

**APPENDIX 3-1**

**PERMITS REQUIRED FOR THE PROJECT**

Table 3-1.1: Permits Required for the Project

Approval Potentially Required	Legislation/ Regulation	Activity Requiring Approval or Compliance	Department or Agency	Requirements
<b>Government of Newfoundland and Labrador</b>				
Release from Environmental Assessment	<i>Environmental Protection Act and Environmental Assessment Regulations</i>	Project	Environmental Assessment Division, Department of Environment and Conservation	The Act applies to any proposed development in the province which may have a significant effect on the environment. The Project requires registration under the Act. After a public and governmental review, the Minister of Environment and Conservation will determine whether the Project may proceed, subject to other applicable legislation, or whether environmental assessment is required.
License to Occupy Crown Land, Crown Land Leases / Grants / Easements	<i>Land Act</i>	Development on Crown Lands	Lands Division, Department of Environment and Conservation	Approval is required for Project Activities and infrastructure on Crown Land.
Certificate of Approval for any Alteration to a Body of Water	<i>Water Resources Act</i>	Any activities which may alter a water body	Water Resources Division, Department of Environment and Conservation	Permits are required for construction activities within 15 m of the high watermark of any water body. An application form is required for each alteration.
Certificates of Approval for any Instream Activity (including Culvert Installation, Bridges and Fording a Watercourse)	<i>Water Resources Act</i>	Any in-stream activity	Water Resources Division, Department of Environment and Conservation	Approval is required for any in-stream activity, including culvert installations and fording activities, before undertaking the work. This also includes any development within 15 m of the high watermark of any water body.
Certificates of Approval for Development Activity in a Protected Public Water Supply Area or Wellhead Protected Public Water Supply Area	<i>Water Resources Act</i>	Construction activity in a protected water supply	Water Resources Division, Department of Environment and Conservation	Approval is required for any activity in a protected public water supply area prior to the commencement of any work.

Table 3-1.1: Permits Required for the Project (continued)

Approval Potentially Required	Legislation/ Regulation	Activity Requiring Approval or Compliance	Department or Agency	Requirements
Certificate of Approval for Construction Site Drainage	<i>Water Resources Act</i>	Any run-off from the project site being discharged to receiving waters	Water Resources Division, Department of Environment and Conservation	Approval is required for any run-off from the project site being discharged to receiving waters.
Water Use Authorization	<i>Water Resources Act</i>	Water withdrawal for use at temporary camps or during Construction and Operations activities	Water Resources Division, Department of Environment and Conservation	Water use authorization is required for all beneficial uses of water.
Application for Water Well Drilling Licence	<i>Water Resources Act</i>	Drilling activity for a water well	Water Resources Division, Department of Environment and Conservation	A licence is required to carry on the business of water well drilling in Newfoundland and Labrador.
Application for Permit for Constructing a Non-Domestic Well	<i>Water Resources Act</i>	Establishment of a water well	Water Resources Division, Department of Environment and Conservation	A licence is required to establish a non-domestic water well in Newfoundland and Labrador.
Policy Directives	<i>Water Resources Act</i>	Project Activities	Water Resources Division, Department of Environment and Conservation	The Department has a number of potentially applicable policy directives in place, including those related to: Infilling Bodies of Water; Use of Creosote Treated Wood in Fresh Water; Treated Utility Poles in Water Supply Areas; Land and Water Developments in Protected Water Supply Areas; Development in Shore Water Zones; and Development in Wetlands.

Table 3-1.1: Permits Required for the Project (continued)

Approval Potentially Required	Legislation/ Regulation	Activity Requiring Approval or Compliance	Department or Agency	Requirements
Compliance Standard, Potential Permit	<i>Endangered Species Act</i>	Project Activities	Wildlife Division, Department of Environment and Conservation	Prohibits the disturbance, harassment, injury, or killing of an individual of a species designated as threatened, endangered or extirpated. The Minister may, under certain circumstances, issue a permit for an activity affecting a designated species, the residence of a specimen of a designated species or critical or recovery habitat.
Access to Highway Permit	<i>Urban and Rural Planning Act, Works, Services and Transportation Act, Protected Road Zoning Regulations</i>	Construction of access roads and trails	Department of Transportation and Works and/or the Government Service Centre	The construction of an access to a highway that is classified as a Protected Road requires approval.
Permit to engage in an activity that affects an endangered species (Requirement to be based on discussion with regulators)	<i>Species at Risk Act</i>	Construction in caribou habitat	Environment Canada	The competent minister may enter into an agreement or issue a permit authorizing a person to engage in an activity affecting a listed wildlife species, any part of its critical habitat or its residences. If entered into or issued, the competent minister must include an explanation of why this was entered into or issued in the Public Registry.
Preliminary Application to Develop Land	<i>Urban and Rural Planning Act, Protected Road Zoning Regulations</i>	Construction activity	Department of Government Services	A development permit is required to build on and develop land, whether Crown or privately owned, within the building control lines of a Protected Road or within the boundaries of a Protected Area.
Quarry Permit	<i>Quarry Materials Act and Regulations</i>	Extracting borrow material	Mineral Lands Division, Department of Natural Resources	A permit is required to dig for, excavate, remove and dispose of any Crown quarry material.

Table 3-1.1: Permits Required for the Project (continued)

Approval Potentially Required	Legislation/ Regulation	Activity Requiring Approval or Compliance	Department or Agency	Requirements
Cutting Permit Operating Permit	<i>Forestry Act and Cutting of Timber Regulations</i>	Clearing land areas for the right-of-way, borrow pits, camp sites or laydown areas	Department of Natural Resources	A permit is required for the commercial or domestic cutting of timber on crown land.
Permit to Burn	<i>Forestry Act and Forest Fire Regulations</i>	Any burning required during the Project	Department of Natural Resources	A permit is required to light fires outdoors between April and December. Permits are not issued during forest fire season.
Archaeological Research Permit	<i>Historic Resources Act</i>	Any archaeological investigations required	Provincial Archaeology Office, Department of Tourism, Culture and Recreation	A permit is required for any archaeological investigations on land or underwater.
Certificate of Approval for Storing and Handling Gasoline and Associated Products	<i>Environmental Protection Act, and Storage and Handling of Gasoline and Associated Products Regulations</i>	Storing and handling gasoline and associated products	Engineering Services Division, Government Service Centre	A Certificate of Approval is required for storing and handling gasoline and associated products.
Fuel Cache Permit	<i>Environmental Protection Act and Environmental Guidelines for Fuel Cache Operations</i>	Temporary fuel storage	Engineering Services Division, Government Service Centre	A permit is required for any temporary fuel storage in a remote location.
Permit for Storage, Handling, Use or Sale of Flammable and Combustible Liquids	<i>Fire Prevention Act, and Fire Prevention Flammable and Combustible Liquids Regulations</i>	Storing and handling flammable liquids	Engineering Services Division, Government Service Centre	This permit is issued on behalf of the Office of the Fire Commissioner. Approval is based on a review of information provided for the Certificate of Approval for Storing and Handling Gasoline and Associated Products.

Table 3-1.1: Permits Required for the Project (continued)

Approval Potentially Required	Legislation/ Regulation	Activity Requiring Approval or Compliance	Department or Agency	Requirements
Compliance Standard	<i>Dangerous Goods Transportation Act and Regulations</i>	Storing, handling and transporting fuel, oil and lubricants	Department of Transportation and Works	If the materials are transported, handled and stored fully in compliance with the regulations, a permit is not required. A Permit of Equivalent Level of Safety is required if a variance from the regulations is necessary. Transporting goods considered dangerous to public safety must comply with regulations.
Certificate of Approval for Installation of a Sewage System	<i>Sanitation Regulations</i> , under the <i>Health and Community Services Act</i>	Sewage disposal and treatment at construction camps	Department of Health and Community Services	Sewage disposal systems designed, constructed or installed to service a private dwelling or a commercial or other building with a daily sewage flow less than 4,546 L must be approved by an inspector before installation.
Certificate of Approval for Septic Systems > 4,546 L per day and Well Approval	<i>Environmental Protection Act</i>	Sewage disposal and treatment at construction camps	Engineering Services Division, Government Service Centre	A Certificate of Approval is required for commercial septic systems and wells in an unserviced area, not covered by a municipality.
Certificate of Approval for a Water Withdrawal System of $\geq$ 4,500 L per day	<i>Water Resources Act</i>	Water supply at temporary camps, and for use in construction activities	Water Resources Division, Department of Environment and Conservation	Certificate of Approval is required for any private water withdrawal system of 4,500 L/day or greater.
Certificate of Approval for Installation of Water Supply System	<i>Sanitation Regulations</i> , under the <i>Health and Community Services Act</i>	Water supply at temporary camps and maintenance depots	Department of Health and Community Services	Water supply systems designed, constructed or installed to service a private dwelling or a commercial or other building, including systems not governed by a municipal council, local service district or local water committee, must be approved by an inspector before installation.

Table 3-1.1: Permits Required for the Project (continued)

Approval Potentially Required	Legislation/ Regulation	Activity Requiring Approval or Compliance	Department or Agency	Requirements
Certificate of Approval for a Waste Management System	<i>Environmental Protection Act and Waste Management Regulations</i>	Waste disposal associated with Construction and Operations	Department of Environment and Conservation, Department of Health and Community Services	Approval is required for waste disposal (e.g., incineration or burying). Used tires must be disposed according to regulations.
Food Establishment Licence – Temporary Facility Permit	<i>Health and Community Services Act, Food and Drug Act and Food Premises Regulations</i>	Establishing and operating a temporary camp and kitchen facility, or using/upgrading existing facilities	Operations Division, Department of Government Services	A licence is required to operate food premises. Where municipal services are unavailable, two copies of plans and specifications for water supply and sewage disposal must be submitted with application for a licence. Food premises are routinely inspected to ensure compliance.
Permit to Destroy Problem Animals	<i>Wildlife Act</i>	Dealing with nuisance wildlife	Department of Natural Resources	The Department provides direction on handling nuisance animals. Details on the situation must be provided for a permit to be issued.
Compliance Standard	<i>Fire Prevention Act, and Fire Prevention Regulations</i>	On-site structures (temporary or permanent)	Engineering Services Division, Government Service Centre	All structures must comply with fire prevention standards.
Compliance Standard	<i>Environmental Control Water and Sewage Regulation under the Water Resources Act</i>	Any waters discharged from the project	Pollution Prevention Division, Department of Environment and Conservation	A person discharging sewage and other materials into a body of water must comply with the standards, conditions and provisions prescribed in these regulations for the constituents, contents or description of the discharged materials.
Compliance Standard	<i>Sanitation Regulations, under the Health and Community Services Act</i>	Sewage and waste disposal	Department of Health and Community Services	Outlines standards for sewage and waste disposal.

Table 3-1.1: Permits Required for the Project (continued)

Approval Potentially Required	Legislation/ Regulation	Activity Requiring Approval or Compliance	Department or Agency	Requirements
Compliance Standard	<i>Historic Resources Act</i>	Any known archaeological sites near project area or sites encountered during Construction or Operations	Provincial Archaeology Office, Department of Tourism, Culture and Recreation	All archaeology sites and artifacts are considered to be the property of the Crown and must not be disturbed. Any archaeological materials encountered must be reported to the Provincial Archaeology Office. Any proposed alterations to the project should be referred to the Provincial Archaeology Office for approval.
Compliance Standard	<i>Occupational Health and Safety Act and Regulations</i>	Project-related occupations	Department of Human Resources, Labour and Employment	Outlines minimum requirements for workplace health and safety. Workers have the right to refuse dangerous work. Proponents must notify Minister of start of construction for any project greater than 30 days in duration.
Compliance Standard	<i>Workplace Hazardous Materials Information System (WHMIS) Regulations</i> , under the <i>Occupational Health and Safety Act</i>	Handling and storage of hazardous materials	Operations Division, Department of Government Services	Outlines procedures for handling hazardous materials and provides details on various hazardous materials.
<b>Government of Canada</b>				
Release from Environmental Assessment	<i>Canadian Environmental Assessment Act and associated Regulations</i>	Project	Relevant Federal Departments (Responsible Authorities)	The requirements of <i>CEAA</i> must be fulfilled before any irrevocable decision is made by a federal authority that would allow the Project to proceed.

Table 3-1.1: Permits Required for the Project (continued)

Approval Potentially Required	Legislation/ Regulation	Activity Requiring Approval or Compliance	Department or Agency	Requirements
Authorization or Letter of Advice for Works or Undertakings Affecting Fish Habitat	<i>Fisheries Act, Section 35(2)</i>	Construction of cable crossings and watercourse crossings	Department of Fisheries and Oceans	Application must be made if fish habitat may be affected. Where potential for harmful effects to fish habitat can be prevented, a Letter of Advice will be issued outlining appropriate mitigation procedures or conditions to be followed. Authorizations will only be issued where there will be a loss of fish habitat that cannot be avoided by mitigation measures. The authorization requires a habitat compensation plan to be developed and agreed to by DFO and proponent before the authorization is given.
Permit for Construction Within Navigable Waters	<i>Navigable Waters Protection Act and Regulations</i>	Construction of cable crossings and watercourse crossings	Transport Canada	A permit is required for any works or construction activity located below the high water mark, either over, under, through or across any navigable waters. This could include any structure, device or thing that may interfere with navigation. An application must be submitted for each alteration to a navigable waterway.
Permit for Disposal at Sea	<i>Canadian Environmental Protection Act, Disposal at Sea Regulations</i>	Construction of cable crossings	Environment Canada	Disposal at Sea is the deliberate disposal at sea of approved substances from ships, aircraft, platforms or other structures. These substances are primarily dredged sediment from river or marine sources or excavated native till.
Radiocommunication Permit	<i>Radiocommunication Act and Regulations</i>	Establishment and use of radio equipment and associated towers	Industry Canada	Approval of the Minister of Industry may be required to approve sites on which radio apparatus, including antenna systems, may be located, and approve the erection of all masts, towers and other antenna-supporting structures.

Table 3-1.1: Permits Required for the Project (continued)

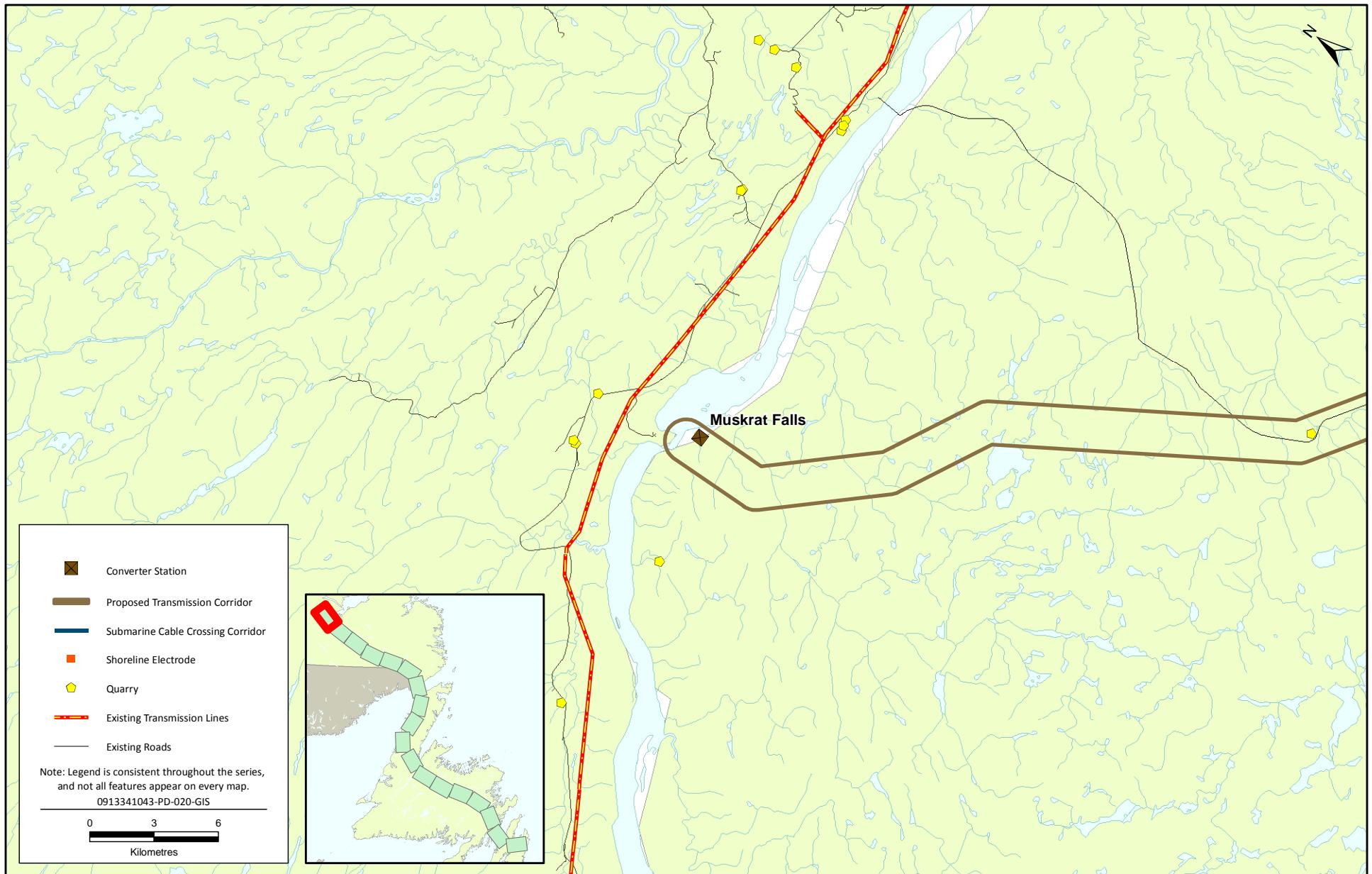
Approval Potentially Required	Legislation/ Regulation	Activity Requiring Approval or Compliance	Department or Agency	Requirements
Temporary Magazine Licence	<i>Explosives Act</i>	Temporary storage of explosives at certain construction areas (Storage only - Explosives manufacture is not contemplated).	Natural Resources Canada	A licence would be required to temporarily store explosives on-site.
Explosives Purchase and Possession Permit	<i>Explosives Act</i>	Purchase and possession of explosives	Natural Resources Canada	A permit is required to purchase and possess explosives.
Explosives Transportation Permit	<i>Explosives Act</i>	Transportation of explosives	Natural Resources Canada	A permit is required for transporting explosives.
Compliance Standard	<i>Fisheries Act</i> , Section 36(3), Deleterious Substances	Any run-off from the project site being discharged to receiving waters	Environment Canada, Department of Fisheries and Oceans	Environment Canada is responsible for Section 36(3) of the <i>Fisheries Act</i> . However, DFO is responsible for matters dealing with sedimentation. Discharge must not be deleterious and must be acutely non-lethal.
Compliance Standard; Permit may be required	<i>Migratory Birds Convention Act and Regulations</i>	Any activities which could result in the mortality of migratory birds and endangered species and any species under federal authority	Canadian Wildlife Service, Environment Canada	Prohibits the deposit of oil, oily wastes or any other substances harmful to migratory birds in any waters or any area frequented by migratory birds. The Canadian Wildlife Service should be notified about the mortality of any migratory bird in the project area, including passerine (songbirds) and waterfowl species. Prohibits disturbing, destroying or taking a nest, egg, nest shelter, eider duck shelter or duck box of a migratory bird, and possessing a live migratory bird, carcass, skin, nest or egg, except when authorized by a permit.
Policy	Federal Policy on Wetland Conservation	Any disruption of wetland habitat	Environment Canada	The goals of this policy should be considered where a project could affect wetland habitat.
Compliance standards; permits may be required	<i>Canada Shipping Act and Regulations</i>	Project-related shipping activity	Transport Canada	All shipping activities in Canadian waters must comply with the Act and Regulations.

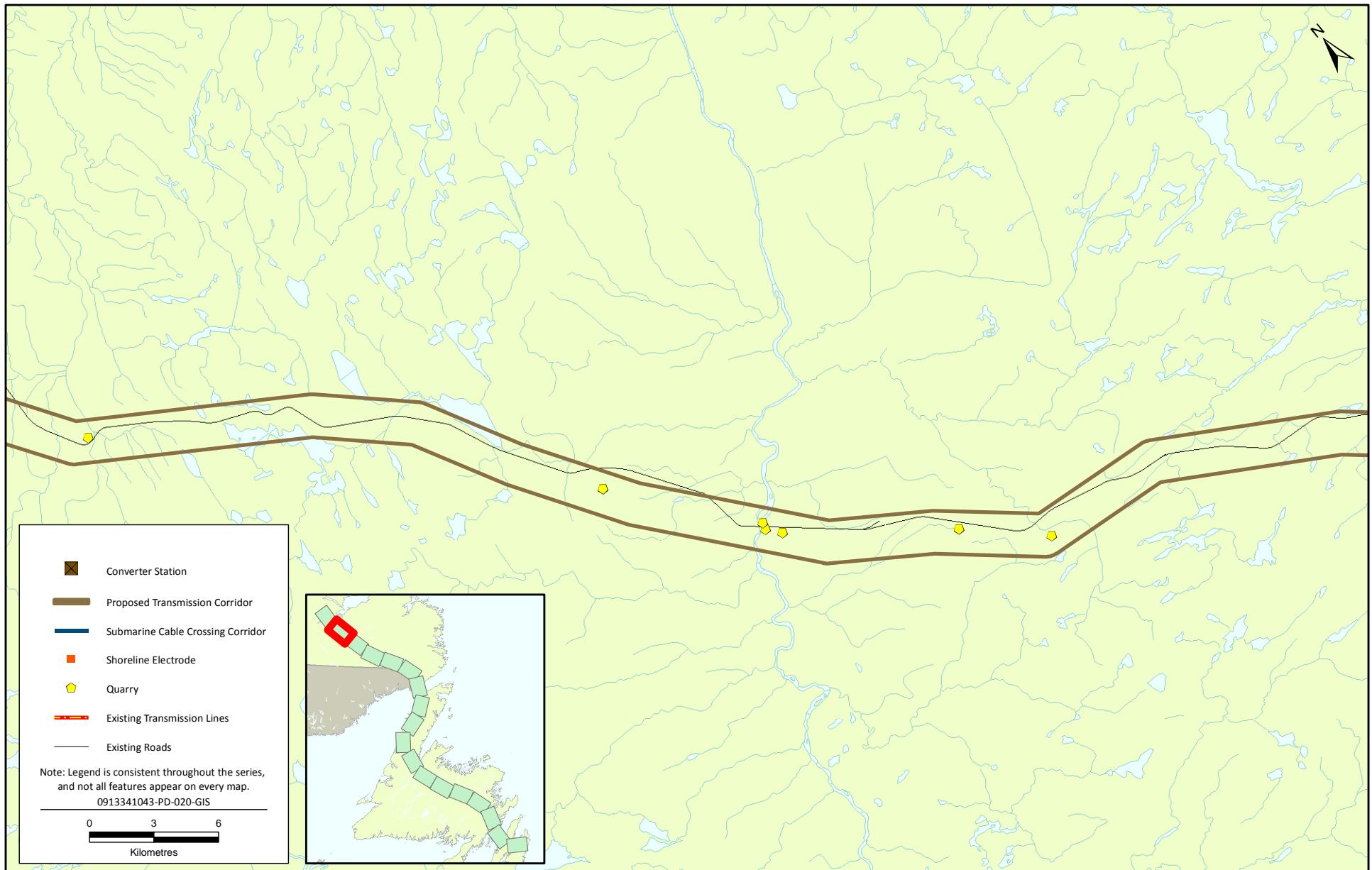
Table 3-1.1: Permits Required for the Project (continued)

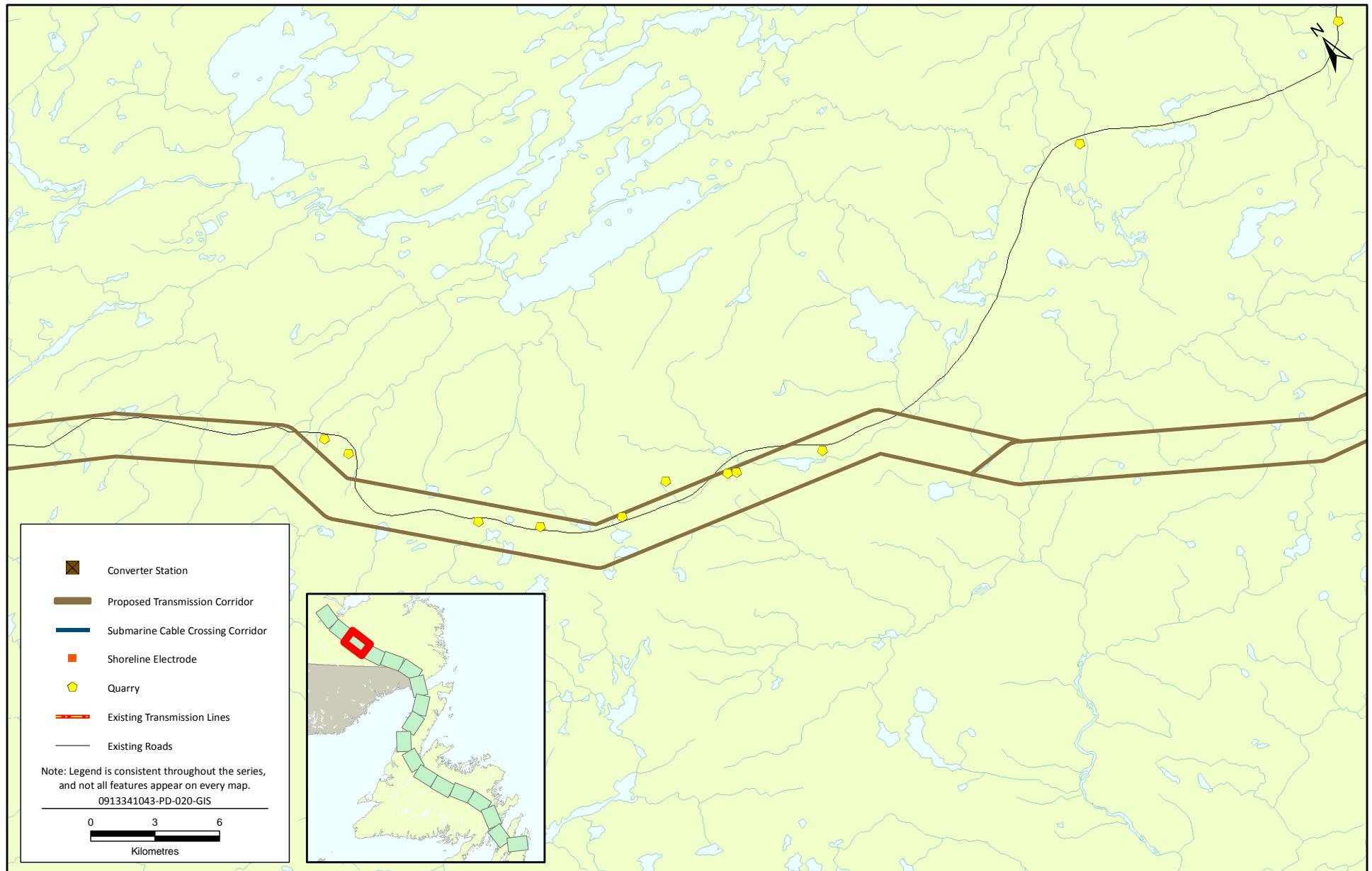
Approval Potentially Required	Legislation/ Regulation	Activity Requiring Approval or Compliance	Department or Agency	Requirements
Compliance standards; permits may be required	National Fire Code	On-site structures (temporary or permanent)	Government Service Centre	Approval is required for fire prevention systems in all approved buildings.
Compliance standards; permits may be required	National Building Code	On-site structures (temporary or permanent)	Government Service Centre	Approval is required for all building plans.
<b>Municipalities</b>				
Development or Building Permit	<i>Urban and Rural Planning Act, 2000, and Relevant Municipal Plan and Development Regulations</i>	Development within municipal boundary	Town/Community Council	A permit is required for any development or building within municipal boundaries.
Approval for Waste Disposal	<i>Urban and Rural Planning Act, 2000, and Relevant Municipal Plan and Development Regulations</i>	Waste disposal	Town/Community Council	The use of a community waste disposal site in Newfoundland and Labrador by proponents/contractors to dispose of waste requires municipal approval. Restrictions may be in place as to what items can be disposed of a municipal disposal site.

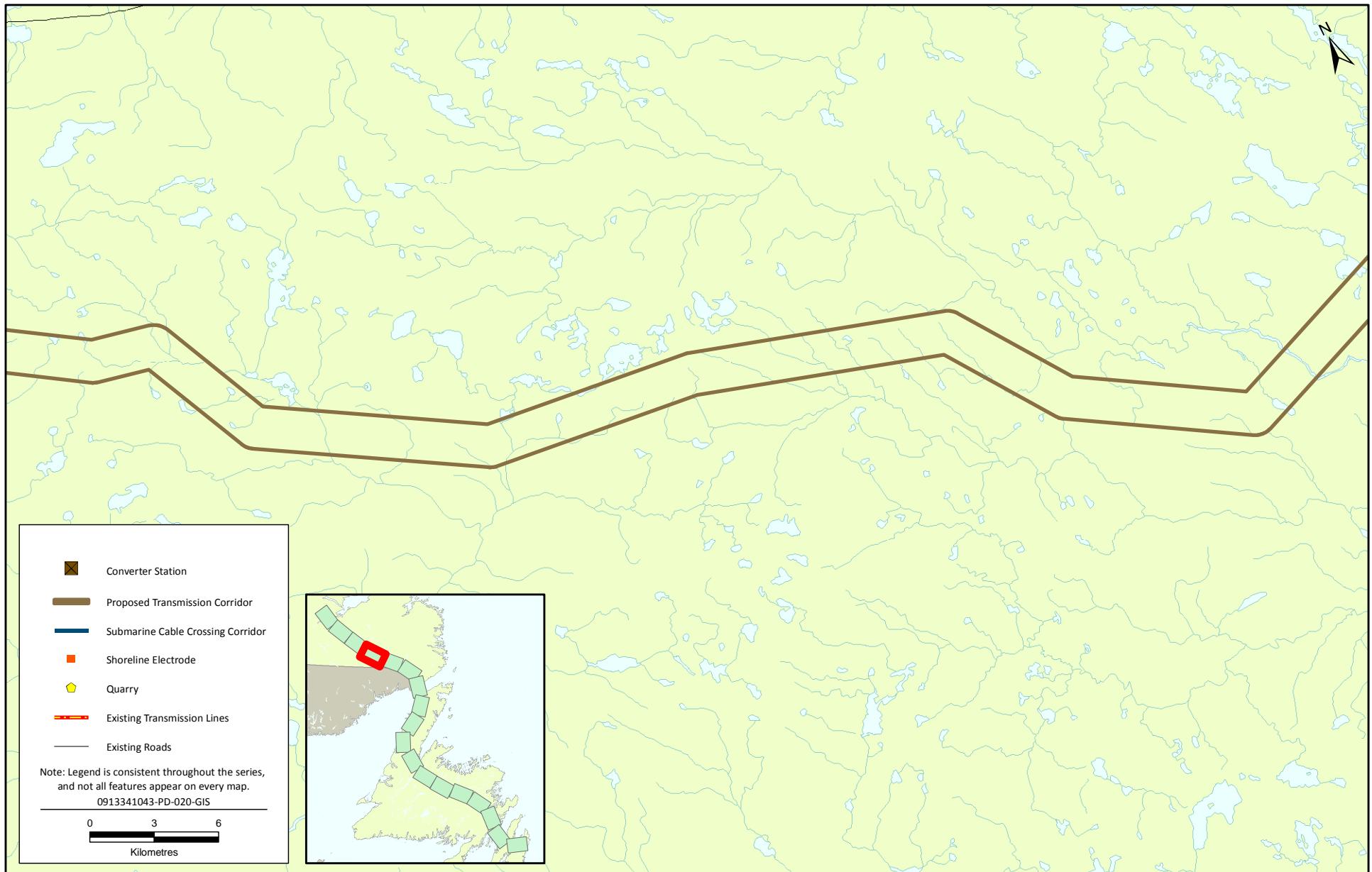
**APPENDIX 3-2**

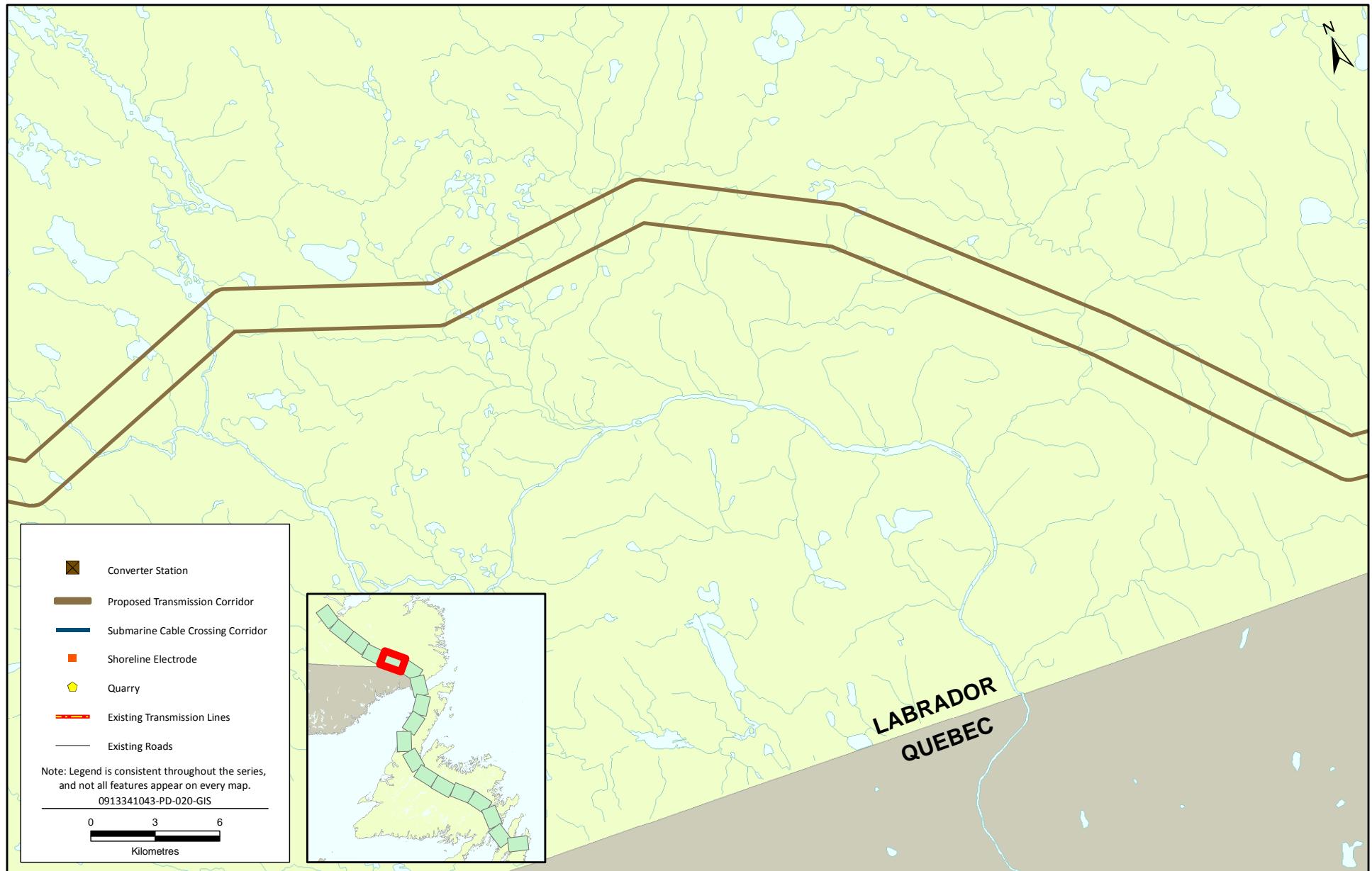
**EXISTING ACCESS ROADS AND QUARRIES**

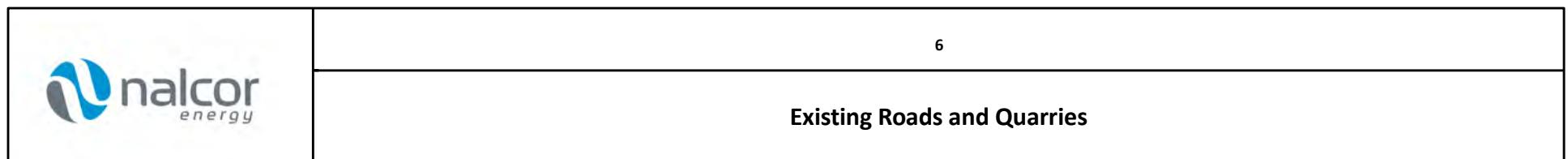
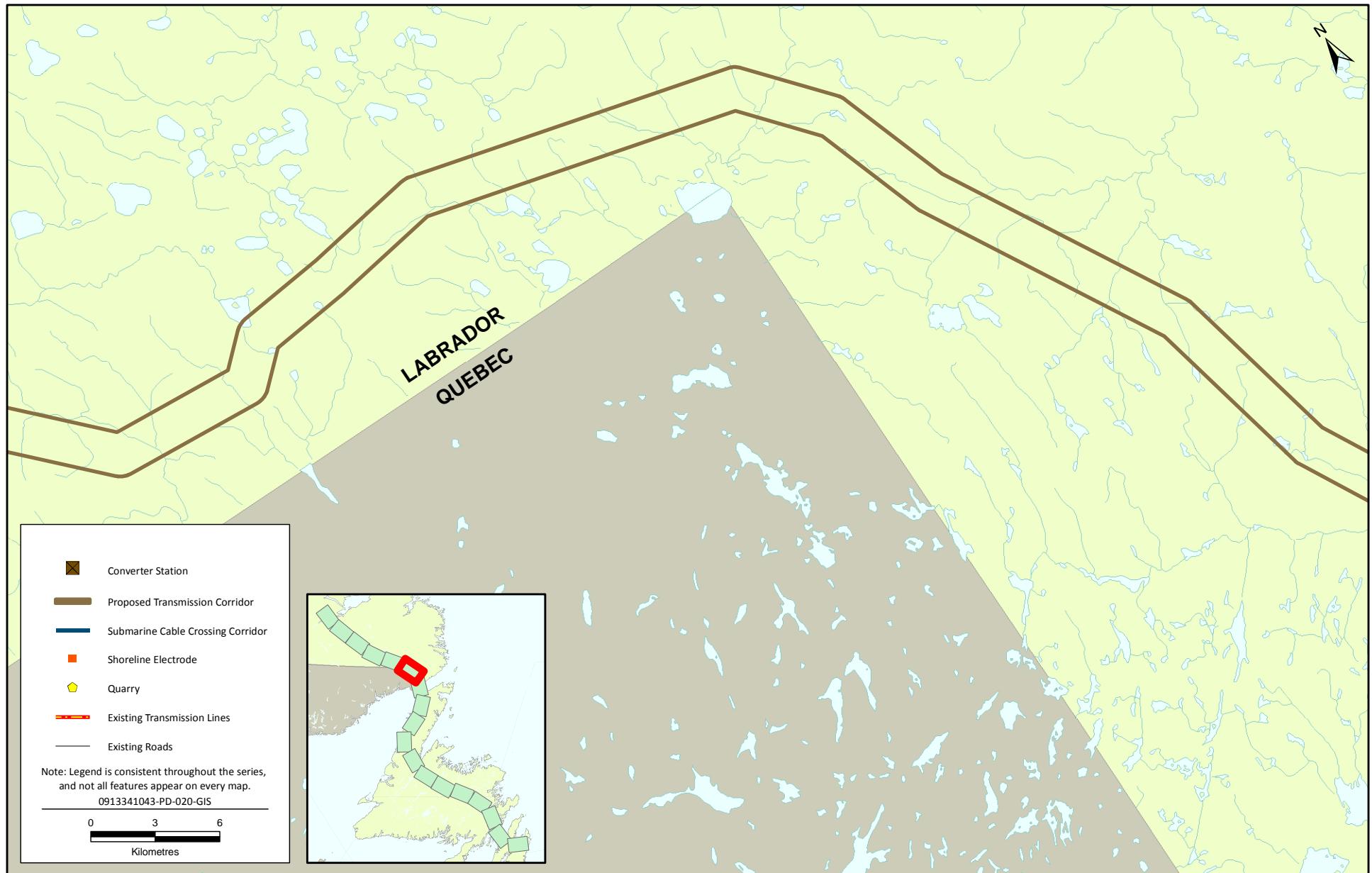




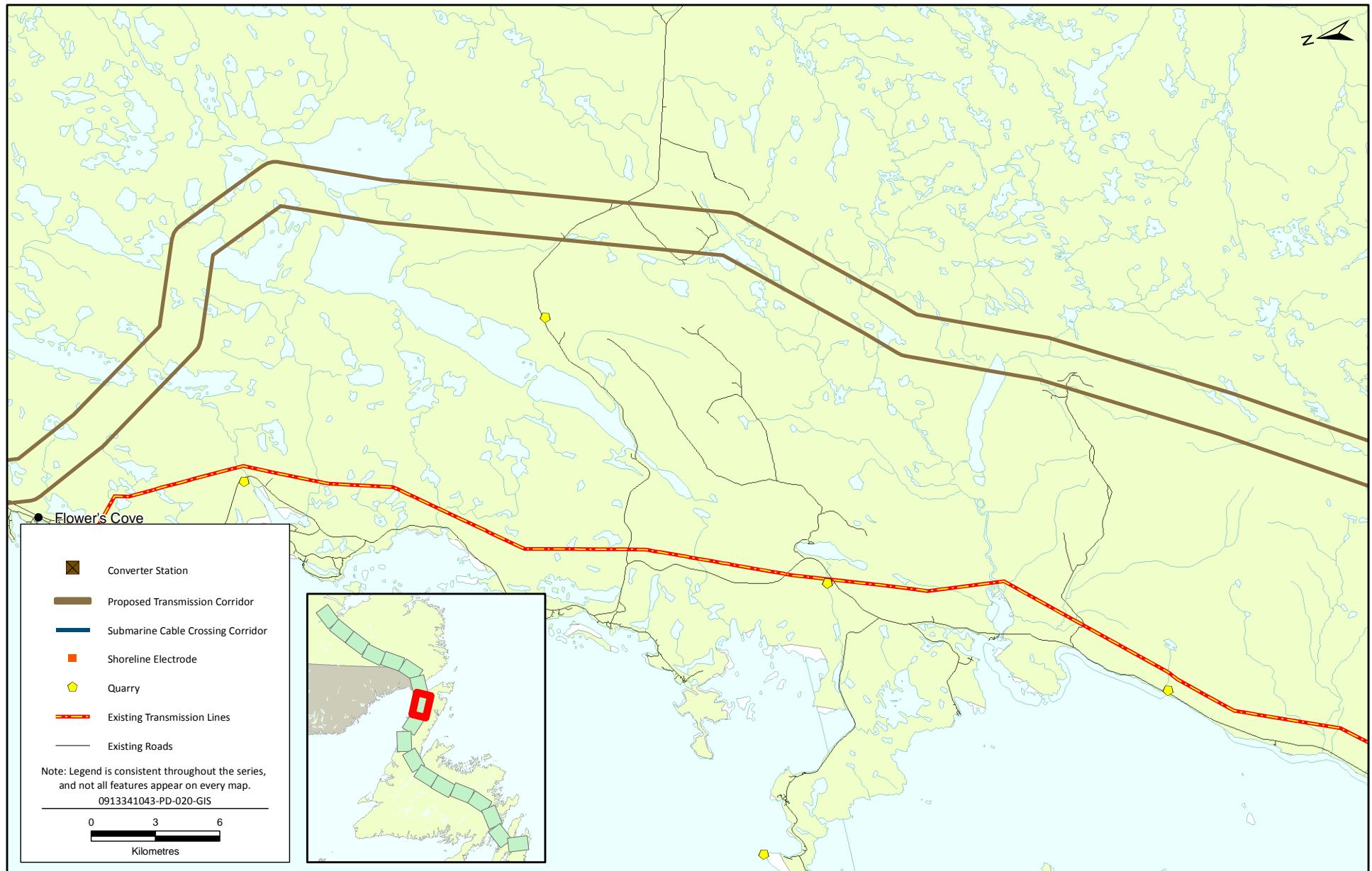


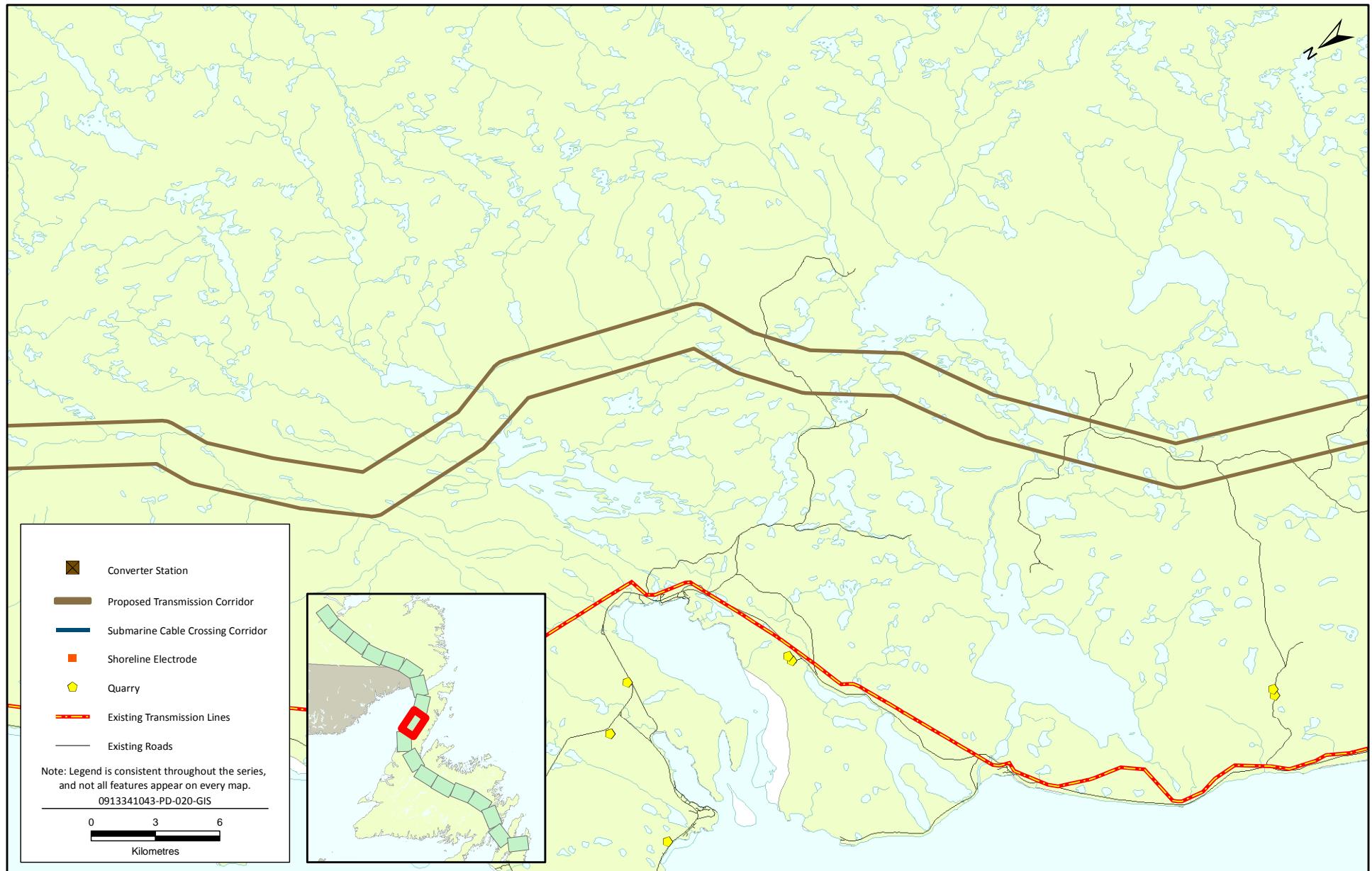


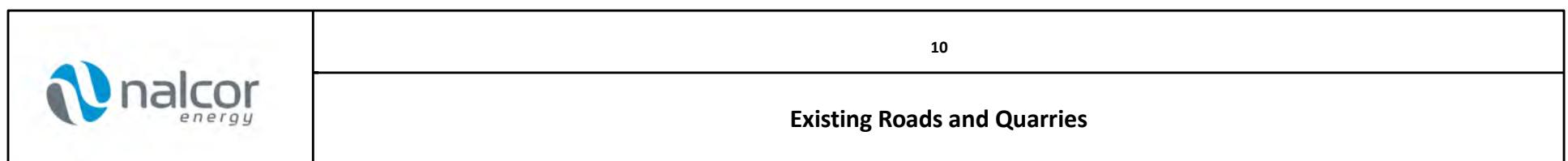
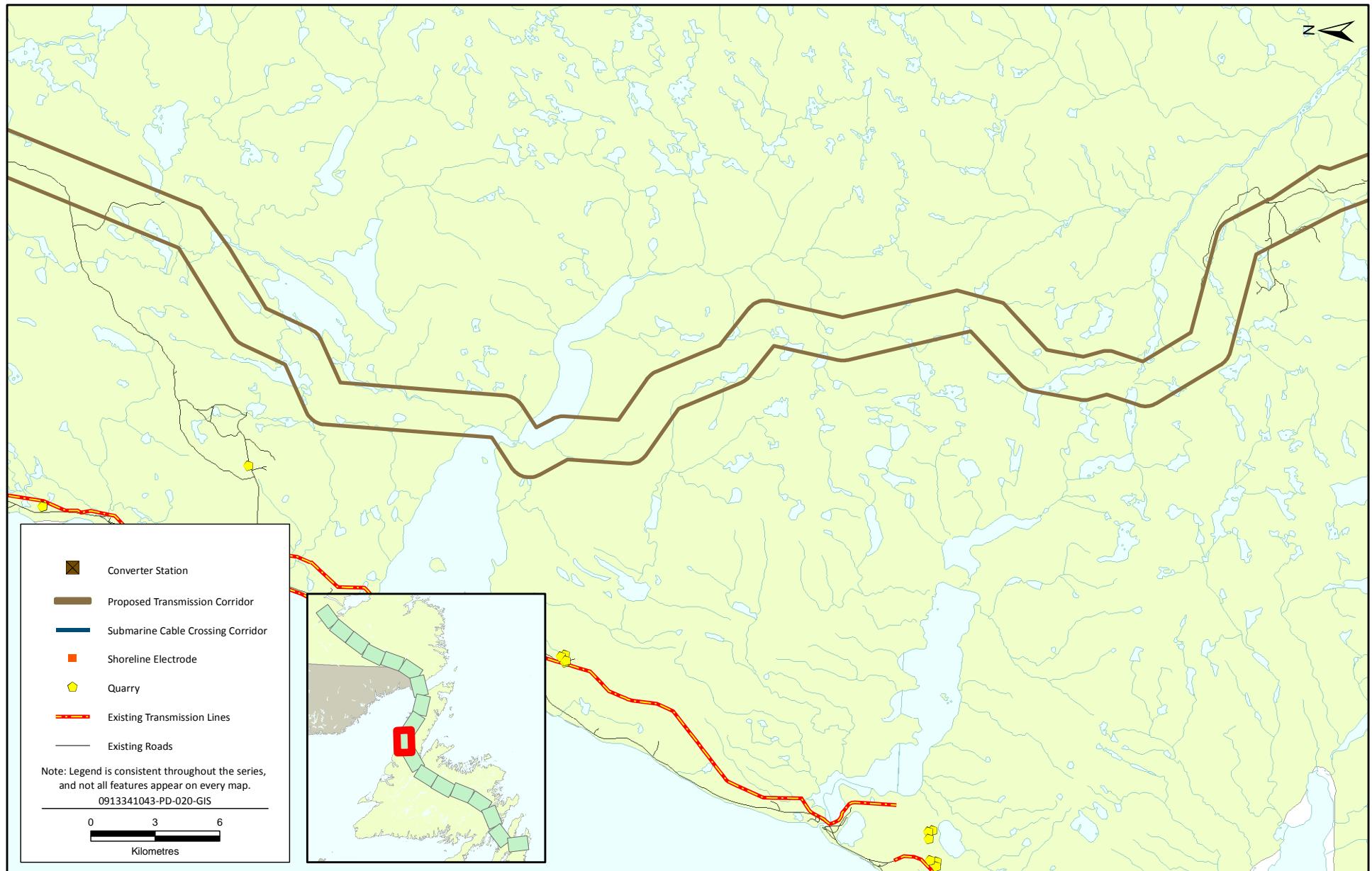


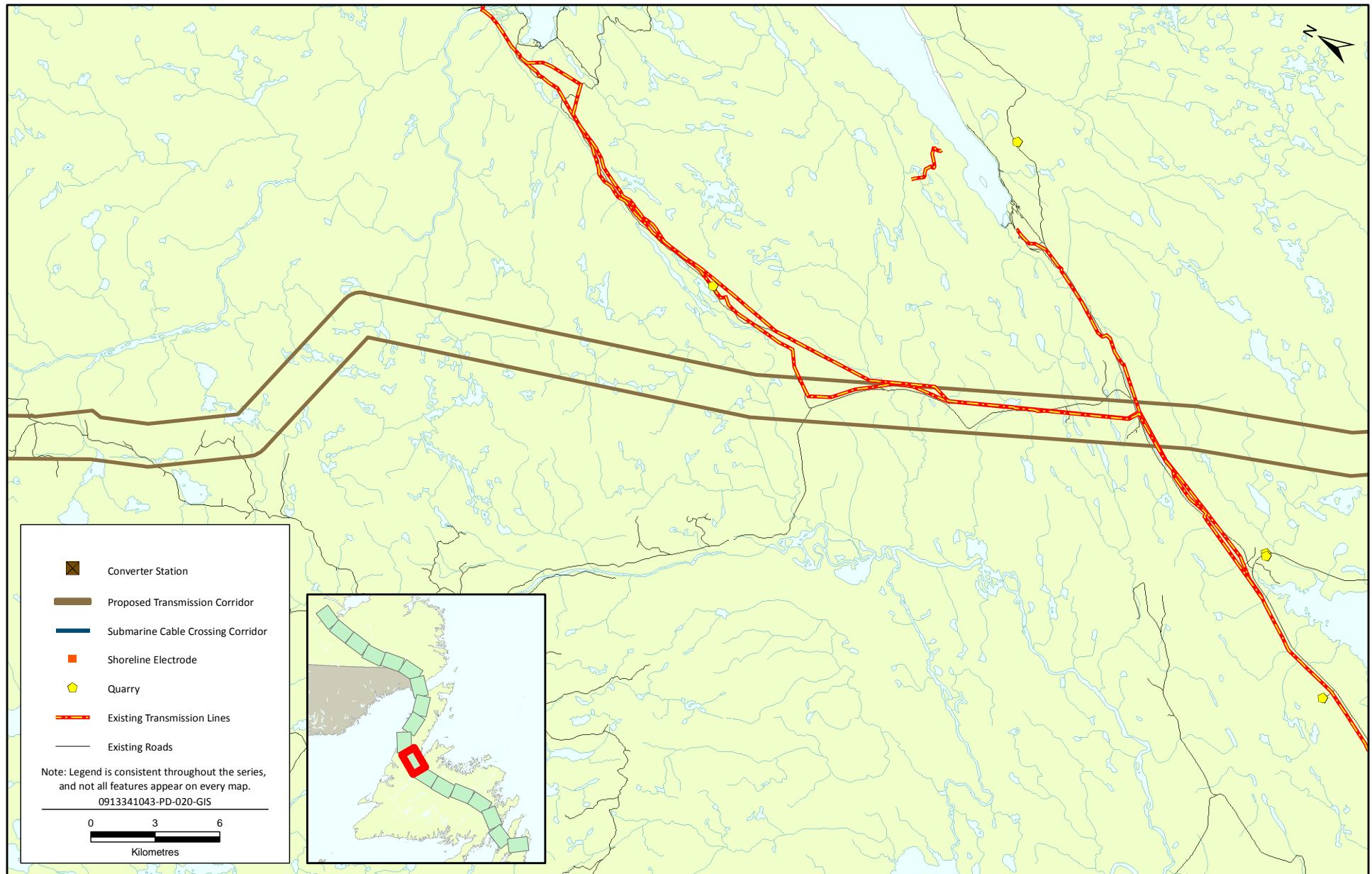


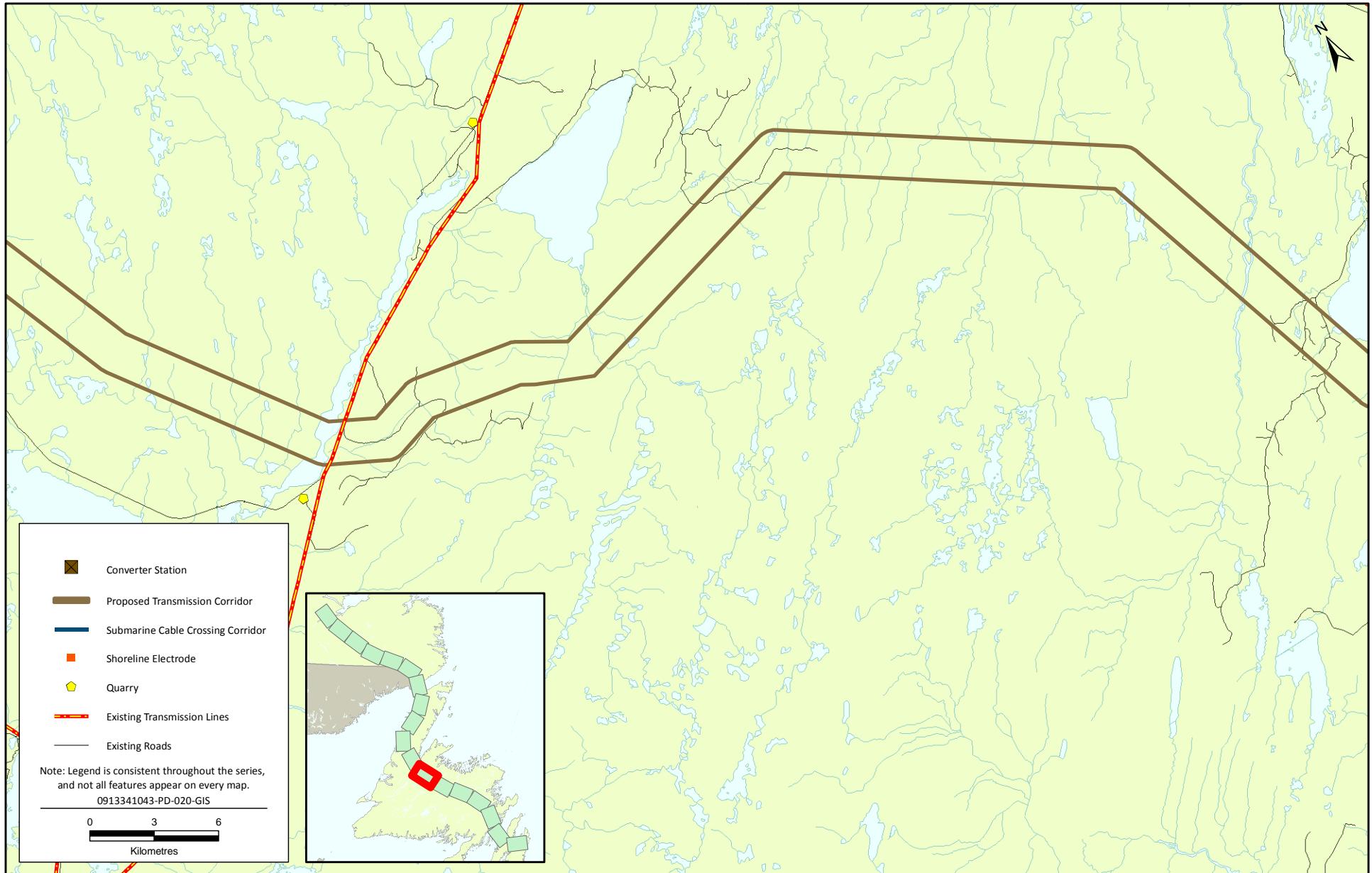






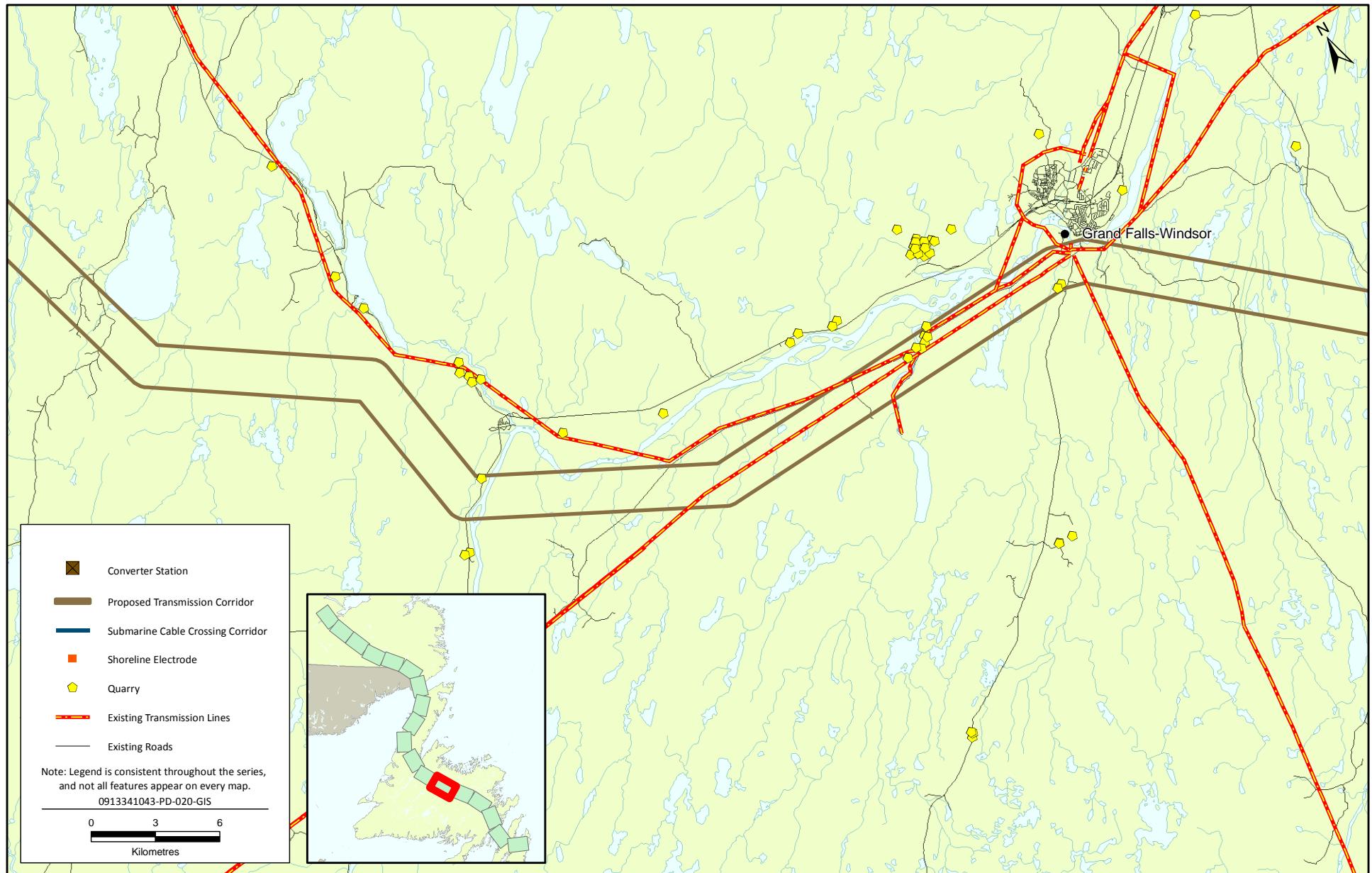


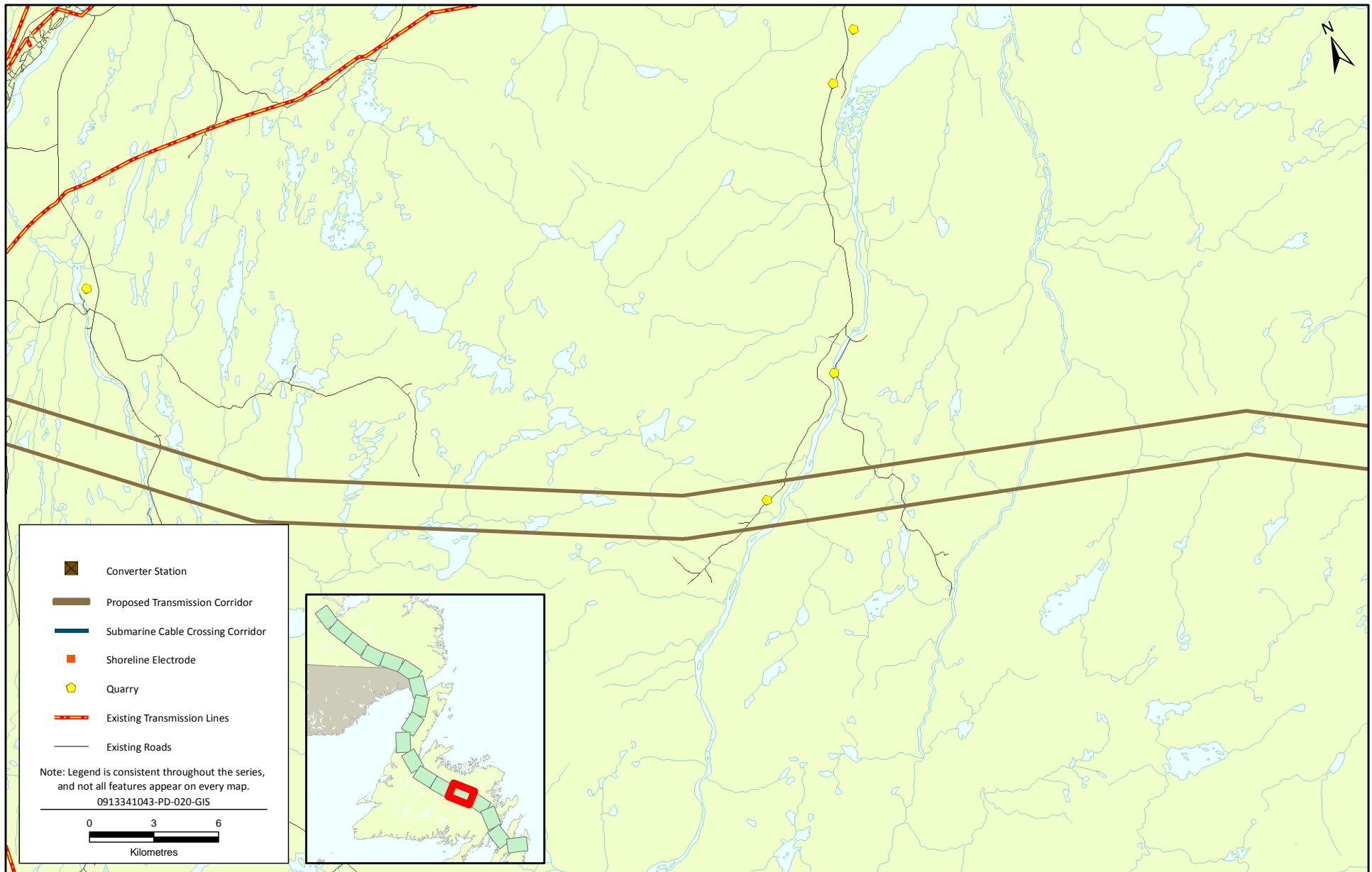


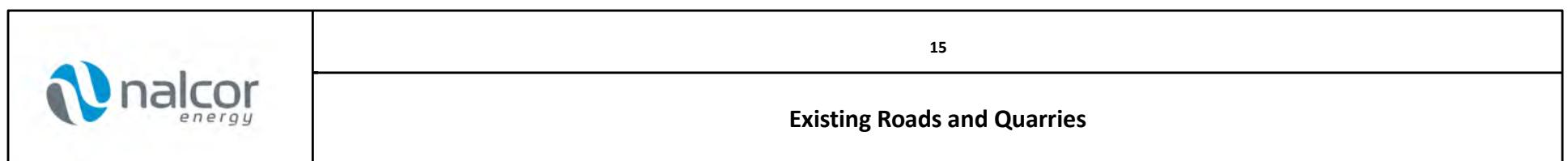
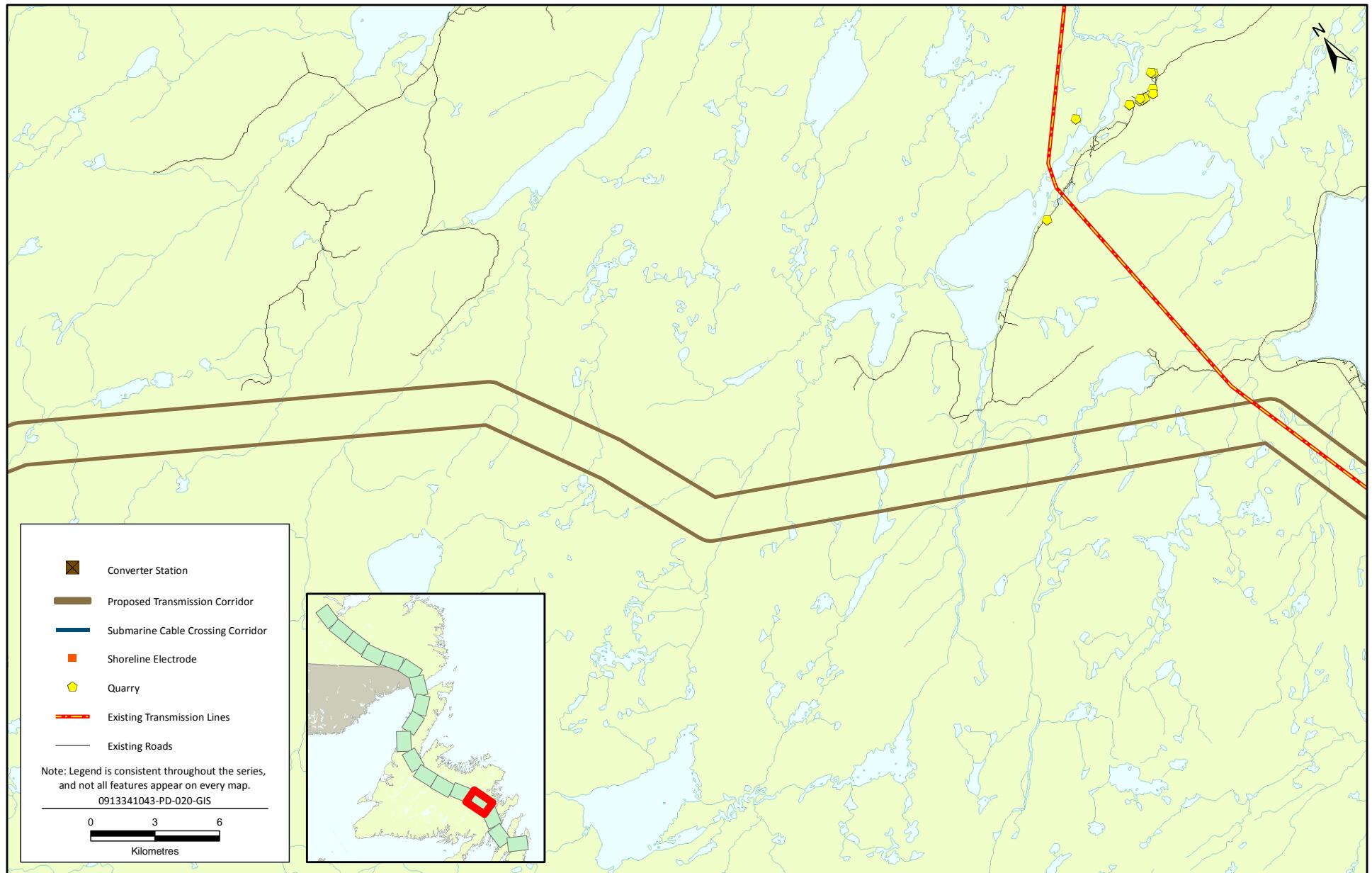


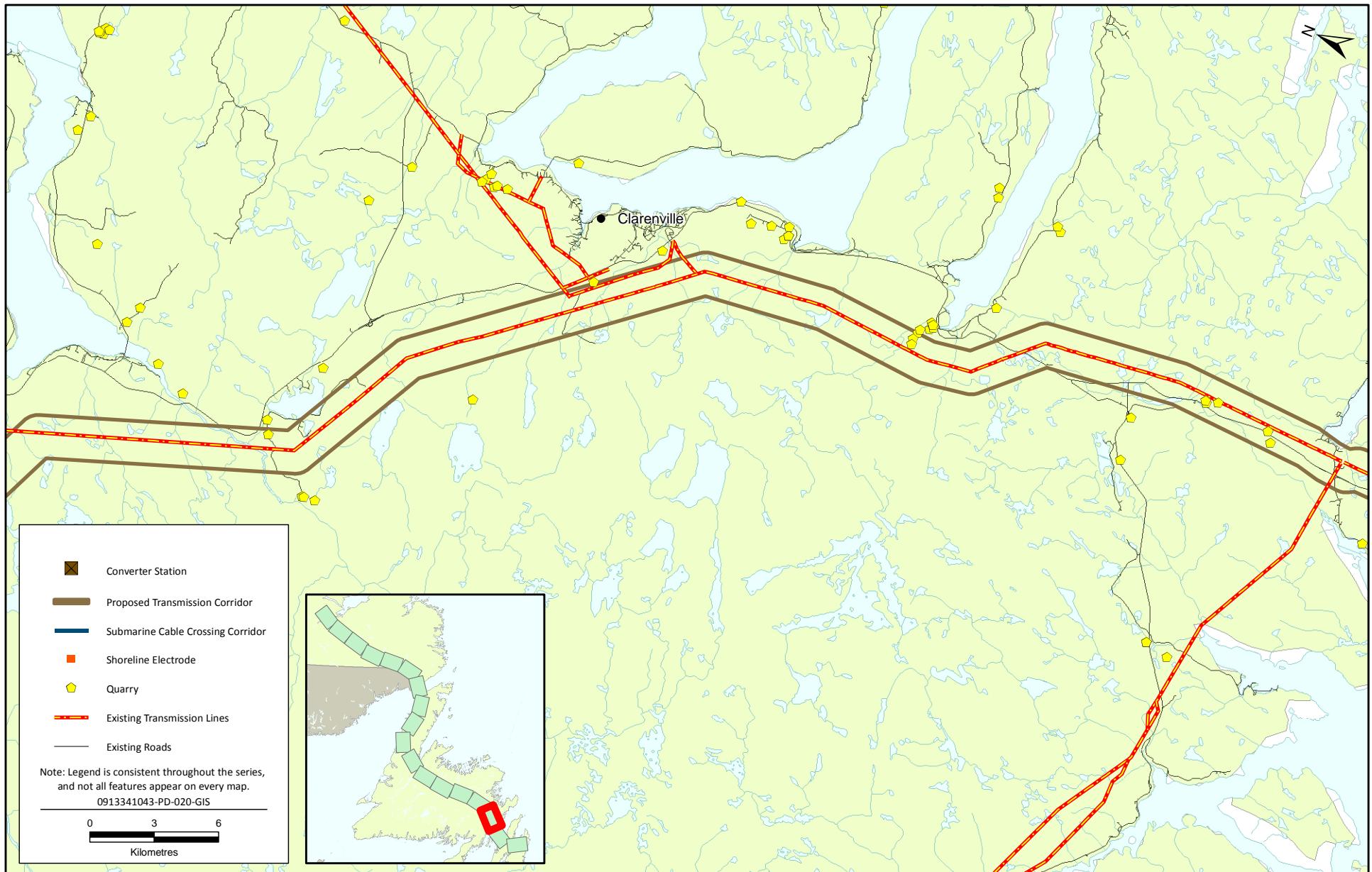
12

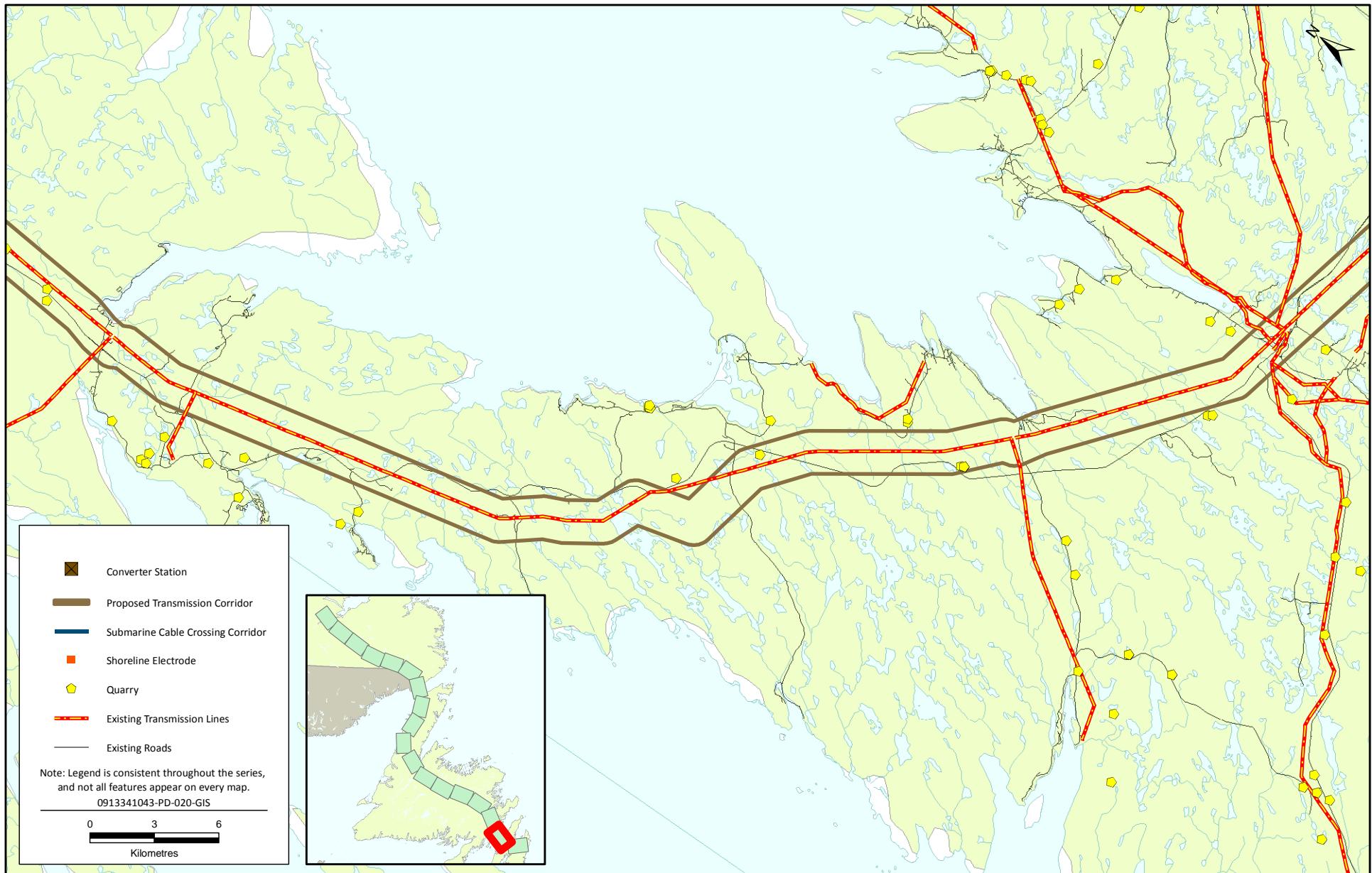
Existing Roads and Quarries

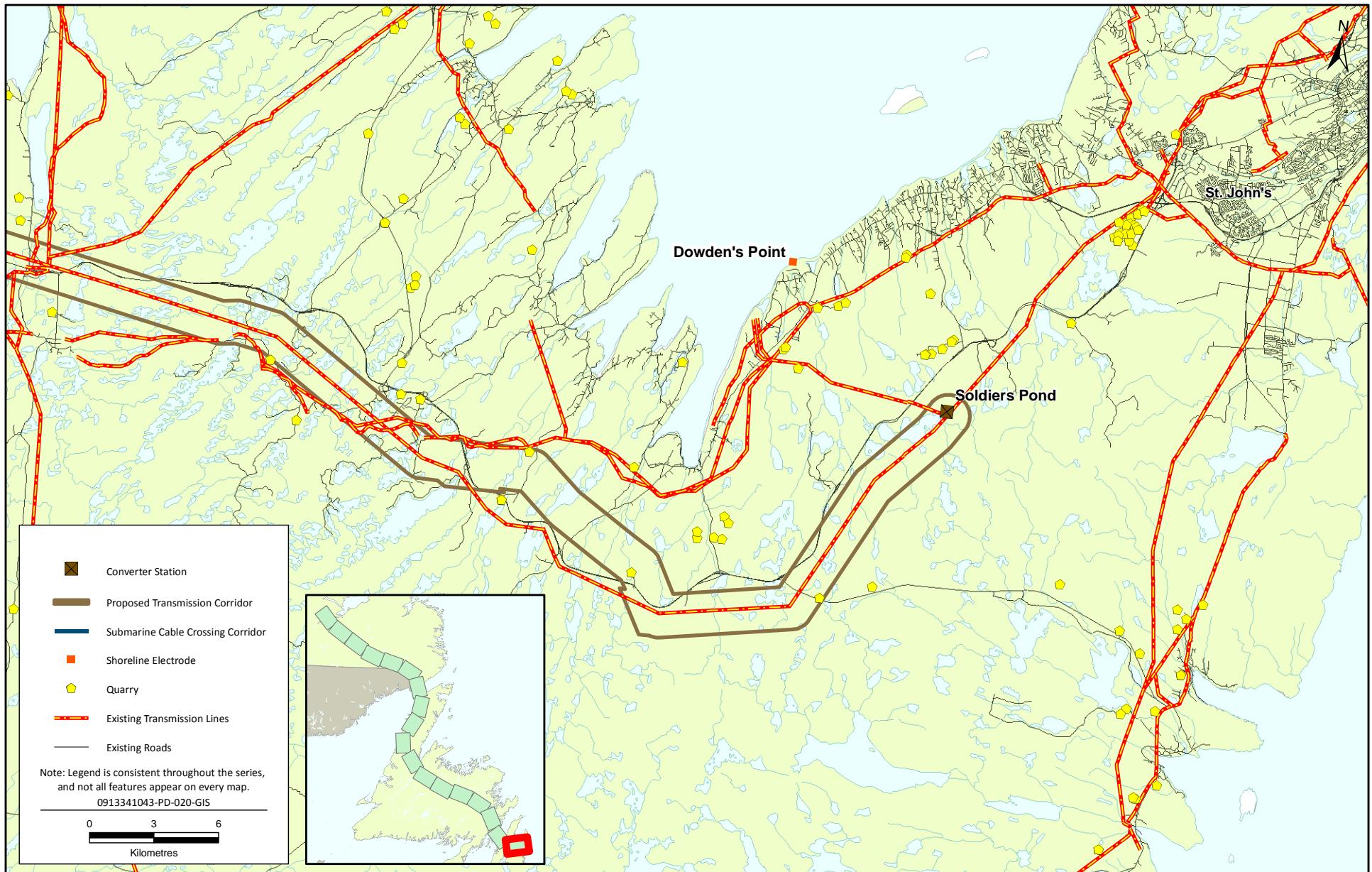












**APPENDIX 3-3**

**PROPOSED TABLE OF CONTENTS FOR THE ENVIRONMENTAL PROTECTION PLAN**

## PREFACE

*Maintenance of the Environmental Protection Plan*

## Initiating Revisions

## Revision Procedures

## 5 1. INTRODUCTION

## 1.1. Purpose

## 1.2. Scope and Application

## 2. PROJECT DESCRIPTION AND CONSTRUCTION SCHEDULE

## 2.1. Construction Related Infrastructure

## 10 2.2. Construction Schedule

## 3. ROLES AND RESPONSIBILITIES

## 3.1. Nalcor Energy

## 3.1.1. Auditing Function

## 3.1.2. Individual Responsibilities

## 15 3.2. Contractors

## 3.3. Project Environmental Awareness

## 3.3.1. Employee Orientation

## 3.3.2. Visitor Orientation

## 3.3.3. Contractor Orientation

## 20 4. RELEVANT LEGISLATION

## 4.1. Federal

## 4.2. Provincial

## 4.3. Municipal

## 5. GENERAL ENVIRONMENTAL PROTECTION PROCEDURES

## 25 5.1. Scheduling and Timing of Construction Activities

## 5.2. Construction Entrance

## 5.3. Linear Developments

## 5.4. Winter Construction

## 5.5. Equipment Operation and Movement

- 5.6. Vessel Operations
- 5.7. Clearing of Vegetation
- 5.8. Surveying
- 5.9. Drilling
- 5.10. Surface Water and Groundwater Use
- 5.11. Storage, Handling and Disposal of Fuel and Other Hazardous Materials
- 5.12. Sewage Disposal
- 5.13. Solid Waste Disposal
- 5.14. Working within 15 Metres of a Body of Water
- 5.15. Watercourse Crossings - Fording, Culverts and Bridges
- 5.16. Buffer Zones
- 5.17. Work In/Around Marine Environment
- 5.18. Grubbing and Disposal of Related Debris
- 5.19. Quarrying and Aggregate Removal from Borrow Areas
- 5.20. Erosion Prevention and Sediment Control
  - 5.20.1. Site Specific Erosion and Sedimentation Control Plan
  - 5.20.2. Erosion Prevention
  - 5.20.3. Sedimentation Prevention
- 5.21. Blasting
- 5.22. Dust Control
- 5.23. Noise Control
- 5.24. Resource Specific Mitigations
  - 5.24.1. Historic and Archaeological Resources
  - 5.24.2. Species at Risk
  - 5.24.3. Wildlife Protection
- 5.25. Commissioning
- 5.26. Site Rehabilitation
  - 5.26.1. Site Specific Rehabilitation Plan
  - 5.26.2. General Measures

6. ENVIRONMENTAL MONITORING AND FOLLOW UP
  - 6.1. Environmental Compliance Monitoring
  - 6.2. Environmental Effects Monitoring
  - 6.3. Annual Environmental Performance Review
- 5 7. CONTINGENCY PLANS
  - 7.1. Fuel and Hazardous Materials Spills
  - 7.2. Wildlife Encounter
  - 7.3. Historic and Archaeological Resources
  - 7.4. Forest Fires
  - 10 7.5. HDD Frac-out
8. CONTACT LIST
9. FORMS
10. REFERENCE DOCUMENTS
11. OTHER RELEVANT ENVIRONMENTAL PLANS

**APPENDIX 3-4**

**NALCOR ENERGY'S ENVIRONMENTAL POLICY AND GUIDING PRINCIPLES**

## ENVIRONMENTAL POLICY AND GUIDING PRINCIPLES



Nalcor Energy will help sustain a diverse and healthy environment for present and future Newfoundlanders and Labradorians by maintaining a high standard of environmental responsibility and performance through the implementation of a comprehensive environmental management system. The following guiding principles set out Nalcor Energy's environmental responsibility:

### PREVENTION OF POLLUTION

- Implement reasonable actions for prevention of pollution of air, water, and soil, and
- + minimize the impact of any pollution which is accidental or unavoidable.
- Use energy as efficiently as possible during the generation, transmission, and distribution of
- + electricity, and the operation of its facilities and promote efficient use of electricity by customers.
- Maintain a state of preparedness in order to respond quickly and effectively to
- + environmental emergencies.
- Recover, reduce, reuse and recycle waste materials whenever feasible.
- + Use the province's natural resources in a wise and efficient manner.
- +

### IMPROVE CONTINUALLY

- Audit facilities to assess potential environmental
- + risks and continually improve environmental performance.
- Integrate environmental considerations into
- + decision-making processes at all levels.
- Empower employees to be responsible for the
- + environmental aspects of their jobs and ensure that they have the skills and knowledge necessary to conduct their work in an environmentally-responsible manner.



### COMPLY WITH LEGISLATION

- Periodically report to the Board of Directors, executive management, employees,
- + government agencies, and the general public which we serve on environmental performance, commitments and activities.
- Comply with all applicable environmental laws and regulations, and participate in the
- + Canadian Electricity Association's Environmental Commitment and Responsibility Program.
- Monitor compliance with environmental laws and regulations, and quantify predicted
- + environmental impacts of selected activities on the environment.
- Respect the cultural heritage of the people of the province and strive to minimize the
- +