

## **APPENDIX A**

Location, access to site & safety advisory

## **APPENDIX A**

### **LOCATION AND ACCESS TO SITE**

#### **Pointe du Lac RL (LLN 2126)**

On the North Shore of the St. Lawrence, enter the property at civic number 1981 from Hwy 138, East of Pointe-du-Lac. The structure is on the side of Hwy 138. SPECIFIC ACTIONS

#### **Site coordinates:**

46°16'46"3469

72°40'15"4328

#### **Excerpt from the CCG Safety Notice:**

**Deficiencies:** Unsafe staircase. Unsafe upper platform.

**Specific actions:** Use the Y lanyards to attach at two different points along the staircase. Attach to the cable on the upper platform.

## **APPENDIX B**

Photos of existing works

Pointe du Lac RL



Pointe du Lac RL



## **APPENDIX C**

Working constraints

The working constraints are illustrated in plan QE59400-C01-01 of Appendix E

## **APPENDIX D**

Existing facilities to be dismantled



## Appendix D

Existing facilities to be dismantled

883-1 steel tower

883-2 reinforced concrete foundation

## **APPENDIX E**

Construction plans

## Construction plans

- QE8400-C01\_01 Installation and general notes
- QE8400-C01\_02 Foundation plan
- QE8400-C01\_03 Fencing - details
- QE8400-C01\_04 35.05 m (115.0') Tower – Assembly plan
- QE8400-C01\_05 35.05 m (115.0') Tower – Assembly plan
- QE8400-C01\_06 35.05 m (115.0') Tower – Assembly plan
- QE8400-C01\_07 Lightning protection
- QE8400-C01\_08 Lightning protection

## **APPENDIX F**

Daymark dimensions and assembly plans

## Appendix F

Daymark dimensions and assembly plans

08809-01 Daymark elevation and details

08809-02 Daymark plate details

## **APPENDIX G**

Daymark orientation

## **APPENDIX H**

### Electrical Installation Plans

## Appendix H

08990-E02 01/02 and 02/02 Future electrical installation with or without Hydro-Québec easement



**SUMMARY TABLE OF THE WORK TO BE DONE, page 1 OF 2**

**STRUCTURES TO BE DISMANTLED**

<b>Sites with height (m) of new structures</b>	<b>LLN</b>	<b>Heights of existing towers (m)</b>	<b>Plan of the existing tower to be dismantled</b>	<b>Plan of the existing foundation to be dismantled</b>
Pointe du Lac RL, 32.7 m	2126	32.6 m	883-1	883-2

**SUMMARY TABLE OF THE WORK TO BE DONE, page 2 OF 3**

**TEMPORARY STRUCTURES, FOUNDATION AND FENCES TO BE BUILT**

<b>Sites with height (m) of new structures</b>	<b>Temporary structure (mm)</b>	<b>Foundation plan</b>	<b>Foundation (mm)</b>	<b>Elevation of the top of the foundation (m)</b>	<b>Fence to be built (mm)</b>	<b>Fence plan</b>
Pointe du Lac RL 35.05 m	30.0 m min.	QE58400-C01-02 02/08	Foundation with pilasters and footing of 8500 x 8500 x 700	18.13 m	Yes 12071 x 12071	Yes. QE58400-C01-03 03/08

**SUMMARY TABLE OF THE WORK TO BE DONE, page 2 OF 2**

**STRUCTURES AND ACCESSORIES TO BE INSTALLED**

<b>Sites</b>	<b>Structure (Width x width x height in mm)</b>	<b>Plan of the tower to be constructed</b>	<b>Lantern, electrical diagram, box if needed</b>	<b>Plans for accessories, monorail and service platform</b>	<b>Height of daymarks (mm)</b>	<b>Daymark plan</b>
Pointe du Lac RL m	4572 x 4572 x 35050	QE58400	08990-E02		7320	08809-01 and 08809-02

## **APPENDIX I**

### Summary Table of Work

**SUMMARY TABLE OF THE WORK TO BE DONE, page 1 OF 2**

**STRUCTURES TO BE DISMANTLED**

<b>Sites with height (m) of new structures</b>	<b>LLN</b>	<b>Heights of existing towers (m)</b>	<b>Plan of the existing tower to be dismantled</b>	<b>Plan of the existing foundation to be dismantled</b>
Pointe du Lac RL, 32.7 m	2126	32.6 m	883-1	883-2

**SUMMARY TABLE OF THE WORK TO BE DONE, page 2 OF 3**

**TEMPORARY STRUCTURES, FOUNDATION AND FENCES TO BE BUILT**

<b>Sites with height (m) of new structures</b>	<b>Temporary structure (mm)</b>	<b>Foundation plan</b>	<b>Foundation (mm)</b>	<b>Elevation of the top of the foundation (m)</b>	<b>Fence to be built (mm)</b>	<b>Fence plan</b>
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**SUMMARY TABLE OF THE WORK TO BE DONE, page 2 OF 2**

**STRUCTURES AND ACCESSORIES TO BE INSTALLED**

<b>Sites</b>	<b>Structure (Width x width x height in mm)</b>	<b>Plan of the tower to be constructed</b>	<b>Lantern, electrical diagram, box if needed</b>	<b>Plans for accessories, monorail and service platform</b>	<b>Height of daymarks (mm)</b>	<b>Daymark plan</b>
Pointe du Lac RL m	4572 x 4572 x 35050	QE58400	08990-E02		7320	08809-01 and 08809-02

## **APPENDIX J**

### Geotechnical Investigation Report



**CANADIAN ENVIRONMENTAL ASSESSMENT ACT (CEAA) - SCREENING REPORT  
SUMMARY TABLE**

**TABLE 2: MITIGATION MEASURES AND RESIDUAL EFFECTS**

DESCRIPTION OF PROJECT COMPONENTS/ACTIVITIES	ENVIRONMENTAL COMPONENTS AFFECTED BY THE PROJECT	DESCRIPTION OF ENVIRONMENTAL EFFECTS	MITIGATION/COMPENSATION MEASURES	DESCRIPTION AND IMPORTANCE OF RESIDUAL EFFECTS
<b>1 Air Quality</b>				
Preparatory activities	Site organization			
Rear light aids to navigation repair work	Installation of a temporary aids to navigation structure	Air pollutant emission through the combustion of petroleum hydrocarbons in the motors of machinery used for the work.	<ul style="list-style-type: none"> <li>▪ The machinery will be inspected to ensure it is working properly and its maintenance will be carried out in accordance with the recommended use.</li> <li>▪ The backfill materials will be covered with a tarp on windy days</li> <li>▪ The work will be planned so that the machinery is used as little as possible</li> <li>▪ Idling motors must be avoided as much as possible</li> <li>▪ If cutting is necessary, the cutting tools must be equipped with a dust collector</li> </ul>	Non-significant negative effect
	Demolition of the metal structure and concrete base and recovery of materials			
	Importing new materials			
	Storing recovered and imported materials			
	Installing new concrete bases			
	Installing the metallic structure and aids to navigation equipment	Fine granular material suspended in the air when fill is being brought in and during periods of high wind		
Demobilization	Removal of the temporary aids to navigation structure			







TABLE 2: MITIGATION MEASURES AND RESIDUAL EFFECTS

DESCRIPTION OF PROJECT COMPONENTS/ACTIVITIES	ENVIRONMENTAL COMPONENTS AFFECTED BY THE PROJECT	DESCRIPTION OF ENVIRONMENTAL EFFECTS	MITIGATION/COMPENSATION MEASURES	DESCRIPTION AND IMPORTANCE OF RESIDUAL EFFECTS
<b>2. Noises and vibrations</b>				
Preparatory activities	Site organization			
Rear light aids to navigation repair work	Installation of a temporary aids to navigation structure	Occasional disruptions due to noise caused by the machinery used  Occasional disruptions due to the vibrations caused by increased machinery traffic	<ul style="list-style-type: none"> <li>The work to be done must be planned during normal working hours and in accordance with municipal requirements</li> <li>Idling motors must be avoided as much as possible</li> </ul>	Non-significant negative effect
	Demolition of the metal structure and concrete base and recovery of materials			
	Importing new materials			
	Storing recovered and imported materials			
	Installing new concrete bases			
	Installing the metallic structure and aids to navigation equipment			
Demobilization	Removal of the temporary aids to navigation structure			







TABLE 2: MITIGATION MEASURES AND RESIDUAL EFFECTS

DESCRIPTION OF PROJECT COMPONENTS/ACTIVITIES	ENVIRONMENTAL COMPONENTS AFFECTED BY THE PROJECT	DESCRIPTION OF ENVIRONMENTAL EFFECTS	MITIGATION/COMPENSATION MEASURES	DESCRIPTION AND IMPORTANCE OF RESIDUAL EFFECTS
<b>3. Soil quality and erosion</b>				
Preparatory activities	Site organization	Soil compaction due to machinery movement Soil erosion following vegetation removal Use of unknown materials	<ul style="list-style-type: none"> <li>Limit machinery movement off designated routes to avoid unnecessary soil compaction</li> <li>Use clean materials from known quarries and sand pits</li> <li>Inspect the machinery to ensure it is working properly and perform its maintenance in accordance with the recommended use</li> <li>Act quickly during spills or accidents involving petroleum products and keep emergency kits at all times</li> </ul>	No residual effects observed
Rear light aids to navigation repair work	Installation of a temporary aids to navigation structure			
	Demolition of the metal structure and concrete base and recovery of materials			
	Importing new materials			
	Storing recovered and imported materials			
	Installing new concrete bases			
Demobilization	Installing the metallic structure and aids to navigation equipment			
	Removal of the temporary aids to navigation structure			
<b>4. Water quality</b>				
Rear light aids to navigation repair work	Demolition of the metal structure and concrete base and recovery of materials	Settling of demolition debris from the current structure at the surface of the water and its solubilization Deposit of fine particles in the imported materials on the surface of the water and their solubilization Potential contamination by petroleum hydrocarbons in the event of a spill	<ul style="list-style-type: none"> <li>The machinery must not be kept less than 30 m from the shore of the river or a watercourse</li> <li>The machinery must not be cleaned or kept near the river waters or a watercourse</li> <li>Appropriate machinery must be used to perform the work</li> <li>If necessary, the debris must be stored in such a way that it cannot be blown into surface water by the wind</li> <li>If possible, use materials free from fine particles</li> <li>The materials brought on site and installed to construct the access road or new aid-to-navigation light structures must be clean when they arrive at the site and must be stored under polyethylene tarps to avoid being blown into the air on a very windy day</li> <li>If cutting is necessary, the cutting tools must be equipped with a dust collector</li> </ul>	No residual effects observed





TABLE 2: MITIGATION MEASURES AND RESIDUAL EFFECTS

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<b>5. Sediment quality</b>				
	---	No environmental impacts observed	No mitigation measures deemed necessary	No residual effects observed
<b>6. Aquatic fauna, flora and habitat</b>				
	---	No environmental impacts observed	No mitigation measures deemed necessary	No residual effects observed
<b>7. Terrestrial fauna, flora and habitat</b>				
Preparatory activities	Site organization	Soil compaction as a result of moving the machinery Occasional disruptions due to noise caused by the machinery used  Occasional disruptions due to the vibrations caused by increased machinery traffic  Soil erosion following vegetation removal Soil contamination from using unknown materials	<ul style="list-style-type: none"> <li>Limit moving machinery off the designated roads to avoid soil compaction and destruction of terrestrial habitats</li> <li>The work will be planned so that the machinery is used as little as possible</li> <li>Idling motors must be avoided as much as possible</li> <li>Materials imported on site to fill the new concrete bases must be clean when they arrive on site</li> <li>Restore the soil and vegetation to its former state once the work is complete to ensure that vegetation grows back quickly</li> </ul>	Non-significant negative effect
Rear light aids to navigation repair work	Installation of a temporary aids to navigation structure			
	Demolition of the metal structure and concrete base and recovery of materials			
	Importing new materials			
	Storing recovered and imported materials			
	Installing new concrete bases			
	Installing the metallic structure and aids to navigation equipment			
Demobilization	Removal of the temporary aids to navigation structure			





TABLE 2: MITIGATION MEASURES AND RESIDUAL EFFECTS

DESCRIPTION OF PROJECT COMPONENTS/ACTIVITIES	ENVIRONMENTAL COMPONENTS AFFECTED BY THE PROJECT	DESCRIPTION OF ENVIRONMENTAL EFFECTS	MITIGATION/COMPENSATION MEASURES	DESCRIPTION AND IMPORTANCE OF RESIDUAL EFFECTS
<b>8. Avian fauna and habitat</b>				
Preparatory activities	Site organization	Noise caused by the use of machinery on the site Airborne particles that can interfere with vision and breathing Settling of particles in feeding areas	<ul style="list-style-type: none"> <li>Do the work outside bird colony nesting periods</li> <li>Idling motors must be avoided as much as possible</li> <li>The work must be completed in as little time as possible</li> <li>The work must be completed during normal working hours to give the shore birds enough time to feed each day</li> <li>The mitigation measures given for air quality also apply</li> </ul>	Non-significant negative effect
Rear light aids to navigation repair work	Installation of a temporary aids to navigation structure			
	Demolition of the metal structure and concrete base and recovery of materials			
	Importing new materials			
	Storing recovered and imported materials			
	Installing new concrete bases			
Demobilization	Installing the metallic structure and aids to navigation equipment			
	Removal of the temporary aids to navigation structure			
<b>9. Wetlands</b>				
	---	No environmental impacts observed	No mitigation measures deemed necessary	No residual effects observed









TABLE 2: MITIGATION MEASURES AND RESIDUAL EFFECTS

DESCRIPTION OF PROJECT COMPONENTS/ACTIVITIES	ENVIRONMENTAL COMPONENTS AFFECTED BY THE PROJECT	DESCRIPTION OF ENVIRONMENTAL EFFECTS	MITIGATION/COMPENSATION MEASURES	DESCRIPTION AND IMPORTANCE OF RESIDUAL EFFECTS
<b>10. Species at risk and their habitat</b>				
Preparatory activities	Site organization			
Rear light aids to navigation repair work	Installation of a temporary aids to navigation structure	Soil compaction as a result of moving the machinery Occasional disruptions due to noise caused by the machinery used	<ul style="list-style-type: none"> <li>Limit moving machinery off the designated roads to avoid soil compaction and destruction of terrestrial habitats</li> <li>The work will be planned so that the machinery is used as little as possible</li> <li>Idling motors must be avoided as much as possible</li> <li>Materials imported on site to fill the new concrete bases must be clean when they arrive on site</li> <li>Restore the soil and vegetation to its former state once the work is complete to ensure that vegetation grows back quickly</li> <li>Do the work outside bird colony nesting periods</li> <li>The work must be completed in as little time as possible</li> <li>The work must be completed during normal working hours to give the shore birds enough time to feed each day</li> <li>The mitigation measures given for air quality also apply</li> </ul>	Non-significant negative effect
	Demolition of the metal structure and concrete base and recovery of materials			
	Importing new materials	Soil erosion following vegetation removal		
	Storing recovered and imported materials	Soil contamination from using unknown materials		
	Installing new concrete bases	Airborne particles that can interfere with vision and breathing		
	Installing the metallic structure and aids to navigation equipment	Settling of particles in feeding areas		
Demobilization	Removal of the temporary aids to navigation structure			
<b>11. Common use of lands and resources for traditional purposes by Aboriginal people</b>				
	---	No environmental impacts observed	No mitigation measures deemed necessary	No residual effects observed





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DESCRIPTION OF PROJECT COMPONENTS/ACTIVITIES	ENVIRONMENTAL COMPONENTS AFFECTED BY THE PROJECT	DESCRIPTION OF ENVIRONMENTAL EFFECTS	MITIGATION/COMPENSATION MEASURES	DESCRIPTION AND IMPORTANCE OF RESIDUAL EFFECTS
<b>12. Health and safety</b>				
Preparatory activities	Site organization	Site activities that could undermine the health and safety of individuals	<ul style="list-style-type: none"> <li>Access to the site must be limited to duly authorized people and those individuals must be in possession of their health and safety cards on construction sites</li> <li>The work must be performed in compliance with the Safety Code for the construction industry</li> </ul>	No residual effects observed
Rear light aids to navigation repair work	Installation of a temporary aids to navigation structure			
	Demolition of the metal structure and concrete base and recovery of materials			
	Importing new materials			
	Storing recovered and imported materials			
	Installing new concrete bases			
Demobilization	Installing the metallic structure and aids to navigation equipment			
	Removal of the temporary aids to navigation structure			
<b>13. Socio-economic impacts</b>				
	---	No environmental impacts observed	No mitigation measures deemed necessary	No residual effects observed





TABLE 2: MITIGATION MEASURES AND RESIDUAL EFFECTS

DESCRIPTION OF PROJECT COMPONENTS/ACTIVITIES	ENVIRONMENTAL COMPONENTS AFFECTED BY THE PROJECT	DESCRIPTION OF ENVIRONMENTAL EFFECTS	MITIGATION/COMPENSATION MEASURES	DESCRIPTION AND IMPORTANCE OF RESIDUAL EFFECTS
<b>14. Impacts on tourism and recreation</b>				
Preparatory activities	Site organization	Disruption of tourism and recreation activities in the area by the repair work	<ul style="list-style-type: none"> <li>Perform the work outside the area's high tourist season</li> </ul>	No residual effects observed
Rear light aids to navigation repair work	Installation of a temporary aids to navigation structure			
	Demolition of the metal structure and concrete base and recovery of materials			
	Importing new materials			
	Storing recovered and imported materials			
	Installing new concrete bases			
Demobilization	Installing the metallic structure and aids to navigation equipment			
	Removal of the temporary aids to navigation structure			
<b>15. Heritage, cultural, historical, archeological and paleontological resources</b>				
	---	No environmental impacts observed	No mitigation measures deemed necessary	No residual effects observed
<b>16. Navigation</b>				
	---	No environmental impacts observed	No mitigation measures deemed necessary	No residual effects observed







TABLE 2: MITIGATION MEASURES AND RESIDUAL EFFECTS

DESCRIPTION OF PROJECT COMPONENTS/ACTIVITIES	ENVIRONMENTAL COMPONENTS AFFECTED BY THE PROJECT	DESCRIPTION OF ENVIRONMENTAL EFFECTS	MITIGATION/COMPENSATION MEASURES	DESCRIPTION AND IMPORTANCE OF RESIDUAL EFFECTS
<b>17. Accidents and malfunctions</b>				
Preparatory activities	Site organization	Soil, backfill materials, and surface water can be locally contaminated by oil spills from the machinery used for the work or for transporting the materials	<ul style="list-style-type: none"> <li>Accidental spills must be reported to the DFO contact immediately</li> <li>Vehicle maintenance, gas fuelling and storage of gas and other dangerous materials must be performed at a distance of 30 metres from the river, whenever possible. If this is not possible, containment measures must be applied</li> <li>The use of clean equipment that has no oil leaks and is regularly inspected during the work</li> <li>There must be a complete emergency response kit for accidental oil spills on site</li> <li>Work site personnel must have the necessary training to act in the event of an environmental emergency. The foreman must be immediately notified of the incident</li> <li>The soil or backfill materials, as the case may be, that are contaminated by an accidental spill must be piled onto and covered with waterproof tarps, have samples taken based on the soil volume in question, according to the sizes defined in the Sampling Guide for Environmental Analysis, Booklet 5, be submitted for chemical laboratory analysis, namely petroleum hydrocarbons (PH) C10 to C50, polycyclic aromatic hydrocarbons (PAH) and volatile organic compounds (VOC) and be handled in accordance with the MDDEP Management Grid for Excavated Contaminated Soils or in accordance with the regulations in effect and sent to an authorized site</li> <li>Any water contaminated by an accidental spill must be contained in order to be characterized or be handled directly by a specialized company that will send it to an MDDEP-approved treatment centre</li> <li>In case of a spill, immediately report the incident to the responsible authorities and act quickly. Contact Environment Canada emergency services (1-866-283-2333) and/or the Canada Coast Guard (1-800-363-4735), the MDDEP (1-866-694-5454) and the foreman</li> </ul>	No residual effects observed
Rear light aids to navigation repair work	Installation of a temporary aids to navigation structure			
	Demolition of the metal structure and concrete base and recovery of materials			
	Importing new materials			
	Storing recovered and imported materials			
	Installing new concrete bases			
Demobilization	Installing the metallic structure and aids to navigation equipment			
	Removal of the temporary aids to navigation structure			

## **APPENDIX K**

### Environmental Impact Mitigation Measures Sheet



## **APPENDIX L**

### Environmental Monitoring Form