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**ESS Group: Water Crossing**

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Easting</th>
<th>Northing</th>
<th>UTM Zone</th>
<th>Channel Width</th>
<th>Wet Width</th>
<th>Fish Habitat Class</th>
<th>Habitat Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S10</td>
<td>S2-Aqua-111</td>
<td>Garber Drain</td>
<td>611387</td>
<td>S490553</td>
<td>14N</td>
<td>N/A</td>
<td>7m</td>
<td>Low</td>
<td>Marginal</td>
</tr>
<tr>
<td>S2-S10</td>
<td>S2-Aqua-112</td>
<td>Garber Drain</td>
<td>611558</td>
<td>S490222</td>
<td>14N</td>
<td>N/A</td>
<td>4m</td>
<td>Low</td>
<td>Marginal</td>
</tr>
</tbody>
</table>

**Potential Effects:**
Habitat loss and contamination from structure foundations & installments; 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 or dry ground to minimize surface damage, rutting and erosion. If wet conditions, one time fording is permitted.  
- Use existing trails, roads or cut lines whenever possible as access routes.  
- No machinery or crews will contact equipment in close proximity to the waterbody except at the trail crossing.  
- Limit machinery fording of the watercourse to a one-time event (over and back) only if no alternative crossing method is available. If repeated crossings of the watercourse are necessary prior approval from the NH Environmental Inspector is required.  
- Locate crossings perpendicular to the bank, whenever possible.  
- Immediately stabilize shoreline or banks disturbed by any activity associated with the project to prevent erosion and/or sedimentation, preferably through re-vegetation with native species suitable for the site.

**ESS Group: Groundwater**

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S09</td>
<td>S2-Aqua-200</td>
<td>Saline artesian areas</td>
<td>Site: 9 to 10</td>
<td>E-611257 N-5496792</td>
<td>E-611391 N-5490218</td>
<td>14N</td>
<td>6374m</td>
</tr>
<tr>
<td>S2-S10</td>
<td>S2-Aqua-200</td>
<td>Saline artesian areas</td>
<td>Site: 11 to 12</td>
<td>E-611391 N-5490218</td>
<td>E-619944 N-5490307</td>
<td>14N</td>
<td>8534m</td>
</tr>
</tbody>
</table>

**Potential Effects:**
Increase in salinity of soils and surface water in case of potential groundwater discharge to the surface; wetting the subsurface environment (ground saturation); effect on local vegetation.

**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 NUMBER: 316*
ESS Group: Groundwater

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-509</td>
<td>S2-Aqua-200</td>
<td>Saline artesian areas</td>
<td>Site: 9 to 10</td>
<td>E-611257</td>
<td>E-611391</td>
<td>N-5490792</td>
<td>14N</td>
</tr>
<tr>
<td>32-510</td>
<td>32-Aqua-200</td>
<td>Saline artesian areas</td>
<td>Site: 11 to 14</td>
<td>E-541901</td>
<td>E-540044</td>
<td>N-5490218</td>
<td>14N</td>
</tr>
</tbody>
</table>

Potential Effects:

Increase in salinity of soils and surface water in case of potential groundwater discharge to the surface; wetting the surficial environment (ground saturation); effect on local vegetation.

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: Water Crossing

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Easting</th>
<th>Northing</th>
<th>UTM Zone</th>
<th>Channel Width</th>
<th>Wet Width</th>
<th>Fish Habitat Class</th>
<th>Habitat Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S10</td>
<td>S2-Aqua-113</td>
<td>Unnamed Drain</td>
<td>616907</td>
<td>5490335</td>
<td>14N</td>
<td>N/A</td>
<td>3m</td>
<td>Low</td>
<td>Marginal</td>
</tr>
<tr>
<td>S2-S10</td>
<td>S2-Aqua-114</td>
<td>Manness Drain</td>
<td>618051</td>
<td>5490359</td>
<td>14N</td>
<td>N/A</td>
<td>7m</td>
<td>Low</td>
<td>Marginal</td>
</tr>
<tr>
<td>S2-S10</td>
<td>S2-Aqua-115</td>
<td>Roberts Drain</td>
<td>620318</td>
<td>5490417</td>
<td>14N</td>
<td>N/A</td>
<td>7m</td>
<td>Low</td>
<td>Marginal</td>
</tr>
</tbody>
</table>

**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 disturbance and impacted fish movement, flooding of floodplain.

**Specific Mitigation:**

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion. If wet conditions, one time footing is permitted
- Use existing trails, roads or cut lines whenever possible as access routes
- For no machine zone will restrict equipment in close proximity to the waterbody except at the trail crossing.
- Limit machinery fording of the watercourse to a one-time event (over and back) only if no alternative crossing method is available. If repeated crossings of the watercourse are necessary prior approval from the Eindhoven Environmental Inspector is required
- Locate crossings perpendicular to the bank, whenever possible.
- Immediately stabilize shoreline or banks disturbed by any activity associated with the project to prevent erosion and/or sedimentation, preferably through re-vegetation with native species suitable for the site.

### ESS Group: Groundwater

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<th>Sec-Seg ID</th>
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<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S10</td>
<td>S2-Aqua-200</td>
<td>Saline artesian areas</td>
<td>Site: 11 to 12</td>
<td>E-611391 N-5490218</td>
<td>E-619944 N-5490397</td>
<td>14N</td>
<td>85S4m</td>
</tr>
</tbody>
</table>

**Potential Effects:**

Increase in salinity of soils and surface water in case of potential groundwater discharge to the surface; wetting the surficial environment (ground saturation); effect on local vegetation.

**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: Water Crossing

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Easting</th>
<th>Northing</th>
<th>UTM Zone</th>
<th>Channel Width</th>
<th>Wet Width</th>
<th>Fish Habitat Class</th>
<th>Habitat Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S10</td>
<td>S2-Aqua-116</td>
<td>Domain Drain</td>
<td>623839</td>
<td>5490470</td>
<td>14N</td>
<td>N/A</td>
<td>2m</td>
<td>Low</td>
<td>Marginal</td>
</tr>
</tbody>
</table>

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 impacted fish movement; flooding of floodplain

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion. If wet conditions, one time fording is permitted.
- Use existing trails, roads or cut lines whenever possible as access routes
- 7m no machine zone will restrict equipment in close proximity to the waterbody except at the trail crossing.
- Limit machinery fording of the watercourse to a one-time event (over and back) only if no alternative crossing method is available. If repeated crossings of the watercourse are necessary prior approval from the MN Environmental Inspector is required
- Locate crossings perpendicular to the bank, whenever possible.
- Immediately stabilize shoreline or banks disturbed by any activity associated with the project to prevent erosion and/or sedimentation, preferably through re-vegetation with native species suitable for the site.
ESS Group: Archaeological

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Easting</th>
<th>Northing</th>
<th>UTM Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S13</td>
<td>S2-Hert-100</td>
<td>Old creek bed east of current drain</td>
<td>628452</td>
<td>5490429</td>
<td>14N</td>
</tr>
</tbody>
</table>

Potential Effects:
Potential disturbance to heritage resources.

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

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Easting</th>
<th>Northing</th>
<th>Channel Width</th>
<th>Wet Width</th>
<th>Fish Habitat Class</th>
<th>Habitat Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S10</td>
<td>S2-Aqua-117</td>
<td>Unnamed Drain</td>
<td>624682</td>
<td>5490494</td>
<td>N/A</td>
<td>N/A</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>S2-S13</td>
<td>S2-Aqua-118</td>
<td>Unnamed Drain</td>
<td>626330</td>
<td>5490549</td>
<td>N/A</td>
<td>N/A</td>
<td>Low</td>
<td>Marginal</td>
</tr>
<tr>
<td>S2-S13</td>
<td>S2-Aqua-119</td>
<td>La Pointe Coulee</td>
<td>628394</td>
<td>5490443</td>
<td>4m</td>
<td>Low</td>
<td>Low</td>
<td>Marginal</td>
</tr>
</tbody>
</table>

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 or dry ground to minimize surface damage, rutting and erosion. If wet conditions, one time fording is permitted
- Use existing trails, roads or cut lines whenever possible as access routes
- No machine zone will restrict equipment in close proximity to the waterbody except at the trail crossing
- Limit machinery fording of the watercourse to a one-time event (over and back) only if an alternative crossing method is available. If repeated crossings of the watercourse are necessary prior approval from the MH Environmental Inspector is required
- Locate crossings perpendicular to the bank, whenever possible.
- Immediately stabilize shoreline or banks disturbed by any activity associated with the project to prevent erosion and/or sedimentation, preferably through re-vegetation with native species suitable for the site.
### ESS Group: Archaeological

<table>
<thead>
<tr>
<th>Sec-Seq ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Easting</th>
<th>Northing</th>
<th>UTM Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-514</td>
<td>S2-Hert-101</td>
<td>Potential Archaeological Site - Red River west shore</td>
<td>630003</td>
<td>5489915</td>
<td>14N</td>
</tr>
<tr>
<td>S2-514</td>
<td>S2-Hert-102</td>
<td>Registered Archaeological Site</td>
<td>630019</td>
<td>5489897</td>
<td>14N</td>
</tr>
</tbody>
</table>

**Potential Effects:**
- Potential disturbance to heritage resources

**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

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<thead>
<tr>
<th>Sec-Seq ID</th>
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<th>Northing</th>
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<th>Wet Width</th>
<th>Fish Habitat Class</th>
<th>Habitat Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S14</td>
<td>S2-Aqua-120</td>
<td>Red River</td>
<td>630071</td>
<td>5489841</td>
<td>14N</td>
<td>50m</td>
<td>N/A</td>
<td>High</td>
<td>Important</td>
</tr>
</tbody>
</table>

**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
- 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 work or fording from April 1 – July 15

### ESS Group: Groundwater

<table>
<thead>
<tr>
<th>Sec-Seq ID</th>
<th>ESS ID</th>
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<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S15</td>
<td>S2-Aqua-201</td>
<td>Saline artesian areas</td>
<td>Site: 17 to 18</td>
<td>E-632162</td>
<td>N-5489924</td>
<td>14N</td>
<td>825m</td>
</tr>
</tbody>
</table>

**Potential Effects:**
- Increase in salinity of soils and surface water in case of potential ground water discharge to the surface; wetting the surficial environment (ground saturation); effect on local vegetation

**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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**MAP NUMBER:** 321
ESS Group: Archaeological

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
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</thead>
<tbody>
<tr>
<td>S2-S14</td>
<td>S2-Hert-104</td>
<td>Archaeological Site</td>
<td>Site: 13 to 14</td>
<td>E-630172</td>
<td>E-630177</td>
<td>14N</td>
<td>65 m</td>
</tr>
<tr>
<td>b2-b15</td>
<td>b2-Mert-104</td>
<td>Archaeological Site</td>
<td>Site: 13 to 14</td>
<td>E-630167</td>
<td>E-630177</td>
<td>14N</td>
<td>65 m</td>
</tr>
</tbody>
</table>

Potential Effects:

Potential disturbance to heritage resources

Specific Mitigation:

- Project Archaeologist is required to be on site during pre-existing investigations and/or rehabilitation installation
- 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 as required by Project Archaeologist
- The presence of the Project Archaeologist is required to monitor the excavation of house footings at house # 3136.
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Potential Effects:

Potential disturbance to heritage resources.

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

Potential Effects:

Potential aesthetic concerns with presence to canoe route traffic; disruption from operational activities

Specific Mitigation:

- Where possible carry out construction activities during frozen ice conditions to avoid conflict with canoe route traffic
- If construction is to take place during the summer months post warning markers and signs upstream and downstream of the crossing

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 or dry ground to minimize surface damage, rutting and erosion. If wet conditions, one time fording is permitted
- Use existing trails, roads or cut lines whenever possible as access routes
- 7m no machine zone will restrict equipment in close proximity to the waterbody except at the trail crossing.
- Locate crossings perpendicular to the bank, whenever possible.
- Immediately stabilize shoreline or banks disturbed by any activity associated with the project to prevent erosion and/or sedimentation, preferably through re-vegetation with native species suitable for the site.
ESS Group: Groundwater

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

Specific Mitigation:
- Marshalling 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

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 or 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 wherever possible as access routes
- Limit all equipment to project footprint only, where possible
- No damage to vegetation on the edge of theRight of Way
- No pushing debris into adjacent timber

ESS Group: Species of Concern

Potential Effects:
Potential loss of previously known plants of conservation concern from clearing, construction, maintenance and decommissioning activities.

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
- Confin 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
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**ESS Group: Water Crossing**

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<th>Habitat Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S18</td>
<td>S2-Aqua-126</td>
<td>Tourend Creek</td>
<td>639936</td>
<td>5488411</td>
<td>14N</td>
<td>N/A</td>
<td>N/A</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>S2-S19</td>
<td>S2-Aqua-127</td>
<td>Unnamed Drain</td>
<td>640396</td>
<td>5488416</td>
<td>14N</td>
<td>N/A</td>
<td>N/A</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**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 50m and increase in size based on slope and entering waterway, within these buffers shrub and herbaceous understory vegetation 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: Groundwater**

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<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S16</td>
<td>S2-Aqua-201</td>
<td>Saline artesian area</td>
<td>Site: 19 to 20</td>
<td>E-6392964 N-5489042</td>
<td>E-638461 N-5489198</td>
<td>14N</td>
<td>5479 m</td>
</tr>
</tbody>
</table>

**Potential Effects:**
Increase in salinity of soils and surface water in case of potential groundwater discharge to the surface; wetting the surficial environment (ground saturation); effect on local vegetation.

**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 or installed foundations will be undertaken to monitor for excess moisture.

**ESS Group: Species of Concern**

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<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S16</td>
<td>S2-Aqua-202</td>
<td>Aquifers vulnerable</td>
<td>Site: 25 to 26</td>
<td>E-636431 N-5489140</td>
<td>E-638663 N-5489203</td>
<td>14N</td>
<td>2232 m</td>
</tr>
<tr>
<td>S2-S17</td>
<td>S2-Aqua-202</td>
<td>Aquifers vulnerable</td>
<td>Site: 26 to 30</td>
<td>E-636663 N-5489203</td>
<td>E-638860 N-5488411</td>
<td>14N</td>
<td>816 m</td>
</tr>
<tr>
<td>S2-S18</td>
<td>S2-Aqua-202</td>
<td>Aquifers vulnerable</td>
<td>Site: 32 to 33</td>
<td>E-639860 N-5488411</td>
<td>E-639571 N-5488410</td>
<td>14N</td>
<td>711 m</td>
</tr>
<tr>
<td>S2-S19</td>
<td>S2-Aqua-202</td>
<td>Aquifers vulnerable</td>
<td>Site: 35 to 39</td>
<td>E-639571 N-5488410</td>
<td>E-640472 N-5488432</td>
<td>14N</td>
<td>6147 m</td>
</tr>
</tbody>
</table>

**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 NUMBER:** 323
**ESS Group: Forestry**

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S19</td>
<td>S2-Ruse-301</td>
<td>Shelterbelt</td>
<td>Site: 41 to 42</td>
<td>E-641253 N-5488452</td>
<td>E-641867 N-5488472</td>
<td>14N</td>
<td>613m</td>
</tr>
<tr>
<td>22-S19</td>
<td>S2-Ruse-401</td>
<td>Snerdger</td>
<td>Site: 43 to 44</td>
<td>E-641073 N-5488475</td>
<td>E-641084 N-5488476</td>
<td>14N</td>
<td>31m</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S19</td>
<td>S2-Aqua-202</td>
<td>Aquifers vulnerable to contamination</td>
<td>Site: 31 to 38</td>
<td>E-639571 N-5488410</td>
<td>E-645717 N-5488578</td>
<td>14N</td>
<td>6147m</td>
</tr>
</tbody>
</table>

**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: Species of Concern**

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-S19</td>
<td>S2-Eco-300</td>
<td>Species of Concern (plant)</td>
<td>Site: 36 to 37</td>
<td>E-639571 N-5488410</td>
<td>E-645717 N-5488578</td>
<td>14N</td>
<td>6147m</td>
</tr>
<tr>
<td>S2-S19</td>
<td>S2-Eco-301</td>
<td>Species of Concern (plant)</td>
<td>Site: 39 to 40</td>
<td>E-640472 N-5489412</td>
<td>E-645717 N-5488578</td>
<td>14N</td>
<td>5246m</td>
</tr>
</tbody>
</table>

**Potential Effects:**

Potential loss of previously known plants of conservation concern from clearing, construction, maintenance and decommissioning activities.

**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

**MAP NUMBER:** 324