



Coming this summer:

# Solar arrays at Beverly High School

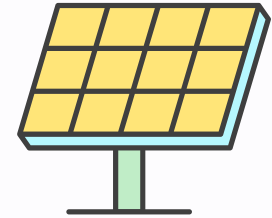
## Basic information

The City of Beverly partnered with Kearsarge Energy to develop 4.3 kW DC solar arrays across six properties, including Beverly Middle School and Beverly High School, to generate renewable energy credits, save money, and reduce carbon emissions.

Parking lots will not be available this summer as we build toward a clean energy future. Construction is on a tight schedule to minimize disruption to students. Here's what to expect over the next few months.

Middle School:

- Rooftop
- Parking Canopies



High School:

- Ground-mounted array, replacing the existing historic array from 1981
- Parking Canopies by the cafeteria entrance
- Battery storage

## Construction Schedule: Summer 2022

### June

- 16 Equipment, crew facilities, and fencing delivered; lighting relocated
- 20-23 Deconstruction of historic ground-mounted solar array
- Site preparation
- 24 After the last day of school, foundation construction begins

### July

- Steel canopy structures and solar panels are constructed

### August

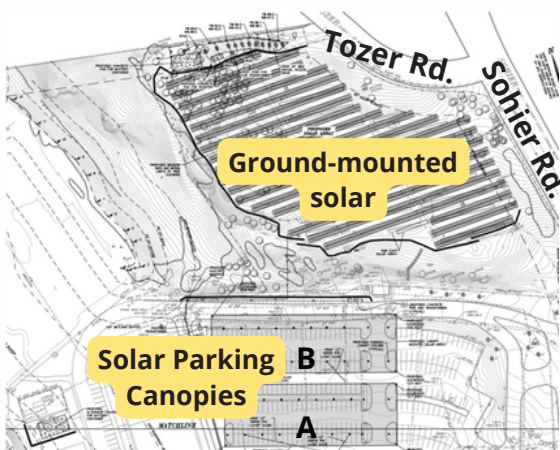
- Construction and electrical work continue
- Southern parking area (labeled "A") closest to school opens by August 28

### Sept.

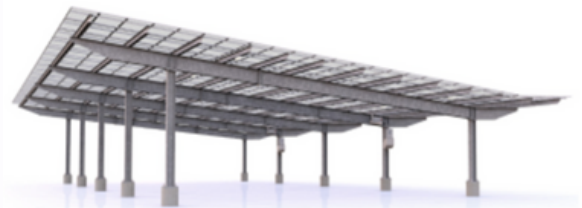
- Continued electrical work in northern parking area (labeled "B") may limit parking in the first few weeks of the school year.

### October

- Battery storage installed near basketball court



High School



Canopy Design: Long-span



# FAQs

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## How will construction impact students?

The construction schedule is designed to minimize disruption to students and families during the school year. During summer vacation, crews will build the parking canopy foundations, construct the canopies, and connect the solar panels to the electric grid.

Most parking will re-open by the start of the '22-'23 school year, but parking availability will be limited during September as the crew completes electrical work. This will not disrupt student learning. We will communicate any changes in parking protocol as the project advances.

## How does this project help our climate goals?

Our community's climate action plan, Resilient Together, strives to reduce carbon emissions by 50% by 2030. Combined with our existing solar portfolio, this City-wide solar project will help us offset nearly all municipal electricity consumption.

Each year, this project will avoid carbon emissions equivalent to 390,000 gallons of gasoline and equivalent to sequestering carbon from 4,000 acres of forest!

## How will the solar canopies be maintained?

Kearsarge Energy will monitor and maintain the solar canopies. During the winter, the City will continue to salt and plow snow in these parking lots.

## Will it be dark under the canopies? Will there be glare above?

Lights will be moved under the canopies to illuminate parking spaces. The materials are primarily steel, glass, and silicon, and the panels are designed to absorb light.

## What are the benefits to students?

Students will experience a daily reminder that their community is committed to fighting climate change. One row of the 1981 solar array at the High School, the oldest continuously operating solar field in the U.S., will be kept for educational purposes to demonstrate the evolution of solar technology. The project will include clean energy educational resources.

Practically, there may be less snow to remove from cars, more shelter from rain, and more shade in the warmer months.

## What are the financial benefits?

The City of Beverly will receive over \$1.1 M in revenue over the 20-year term, as well as electricity cost savings of ~\$937 K. The School Department currently benefits from discounted electricity through the purchase of renewable energy credits generated from our existing solar portfolio (solar farms by the airport and over the capped landfill on Otis Rd.).

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## Interested in learning more?

Visit [beverlyma.gov/473/Sustainability](https://beverlyma.gov/473/Sustainability) for project plans, slides, and presentation recordings.

Questions? Email [sustainability@beverlyma.gov](mailto:sustainability@beverlyma.gov) or call Erina (Sustainability Office) at 978-605-2332