

**Appendix D**  
**Copies of Display Boards, Comment Sheets and**  
**Sign-in Sheets from Second Public Meeting**

The logo for Northland Power, featuring the words "Northland" and "Power" in a large, white, sans-serif font. The text is set against a background of a bright blue sky with white clouds and a sunburst effect in the upper right corner. A solid green horizontal bar is positioned below the text.

# Northland Power

## ***Welcomes You to the Public Meeting***

*for the Glendale Solar Project*

Monday, August 8, 2011

5:00 pm to 7:00 pm

Char-Lan Recreation Centre, Community Hall

19740 John Street, Williamstown, ON



# Purpose of this Public Meeting

A public meeting to solicit stakeholder input is an important aspect of the Renewable Energy Approval (REA) process and project planning.

This public meeting provides an opportunity to:

- Gain further understanding about Northland Power's proposed solar energy projects in your area
- Obtain information about the REA Process
- Ask questions regarding the proposed Projects
- Raise concerns or issues regarding the proposed Projects

## How can I provide comments or concerns?

A variety of methods are available for providing comments or concerns.

You can:

1. Fill out a comment form provided at this public meeting. This form can also be used to register your name and mailing address so you are included on the Project mailing lists.
2. Discuss your comments or concerns with one of the representatives of Northland Power or Hatch present at this public meeting.
3. Contact the Environmental Coordinator for the Project via the following information:

**Sean Male**, MSc

Environmental Coordinator  
Hatch Ltd.

Address: 4342 Queen Street, Suite 500  
Niagara Falls, Ontario,  
L2E 7J7

Phone: 905-374-0701 Ext 5280

Fax: 905-374-1157

Email: [smale@hatch.ca](mailto:smale@hatch.ca)

For more information please visit:

**[www.northlandpower.ca](http://www.northlandpower.ca)**



# Northland Power

*Northland Power develops and operates clean and green power generation facilities, mainly in the provinces of Ontario and Quebec, with Saskatchewan being added to that list shortly. Our facilities produce about 900 MW of electricity. Northland Power has been in business since 1987 and has been publicly traded since 1997.*

Sustainability is a core value at Northland Power. All of our development efforts and operational practices focus on providing long term benefits to our customers, investors, employees, communities and partners.

*For Northland Power, sustainability has many dimensions:*

**Environmental:** Northland Power was founded on the belief that clean and green energy sources are vital to the future of our planet. Our construction and operational practices are engineered to meet the highest environmental standards, even in jurisdictions where lower standards are legislated.

**Community:** Northland Power takes an active interest in its host communities to ensure they remain vibrant, healthy places to live.

**Operational:** Northland Power maintains and reinvests in their operating assets to achieve maximum efficiency and economic life.

**Health and Safety:** Ensuring that our staff has the knowledge, tools and time to work safely is Northland's first priority. Our culture of safety, respect and independence helps to ensure we attract and retain the people that we need to perform.

**Financial:** Northland Power consistently chooses long term success over short term gain. Northland Power only pursues projects that meet strict return thresholds and have creditworthy customers. As a result, we have paid stable monthly dividends since 1997.



Northland Power has retained Hatch Ltd. to undertake the Renewable Energy Approval (REA) process, subject to the provisions of the Environmental Protection Act Part V.0.1 and Ontario Regulation 359/09. Hatch is an Ontario-based consulting, engineering and management company with operations worldwide and a reputation for excellence acquired over 80 years of continuous service to its clients. Hatch will undertake the REA process from its Niagara Falls, Ontario office.





# Solar Technology

A solar photovoltaic (PV) module (or panel, as they are often called) transforms the sun's energy into electrical energy. Silicon, a semi-conductor, is the material that transforms a ray of sunshine into electricity. The silicon is located within a grid (commonly made of metal) that conducts electricity. When the sunlight hits the silicon, electrons flow from the silicon into the grid, thereby producing electricity. The silicon and metallic grid are located beneath a layer of glass to provide weather protection. The glass has a special coating applied to maximize the capture of sunlight by the panel, thereby reducing glare.

## *Advantages of Solar Energy*

Solar power has a multitude of advantages compared to most other power generation technologies.

- First and foremost, the fuel is free. As the cost of many fossil fuels is expected to increase in the future, having solar energy on the grid at a set price will give greater stability to future energy prices.
- Another key benefit is the absence of any green house gas emissions and other pollutants. This ensures that the local community will not have to live with poor air quality or noxious odours.
- Solar PV systems are comprised of safe, common materials that will not affect the lands on which they are located, allowing for easy remediation upon decommissioning.
- Most solar PV systems have no moving parts, unlike almost all other power generation technologies. Having no moving parts reduces the environmental impact, maintenance costs, and noise levels of this type of power generation,
- There is a natural supply/demand match that is inherent to solar power, as the sun rises and sets in parallel with society's general daily electricity demand pattern. This helps mitigate the need for the development of other technologies that traditionally meet peak electricity demand.



Ontario's Feed-in-Tariff (FIT) program was launched by the Ontario Power Authority on October 1, 2009 to encourage the development of renewable energy resources and to stimulate growth in green technology and renewable power industries.

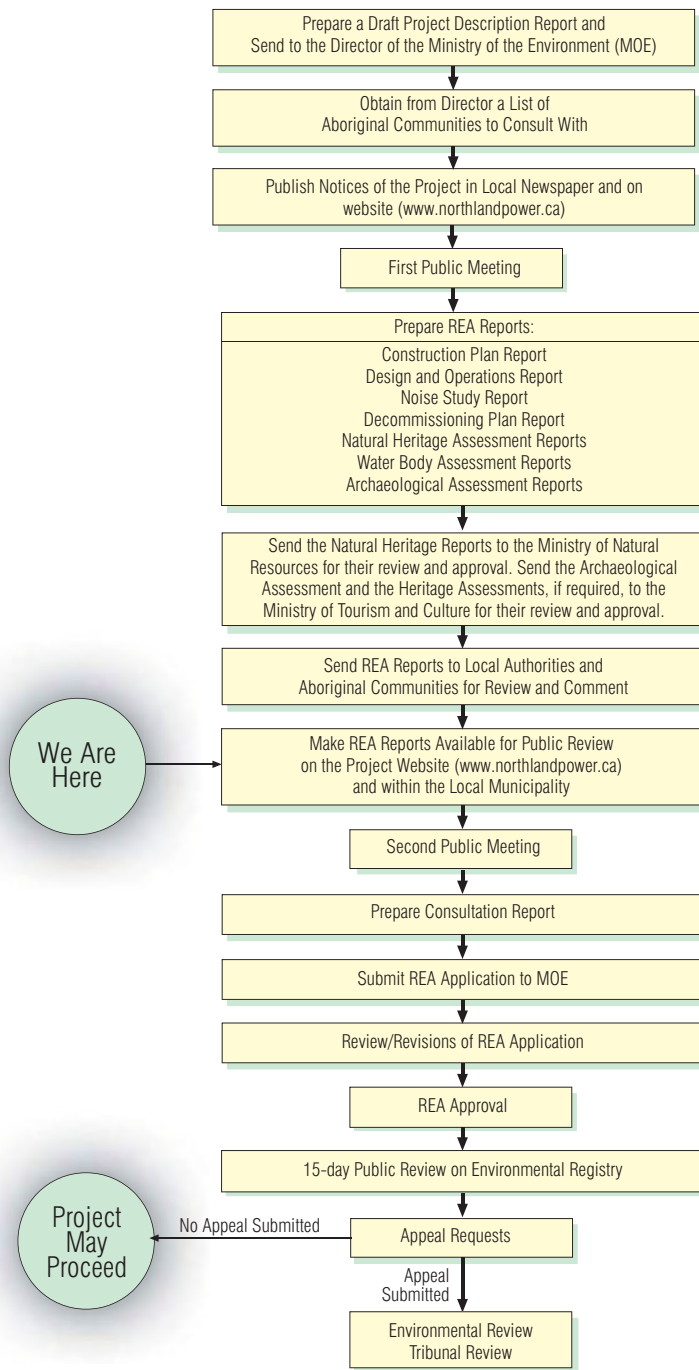
The Ontario Power Authority awarded 184 FIT contracts to renewable power developers in Ontario on April 8, 2010. Northland Power was awarded a total of 13 contracts for proposed solar ground-mount developments throughout the province. These projects are currently proceeding through the REA process.



# Renewable Energy Approval Process

The proposed Project is subject to the (REA) process, subject to the provisions of Part V.0.1 of the Environmental Protection Act and Ontario Regulation 359/09. The REA process entails consideration of environmental aspects, including natural heritage features and water bodies, as well as heritage and archaeological resources. In addition, the REA process includes public, government agency and First Nation consultation.

The main components of the REA process are shown in the flow diagram.





# Glendale Solar Project

## Project Location

The proposed Project is located on County Road 44, Headline Road, south of the community of Martintown within the Township of South Glengarry. The proposed Project, if approved, will be constructed on privately owned lands.

## Project Description

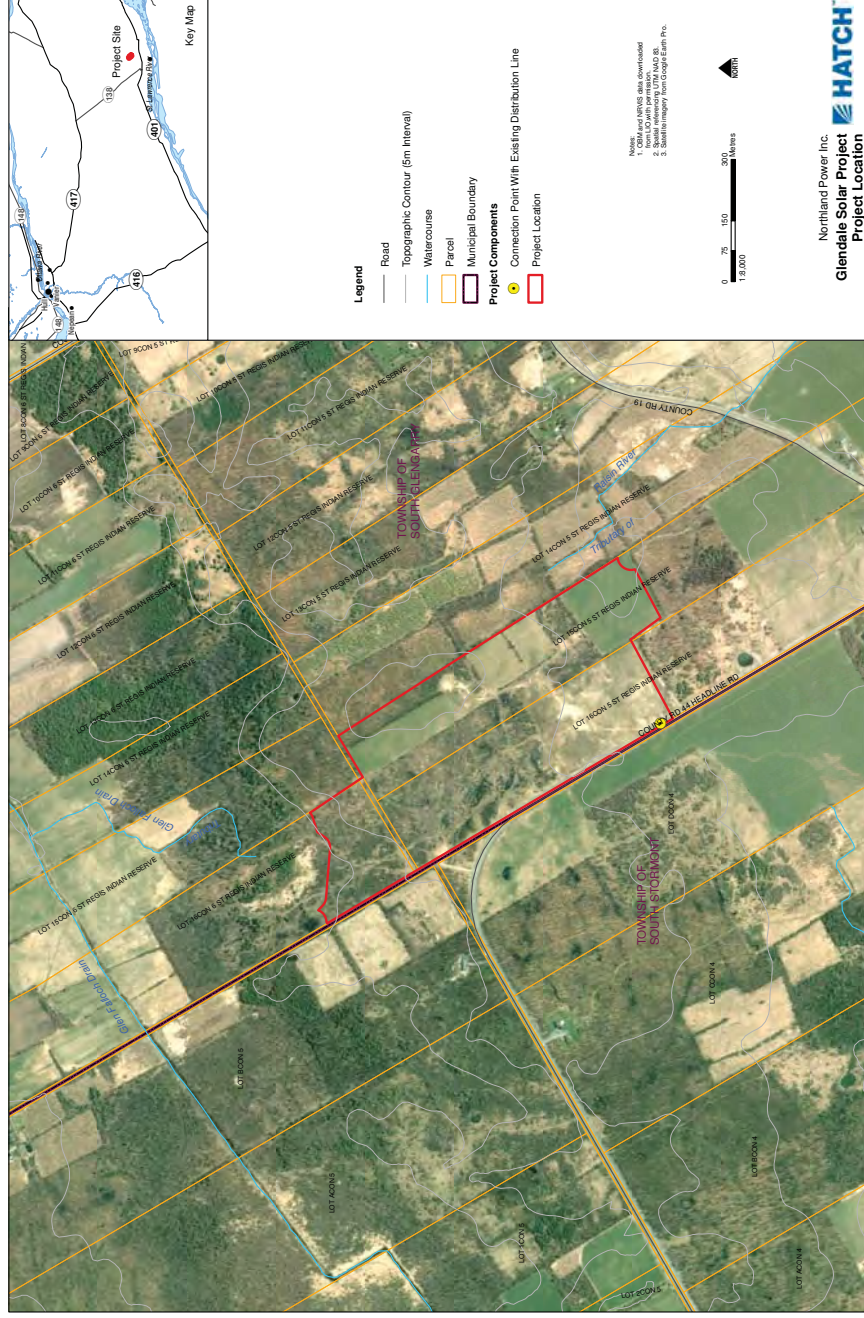
The proposed Glendale Solar Project is considered to be a Class 3 solar facility, as defined under the Environmental Protection Act (Act) Part V.0.1 and Ontario Regulation 359/09. Class 3 solar facilities are defined as having a name plate capacity of 10 kilowatts (kW) or greater and the solar panels are mounted on the ground. Specifically, this proposed Project has a nameplate capacity of 10MW (ac).

The proposed Project will use crystalline technology photovoltaic (PV) panels installed on ground-mounted rack structures made of steel and aluminum. The panels will be tilted and fixed in place (i.e., they will not move to track the sun). The project will consist of approximately 50,000 panels and will be designed to optimize energy production.

## Project Schedule – Glendale Solar Project

FIT Application – November 2009  
Submission of Project Description to MOE – April 2010  
FIT Contract Award – April 2010  
First Public Meeting – September 2010  
Second Public Meeting – August 2011  
Final Public Meeting – October 2011  
REA Application Submission – October 2011  
REA Received – March/April 2012  
Start of Construction – April 2012  
Commercial Operation Date – Fall 2012

For more information regarding this Project please visit the Project website at [northlandpower.ca/glendale](http://northlandpower.ca/glendale).





# Glendale Solar Project

## Natural Heritage Features

As per Ontario Regulation 359/09, a records review and a site investigation were conducted in order to identify environmental features of the Project location and surrounding area. A variety of features were identified and considered during this process, including but not limited to the following:

- Wildlife/Wildlife habitat
- Vegetation communities, including woodlands and wetlands
- Valleylands
- Species at risk
- Waterbodies

## Terrestrial Environment

The Project location is mainly comprised of active agricultural lands used for the production of hay or corn, while the remaining is comprised of natural features such as woodlands, wetlands and cultural vegetation communities (i.e., hedgerows).

The woodland located on and near the southeastern corner of the Project location, is described as a young to mid-aged forest, dominated by deciduous tree species. The tree species observed within this portion of the woodland include ironwood, American beech, and sugar maple as the dominant species, with green ash, black ash, bur oak, rock elm, white elm, and basswood associates. The woodland on and within 120 m of the northern half of the Project location is described as a mid-aged deciduous forest. The tree species observed included trembling aspen, American beech, sugar maple, red maple, ironwood, bitternut hickory, shagbark hickory, American elm, white ash, green ash, bur oak and basswood. These two woodlands were determined to be contiguous and significant.

There are two unevaluated wetland communities that were identified within 120 m of the Project location during the site investigation. The first of these communities, located within 120 m north of the Project location is comprised of a reed-canary grass meadow marsh community, while the second located within 120 m south of the Project location is comprised of a mixed wood swamp community. These communities were considered to be significant.

A number of significant wildlife habitats are found on or within 120 m the Project location, they include the following:

- all lands on and within 120 m of the Projects site as habitat for Milksnake
- woodlands supporting amphibian breeding habitat
- forest providing a high diversity of habitats
- highly diverse areas

## Aquatic Environment

There are no waterbodies on the Project location, though two are located within 120 m of the Project location. A tributary of Raisin River originates approximately 50 m west of the southeastern corner of the Project location and flows south through the adjacent agricultural fields. Observation made from the Project location indicate that this watercourse appears to be restricted to a narrow vegetated corridor surrounded by agricultural fields. During the site investigation an additional watercourse was found and classified as an intermittent constructed drain as no standing water was observed during the June 2011 site investigation. This watercourse (labeled Watercourse A) flows south through a wooded area south of the Project location and also occurs directly adjacent to a wetland.



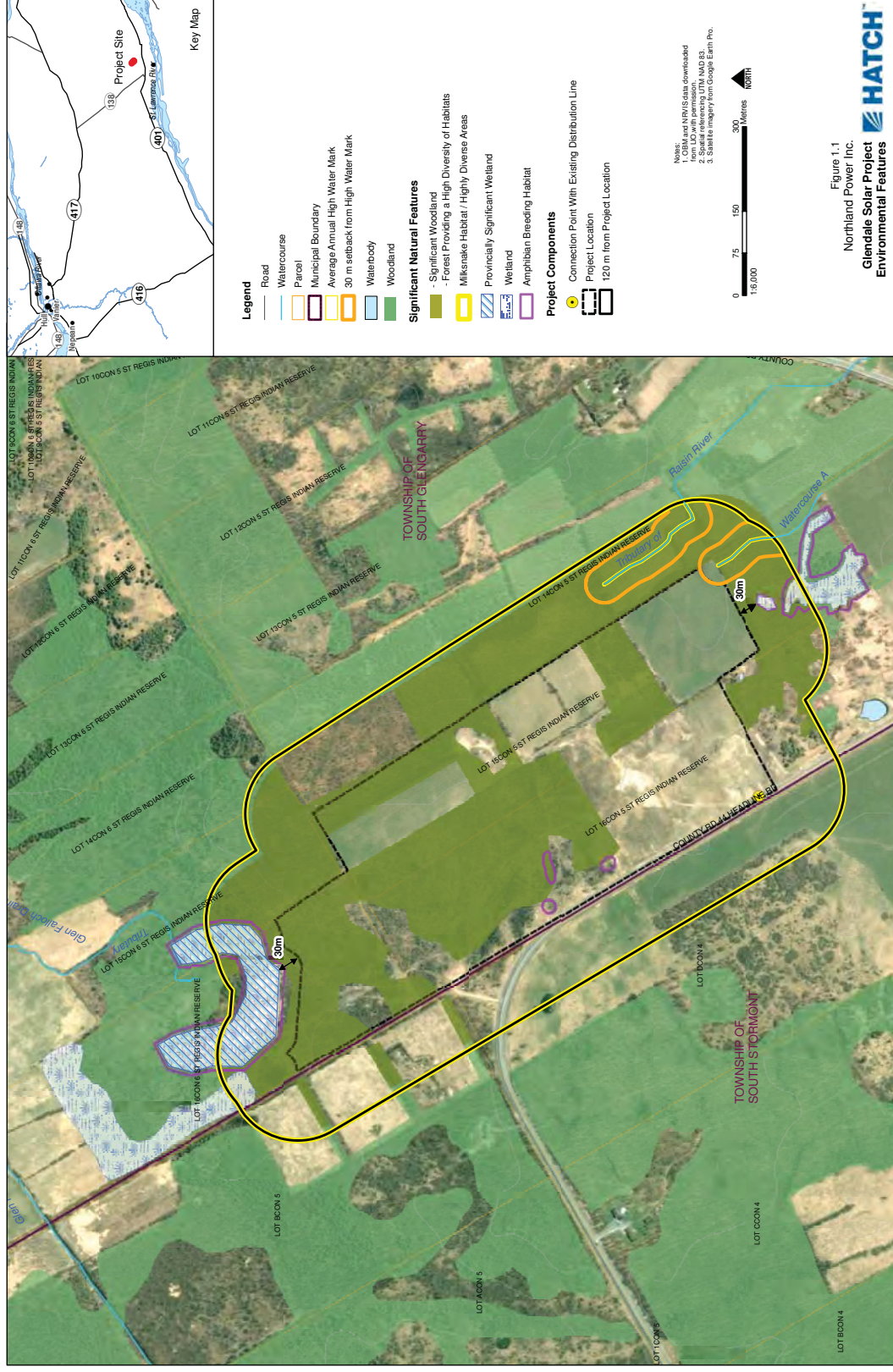
*More information on the findings of these studies are available in the Natural Heritage and Water Bodies Reports posted to the project website ([www.northlandpower.ca/glendale](http://www.northlandpower.ca/glendale)) and available in hard copy at the municipal office.*





# Glendale Solar Project

## Environmental Features





# Noise

## Noise Study

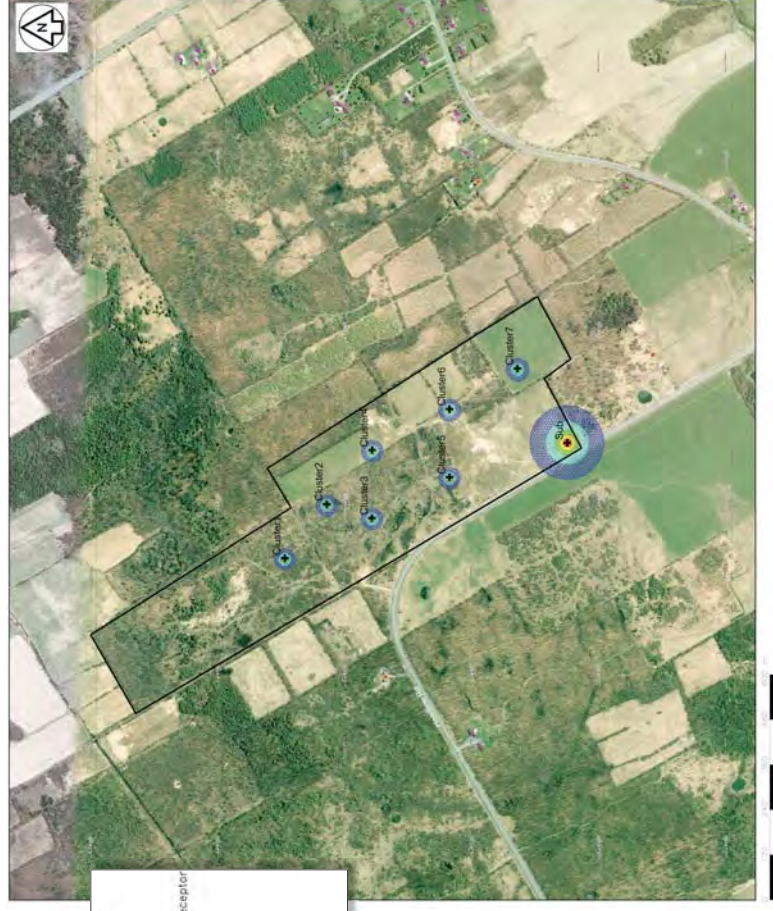
A detailed analysis of the noise emissions to be produced by the Project has been completed in accordance with Ministry of Environment guidelines. It has been determined that noise levels will not exceed 40 dBA at sensitive receptors at any time of day in accordance with regulated noise levels.

At the time of preparing the noise studies, final component selection (i.e. inverters and transformers) had not been completed. For that reason, this study reflects a "worst case" scenario for potential noise impacts, by modeling the highest sound profiles of those components under consideration.

Noise map during day time

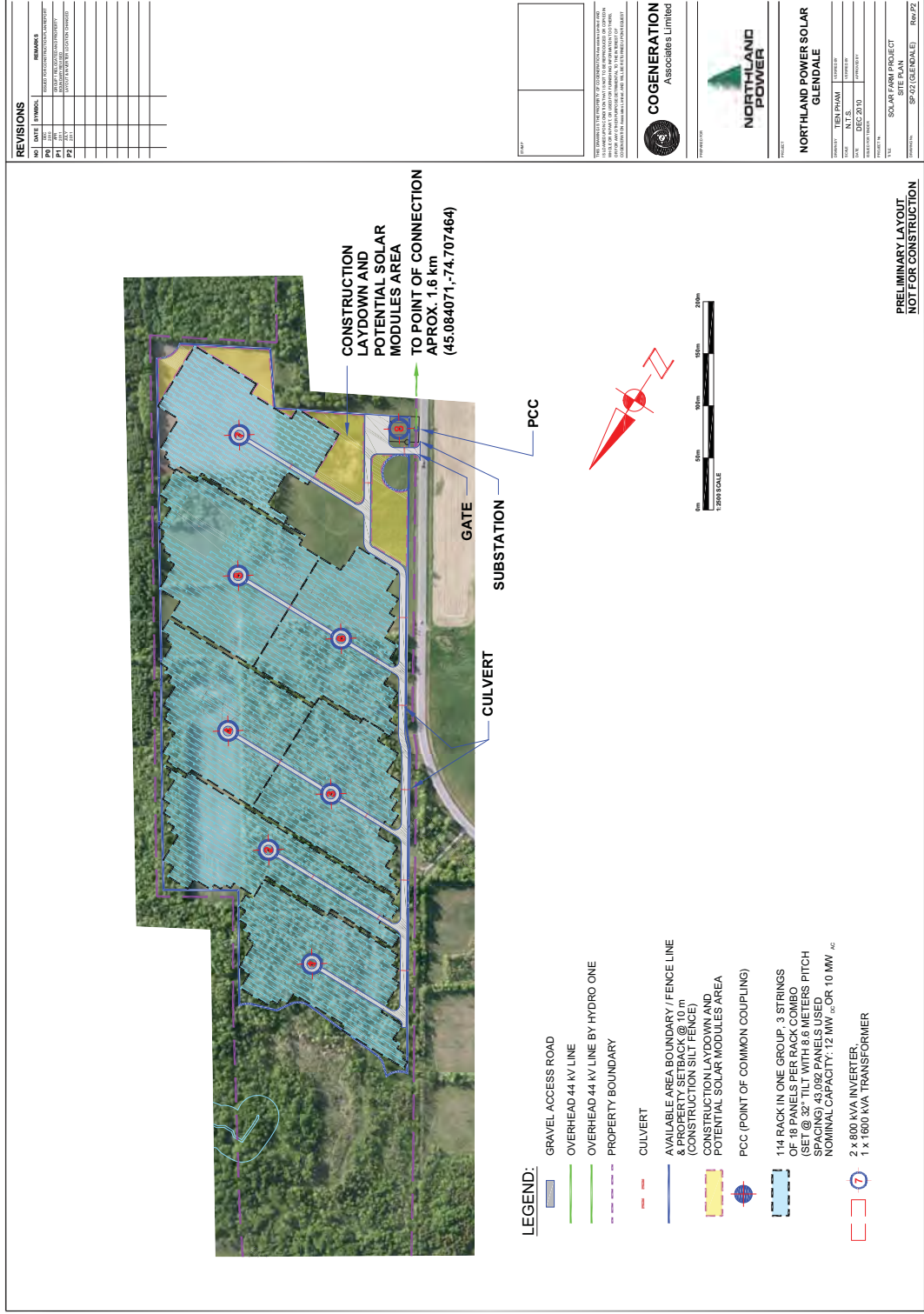


Noise map during Night time



# Glendale Solar Project

## Preliminary Site Plan





# Glendale Solar Project

## Potential Negative Environmental Effects and Mitigation Measures

Environmental Component	Potential Environmental Effect	Proposed Mitigation
Physiography/Topography	During construction, regrading of excavated soils and some minor alterations to local topography may occur.	Decommissioning of the Project site will include regrading to original conditions, to the greatest extent possible.
Soils	Reductions in soil quality/loss of soils as a result of accidental spills, erosion and soil compaction during construction.	The use of erosion and sedimentation control, soil loosening, and spill prevention and response measures will limit the impact on soils.
Surface Water	Surface water quality of Watercourse A and the tributary of the Raisin River could be impaired due to contamination from accidental spills or increased turbidity due to site erosion.	A 30-m setback will be put in place from all water bodies. As well, erosion and sedimentation control measures and spill prevention and response measures will minimize the potential for adverse effect.
Groundwater	Excavations may result in a minor, localized drop in the groundwater table due to dewatering. In addition, groundwater may also be impaired by contamination due to accidental spills.	Spill response measures will prevent any accidental spills. Dewatering during construction anticipated to be minimal.
Aquatic Habitats/Biota	The installation of the Project may result in indirect effects on aquatic habitat and biota downstream from the Project due to erosion and sedimentation and changes in surface water runoff.	30-m setbacks from all waterbodies will be implemented to protect surface water runoff quality. Stormwater management plan implemented to control surface runoff.
Wetlands	Wetlands 30 m from Project may be indirectly affected by Project activities, such as the generation of dust during construction which could impact vegetation communities.	Mitigation measures proposed in respect of vegetation communities and surface water quality will be effective at mitigation potential effects on the wetland community.
Vegetation, including wooded areas	Vegetation clearing on agricultural land, within hedgerows, and wooded areas may be required. Vegetation communities adjacent to the Project site may be indirectly affected by Project activities, such as the generation of dust during construction which could impact vegetation communities.	Work areas will be flagged to limit the extent of clearing. Woodland compensation planting will take place to mitigate for loss of woodland communities.  Dust control measures will be implemented during the construction period.
Terrestrial Wildlife/Wildlife Habitat (including species at risk)	Potential loss of wildlife habitat and potential wildlife avoidance of the Project area during construction and operation may occur as a result of disturbance.	Work areas will be clearly marked and will not infringe further than necessary. Mitigation measures will include not clearing in bird breeding season, if required. Amphibian breeding ponds will be created to replace those removed on-site.
Air Quality	Reductions in local air quality from operation of construction equipment and dust displacement may occur due to vehicle traffic.	Through the use of standard best management practices and mitigation measures dust will be suppressed and discharge of exhaust minimized to maintain local air quality during construction.
<b>Social Environment</b>		
Land Use	Current land use will be discontinued within the Project footprint.	After decommissioning, there is a potential for the land to regain the past use.
Tourism and Recreation	Any tourism or recreational resources existing within the immediate Project vicinity will be considered in determining potential impacts.	Visual screening in those areas will be considered, if required.
Archaeological and Cultural Heritage Resources	Excavations during Project construction may result in the discovery of archaeological resources. Archaeological assessments have been conducted to determine potential. Potential heritage resources have been determined as per the requirements of the Ministry of Tourism and Culture.	Mitigation measures recommended as a result of the archaeological or heritage assessments, if required, will be implemented as required. For more information, please refer to the Stage 1-2 Archaeological Reports and Appendix N-Protected Properties and Heritage Resource Information.
Sound Levels	Temporary disturbance to neighbouring residents may occur during construction. The operation of inverters and transformers may result in increased ambient sound levels.	Noise studies were conducted as per O. Reg. 359/09 to ensure noise during operations meets provincial guidelines. Construction will be conducted according to local noise by-laws, where applicable. For more information, please refer to the Draft Noise Assessment Report
Visual Landscape	Installation of the Project will result in a change to the local landscape.	Visual barriers may be installed, where necessary, if this is determined to be effective and viable.
Community Safety	Construction of the Project will result in a risk to community and workforce safety. During operation, potential risks to public safety are limited.	Safety procedures will be followed to ensure both worker and public safety.
Local Traffic	Construction of the Project may result in increased local area traffic and temporary disruption along routes used resulting in delays to the local community traffic, and increased traffic as a result of equipment delivery to the Project site.	Transportation routes will be determined to minimize the impact on local traffic.
Waste Management and Disposal Sites	Construction and operation of the Project will likely result in the generation of recyclable material, and municipal hazardous and sanitary waste.	The disposal and proper storage of wastes and recyclables will occur.



# Next Steps

- All further Project Reports (such as the Construction Plan Report, Archaeological Assessment Report, etc) are available for public review on the Project website and at your local municipal office.
- The Final Public Meeting is being held on Monday, October 3, 2011.
- Finally, any written comments or concerns will be addressed within the Consultation Report as a part of the REA submission, which will be available for public review.



**We appreciate your attendance at this Public Meeting and hope to see you at the next one. Thank you.**

*Your opinion is important to us,*

**Please Sign in and Complete a Comment Sheet**







3. Please provide any comments, questions or concerns related to the Project.

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If you would you like to be included on the Project mailing list, please provide your name and full mailing address below:

Name: \_\_\_\_\_

Mailing Address (including your postal code):

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WE WELCOME YOUR INPUT. PLEASE COMPLETE AND SUBMIT THIS COMMENT SHEET BEFORE LEAVING - THANK YOU

Alternatively, if you prefer to mail/fax your response:

Sean Male, Environmental Coordinator  
4342 Queen St, Suite 500, Niagara Falls, Ontario, L2E 7J7  
Phone: 905-374-5200 Fax: 905-374-1157  
smale@hatch.ca

For more information regarding the Glendale Solar Project, please visit  
[northlandpower.ca/glendale](http://northlandpower.ca/glendale)

**\*Please note that all information provided will be publicly available**

Please Sign In  
 (PLEASE USE BLOCK LETTERS)  
 Northland Power – Glendale – Public Meeting

Project: Glendale Solar Project

Date: Monday August 8, 2011

Name	Complete Mailing Address			Phone <small>(Please include area code)</small>
	Street	City	Postal Code	
Joanne Haley	Twp - South Benjamin			
Jim McDowell	" "	" "		

\*Please note that all information provided will be publically available