

# MAP NUMBER : 135

## ESS Group : Permafrost

| Sec-Seg ID | ESS ID       | ESS Name   | Location       | Start                 | Stop                  | UTM Zone | Distance |
|------------|--------------|------------|----------------|-----------------------|-----------------------|----------|----------|
| N3-S10     | N3-Soils-117 | Permafrost | Site: 95 to 96 | E-419392<br>N-6019121 | E-416577<br>N-6016635 | 14N      | 3755m    |

## **Potential Effects:**

Melting or loss of permafrost due to disturbance of the active layer

## Specific Mitigation:

- Carry out construction activities on frozen ground to minimize surface damage and rutting
- Use existing trails, roads or cut lines whenever possible as access routes ٠
- Avoid organic soils containing permafrost to the extent possible ٠
- Maintain shrub and herbaceous vegetation to the extent possible ٠
- Remove trees by low-disturbance methods ٠
- Confine vehicle traffic to established trails to the extent possible ٠
- Implement erosion protection before commencing construction in accordance with Erosion/Sediment Control ٠ Plan

## ESS Group : Habitat

| Sec-Seg ID | ESS ID     | ESS Name      | Location       | Start                 | Stop                  | UTM Zone | Distance |
|------------|------------|---------------|----------------|-----------------------|-----------------------|----------|----------|
| N3-S10     | N3-Eco-102 | Patterned Fen | Site: 97 to 98 | E-418810<br>N-6018607 | E-416757<br>N-6016794 | 14N      | 2739m    |

## **Potential Effects:**

Potential loss of plants of conservation concern and habitat disturbance 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
- Provide 5 m vegetated (shrub and herbaceous) buffer around site ٠
- Remove trees by low-disturbance methods •
- Confine vehicle traffic to established trails to the extent possible ٠
- Install erosion protection and sediment control measures in accordance with Erosion/Sediment • Control Plan

#### ESS Group : Birds and Habitat

| Sec-Seg ID | ESS ID      | ESS Name                       | Location       | Start                  | Stop                  | UTM<br>Zone | Distance |
|------------|-------------|--------------------------------|----------------|------------------------|-----------------------|-------------|----------|
| N3-S10     | N3-Wild-103 | Nearby Bonaparte's gull colony | Site: L3 to L4 | E- 417373<br>N-6017338 | E-416672<br>N-6016719 | 14N         | 935m     |

## **Potential Effects:**

Higher risk of wire collision, disturbance during breeding and nesting, risk of wire collision is localized to the right-of-way while construction disturbance can effect colonies up to 400 meters away

# Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain setback during timing window
- Conduct priority assessment for bird diverters and other measures prior to transmission line stringing •
- Install bird diverters or other measures at high priority sites



# MAP NUMBER : 136

## **ESS Group :** Permafrost

| Sec-Seg ID | ESS ID       | ESS Name   | Location         | Start                 | Stop                  | UTM Zone | Distance |
|------------|--------------|------------|------------------|-----------------------|-----------------------|----------|----------|
| N3-S10     | N3-Soils-117 | Permafrost | Site: 95 to 96   | E-419392<br>N-6019121 | E-416577<br>N-6016635 | 14N      | 3755m    |
| N3-S11     | N3-Soils-118 | Permafrost | Site: 103 to 104 | E-414259<br>N-6014526 | E-412982<br>N-6012989 | 14N      | 1998 m   |

## **Potential Effects:**

Melting or loss of permafrost due to disturbance of the active layer

#### **Specific Mitigation:**

- Carry out construction activities on frozen ground to minimize surface damage and rutting
- ٠ Use existing trails, roads or cut lines whenever possible as access routes
- Avoid organic soils containing permafrost to the extent possible ٠
- ٠ Maintain shrub and herbaceous vegetation to the extent possible
- Remove trees by low-disturbance methods ٠
- Confine vehicle traffic to established trails to the extent possible ٠
- Implement erosion protection before commencing construction in accordance with Erosion/Sediment Control • Plan

#### ESS Group : Habitat

| Sec-Seg ID | ESS ID     | ESS Name      | Location       | Start                 | Stop                  | UTM Zone | Distance |
|------------|------------|---------------|----------------|-----------------------|-----------------------|----------|----------|
| N3-S10     | N3-Eco-102 | Patterned Fen | Site: 97 to 98 | E-418810<br>N-6018607 | E-416757<br>N-6016794 | 14N      | 2739m    |

#### **Potential Effects:**

Potential loss of plants of conservation concern and habitat disturbance 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
- Provide 5 m vegetated (shrub and herbaceous) buffer around site •
- Remove trees by low-disturbance methods ٠
- Confine vehicle traffic to established trails to the extent possible ٠
- Install erosion protection and sediment control measures in accordance with Erosion/Sediment ٠ Control Plan

#### ESS Group : Birds and Habitat

| Sec-Seg ID | ESS ID      | ESS Name                       | Location       | Start                  | Stop                  | UTM<br>Zone | Distance |
|------------|-------------|--------------------------------|----------------|------------------------|-----------------------|-------------|----------|
| N3-S10     | N3-Wild-103 | Nearby Bonaparte's gull colony | Site: L3 to L4 | E- 417373<br>N-6017338 | E-416672<br>N-6016719 | 14N         | 935m     |

#### **Potential Effects:**

Higher risk of wire collision, disturbance during breeding and nesting, risk of wire collision is localized to the right-of-way while construction disturbance can effect colonies up to 400 meters away

# Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain 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 : Forestry

| Sec-Seg ID | ESS ID      | ESS Name       | Location         | Start                 | Stop                  | UTM Zone | Distance |
|------------|-------------|----------------|------------------|-----------------------|-----------------------|----------|----------|
| N3-S10     | N3-RUse-300 | Fuel Wood Area | Site: 99 to 100  | E-416007<br>N-6016132 | E-414450<br>N-6014756 | 14N      | 2078 m   |
| N3-S10     | N3-RUse-300 | Fuel Wood Area | Site: 101 to 102 | E-414450<br>N-6014756 | E-409095<br>N-6008312 | 14N      | 8378 m   |

## **Potential Effects:**

Potential to disrupt access to fuel wood area

## **Specific Mitigation:**

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Avoid surface damage to and obstruction of access route
- Make fuel wood from ROW clearing available to local community where demand exists