

June 27, 2025

Mr. Ken Garrett
Building and Zoning Official
B&F Construction Code Services Inc.
2400 Vantage Drive
Elgin, IL 60124

Via Email Only

Re:

Proposed Inkberry Solar Farm

Special Use Permit (SUP) Application Review

Dear Ken:

Please allow this to acknowledge receipt of the following:

• Application for Special Use Permit for a 2 MWac solar farm on PIN Numbers 03-23-200-014 and 03-23-200-17, consisting of 65 pages.

We have reviewed the same and provide the following comments for Village consideration:

- We strongly recommend that historical records for drain tile be provided for review. Much of Boone County's farmlands contain drain tile, and cutting through an existing tile can impact tributary field(s) that are far away from the point where the tile is severed.
- We recommend that the Village require pollinator friendly landscape features, along with a
 maintenance bond to help ensure that the applicant establish and maintain the landscaping (or
 the bond could be used to construct improvements to manage runoff if the vegetation is not
 established or maintained).
 - The American Society of Civil Engineers conducted hydrologic studies of solar farms to determine if there is increased runoff volume, or a notable increase in peak runoff rate. The study was published in the *Journal of Hydrologic Engineering* in May of 2013, and found that there is little increase in runoff volume or rate <u>if</u> the panels are placed on vegetated fields, and the vegetation is maintained. It is therefore very important to properly establish and maintain the vegetation, otherwise storm water detention will be necessary.
 - We recommend that the periodic vegetation inspection reports be provided to the Village.
- Permits from IDOT will be required for the site access driveway(s).
- We recommend that the portion of the access driveway(s) within the public right of ways are paved. Access driveways on private property may be aggregate.
- We would like to understand what the applicant has in mind for the vegetative screening along the south side of the panel field. Please provide additional information and/or a detailed drawing.
- We recommend that the applicant provide at least a preliminary decommissioning plan, as well as an opinion of probable cost. A decommissioning bond should be included as a condition of the SUP.

• There is a drainage ditch located along the northerly property line of West Grove Subdivision with known drainage issues. The Village anticipated that the issues would be resolved concurrently with the development of the parcel to the north, and while at the time the Village probably didn't envision the property to the north developing as a solar farm the drainage issues should nonetheless be addressed concurrently with this project. The "fix" that was envisioned years ago anticipated the property to the north developing as an industrial use and included widening the drainage easement, installing storm sewers to manage high frequency rainfall events (i.e., 10-year storm and more frequent storms) and create a swale over the storm sewer to manage the low frequency storm events (i.e., any storm greater than the 10-year event). Given the fact that the proposed development is a solar farm with the panels located 250'+ from the property line, we think there is an easier, less costly fix. We'd suggest that a new ditch be created on the solar farm property along its southern property line. Spoils from the new ditch could then be utilized to fill the existing ditch. The new ditch could be made wider w/ 4:1 side slopes so that it can be maintained, and the new ditch should be protected by a drainage easement.

Please do not hesitate to contact me at (815) 636-9590 with any questions, or if I may be of further assistance.

Yours very truly,

McMAHON

Christopher D. Dopkins, P.E. Associate/Village Engineer

Cc:

Ms. Kristi Richardson, Village President Mr. David Howe, Director of Public Works Mr. Aaron Szeto, Village Attorney

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