



**To:** Plan Commission/ZBA

Patrick Ainsworth, AICP, Community and Economic Development Director

**From:** Ronald Mentzer, Community & Economic Development Consultant

**Date:** April 17, 2025

Consideration of Case Number SU-25-2-4-1 - Request of Hendrickson USA LLC seeking approval for a Special Use Permit and Variations for a New Solar Array which is Classified as a Utility Facility under the Crest Hill Zoning Ordinance on a 4.8-acre area of land in a M-2 General Manufacturing District located at 501 Caton Farm Road in

**Re:** Crest Hill, Illinois

---

***Project Details***

Project	Utility Facility (Solar Array)
Request	Special Use for Utility Facility
	Variation for Surface Material
	Deviation from Curb Cut Width
Location	501 Caton Farm Road

***Site Details***

Building Sizes	N/A
Site Area	24.6 Acres

***Land Use and Zoning Summary***

	Land Use	Comp Plan	Zoning
Subject Parcel	Vacant & Manufacturing	Manufacturing	M-2
North	Stateville	Stateville	M-1
South	ComEd	Manufacturing	M-2
East	Manufacturing	Manufacturing	M-2
West	Cemetery	Community Facilities	M-1

---

**PROJECT SUMMARY**

Verde Solutions, on behalf of Hendrickson USA LLC (the "Applicant"), has submitted an application package for the City's potential approval of a Special Use Permit with Variations for the construction and operation of a 4.8-acre solar array to assist with powering the approximately 100,000 SF, Hendrickson Manufacturing Facility (see Attachment A for the Application). The Applicant has selected the vacant land to the west of their manufacturing facility to improve with the proposed solar array and an emergency vehicle only access road. The Applicant is proposing to limit land disruption and pave as little of the existing lot which presents a Variation request to improve the emergency vehicle access road with an engineered gravel material. There are two parcels within the entire property that are both owned by the Applicant. Since the solar array is improved on the vacant lot to the west and will power the existing manufacturing facility, both PINs are included in the Application (PIN 11-04-33-100-002-

0000 and 11-04-33-100-003-0000). The Applicant has operated at the current location for almost 50 years and are planning to update parts of their property over the next couple of years starting with the solar array.

### **Project Background**

In August 2024, the Applicant met with the Community Development staff to obtain preliminary feedback on the preliminary concept and see what the process was to move forward on this project. Community Development staff realized the project scope and determined that a Special Use was required size under the classification of Utility Facility. The Crest Hill Zoning Code defines the land use of Utility Facility below:

**UTILITY FACILITY:** A service and its related facilities which ostensibly provides for the benefit of the general utility services including, but not limited to: water, sanitary sewer, storm sewers, electrical, telephone, natural gas, radio, television, radar, Wi-Fi, and related utilities

The collective power generated from the solar panels will total approximately 1.185 megawatts which, is stated in the Application, can supply all of the annual power needed for the Hendrickson USA facility. Given the size of this project, the Lockport Fire Protection District was consulted on the access for this project and requested an access road in order to serve the property in the event of a fire or other emergency. A design solution was reached which will allow for an access road to be improved around the solar array for emergency vehicles only and will be improved with a subgrade fabric and  $\frac{3}{4}$ " stone size limestone gravel surface which was reviewed by the City Engineer. Improving the access road with asphalt or concrete would trigger stormwater detention requirements and thus would not make this project feasible for the Applicant. This access road will be within the fenced area and the access road *cannot* be accessed through Caton Farm (the only access is through their private property). I will be used for emergency vehicles only.

There are several additional steps that are being taken to assist with the design and placement of this project which includes maintaining an approximately 180 foot setback from Caton Farm Road, over 200 new live plantings will be added to the perimeter of this project to enhance the property's landscaped area, the entire solar array will be fenced off so no unauthorized personnel can access this area and the entrance into the solar array will be locked. The Lockport Fire Protection District will have access to the fenced off area in the event of an emergency.

If the Special Use and the Variation/Deviation requests are approved, the Applicant plans to start the permit process and construction of the solar array this year.

### **Planning, Zoning, and City Code Analysis**

**Zoning Ordinance and Crest Hill City Code Regulations** – The following subsections assess the submittals in relation to the Zoning Ordinance and the Crest Hill City Code. There are several components of the project to review in comparison to this document, hence there are multiple attributes of this project that are detailed below.

**Off Street Parking** – There are no parking requirements for a Utility Service given the notion that the solar array is an accessory use of providing renewable electricity to the primary manufacturing facility of the Applicant on the parcel to the east (PIN 11-04-33-100-003-0000). This is essentially an un-manned facility which will have a monitoring system and will require minimal maintenance during the lifespan of the solar array.

**Zoning Regulations for M-2 General Manufacturing District Related to the Solar Array Only**

Minimum Lot Area	1 Acre Required	24.6 Acres Provided
Accessory Structure Height	15 Foot Max Allowed Height	10.57 Feet Proposed
Front Yard Setback	30 Feet Required	Approx. 180 Feet Proposed
Interior Side Yard Setback	20 Feet Required	Approx. 77 Feet Proposed (West)
Interior Side Yard Setback	20 Feet Required	Approx. 297 Feet Proposed (East)
Rear Yard Setback	20 Feet Required	Approx. 142 Feet Proposed
Lot Coverage	85% Max Allowed	20.5% Presented
Access Road Surface Material	Dust free hard surface such as asphalt or concrete	<b>¾" Stone Size Limestone Material*</b>

\*Variance being requested for the emergency access road surface material.

As shown in the table above, all bulk regulations are in compliance between the proposed project and the Crest Hill Zoning Ordinance. Note, the solar array may have to move slightly based on final engineering review when comparing stormwater drainage patterns. Any slight adjustment will still conform to all setbacks and the maximum location adjustment will be no more than 10 feet. Also, the surface material of the access road is the requested Variance.

**Fencing Regulations** – Section 8.3-9.1.b of the Zoning Ordinance allows for fencing up to eight feet in height for non-residential zoned properties. The Applicant is proposing a six-foot-tall chain link fence with the addition of a one-foot barbed wire atop of the chain-link fence for a total height of seven feet. There are no restrictions on adding barbed wire to fencing in non-residential zoning districts. As such, the proposed fencing is in compliance with the Zoning Ordinance.

**Emergency Access Road Paving Material With Solar Array Project Area** – As mentioned above, the Applicant is requesting a variance for Zoning Ordinance Code Section 11.6-1 as all parking, drive and loading areas needs to be improved with asphalt, concrete or similar materials. In addition to this being an access road for emergency vehicles only, there is a known flood zone south of the subject property. The property with the flood zone is owned by ComEd.

Reducing the amount of impervious surface on this site will assist with drainage efforts for the area to the south. Additionally, according to the Will County Stormwater Ordinance, solar panels are exempt from site runoff storage requirements provided certain criteria are met (See the Stormwater Report in Attachment B for reference). According to the Stormwater Report all criteria for this proposed solar array have been met. Therefore, maintaining an access road with a subgrade fabric and a ¾" stone size limestone gravel material, in addition to the lack of impervious surfaces from the solar array, will cumulatively assist with drainage and reduce the need for additional stormwater detention facilities.

**Existing Driveways and Loading Area**– Since the Plat of Survey shows the driveway entrance from Caton Farm Road leading to the accessory building improved with a gravel surface, staff has worked with the Applicant to transition this surface from a gravel material to a dust free hard surface which will bring this portion of the property into conformity with the Zoning Ordinance. This particular improvement is less than 25,000 square feet which will not require stormwater detention requirements. A condition has been added to the staff recommendation regarding this matter.

Additionally, the driveway entrance on the eastern lot with the PIN of 11-04-33-100-003-0000 measures approximately 45 feet at the property line. Per City Code Section 15.04.040(I)(8), the maximum driveway width allowed is 30'. As such, another deviation/variation is being requested to

allow for a 45-foot-wide driveway. The Applicant plans to resurface all parking lot and drive aisle areas in the near future so it is prudent to request this City Code deviation now to assist the Applicant with these future improvements.

**Live Planting Requirement Section** – City Code Section 15.04.040(I)(2)(b)(2) states that 1 approved planting per 725 square feet of improved land area is required which results in a minimum of 313 plantings required for this site. The proposed landscape plan shows that 313 plantings will be provided with 99 live plantings and trees are already improved on site, and 216 live plantings are being added to the improved area. The number of live plantings complies with this code section.

**Comprehensive Plan** – The 2014 Crest Hill Comprehensive Plan is a land use guide to ensure logical and orderly growth of the community. With this notion, this document was reviewed in comparison to this project to ensure that this guide is being followed. That analysis is discussed below in more detail.

The City's 2014 Comprehensive Plan assigns this property as Light Industrial on the Future Land Use Map. Light Industrial is further defined within this document stating, "Industrial uses include activities related to the manufacturing, fabrication, storage, and assembly of a variety of goods and materials. Industrial uses in Crest Hill vary greatly in terms of external impacts and relationship to surrounding development. In some cases, large industrial areas are separated by major streets or open spaces".

Since the property is already improved with a manufacturing use and the Applicant is preparing to add a solar array to help power this facility, the proposed improvement is in-line with the Crest Hill Comprehensive Plan.

Additionally, under the Development Improvement Considerations section (pages 50-51), the following item was also stated about enhancements made to the industrial properties, "New infrastructure should be designed to provide flexibility for future expansions and retrofits, especially in Crest Hill's potential industrial growth areas. This will allow the City to evolve its systems to respond to emerging technologies and services in an effort to remain competitive for long-term economic development."

This recommendation establishes the notion of modernizing facilities with emerging utility technology that can assist our business community with new energy sources and provide an economic benefit which results in a more competitive advantage. The proposed solar array will generate enough power to fulfill all of Hendrickson USA's operations thereby allowing this local employer to maintain operations with a cost-effective alternative power source.

### **STAFF RECOMMENDATION**

Staff recommends that the Plan Commission approve of the requested Special Use and the Variances. Should the Plan Commission recommend approval to the City Council, then the following conditions shall be considered as part of the recommendation:

#### **Conditions of Approval:**

1. That the drawings submitted for a building permit shall be in substantial compliance with the drawings approved by City Council and identified below, unless otherwise noted in the remaining conditions:
  - Solar Ground Mount System Plans Engineered by PurePower Engineering last dated 3/28/2025

- Stormwater Management Permit Details Prepared by Hey and Associates Inc. Last Dated April 15, 2025
  - Structural Detail Drawings Created by DCE Solar Sheets 1 through 5 Last Dated 3/6/2025
  - Landscape Plans Created by Hey and Associates Inc. Last Dated 3/31/2025
2. The gravel driveway and loading area in the front of the accessory building on the property with the Permanent Index Number of 11-04-33-100-002-0000 shall receive a permit to transition this surface material to an approved surface material to be in compliance with Zoning Ordinance Section 11.6-1 and follow applicable construction standards. This specific area includes the driveway entrance from Caton Farm Road leading to the accessory building as well as to the gates of the solar array area. This permit shall be issued before May 19, 2026.
  3. The emergency access road containing the 3/4" limestone surface material shall be improved with a base material and construction method approved by the City Engineer. All details of the materials and construction methods shall be submitted with the building permit application for the solar array.
  4. The thickness of stone for the temporary construction access road should be at least two inches thick.
  5. Prior to permit issuance for the solar array the structural calculations report provided with through submittal will need to be signed and stamped by a Licensed Structural Engineer.
  6. A Fire Truck Turning Performance Analysis shall be provided for review and approval as part of the building permit application submittal for the solar array.
  7. If any new outdoor lighting is being proposed with this project, then a Photometric Plan shall be provided at time of submitting a building permit application to ensure compliance with applicable codes and regulations.
  8. All required final design drawings and related supporting project information shall be submitted for final engineering review and approval in conjunction with the formal building permit application submitted for the solar array.
  9. All new shade trees, ornamental trees, and evergreen trees proposed on north of the solar array shall be planted with a minimum height of six feet and a minimum of 2.5" caliber at time of planting.
  10. All conditions made with this Ordinance shall be transferred to any new property owner.

**Attachments:**

Attachment A – Plan Commission Application

Attachment B – Application Submittals and Drawings

**EXHIBIT A – AERIAL PHOTO OF SUBJECT PROPERTY LOCATION WITH ZONING OVERLAY**

