

Black Nubble Wind Farm Project

Solid Waste Narrative

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Solid Waste

1.0 Introduction

DeLuca-Hoffman Associates, Inc. was retained to prepare designs and portions of the permit applications for a series of wind turbines proposed to be sited on Black Nubble. DeLuca-Hoffman Associates, Inc. designed the primary access roads and summit roads, which will be used to access the wind turbines from existing roadway systems; and also prepared the Stormwater Management Report, Erosion and Sedimentation Control Plans, Road Maintenance Plan, Solid Waste Narrative, and Blasting Narrative associated with the primary access roads and summit roads. Note that the term “summit road” is synonymous with “ridgeline road” within this application. The work of DeLuca-Hoffman Associates, Inc. is summarized in a series of reports as follows:

- ❑ Basis of Design for Primary Access Roads and Summit Roads;
- ❑ Erosion and Sedimentation Control Plan for Roadway Construction;
- ❑ Stormwater Management for Primary Access Roads and Summit Roads;
- ❑ Road Maintenance;
- ❑ Blasting Narrative;
- ❑ Erosion and Sedimentation Control Plan for Transmission Line Corridor Construction; and
- ❑ Solid Waste Narrative.

The narratives prepared by DeLuca-Hoffman Associates, Inc. are supported by the project Civil Engineering Design Drawings included with this submission. Please refer to Cover Sheet C-1 for a complete list of the project drawings.

The designs and reports prepared by DeLuca-Hoffman Associates, Inc. rely upon baseline information provided for this project by other Project consultants.

Civil Engineering Design Specifications for the project are provided in Appendix 2.11.

Solid Waste

2.0 Overview

DeLuca-Hoffman Associates, Inc. has prepared the following Solid Waste narrative.

This section of the application provides estimates of solid waste generation. The section considers the reductions of solid waste through the use of recycling, and outlines the planned procedures for the transport and disposal of solid wastes that will be generated by the proposed Black Nubble Wind Farm Project. The most significant solid waste item generated in the construction of this project will be tree stumps from clearing for roadways, the maintenance building, turbine pads and the substation interconnect.

The following volumes of solid waste associated with the construction and operation of the development have been estimated:

- 30,000 cubic yards of stumps, grubblings and brush from the construction of the proposed roadways, wind turbines, substation and associated work.
- 300 cubic yards of construction debris from the construction of the proposed project.
- A limited volume of solid waste will be generated by the operations of the proposed wind farm. It is estimated that the facility will be maintained by 5 to 10 maintenance personnel who will generate 5 cubic yards/month of recyclable waste and 10 cubic yards/month of non-recyclable waste.

Project associates have made contact with Waste Management in Norridgewock with regard to construction solid waste disposal. No formal agreement has been made, but Maine Mountain Power intends to engage a contractor for this service.

Stump dump locations have been determined and are shown on the project Base Map. Permission from abutting landowners for the dumping of stumps is included in the Black Nubble Expansion Deed included with this application.

Solid Waste

3.0 Stumps and Grubbing Debris

Maine Mountain Power will retain a general contractor to perform earthwork and land clearing onsite. Land clearing will include cutting of trees and stump removal. Maine Mountain Power proposes to grind a portion of the stumps and brush and use the grindings to process Erosion Control Mix material to be used on the project site and to bury the remaining stumps at a stump dump location 2 acres in size.

The volume of stumps, grubblings, and chipped vegetation, which will be generated by the project, is directly related to the disturbed area of the project.

The following table shows the approximate disturbed areas which are broken down with more detail in the Key Fact Summary for the project.

<u>Approximate Disturbed Areas for New Access Roads and Summit Road Construction (Acres)</u>	
Roadway Segment	Areas (acres)
Upper and Lower Black Nubble Summit Principal Roadway and Spurs	<u>40</u>
Access Roadway to Upper Black Nubble	<u>12</u>
Access Roadway to Lower Black Nubble	<u>1</u>
Substation Access Road	<u>1</u>
DISTURBED AREA (Acres)	<u>54</u>

<u>Approximate Disturbed Areas Associated with other Project Improvements (Acres)</u>	
Roadway Segment	Areas (acres)
Existing Road Improvements, <u>Access Routes to Transmission Lines</u> , Batch Plant, O&M Site, Gravel Pits and Stump Dumps	<u>37</u>

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Turbine Sites, UGE and Reference Towers	<u>12</u>
Substation	<u>1</u>
DISTURBED AREA (Acres)	<u>50</u>

Therefore, the total disturbed area for the areas above will be on the order of 104 acres.

If it is assumed that the construction generates 300 cubic yards of stumps per acre, then approximately 31,000 cubic yards of stumps are anticipated to be generated from the project.

As noted, this is for the work attendant with the roadways to access the turbine sites, turbine pads, substation and other elements. Additional clearing and disturbances for transmission lines and associated access are described in other sections of the application.

4.0 Construction and Demolition Debris

The general contractor will be required to enter into a contract with a licensed solid waste disposal firm for the legal disposal of all construction and demolition debris related to the project as required by LURC Standards. Mixed construction material waste, will be transported to a Transfer Station, Waste Facility, or Commercial Recycling Facility with a MeDEP license.

Concrete will either be processed onsite or hauled back to the supplier’s plant.

5.0 Grit/Sediment Removal

The Owner will enter into a maintenance contract for grit/sediment removal. It is anticipated that grit/sediments will be removed from the ditches and culverts and disposed of by the contractor. A copy of the contract and disposal location will be available for review by LURC when a fully executed contract is available.

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6.0 Commercial Waste

The commercial waste resulting from operation of the development will be transported by a commercial trash company and disposed in a designated landfill. During construction, “roll-offs” will be available at multiple locations for disposal of non-biological construction debris.

The volume of solid waste, which will be generated by the 5 to 10 maintenance personnel, has been estimated at 5 cubic yards of recyclable waste and 10 cubic yards of non-recyclable waste per month.

7.0 Closure

The solid waste provisions for this project are similar to methods employed for construction of access roads and construction sites in this area. The computations of waste volumes are estimates only. Contractors should compute the waste volumes separately and not rely on estimates provided in this section. This solid waste plan conforms with the solid waste disposal guidelines set forth by section 10.25H of LURC standards.