

# Cypress Creek Renewables Typical Project Illustrations

Independent Solar, LLC

3 MW Community Solar Facility

206 Milton Turnpike, Milton, NY 12547

July 10, 2020

**Purpose:** To provide an example of a Cypress Creek Renewables developed, owned, and operated solar facility as a visual representation of Independent Solar. Each solar facility developed by Cypress Creek is designed in accordance with the local jurisdiction's guidelines. The facilities shown are 5 MW Cypress Creek solar projects located in Randleman and Garner, North Carolina and include images of a perimeter chain link fence, a gravel access road, ground-mounted solar panels, a DC-to-AC inverter, utility poles, a combiner box, and electrical wiring connecting modules. These photos were not manipulated as part of this assessment.

*Photo 1: Solar Facility from Public Road.*



This photograph shows the solar facility from a public road. Utility poles used to connect the facility to the electrical grid are shown to the right and far center of the photo. A 6-foot tall chain link fence with three strands of barbed wire is shown surrounding the perimeter of the site. Photo taken in the northeastern direction.

*Photo 2: Access Road and Distant View into Facility*



Gravel access road entering the site to the south. The road is approximately 20 feet wide and constructed using compacted gravel. Photo taken in the northeastern direction from the side yard of a neighboring property. No reflective light is observed.

*Photo 3: Ground-Mounted PV Modules, Diversion Swale, Perimeter Access Road, and Security Fence*



Ground-mounted PV modules taken from 15 feet. Stormwater diversion swale to the left of the frame. 15 foot native soil maintenance access road to the far left of the photo. 6-foot tall chain link security fence with three strands of barbed wire surrounding the full site. Photo taken in the northern direction.

*Photo 4: Central Inverter & Equipment Pad*



Central inverter on top set concrete pad. Inverter is typically 8' tall and inverts the DC electricity produced by the solar modules to AC electricity as utilized by the larger electricity grid. A small cooling fan is internal to the inverter box. Photo taken in the western direction.

*Photo 5: Central Inverter Height, as Compared to Average Human*



Central inverter on top set concrete pad. Height of inverter box is typically 8' tall, as compared to the average human height shown in the photo. Warning placards on the inverter box are shown. All access to the inverter is locked for safety purposes and in accordance with the National Electric Code. Photo taken in the western direction.

*Photo 6: Ground-Mounted PV Modules 1*



Polycrystalline silicon technology, fixed-tilt PV modules. Panels are typically three feet by six feet and connected in series. Modules shown are oriented two in portrait and do not exceed 12 feet in height at max tilt. Photo taken in the northern direction.

*Photo 7: Ground-Mounted PV Modules 2*



Photo of ground-mounted PV modules taken at two feet. Solar panels are safe to touch and encased in anti-reflective glass panes and aluminum frames. Photo taken in the northwestern direction.

Photo 9: Combiner Box



Combiner box connected to each string of modules. The combiner box "combines" multiple currents from multiple strings into a single current. The current then flows through trenched, underground cables to the inverter pad, transformer, and on to the electrical grid. Photo taken in the western direction.

*Photo 10: Back of PV Modules*



Wiring connections between each string of modules. Panels encased in aluminum framing and mounted on steel racking. Panels are connected by DC wiring that are funneled into a combiner box at the end of the string. Photo taken in the southern direction.