



Strand Associates, Inc.®
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Madison, WI 53715
(P) 608.251.4843

August 6, 2021

Mr. Erin Ruth
Village of Cottage Grove
221 East Cottage Grove Road
Cottage Grove, WI 53527

Re: Wisconsin Power and Light Company (WPL)—Bonnie Road Substation
Village of Cottage Grove, Wisconsin (Village)

Dear Erin,

Strand Associates, Inc.® (Strand) received a site development review package from WPL on July 28, 2021. Strand received the following documents for review:

1. Request for Site Plan Approval Application, dated July 27, 2021
2. Bonnie Road—Cottage Grove Zoning Map
3. Site Drawings
4. Substation Plan View
5. Substation Elevation View

Strand has the following comments on the previously referenced documents.

Site Plan Comments

1. In accordance with the Village ordinance, driveway openings shall not exceed 24 feet at the lot line. The northern driveway entrance meets the opening size requirements; however, the southern driveway has an opening of 31 feet at the lot line.
2. In accordance with the Village ordinance verify the devices securing the barbed wire to the proposed fence are 10 feet above the ground in height and project toward the property and away from the public right-of-way. The application listed the fence being a chained link fence, 8 feet tall with 1-foot barbed wire. A fencing permit should be issued before construction by the Village Building Inspector.
3. Provide a concrete driveway apron typical section in the drawings. The concrete driveway should be a minimum thickness of 7 inches over 6 inches of base course.
4. The site drawings include the gravel substation pad, a portion of the northern driveway, and a portion of the site fencing within the “Buffer and Storm Sewer Easement.” These elements should be located outside of the easement.

Stormwater Comments

No stormwater calculations or modeling were provided for this review. The site plan includes a bioretention basin, storm trench drain, and graded gravel lot sloping south to north. More information is needed from the applicant to review the performance of these proposed stormwater management improvements. The following is a list of items needed for review:

1. Stormwater Management—Provide documentation, including calculations and modeling, documenting the Postconstruction Peak Discharge Rates, Water Quality Treatment, Infiltration, and Volume and Oil and Grease Control are in accordance with the Village’s ordinance.

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2. Provide information and details for the north perimeter trench drain.
3. Provide outfall details, plantings, and cross section details for the bioretention facility.
4. Verify the north perimeter trench drain and clear stone berm captures the stormwater from the site and directs it to the bioretention basin. Based on the grading plan, during a large storm event it appears the water will overtop and flow around the berm and will not flow to the bioretention basin. This overflow will then travel directly to the north impacting the northern properties. Strand recommends a ditch instead of a berm to capture the stormwater flowing north from the gravel area. The northern ditch should capture up to the 100-year storm event and direct it to the bioretention basin with overflow to Outlot 2.
5. Stormwater and erosion control permits shall be submitted before construction.

General Comments

1. Strand recommends a visual screening around the proposed site in addition to the proposed four trees. The Village may want to consider an opaque fence or other screening alternatives.
2. Strand recommends a noise analysis be completed for the proposed development to determine whether the site will not increase the level of ambient noise for the residential area to the north.
3. Strand recommends the proposed transmission line route to the substation be reviewed by the appropriate Village staff before approval of this substation. The goal should be for the transmission line not to negatively impact existing residential properties to the west and north of this proposed site.
4. If lighting is required for the site, the lighting should be directed away from the residential properties to the north. Any proposed lighting improvements should be shown on future drawing submittals.

Strand anticipates a second review of this site and stormwater components that addresses the previously mentioned comments before the approval of this site plan. Please call 608-251-4843 if you have any questions.

Sincerely,

STRAND ASSOCIATES, INC.®



Kyela R. Specht



Josh J. Straka, P.E.

c: JJ Larson, Director of Public Works/Utilities, Village of Cottage Grove