br>N- 5639166 | E-501935<br>N- 5636356 | 14N      | 3598m    |

Potential Effects:

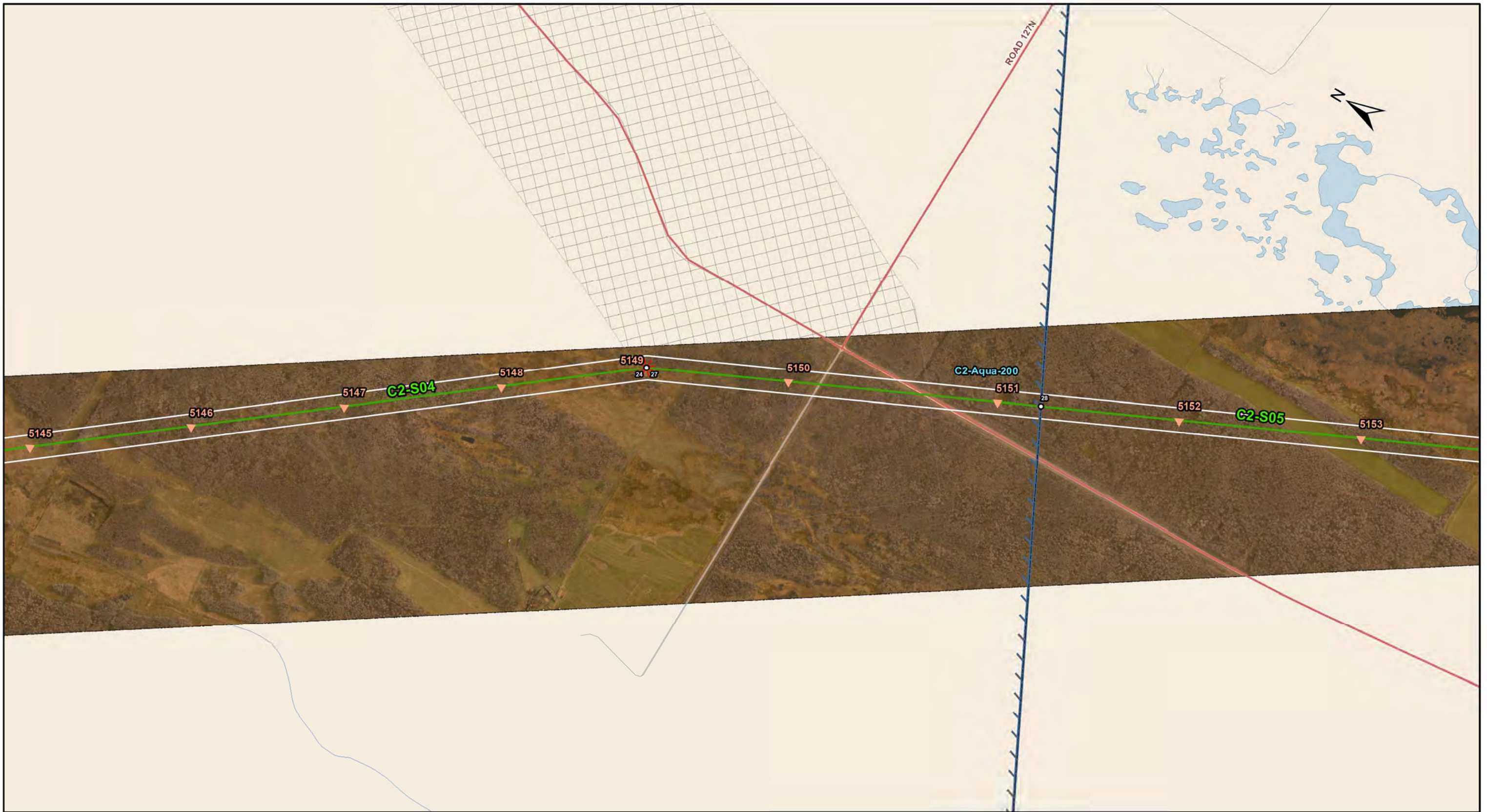
Potential increase in salinity of soils and surface water in case where aquifer is saline and groundwater discharges to the surface; wetting the surficial environment (ground saturation)

Specific Mitigation:

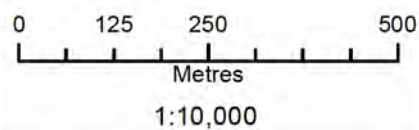
- Qualified driller with appropriate experience will be contracted to work in areas affected by artesian conditions.
- Emergency response plans for sealing/grouting and pumping will be implemented as required.
- Follow up inspections of installed foundations will be undertaken to monitor for excess moisture.



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**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\*
- ▲ Towers (Preliminary)\*
- BPIII Final Preferred Route
- 66 m Right of Way

\*Towers are subject to change, and are only used as a rough guide

**Sensitive Sites\***

- Point Features
- Linear Features
- Area Features

\*Currently outside the Project footprint

**Points of Access\***

- Proposed Access Point
- Major Stream Crossing
- ▲ Abandoned Rail Crossing
- ▲ Rail Crossing
- Transmission Line Crossing
- Bypass Trails
- Approved Access Route

**ESS Features**

**Water**

- Groundwater

## Bipole III Transmission Project

### Construction Environmental Protection Plan

#### Construction Section C2

#### Environmentally Sensitive Site Locations

Map 257



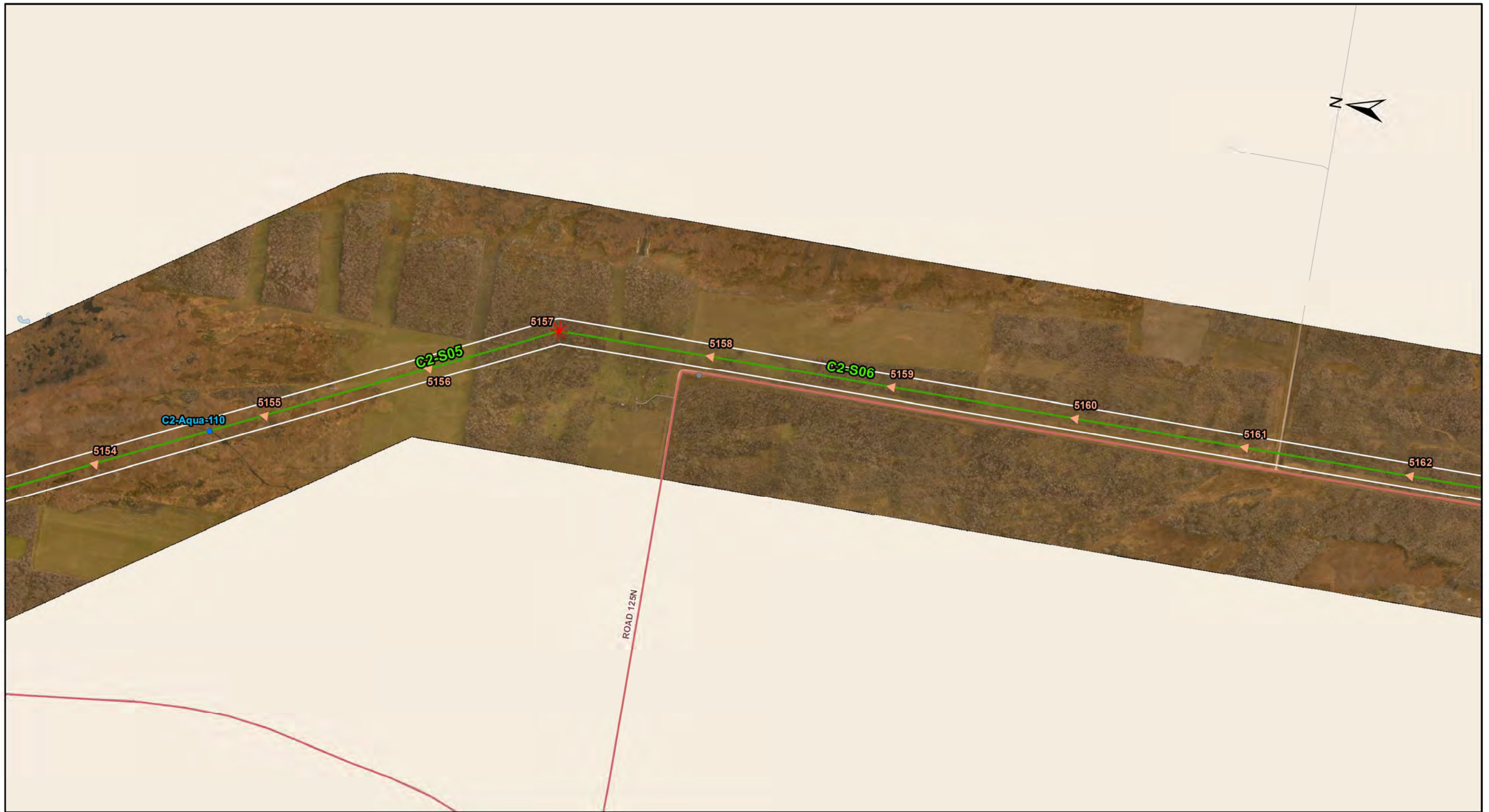
| Sec-Seg ID | ESS ID      | ESS Name                                    | Location       | Start                  | Stop                   | UTM Zone | Distance |
|------------|-------------|---------------------------------------------|----------------|------------------------|------------------------|----------|----------|
| C2-S4      | C2-Aqua-200 | Artesian areas with uncertain water quality | Site: 23 to 24 | E-499686<br>N- 5639166 | E-501935<br>N- 5636356 | 14N      | 3598m    |
| C2-S5      | C2-Aqua-200 | Artesian areas with uncertain water quality | Site: 27 to 28 | E-501935<br>N- 5636356 | E-502400<br>N- 5635389 | 14N      | 1073m    |

Potential Effects:

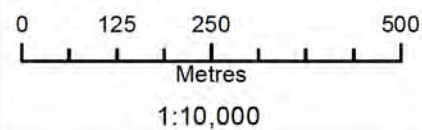
Potential increase in salinity of soils and surface water in case where aquifer is saline and groundwater discharges to the surface; wetting the surficial environment (ground saturation)

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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- 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\*
  - ▲ Towers (Preliminary)\*
  - BP/III Final Preferred Route
  - 66 m Right of Way
  - \*Towers are subject to change, and are only used as a rough guide
- Sensitive Sites\***
- Point Features
  - Linear Features
  - Area Features
- \*Currently outside the Project footprint

- Points of Access\***
- Proposed Access Point
  - Major Stream Crossing
  - ▲ Abandoned Rail Crossing
  - ▲ Rail Crossing
  - Transmission Line Crossing
  - Bypass Trails
  - Approved Access Route

- ESS Features**
- Water**
- Water Crossing

**Bipole III Transmission Project**  
**Construction Environmental Protection Plan**  
**Construction Section C2**  
**Environmentally Sensitive Site Locations**



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-S5      | C2-Aqua-110 | Unnamed Creek | 503131  | 5633872  | 14N      | No Data       | No Data   | No Data            | No Data             |

Potential Effects:

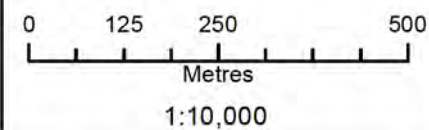
Habitat loss and contamination from structure foundations & installations; increased erosion & sedimentation of streams; Damage to stream banks; Loss of riparian vegetation

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.



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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\*
- Towers (Preliminary)\*
- BPIII Final Preferred Route
- 66 m Right of Way
- \*Towers are subject to change, and are only used as a rough guide

**Sensitive Sites\***

- Point Features
- Linear Features
- Area Features
- \*Currently outside the Project footprint

**Points of Access\***

- Proposed Access Point
- Major Stream Crossing
- Abandoned Rail Crossing
- Rail Crossing
- Transmission Line Crossing
- Bypass Trails
- Approved Access Route

**ESS Features**

**Water**

- Water Crossing

**Resource Use**

- Forestry

# **Bipole III Transmission Project** **Construction Environmental Protection Plan** **Construction Section C2** **Environmentally Sensitive Site Locations**



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-S7      | C2-Aqua-111 | Garrioch Creek | 503982  | 5626741  | 14N      | No Data       | 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.
- No instream works or fording from April 1 - July 15

ESS Group: Forestry

| Sec-Seg ID | ESS ID      | ESS Name        | Location       | Start                 | Stop                  | UTM Zone | Distance |
|------------|-------------|-----------------|----------------|-----------------------|-----------------------|----------|----------|
| C2-S6      | C2-RUse-306 | Alonsa Woodlots | Site: 29 to 30 | E-503564<br>N-5630190 | E-503569<br>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
- If Burning of clearing debris is required it must be conducted 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
- Use existing access trails, roads or cut lines whenever possible as access routes
- Limit all equipment to project footprint only, where possible
- No damage to Vegetation on the edge of the Right of Way
- No pushing debris into adjacent timber





Coordinate System: UTM Zone 14N NAD83  
Data Source: MB Hydro, ProvMB, NRCAN  
Date Created: November 03, 2016  
Version: Final 4.0

0 125 250 500  
Metres  
1:10,000

**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\*
- Towers (Preliminary)\*
- BPIII Final Preferred Route
- 66 m Right of Way

**Sensitive Sites\***

- Point Features
- Linear Features
- Area Features

\*Currently outside the Project footprint

**Points of Access\***

- Proposed Access Point
- Major Stream Crossing
- Abandoned Rail Crossing
- Rail Crossing
- Transmission Line Crossing
- Bypass Trails
- Approved Access Route

**ESS Features**

**Water**

- Water Crossing

**Water**

- Water Crossing

**Bipole III Transmission Project**  
**Construction Environmental Protection Plan**  
**Construction Section C2**  
**Environmentally Sensitive Site Locations**  
Map 260



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-S7      | C2-Aqua-112 | Rocklan Drain | 504265  | 5626110  | 14N      | 5m            | No Data   | 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.
- No instream works or fording from April 1 – July 15

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-S7      | C2-Aqua-113 | Drain    | 505009  | 5624444  | 14N      | No Data       | No Data   | No Data            | No Data             |

Potential Effects:

Habitat loss and 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.

ESS Group: Water Crossing

| Sec-Seg ID | ESS ID      | ESS Name          | Location       | Start                 | Stop                  | UTM Zone | Distance |
|------------|-------------|-------------------|----------------|-----------------------|-----------------------|----------|----------|
| C2-S7      | C2-Aqua-114 | Unnamed waterbody | Site: 31 to 32 | E-505377<br>N-5623620 | E-505516<br>N-5623310 | 14N      | 340m     |
| C2-S7      | C2-Aqua-114 | Unnamed waterbody | Site: 33 to 34 | E-505533<br>N-5623272 | E-505674<br>N-5622955 | 14N      | 346m     |

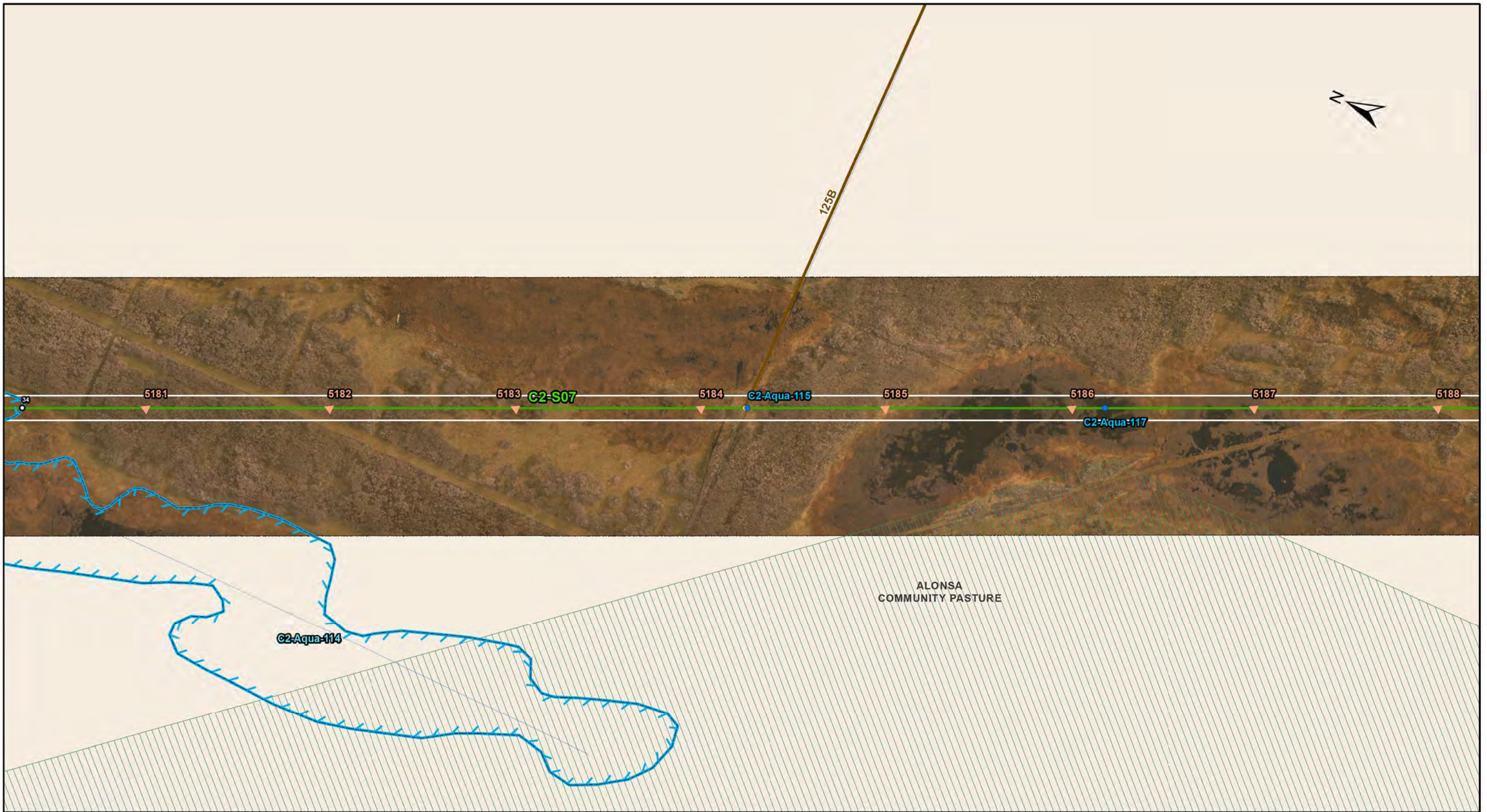
Potential Effects:

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

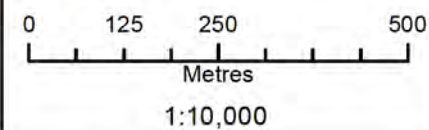
Specific Mitigation:

- 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.





Coordinate System: UTM Zone 14N NAD83  
Data Source: MB Hydro, ProvMB, NRCAN  
Date Created: November 03, 2016  
Version: Final 4.0



**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\*
- Towers (Preliminary)\*
- BPIII Final Preferred Route
- 66 m Right of Way
- \*Towers are subject to change, and are only used as a rough guide

**Sensitive Sites\***

- Point Features
- Linear Features
- Area Features
- \*Currently outside the Project footprint

**Points of Access\***

- Proposed Access Point
- Major Stream Crossing
- Abandoned Rail Crossing
- Rail Crossing
- Transmission Line Crossing
- Bypass Trails
- Approved Access Route

**ESS Features**

**Water**

- Water Crossing

**Water**

- Water Crossing

**Bipole III Transmission Project**  
**Construction Environmental Protection Plan**  
**Construction Section C2**  
**Environmentally Sensitive Site Locations**

Map 261



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-S7      | C2-Aqua-115 | Unnamed Creek | 506477  | 5621163  | 14N      | No Data       | No Data   | No Data            | No Data             |

Potential Effects:

Habitat loss and 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.

ESS Group: Water Crossing

| Sec-Seg ID | ESS ID      | ESS Name          | Location       | Start                 | Stop                  | UTM Zone | Distance |
|------------|-------------|-------------------|----------------|-----------------------|-----------------------|----------|----------|
| C2-S7      | C2-Aqua-114 | Unnamed waterbody | Site: 33 to 34 | E-505533<br>N-5623272 | E-505674<br>N-5622955 | 14N      | 346m     |

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: 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-117 | Small, unnamed lake | 506873  | 5620277  | 14N      | No Data       | No Data   | 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

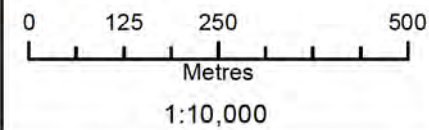
Specific Mitigation:

- 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.
- No instream works or fording from April1 - July 15





Coordinate System: UTM Zone 14N NAD83  
Data Source: MB Hydro, ProvMB, NRCAN  
Date Created: November 03, 2016  
Version: Final 4.0



**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\*
- Towers (Preliminary)\*
- BPIII Final Preferred Route
- 66 m Right of Way

\*Towers are subject to change, and are only used as a rough guide

**Sensitive Sites\***

- Point Features
- Linear Features
- Area Features

\*Currently outside the Project footprint

**Points of Access\***

- Proposed Access Point
- Major Stream Crossing
- Abandoned Rail Crossing
- Rail Crossing
- Transmission Line Crossing
- Bypass Trails
- Approved Access Route

**ESS Features**

**Water**

- Water Crossing

**Resource Use**

- Forestry

**Bipole III Transmission Project**  
**Construction Environmental Protection Plan**  
**Construction Section C2**  
**Environmentally Sensitive Site Locations**

Map 262



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-S7      | C2-Aqua-119 | Unnamed road ditch | 507943  | 5617883  | 14N      | No Data       | No Data   | Low                | Marginal            |
| C2-S7      | C2-Aqua-120 | Unnamed road ditch | 507943  | 5617883  | 14N      | No Data       | No Data   | 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
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- 7m no machine zone will restrict equipment in close proximity to the waterbody except at the trail crossing.

ESS Group: Forestry

| Sec-Seg ID | ESS ID      | ESS Name    | Location       | Start                 | Stop                  | UTM Zone | Distance |
|------------|-------------|-------------|----------------|-----------------------|-----------------------|----------|----------|
| C2-S7      | C2-RUse-309 | Shelterbelt | Site: 35 to 36 | E-507931<br>N-5617909 | E-507937<br>N-5617894 | 14N      | 15m      |

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
- If Burning of clearing debris is required it must be conducted 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
- Use existing access trails, roads or cut lines whenever possible as access routes
- Limit all equipment to project footprint only, where possible
- No damage to Vegetation on the edge of the Right of Way
- No pushing debris into adjacent timber