Cavendish Sewer Utility

Lift Station No. 4 Upgrades

CONTRACT NO. 222626.00

ADDENDUM NO. 1

January 23, 2023

(To be added to and made part of the Tender Documents)

The following changes or modifications shall be made to the Tender Documents:

TO THE SPECIFICATIONS

Appendix 1 Parks Canada Mitigation Measures

Delete the appended 'Parks Canada Mitigation Measures' and replace with the attached 'Parks Canada Basic Impact Assessment'.

Section 00 21 13 Information to Tenderers

Add item 26
"The Tenderer shall agree to comply with and uphold all aspects of Appendix 1 'Parks Canada Basic Impact Assessment' including implementing all Mitigation Measures. If discrepancies exist, the more stringent will apply".

Section 33 65 76 Direct Buried Underground Cable Ducts

Add section 33 65 76 Direct Buried Underground Cable Ducts attached.

Tim LeLacheur, P. Eng
CBCL Limited
January 23, 2023

Basic Impact Assessment

Parks Canada

Version IAA 2019

1. PROJECT TITLE & LOCATION

Lift Station Modification on Route 6 – Cavendish, PEINP

2. PROPONENT INFORMATION

The Resort Municipality of Stanley Bridge, Hope River, Bayview, Cavendish and North Rustico

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3. PROPOSED PROJECT DATES

Planned commencement: Fall of 2023 (Phase 1)

Planned completion: 2024 (Phase 2)

4. NOTICES ON REGISTRY

Title for Registry: Lift Station Modification on Route 6 by the Resort Municipality of Stanley Bridge, Hope River, Bayview, Cavendish and North Rustico.

Project notice posted on Registry	2022-12-09
BIA or any permits approval cannot be taken before	2023-01-09

5. PROJECT FILE NUMBER (internal /Registry)

PEINP23-02

6. PROJECT DESCRIPTION

Project Objective:

Pumping station #4 services areas along Route 6 to Friendly lane as well as a section of the Marco Polo Campground. Being a summer resort area with relatively few year-round residents within the service area results in a very large variation between peak summer and winter flows of approx. 1.64 L/s ADF in summer to less than 0.2 L/s ADF in winter (or a ratio of 8:1). In the summer of 2019 it was determined that the pumping station did not meet peak flow rates and storage. Therefore, the objective of Phase 1 of this project is to upgrade the existing lift station into current regulatory compliance and to accommodate growth in the municipality including

during peak tourist season. Currently, a trailer mounted generator is moved on site during power outages. To ensure operations during a power outage, a permanent backup generator will be installed onsite (Phase 2). The upgrades previously assessed under a PRIA (PEI19-19) for work to occur in 2020. However, the scope of the project has changed enough to now require a BIA (PEI23-02).

Project location:

Pumping Station #4 is located adjacent to Route 6 between North Rustico and Cavendish in an area dominated by agricultural fields (46.4930, -63.3667). The area surrounding the worksite is a Parks Canada leased agricultural field that has been used as a hay field and a cattle pasture. Since 2020, Bobolink have been found nesting in the area (Bobolinks are listed as threatened on SARA and are protected under the Migratory Bird Act).

The pre-European history of the area was originally old growth Acadian Forest. The area was cleared for farming during European settlement in the 1700's. While the area remains largely agricultural, there has been an increase of vacation rental properties and residential developments occurring in the area since the 1950s. For the purposes of this project, all construction activity will take place inside the easement boundaries (15 x 15m) of the pre-existing lift station (Figure 2).

Project phases and activities:

<u>Phase #1:</u>

1) Excavation to a maximum depth of 3.2m for the installation of a new 1.8m diameter by 2.55m deep valve chamber with a 300mm thick clear stone base.
2) Trenching for new connections, removal of existing force main, and installation of underground power conduits. Sand and other insulation may be installed.
3) A 300mm thick cast in place concrete pad for the generator will be installed on top of a 300mm clear stone base. The pad will be surrounded by 200mm of depth of the clear stone.
4) Construction of a new gravel driveway with 150mm class A gravel and 300mm select borrow. The existing topsoil and organic matter will be removed. The existing grade will be proof rolled before placing the select borrow.
5) Upgrade of the existing control panel to a new control panel.
6) Installation of three phase power by Maritime Electric in the right of way on the south side of Route 6. This may involve the replacement of the pole on the south-eastern side of the easement boundary to support the additional pole top transformers.
7) Maintenance and replacement of parts in the existing lift station. Replacement of the existing single-phase pumps with new three phase pumps within the existing wet well chamber.
8) Grading out of the slope to the existing fence line.

Onsite common borrow, topsoil, and sod, removed for excavation will be used for backfill, grading, and landscaping. Class A gravel, bedding sand, select borrow, and clear stone will be imported. A sediment control fence comprised of geotextile fabric and wood stakes will be

installed on the perimeter of the easement boundary. Limited excavation (150mm by 150mm) for this installation will be backfilled with existing topsoil to embed the geotextile below grade.

A sanitary pumping truck will be used to pump the effluent during the station downtime as the sanitary system will need to remain in operation. Pumped effluent will be reintroduced into the sanitary and treatment facilities. This procedure is to ensure that the lift station remains operational throughout the construction process. A staging area has yet to be defined, but work will be limited to the size of the site (15 x 15m easement).

Phase #2:

1) Installation of a standby generator that will be bolted to the new concrete pad.

Complete design drawing and specifications can be found in the attachments section of the BIA (Section 16).

Project Timeline:

Initial upgrade work (phase 1) is proposed for late September to November 2023 spanning 6-8 weeks. The second phase of the project is projected for 2024 depending on the lead time of the generator. Phase 2 work is anticipated to take 1 week.

7. VALUED COMPONENTS LIKELY TO BE AFFECTED

Species at Risk	• The project will take place in close proximity to known nesting habitat for Bobolink. The project has the potential to disturb the nesting or feeding behaviour of Bobolink if work occurs during the critical environmental timing window (Figure 1).
Soil/Land Resources	• Soil contamination from wastes (e.g., garbage, litter, sewage, fuel), equipment leaks, or accidental spills • Incidental increased disturbance footprint. • Soil compaction and rutting. • Soil erosion, loss of topsoil and exposure of subsoil. • Change in slopes, landforms and landscape.
Air/Noise Quality	• Short-term decreased ambient air quality (e.g., dust, aggregate from paved surfaces, asphalt plant, equipment emissions). • Increased ambient noise level. • Temporary increased levels of CO2 and other pollutants.
Wildlife and Vegetation	• Introduction of invasive species. • Wildlife habituation/attraction to artificial food sources. • Potential safety hazard for wildlife due to trenching and excavations • Wildlife sensory disturbance causing displacement/preferred habitat avoidance. • Damage to nests/disruption of nesting animals (e.g. Bobolink) • Injury or mortality from project activities. • Damage to and removal of vegetation
Cultural Resources	• Impacts to archaeological resources (known or potential: from displacement, compaction or destruction, resulting in loss of heritage value

Visitor Experience and Safety	• The proposed work will take place outside of peak tourism season and impacts should be negligible. • Road safety and traffic management, as the project area is bordering Highway 6.

Physical activities that will be undertaken to complete the proposed project have been summarized in Appendix 1: Effects Identification Matrix.

8. EFFECTS ANALYSIS

Species at Risk

The project will take place in proximity to suitable nesting habitat for Bobolink. Bobolink is listed as threatened in Schedule 1 of the Species at Risk Act. There have been known occurrences of Bobolink nests approximately 200 m from the proposed work site since 2020. This habitat will not be impacted by the planned project. However, if the project occurs during the critical nesting period (Figure 1), there is potential risk for disturbance to Bobolink.

The construction is currently scheduled to occur outside of the environmental timing window for nesting in 2023. This should result in no impacts on individual Bobolink or their habitat. However, there are still unknown timing windows for the generator installation in 2024. For any work taking place between late May to August, a Bobolink survey will be required prior to any work beginning. Based on survey outcomes, a list of mitigations may be provided to reduce impacts to any potential Bobolink in the area.

Soil/Land Resources

Construction activities (trenching, earth relocation, landscaping, vegetation removal, infrastructure removal and installation) will result in removal of a certain amount of grass, natural vegetation and topsoil thereby giving opportunity for soil erosion, especially during precipitation events. Soil compaction and rutting is also a concern. However, planned erosion control strategies, including siltation fencing, the use of smaller equipment where possible, and planned rehabilitation of the site will reduce the impacts. A formal erosion and sediment control plan will be implemented to further minimize erosion potential of the project. Given that the project will occur within previously disturbed boundaries, the impacts are not considered significant provided the mitigations are followed.

Spills of any kind of hazardous material (oils, gasoline, diesel, hydraulic fluids, sewage waste) are serious and must be responded to immediately. Organisms are immediately affected and may not recover from exposure, contact, or ingestion of the substance. Bio-accumulation can then become a concern for other species of prey. Spills can also seep deep into the ground reaching subsurface aqueducts, which supply PEI with all of its drinking water. Spills are a real and serious hazard when working with large machinery during construction projects, including the transfer of waste water effluent and use of a pump truck. It is anticipated that any impacts will be minimal to none barring any material spills. A spill response plan will be developed and will mitigate potential adverse impacts of contamination from machinery.

Air/Noise Quality

Provincial air quality is excellent. The province is occasionally subject to trans-boundary pollution from the mainland. Local air pollutants are restricted to seasonal (May to October) applications of pesticides, herbicides and fertilizers from park managed lands, adjacent farmlands and golf courses. Local air quality will be temporarily and minimally negatively impacted when heavy machinery is operated on site (including decreased ambient air quality and increased CO_2 and pollutants).

The proposed project area currently experiences moderate intensity of noise pollution due to the vehicle traffic on the adjacent provincial highway. Increased noise pollution and increased vibrations will occur from the construction operations as the project requires the use of heavy machinery. Installation of a permanent generator onsite will increase noise pollution in the area when in use. However, given that a portable generator is brought on site during power outages at this time, no significant change in ambient noise should be expected.

Wildlife and Vegetation

Wildlife may be temporarily disturbed by the required operation of heavy machinery during construction. The impact will be localized to the vicinity of the project footprint. It is expected that these impacts are minimal to species already adapted to anthropogenic impacts/disturbances and work is scheduled outside the key environmental timing windows (Figure 1).

All construction and landscaping activities will be limited to the already disturbed footprint of the current site. This should limit any potential destruction of habitat and/or the removal or damage to vegetation that has not already been disturbed. No known invasive species occur within the project footprint. However, there is a potential risk for introduction and spread of invasive species by contaminated equipment. There is no anticipated need to bring in additional soils onto the site which limits the risk of invasive species introduction onto the site. Organic matter and topsoil excavated will be reused to backfill the area. If this changes, all soil brought into the site is required to be examined by a Parks Canada designated staff.

Cultural Resources

There are potential adverse effects to archaeological resources (known or potential) from displacement, compaction or destruction, resulting in loss of heritage value. However, a cultural resource impact analysis determined there are no archaeological concerns with this project if disturbance is limited to the previously impacted footprint as noted in the project description, no archaeological overview assessment will be required. A precautionary approach should be applied.

Consultation with L'Nuey stated that research has uncovered a historical Mi'kmaq travel/portage route through the area. However, provided there are no findings of cultural, archaeological, or paleontological significance, the Mi'kmaq do not object to the proposed project. However, should any findings of cultural, archaeological, or paleontological significance arise, all work must be halted, the archaeologist having jurisdiction over the area is to be

contacted, as per the applicable legislation and regulations, and further consultation with Mi'kmaq must be undertaken.

Visitor Experience and Safety

The construction area is located along Highway 6 and as the potential to temporarily impact the traffic along this road. Safe work practices along the road and traffic management will be mitigated as required by the province and/or the municipality.

9. MITIGATION MEASURES

Project Planning and Site Preparation

1. Project Planning

1.1 The conditions presented in this basic impact assessment (BIA) will be considered part of the project. Failure to comply may result in work being suspended pending rectification of problem(s).

1.2 The contractor is not to limit his/her environmental responsibilities to this screening report and will be responsible to adhere to Federal (including National Park / National Historic) and Municipal regulations.

1.3 Proper safety procedures must be followed during the duration of the project as per applicable municipal, provincial (Occupational Health and Safety Act) and federal regulations.

1.4 The Project Manager is responsible to take all necessary precautions to ensure there is no safety concerns related to visitors of the Park.

1.5 Upon completion of the project, the Contractor is responsible for completely cleaning up the site, and restoring the disturbed areas to their original condition. This includes removal of any erosion or sediment control.

1.6 Identify key contacts and their respective roles and responsibilities prior to work starting, and communicate this to all on-site workers.

Parks Canada Key Contacts	Roles and Responsibilities	Contacts
Parks Canada Emergency Dispatch	Dispatch of emergency services (i.e. PCA spill team, wildlife conflict team, etc.)	1-877-852-3100
IA Practitioner – Kelsey MacDonald	Impact Assessment Practitioner and Environmental Protection Officer	1-782-377-1736

1.7 People working on the project/activities shall attend a briefing with a designated Parks Canada staff before beginning work at the site. Mitigations that are conditions of the project approval shall be reviewed and explained including the emphasis on ecological/cultural integrity and resource protection when working in a Parks Canada administered protected heritage place.

1.8 The contractor shall determine the exact location of all existing buried utilities before commencing work.

2. Timing of Work

2.1 Schedule construction during optimum times for reducing erosion, and outside of environmental timing windows for sensitive species to maintain compliance with the *Migratory Birds Convention Act, Fisheries Act*, and *Species at Risk Act*.

2.2 Any work occurring between May and September requires a survey at least one week prior to work commencing to ensure no migratory birds or species at risk (e.g. Bobolink) are impacted by the project activities. It is the responsibility of the contractor to contact the Parks Canada EPO/Contact for the survey to take place. Mitigations may be required depending on the results of the Bobolink survey. This will be updated accordingly by the EPO or Parks Canada staff and provided to the contractor prior to work commencing.

2.3 Schedule work to avoid wet, windy and rainy periods or very dry periods that may increase erosion and sedimentation.

3. **Staging and Laydown Sites**

3.1 Delineate the work zone and restricted areas by clearly marking with stakes, biodegradable flagging tape or other eco-friendly means to limit active construction and define access and egress locations. Remove completely when the project is completed. Seek EPO review and approval.

3.2 Staging areas, material/equipment drop sites, and parking areas must be identified, including duration of use, within an existing disturbed footprint (ie. Roadway and/or the 15 x 15m easement boundary) or approved by designated Parks Canada staff.

3.3 Use existing roadways, trails, disturbed areas or other areas as approved by designated Parks Canada staff for site access, travel within the site, and construction activities.

Equipment Operation and Fuel Mitigations

4. **Equipment Operations:**

4.1 Ensure machinery arrives on site properly tuned, in a clean condition, free of fluid leaks (e.g., fuel, oil or grease), invasive species, noxious weeds and soils from off-site, in good operating order, and fitted with standard air emission control devices and spark arrestors.

4.2 Select equipment appropriate to the nature of work being conducted (e.g., avoid using large scale machinery when hand tools or smaller scale machinery could be used).

4.3 Heavy equipment operating on paved surfaces must be equipped with street pads; damage to paved surfaces must be restored to original conditions.

4.4 Refueling must take place on an impermeable fuel mat with a berm or within a container. Leaks and spills during refueling must be cleaned up, reported and contaminated materials must be disposed of appropriately. Fuel must never be dispelled or deposited into the environment or any water body.

4.5 Machinery must be stored, maintained, and refuelled on a flat surface, outside the dripline of trees and above the high water mark and in such a way as to prevent any deleterious substances from entering the environment.

4.6 Any required cleaning of tools and equipment must be done off-site. If it must be on-site, it must be in an appropriate area at least 30m from a waterbody.

4.7 Gas generators must be secured to prevent movement during the operation and set up on an impermeable fuel mat with a berm or within a container that can contain 110% of the volume of fuel in the generator.

4.8 Ensure drip trays are placed under equipment when not in use.

5. **Spill Response Plans and Hazardous Material Management**

5.1 A Spill Contingency and Response Plan must be submitted and approved by designated Parks Canada staff prior to starting work.

Note:

The Spill Response Plan must, at minimum, include the following information:

- List of products and materials that are considered or defined as hazardous or toxic to the environment. Such products include, but are not limited to, waterproofing agents, grout, cement, concrete finishing agents, hot poured rubber membrane materials, asphalt cement, sand blasting agents, paint, solvents and hydrocarbons;
- Required equipment on site and location of spill kits;
- Spill prevention procedures (i.e., containment and storage of materials, security, handling, use and disposal of empty containers, surplus products or waste generated in the application of these products in accordance with all applicable federal and provincial legislation);
- Fueling and fuel storage procedures;
- Spill response procedures (i.e., containment, clean-up, disposal of contaminated materials, etc.);
- Spill reporting procedures; and
- Up-to-date emergency response contact list including contact information for reporting spills.

5.1 Ensure that all on-site workers receive a briefing about the Spill Response Plan and are aware of the location and use of spill kits and containment devices.

5.2 Fuel shall be stored within a spill pan or in some form of an impermeable secondary containment capable of capturing 110% of the largest possible spill.

5.3 The refuelling, parking of equipment, and/or storage of hazardous or toxic products, if required, shall be at a location pre-approved by the Project Manager and EPO and will not take place within 100m of a waterway.

5.4 Follow all applicable regulations and codes for the management and handling of hazardous waste.

5.5 If potentially hazardous materials (e.g., waste effluent, cement-based products, sealants, or paints) are used on site, ensure raw material, mixed compounds and wash water are not released to any waterbody or soils. Measures such as collection/drip trays and berms lined with occlusive material such as plastic and a layer of sand, and double-lined fuel tanks can prevent spills into the environment.

5.6 Any and all hazardous material must be disposed of in accordance with all federal and provincial requirements. The Environmental Protection Officer (EPO) must be notified as to when transfer and disposal of hazardous materials is to occur, as well as, which waste disposal facility is to be used.

5.7 Spill containment equipment must be present on site. All equipment on-site shall be accompanied by a spill containment kit of the appropriate size. Retain spill kits (including sorbent material and berms) sufficient to contain and clean up 110% of the site's largest possible fuel or chemical spill at each location of potential spills, including all sites where equipment is working, refuelling, lubrication, and repair locations.

5.8 All spills must be contained and cleaned-up as soon as it is possible to safely do so (timely and effective action to stop, contain, and clean-up all spills if safe to enter site). In the event of a major spill, stop all other work and devote all personnel to spill containment and clean-up.

5.9 Immediately notify the designated Parks Canada staff (EPO; 902-393-8098) of any spill. The spill must be reported to both Environmental Emergency (1-800-565-1633) and Parks Canada Dispatch (1-877-852-3100).

5.10 The control, clean up, disposal of contaminants and site remediation to pre-spill conditions, shall be the responsibility of the contractor. The site will be inspected to

ensure completion to the expected standard and to the satisfaction of Parks Canada to an approved facility may be requested by the designated Parks Canada staff.

5.11 If hazardous waste or potentially contaminated material is uncovered during excavation/construction, work must stop and excavated materials must be secured onsite in a manner that prevents contamination of the surrounding environment, including leaching. The designated Parks Canada staff must be contacted for further direction.

5.12 A plan for the transport and control of paint and hazardous products (e.g. sewage effluent, application of paint, cleaning of equipment, containment and disposal of waste paint and cleaning products) must be approved by designated Parks Canada staff.

6. **Noise Management**

6.1 Use the standard and well-maintained noise attenuation devices provided with certain equipment or tools (e.g., compressor side panels).

6.2 Shut off motorized equipment if it is not used for an extended period of time.

Soil and Land Resource Related Mitigations

7. **Soil and Land Resources General**

7.1 Excavate, conserve, store and replace existing site topsoil unless otherwise directed by designated Parks Canada staff. Soil imports from other project sites or outside of the protected heritage place is not generally recommended. However, if required, it must be approved by designated Parks Canada staff.

7.2 Plan project activities to minimize soil handling and limit equipment movement over exposed soils and steep or unstable slopes prone to erosion.

7.3 Do not travel or operate equipment outside of designated areas.

7.4 Use low pressure or rubber tracked equipment or surface padding (e.g., timber mats) where feasible to minimize soil compaction and ground disturbance. Avoid travel on saturated soils.

7.5 Avoid activities that contribute to soil compaction and use practices that roughen and decompact soils to promote infiltration.

7.6 Minimize the length of time soils are exposed and complete work in one area before commencing work in another area.

7.7 If vegetation clearing is scheduled early due to restricted activity periods, maintain soil stability by delaying grubbing until just prior to construction activities.

8. **Erosion and Sediment Control**

8.1 Erosion and sediment controls measures that correspond with the nature and duration of the project and must be installed prior to commencement of work.

8.2 Maintain effective erosion and sediment control measures until complete revegetation of disturbed areas is achieved unless directed otherwise by designated Parks Canada staff. Then remove temporary erosion and sediment control products, especially non-biodegradable materials, when they are no longer required.

8.3 In the event of erosion and sediment control measure malfunction or of deleterious substance, including sediment, run off (current or impending), work shall stop until measures are adjusted to address the problem.

8.4 Use erosion and sediment control products, including backing, that are made of 100% biodegradable materials (e.g., jute, sisal or coir fiber) when possible.

8.5 Erosion and sediment control products should be selected to reduce potential for wildlife entanglement/attraction and prevent introduction of invasive alien species. These options may include:

i. Net-less erosion control blankets made of excelsior or loose mulch and unreinforced silt fences.

ii. Netting with a loose-weave wildlife safe design.

8.6 Use of straw-based or hay-based erosion control must be authorized by designated Parks Canada staff.

9. Excavation

9.1 Prior to excavation, the topmost organic layer of vegetation including as much root mass as possible will be stripped and stored. The excavated material and the strips of vegetation will be placed back over the exposed area as the first step in stabilization and restoration.

9.2 Where possible, trenches occupied with existing infrastructure will be used to remove old, and install new infrastructure and utilities.

9.3 Minimize the time excavations remain open. All trenches or ditches left unattended overnight must be fenced or covered to prevent wildlife and/or visitor entrapment/injury/death. Slope the sides to no greater than 1:1 and ensure that wildlife and humans can safely exit it.

9.4 Minimize changes to the ground surface that negatively affect infiltration and runoff characteristics and maintain or re-establish effective surface drainage on completion of the project

9.5 Backfill and compact excavations as soon as possible. Optimize degree of compaction to minimize erosion and allow for re-vegetation.

9.6 In the event of a work program shutdown during inclement weather (e.g., winter conditions unfavourable for construction, heavy rain events) establish sediment and erosion control and a contingency planning for bared soils or excavated material stockpiles.

9.7 Materials shall be placed at storage sites or on the grade without spillage outside the working limits. Any material inadvertently falling outside the work limits is to be removed promptly in a manner that does not damage trees or vegetation.

10. Soil Salvage

10.1 Plan the topsoil and subsoil salvage to minimize handling and traffic on soils.

10.2 Salvage site topsoil using a “two lift” method (in separate layers or lifts) and store topsoil and subsoil separately for improved reclamation success. Topsoil shall not be removed from the site unless otherwise directed.

10.3 Stabilize and repair all eroded areas prior to surface preparation, as determined by the designated Parks Canada staff, using local material where possible.

11. Storage of Excavated Materials

11.1 Identify soil storage locations when developing construction plans. Soil storage should be located on previously disturbed areas (e.g., pull outs, roads, trails, campsite, and staging area) so that no soil compaction occurs outside of the construction area, unless otherwise directed.

11.2 Store stockpiled material on flat ground, away from drainage areas, waterbodies, subsoil, spoil material, construction activity and day-to-day operations unless otherwise directed. Plan to separate stored topsoil from spoil by at least 1 m. Use appropriate material (e.g., geo-textile) to separate soil components where space is limited. Limit soil stockpile height to 2 m unless approved by designated Parks Canada staff.

11.3 Avoid topsoil loss. For example:

i. Do not store soil in areas prone to high winds.

ii. Surround soil with berms or construct barricades in areas with steeper slopes.

iii. Cover and anchor stockpile with dark geotextile when storage will exceed a week.

11.4 If surplus topsoil is available after site reclamation make arrangements for disposal or stockpiling for other projects in consultation with the designated Parks Canada staff.

12. Grading

12.1 Do not grade or allow material to spill outside of the delineated work area, within 1 m of the forest drip line, or in a stream, waterbody or wetland. Any material inadvertently falling outside the work limits will be removed promptly in a manner that does not damage vegetation or water quality.

12.2 Avoid grading following seed set if it is likely to spread seeds of non-native vegetation.

13. Revegetation and Site Reclamation

14.1 Schedule construction so that seeding or planting can coincide with seasonal planting windows (i.e., spring or fall).

14.2 Post-construction reclamation activities must be detailed in an approved Environmental Protection Plan prior to construction.

14.3 Implement restoration plan for the disturbed area immediately following completion of construction. Restoration plans will be the responsibility of the contractor with collaboration with Resource Conservation staff.

14.4 Revegetate and stabilize bare areas as soon as possible after disturbance, preferably as soon as a significant area is graded and finished and before the next rain event.

13.1 Reuse excavated material on site, unless there are any indicators of potential contamination.

13.2 Excavations must be drained (but not directly into a waterbody), backfilled, and compacted as soon as possible.

13.3 Place and grade topsoil before winter. Do not compact topsoil by driving repeatedly over the site. Keep topsoil “rough and loose” or as directed by designated Parks Canada staff.

13.4 Where insufficient topsoil is available, imported soil may be used as a last resort. Imported topsoil must be certified completely free of non-native seeds and compost developed from sewage treatment plants. Site restoration using locally sourced, weed and contaminant free materials are preferred. Soil sources must be pre-inspected by Parks Canada EPO prior to arriving at the project site within the National Park/National Historic Site.

13.5 Where remaining soils are unstable due to steepness or soil characteristics, immediate installation of sod or erosion control blanket is required. Use sod in high traffic areas or places that need extra erosion control.

14.5 Use the stripped sod and stored for revegetation. If sourced sod is required, sod should be grown from native species (often called fescue sod) and ensure adequate anchoring and watering is in place.

14.6 If seed is required:

a. Use Parks Canada approved seed mix (60% creeping red fescue, 20% hard fescue, 10% perennial ryegrass, 10% Alsike clover). Ensure seed certificates are approved by the designated Parks Canada staff prior to seeding.
b. Do not perform seeding under adverse field conditions such as frozen soils, excessively wet or dry soil, ice or standing water, heavy rain, or high winds.
c. Confirm seeding plan and mitigations with the Parks Canada EPO prior to seeding.

Concrete and Gravel Related Mitigations

14. Concrete Handling and Washout Facilities

14.1 Prevent wash water, concrete, debris and sediment used in roads, barriers, guardrails or other-related infrastructure from directly or indirectly entering water by establishing and maintaining effective separation of the concrete work from the storm drain inlets, open drainage facilities, and waterbodies.

14.2 Washout of concrete mixer trucks shall be performed only back at the concrete yard or contractor's facility. No concrete washout shall occur within the National Park or at roadside.

14.3 Pump excess concrete in concrete pump bin back into concrete mixer truck.

15. Concrete Application

15.1 Determine site specific mitigation measures for larger scale manual mixing activities (around >20 litres) including buffer zones, drip trays, and daily surveillance requirements.

15.2 Perform concrete cutting operations in a way to pick up all saw cutting residue.

15.3 Collect wash water when cleaning areas and equipment used during concrete activities and dispose of wash water with slurry.

15.4 Do not dump unused wet concrete on bare ground to harden at construction sites.

15.5 Treated wood is prohibited in certain situations and must be handled, installed, and disposed of according to current guidance prepared by Parks Canada (see Guidelines for the Use, Handling and Disposal of Treated Wood). If pressure treated wood is used, follow procedures in the Parks Canada Treated Wood Management Guidelines. All construction materials must be clean and non-toxic (free of fuel, oil, grease, and/or any contaminants or invasive species). The use of pressure treated wood will be restricted to treatments that do not contain arsenic.

16. Dust Management

16.1 Wet down dry materials, if appropriate, and cover waste to prevent the wind from blowing dust and debris. Control dust on roads used by the on-site workers (including temporary roads).

16.2 Dust control materials should be applied to pre-wetted surfaces.

16.3 For dust control from all project activities, use only water that is free of waste and organic matter. Chemical dust suppressants shall not be used unless directed otherwise by designated Parks Canada staff, in accordance with Parks Canada health and safety and environmental policies.

17. Gravel Crushing and Washing

17.1Gravel will be obtained from an approved operational borrow pit only.

17.2 Gravel will not be crushed nor cleaned within the National Park. It must arrive on site already crushed and washed.

18. Infrastructure Removal

18.1 Before undertaking the partial or complete demolition of existing infrastructure, prepare a demolition plan or a written procedure for partial demolition. This is subject to approval and direction from the designated Parks Canada staff.

18.2 If water lines and wells are of no further use, remove, cap or decommission them according to the appropriate federal or provincial legislation. Consult with designated Parks Canada staff to determine whether full excavation and removal of all subsurface infrastructure (e.g., pipes, cement structures, wires) is required. Backfill any excavation with clean and authorized topsoil.

18.3 Prior to commencement of demolition activities, identify water and septic systems, lines and/or fields and take precautions during the operation of heavy equipment to avoid damaging them.

Wildlife and Invasive Species

19. Wildlife

19.1 Schedule work to avoid restricted activity periods. Refer to Section 10, Figure 1.

19.2 On-site workers must receive any required wildlife awareness training, according to field unit policy.

19.3 On-site workers must be made aware of and subsequently report any incidental sightings of species at risk immediately to designated Parks Canada staff.

19.4 If unexpected nests/dens/roosts, species at risk or other wildlife are found, cease work in the immediate area and contact designated Parks Canada staff for further direction.

19.5 Control materials that might attract wildlife (e.g., petroleum products, human food and garbage) as part of the waste management plan.

19.6 Conduct activities during daylight hours and avoid critical foraging times (i.e., dusk and dawn) unless otherwise approved by designated Parks Canada staff.

19.7 Never approach or harass wildlife (e.g., feeding, baiting, luring). If wildlife is observed at or near the work site, allow the animal(s) the opportunity to leave the work area.

19.8 Immediately alert designated Parks Canada staff or emergency dispatch of any potential wildlife conflict (e.g., aggressive behaviour, persistent intrusion, etc.), encounters on or around the site or crew accommodation, distress or mortality.

19.9 Minimize the time between removal and replacement of transmission pole, and cover or fence when left unattended to reduce the potential for wildlife and human injury.

20. Invasive Alien Species

20.1 All construction equipment from outside the Parks Canada protected heritage place must be washed outside the site prior to arrival to minimize risk of introducing invasive weed species and soils from off-site. Proof that this mitigation was applied may be requested before equipment is permitted into the protected heritage place.

20.2 Organic material (ie. Topsoil, borrow, and fill material) taken from the construction site will not be used in other parts of the protected heritage place unless approved by the designated Parks Canada staff.

20.3 Minimize ground disturbance, vegetation removal and bare soil exposure (e.g., cover stockpiled material with tarps, plant seeds or plants, cover with natural mulch/ground coverings).

20.4 Monitor disturbed and re-vegetated areas until native vegetation is growing successfully and invasive alien species spread is prevented. Parks Canada shall be notified if an invasive species is identified, (i.e., giant hogweed).

Cultural Resources

21. Cultural Resources

21.1 Avoid known potential cultural resources and/or archaeological sites unless authorized by designated Parks Canada staff.

21.2 The designated Parks Canada staff should ensure on-site workers receive appropriate cultural resource awareness training.

21.3 If materials of potential historical, archaeological, paleontological, or cultural interest (i.e., structural remains and/or artifact concentrations) are encountered, work will cease at that location, the site secured, the EPO will be alerted, and Parks Canada cultural resource professionals will be immediately contacted for an evaluation assessment.

21.4 If cultural resources are exposed:

i. The resources should be left in the ground, as uncovered, for archaeological evaluation. It is essential that artifacts are not disassociated from their depositional environment
ii. If artifacts must be removed in advance of archaeological evaluation, and there are no associated structural features present, the soil layer/type in which the artifact(s) is found as well as its depth, accurate location, and any other relevant spatial points of reference available on the landscape must be recorded, measured, and photographed before the artifact(s) is collected.
iii. This information must then be stored with the artifact and submitted to Terrestrial Archaeology for evaluation and further consultation with the Mi'kmaq must be undertaken by the Park.

21.5 The Proponent and Contractor must be aware that he/she is working in a National Park whose emphasis is on ecological/cultural integrity and resource protection. Adherence to all relevant National Parks and National Historic Site Regulations is expected.

Visitor Experience

22. Visitor Experience

22.1 Ensure traffic accommodation plans are consistent with field unit standards, where they exist. If traffic control is required, a flag person should manage traffic through the construction/hazard area.

22.2 Close and mark the work site and safety hazards with appropriate signage while active construction, repair or maintenance is underway. Follow the municipality recommendations regarding temporary detours or reroutes, as appropriate.

22.3 Keep visitor access trails and roads outside the construction area free of construction materials, waste, machinery and equipment.

Site Clean Up/General Waste Management

23. Site Clean up

23.1 Leave No Trace wilderness ethic principles shall be communicated to/observed by all the construction crew.

23.2 Remove all salvageable, non-combustible and non-hazardous materials and reuse or recycle it to the greatest extent possible. Remaining material considered to be waste and demolition debris is to be disposed at an approved disposal facility.

23.3 Contain all wastes and transport to a provincially approved waste landfill site outside the Parks Canada protected heritage place, unless otherwise directed by designated Parks Canada staff. Cover waste loads during transportation. All construction materials must be removed from the site on project completion.

23.4 Construction, trade, hazardous waste and domestic waste materials shall not be burned, buried or discarded at the construction site or elsewhere in Parks Canada protected heritage places. Burning or burying is not permitted unless approved by Parks Canada.

23.5 Sanitary facilities, such as a portable container toilet, shall be provided and maintained in a clean condition. Accumulated waste must be disposed of at a sanitary waste disposal facility. The portable facilities must have sufficient capacity and be managed to ensure waste is not discharged to the receiving environment.

23.6 Empty construction waste storage containers when 90% full. Provide lids for waste containers, ensure they are wildlife proof if there are attractants, and cover waste loads during transport (including waste containers and truck loads).

23.7 All wildlife attractants must be secured (e.g., petroleum products, human food, recyclable drink containers and garbage) in wildlife-proof containers, a secure

building or vehicle. When possible, keep food waste separate from construction waste and remove daily

Monitoring and Control:

24.Monitoring

24.1 Schedule site inspections to monitor reclamation progress for an appropriate timeframe following construction to ensure establishment of vegetation.

24.2 Avoid or terminate activities on site that attract or disturb wildlife.

10. Environmental Timing Windows Table

<table>
<tr><th></th><th>Jan</th><th>Feb</th><th>Mar</th><th>Apr</th><th>May</th><th>Jun</th><th>Jul</th><th>Aug</th><th>Sep</th><th>Oct</th><th>Nov</th><th>Dec</th></tr>
<tr><td>Bobolink</td><td colspan="4">Reduced risk for Bobolink</td><td colspan="4">Bobolink nesting period. Work should be avoided in this period</td><td colspan="4">Reduced risk for Bobolink</td></tr>
<tr><td>Birds</td><td colspan="4">Reduced risk for harm to birds</td><td colspan="4">AVOID VEGETATION REMOVAL Bird Nesting Period: April - Mid August</td><td colspan="4">Reduced risk for harm to birds</td></tr>
<tr><td>Snakes</td><td colspan="4">Avoid disturbance of Hibernacula</td><td colspan="2">Road Mortality</td><td colspan="3">Peak : breeding, young Mitigate road mortality</td><td>Migration Road mortality</td><td colspan="2">Avoid disturbance of Hibernacula</td></tr>
</table>

Figure 1. Environmental timing windows for the biological and ecological processes that occur in the surrounding ecosystem of the proposed project.

11. OTHER Considerations

☒ Comments received from the public /stakeholder engagement

No comments received via Public Consultation.

☒ Indigenous peoples engagement or consultation

A consultation letter was composed and sent to L'nuey of PEI to invite consultation, feedback, and involvement in the project. (Attached as Appendix 3). A response was received and comments are integrated in the BIA.

☒ Surveillance

A pre-project briefing will be held by the EPO for all of the people working on the project. The briefing will be used to review the mitigations. The EPO will be onsite periodically for site inspections during the work. Inspection records and photos will be completed and maintained. A surveillance report will also be generated and filed.

☒ Follow-up monitoring

A site visit will be conducted after the work is held to evaluate the quality of the work and the integrity of the project site.

☐ SARA Follow-up monitoring

No impact to any species at risk predicted. Potential need for species at risk monitoring if work is conducted between May and September.

12. SIGNIFICANCE OF RESIDUAL ADVERSE EFFECTS

The Canada National Parks Act, October 2000 defines ecological integrity with respect to a National Park as,

"A condition that is determined to be characteristic of its natural region and likely to persist, including abiotic components and the composition and abundance of native species and biological communities, rates of change and supporting processes".

It is anticipated that this project will have no or minimal impact on the existing ecological integrity of the site, the National Park. It is anticipated that this project will have no or minimal impact on commemorative integrity (no heritage sites or other sensitive elements have been identified that would be adversely affected by the project). Work will be completed outside of the operating season and visitor experience objectives will not be impacted. There are no negative cumulative effects anticipated as the result of this project.

Effect on SARA Listed Species: There are no listed species within the proposed project sites. However, Bobolink are known to nest within 200m of the project site. The worksite will not have any direct impact on suitable habitat for nesting Bobolink and will not disturb any Bobolink present. Any work that is to occur within the environmental timing window for Bobolink (Figure 1) will require a survey to be complete in advance and instructions will be given by PEINP Resource Conservation team and the EPO on how to proceed.

A Cultural Resources Impact Assessment has been completed (see attachment). An Archaeological Overview Assessment was not completed as it was deemed unnecessary. There were "*no archaeological concerns with this project if they limit disturbance to the previously impacted footprint as noted*".

13. EXPERTS CONSULTED

Include Parks Canada experts. Add as many entries as necessary for the project.

Department/Agency/Institution: Parks Canada	Date of Request: 2019-12-02 and again in 2022-12-09
Expert's Name & Contact Information: Sofie Desjardins, sofie.desjardins@pc.gc.ca	Title: Policy Advisor, Cultural Resource Management
Expertise Requested: Cultural Resource Management	
Response: "Please find below the comments from Becki. The clauses identified in the BMP suffice Including the Accidental Find Protocol. Should the scope of work change, please let us know." (Sofie 2019-12-09) Due to change in scope, Sofie was contacted again to confirm recommendations. Her response "I've submitted the updated information to the terrestrial archaeologist and refer them to and I'm expecting a following in the upcoming week or two." (Sofie 2023-01-10)	

Department/Agency/Institution: Parks Canada	Date of Request: 2019-12-02
Expert's Name & Contact Information: Rebecca Dunham, rebecca.duggan@canada.ca	Title: Archaeologist, Indigenous Affairs and Cultural Heritage Directorate (IACH)
Expertise Requested: Cultural Resource Management	
Response: "There are no archaeological concerns with this project if they limit disturbance to the previously impacted footprint as noted in the project description. The BMP mitigation measures for CR are fine, however, the precautionary approach should be applied. If cultural resources are exposed, • The resources should be left in the ground, as uncovered, for archaeological evaluation. It is essential that artifacts are not disassociated from their depositional environment. • If artifacts must be removed in advance of archaeological evaluation, and there are no associated structural features present, the soil layer/type in which the artifact(s) is found as well as its depth, accurate location, and any other relevant spatial points of reference available on the landscape must be recorded, measured, and photographed before the artifact(s) is collected. • This information must then be stored with the artifact and submitted to Terrestrial Archaeology for evaluation." (Archaelogist, IACH, R. Dunham, 2019-12-09)	

Department/Agency/Institution: Parks Canada	Date of Request: 2019
Expert's Name & Contact Information: Tammy MacDonald Currently, Aaron Waddell, aaron.waddell@pc.gc.ca	Title: A/Consultation Coordinator, L'Nuey
Expertise Requested: Indigenous Relations	
Response: A letter was composed and sent to L'Nuey of PEI to invite consultation, feedback, and involvement in the project. (Attached as Appendix 3). Response from Tammy MacDonald, A/Consultation Coordinator, L'Nuey. "*Due to the excavation work that will be undertaken during the expansion the of the sewage lift station, if there are any findings of cultural, archaeological, or paleontological significance, all work must immediately come to a halt, the archaeologist having jurisdiction over the area is to be contacted, as per the applicable legislation and regulations and further consultation with the Mikmaq must be undertaken.* *Our research has uncovered a historical Mi'kmaq travel/portage route through the area. However, provided there are no findings of cultural, archaeological or paleontological significance, the Mi'kmaq do not object to the proposed project. The lack of objection to the use of the above referenced parcel is premised on the purpose for which the subject land is to be used – as outlined in the information provided by you." (2020-01-17)*	

Department/Agency/Institution: Parks Canada	Date of Request: 2022-12-09
Expert's Name & Contact Information: Vincent Bourgeois, Vincent.bourgeois@pc.gc.ca	Title: Terrestrial Archaelogist
Expertise Requested: Cultural Resource Management	
Response: "I had a chance to review the proposal for the expansion of the lift station along Route 6. According to the updated project drawings of November 2022, all construction will be limited to the 10x15m plot of land devoted to the existing lift station, and appears to have been altered considerably during it's initial construction. Because of this, I recommend that the project can proceed without an AIA but with the Accidental Find clause in the event that there might be intact cultural resources below the disturbances." (TAR, V. Bourgeois, 2023-01-10)	

Department/Agency/Institution: CBCL on behalf of the Resort Municipality)	Date of Request: 2022-12-14
Expert's Name & Contact Information: Wendell LaBode	Title: Consultation Coordinator
Expertise Requested: Indigenous Relations	
Response: A letter was composed and sent to L'Nuey of PEI to invite consultation, feedback, and involvement in the project. (Attached as Appendix 3). Response from Wendell LaBode, Consultation Coordinator, L'Nuey. "*While the formal consultation relationship is between the Crown and the Epekwitnewaq Mi'kmaq, we write to advise that based on our research, and the specific information provided by you, the Epekwitnewaq Mi'kmaq do not object to Cavendish Sewer Utility and the Resort Municipality of Stanley Bridge, Hope River, Bayview, Cavendish and North Rustico commencing on the proposed work for this project. Please note that due to the excavation work that is proposed to be undertaken during the sewer utility lift station upgrades, if there are any findings of cultural, archaeological or paleontological significance, all work must immediately come to a halt, the PEI Provincial Archaeologist is to be contacted, as per PEI's Archaeology Act and Archaeology Act Regulations, and further Crown consultation with the Epekwitnewaq Mi'kmaq must be undertaken.* *The response provided herein is specific to the particular activity(ies) in the specific areas/property locations outlined in the information provided by you. If there is any additional activity, or change in activity, or the activity will involve areas other than the specified locations, or during time frames other than what you have outlined, further consultation will be required.(January 16, 2023)*	

Department/Agency/Institution: Parks Canada	Date of Request: 2022-12-15
Expert's Name & Contact Information: Aaron Wadell, aaron.waddell@pc.gc.ca	Title: Indigenous Relations Advisor
Expertise Requested: Indigenous Relations	
Response: "At this time, I would advise that the Mi'kmaq Consultations that were requested/received in 2019 remain valid. The work location and description that was Consulted on in 2019 remains accurate (with the potential ground disturbance footprint and excavation depth actually decreasing) to what has been described in the most recent proposal." *"Please note: I have highlighted two points that were specifically identified in L'nuey's response to the project in 2020. First: If anything of cultural/archeological/paleontological significance is found, all work needs to stop and further formal Consultations must be initiated by PCA. Second: L'nuey stated that their endorsement of the project was based on the project work described. As the scope of the work is in the same footprint as previously Consulted on; we have the Mi'kmaq's permission to continue. However, if the project work changes, or extends outside of the previously described (2019) 15m x 15m footprint, we will need to formally Consult again." – Aaron Waddell, 01-16-2023*	

14. DECISION

Taking into account implementation of mitigation measures outlined in the analysis, the project is:

☒ not likely to cause significant adverse environmental effects.

☐ likely to cause significant adverse environmental effects.

FOR SARA REQUIREMENTS:

☐ Residual adverse effects to species at risk are not likely, and therefore, the SARA-Permit Decision Tool was not required

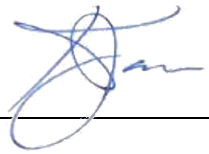
OR, the SARA-Permit Decision Tool (Appendix 2) was used and determined:

☒ This activity does not require a SARA permit

☐ This activity requires a SARA permit and one can be issued

☐ This activity requires a SARA permit but one cannot be issued

10. RECOMMENDATION AND APPROVAL
(Add additional blocks as required)

Prepared by: Kelsey MacDonald, Resource Conservation Officer 	Date: January 18, 2023
Recommended by: Brad Romaniuk, Resource Conservation Manager 	Date: Jan 20, 2023
Approval signature: Karen Jans, PEI Field Unit Superintendent 	Date: January 20, 2023

15. ATTACHMENTS

Attachment 1. A Cultural Resource Impact Analysis (CRIA) was submitted to the Terrestrial Ecology Team in 2019 (Attached below).

Request for Cultural Resource Impact Analysis (CRIA)

Will the project focus directly on a cultural resource? ☐**Yes**, please select type(s)
- ☐National Historic Site(s)
- ☐Building(s)
- ☐Engineering Work(s)
- ☐Archaeological Site(s)
- ☐Cultural Landscape(s)
- ☐In situ object(s)
- ☐Unknown

☒**No**
If there are any cultural resources within the immediate area of the project, please provide information on these resources.

FOR INTERNAL USE	
Project Number	

Project Title	**PEINP19-19 – Lift Station Modification Route 6 Cavendish**

Protected Heritage Place:	**PEI National Park**	**Management Unit:**	**PEI Field Unit**
Street Address/Location:	**Route 6, Cavendish**	**Date:**	**November 29, 2019**
Program Activity (%):	*N/A – paid for by municipality of Cavendish*	**Funding Source:**	*N/A – paid for by municipality of Cavendish*
		Estimated Total Project Budget:	**$ N/A**

Planned Schedule: The proposed schedule is as follows:

1. Complete Tender Documents and Final Submission for Environmental Approval Nov. 29/19
2. Tender the Project (3 weeks) Dec. 20/19
3. Tender Award, Order Pumps and Controls Jan. 15/20
4. Begin Construction Apr. 15/20
5. Install Pumps & Controls May. 1/20
6. Commissioning of Station and Controls June 1/20

Contact Information

Contact Person/Lead:	Hailey Paynter, Ecological Integrity Monitoring Coordinator, hailey.paynter@canada.ca, 902-626-5117
Asset Manager:	Bill Courtney, Assets Manager, bill.courtney@canada.ca, 902-672-6374
Cultural Resource Management Advisor (Field Unit or HCDD):	Sofie Desjardins, Policy Advisor, Cultural Resource Management, sofie.desjardins@canada.ca, 514-891-7275
Field Unit Superintendent:	Karen Jans

For help on completing this form please contact your CRM Advisor

Scope Statement

Objective of project	This project is designed to change the functional requirements of the existing sewage lift station. While the lift station is owned and maintained for the municipality of Cavendish, it is on Parks Canada land. The objective of the project is to enhance the capacity of an existing lift station to meet the storage and flow requirements of peak tourist season.

CRIA Status and Format	**NOT REQUIRED** ☐ Project will not impact known cultural resources and the potential for archaeological resources has been determined to be low according to the appropriate archaeological assessment(s). (Please attach archaeological assessment). Close file.
	REQUIRED ☐ Emergency intervention in response to a natural emergency under the *Emergencies Act*; or where carrying out of the project without delay is in the interest of preventing damage to property or the environment or is in the interest of public health or safety (please contact your CRM advisor to inform them of the situation and determine the appropriate disaster response for conserving cultural resources) ☐ Proposed intervention has been previously assessed and there is no change in approach (attach review) ☐ An Environmental Impact Analysis that includes CRM input will be undertaken or has been completed (*Basic or* *Detailed, please attach*). ☒ An Approved Best Management Practice (BMP) exists that will address some or all potential adverse impacts of this intervention (Parks Canada National Best Management Practices – Common Activities) ☐ Complete a Statement of Impacts to Cultural resources (includes as required a Classified Federal Heritage Building Review of Intervention, Archaeological Overview Assessment, Archaeological Impact Assessment)
Conservation Approach	- Work is taking place within 15 x 15 m footprint previously disturbed ground - Onsite topsoil and sod removed for excavation, will be used for backfill and landscaping. This will be done to ensure that minimal foreign substance is brought into the area (including invasive species. Silt fencing will be installed as required. - Class A gravel, to be used in the trench under the force main and under the valve chamber and storage tank, is the only granular or soil material to be imported to the site. - A small excavator or backhoe will be used to excavate and install the two added tanks and trenching for the force main reconnection. The maximum depth of excavation will be 4.9 m. - A sanitary pumping truck will be onsite during station downtime, to ensure the station remains operational. Pumped effluent will be reintroduced into the sanitary and treatment facilities. This procedure is to ensure that the lift station remains operational throughout the construction process. - The tanks to be installed are precast concrete (no on site concrete production) and measure 1.8 m in diameter and 4.9 m in depth.

Project Impacts

Very little impacts are expected to cultural heritage as this site has been previously disturbed in the past for installation of the existing lift station. All work will take place within previously disturbed footprint (15 m x 15 m).

Options Considered

No other options have been considered as this work is required to prevent further harm to the environment by potential overflowing or breaching of current lift station during peak tourist season.

Moving the expansion of the lift station to an alternate location outside of the 15 x 15 m previously disturbed site would increase the potential for adverse effects to cultural artefacts.

Background Information

Attachments	*Provide sufficient information to fully describe both the current condition where the project is to take place and what is being proposed.* At a minimum, the submission should include: ☒ **Photos of the existing condition where the project is to take place** ☒ **Graphics illustrating the Proposal** (drawings/cut sheets/renderings/etc.) ☒ **Maps showing the overall project within the heritage place and detailed map showing location of all components of the project**

Attachment 2. In 2019, when the original pathway decision was drafted, a letter was composed and sent to L'nuey of PEI to invite consultation, feedback and involvement in the project (Attached below).

L'NUEY
MOVING TOWARDS
A BETTER TOMORROW

17 January 2020

Karen Jans
Field Unit Superintendent
2 Palmers Lane
Charlottetown, PEI
C1A 5V6

Dear Ms. Jans,

Re: Sewage Lift Station Expansion – Cavendish National Historic Park, Queens County, PE

Further to your letter of December 16, 2019, I am writing in relation to Parks Canada proposed expansion of the sewage lift station at Cavendish National Historic Park.

Due to excavation work that will be undertaken during the expansion of the sewage lift station, if there are any findings of cultural, archaeological or paleontological significance, all work must immediately come to a halt, the archaeologist having jurisdiction over the area is to be contacted, as per the applicable legislation and regulations, and further consultation with the Mi'kmaq must be undertaken.

However, provided there are no findings of cultural, archaeological or paleontological significance, the Mi'kmaq do not object to the proposed project. The lack of objection to the use of the above referenced parcel is premised on the purpose for which the subject land is to be used - as outlined in the information provided by you.

The Mi'kmaq Confederacy database is, to date, a partial inventory of existing knowledge. As such, it does not mean that the subject area was not used (or used for additional purposes), rather that evidence of use, if it exists, has not yet been collected. It is imperative to ensure proper consultation protocols are followed with the PEI Mi'kmaq, who have asserted Aboriginal title to all lands and waters of Prince Edward Island, including adjacent areas and offshore islands. It is also imperative to recognize that, while site specific activities are a fundamental aspect of Aboriginal and treaty rights, the assertion of Aboriginal title is grounded in the sufficient and exclusive occupation of Prince Edward Island by the Mi'kmaq at the time of the assertion of European sovereignty.

As indicated, the response provided herein is specific to the particular activity (ies) in the particular area(s) specified in the information provided by you.

I trust the foregoing to be satisfactory, but please do not hesitate to contact me if you have any questions.

Yours truly,

T. J. MacDonald

Tammy MacDonald
A/Consultation Coordinator

cc. Bill Courtney
Jesse Francis

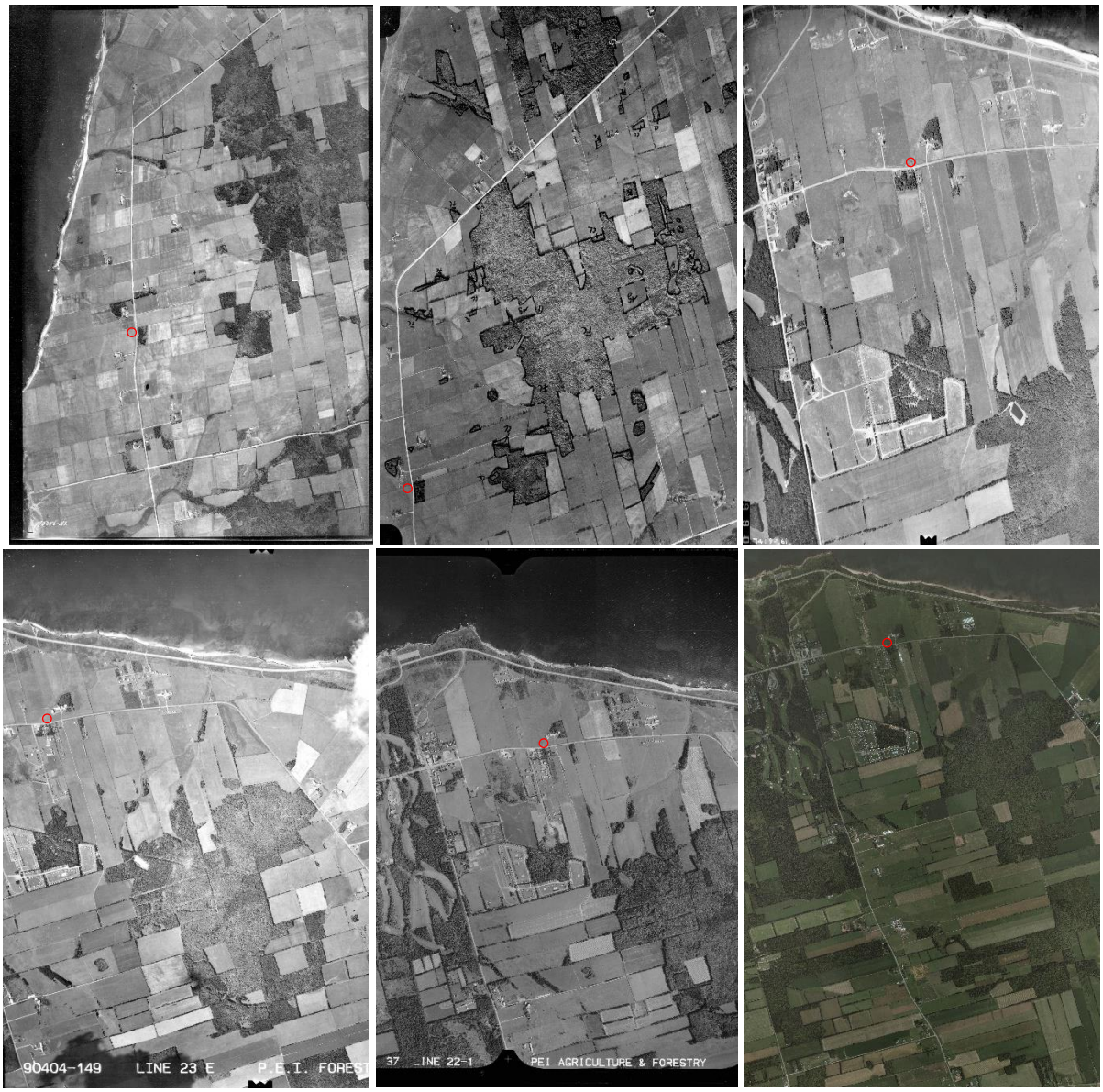


Figure 2. Historical view of the land use in the lift station location of Cavendish, PEI. Photos are taken from 1935 (top left), 1958 (top middle), 1974 (top right), 1990 (bottom left), 2000 (bottom middle), 2010 (bottom right) via aerial photography. The area circled in red demonstrates the location of the lift station in each image.

Figure 3. Map of the Lift Station Location in Cavendish, PEI. The lift station is located adjacent to a cattle pasture and ranch just off Route 6.

Figure 4. Photo of the existing pumping station #4 that is proposed for upgrades in 2023.

16. APPENDIX

Appendix 1: Effects Identification Matrix (optional)

Appendix 2: SARA Permit Decision Tool

Parks Canada place where the activity will occur	Species at risk affected by the activity:	Title of activity (e.g., Trail development in Blue Meadow):
Prince Edward Island National Park	Bobolink (*Dolichonyx oryzivorus*)	Lift Station Modification on Route 6

Part A – Does a SARA permit need to be considered for this activity?

1. Will residual adverse effects of the activity (effects that will still occur even after mitigation measures are implemented) contravene a SARA prohibition for a listed endangered (En), threatened (Th) or extirpated (Ex) species, its residence or its critical habitat? (If more than one species will be affected, then clearly delineate the effects on each species).

SARA prohibitions: Section 32 - Cannot: kill, harm, harass[1], capture, or take an individual; possess, collect, buy, sell or trade an individual or any part or derivative of an individual; Section 33 – Cannot damage or destroy a residence; Section 58 – Cannot destroy any part of critical habitat[2]; Section 80 - Cannot carry out an activity that is prohibited under an emergency order.

The proposed project will take place in proximity to a field where Bobolink have been observed nesting in 2020, 2021 and 2022. The worksite will not have any direct impact on suitable habitat for nesting Bobolink and will not disturb any Bobolink present. Any work that is to occur within the environmental timing window for Bobolink will require a survey to be completed for Bobolink in advance. If any Bobolink are present and there is the possibility for direct, indirect, or residual adverse effects, the project will cease until Bobolink have left the area. A full description of this project can be found in Section 6 of the Impact Assessment (PEINP-19-19)

☐ **Yes. There are residual adverse effects of the activity that will contravene a SARA prohibition**.

Continue to Question 2.

[1] A 2008 legal opinion concluded that it could be validly argued that any activity which causes even one individual of a wildlife species, on just one occasion, to be disturbed, alarmed, distressed, or molested, constitutes “harassment” under *SARA*.

[2] Critical habitat destruction results if a portion of the critical habitat is degraded, either permanently or temporarily, by activities occurring either internal or external to the critical habitat, such that the habitat function provided by the degraded portion is no longer available to the species when needed.

☒ **No. There are NO residual adverse effects of the activity that will contravene a SARA prohibition**.

STOP - you have completed the tool. **Check the first box in Part C and submit for approval**.

2. Does the activity qualify for an exception under s 83 of SARA?

☐ **Yes. A SARA permit is NOT required, as the activity is permitted in a published recovery strategy or**

OR

☐ **Yes. A SARA permit is NOT required, as the activity is required for public safety, health or national security AND is authorized by or under another Act of Parliament.**

STOP - If **ALL** activities that would contravene a SARA prohibition qualify for an exception under SARA s 83, **check the first box in Part C and submit for approval (Part F)**.

☐ **No. A SARA permit is required. Continue to Part B.**

Part B – Can a SARA permit be issued for this activity?

******Complete ONLY if you have answered NO to Question 2, above******

3. What is the purpose of the activity?

Select the appropriate box:

☐ **The activity is scientific research related to the conservation of the species and conducted by qualified persons (continue to Question 4)**; OR

☐ **The activity benefits the species or is required to enhance its chance of survival in the wild** (i.e., an activity that supports the implementation of recovery actions as described in recovery documents (recovery strategies/action plans) for the species, where these are available. Where recovery documents are not available, the activity must support the recovery of the species based on an assessment of best information available (including status reports, species experts, peer-reviewed information) **(continue to Question 4)**; OR

☐ **Affecting the species is incidental to the activity** (i.e., the purpose of the activity is not to engage in an activity that is prohibited under SARA (e.g., kill, harm, harass an individual; destroy a residence or critical habitat). For example, fishing for a listed species would not be incidental, but accidental by-catch would be. A construction activity that causes destruction of critical habitat, such as building a parking lot, would be considered to incidentally affect the species.) **(continue to Question 4; If the activity will incidentally affect a species listed under the *Migratory Bird Convention Act*, consult with the Species Conservation team)**; OR

☐ **The proposed activity DOES NOT fit in any of the above three categories, and the activity CANNOT be permitted**; **check the second box in Part C and submit for approval (Part F).**

4. Have alternatives that would reduce the impact(s) on the species been considered and the best solution adopted?

Excerpts from SARA Permits and Agreements Policy: The purpose of this section is impact avoidance. The alternatives provided must clearly articulate how the impacts of the activity on the listed wildlife species have been avoided by considering reasonable alternatives. Moreover, it must be demonstrated that there are no other reasonable alternatives to the one selected that would further avoid the impact. Biological, ecological, conservation and recovery objectives, and technical and economic factors may be considered when deciding

whether a given alternative is reasonable. The amount of analysis undertaken for the alternatives must be proportional to the magnitude and severity of the impact on the listed wildlife species. An explanation of why not undertaking the activity is not considered reasonable must be provided.

Continue to Question 5.

5. Have all feasible measures been taken to minimize the impact of the activity?

Excerpts from SARA Permits and Agreements Policy: After having determined that impacts on the listed wildlife species have been avoided to the extent reasonably possible, the applicant must apply all feasible mitigation measures to minimize the impacts that could not otherwise be avoided despite having selected the best alternative. Demonstrate that the needs of the species were fully considered during the design of the activity and for identifying all feasible measures to minimize the impact of the activity. Consideration must be given to identifying and adopting best practices for the species. Biological, ecological, technical and economic factors may be considered when considering what measures are feasible.

Continue to Question 6.

6. Will the activity jeopardize the survival or recovery of the species?

Excerpts from SARA Permits and Agreements Policy: An activity will jeopardize the survival or recovery of the species if it increases threats to the extent that the species is not able to, or may not be able to, survive or recover. As the degree of uncertainty increases about whether an activity would affect a species to such an extent that it may not be able to survive or recover, the likelihood decreases that a permit can be issued. Where data is sufficient to support the completion of quantitative analyses, such as population viability, this should be done. However, in some cases, such analyses will not be possible and a precautionary approach will guide the assessment of jeopardy based on the best available information and the weight of available evidence.

☐ **Yes. The activity will jeopardize the survival or recovery of the species and cannot be permitted.**

Check the second box in Part C and submit for approval (Part F).

☐ **No. The activity will not jeopardize survival or recovery of the species and can be permitted.**

☐ **Yes. The activity will jeopardize survival or recovery of the species, but an offset will be implemented to ensure survival or recovery of the species is not jeopardized.** *Append the completed offsetting plan from Parks Canada's SARA Biodiversity Offsets Guideline to this decision tool for final approval (Part F).*

Check the third box in Part C and submit for approval (Part F).

Part C – SARA Permit Decision

Select the appropriate answer from the options below. Note: if this section addresses multiple species and the answer varies among species, specify to which species each answer pertains.

☒ This activity does not require a SARA permit, as was documented in the answers to Questions 1 and 2. **Continue to approval of the decision tool (Part F)**.

☐ This activity requires a SARA permit but one cannot be issued because it does not fit into one of the three required categories (see response to Question 3), OR it does not meet one of the SARA pre-conditions (see responses to Questions 4-6). **Continue to approval of the decision tool (Part F).**

☐ This activity requires a SARA permit and one can be issued (see response to Questions 3-6). **Continue to issuing the permit (Part D)**.

Part D – Issuing the Permit

Select the appropriate section of SARA being used, issue the permit, and continue to Part E.

☐ **SARA s 74:** This activity is already being permitted under another Act of Parliament (e.g., a research, collection or restricted activity permit is already being issued for this activity) and therefore that permit can be made SARA-compliant. Issue the permit for the activity and, below, specify the relevant section(s) of the other Act of Parliament being used to issue the permit (examples provided).

Either include language in the permit already being issued under another Act of Parliament to indicate that the permit is also being issued pursuant to s 74 of the *Species at Risk Act*, or use the SARA Permit Template to attach a SARA s 74 permit to the other permit being issued.

The terms and conditions of the permit being issued under the other Act or Parliament should refer to or include any measures required to ensure compliancy with meeting SARA s 73 pre-conditions (e.g., mitigations outlined in question 5 of this tool). The permit issued under the other Act of Parliament is the enforceable permit.

☐ **SARA s 73:** This activity is NOT being permitted under another Act of Parliament. Issue the permit using the SARA Permit Template.

The terms and conditions of the permit should refer to or include any measures required to ensure compliancy with meeting SARA s 73 pre-conditions (e.g., mitigations outlined in question 5 of this tool).

Part E - Preparing the Explanation of the Permit

7. Provide an explanation of the permit for posting on the SAR Public Registry and continue to Part F.

SARA requires an explanation of any SARA permit issued to be posted on the SARA Public Registry in both official languages (the Species Conservation team recommends that this be completed within 30 days of the permit being issued). Prepare the explanation, using the information you entered in the previous sections of this tool. The Species Conservation team will review the explanation, have it translated and publish it on the SAR Public Registry.

Regional or Local Number:

Start Date of Permit: XXXX **End Date of Permit**: XXXX

Issuing Authority:

Authority Used:

Location of Activity *(province, territory or ocean)*: XXX

Affected Species:

Purpose:

- Affecting the species is incidental to the activity; OR
- The activity is necessary or beneficial to the species; OR
- The activity is scientific research related to the conservation of the species and conducted by qualified persons.

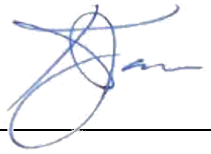
Description of the Activity:

Pre-Conditions:

PART F - TRANSMITTAL FORM

Delete, modify or add rows as required

Tool Completed By	**Name & Title**	**Date Completed**	**Specific Comments**
Resource Conservation	Kim Gamble, Species at Risk Ecologist	9 January 2023	
Functional Teams Consulted:	**Name & Title**	**Date of Review**	**Specific Comments**
National Office Teams			

PAEC (Species Conservation)		Click here to enter a date.	
Choose an item. (Specify Branch/Team)		Click here to enter a date.	
Field Unit Teams			
Choose an item.		Click here to enter a date.	
Choose an item.		Click here to enter a date.	
Other			
☐ Legal Services		Click here to enter a date.	
☐ Other (*specify*):		Click here to enter a date.	
Approved By (FUS, Director of Waterway)	**Karen Jans, PEI Field Unit Superintendent**	**Date Approved** Jan 20, 2023	**Signature** 

PART 1 - GENERAL

1.1 RELATED SECTIONS

.1 Excavating, Trenching and Backfilling: Section 31 23 10.

1.2 REFERENCES

.1 Canadian Standards Association (CSA)
.1 CSA C22.2 No. 211.2-06(R2016), Rigid PVC Conduit.

PART 2 - PRODUCTS

2.1 PVC DUCTS AND FITTINGS

.1 Rigid PVC duct: to CSA C22.2 No. 211.2, with moulded fittings, for direct burial.

.2 Rigid PVC bends, couplings, reducers, bell end fittings, plugs, caps, adaptors same product material as duct, to make complete installation.

.3 Rigid PVC 90° and 45° bends.

.4 Rigid PVC 5° angle couplings.

.5 Expansion joints where conduits exit ground.

2.2 SOLVENT WELD COMPOUND

.1 Solvent cement for PVC duct joints.

2.3 CABLE PULLING EQUIPMENT

.1 6 mm stranded polypropylene pull rope, tensile strength 5 kN, continuous throughout each conduit run with 3 m spare rope at each end.

2.4 MARKER TAPE

.1 Plastic warning tape, 50mm wide, clearly marked as follows:
.1 "CAUTION - BURIED ELECTRICAL LINE", coloured red.

2.5 MARKER PLANKS

.1 Pressure treated planks, 150 x 50mm, to CSA 080-15 UC 4.1

PART 3 - EXECUTION

3.1 INSTALLATION

.1 Install direct buried underground cable ducts in accordance with the requirements of the authorities having jurisdiction.

.2 Install duct in accordance with manufacturer's instructions.

.3 Clean inside of ducts before laying.

.4 Open trench before conduits are laid and confirm no obstructions will necessitate change in grade of conduit.

.5 Confirm full, even support every 1.5m throughout duct length.

.6 Install conduits at elevations and slope ducts with 1:400 minimum slope.

.7 During construction, cap ends of ducts to prevent entrance of foreign materials.

.8 Install Marker tape and planks as indicated.

.9 Pull through each duct mandrel not less than 300mm long and of diameter 6mm less than internal diameter of duct, followed by stiff bristle brush to remove sand, earth and other foreign matter. Pull stiff bristle brush through each duct immediately before pulling in cables.

.10 In each duct, install pull rope continuous throughout each duct run with 3m spare rope at each end.

END OF SECTION