

**NOTICE OF SPECIAL MEETING OF THE CHEBOYGAN COUNTY PLANNING AND ZONING COMMISSION  
ON TUESDAY, AUGUST 11, 2020**

PLEASE TAKE NOTE THAT THE CHEBOYGAN COUNTY PLANNING AND ZONING COMMISSION WILL HOLD A SPECIAL MEETING SCHEDULED FOR TUESDAY AUGUST 11, 2020 at (7:00 P.M.) The meeting will be a “hybrid” meeting in that participants may attend remotely, telephonically or in-person (as permitted by Cheboygan County Resolution 2020-06 and Governor’s Executive Order subject to extension to prevent the spread of Coronavirus Disease COVID-19). The in-person meeting will be at the Cheboygan County Building at 870 S. Main Street, Cheboygan, Michigan. *Please note that if the Commissioners’ Room reaches occupancy capacity, physical attendees will be able to listen to and view meeting proceedings from the Circuit/District Court Rooms in the County Building.*

Also note that you may join the meeting remotely from your computer, tablet or smartphone via the following link. (Visit the County’s Website for additional remote participation instructions):

Please join the meeting from your computer, tablet or smartphone.

<https://global.gotomeeting.com/join/891817693>

The public may also access the meeting telephonically by dialing:

United States (Toll Free): [1 866 899 4679](tel:18668994679)

Access Code: 891-817-693

Those who are hearing impaired can dial 7-1-1 as a free service in Michigan. Provide the operator the toll free number and access code above to be connected.

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Those that are hearing impaired may dial 7-1-1. Please provide the operator the toll free number and meeting access code to be connected to the phone call with help from MI Relay. If other aids and services are needed for individuals with disabilities please contact the County Clerk. The Planning Commission packet is available for download at: [www.cheboygancounty.net](http://www.cheboygancounty.net).

**TELEPHONIC/ELECTRONIC PLANNING COMMISSION MEETING PARTICIPATION**

The public will be asked to identify themselves. When you call please state your name until acknowledged for the record.

- Public comment—will be taken only during the Public Comment portion of the meeting agenda.
- Please make your public comment when called upon to do so or state no comment.
- The time limit for an individual’s public comments shall be 3 minutes.

The following Planning Commission members will be attending the meeting remotely:

- Patty Croft, [pmattson@freeway.net](mailto:pmattson@freeway.net)
- Harold Borowicz, [hborowicz@yahoo.com](mailto:hborowicz@yahoo.com)
- Michael Kavanaugh, [kavandann@gmail.com](mailto:kavandann@gmail.com)
- Stuart Bartlett, [sbartlett@cheboygancounty.net](mailto:sbartlett@cheboygancounty.net)
- Sharon Lyon, [sjl07@juno.com](mailto:sjl07@juno.com)
- Karen Johnson, [karenjohnson@sbcglobal.net](mailto:karenjohnson@sbcglobal.net)
- Ed Delana, [edelana@cheboygancounty.net](mailto:edelana@cheboygancounty.net)
- Charles Freese
- Chum Ostwald
- Cheboygan County Director of Planning and Zoning – Michael Turisk [mturisk@cheboygancounty.net](mailto:mturisk@cheboygancounty.net)



# CHEBOYGAN COUNTY PLANNING COMMISSION

870 SOUTH MAIN ST. ■ PO BOX 70 ■ CHEBOYGAN, MI 49721  
PHONE: (231) 627-8489 ■ FAX: (231) 627-3646

CHEBOYGAN COUNTY PLANNING COMMISSION SPECIAL MEETING  
TUESDAY, AUGUST 11, 2020 AT 7:00 PM  
ROOM 135 - COMMISSIONERS ROOM  
CHEBOYGAN COUNTY BUILDING, 870 S. MAIN ST., CHEBOYGAN, MI 49721

## AGENDA

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

APPROVAL OF AGENDA

APPROVAL OF MINUTES

SCHEDULED PUBLIC HEARINGS

UNFINISHED BUSINESS

1. Orion Renewable Energy Group, LLC - The applicant requests a Special Use Permit for a Level 3 Solar Energy System - Photovoltaic (SES-PV), per Sections 9.3.27 and 10.3.16 of the Zoning Ordinance for construction of a "solar farm"/utility-scale solar energy generating facility in Grant Township. The subject properties are zoned Agriculture and Forestry Management (M-AF) and Lake and Stream Protection (P-LS) and are located approximately 13 miles southeast of the City of Cheboygan, along N. Black River Road, south of Twin Lakes Road and bounded by Ross Road to the south and Page Road to the north, Chamberlin Road to the east and Trudeau Road to the west. The subject properties are in sections 4, 5, 6, 8 and 9 and encompass approximately 1,572 acres on 31 parcels, tax parcel id numbers:

- |                        |                        |                        |
|------------------------|------------------------|------------------------|
| 1. 151-009-200-001-05  | 12. 151-008-300-007-00 | 23. 151-009-400-002-00 |
| 2. 151-006-100-004-00  | 13. 151-008-400-001-00 | 24. 151-009-200-002-00 |
| 3. 151-006-300-001-02  | 14. 151-008-200-001-02 | 25. 151-009-400-001-00 |
| 4. 151-006-100-005-00  | 15. 151-009-300-001-00 | 26. 151-009-200-003-00 |
| 5. 151-006-200-003-00  | 16. 151-009-100-003-00 | 27. 151-004-401-001-00 |
| 6. 151-006-200-005-00  | 17. 151-009-300-004-00 | 28. 151-005-100-001-00 |
| 7. 151-006-400-001-05  | 18. 151-009-400-004-00 | 29. 151-005-300-004-00 |
| 8. 151-008-400-003-00  | 19. 151-009-400-003-00 | 30. 151-005-300-008-00 |
| 9. 151-008-400-004-00  | 20. 151-009-200-001-07 | 31. 151-006-200-002-00 |
| 10. 151-008-100-004-00 | 21. 151-009-300-003-00 |                        |
| 11. 151-008-300-006-00 | 22. 151-009-100-004-03 |                        |

NEW BUSINESS

STAFF REPORT WITH UPDATE ON MASTER PLAN REVISION

PLANNING COMMISSION COMMENTS

PUBLIC COMMENTS

ADJOURNMENT

# CHEBOYGAN COUNTY PLANNING COMMISSION

Orion Renewable Energy Group, LLC

## REVISED Exhibits List

***\*Note that Exhibits numbered 3 – 28 were previously distributed to the Planning Commission (prior to the June 3 meeting/public hearing)***

***\*Exhibits numbered 29-37 were also previously distributed to the Planning Commission (after the June 3 meeting/public hearing)***

***\*Exhibits 38 – 41 are included in this meeting packet***

1. Cheboygan County Zoning Ordinance
2. Cheboygan County Master Plan and Future Land Use Map
3. Site Plan Review Application (9 Pages)
4. Special Use Permit Application (9 Pages)
5. Lease Agreements (37 Pages)
6. Applicant Letter with Applications Responses dated February 25, 2020 (22 Pages)
7. Exhibit A – Site Plan (12 Pages; 22-in. x 33-in.)
8. Exhibit A-1 – List of Parcels (1 Page)
9. Exhibit B – Health and Safety Impacts of Solar Photovoltaics (19 Pages)
10. Exhibit C – Zoning Overlay Detail Map (1 Page)
11. Exhibit D – Sound Simulations (28 Pages)
12. Exhibit E – Visual Simulations (14 Pages)
13. Exhibit F – Property Valuation Report (108 Pages)
14. Exhibit G – Emergency Safety and Fire Plan (2 Pages)
15. Exhibit H – Preliminary Vegetative Management Plan (6 Pages)
16. Exhibit I – Structural Specifications (40 Pages)
17. Exhibit J – Decommissioning and Final Reclamation Plan (2 Pages)
18. Exhibit K – Property Tax Contribution (1 Page)
19. Mailing List (8 Pages)
20. Email from Brent Shank, Cheboygan County Road Commission dated March 9, 2020 (1 Page)
21. Email from Kyle Keller, Environmental Sanitarian, District Health Dept. No. 4, dated March 13, 2020 (1 Page)

22. Letter from Amanda Hoffman, Project Development Manager, Orion Renewable Energy, LLC, dated April 23, 2020 (2 Pages)
23. Email from Sharen Lange, President, Cheboygan Economic Development Group, dated April 28, 2020 (2 Pages)
24. Email from Amanda Hoffman, Project Development Manager, Orion Renewable Energy, LLC, dated April 29, 2020 (1 Page)
25. Letter and associated documents from Eryn Eustice dated May 1, 2020 (44 Pages)
26. Email from Bill E. Wisniewski dated May 10, 2020 (2 Pages)
27. Email from Eric Boyd dated June 3, 2020 (1 Page)
28. Hard copy of PowerPoint presentation, Orion Renewable Energy Group, LLC (25 Pages)
29. Orion Renewable Energy Group, LLC - June 3 Public Hearing Follow-up Questions for Orion Renewable Energy Group (6 Pages)
30. Orion Renewable Energy Group, LLC - Amended Site Plan, Sheets C-002; C-101 and C-102 (Exhibit A) (3 Pages)
31. Orion Renewable Energy Group, LLC - Enlarged Panel View (1 Page)
32. Orion Renewable Energy Group, LLC - Glint and Glare Analysis dated June 9, 2020 (5 Pages)
33. Orion Renewable Energy Group, LLC - Revised Preliminary Vegetation Management Plan (Exhibit H) dated June 10, 2020 (4 Pages)
34. Orion Renewable Energy Group, LLC - Revised Page 2 of Property Valuation Report (Exhibit F)(1 Page)
35. Orion Renewable Energy Group, LLC/Cohn Reznick - Additional Information on Solar Array Impact on Adjacent Real Estate (Exhibit F) dated June 16, 2020 (11 Pages)
36. Orion Renewable Energy Group, LLC/Schoener Environmental, Inc. – Michigan Department of Natural Resources Consultation: Game Species dated June 19, 2020 (1 Page)
37. Orion Renewable Energy Group, LLC – Summary of Proposed Site Plan Changes dated June 19, 2020 (6 Pages)
38. Michigan Department of Agriculture and Rural Development (MDARD) Policy for Allowing Commercial Solar Panel Development on PA 116 Lands (4 Pages)
39. Revised Staff Report (11 Pages)
40. Draft Findings of Fact (33 Pages)
41. Draft Findings of Fact submitted by Orion Renewable Energy Group, LLC (15 Pages)

Note: Planning Commission members also have Exhibits 1 (Cheboygan County Zoning Ordinance No. 200) and 2 (Cheboygan County Master Plan and Future Land Use Map)



# CHEBOYGAN COUNTY

## PLANNING AND ZONING DEPARTMENT

CHEBOYGAN COUNTY BUILDING ■ 870 S. MAIN ST., PO BOX 70 ■ CHEBOYGAN, MI 49721  
PHONE: (231) 627-8489 ■ FAX: (231) 627-3646; [www.cheboygancounty.net/planning/](http://www.cheboygancounty.net/planning/)

### STAFF REPORT

<b>Item/Requested Action:</b> A request for a special use permit for a Level 3 Solar Energy System - Photovoltaic (SES-PV) per Sections 9.3.27, 10.3.16 and 17.30.6.C of the Zoning Ordinance	<b>Prepared by:</b> Michael Turisk
<b>Date:</b> <i>Revised August 4, 2020</i>	<b>Expected Meeting Date:</b> <b>TUESDAY, AUGUST 11, 2020</b>

### GENERAL INFORMATION

#### **Property Owners (per Exhibit A-1; *List of Parcels – previously distributed*):**

Tromble Bay Farms II, LLC  
Tromble Bay Farms III, LLC  
Rick and Michele Tromble  
Beethem Properties  
David and Michele Wolf  
Lisa A. Herron

#### **Applicant:**

Orion Renewable Energy Group, LLC

#### **Contact and Phone:**

Amanda Hoffman, Project Development Manager, Orion Renewable Energy Group, LLC; 503.476.4883

#### **Property Location:**

The subject properties are located in Grant Township and generally located 13 miles southeast of the City of Cheboygan along N. Black River Road, south of Twin Lakes Road and bounded by Ross Road to the south and Page Road to the north, Chamberlin Road to the east and Trudeau Road to the west.

### BACKGROUND INFORMATION

The applicant requests a special use permit to construct and operate a Level 3 Solar Energy System – Photovoltaic (SES-PV), per Sections 9.3.27, 10.3.16 and 17.30.6.C of the Zoning Ordinance. The project site for the “Cheboygan Solar Project” (“Project”) is generally located 13 miles southeast of the City of Cheboygan in Grant Township.

Furthermore:

- Would encompass approximately 1,566 acres on 31 leased and private parcels zoned Agriculture and Forestry Management (M-AF) and Lake and Stream Protection (P-LS). (see *Exhibit A (Site Plan); Sheet C-203*)
- Photovoltaic (PV) solar modules and supporting equipment and infrastructure would be located within a fenced, approximately 785-acre Project area of which approximately 212 acres would be covered by PV. (PV modules arrange individual PV cells and are grouped into an *array*.)
- The Project's arrays would be mounted on single-axis tracking systems (see *Exhibit A (Site Plan); Sheet C-203*) that facilitate maximum solar absorption efficiency and productivity by allowing arrays to track the sun's path throughout the day (unlike stationary or static arrays). PV panels would reset to the east in the evening or early morning to receive sunlight at sunrise. The typical maximum height of PV arrays would be less than 10 feet and would not exceed the maximum 20-foot standard.
- The dimensions of PV arrays would vary. They would be oriented north-south given the use of single-axis tracking devices.
- PV generates direct current (DC) electricity; therefore, electricity generated by the Project would be fed underground to approximately 40, 3,550 kW (kilowatt) inverters that convert DC output to alternating current (AC). (see *Exhibit A (Site Plan); Sheet C-202*)
- Transformer-generated power would be routed to a Project point-of-interconnect (POI) substation or switchyard that would be accessed via Owens Road. The Project substation would include a larger transformer that "steps up" medium voltage to the 138 kilovolts (kV) of the adjacent transmission line to facilitate distribution to the grid (see *Exhibit A (Site Plan); Sheets C-206 and C-207*).
- An operations and maintenance (O & M) building would be constructed between Twin Lakes Road and Hanson Road, at the west side of Owens Road and near to the overhead electric right-of-way (see *Exhibit A (Site Plan); Sheet C-204*). Typical operations and maintenance activities that would occur include, but would not limited to, liaison and remote monitoring; inverter operation; security and management; and repair and maintenance.
- The Project is designed to produce up to 91 megawatts (MW) of electricity at the point of interconnection to the grid and for distribution to a regional power provider. (The average number of homes powered per MW of PV varies from state to state due to several factors, including average sunshine [*insolation*] and average household electricity consumption. However, since 2012 the national average has ranged from 150 – 210 homes per MW).

- Modules would be specifically designed with light-trapping and antireflective characteristics to maximize light absorption efficiency, and minimize reflection and consequent significant glare potential.
- The primary component of the Project is expected to be constructed in approximately nine to 14 months, weather dependent. The Project may be built in phases if full capacity is not achieved in the first phase.
- Landscape Details, per *Exhibit A (Site Plan); Sheet L-101*, include four Plant Modules with Modules 1 and 2 to be installed and maintained to serve residential screening purposes and Modules 3 and 4 intended for public and private road rights-of-way screening.
- An emergency response plan would be prepared in coordination with local emergency service providers that would ensure 24/7 access and provide contact information for operations personnel. The emergency response plan would include lockboxes for access gates, with keys to be provided to emergency services personnel.
- Chain link and woven wire fencing would be installed as a security measure. (*See Exhibit A (Site Plan); Sheet C-205*).
- The Project would create approximately 200 construction jobs, and two to four full-time maintenance and operations jobs according to the applicant.
- Exhibit A (Site Plan); Sheet C-201 (*General Notes and Details*) provides plan notes regarding code compliance, electrical interconnection, height restrictions, landscaping, required and applicant-imposed setbacks and temporary staging/unloading areas. Further, details are provided for pole-mounted lighting fixtures, access road and gravel access road section.
- Once commissioned and operational, the anticipated useful Project life is 30 years at a minimum.
- A special use application/site plan waiver is requested from the requirement that site plans be drawn at 1 inch = 100 feet or less.

**Surrounding Zoning and Land Uses:**

The zoning of the subject properties and immediate area is Agriculture and Forestry Management (M-AF) and Lake and Stream Protection (P-LS). Land uses are predominately agricultural with scattered “rural-residential” home sites.

**Environmentally Sensitive Areas (steep slopes, wetlands, woodlands, stream corridor, floodplain):**

No identified environmentally sensitive areas of significance, such as Critical Habitat, occur within or near to the nearly 1,600-acre project site. Although the leased area encompasses almost 1,600 acres, solar modules (groups of photovoltaic cells), and supporting infrastructure would be within a fenced area of approximately 862 acres. The application indicates that effort would be made to minimize or avoid

impacting wetlands and vegetation during clearing, grubbing, grading and construction within Lake and Stream Protection zoning. The applicant indicates that all requisite Federal and State permits would be obtained in order to comply with applicable environmental regulations. Although not required by the Zoning Ordinance, the Project proposes native lawn and plant seed mixes and various “pollinator friendly” plantings that would enhance wildlife habitat and attract various pollinators. (See Exhibit 33 [Orion Exhibit H]; *Preliminary Vegetative Management Plan*)

**Historic Buildings/Features:**

There are no known historic buildings or features on the subject properties.

**Traffic Implications:**

There will be a temporary, but likely noticeable influx of traffic movements during site preparation and construction. However, due to minimal maintenance requirements, this project is expected to generate negligible traffic impacts at the commissioning and operation phase. Traffic control would be used as needed to ensure that people are aware of the presence of crossing or slow-moving construction vehicles. A recommended condition of approval would require the repair of any damage to existing roadways caused by construction vehicles following construction, or during construction as necessary, to maintain safe driving conditions.

**Access and street design: (secondary access, pedestrian access, sidewalks, residential buffer, ROW width, access to adjacent properties):**

Construction, operations and maintenance personnel would primarily use Twin Lakes Road, Hanson Road and Owens Road (collectors) to arrive and depart via the Project’s proposed 21 access points. (See *Exhibit 30 [Orion Overall Map C-002]*):

- One access point along Page Road;
- Two access points along the east side of Trudeau Road;
- Two access points along Hanson Road;
- Two access points along Ross Road;
- Four access points along North Black River Road;
- Five access points along Twin Lakes Road; and
- Five access points along Owen Road.

Sheet C-201 of Exhibit 7 (Orion Exhibit A) provides detail regarding the proposed design and dimensional characteristics of access driveways and unimproved internal roads. The Project would be required to comply with all applicable minimum design standards for non-residential driveways and approaches.

**Signs:**

The Project will position construction-related signs so as not to interfere with driver visibility and vehicle safety, including positioning signs at least 25 feet from road intersections.

**Setbacks:**

Per Section 17.30.6.C., the minimum setbacks for Level 3 Solar Energy Systems – SES PV are as follows:

All Level 3 SES-PV Systems along with their supporting structures, inverters and supporting buildings and equipment (excluding fencing, vegetative screening, berms, roads, underground cables and generator system step-up transformer facilities) shall comply with:

- a) **100 feet from any dwelling. This setback may be waived or reduced if requested by the owner of the dwelling to be screened.**

The Project would be compliant with this setback standard as depicted by 100 foot radii surrounding existing residences in proximity to the Project.

- b) **50 feet from any Level 3 SES-PV Facility perimeter not abutting a private or public road unless requested to be waived by the property owner of the parcel to be screened.**

The Project would comply with this setback standard as depicted by the 50 foot setback line as depicted by the single dash line surrounding existing residences in proximity to the Project and shown in Exhibit 30 (Orion Exhibit A; *Sheets C-002; C-101 and C-102*).

- c) **50 feet from any public or private road right of way.**

The Project would comply with this setback standard by the 50-foot setback line as depicted by the two dash line shown along the 66 foot road rights-of-way in Exhibit 30 (Orion Exhibit A; *Sheets C-002; C-101 and C-102*).

- d) **500 feet from any major body of water as listed in section 10.1.2.**

Not applicable

- e) **40 feet from any perennial stream, other than those listed in Section 10.1.2, shown as part of the P-LS zoning district. However, underground cables may be allowed if permitted by the Michigan Department of Environmental Quality (MDEQ) and the Army Corps of Engineers.**

The Project would comply with this setback standard as depicted by the delineated wetlands and streams/50-foot buffer shown in Exhibit 30 (Orion Exhibit A; *Sheets C-002; C-101 and C-102*).

**ii. The generator system step-up transformer facility and any electrical storage facility shall meet the following setbacks:**

- a) **500 feet from any dwelling.**

The Project would comply with this setback standard as depicted by the *Proposed Substation Footprint* shown in Exhibit 30 (Orion Exhibit A; *Sheets C-002; C-101 and C-102*).

- b) 250 feet from any public or private road abutting the Level 3 SES-PV Facility perimeter of or bisecting the project.**

The Project would comply with this setback standard as shown in Exhibit 30 (Orion Exhibit A; *Sheets C-002; C-101 and C-102*).

- c) 500 feet from the ordinary high water mark of any body of water listed in Section 10.1.2.**

Not applicable

**iii. All tree plantings utilized for screening shall have setbacks of seven (7) feet from any property line, public or private road right(s)-of-way, utility or driveway easement(s) or the Level 3 SES-PV Facility perimeter. The seven (7) foot setback shall be measured at the time of planting from the center of the trunks of the trees used for screening.**

The Project would comply with this setback standard as shown in Exhibit 30 (Orion Exhibit A; *Sheets C-002; C-101 and C-102*).

**iv. Fencing shall be no closer than one (1) foot from any property line, public road right(s)-of-way, utility or driveway easement(s) or the established Level 3 SES-PV Facility perimeter. Fencing is considered a security measure and cannot be considered as adequate screening for a Level 3 SES-PV System.**

Note that *Exhibit A; Sheet C-201* indicates two distinct applicant-imposed setbacks, including 50 feet from any delineated wetland or stream, and 250 feet from existing dwellings (100 feet is the minimum standard).

**Noise:**

Photovoltaic (PV) arrays do not generate sound alone; however, supporting hardware, such as tracking motors, integrated inverters (via cooling fans, for example), and medium- and high-voltage transformers, do so. (Given that PV arrays alone do not generate electricity in the absence of sunlight, minimal noise impacts would be experienced during nighttime hours and overcast conditions).

Sound propagation modeling was performed (see Exhibit D; *Sound Simulations*) to determine Project compliance with the maximum allowable 60 dBA (A-weighted decibels) standard, per Section 17.30.6.C. Results indicate that maximum sound from a given property line would be 49 dBA, near to the proposed Project substation at the west side of Owens Road (south of its intersection with Twin Lakes road). The nearest residence would be approximately 260 feet from any tracking motor, with 45 dBA documented as the maximum. The nearest residence would be approximately 670 feet from any inverter and approximately 850 feet from the high-voltage transformer. (See Exhibit 11 [Orion Exhibit D; *Sound Simulations*]; Figure 4: *A Scale of Sound Pressure Levels for Typical Sound Sources*). This is a useful reference in that it offers examples of common sounds and their respective decibels.

**Fence/Hedge/Buffer/Screening:**

Landscaping and screening are required project elements for Level 3 Solar Energy Systems - Photovoltaic (SES-PV), per Section 17.30.6.C. As noted in Exhibit A (Sheet L-101; *Landscape Details*), the applicant proposes four distinct Plant Modules that would be sited according to current conditions and anticipated build-out conditions to serve as screening the Project from public rights-of-way and residential uses, in particular, as well as to maintain and enhance landscape aesthetics and wildlife habitat. Existing vegetation would be maintained and integrated where appropriate with landscaping/Plant Modules.

Photo simulations have been provided to depict the Project's appearance from eight locations or simulation points around the Project site, and at different stages of woody vegetation growth.

Photo simulations include required setbacks and three simulations include landscaping at the time of planting and at the 10-year mark. (See Exhibit 12 [Orion Exhibit E]):

**ViewPoint 1** - Twin Lakes Road just east of North Black River Road looking southeast

**ViewPoint 2** - Hanson Road just west of Chamberlain Road looking south

**ViewPoint 3** - Intersection of Hanson Road and Owens Road looking northeast

**ViewPoint 4** - Ross Road just east of Owens Road looking north

**ViewPoint 5** - Twin Lakes Road just west of Chamberlain looking northwest

**ViewPoint 6** - Twin Lakes Road between North Black River Road and Owens Road looking southeast

**ViewPoint 7** - Twin Lakes Road just east of North Black River Road looking northeast

**ViewPoint 8** - North Black River Road, north of Twin Lakes Road looking northwest

**Parking:**

Three temporary staging areas to allow for unloading equipment, materials and provide construction-related and employee vehicle parking would be located just west of North Black River Road, at the north side of Twin Lakes Road (east of its intersection with Trudeau Road), and at the east side of Trudeau Road (near to the western terminus of the Project Area). These staging areas would be restored after construction is completed.

There are no parking requirements for this use. However, the Zoning Ordinance requires one space per two employees. Two to four full-time operational maintenance and security personnel are expected at the time of commission and operation; therefore, a minimum of two parking spaces would be required.

**Lighting:**

The Applicant has indicated that the Project would be in full compliance with the applicable standards as set forth in Sections 3.7 and 20.10 of the Zoning Ordinance. Exhibit A shows the locations of all lighting within the proposed facility and Sheet C-201 (General Notes and Details) indicated that pole-mounted fixtures would be 18 feet in height from grade. During operations, lighting would not be needed under typical nighttime periods. It would be only during occasional unscheduled maintenance situations will motion- and/or manually-activated illumination be needed. Since maintenance activities are not typically carried out during the evening hours, lights will only be turned on as needed.

Localized security lighting may also be employed during construction and operations. Perimeter and safety lights will be installed and used only on an as-needed basis for emergencies or security. Manually or motion activated lighting would be provided at points of site ingress and egress, any operations and maintenance, and the Project substation.

The on-site Project substation will include lighting to allow for safety inspections or maintenance that may be required during nighttime hours. Lighting would also be provided adjacent to the operations and maintenance building and mounted at the site entrance gates to allow for safe entry and exit. All lighting will be shielded and downward-directional to minimize light trespass.

### **Stormwater Management:**

Relatively flat sites are ideal for Level 3 Solar Energy Systems/utility-scale solar energy development. The topography within the Project site is generally consistent, ranging from approximately 185 feet to 200 feet above mean sea level.

The greatest elevations occur at the northwestern to the southeast corners of the Project area. Lower elevations occur at the southwestern Project area where the land slopes gently downward toward the Black River. The *Revised Preliminary Vegetative Management Plan (Exhibit 33; Orion Exhibit H)* presents an overview of methods or best management practices for stormwater management, through minimizing erosion and sedimentation loads into nearby waterways and improving soil conditions. The primary objectives of the Vegetative Management Plan are to preserve and enhance aesthetic value of the project site and preserve and restore natural habitats that would be resistant to invasive species, particularly herbaceous plants. The Plan also articulates the site enhancements that intend to create habitats to attract various pollinators (e.g., bees; butterflies) and how vegetative corridors would be maintained along on-site streams to the greatest extent practicable. Ultimately, a final, detailed vegetation management plan would be developed based on the preliminary plan to help to guide the implementation of vegetation management efforts during construction, operations and maintenance.

The Final Vegetative Management Plan would also acknowledge the requirement to comply with the Department of Environment, Great Lakes and Energy (EGLE) Soil Erosion and Sedimentation Control Program, Part 91. To minimize negative hydrological impacts, a proposed condition of approval speaks to restoring development-impacted on-site watercourses to pre-development conditions following construction, except for drainage features specifically designed to mitigate drainage impacts.

Long-term maintenance protocols to manage cover would include mowing to preclude woody plant and noxious weed encroachment, with controls using mechanical and herbicidal methods. The project site would be evaluated annually for replanting/reseeding in order to maintain adequate and viable ground cover throughout the Project's life cycle.

### **Master Plan and Future Land Use Map:**

The project site/subject properties are within designated Forest/Agriculture on the Cheboygan County Future Land Use Map. A land use goal identified in the County's Master Plan ("Plan") is to "provide opportunities for safe and efficient use and transport of energy sources."

Relevant strategies identified in the Plan for meeting said goal include “allow for appropriate use and transport of all forms of energy” and “ensure opportunities for development of renewable energy that maximizes sustainable use of natural resources and retains energy dollars in the local economy.”

**Public Comment:**

Prior to application submittal, the applicant hosted an open house at the Cheboygan Public Library on February 10, 2020. In response to feedback received. The site plans presented at the open house were amended to show the removal of a row of PV at the south side of the Project along Ross Road in order to provide additional buffer for nearby residents.

The Planning and Zoning Department mailed Notices of Hearing on March 3, 2020 and May 19, 2020 to surrounding property owners within 300 feet of the subject properties. As of July 6, 2020, a letter of support has been received by the President of the Cheboygan Economic Development Group (Exhibit 23 – previously distributed), as well as three (3) written responses from property owners in the vicinity of the site , including an email/ letter with a list of project-related questions submitted, with the second letter including an analysis of the proposed project. Concerns expressed during the public hearings on June 3 and 17 include:

- The potential for property values to be negatively impacted.
- The potential for negative visual impacts.
- The potential for radiation that might harm people and domestic and wild animals.
- The potential for pesticides and chemicals to impact ground water resources.
- The potential for impact upon wireless reception in the area.
- The proposed location of the Project substation off of Owens Road.

The applicant addresses a number of the aforementioned concerns in the submitted *June 3 Public Hearing Follow-up Questions for Orion Renewable Energy Group*. (Exhibit 29 – previously distributed)

**Review or permits from other government agencies:**

The applications, site plans and supporting documents were provided to the Grant Township Supervisor, County Road Commission, District Health Department No. 4, Michigan Department of Transportation (MDOT), Alverno Fire Department, the County Administrator, the County Building Official, the Michigan Department of Natural Resources. As of the date of this revised memorandum, staff has received comments from the County Road Commission (Exhibit 20 – previously distributed) regarding the need for driveway permits for all access points and review of the vegetative screening/Vegetative Management Plan prior to commencing work. In addition, the District Health Department No. 4 (*Exhibit 21* – previously distributed) indicated that a commercial on-site sewage disposal permit for the operations and maintenance building is required.

In their letter to the Planning Commission dated June 9, 2020, Schoener Environmental, Inc. indicates that various staff with the Michigan Department of Natural Resources (MDNR) were contacted about the potential impacts on wildlife corridors and big game species such as white-tailed deer and black bear.

According to the letter dated June 19, 2020, the MDNR does not generally comment on potential impacts to game species for projects on private property. The letter also indicates a phone conversation with MDNR staff that suggested minimal potential impact to wildlife movements from utility-scale solar development. (*Exhibit 36* – previously distributed)

**Recommendations (proposed draft conditions of approval):**

1. The applicant shall comply with requirements for Level 3 Solar Energy Systems – SES-PV, per Section 17.20 of the Zoning Ordinance, as applicable.
2. Prior to issuance of any County Department of Building Safety building permits, the Project shall be in compliance with the Department of Environment, Great Lakes and Energy's (EGLE) Soil Erosion and Sedimentation Control Program, Part 91, as applicable.
3. Prior to construction or commencing with construction preparation activities including, but not limited to, land clearing, grubbing and/or grading, the applicant shall obtain County Department of Building Safety permits, as applicable.
4. Prior to construction, the applicant shall obtain all County Road Commission permits, as applicable, and submit written confirmation of compliance with County Road Commission requirements with regard to fencing and screening installations.
5. The applicant shall repair any damage to existing roadways caused by construction vehicles following construction, or during construction as necessary, to maintain safe driving conditions.
6. To minimize negative hydrological impacts, the applicant shall restore development-impacted on-site watercourses to pre-development conditions following construction (except for drainage features specifically designed to mitigate drainage impacts).
7. The Project shall comply with District Health Department No. 4 requirements, as applicable.
8. Herbaceous and woody vegetation installed and utilized as ground cover and screening purposes shall be maintained for the duration of the useful life of the Project. In addition, dead, dying and diseased herbaceous and woody vegetation shall be replaced as needed for the duration of the useful life of the Project.
9. Transformers that will serve the project shall be specified to be 5 dBA lower than the National Electrical Manufacturer's Association (NEMA) TR-1 standard sound levels.
10. Prior to building permit issuance the applicant shall provide a crossing agreement with the utility holding the power line easement for that portion of Section 6 along North Black River Rd. where an access point is proposed.
11. Prior to beginning construction or commencing with site preparation activities, including, but not limited to, land clearing, grubbing and/or grading, a performance guarantee shall be furnished to the

County by the owner(s) of the Level 3 Solar Energy System – SES-PV in the form of a cash deposit, certified check, irrevocable letter of credit or surety bond acceptable to the County in an amount equal to the estimated costs associated with removal of the Level 3 Solar Energy System – SES-PV, including all solar panels, supporting structures, inverters, transformers and all associated equipment in accordance with the decommissioning and restoration plan per Section 17.30.3.3.M. The performance guarantee shall be approved by the County prior to beginning construction or commencing with site preparation activities, including, but not limited to, land clearing, grubbing and/or grading.

12. The applicant shall provide the Planning and Zoning Department the Acceptance of Conditions form to be attached to the special land use approval letter within thirty (30) calendar days from the date of the approval letter. This form shall be signed by the owner(s) of the Level 3 Solar Energy System - Photovoltaic (SES-PV). The applicable building permit application(s) shall include a site plan in conformance with this special land use that meets all applicable site development standards (such as minimum required setbacks from property boundaries) and appropriate building permit fees, as applicable. Permits must be issued within twelve (12) months from the date of the special land use approval letter (unless a special use extension request is approved by the Planning Commission, pursuant to Section 18.12.a., as amended), otherwise the special land use may be deemed void upon thirty (30) days written notification to the applicant.
13. Any changes to the approved special use shall be subject to review by the Planning and Zoning Department and may require an application for special use amendment and approval by the Planning Commission.
14. It is the applicant's responsibility to obtain any additional permits or meet additional conditions, if any, that may be applicable to the proposed land use pursuant to other federal, state, or local laws or regulations.

**CHEBOYGAN COUNTY  
PLANNING COMMISSION  
SPECIAL USE PERMIT REQUEST**

**Applicant:** Orion Renewable Energy Group, LLC  
155 Grand Avenue; Suite 706  
Oakland, CA 94612

**Owners:** Tromble Bay Farms II, LLC  
Tromble Bay Farms III, LLC  
Rick and Michele Tromble  
Beethem Properties  
David and Michele Wolf  
Lisa A. Herron

**Parcel(s):** Grant Township, Sections 4, 5, 6, 8 and 9

- |                        |                        |                        |
|------------------------|------------------------|------------------------|
| 1. 151-009-200-001-05  | 12. 151-008-300-007-00 | 23. 151-009-400-002-00 |
| 2. 151-006-100-004-00  | 13. 151-008-400-001-00 | 24. 151-009-200-002-00 |
| 3. 151-006-300-001-02  | 14. 151-008-200-001-02 | 25. 151-009-400-001-00 |
| 4. 151-006-100-005-00  | 15. 151-009-300-001-00 | 26. 151-009-200-003-00 |
| 5. 151-006-200-003-00  | 16. 151-009-100-003-00 | 27. 151-004-401-001-00 |
| 6. 151-006-200-005-00  | 17. 151-009-300-004-00 | 28. 151-005-100-001-00 |
| 7. 151-006-400-001-05  | 18. 151-009-400-004-00 | 29. 151-005-300-004-00 |
| 8. 151-008-400-003-00  | 19. 151-009-400-003-00 | 30. 151-005-300-008-00 |
| 9. 151-008-400-004-00  | 20. 151-009-200-001-07 | 31. 151-006-200-002-00 |
| 10. 151-008-100-004-00 | 21. 151-009-300-003-00 |                        |
| 11. 151-008-300-006-00 | 22. 151-009-100-004-03 |                        |

**Hearing Date:** Tuesday, August 11, 2020; 7:00 PM

**APPLICATION**

The Applicant seeks approval for a Special Use Permit for a Level 3 Solar Energy System - Photovoltaic (SES-PV), per Sections 9.3.27 and 10.3.16 and 17.30.6.C of the Zoning Ordinance.

**GENERAL FINDINGS OF FACT**

1. The applicant requests a Special Use Permit for a Level 3 Solar Energy System – Photovoltaic (SES-PV) on leased, private land in Grant Township. (See Exhibits 1, 3, 4, 7 and 30)
2. The subject properties for the proposed Level 3 Solar Energy System – Photovoltaic (SES-PV) are zoned Agriculture and Forestry Management (M-AF) and Lake and Stream Protection (P-LS) and encompass 1,566 acres on 31 parcels. (See Exhibits 3, 4, 5, 7, 29, and 31)

3. Photovoltaic (PV) solar modules and supporting equipment and infrastructure would be located within a fenced, approximately 830-acre Project area of which approximately 230 acres would be covered by PV. (See Exhibits 3, 4, 5, 7, 30 and 31)
4. Level 3 Solar Energy Systems– Photovoltaic (SES-PV) are permitted by special use in the Agriculture and Forestry Management (M-AF) and Lake and Stream Protection (P-LS) zoning districts pursuant to Sections 9.3.27, 10.3.16, and 17.3.D.6.C., respectively, of the Zoning Ordinance. (See Exhibits 1, 3, 4, 5, 7, 30 and 31)
5. Level 3 Solar Energy Systems– Photovoltaic (SES-PV) require a special use permit in accordance with Section 18.7., and a site plan review in accordance with Section 20.10 of the Zoning Ordinance. (See Exhibits 1, 3, 4, 5, 7, 30 and 31)
6. A Project substation and operations and maintenance (O & M) building would be constructed between Twin Lakes Road and Hanson Road, at the west side of Owens Road and near to the overhead electric right-of-way. (See Exhibits 3, 4, 5, 7, 30 and 31)
7. Upon completion, the Level 3 Solar Energy Systems– Photovoltaic (SES-PV) would generate up to 91 megawatts (MW) of electricity for distribution to a regional power provider. (See Exhibits 3, 4, 5, 7, 28, 30 and 31)
8. Because of the size of the project (1,566 acres), the Applicant has requested a waiver of the requirement that site plans be drawn to a scale of 1 inch = 100 feet or less and to allow a scale of 1 inch = 400 feet. (See Exhibits 3, 4, 7 and 30)

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## **FINDINGS OF FACT UNDER SECTION 17.30.6.C OF THE ZONING ORDINANCE**

### **A. Setbacks:**

i. All Level 3 SES-PV Systems along with their supporting structures, inverters and supporting buildings and equipment (excluding fencing, vegetative screening, berms, roads, underground cables and generator systems step-up transformer facilities) shall comply with the following setbacks:

- a) 100 feet from any dwelling. This setback may be waived or reduced if requested by the owner of the dwelling to be screened.
- b) 50 feet from any Level 3 SES-PV Facility perimeter not abutting a private or public road unless requested to be waived by the property owner of the parcel to be screened.
- c) 50 feet from any public or private road right-of-way.
- d) 500 feet from any major body of water as listed in Section 10.1.2.
- e) 40 feet from any perennial stream, other than those listed in Section 10.1.2, shown as part of the P-LS zoning district. However, underground cables may be allowed if permitted by the Michigan Department of Environmental Quality (MDEQ) and the Army Corps of Engineers.

ii. The generator system step-up transformer facility and any electrical storage facility shall meet the following setbacks:

- a) 500 feet from any dwelling.
- b) 250 feet from any public or private road abutting the Level 3 SES-PV Facility perimeter of or bisecting the project.
- c) 500 feet from the ordinary high water mark of any body of water listed in Section 10.1.2.

iii. All tree plantings utilized for screening shall have setbacks of seven (7) feet from any property line, public or private road right(s)-of-way, utility or driveway easement(s) or the Level 3 SES-PV Facility perimeter. The seven (7) foot setback shall be measured at the time of planting from the center of the trunks of the trees used for screening.

iv. Fencing shall be no closer than one (1) foot from any property line, public road right(s)-of-way, utility or driveway easement(s) or the established Level 3 SES-PV Facility perimeter. Fencing is considered a security measure and cannot be considered as adequate screening for a Level 3 SES-PV System.

1. The Planning Commissions finds that the Project would comply with the applicable minimum setback requirements, above. (See Exhibits 1, 3, 4, 12, 15, 16, 30 and 37)
2. The Planning Commission finds that the Project will exceed setback requirements around dwellings by maintaining a 250-foot setback and a 50-foot setback from perennial streams other than those listed in Section 10.1.2. (See Exhibits 1, 3, 4, 12, 15, 16, 30 and 37)
3. Standard has been met.

**OR**

1. None found.
2. Standard has not been met.

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## **B. Vegetative Screening and Landscaping:**

i. Level 3 SES-PV facilities abutting a public or private road or property line of an adjacent parcel shall comply with the following requirements:

- a) Screening shall be required along any public or private road right(s)-of-way and opposite any dwelling on the same or adjacent parcels unless the owner of the dwelling to be screened requests in writing otherwise.
- b) Evergreen coniferous trees or a combination of trees and berms shall be the minimum acceptable methods of screening wherever screening is required.

c) Minimum height at time of planting requirements for trees utilized for screening are as follows:

1. Trees planted opposite a dwelling shall be a minimum of eight (8) feet tall at the time of planting. The tree height may be reduced by one (1) foot for each one (1) foot in the height of the berm on which it is planted, i.e., the total of the berm and tree height must be a minimum of eight (8) feet in height. If the road bed is elevated above the surrounding land surface at the location requiring screening, tree tops shall be at least eight (8) feet above the road surface.

2. Tree height at the time of planting shall not be allowed to be reduced below four (4) feet in height regardless of berm height (see Figure 2).

3. Trees planted for screening along road right(s)-of-way not opposite a dwelling shall require a minimum height at the time of planting of five (5) feet.

ii. Buried electrical cables within easements used to connect noncontiguous parcels with the Level 3 SES-PV facility, although an integral part of the facility, shall not require screening regardless of proximity to any dwelling.

iii. All tree plantings or combination of trees and berms utilized for screening opposite a dwelling shall extend 100 feet in either direction from a point on the Level 3 SES-PV facility perimeter directly opposite the midpoint of the opposing dwelling.

iv. In the event a property line lies within the road right(s)-of-way, setbacks shall be measured from the edge of the road right(s)-of-way.

v. At road or driveway intersections, vegetative screening or combination of trees and berms or fences shall be established or maintained in a manner that does not obstruct the view of vehicular traffic in any direction. All right-of-way intersections shall be provided and maintained with a clear unobstructed vision corner extending not less than 20 feet from all right-of-way line intersections along said right-of-way line in the form of a triangle.

vi. Natural vegetative screening is encouraged to be incorporated and maintained into the evergreen coniferous tree screening requirements per Section 17.30.6.C.B. However, natural vegetative screening shall be considered an addition to, and not a replacement for, the evergreen coniferous tree screening requirements.

vii. All trees planted for screening shall be maintained in good condition for the life of the project. All dead, dying or diseased trees shall be replaced within one (1) year with trees in compliance with the standards set forth in this Section.

1. The Planning Commission finds that the Project would comply with the minimum vegetative screening and landscaping requirements, above. (See Exhibits 7, 15, 30 and 33)
2. The Planning Commission finds that the applicant plans to exceed the 5 foot height requirement of B.i.(c)3 by having all trees used for screening be 9 feet in height. (See Exhibits 3, 4, 7, 15, 30 and 33)
3. Standard has been met.

**OR**

- 1.
2. Standard has not been met.

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### **C. Noise:**

No level 3 SES-V facility shall generate noise that, when measured at the Level 3 SES-PV Facility's perimeter, shall exceed 60 decibels (dBA). This standard does not apply during construction, routine equipment maintenance, repair or replacement, or at the time of decommissioning and reclamation.

1. The Planning commission finds that the Project would comply with the maximum dBA standard, as sound simulations performed at various locations in the Project site demonstrate compliance. (See Exhibits 7, 11, 38 and 39)
2. The Planning Commission finds that Exhibit D, Sound Simulations indicates that the highest sound level at the Project boundary line is 49 dBA and the highest sound level at any residence is 45 dBA. (See Exhibits 6, 7, 11, 30, 37 and 39)
3. Standard has been met.

**OR**

1. None found.
2. Standard has not been met.

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### **D. Electrical Interconnections:**

All electrical interconnections or distribution lines shall comply with all applicable codes and standards. Only existing above-ground transmission lines as well as above-ground transmission lines from the project generation station step-up transformer facility to the point of

interconnection with transmission lines are permitted above ground. All other electrical interconnections shall be buried unless other requirements are determined at the time of building permit review.

1. The Planning Commission finds that the Project would comply with the aforementioned requirements with the only overhead lines located from the step-up transformer site to the transmission line immediately next to the transformer facility. (See Exhibits 6, 7, 28, 30 and 37)
- 2.
3. Standard has been met.

**OR**

1. None found.
2. Standard has not been met.

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#### **E. Height Restriction:**

Level 3 SES-PV solar collection panels with their support structures shall not exceed 20 feet in height when oriented at maximum tilt. All other structures except those within the generation station step-up transformer facility and associated transmission towers shall be limited to thirty-five (35) feet. Equipment within the generation station step-up transformer facility shall be exempt from height restrictions.

1. The Planning Commission finds that as shown in the Site Plan (See Exhibits 7, 28, 29, 30, 31 and 37), the typical maximum height of PV panels is less than 10 feet. The inverters are 7.5 feet high and the utility building is 27.2 feet high.
- 2.
3. Standard has been met.

**OR**

1. None found.
2. Standard has not been met.

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#### **F. Performance Guarantee:**

In conjunction with the approval of a Level 3 SES-PV System the Planning Commission shall require the owner of the Level 3 SES-PV System to furnish the County with a performance guarantee in the form of a cash deposit, certified check, irrevocable letter of credit or surety bond acceptable to the County in an amount equal to the estimated costs associated with removal of the Level 3 SES-PV facility, including all solar panels, supporting structures,

inverters, transformers and all associated equipment in accordance with the decommissioning and restoration plan in Section 17.30.3.3.M. This performance guarantee shall be furnished prior to the construction of the Level 3 SES-PV System and may be combined with any performance guarantee required to be given to the owner of the site.

1. The Planning Commission finds that a Performance Guarantee would be furnished after issuance of zoning permits and prior to construction. Applicant understands this requirement for a performance guarantee and will comply with it. (See Exhibits 1, 6 and 17)
- 2.
3. Standard has been met.

**OR**

1. None found.
2. Standard has not been met.

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### **G. Final Reclamation:**

Any Level 3 SES-PV System not operated for a continuous period of twelve (12) months shall be considered abandoned. The owner of any Level 3 SES-PV System that is abandoned as provided herein shall be removed from the property upon receipt of notice from the Zoning Administrator of such abandonment, or the end of operation under the terms and conditions of this subsection. The timeframe for final reclamation shall be determined and approved by the Planning Commission and made a condition of approval of the special use permit. Except as provided herein, the Level 3 SES-PV System shall be removed from the property by the owner of the Level 3 SES-PV System, including all structures, equipment, components, and subsystems, except underground cables buried at a depth greater than three (3) feet. Berms and trees, service roads and fencing, however, if requested by the owner of the property on which the Level 3 SES-PV System is located, shall be permitted to remain.

Furthermore, the property owner may request that the property on which the Level 3 SES-PV System functioned remain unvegetated.

1. The Planning Commission finds that the Applicant has communicated understanding of the final reclamation requirements and will comply with them as needed. (See Exhibits 1, 6 and 17)
- 2.
3. Standard has been met.

**OR**

1. None found.

2. Standard has not been met.

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## **FINDINGS OF FACT UNDER SECTION 18.7 OF THE ZONING ORDINANCE**

The Planning Commission makes the following findings of fact as required by Section 18.7 of the Zoning Ordinance for each of the following standards listed in that section:

- a. The property subject to the application is located in a zoning district in which the proposed special land use is allowed.
  1. The Planning Commission finds that the Applicant requests a special use permit for a Level 3 Solar Energy System – Photovoltaic (SES-PV) on leased, private land in Grant Township. (See Exhibits 4, 6, 7 and 30)
  2. The Planning Commission finds that the subject properties are zoned Agriculture and Forestry Management (M-AF) and Lake and Stream Protection (P-LS). (See Exhibits 3, 4, 7 and 30)
  3. The Planning Commission finds that the Level 3 Solar Energy Systems – Photovoltaic (SES-PV) is a land use that requires a special use permit in the Agriculture and Forestry Management (M-AF) and Lake and Stream Protection (P-LS) zoning districts, pursuant to Sections 9.3.27 and 10.3.16, respectively, of the Zoning Ordinance. (See Exhibit 1)
  - 4.
  5. Standard has been met.

### **OR**

1. The Planning Commission finds that uses classified as special land uses are recognized as possessing unique characteristics (relative to location, design, size, public infrastructure needs, and other similar characteristics) which require individual review and approval standards in order to safeguard the general health, safety, and welfare of the County.
2. The Planning Commission finds that special land uses have been determined to have such characteristics that a discretionary, site-specific review by the Planning Commission is necessary to evaluate whether the particular use, as proposed, is compatible, or can be made compatible, with neighboring land uses and other uses permitted in the zoning district. Special land uses may not be appropriate at all locations within a particular zoning district.
3. Standard has not been met.

b. The proposed special land use will not involve uses, activities, processes, materials, or equipment that will create a substantially negative impact on the natural resources of the County or the natural environment as a whole.

1. The Planning Commission finds that the subject parcels are zoned Agriculture and Forestry Management (M-AF) and Lake and Stream Protection (P-LS). (See Exhibits 3, 4, 7, 10 and 30)
2. The Planning Commission finds that the Level 3 Solar Energy System – Photovoltaic (SES-PV) would operate every day and for 24 hours per day during operation phase. (See Exhibits 4, 5, 7, 28, and 30)
3. The Planning Commission finds that the subject properties for the proposed Level 3 Solar Energy System – Photovoltaic (SES-PV) are zoned Agriculture and Forestry Management (M-AF) and Lake and Stream Protection (P-LS) and encompass approximately 1,566 acres on 31 parcels. (See Exhibits 4, 5, 6, 7, 10, 29 and 30)
4. The Planning Commission finds that Level 3 Solar Energy Systems - Photovoltaic (SES-PV) are permitted by special use in the Agriculture and Forestry Management (M-AF) and Lake and Stream Protection (P-LS) zoning districts pursuant to Sections 9.3.27 and 10.3.16, respectively, of the Zoning Ordinance. (See Exhibits 1, 4, 5, 7, 10 and 30)
5. The Planning Commission finds that Level 3 Solar Energy Systems– Photovoltaic (SES-PV) require a special use permit in accordance with Section 18.7., and a site plan review in accordance with Section 20.10 of the Zoning Ordinance. (See Exhibits 1, 3, 4, 7, 10 and 30)
6. The Planning Commission finds that the Project is designed and would be constructed to avoid sensitive natural resources, such as wetlands, riparian areas and trees. The Project site is not known to lie within critical habitat for endangered, threatened or sensitive species. (See Exhibits 7, 15, 28, 30, 33, 36 and 37)
7. Furthermore, the Planning Commission finds that the location of the Project avoids any designated conservation areas or preserves. (See Exhibits 6, 7, 15, 28, 30 and 33)
8. The Planning Commission finds that the native seed mixes and pollinator-friendly vegetation would be planted and maintained that would enhance habitat for pollinating insects, birds and other wildlife. These activities would be helpful to continued agricultural activities in and around the Project site, and support the natural resources in and surrounding the site. (See Exhibits 7, 15, 28, 30 and 33)

9. The Planning Commission finds that fencing of solar panel location is proposed to be fifty (50) feet from all streams and wetland which allows natural wildlife corridors and habitat for indigenous and migratory wildlife. The type of fencing used will allow small wildlife to pass through it and will not prevent deer from jumping over it. (See Exhibits 6, 7, 15, 28, 30, 33, 36, and 37)
10. The Planning Commission finds that electromagnetic fields generated by solar farms do not pose a hazard to human health or to plant and animal wildlife. A 1997 study by the National Academy of Science which was directed by Congress found: "Based on a comprehensive evaluation of published studies relating to the effects of power-frequency electric and magnetic fields of cells, tissues and organisms (including humans), the conclusion of the committee is that the current body of evidence does not show that exposure to these fields presents a human-health hazard." (See Exhibits 6, 9, 29 and 30)
11. Standard has been met.

**OR**

1. The Planning Commission finds that fencing will alter wildlife travel patterns and will be detrimental to hunting in the area.
2. The Planning Commission finds that the Project as proposed would encompass approximately 1,566 acres, so there is the potential for observable negative impacts upon, for example, viewsheds, wildlife corridors and habitats, hydrologic systems and agricultural resources.
3. Standard has not been met.

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c. The proposed special land use will not involve uses, activities, processes, materials, or equipment, or hours of operation that will create a substantially negative impact on other conforming properties in the area by reason of traffic, noise, smoke, fumes, glare, odors, or the accumulation of scrap material that can be seen from any public or private highway or seen from any adjoining land owned by another person.

1. The Planning Commission finds that Level 3 Solar Energy System – Photovoltaic (SES-PV) would operate every day and for 24 hours per day during operation phase. (See Exhibits 6, 7, 9, 12, 16, 28, 30, 32 and 37)
2. The Planning Commission finds that the Project would comply given that anticipated traffic counts post-construction and during operations would be minor, generating approximately 10 vehicle trips per day by 2-4 full-time employees.

Maintenance efforts would enlist up to 20 employees that would generate approximately 50 vehicle trips per day. (See Exhibits 6, 7, 9, 17, 28, 30 and 37)

3. The Planning Commission finds that sound simulations demonstrate that the Project would not generate more than 60 dBA as measured at the property line. (See Exhibits 6, 7, 11, 28, 29, 30 and 37)
4. In addition, the Planning Commission finds that:
  - PV does not generate appreciable noise during nighttime, storms and heavy overcast periods;
  - PV does not generate odors, smoke and/or other pollutants during operation and maintenance;
  - PV is designed to be highly absorptive of photons (sunlight) in order to maximize efficiency, thereby minimizing potential disruptive glare; and
  - PV does not generate scrap or other waste materials during operation.(See Exhibits 6, 7, 9, 16, 28, 29, 30 and 37)
5. A glint and glare analysis was submitted by the applicant (See Exhibit 32)
6. Standard has been met.

**OR**

1. The Planning Commission finds that the Project as proposed would encompass approximately 1,566 acres, so there is the potential for observable negative impacts upon, for example, viewsheds, wildlife corridors and habitats, hydrologic systems and agricultural resources.
2. The Planning Commission finds that noise generation, particularly from the point-of-interconnect substation, has the potential to compromise quality of life for those residents that live in proximity to the project site.
3. None found.
4. Standard has not been met.

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d. The proposed special land use will be designed, constructed, operated, and maintained so as not to diminish the opportunity for surrounding properties to be used and developed as zoned.

1. The Planning Commission finds that Level 3 Solar Energy System – Photovoltaic (SES-PV) would operate every day and for 24 hours per day during the operation phase. (See Exhibits 6-18, 30, 37)

2. The Planning Commission finds that the Project would comply given that anticipated traffic counts post-construction and during operations would be minor, generating approximately 10 vehicle trips per day by 2-4 full-time employees.  
  
Maintenance efforts would enlist up to 20 employees that would generate approximately 50 vehicle trips per day. (See Exhibits 6-18, 28 and 30)
3. The Planning Commission finds that the design, construction, operation, and maintenance of the proposed Project would not diminish opportunities for surrounding property owners to use and develop their properties as zoned. As noted above, the Project would not generate negative off-site impacts from traffic, noise, smoke, fumes, glare, odors, or waste materials that would negatively impact the ability to use or develop surrounding properties. The Project's design complies with the minimum applicable zoning standards (e.g., setback; screening) to help minimize the potential for negative off-site impacts. (See Exhibits 3, 4, 6, 7, 9, 11, 12, 14, 15, 28, 29, 30, 32, 33 and 37)
4. The Planning Commission finds that the primary uses of surrounding parcels are farming and residential which are uses that would not be diminished by a solar farm. (See Exhibits 6-18, 28, 30, 32, 35 and 37)
5. The Planning Commission finds that wildlife corridors are provided along all perennial streams and wetlands within the Project despite fenced farms. (See Exhibits 6, 7, 28, 33 and 36)
6. Standard has been met.

**OR**

1. The Planning Commission finds that the Project as proposed would encompass a large area - approximately 1,566 acres - so there is potential for observable negative impacts upon, for example, viewsheds, wildlife corridors and habitats, hydrologic systems and agricultural resources.
2. The Planning Commission finds that noise generation, particularly from the point-of-interconnect substation, has the potential to compromise quality of life for those residents that live in proximity to the project site.
3. The Planning Commission finds that some parcels in the area are used for hunting and the fencing of large tracts might alter the travel routes for some wildlife species.
4. Standard has not been met.

e. The proposed special land use will not place demands on fire, police, or other public resources in excess of current capacity nor increase hazards from fire or other dangers to the subject property or adjacent properties.

1. The Planning Commission finds that the Project would not require public resources greater than current capacity, nor increase hazards from fire or other dangers. (See Applications (Exhibits 3 and 4); Project Narrative (Exhibit 6) and Exhibits 6, 7, 9, 14, 17, 28, 30, 32 and 37)
2. The Planning Commission finds that the Project site incorporates a variety of security features and will pose minimal fire risk. The Project site is accessible from both a primary and secondary access driveway. These driveways are each provided with 30-foot double swing gates with "Knox Box" for keyed entry. Internal roads are proposed between arrays, as well as around the Project site inside the perimeter security fence to provide access for operational and emergency vehicles. (See Exhibits 6, 7, 14, 16, 28, 30 and 37)
3. The Planning Commission finds that the Level 3 Solar Energy System – Photovoltaic (SES-PV) would operate every day and for 24 hours per day during operation phase. (See Exhibits 6, 7, 28, 30 and 37)
4. The Planning Commission finds that the Project would comply given that anticipated traffic counts post-construction and during operations would be minor, generating approximately 10 vehicle trips per day by 2-4 full-time employees. Maintenance efforts would enlist up to 20 employees that would generate approximately 50 vehicle trips per day. (See Exhibits 4, 6, 7, 28, and 30)
5. The project site is served by the Alverno Fire Department and Cheboygan County Sheriff's Department. (See Exhibits 6, 7, 14 and 30)
6. Standard has been met.

**OR**

- 1.
2. Standard has not been met.

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f. The proposed special land use shall not increase traffic hazards or cause congestion on the public or private highways and streets of the area in excess of current capacity. Adequate access to the site shall be furnished either by existing roads and highways or proposed roads and highways. Signs, buildings, plantings, or other elements of the proposed project shall not interfere with driver visibility or safe vehicle operation. Entrance drives to the use and to off-street parking areas shall be no less than 25 feet from a street intersection (measured from the road right-of-way) or from the boundary of a different zoning district.

1. The Planning Commission finds that the Project would not create traffic congestion or increase traffic-related hazards adjacent to (and in the vicinity of) the Project site, located in an area of the County with an established circulation system with conditions that allow easy access with minimal, if any, changes to existing circulation or traffic patterns anticipated during facility operation. (See Exhibits 3, 4, 6, 7, 14, 16, 28, 30 and 37)
2. The Planning Commission finds that given negligible trip generation during facility operation, associated traffic would be negligible given only 2-4 full-time employees. Points of ingress/egress and off-street parking would be 25 feet at a minimum from intersections. (See Exhibits 3, 4, 6, 7, 14, 28, and 30)
3. The Planning Commission finds that the subject properties are located in Grant Township and generally located 13 miles southeast of the City of Cheboygan along North Black River Road, south of Twin Lakes Road and bounded by Ross Road to the south and Page Road to the north, Chamberlin Road to the east and Trudeau Road to the west. (See Exhibits 3, 4, 6, 7, 10, 28 and 30)
4. The Planning Commission finds that the Level 3 Solar Energy System – Photovoltaic (SES-PV) does not require water service to operate. (See Exhibits 6, 7, 28 and 30)
5. The Planning Commission finds that collector roads would serve the Project and offer an adequate level of service capacity. Given negligible trip generation at operation, associated traffic would likely be unnoticeable given 2-4 full-time employees. Points of ingress and egress and off-street parking would be 25 feet at a minimum from intersections. (See Exhibits 6, 7, 10, 28, 30 and 37). The Planning Commission also finds that the Applicant would coordinate with the County Road Commission in order to minimize potential roadway conflict during construction. (See Exhibits 6 and 20)
6. The Planning Commission finds that traffic during the construction phase would average less than 500 per day, and approximately 10 per day during normal operations. (See Exhibits 6, 7, 14, 28 and 30)
7. Standard has been met.

**OR**

1. The Planning Commission finds that the Project could create traffic congestion or increase traffic-related hazards adjacent to (and in the vicinity of) the Project site, particularly during construction phases. (See Exhibits 6, 7, 14, 28, 30, and 37)
2. Standard has not been met.

g. The proposed special land use will be adequately served by water and sewer facilities, and refuse collection and disposal services.

1. The Planning Commission finds that operations and maintenance building would be served by well and septic.

The Project would not utilize significant volumes of water when operational (groundwater would not be used to clean solar modules), but newly planted herbaceous and woody plants and seeds would require regular watering until established. Trash and other refuse would be hauled offsite to an authorized area landfill. (See Exhibits 6, 7, 16, 28, 30 and 33)

2. Standard has been met.

**OR**

- 1.
2. Standard has not been met.

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h. The proposed special land use will comply with all specific standards required under this Ordinance applicable to it.

1. The Planning Commission finds that the Project will meet or exceed all specific standards required under the Zoning Ordinance, including the standards for granting site plan approval in Section 20.10 and the standards applicable to Level 3 SES-PV Systems in Section 17.30.6.C. of the Zoning Ordinance, including minimum building setbacks, screening requirements, parking and maximum height. (See Exhibits 1, 6-18, 28, 30, 33 and 37)
2. The Planning Commission finds that future land uses per the Cheboygan County Master Plan include Farm/Agricultural and Public Interest Land. (See Exhibit 2)
3. Standard has been met.

**OR**

1. The Planning Commission finds that the Project as proposed would encompass a large area - approximately 1,566 acres - so there is potential for observable negative impacts upon, for example, viewsheds, wildlife corridors and habitats, hydrologic systems and agricultural resources.
2. The Planning Commission finds that noise generation, particularly from the point-of-interconnect substation, has the potential to compromise quality of life for those residents that live in proximity to the project site.
3. Standard has not been met.

## **SPECIFIC FINDINGS OF FACT UNDER SECTION 20.10 OF THE ZONING ORDINANCE**

The Planning Commission makes the following findings of fact as required by Section 20.10 of the Zoning Ordinance for each of the following standards listed in that Section:

a. The site plan shall be designed so that there is a limited amount of change in the overall natural contours of the site and shall minimize reshaping in favor of designing the project to respect existing features of the site in relation to topography, the size and type of the lot, the character of adjoining property and the type and size of buildings. The site shall be developed so as not to impede the normal and orderly development or improvement of surrounding property for uses permitted in this Ordinance.

1. The Planning Commission finds that utility-scale PV or "solar farms" are typically sited on terrain with little slope, as is the case with the Project site, and therefore minimal changes to the natural contours would occur during site preparation and construction. (See Exhibits 6, 7, 8, 12, 15, 16, 28, 30, 31 and 37)
2. The Planning Commission finds that although site grading, as well as tree and vegetation grubbing, would occur as part of site preparation, effort would be made to maintain existing, viable trees and vegetation to maintain landscape aesthetic, enhance proposed vegetative screening and stabilize soils. Trees and various varieties of native plants would be planted post-construction and maintained during operation; doing so would help in remediating pre-construction tree and vegetation removal. (See Exhibits 6, 7, 12, 15, 28, 30, 32, 33 and 37)
3. The Planning Commission finds that minimal changes to natural contours of the site would occur during site preparation and construction given level terrain. (See Exhibits 6, 7, 15, 28, 30, 33 and 37)
4. Standard has been met.

**OR**

1. None found.
2. Standard has not been met.

b. The landscape shall be preserved in its natural state, insofar as practical, by minimizing tree and soil removal, and by topographic modifications which result in smooth natural appearing slopes as opposed to abrupt changes in grade between the project and adjacent areas.

1. The Planning Commission finds that utility-scale PV or "solar farms" are typically sited on terrain with little slope, as is the case with the Project site, and therefore minimal changes to the natural contours would occur during site preparation and construction.

The Planning Commission also finds that the Project site ranges in 620-680 above mean sea level 680 feet at the Northwest corner to 620 feet at the Southeast corner over three (3) miles away. (See Exhibits 6, 7, 29, 30 and 37).

2. The Planning commission finds that although site grading, as well as tree and vegetation grubbing, would occur as part of site preparation, effort would be made to maintain existing, viable trees and vegetation to maintain landscape aesthetic, enhance proposed vegetative screening and stabilize soils. Trees and various varieties of native plants would be planted post-construction and maintained during operation; doing so would help in remediating pre-construction tree and vegetation removal. (See Exhibits 6, 7, 15, 30, 33 and 37)
3. The Planning Commission finds that fenced portions of the project area are located primarily on land which had previously been used for farming and was already cleared therefore eliminating the need for further clearing or grading. (See Exhibit 6, 7, (pp. 101 and 102) and Exhibits 15, 28, 30, 33 and 37)
4. Standard has been met.

**OR**

1. The Planning Commission finds that some clearing and grading will occur in the construction phase.
2. Standard has not been met.

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c. Special attention shall be given to proper site drainage so that removal of storm waters will not adversely affect neighboring properties.

1. The Planning Commission finds that stormwater would be maintained on the Project site. The Preliminary Vegetative Management Plan is designed to reduce stormwater runoff, improve soils, and create habitat for various pollinators, namely bees and butterflies. Fenced solar panel locations will not adversely affect storm water runoff, due to the fact that solar panels are not considered impervious. (See Exhibits 6, 7, 12, 30, 33)
2. The Planning Commission finds that step-up transformer site composing 52,370 square feet exceeds the 8,000 square feet impervious service limitation and will be covered by the storm water management plan. (See Exhibits 6, 7, 14, 28, 29, 30, 33 and 37)
3. Standard has been met.

**OR**

1. The Planning Commission finds that the step-up transformer site (52,370 square feet) exceeds the 8,000 square feet impervious surface requirement.
  2. Standard has not been met.
- 

d. The site plan shall provide reasonable, visual and sound privacy for all dwelling units located therein. Fences, walls, barriers and landscaping shall be used, as appropriate, for the protection and enhancement of property and for the privacy of its occupants.

Not applicable, as no dwelling units are proposed.

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e. All buildings or groups of buildings should be so arranged as to permit emergency vehicle access by some practical means.

1. The Planning Commission finds that a practical means for access by emergency vehicles is provided via numerous access points via local collector roads and internal operations and maintenance roads. (See Exhibits 6, 7, 14, 28, 30, 33, and 37)
2. The Planning Commission finds that the project substation and maintenance building which has direct access off Owens Road. (See Exhibits 6, 7, 14, 28, 30 and 37)
3. Standard has been met.

**OR**

1. None found.
  2. Standard has not been met.
- 

f. Every structure or dwelling unit shall have access to a public street, walkway or other area dedicated to common use.

1. The Planning Commission finds that the onsite project substation and operations and maintenance building would have access to public roadways, principally Owens Road. (See Exhibits 6, 7, 14, 28, 30 and 37)
2. Standard has been met.

**OR**

1. None found.

2. Standard has not been met.

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g. For subdivision plats and subdivision condominiums, there shall be a pedestrian circulation system as approved by the Planning Commission.

Not applicable, as no subdivision condominiums or subdivision plats are proposed.

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h. Exterior lighting shall be arranged as follows: a. It is deflected away from adjacent properties, b. It does not impede the vision of traffic along adjacent streets and c. It does not unnecessarily illuminate night skies.

1. The Planning Commission finds that the Project would comply with the lighting standards as provided in Sections 3.7.1 and 20.10 of the Zoning Ordinance. For example, per the submitted application, all lighting, including for access, maintenance and security purposes, would be shielded and directed downward to minimize light trespass or light pollution. The on-site Project substation or switchyard will include manually- and/or motion-activated lighting to allow for inspections or maintenance as may be required during evening hours. (However, maintenance is not typically performed during nighttime hours). Project perimeter and security lighting would be installed and illuminated only on an as-needed basis for emergencies or security breaches. (See Exhibits 6, 7, 14, 28, 30 and 37)
- 2.
3. Standard has been met.

OR

1. None found.
2. Standard has not been met.

i. The arrangement of public or common ways for vehicular and pedestrian circulation shall respect the pattern of existing or planned streets and pedestrian or bicycle pathways in the area. Streets and drives which are part of an existing or planned street pattern which serves adjacent development shall be of a width appropriate to the traffic volume they will carry and shall have a dedicated right-of-way equal to that specified in the Master Plan.

Not applicable. No public common ways are proposed.

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j. Site plans shall conform to all applicable requirements of state and federal statutes and the Cheboygan County Master Plan.

1. The Planning Commission finds that the site plan conforms to the applicable requirements of state and federal statutes and the Cheboygan County Master Plan ("Plan"), as the Project would help the County to successfully attain the Plan goal that speaks to providing opportunities for safe and efficient use and transport of energy sources. To this end, strategies identified in the Plan for meeting said goal are to "allow for appropriate use and transport of all forms of energy" and "ensure opportunities for development of renewable energy that maximizes sustainable use of natural resources and retains energy dollars in the local economy." (See Exhibits 1, 2, 3, 7, 10, 28, 30 and 37)
2. Standard has been met.

**OR**

1. None found.
2. Standard has not been met.

**DECISION**

**TIME PERIOD FOR JUDICIAL REVIEW**

State law provides that a person having an interest affected by the zoning ordinance may appeal a decision of the Planning Commission to the Circuit Court. Pursuant to MCR 7.101 any appeal must be filed within twenty-one (21) days after this Decision and Order is adopted by the Planning Commission.

**DATE DECISION AND ORDER ADOPTED**

Tuesday, August 11, 2020

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Patty Croft, Chairperson

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Charles Freese, Secretary

**\*FINDINGS OF FACT SUBMITTED BY ORION RENEWABLE ENERGY GROUP**

**CHEBOYGAN COUNTY  
PLANNING COMMISSION  
SPECIAL USE PERMIT REQUEST**

**Applicant:** Orion Renewable Energy Group, LLC  
155 Grand Avenue; Suite 706  
Oakland, CA 94612

**Owners:** Tromble Bay Farms II, LLC  
Tromble Bay Farms III, LLC  
Rick and Michele Tromble  
Beethem Properties  
David and Michele Wolf  
Lisa A. Herron

**Parcel(s):** Grant Township, Sections 4, 5, 6, 8 and 9

- |     |                    |     |                    |     |                    |
|-----|--------------------|-----|--------------------|-----|--------------------|
| 1.  | 151-009-200-001-05 | 12. | 151-008-300-007-00 | 23. | 151-009-400-002-00 |
| 2.  | 151-006-100-004-00 | 13. | 151-008-400-001-00 | 24. | 151-009-200-002-00 |
| 3.  | 151-006-300-001-02 | 14. | 151-008-200-001-02 | 25. | 151-009-400-001-00 |
| 4.  | 151-006-100-005-00 | 15. | 151-009-300-001-00 | 26. | 151-009-200-003-00 |
| 5.  | 151-006-200-003-00 | 16. | 151-009-100-003-00 | 27. | 151-004-401-001-00 |
| 6.  | 151-006-200-005-00 | 17. | 151-009-300-004-00 | 28. | 151-005-100-001-00 |
| 7.  | 151-006-400-001-05 | 18. | 151-009-400-004-00 | 29. | 151-005-300-004-00 |
| 8.  | 151-008-400-003-00 | 19. | 151-009-400-003-00 | 30. | 151-005-300-008-00 |
| 9.  | 151-008-400-004-00 | 20. | 151-009-200-001-07 | 31. | 151-006-200-002-00 |
| 10. | 151-008-100-004-00 | 21. | 151-009-300-003-00 |     |                    |
| 11. | 151-008-300-006-00 | 22. | 151-009-100-004-03 |     |                    |

**Hearing Date:** Tuesday, August 11, 2020; 7:00 PM

**APPLICATION**

The Applicant seeks approval for a Special Use Permit for a Level 3 Solar Energy System - Photovoltaic (SES-PV), per Sections 9.3.27 and 10.3.16 and 17.30.6.C of the Zoning Ordinance.

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**GENERAL FINDINGS OF FACT SUBMITTED BY ORION RENEWABLE ENERGY GROUP**

1. Applicant submitted its Initial Solar Project Application for Site Plan Approval and Special Use Permit on February 25, 2020. The application consisted of:

- a. *The Cheboygan County Planning Commission (“PC”) site plan review Application (9 pages)*
  - b. *The Cheboygan County Planning Commission (“PC”) special use permit application (9 pages)*
  - c. *A letter dated February 25, 2020, consisting of a narrative explaining how the zoning ordinance requirements are met (22 pages)*
  - d. *Attachment to the County form consisting of leases and easements of the project area (37 pages)*
  - e. *Exhibits to the site plan and special use application consisting of:*
    - i. *Exhibit 3 — Site Plan (12 pages)*
    - ii. *Exhibit 9 — Health and Safety Impacts of Photovoltaic (sic) (19 pages)*
    - iii. *Exhibit 10 — Zoning Overlay Detail Map (1 page)*
    - iv. *Exhibit 11 — Sound Modeling of Cheboygan Solar (RSG) (22 pages)*
    - v. *Exhibit 12 — Visual Simulations (12 pages)*
    - vi. *Exhibit 13 — Property Valuation Report (CohnReznick) (108 pages)*
    - vii. *Exhibit 14 — Emergency Safety and Fire Plan (2 pages)*
    - viii. *Exhibit 15 — Vegetative Management Plan (Shoener) (6 pages)*
    - ix. *Exhibit 16 — Structural Specifications (Jinko Solar) (27 pages)*
    - x. *Exhibit 17 — Decommissioning and Final Reclamation Plan (2 pages);*
    - xi. *Exhibit 18 — Property Tax Contribution Chart (1 page)*
2. *The Cheboygan County Planning and Zoning Department determined that the application was administratively complete in that it provided everything required and addressed each of the site plan and special land use standards from the Cheboygan County Zoning Ordinance (“Zoning Ordinance”). Thus, on March 3, 2020, the PC scheduled a public hearing on applicant’s application for March 18, 2020. (See Exhibit 6)*
  3. *Governor Whitmer’s Executive Order No. 2020-15 issued on March 18, 2020, temporarily authorized governmental meetings to be held electronically, but prohibited in-person meetings. The PC adjourned the proposed meeting.*
  4. *On June 1, 2020, Governor Whitmer’s Executive Order No. 2020-110 was issued and continued to prohibit local government meetings of more than 10 people indoors.*
  5. *On June 3, 2020, the PC held the public hearing on applicant’s request electronically. Following applicant’s presentation, a public hearing was held at which several people made comments. Following the close of the public hearing, the PC engaged in some discussion. It then adjourned the consideration of the application until its June 17, 2020, meeting. (See Exhibit 37)*
  6. *On June 17, 2020, applicant provided a letter responding to PC questions from its June 3, 2020, meeting, a revised site plant, and a glint and glare study. (See Exhibit 37)*
  7. *At its June 17, 2020, meeting, the PC re-opened the public hearing in a limited fashion to enable people who had attended the June 3, 2020, PC meeting, but because of electronic difficulty were not able to participate. Following the limited public hearing, the PC engaged in*

discussion on the application. It then adjourned the consideration of the application to its July 15, 2020, meeting. (See Exhibit 37)

8. On June 22, 2020, applicant supplied the PC with a site plan comparison, a supplemental memorandum to the property valuation report, and a memorandum regarding MDNR comments on the project. In this submittal, applicant requested that the PC hold a special meeting on June 30, 2020, to continue its discussion on the application. (See Exhibit 37)

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**FINDINGS OF FACT UNDER SECTION 17.30.6.C OF THE ZONING ORDINANCE  
SUBMITTED BY ORION RENEWABLE ENERGY GROUP**

**A. Setbacks:**

1. *The Planning Commission finds that all Level 3 SES-PV panels, inverters, supporting structures, buildings and equipment will be set back at least, and in many cases substantially greater than, 100 feet from all dwellings, 50 feet from the facility perimeter, 50 feet from all public and private road rights-of-way, 500 feet from any major body of water, and 40 feet from any perennial stream. The Planning Commission further finds that in many instances, the Level 3 SES-PV equipment will be set back substantially further than the ordinance minimum distances. (See Exhibits 3, 7, 16, 30 and 37)*
2. *The Planning Commission finds that the generator system step-up transformer and all electrical storage facilities will be over 500 feet from any dwelling, over 250 feet from any public or private road abutting the facility perimeter, and over 500 feet from the ordinary high water mark of any body of water. The Planning Commission further finds that, in fact, in many instances, the generator system transformer and electrical storage facilities are set back substantially further than these minimum distances. (See Exhibits 3, 7, 16, 30 and 37)*
3. *The Planning Commission finds that all tree plantings utilized for screening will setback at least seven (7) feet from any property line, public or private right-of-way, utility or driveway easement(s) or the facility perimeter. The Planning Commission further finds that, in fact, in many instances the tree plantings are set back substantially more than these minimums. (See Exhibits 7, 15, 33 and 37)*
4. *The Planning Commission finds that all proposed fencing will be greater than 1 foot from all property lines, public road right(s)-of-way, utility and driveway easement(s) and the facility perimeter. (See Exhibit 7)*

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**B. Vegetative Screening and Landscaping:**

1. *The Planning Commission finds that screening is proposed along all public and private road right(s)-of-way and opposite all dwellings on the same or*

adjacent parcels. The Planning Commission further finds that the screening is proposed to be a combination of evergreen coniferous trees and berms. The Planning Commission further finds that the trees are proposed to be a minimum of eight (8) feet tall at the time of planting. (See Exhibits 7, 15, 30, 33 and 37)

2. The Planning Commission finds that all screening and landscaping is proposed to extend a minimum of 100 feet in both directions from a point on the facility perimeter directly opposite the midpoint of the opposing dwelling. (See Exhibits 7, 15, 30, 33 and 37)
3. The Planning Commission finds that all setbacks are measured from the edge of all road rights-of-way. (See Exhibits 7, 10, 30 and 37)
4. The Planning Commission finds that at road or driveway intersections, vegetative screening and fencing will not obstruct the view of vehicular traffic in any direction, and clear unobstructed vision corners will be preserved not less than 20 feet from all right-of-way lines. (See Exhibits 7, 10, 28, 30 and 37)

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### C. Noise:

1. The Planning Commission finds that the facility will generate noise less than 60 dBA at the perimeter. The Planning Commission further finds that RSG in its Sound Modeling of Cheboygan Solar report dated February 13, 2020 modeled the predicted noise levels at the facility boundaries using actual site conditions and project equipment in accordance with ISO 9613-2 standards. The Planning Commission further finds that this procedure takes into account source sound power levels, ground surface reflection and absorption, geometric divergence, meteorological conditions, walls, barriers, berms and terrain. The Planning Commission further finds that the study assumes downwind sound propagation between every source and every receiver, and assumes weather conditions favorable to sound propagation, and thus is conservative in its approach. (See Exhibits 7, 11, 38 and 39)
1. The Planning Commission finds that the modeling software is widely used by sound professionals in the U.S. (See Exhibits 7 and 11)
2. The Planning Commission finds that the results of the modeling are that the maximum property line sound level will be 49 dBA, which is 11 dBA below the standard. (See Exhibits 7 and 11)

#### **D. Electrical Interconnections:**

1. *The Planning Commission finds that all electrical interconnections from the project to the substation will comply with existing codes. (See Exhibits 7, 28, 30 and 37)*
  2. *The Planning Commission finds that all electrical transmission lines from the solar panels to the substation will be buried. The Planning Commission further finds that only the transmission lines from the project generator station step-up transformer facility to the existing overhead transmission lines will be above ground. (See Exhibits 7, 28, 30 and 37)*
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#### **E. Height Restriction:**

1. *The Planning Commission finds that the project's solar collection panels with their support structures will be between 8' – 10' high, depending on their tilt. The Planning Commission further finds that the project anemometers will be 10' high. The Planning Commission further finds that the project inverters will be 7' - 5 1/4" high. (See Exhibit 8, Sheets C-202 and C-203, and Exhibit 16, 28, 30 and 37)*
  2. *The Planning Commission finds that the project's O&M building will be 16'-6" to the eaves and 26'-6" to the peak. (See Orion Exhibit 7, sheet C-204 and Exhibits 30 and 37)*
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#### **F. Performance Guarantee:**

1. *The Planning Commission finds that the applicant proposes to provide a description of the financial security guaranteeing the removal of the system. The Planning Commission further finds that it shall be in the form acceptable to the County Board, based on the net removal cost, and will the County as beneficiary. (See Exhibits 1 and 17)*
  2. *The Planning Commission finds that the amount will be estimated by the project engineer. The Planning Commission further finds that the estimate will be updated every 5 years and be subject to County approval. (See Exhibits 1 and 17)*
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#### **G. Final Reclamation:**

1. *The Planning Commission finds that the applicant proposes to remove all non-utility owned equipment, including conduit buried at less than three feet, structures, fencing, roads and foundations. (See Exhibits 7 and 17)*

2. *The Planning Commission finds that the applicant proposes to restore the property to its original condition, unless directed otherwise by the Lessor of the property. (See Exhibits 7 and 17)*

## **FINDINGS OF FACT UNDER SECTION 18.7 OF THE ZONING ORDINANCE**

a. The property subject to the application is located in a zoning district in which the proposed special land use is allowed.

1. *The Planning Commission finds that the property within 500-feet of a river or stream is located in the P-LS district which allows Level 3 SES-PV by special land use permit. The Planning Commission further finds that property more than 500-feet from streams is located in the M-AF district which allows Level 3 SES-PV by special land use permit. (See Exhibits 1, 3, 4, 7, 10, 28 30 and 37)*
2. *Standard has been met.*

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b. The proposed special land use will not involve uses, activities, processes, materials, or equipment that will create a substantially negative impact on the natural resources of the County or the natural environment as a whole.

1. *The Planning Commission finds that the Applicant is seeking a special use permit for a Level 3 SES-PV use. (See Exhibits 1, 3, 4 and 7)*
2. *The Planning Commission finds that the solar panels are spaced and fenced so as to preserve open areas that allows the free movement of wildlife. (See Exhibits 7, 9, 12, 15, 16, 28, 32, 36 and 37)*
3. *The Planning Commission finds that the Michigan Department of Natural Resources has indicated that it is unaware of any potentially significant impacts to the movement of large game species as a result of the installation of utility-scale solar projects, and that this has not been an issue for other types of development projects, including those with fragmented fenced areas (See Exhibit 36)*
4. *The Planning Commission finds that once constructed, solar facilities do not create odors, sound above County standards, waste, unreasonable amounts of traffic, glare, smoke, or vapors that might negatively impact the County's natural resources or natural environment, nor do they use County's natural resources to generate electricity. (See Exhibits 7, 9, 14, 15, 17, 28, 30, 32 and 36)*
3. *The standard has been met.*

c. The proposed special land use will not involve uses, activities, processes, materials, or equipment, or hours of operation that will create a substantially negative impact on other conforming properties in the area by reason of traffic, noise, smoke, fumes, glare, odors, or the accumulation of scrap material that can be seen from any public or private highway or seen from any adjoining land owned by another person.

1. *The Planning Commission finds that the applicant is seeking a special use permit for a Level 3 SES-PV use. (See Exhibits 3, 4, 7-18, 28, 30 and 37)*
2. *The Planning Commission finds that the proposed use would not involve equipment or processes which would generate noise or traffic which is incompatible with the surrounding land uses. The Planning Commission further finds that no smoke, glare, fumes, odors or scrap material would be produced by the Level 3 SES-PV solar panels. (See Exhibits 3, 4, 7-18, 28, 30, 32 and 37)*
3. *The Planning Commission finds that the glint and glare study does not predict any glare occurrences for nearby residences at either single story or second story viewing heights. The Planning Commission finds in addition, that it does not predict any glare occurrences for Hoffman's Black Mountain Aerodrome (2M7) Airport Runway 15/33 approaches. (See Exhibits 3, 4, 7-18, 28, 30, 32 and 37)*
3. *The Planning Commission finds that the RSG sound modeling analysis demonstrated that the noise generated by the solar panels, substation transmission lines and related equipment is well within the County's sound limits. (See Exhibits 11, 28 and 38)*
4. *The Planning Commission finds that the Project will be adequately landscaped and screened in accordance with the Zoning Ordinance requirements, and in some areas going beyond the minimum standards of what the Zoning Ordinance requires. (See Exhibit 7, pages C-101 and 102 and Exhibits 1, 15, 30 37 and 38)*
5. *The Planning Commission finds that a few people expressed concerns at the public hearing about the radiation levels and safety of the Project. The Planning Commission finds that the applicant's Health and Safety Impacts of Solar Photovoltaics explained that photovoltaic technology and solar inverters are not known to pose any significant health dangers (See Exhibits 9, 10 and 11). The Planning Commission further finds that the Project areas are already subject to high voltage transmission lines that likely produce substantially more radiation than will the project.*
6. *The standard has been met.*

d. The proposed special land use will be designed, constructed, operated, and maintained so as not to diminish the opportunity for surrounding properties to be used and developed as zoned.

1. *The Planning Commission finds that the applicant is seeking a special use permit for a Level 3 SES-PV use. (See Exhibits 7-18, 28, 30 and 37)*
2. *The Planning Commission finds that the proposed use will not diminish the opportunities for surrounding properties to develop as zoned. The Planning Commission further finds that it is consistent with agricultural uses as previously determined by the Michigan Department of agriculture and Rural Development in its guidance entitled "Policy for Allowing Commercial Solar Panel Development on PA 116 Lands". The Planning Commission further finds that PA 116 is the farmland preservation statute. The Planning Commission further finds that Level 3 SES-PV solar panels do not impact residential or natural resources in protection areas. (See Exhibits 7, 8, 9, 10, 11, 13, 14, 15, 17, 28, 30, 32, 34 and 37)*
3. *The Planning Commission finds that the CohnReznick Property Value Impact Study demonstrated that there is no measurable and consistent difference in property value for properties adjacent to solar farms. The Planning Commission further finds that this was supported by interviews with local real estate brokers who stated that there is no difference in price, marketing periods, or demand for homes directly adjacent to solar farm facilities in Michigan. (See Exhibits 5, 10 and 34)*
4. *The Planning Commission finds that while a few people at the public hearing expressed concerns about the impacts to property values, they presented no empirical data to support their concerns. (See Exhibits 38 and 39)*
5. *The Planning Commission finds that as a result of concerns expressed at the public hearing, the applicant removed numerous proposed solar panels, so as to provide additional setbacks from the people expressing those concerns. (See Exhibits 30, 32, 33 and 37)*
6. *The standard has been met.*

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e. The proposed special land use will not place demands on fire, police, or other public resources in excess of current capacity nor increase hazards from fire or other dangers to the subject property or adjacent properties.

1. The Planning Commission finds that the applicant is seeking a special use permit for a Level 3 SES-PV use. (See Exhibits 3, 4 and 7)

2. The Planning Commission finds that the use would not place additional demands on police or other public resources in excess of current capacity, as the property will be largely unoccupied (other than maintenance activities)
  3. Applicant will provide an emergency response plan to the County at or prior to the time of seeking building permits, which will be agreed to by the local fire department. (See Exhibits 7, 14, 16, 28, 30, 37 and 38)
  4. The Planning Commission finds that the Project will provide over \$7 million in property taxes, which far exceeds the cost of demands that the project will place on public resources. (See Exhibit 18)
  5. The standard has been met.
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f. The proposed special land use shall not increase traffic hazards or cause congestion on the public or private highways and streets of the area in excess of current capacity. Adequate access to the site shall be furnished either by existing roads and highways or proposed roads and highways. Signs, buildings, plantings, or other elements of the proposed project shall not interfere with driver visibility or safe vehicle operation. Entrance drives to the use and to off-street parking areas shall be no less than 25 feet from a street intersection (measured from the road right-of-way) or from the boundary of a different zoning district.

1. *The Planning Commission finds that access to the site is provided by driveways from Trudeau Rd (2), N. Beach River Road, Black River Road (2), Page Road, Twin Lakes Road (5), Owens Road (5), Hansen Road (4) and Ross Road (2) (See Exhibit 7, Sheet C-002 and Exhibits 30, 37 and 38).*
2. *The Planning Commission finds that these access driveways are adequately spaced from existing driveways and intersections, or are directly across from each other, so as to not create traffic hazards given the infrequent use anticipated for them. (See Exhibits 7, 30, 37 and 38)*
1. *The standard has been met.*

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g. The proposed special land use will be adequately served by water and sewer facilities, and refuse collection and disposal services.

1. *The Planning Commission finds that the site will be adequately served by on-site water and sewer facilities as well as refuse collection and disposal for the only portions of the use that will have short-term human use. The Planning Commission further finds that the vast majority of the project (the*

*Level 3 SES-PV panels) do not require water or sewer facilities, nor do these generate refuse. (See Exhibits 7, 16, 28, 30, 37 and 38)*

1. *The standard has been met.*

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h. The proposed special land use will comply with all specific standards required under this Ordinance applicable to it.

1. *The Planning Commission finds that the special land use will comply with all relevant standards required under the ordinance. (See Exhibits 8-18, 28, 30, 37 and 38)*
2. *The standard has been met.*

## SPECIFIC FINDINGS OF FACT UNDER SECTION 20.10 OF THE ZONING ORDINANCE

a. The site plan shall be designed so that there is a limited amount of change in the overall natural contours of the site and shall minimize reshaping in favor of designing the project to respect existing features of the site in relation to topography, the size and type of the lot, the character of adjoining property and the type and size of buildings. The site shall be developed so as not to impede the normal and orderly development or improvement of surrounding property for uses permitted in this Ordinance.

1. *The Planning Commission finds that the property area is relatively flat. The Planning Commission further finds that it has been use historically for agriculture. (See Exhibits 7, 10, 15, 28, 33, 37 and 38)*
  2. *The Planning Commission finds that there will be only minor change in natural contours of the site and the proposed addition of Level 3 SES-PV panels will not impede the normal and orderly development or improvements of surrounding property. It is consistent with agricultural uses as previously determined by the Michigan Department of agriculture and Rural Development in its guidance document entitled "Policy for Allowing Commercial Solar Panel Development on PA 116 Lands". The Planning Commission further finds that PA 116 the farmland preservation statute.*
  3. *The Planning Commission finds that Level 3 SES-PV solar panels and related equipment do not impact residential uses or natural resources in protection areas. (See Exhibits 7, 9, 10, 12, 14, 15, 16, 17, 23, 28, 30, 33, 37 and 38)*
  4. *The standard has been met.*
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b. The landscape shall be preserved in its natural state, insofar as practical, by minimizing tree and soil removal, and by topographic modifications which result in smooth natural appearing slopes as opposed to abrupt changes in grade between the project and adjacent areas.

1. *The Planning Commission finds that there will be only minor changes in slope or grade on the property in question. The Planning Commission further finds that native soil will be kept in place and preserved for future uses. The Planning Commission further finds that the property's natural state relative to adjacent properties would be largely preserved. (See Exhibits 7, 9, 10, 11, 13, 14, 15, 28, 30, 33, 37 and 38)*
2. *The Planning Commission finds that the property areas have mainly been used historically for agriculture, thus substantially minimizing tree removal. (See Exhibits 7, 10, 28, 30, 37 and 38)*

3. *The Planning Commission finds that the Shoener Vegetative Management Plan is designed to avoid, minimize and/or mitigate impacts related to stormwater runoff/retention, soil quality and vegetative resources. (See Exhibits 7, 9, 15 and 33)*
  4. *The standard has been met.*
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c. Special attention shall be given to proper site drainage so that removal of storm waters will not adversely affect neighboring properties.

1. *The Planning Commission finds that stormwater drainage would not be diverted to neighboring properties. The Planning Commission further finds that the Project will obtain a Part 91 (Soil Erosion and Sedimentation Control) permit. The Planning Commission further finds that the applicant will also receive Drain Commission approval at or prior to the time of seeking building permits. (See Exhibits 7, 28, 30, 37 and 38)*
  2. *The standard has been met.*
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d. The site plan shall provide reasonable, visual and sound privacy for all dwelling units located therein. Fences, walls, barriers and landscaping shall be used, as appropriate, for the protection and enhancement of property and for the privacy of its occupants.

1. *The Planning Commission finds that no dwellings are proposed for the site. The Planning Commission further finds that landscaping and screening will be provided in accordance with the Zoning Ordinance requirements to shield off-site dwellings. (See Exhibits 7, 10, 12, 15, 28, 30, 33, 37 and 38)*
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e. All buildings or groups of buildings should be so arranged as to permit emergency vehicle access by some practical means.

1. *The Planning Commission finds that the site plan provides full access by emergency vehicles to all Level 3 SES-PV solar panels, the substation and maintenance building. (See Exhibits 7, 28, 30, 37 and 38)*
  2. *The standard has been met.*
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f. Every structure or dwelling unit shall have access to a public street, walkway or other area dedicated to common use.

1. *The Planning Commission finds that there are no dwellings proposed for the project. The Planning Commission further finds that Level 3 SES-PV solar panels will be accessible by the access drives identified in subsection f of Section 18.7 above. (See Exhibits 7, 10, 12, 14, 16, 28, 30, 37 and 38)*

*The standard has been met.*

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- g. For subdivision plats and subdivision condominiums, there shall be a pedestrian circulation system as approved by the Planning Commission.

Not applicable, as no subdivision condominiums or subdivision plats are proposed.

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- h. Exterior lighting shall be arranged as follows: a. It is deflected away from adjacent properties, b. It does not impede the vision of traffic along adjacent streets and c. It does not unnecessarily illuminate night skies.

1. *The Planning Commission finds some localized security-related lighting may also be required during construction and/or operations. The Planning Commission further finds that perimeter and safety lights will be installed and used only on an as-needed basis for emergencies or protection against security breach. The Planning Commission further finds that lighting activated manually or by motion detection will be provided at points of site ingress and egress, any operations and maintenance, and the Project substation.*

*The Planning Commission further finds that the on-site Project substation or switchyard will include lighting to allow for safety inspections or maintenance that may be required during the evening hours. The Planning Commission further finds that lighting will also be provided next to the entrance door to the operations and maintenance building and mounted at the site entrance gates to allow for safe entry and exit.*

*The Planning Commission further finds that since maintenance activities are not typically carried out during the evening hours, lights will only be turned on as needed.*

*The Planning Commission further finds that all lighting will be shielded and directed downward to minimize any effects to the surrounding area (adjacent properties and adjacent streets). (See Exhibits 7, 12, 14, 16, 28, 30, 37 and 38)*

*The standard has been met.*

i. The arrangement of public or common ways for vehicular and pedestrian circulation shall respect the pattern of existing or planned streets and pedestrian or bicycle pathways in the area. Streets and drives which are part of an existing or planned street pattern which serves adjacent development shall be of a width appropriate to the traffic volume they will carry and shall have a dedicated right-of-way equal to that specified in the Master Plan.

1. *The Planning Commission finds that vehicle traffic would use the driveway/private road system and established circulation pattern. The Planning Commission further finds that because of the limited amount of traffic, there will be no impact on existing public vehicular and pedestrian traffic circulation. (See Exhibits 7, 14, 28, 30, 37 and 38)*

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j. Site plans shall conform to all applicable requirements of state and federal statutes and the Cheboygan County Master Plan.

1. *The Planning Commission finds that the proposed use conforms with the Cheboygan County Master Plan goals for preservation of agricultural land and for developing renewable energy. (See Exhibits 1, 2, 7, 10, 23, 28, 30, 37 and 38)*
2. *The Planning Commission finds that the proposed use meets the provisions of the Zoning Ordinance as an allowable use through the special use permit process. (See Exhibits 7-18, 28, 30, 37 and 38).*

**DECISION**

**TIME PERIOD FOR JUDICIAL REVIEW**

State law provides that a person having an interest affected by the zoning ordinance may appeal a decision of the Planning Commission to the Circuit Court. Pursuant to MCR 7.101 any appeal must be filed within twenty-one (21) days after this Decision and Order is adopted by the Planning Commission.

**DATE DECISION AND ORDER ADOPTED**

Tuesday, August 11, 2020

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Patty Croft, Chairperson

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Charles Freese, Secretary