



Modification Document – Proposed On-Site Fuel Storage

Northland Power Belleville North L.P.

July 16, 2018

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Appendix A – Site Plan

1.0 Introduction

The Belleville North Solar Project (“the Project”) was developed in 2012 by Northland Power Inc. on behalf of Northland Power Solar Belleville North L.P. (“Northland”) under Renewable Energy Approval Number 5943-8R8HYQ on March 13, 2012.

Since beginning commercial operation, a need for on-site fuel storage has been identified that was not contemplated during the development of the project. Heavy snow accumulation on the solar panels during the winter months has had significant negative impact on the facility’s production levels and as a result Northland will utilize mechanical snow removal technology at the Project site to mitigate further impacts to performance. In order to operate the proposed snow removal equipment a small volume of diesel fuel is required to be stored on-site so Northland plans to install a fuel tank prior to the winter of 2018-2019.

The tank is to be installed and operated so that it is in compliance with the MOECC’s Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities as well applicable Technical Standards and Safety Association (TSSA) regulations. A site plan depicting the proposed installation of the tank can be found in appendix A.

This report summarizes the proposed changes to the project that necessitate an amendment of the REA. This includes the rationale for the change and will identify amendments to be made to the REA’s supporting documents if necessary.

2.0 Proposed Project Change

Appendix A contains a site plan drawing indicating the installation location of the proposed fuel tank.

2.1 Change

Installation of a small fuel storage tank at the Project site.

2.2 Rational for Change

Storage of diesel is required on-site to fuel maintenance equipment. The need for on-site storage of fuel was not contemplated during the development of the Project.

2.3 Addition Environmental Risks and Mitigation

The risk of releasing diesel fuel to the natural environment is mitigated by the double-walled design of the proposed fuel tank which is design to the latest version of CAN/ULC-601. The tank will be installed and operated in accordance with the MOECC's Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities as well as the applicable TSSA regulations for liquid fuel storage.

3.0 Summary of Revisions to REA Supporting Documents

This section addresses amendments to the supporting documents submitted with the REA application necessitated by the changes proposed in this document.

3.1 Construction Report

No material changes. Existing project infrastructure will be utilized to access fuel tank location.

3.2 Design and Operation Report

Page	Section	Original Text	Amended Text
10	3.2.6	Not Applicable	On-Site Fuel Storage A fuel storage tank may be installed at the Project site to facilitate the operation of maintenance related equipment. The fuel storage tank will be installed in accordance with Ministry of Environment and Climate Change's Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities as well as applicable TSSA regulations and any other applicable legislation, regulations, standards, codes, or practices.

3.4 Decommissioning Report

No material changes.

3.5 Heritage Assessment Report

No material changes.

3.6 Project Description Report

No material changes.

3.7 Protected Properties Assessment

No material changes.

3.8 Water Assessment Report

No material changes.

3.9 Natural Heritage Assessment and Environmental Impact Study

No material changes.

3.10 Noise Assessment Study Report

No material changes. No noise emitting equipment will be installed or moved as a result of the changes proposed in the document.

Appendix A

Site Plan

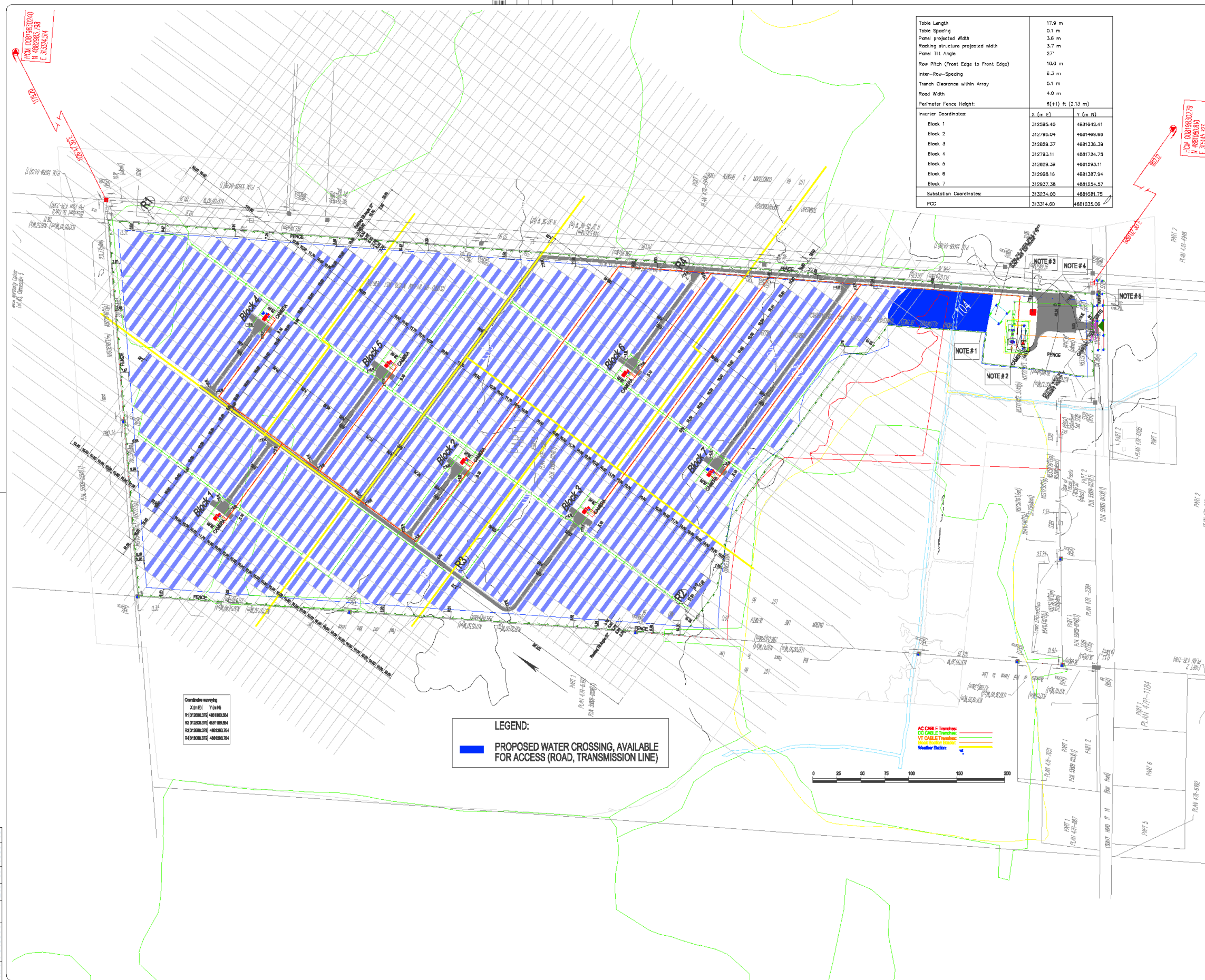


Table Length	17.9 m
Table Spacing	0.1 m
Panel projected width	3.6 m
Racking structure projected width	3.7 m
Panel Tilt Angle	27°
Row Pitch (Front Edge to Front Edge)	10.0 m
Inter-Row Spacing	6.3 m
Tranche Clearance within Array	5.1 m
Road Width	4.0 m
Perimeter Fence Height:	6(+1) ft (2.13 m)
Inverter Coordinates:	X (m E) Y (m N)
Block 1	31295.40 4881642.41
Block 2	312790.04 4881496.66
Block 3	312820.37 4881336.38
Block 4	312793.11 4881724.75
Block 5	312829.39 4881993.11
Block 6	312968.16 4881387.94
Block 7	312937.38 4881254.57
Substation Coordinates:	31324.00 4881081.75
PCC	313314.60 4881035.06

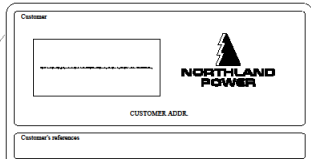
- THIS DIMENSIONED DOCUMENT IS THE WORK OF FORMER AND, AS SUCH, IS PROTECTED BY LAW. IT IS SOLELY INTENDED FOR THE USE SHOWN AND SHOULD NOT BE REPRODUCED OR ADAPTED OR USED IN ANY MANNER WITHOUT THE WRITTEN AUTHORIZATION OF THE ORIGINAL AUTHOR.
- Fencing will be done as per Drawing NPI-P040314-BN-CI-300.
 - Substation Building and Switchyard details are shown in Drawing 1218E02.
 - Maintenance Building details are shown in Drawing NPI-P040314-BN-SI-0219-00.
 - Overhead high voltage line and PCC details are shown in the Substation and switchyard details drawing (see Note #2).
 - Metering pole position and details are shown in the Substation and switchyard details drawing (see Note #2).

REV	DATE	DESCRIPTION	BY	CHK
19	12-01-16	ISSUED FOR CONSTRUCTION, INC.	SK	DD
18	12-06-15	ISSUED FOR OWNER'S REVIEW, IGA	SK	SCB
17	12-06-15	ISSUED FOR OWNER'S REVIEW, IGA	SK	SCB
16	12-06-14	ISSUED FOR OWNER'S REVIEW, IGA	SK	SCB
15	12-06-06	ISSUED FOR OWNER'S REVIEW, IGA	SK	SCB
14	12-05-15	ISSUED FOR OWNER'S REVIEW, IGA	SK	SCB
13	12-05-03	ISSUED FOR OWNER'S REVIEW, IGA	SK	SCB
12	12-04-04	ISSUED FOR OWNER'S REVIEW, IGA	SK	SCB
11	12-03-23	ISSUED FOR OWNER'S REVIEW, IGA	SK	SCB
10	12-03-23	ISSUED FOR OWNER'S REVIEW, IGA	SK	SCB

ISSUES / REVISIONS

ALL DIMENSIONS MUST BE TAKEN AND CHECKED BEFORE BEGINNING THE WORKS

Customer's information



Project: **NORTHLAND POWER PORTFOLIO OF SOLAR PARKS BELLEVILLE NORTH 10MW**

Title: **SITE PLAN**

Prepared: H. Castro
 Drawn: H. Castro
 Checked: D. Ejeu

Discipline: ELECTRICAL
 Scale: 1:1250
 Date: 2012-02-01

Project manager: D. Ejeu
 Supervisor: 01

File: NPI P040314
 Title: BN CI 1500 19

Project: NPI P040314
 Discipline: BN CI
 Title: 1500 19

