

Jeremy Balousek, P.E., Division Manager Joe Parisi, Dane County Executive

Land Conservation • Office of Lakes & Watersheds • Parks • Water Resource Engineering

Thursday, November 2, 2023

Ajay Sharma Bowman Consulting Group, Ltd. 10 South LaSalle St, STE 2110 Chicago, IL 60603

RE: Equipment Share- Erosion Control & Stormwater Management Preliminary Review

Dear Ajay Sharma:

Per your request, I have reviewed the conceptual plans for the proposed commercial development on Lot 3 CSM 16140 located off North Star Road in the Town of Cottage Grove, Dane County Wisconsin. This preliminary review is based on the information you have provided to date and is consistent with the preliminary review process found in Chapter 14, Dane County Code of Ordinances (DCCO).

The proposed development will require erosion control and stormwater management permits from this office. This site is subject to the erosion control and stormwater management performance standards described in §14.11(3) and §14.12(2) DCCO. The following items will need to be addressed in the erosion control and stormwater management plans:

- 1. The erosion control plan must be designed to prevent gully and bank erosion, limit total off-site annual sediment yield from sheet and rill erosion to less than 5.0 tons/acre and provide a stable outlet capable of carry the design flow. The prescriptive requirements of §14.11(3)(d) must also be incorporated into the erosion control plan.
- 2. The proposed development results in the cumulative addition of more than 20,000 SF of impervious surfaces and therefore is subject to new development stormwater management standards. The stormwater management plan must be designed to provide rate control for the 1, 2, 10, 100 and 200-year, 24 hour storm events; achieve 80% TSS reduction for the 1-year, 24 hour storm event compared to no controls; achieve 90% average annual predevelopment stayon; provide oil and grease control from parking and traffic areas; and provide a stable outlet. This site is not in a thermally sensitive watershed and is no longer within a closed watershed, therefore those standards will not apply to this development.
- 3. Lot 3 CSM 16140 is part of a previously permitted commercial plat known as Cottage Grove Rural Business Lots (Permit SM2022-0366). The approved stormwater management plan addresses rate control and sediment control for Lot 3 CSM 16140 assuming a maximum of 85% lot coverage split 30% roof and 70% parking. Gravel is considered an impervious surface. The proposed development appears to exceed the parking area assumptions of the previously

approved stormwater management plan. You will need to demonstrate that rate and sediment control requirements are met with the existing regional wet detention basin. A copy of the full stormwater management report for SM2022-0366 is available upon request.

- 4. It appears there are no on-site stormwater BMP's proposed for this development. At a minimum, infiltration (90% predevelopment stay-on) and oil and grease control will need to be addressed on-site. A site evaluation for infiltration per WDNR Technical Standard 1002 will be required.
- 5. Stormwater modeling and calculations must be done using NRCS TR-55 methodology and the design storms and rainfall distribution described in ordinance. Rational method is not an acceptable methodology for site design.
- 6. Swales will need to be designed for capacity and stability for a 10-year, 24 hour storm event. Disturbed slopes 3:1 or greater will need to be erosion matted during site stabilization.
- 7. The stable outlet standard will need to be addressed. It appears swales will direct runoff to the southeast corner of the site. You will need to demonstrate the outlet is stable for a 10-year, 24 hour storm event.
- 8. All erosion control and stormwater management practices will need to be designed to meet applicable WDNR and Dane County Technical Standards.

The above items will need to be addressed in the final erosion control and stormwater management plans. Completed permit applications and plans will need to be submitted for review. Permit application forms are available at <a href="https://lwrd.countyofdane.com/what-we-do/erosion-and-stormwater">https://lwrd.countyofdane.com/what-we-do/erosion-and-stormwater</a>. Additional guidance can be found in the <a href="Dane County Stormwater Manual">Dane County Stormwater Manual</a>. Permits need to be obtained prior to commencement of any land disturbing activity.

Sincerely,

Jason Tuggle

Urban Erosion Control Analyst Water Resource Engineering

Dane County Land & Water Resources

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Cc: Roger Lane, Dane County Zoning Administrator (email)
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