4.0 METHODS

Environmental attributes with which the Project could interact were identified from publicly available desktop resources, as the majority of the route traversed existing disturbed and developed areas within the Moncton Industrial Park. A site visit was conducted October 21, 2017, to provide ground-truthing of selected environmental features that could not be obtained from desktop information.

4.1 VALUED COMPONENTS

Based on its professional experience and work with similar projects, and the environment setting within which the Project will be situated (Section 3.0), the Stantec team selected the following valued components (VCs) as those that should be considered as part of this EIA Registration:

- Atmospheric environment
- Water resources (surface water and groundwater)
- Freshwater fish and fish habitat
- Terrestrial environment
- Socioeconomic environment
- Heritage resources
- Current use of land and resources for traditional purposes by Aboriginal persons
- Effects of the environment on the project

Chapter 5.0 provides a description of each of these VCs, their existing (baseline) conditions, potential interactions with the Project, and planned mitigation to reduce Project-environment interactions.

4.2 VC RATING

A binary qualitative rating system was used to evaluate the potential for interactions between the Project and the environment. One of the following two ratings was prescribed for each individual VC:

- An interaction between the Project and the environment could occur
- No interaction occurs between the Project and the environment

Project-VC interactions are discussed in greater detail in Chapter 5.0.

4.3 VC ASSESSMENT BOUNDARIES

4.3.1 Spatial Boundaries

The assessment of potential environmental interactions with the VCs encompasses two spatial boundaries: Project Development Area (PDA) and Local Assessment Area (LAA).

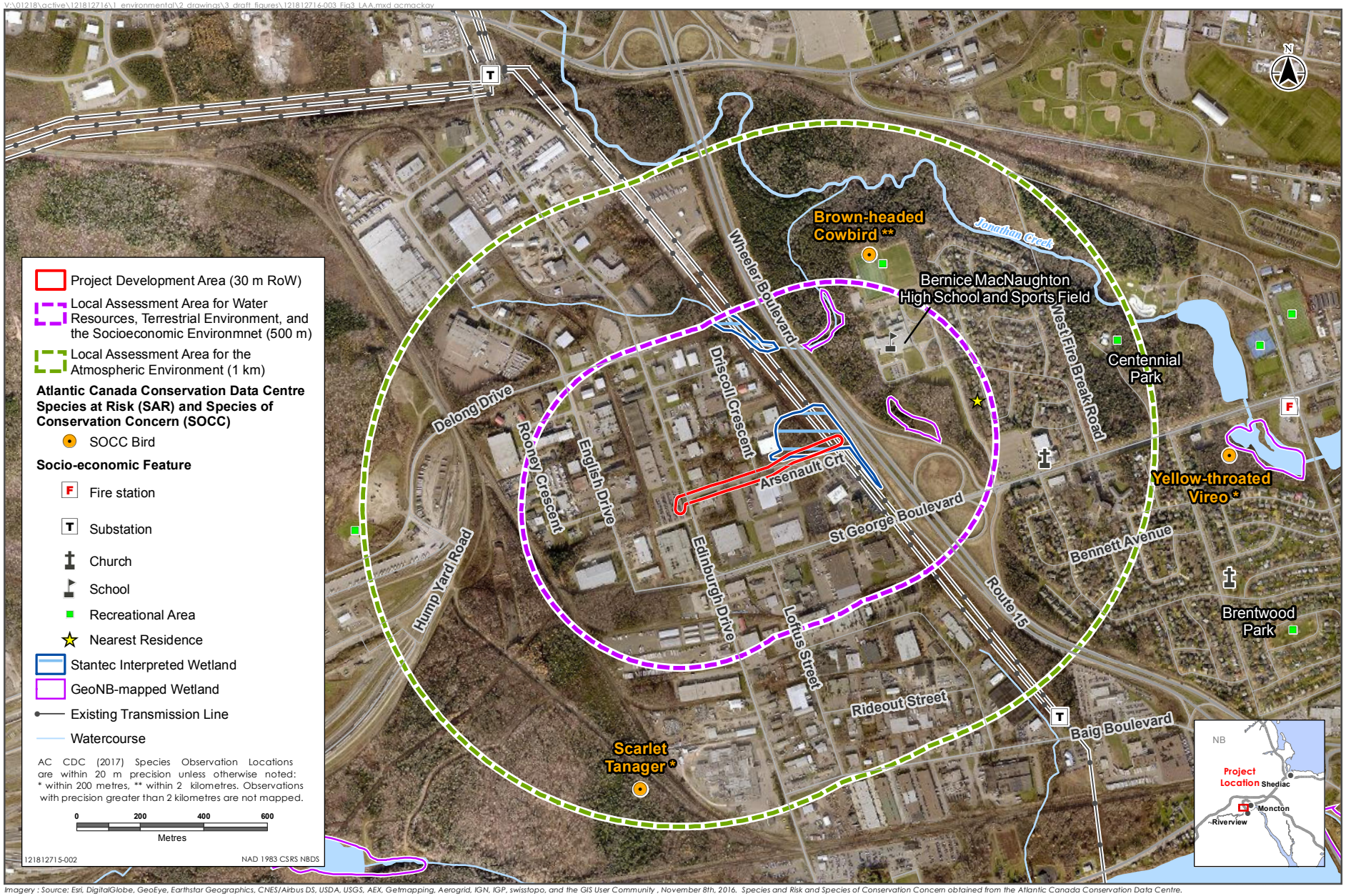
Project Development Area

The PDA is the immediate area encompassing the Project footprint, and is limited to the anticipated area of physical disturbance associated with the construction, operation and maintenance, and decommissioning and abandonment of the Project. The PDA includes the footprint of the 557 m-long, 30 m-wide RoW for the new 138 kV transmission line to be constructed. The PDA is the same for all VCs, and is illustrated in Figure 2.1.

Local Assessment Area

The LAA is defined as the maximum area where Project-specific environmental interactions can be predicted and measured with a reasonable degree of accuracy and confidence (i.e., the zone of influence of the Project for each VC). Beyond the LAA, the environmental effects of the Project on the respective VCs are expected to be minimal. The LAA can vary amongst the VCs, and is depicted in Figure 4.1and summarized for each VC in Table 4.1.

V:\01218\active\121812716\1_environmental\2_drawings\3_draft_figures\121812716-003_Fig3_LAA.mxd acmackay



Imagery : Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community , November 8th, 2016. Species and Risk and Species of Conservation Concern obtained from the Atlantic Canada Conservation Data Centre.

Assessment Areas for Valued Components

Stantec

121812716 - MONCTON INDUSTRIAL PARK, NB POWER

Figure 4.1

Table 4.1 Local Assessment Area for Valued Components

Valued Component[1]	Local Assessment Area
Atmospheric environment (air, noise, GHG)	PDA plus 1 km on either side of RoW centreline for air and noise. None for GHG[2]
Water resources (surface water and groundwater)	PDA plus 500 m on either side of RoW centreline
Freshwater fish and fish habitat	PDA, plus 100 m on either side of RoW centreline and a 30 m buffer on either side of watercourses identified in the PDA (if applicable)
Terrestrial environment	PDA plus 500 m on either side of RoW centreline
Socioeconomic environment	PDA plus 500 m on either side of RoW centreline
Heritage resources	PDA
Current use of land and resources for traditional purposes by Aboriginal persons	PDA
Effects of the environment on the project[1]	PDA

[1] Effects of the environment on the project is not a VC; however, it is included here for continuity in the assessment of potential interactions between the Project and the environment.

[2] No LAA is applicable to GHGs and climate change as these environmental interactions occur on a global scale.

4.3.2 Temporal Boundaries

Temporal boundaries identify when a potential environmental interaction is assessed in relation to specific Project phases and activities. The temporal boundaries for the assessment of the potential environmental interactions with the Project include the following periods:

- Construction – anticipated to be during fall 2018
- Operation and Maintenance – approximately 50 years or the end of service life

There is potential for the Project to interact with the VCs, and for the environment to interact with the Project, during various phases of the Project. These will be discussed in detail in Chapter 5.0.