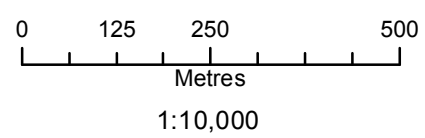


Coordinate System: UTM Zone 14N NAD83
 Data Source: MB Hydro, ProvMB, NRCAN
 Date Created: July 23, 2014
 Version: Draft



- Land Base**
- Transmission Line
 - Highway
 - Major Road
 - Local Road
 - Railway (Operational)
 - Railway (Discontinued)
 - First Nation
 - Mining
 - Provincial Forest
 - Township/Range

- Project Infrastructure**
- Angle Tower Locations
 - BPIII Final Preferred Route
 - 66 m Right of Way
 - Ground Electrode Line
 - Proposed Converter Station

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

- ESS Features**
- Water**
 - Water Crossing
 - Resource Use**
 - Forestry
 - Water**
 - Groundwater

**Bipole III Transmission Project
 Construction Environmental Protection Plan
 Construction Section S2
 Environmentally Sensitive Site Locations**

Draft: For Discussion Purposes Only

ESS Group: Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
S2-S36	S2-Aqua-152	Unnamed Drain	662951	5523672	14N	N/A	N/A	None	None
S2-S36	S2-Aqua-153	Unnamed Drain	662705	5523892	14N	N/A	N/A	None	None
S2-S36	S2-Aqua-154	Unnamed Drain	662489	5524097	14N	N/A	N/A	Low	No Fish Habitat

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 Timing Windows, Temporary Stream Crossings, Ice Bridges and Snow Fills, and Overhead Line Construction

ESS Group: Forestry

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
S2-S35	S2-RUse-310	Shelterbelt	Site: 135 to 136	E-662690 N-5523913	E-662670 N-5523932	14N	28m

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
- 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

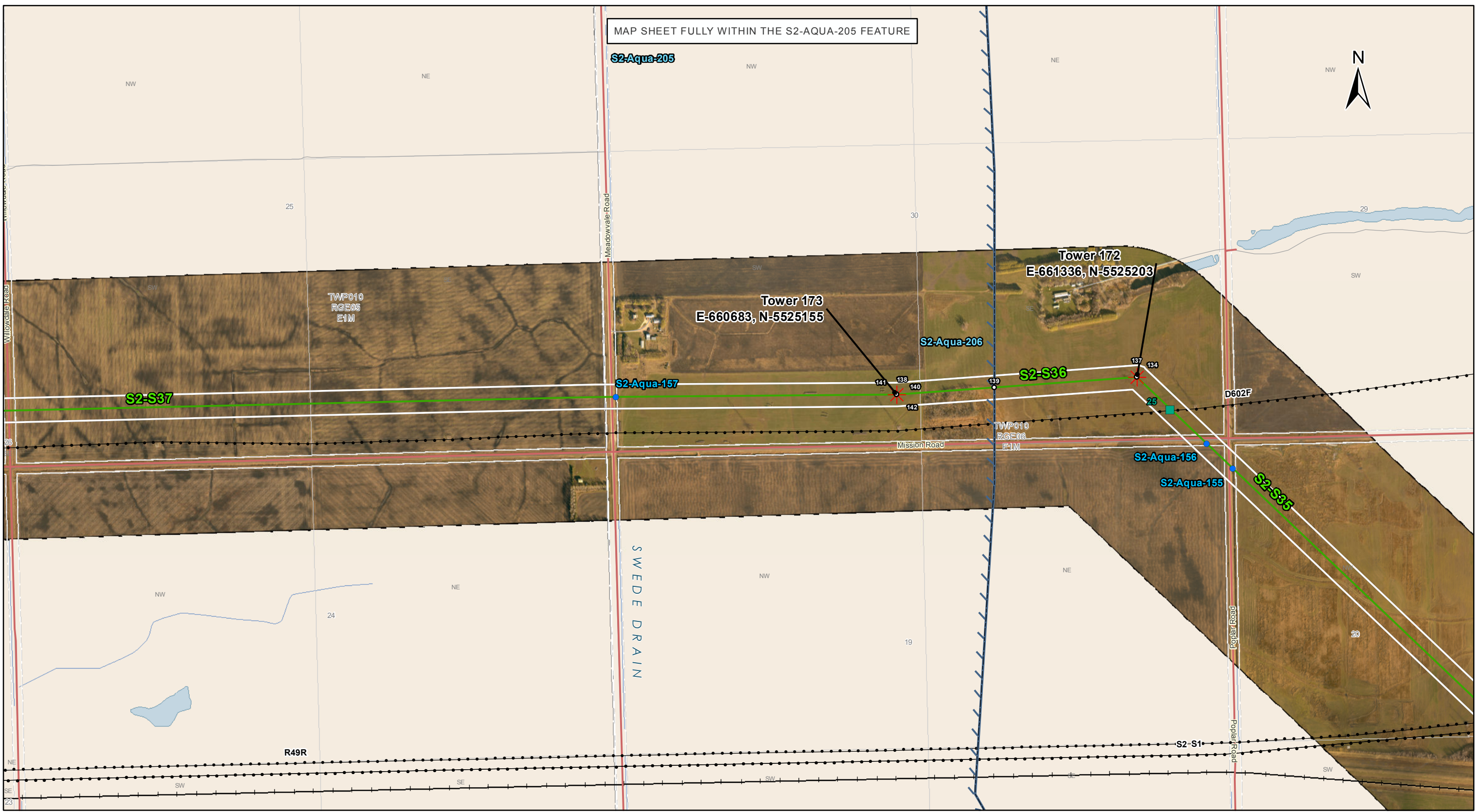
Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
S2-S35	S2-Aqua-205	Freshwater artesian areas	Site: 133 to 134	E-664912 N-5521792	E-661336 N-5525202	14N	4941 m

Potential Effects:

Wetting the surficial environment near potential discharge from tower foundation drill hole (ground saturation); also, potential level drop in the aquifer.

Specific Mitigation:

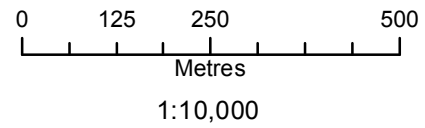
- Qualified driller with appropriate experience will be contracted to work in areas affected by artesian conditions.
- Emergency response plans for sealing/grouting and pumping will be implemented as required.
- Follow up inspections of installed foundations will be undertaken to monitor for excess moisture.



MAP SHEET FULLY WITHIN THE S2-AQUA-205 FEATURE



Coordinate System: UTM Zone 14N NAD83
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 Version: Draft



- Land Base**
- Transmission Line
 - Highway
 - Major Road
 - Local Road
 - Railway (Operational)
 - Railway (Discontinued)
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 - Township/Range

- Project Infrastructure**
- Angle Tower Locations
 - BPIII Final Preferred Route
 - 66 m Right of Way
 - Ground Electrode Line
 - Proposed Converter Station

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

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

**Bipole III Transmission Project
 Construction Environmental Protection Plan
 Construction Section S2
 Environmentally Sensitive Site Locations**

Draft: For Discussion Purposes Only

ESS Group: Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
S2-S38	S2-Aqua-155	Unnamed Drain	661597	5524953	14N	N/A	N/A	None	None
S2-S38	S2-Aqua-156	Unnamed Drain	661525	5525022	14N	N/A	N/A	None	None
S2-S38	S2-Aqua-157	Swede Drain	659919	5525149	14N	N/A	N/A	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 Timing Windows, Temporary Stream Crossings, Ice Bridges and Snow Fills, and Overhead Line Construction

ESS Group: Groundwater

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
S2-S35	S2-Aqua-205	Freshwater artesian areas	Site: 133 to 134	E-664912 N-5521792	E-661336 N-5525202	14N	4941m
S2-S36	S2-Aqua-205	Freshwater artesian areas	Site: 137 to 138	E-661336 N-5525202	E-660682 N-5525155	14N	655m
S2-S37	S2-Aqua-205	Freshwater artesian areas	Site: 142 to 143	E-660682 N-5525155	E-658228 N-5525111	14N	2454m

Potential Effects:

Wetting the surficial environment near potential discharge from tower foundation drill hole (ground saturation); also, potential level drop in the aquifer.

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: Groundwater

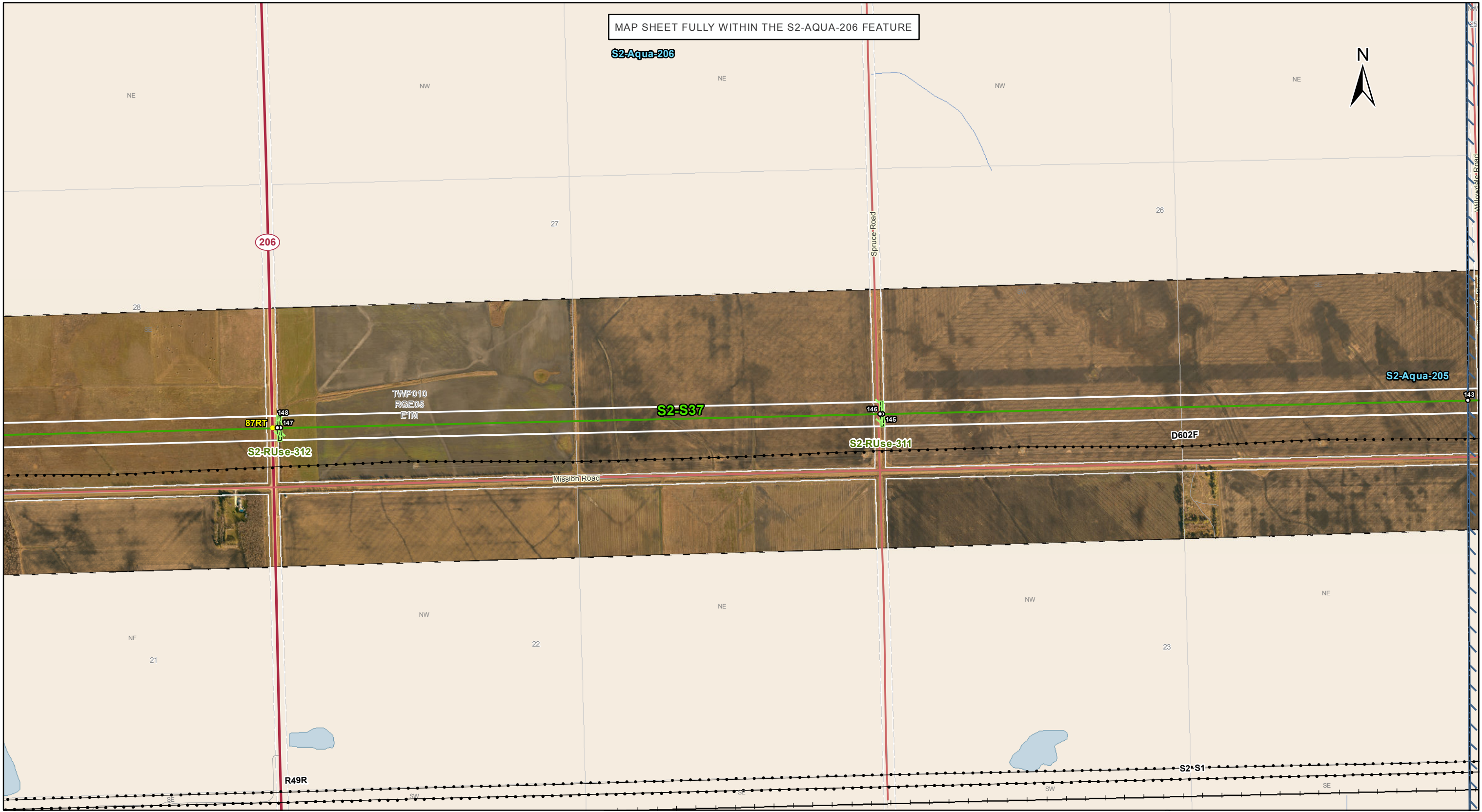
Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
S2-S36	S2-Aqua-206	Aquifers vulnerable to contamination	Site: 139 to 140	E-660948 N-5525174	E-660682 N-5525155	14N	266 m
S2-S37	S2-Aqua-206	Aquifers vulnerable to contamination	Site: 141 to 144	E-660682 N-5525155	E-649999 N-5524902	14N	10686 m

Potential Effects:

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

Specific Mitigation:

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



MAP SHEET FULLY WITHIN THE S2-AQUA-206 FEATURE

S2-Aqua-206



206

87RT

S2-RUse-312

TWP010
R0E05
E1M

S2-S37

S2-RUse-311

D602F

S2-Aqua-205

Mission Road

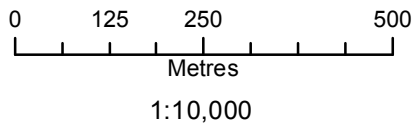
Spruce Road

R49R

S2-S1



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- Land Base**
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 - Railway (Discontinued)
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- Angle Tower Locations
 - BPIII Final Preferred Route
 - 66 m Right of Way
 - Ground Electrode Line
 - Proposed Converter Station

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

- ESS Features**
- Resource Use**
- Forestry
- Water**
- Groundwater

**Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section S2
Environmentally Sensitive Site Locations**

Draft: For Discussion Purposes Only

Map 341

ESS Group: Groundwater

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
S2-S37	S2-Aqua-206	Aquifers vulnerable to contamination	Site: 141 to 144	E-660682 N-5525155	E-649999 N-5524902	14N	10686 m

Potential Effects:

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

Specific Mitigation:

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

ESS Group: Groundwater

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
S2-S37	S2-Aqua-205	Freshwater artesian areas	Site: 142 to 143	E-660682 N-5525155	E-658228 N-5525111	14N	2454 m

Potential Effects:

Wetting the surficial environment near potential discharge from tower foundation drill hole (ground saturation); also, potential level drop in the aquifer.

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

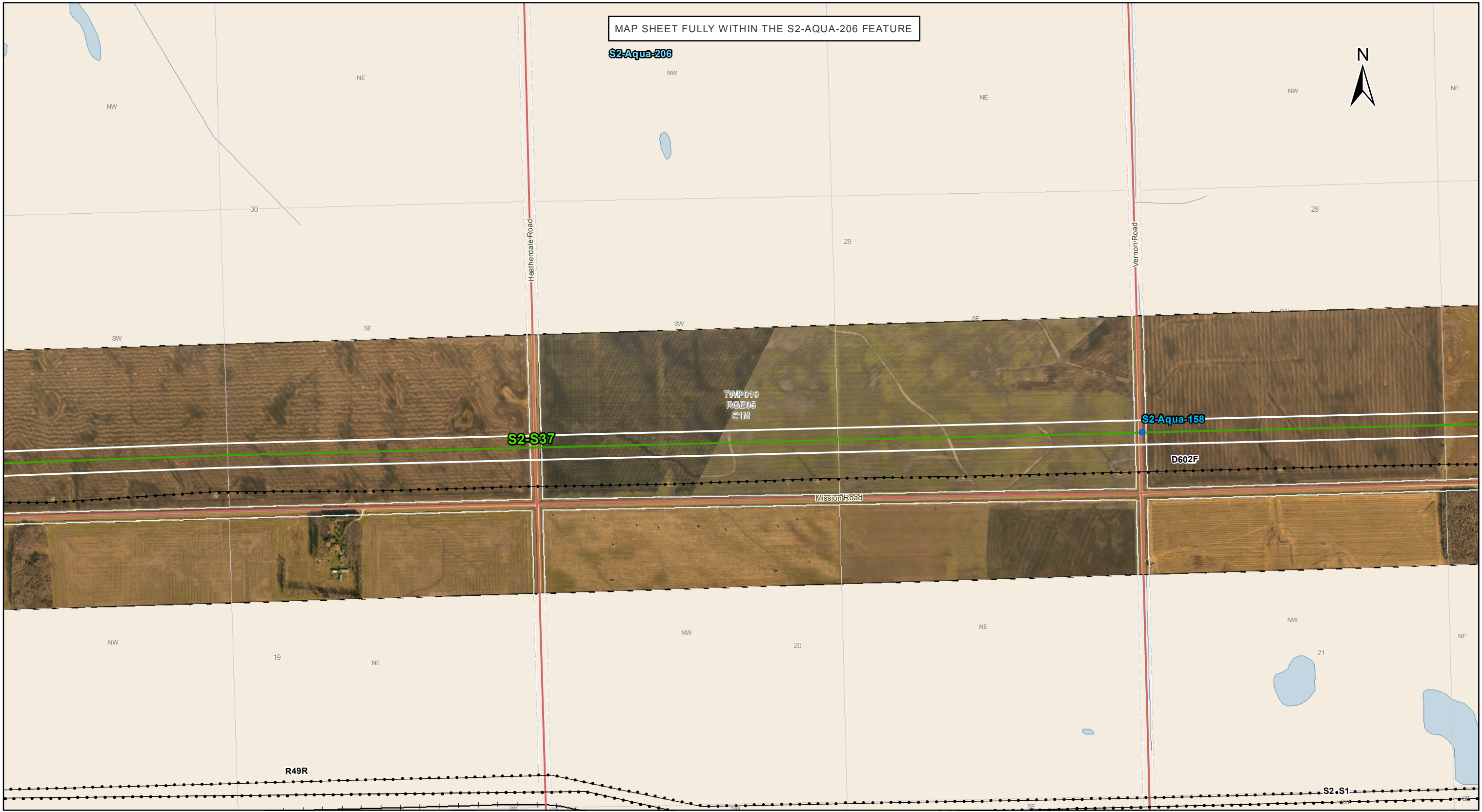
Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
S2-S37	S2-RUse-311	Shelterbelt	Site: 145 to 146	E-656642 N-5525075	E-656635 N-5525075	14N	7 m
S2-S37	S2-RUse-312	Shelterbelt	Site: 147 to 148	E-655009 N-5525037	E-655000 N-5525037	14N	9 m

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
- 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



MAP SHEET FULLY WITHIN THE S2-AQUA-206 FEATURE

S2-Aqua-206



S2-S37

S2-Aqua-158

D602F

TWP010
RGE05
E1M

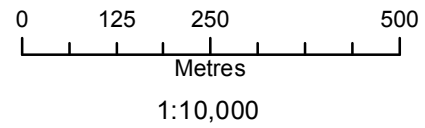
Mission Road

R49R

S2.S1



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- Water
 - Water Crossing
 - Water
 - Groundwater

**Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section S2
Environmentally Sensitive Site Locations**

Draft: For Discussion Purposes Only

Map 342

ESS Group: Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
S2-S38	S2-Aqua-158	Unnamed Drain	653343	5524996	14N	N/A	N/A	None	None

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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- 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 Timing Windows, Temporary Stream Crossings, Ice Bridges and Snow Fills, and Overhead Line Construction

ESS Group: Groundwater

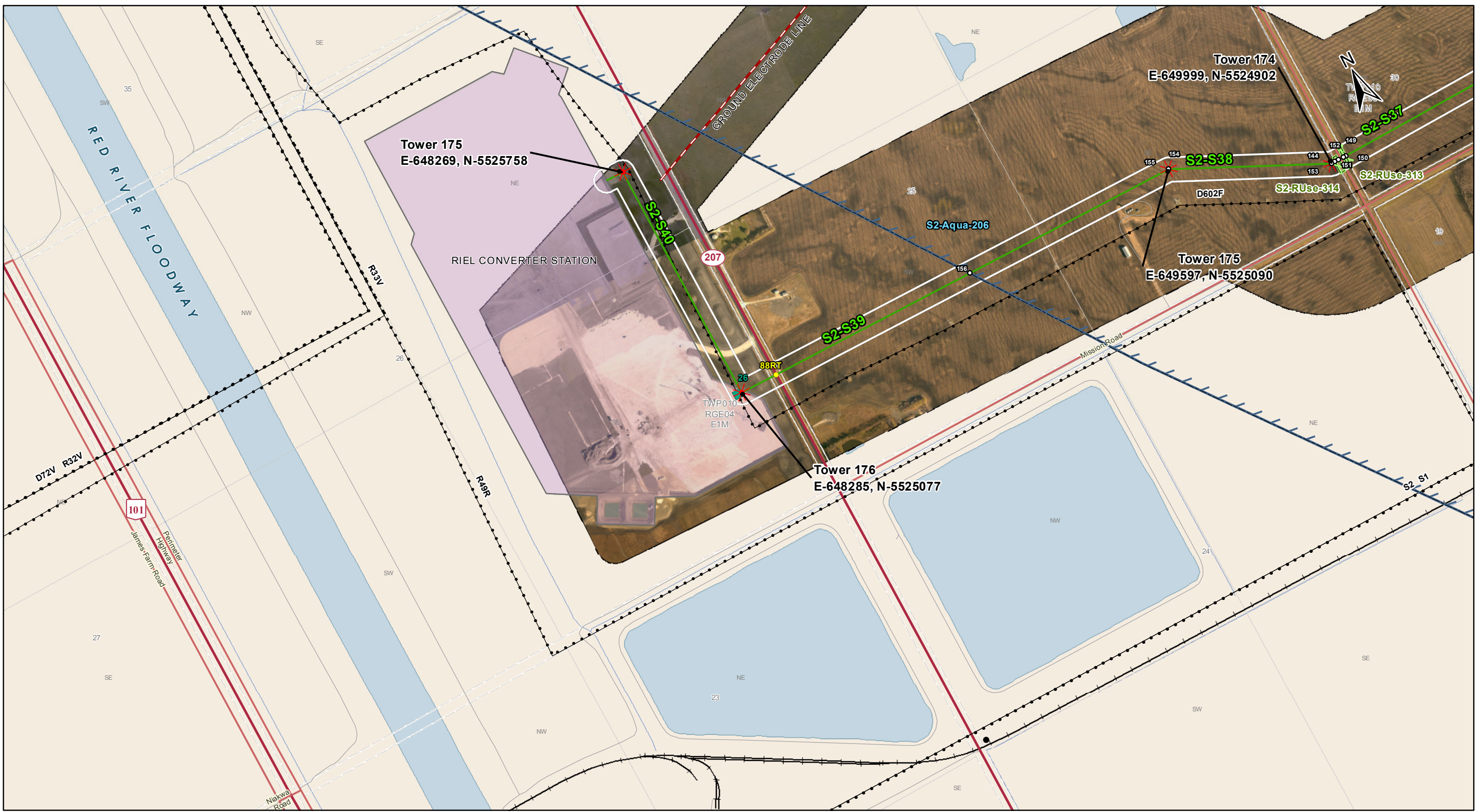
Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
S2-S37	S2-Aqua-206	Aquifers vulnerable to contamination	Site: 141 to 144	E-660682 N-5525155	E-649999 N-5524902	14N	10686m

Potential Effects:

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

Specific Mitigation:

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



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0 125 250 500
 Metres
 1:10,000

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- *Labels correspond to BPIII Access Management Database

- ESS Features**
- Resource Use**
- Forestry
- Water**
- Groundwater

**Bipole III Transmission Project
 Construction Environmental Protection Plan
 Construction Section S2
 Environmentally Sensitive Site Locations**

Draft: For Discussion Purposes Only

ESS Group: Groundwater

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
S2-S37	S2-Aqua-206	Aquifers vulnerable to contamination	Site: 141 to 144	E-660682 N-5525155	E-649999 N-5524902	14N	10686 m
S2-S38	S2-Aqua-206	Aquifers vulnerable to contamination	Site: 153 to 154	E-649999 N-5524902	E-649596 N-5525089	14N	443 m
S2-S39	S2-Aqua-206	Aquifers vulnerable to contamination	Site: 155 to 156	E-649596 N-5525089	E-648986 N-5525083	14N	610 m

Potential Effects:

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

Specific Mitigation:

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

ESS Group: Forestry

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
S2-S37	S2-RUUse-313	Shelterbelt	Site: 149 to 150	E-650042 N-5524903	E-650035 N-5524903	14N	7 m
S2-S37	S2-RUUse-314	Shelterbelt	Site: 151 to 152	E-650019 N-5524903	E-650009 N-5524902	14N	10 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
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