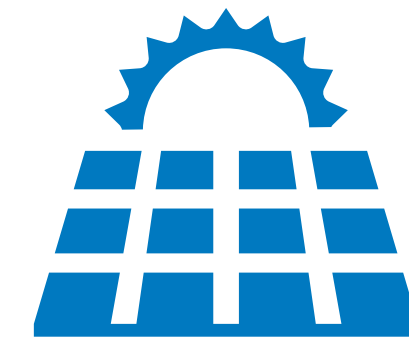


# Overview



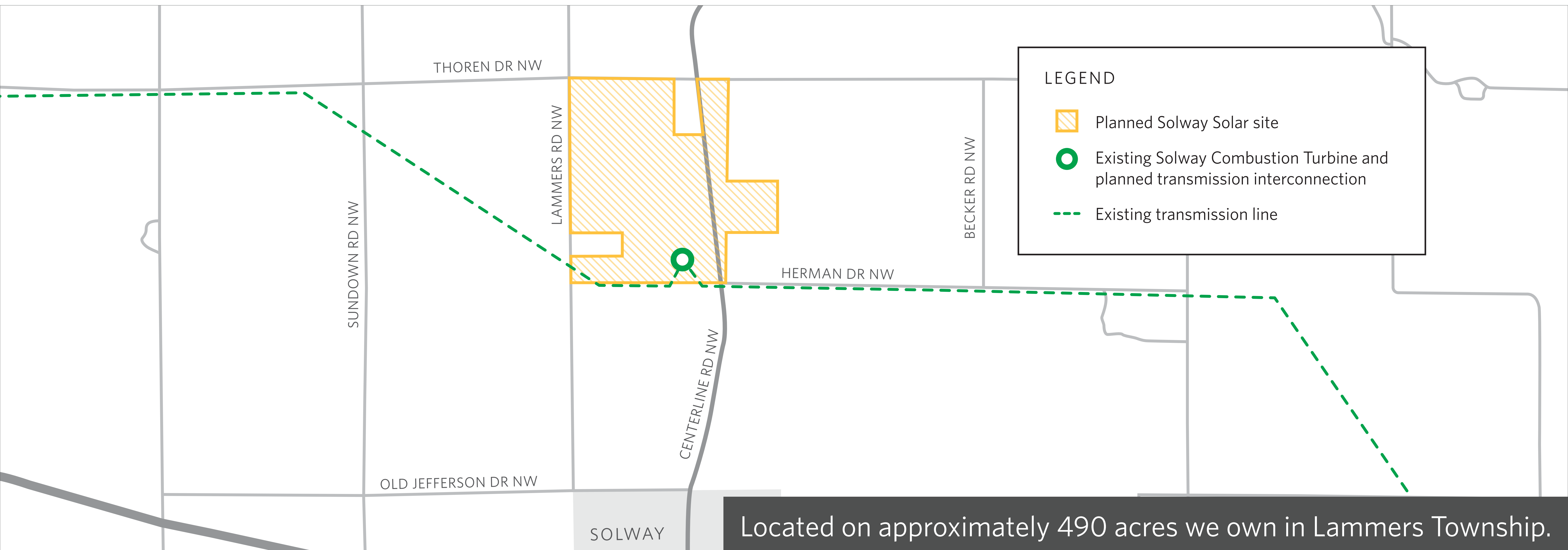
Proposed 50-megawatt (MW) solar generation facility



Approximately 100,000 solar panels



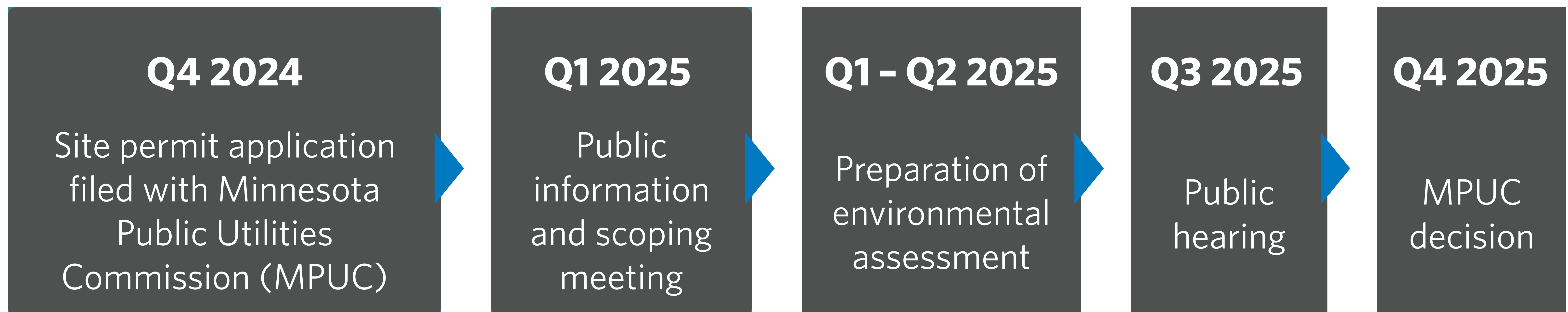
Will generate enough electricity to power about 9,000 homes annually



# Timeline



## State permitting process



Timeline is subject to change

# Powering the future



We selected this location because it offers an opportunity to add solar generation to meet Minnesota's Carbon Free Standard while using an existing transmission interconnection to help keep costs as low as possible.

## Project benefits



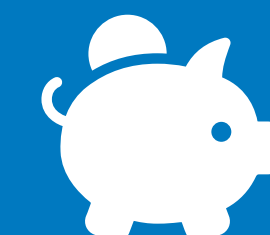
Increased electric reliability and resiliency



No fuel costs, resulting in savings that are passed along to customers



Access to low-cost, renewable energy



Help offset other high-cost generation during peak energy-use periods

# Economic benefits



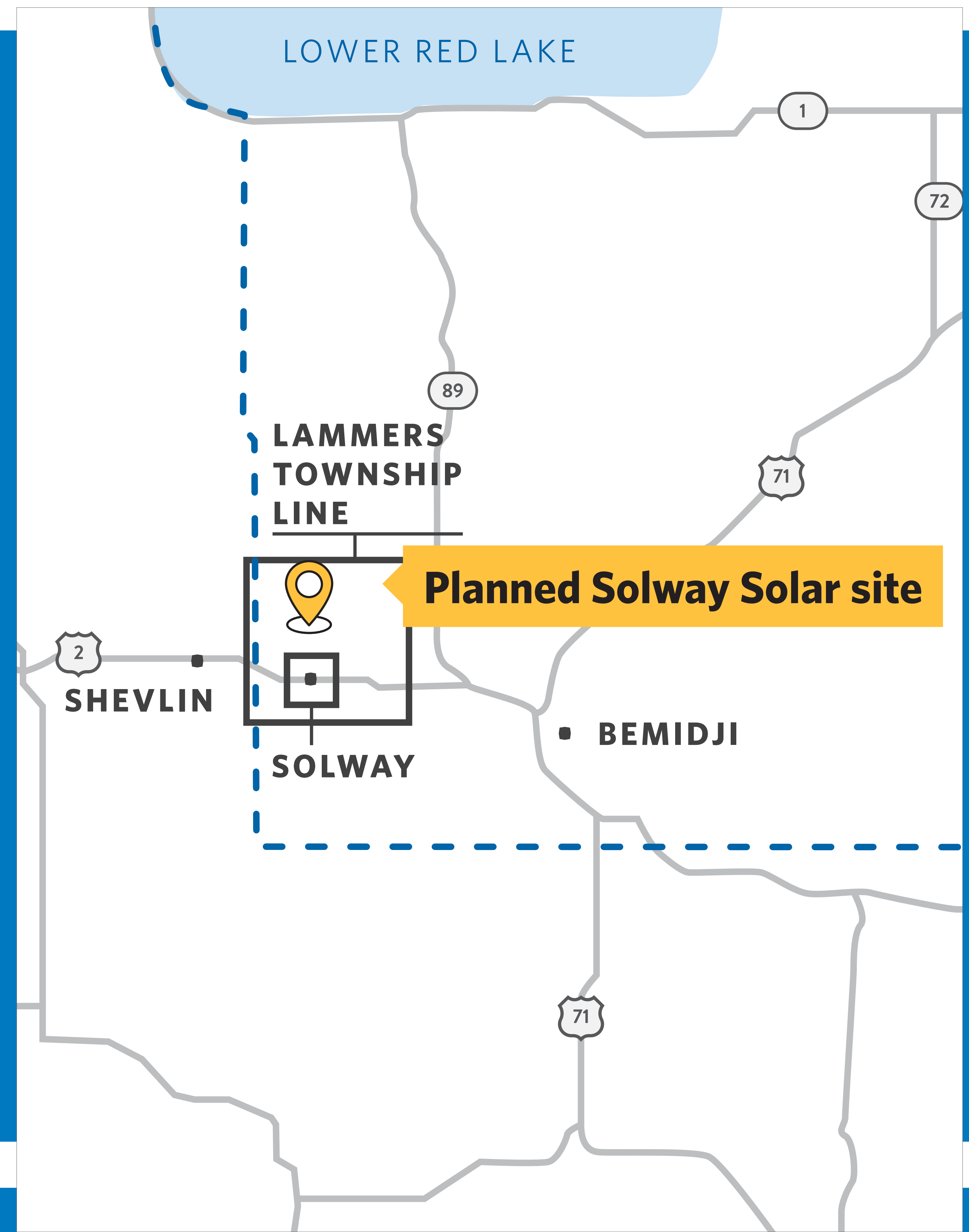
## 70 jobs

expected to be created  
during peak construction

## \$4.2 million

estimated to be generated in production  
tax over the life of the facility  
(approximately 35 years)

- ▶ **80%** of tax revenue will go to Beltrami County
- ▶ **20%** of tax revenue will go to Lammers Township





# Visual impact



Pollinator-friendly seed mix within project site



Agricultural-style fence along perimeter of project



Existing trees will serve as visual screening along portions of the project perimeter.

Fence example



Tree screen example





# Current project area



Aerial view facing north

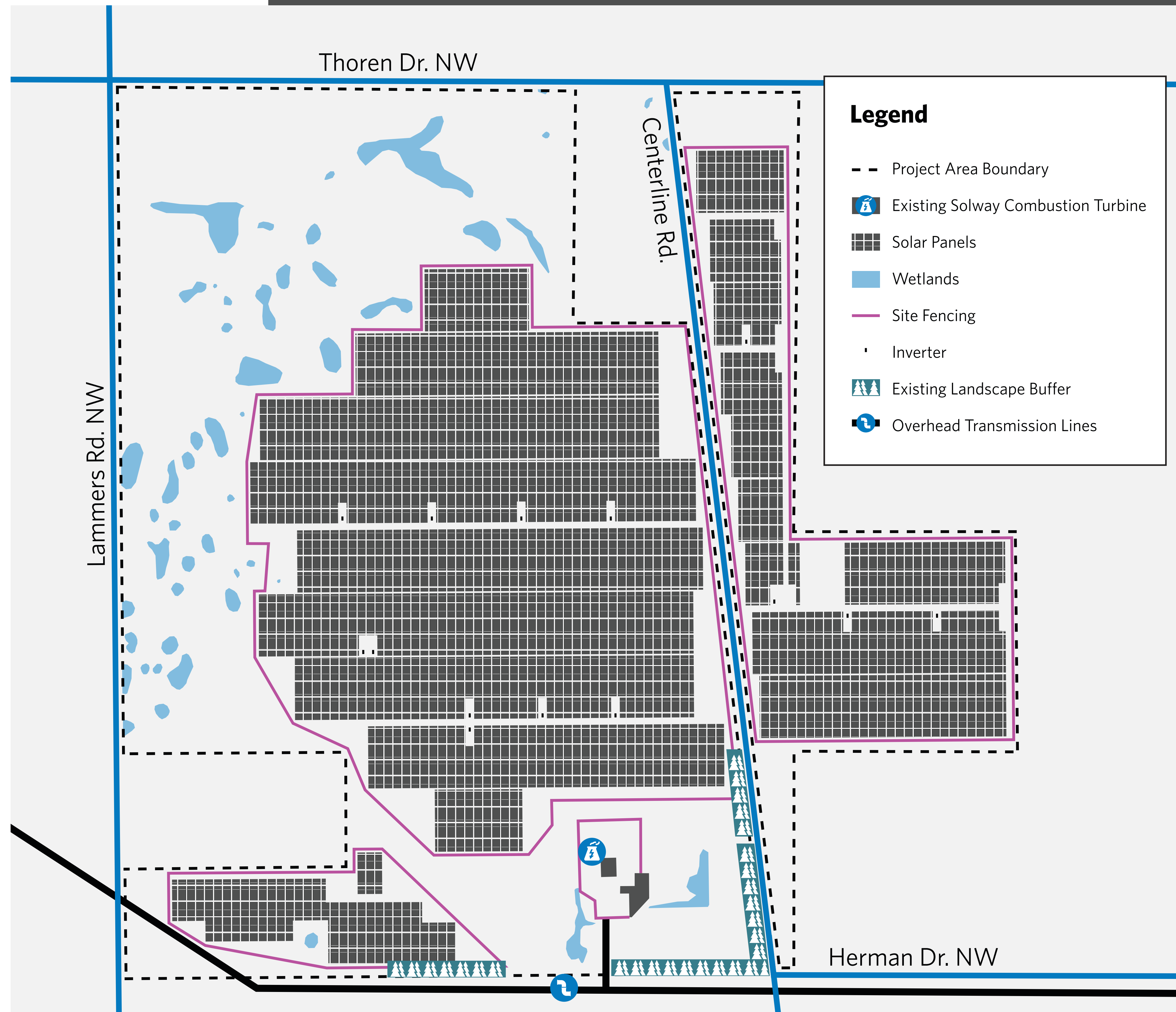


Aerial view facing east





# Preliminary design



## Single axis tracking system in north-to-south orientation

- 100,000 panels rotate from east to west to maximize efficiency
- 15 inverters
- Panel layout avoids impacts to wetlands
- Project interconnects with existing transmission line



# How solar technology works



- The sun is a giant nuclear reactor emitting vast amounts of energy in sunlight.
- Every hour, enough solar energy reaches Earth to power the entire planet for a year!



- When sunlight hits these cells, it knocks electrons loose, creating an electric current.
- This process is known as the photovoltaic effect.
- Solar panels, also known as photovoltaic (PV) cells, are made from materials like silicon that can absorb sunlight.



- The electricity generated by solar panels is direct current (DC).
- Most of our homes and appliances use alternating current (AC).
- An inverter converts DC into AC, making the electricity usable for everyday purposes.