

August 13, 2018

Doug Koehler
Senior Planner
City of Waukesha



Re: Project Review – Montessori School of Waukesha – Project Number: SPAR18-00028

Dear Mr. Koehler,

Below is a response to the review comments received August 7, 2018.

Sanitary Sewer

1. Need to show the existing sanitary sewer laterals serving the existing buildings.
 - Plans have been updated. See Sheet C1.1
2. Any unused sanitary laterals shall be abandoned. Contact the Engineering Division for specific requirements.
 - Note updated on C1.1.
3. Sewer lateral video. The existing building has a sanitary sewer lateral connecting the City's sewer main. Please provide a sewer lateral video to City for review and approval. Contact the City Engineering Department for the video format. If lateral maintenance needed, then the lateral improvements may need to be included as part of this project. The lateral pipe and connection to the main may need to be lined or relayed to reduce infiltration into the City's sanitary sewer system or improve the structural integrity.
 - Note added to Sheet C1.1 and C1.4.
4. A record drawing showing the sanitary sewer improvements shall be signed/sealed by a professional engineer or registered land surveyor.
 - Record drawing note added to Sheet C1.0.

Storm Sewer

4. A record drawing showing the storm sewer improvements shall be signed/sealed by a professional engineer or registered land surveyor.
 - Record drawing note added to Sheet C1.0.

Street Lighting

The City of Waukesha has existing Fiber Optic Communications buried in the right of way on the east side of University Drive. These facilities shall be shown on all site drawings as a reference to contractors. Call Digger's Hotline prior to excavation for proper facility locations. No further comments at this time.]

- Notes added to Sheet C1.1 and C1.4.

Stormwater

1. This project adjoins areas that encounter severe flooding during large storm events. This project is proposing to discharge into a City storm sewer that experiences very large flows during the 100-year storm event. Existing flooding occurs during large storm events on the UWW soccer fields which are upstream, the Summit Woods property which is downstream, the right of way area of Summit Avenue, and the south side of this property. The City modeling shows no flooding of the Montessori property due to storm sewer surcharging in the pipe.

- Per City provided map flooding does not occur on the Montessori school property.

2. Accurate tailwater elevations for the 2-year, 10-year, and 100-year storm events should be used for the on-site storm water modeling. Include Pond Reports for 2-year, 10-year, and 100-year events. Both connections should be updated.

- Tailwater elevation is top of rim at the connection storm structure along Summit Avenue. Since this tailwater elevation is 3' below bottom of pond. It does not have an effect on the proposed pond.

3. Restoration specifications for the dry basin should be added to the Drawings.

- Plans have been updated, C1.3

4. Drainage easements should encompass pond and flood storage areas.

- Added to Sheet C1.3 to encompass the south detention basin and stormwater quality structure. The north drainage area is just a open swale which leads to an endwall with pipe that has been sized for the 100yr storms.

5. The City has a storm water model showing the flooding elevations in this area. The model flood elevations should be added to these plans prior to review and approval of drawings.

- Model shows no flooding on the property.

6. There is severe flooding downstream of this property. Infiltration should be utilized to the maximum extent practicable. Replace landscape berms along east and west lot lines with shallow rain garden or grass areas to encourage infiltration, and reduce off site runoff flow rates with the goal to reduce downstream flooding.

- Dry detention basins and swales will naturally infiltrate during rain events while storm flows are being detained in the basins. This will help provide infiltration in the area.

7. Include illustration printout of hydrograph combinations in storm water plan.

- Printout is included in stormwater report.

8.32.10(e)11. A storm water BMP maintenance agreement in accordance with section 32.12;

- Draft Maintenance Agreement is included.

9. a. Submit storm water maintenance agreement using City template. City template can be sent to Engineer.

- Draft Maintenance Agreement is included.

10.32.10(e)(12.)H. A cover sheet stamped and signed by a professional engineer registered in the State of Wisconsin indicating that all plans and supporting documentation have been reviewed and approved by the engineer and certifying that they have read the requirements of this ordinance and that, to the best of their knowledge, the submitted comply with the requirements.

- Plans have been updated on C1.0 and stamped.

11. 32.10(d)(6.)A. Drainage easement. Perpetual drainage easements or other deed restrictions shall be recorded on the property to preserve major storm water flow paths and permanent storm water BMP locations. Covenants in these areas shall not allow buildings or other structures and shall prevent any grading, filling or other activities that interrupt or obstruct flows in any way. Covenants shall also specify maintenance responsibilities and authorities in accordance with section 32.12.

- Drainage easement is on Sheet C1.3 to cover dry detention basin. Stormwater Maintenance agreement can cover remaining storm system. BMP diagram is included in the plans.

12. 32.10(e)(12.)J. For sites where changes are proposed in storm water flow paths, or where proposed storm water discharges may otherwise have a significant negative impact on downstream property owner(s), the Authority may require the applicant to submit written authorization or complete other legal arrangements with the affected property owner(s); and

- All post development flows are less than predevelopment flows.

13. Submit Erosion Control Plan per Chapter 32.09.

- EC Plan is included. See specifications on Sheet C1.0 and locations on C1.3.

14. 60. 32.09(d)(2.)(B.)(xiv) Detailed construction notes clearly explaining all necessary procedures to be followed to properly implement the plan, including estimated starting date of grading, timing and sequence of construction or demolition, any construction stages or phases, utility installation, dewatering plans, refuse disposal, inspection requirements, and the installation, use, and maintenance of BMP(s) proposed in the plan;

- See Sheet C1.0 for construction sequence and specifications.

15. 32.09(d)(2.)(C.)(ii) Summary of design data for any structural BMP such as sediment basins or sediment traps. A professional engineer, licensed in the State of Wisconsin, shall stamp and sign a statement approving all designs and certifying that they have read the requirements of this ordinance and that, to the best of their knowledge, the submitted plans comply with the requirements;

- Plans provide stormwater quality structure. This structure is to be installed prior to earth disturbing activities.

16. 32.09(d)(2)(iv): All woodland areas, those proposed to be lost or transplanted during construction and acres or numbers of each. For woodlands proposed to be lost, show individual trees larger than eight (8) inches in diameter that are located within twenty (20) feet of proposed grading boundaries

- Tree survey was forwarded to planning. Landscaping plans did not receive comments. Therefore we are assuming landscaping plan as shown, is acceptable.

17. Add north pond area to storm water management plan.

- North pond is a swale that drains to an open endwall storm sewer with a 100yr sized pipe.

General Engineering

1. Depending on the final design, the following permits or approvals may be needed: a. City of Waukesha Storm Water Erosion Control Permit, b. Wisconsin DNR NOI, and NOI for fill site., c. City of Waukesha – Engineering Division Construction Permit. City of Waukesha – Engineering Division Street Opening Permit

- Understood.

2. Additional required submittals, fees, financial guarantees include:

a. Easements, if applicable

b.

c. A Developers Agreement will need to be prepared by the City, and approved prior to the start of construction.

e. Impact fees

f. Review fees

g. Letter of credits

h. Applicable sewer connection charges per Chapter 29.11(c) will be owed to the City for this project.

i. ALTA Survey

- Understood.

3. The storm water management plan, construction drawings, storm water facility maintenance agreement, easements, Developer's Agreement, and Bonds should be reviewed and approved prior to the construction being started. If the location of any work need to be changed as a result of the approved construction drawings, the Drawings should be updated to reflect the needed changes.

- Understood.

4. In accordance with Wisconsin Administrative Code A-E 2.02(4): Each sheet of plans, drawings, documents, specifications and reports for architectural, landscape architectural, professional engineering, design or land surveying practice should be signed, sealed, and dated by the registrant or permit holder who prepared, or directed and controlled preparation of, the written material.

- Understood.

5. A temporary 10 foot wide sidewalk slope easement along the street frontages of all lots shall be in effect until concrete sidewalks are installed. Said easement area shall not be permanently improved.

- Provided on plans.

6. A 15 foot radius easement permanent sidewalk/grading easement is hereby established upon each corner lot where street right of way lines intersect.

- Provided on plans.

7. 22.53 Traffic, Loading, Parking and Access (1) TRAFFIC VISIBILITY. (Am. #38-02) In all districts no structures, fences, or vegetation shall be permitted on a corner lot within twenty (20) feet of the point of intersection of the right-of-way lines (the "corner") which obstructs or interferes with traffic visibility. Vision corner easements: No structure, driveway or improvement of any kind is permitted within the vision triangle. No vegetation, bushes, trees, or other visual obstructions may exceed 24 inches in height within vision corner easements platted hereon. Said vision corner easement is granted to the City of Waukesha.

- Trees and signage on corner has been removed to accommodate.

8. Sidewalk should be added to the drawings and installed along Brentwood Drive and University Avenue for the full length of the property. The sidewalk along University Avenue should connect into the existing bus stop.

- Plans have been updated.

9. The 25 foot residential paving setback is not met along the east lot line.

- Plans have been updated to remove parking in this area.

10. Add City sidewalk detail.

- Plans have been update, C1.6.

11. Add spot grades for all proposed sidewalk that include spot grades every 25 feet. Show existing top of curb grade, 2% terrace slope, 1.5% sidewalk cross slope.

- Plans have been updated, C1.3. Grading has been completed to match existing grades to maximum extent practicable. Please note existing Brentwood Drive exceeds 5% therefore the walk matches the road grade. City to confirm acceptable.

12. Add note, "City standard specifications shall be followed for all work in the public right of way."

- Plans have been updated and note added on Sheet C1.0.

13. Chapter 6.13 Driveways (4): The driveway width should not be greater than 35' at the curb and 30' at the sidewalk, unless the property is in a district zoned for industrial use. In a district zoned for industrial use, the driveway width cannot be greater than 50' at the curb and 45' at the property line. The total frontage of all driveways servicing the premises in any district cannot exceed 90' without approval of the Council.

- 3 Driveways are proposed with a total width, at the lot line, of 74.25'. Driveways are below mentioned dimensions therefore code compliant. Please confirm.

13a. Label driveway widths.

- They are on Sheet C1.2.

14. Show dimensions of terrace, sidewalk, driveways.
 - Shown on Sheet C1.2.
15. Proposed sidewalk grades should be shown every 25-Ft at face and back of sidewalk.
 - Shown on Sheet C1.3.
16. Show match grades at sidewalk.
 - Plans have been updated, Sheet C1.3. Shows existing grades to match.
17. Show approximate match limits of pavement (and grades). Add note "Pavement limits shown on the plan are approximate – actual limits will be determined in the field by the City Engineer."
 - Note added on C1.3.
18. Remove existing driveway access and existing driveway section curb and gutter and replace with standard vertical face curb and gutter.
 - Note provided on C1.1, C1.2, and detail on C1.6.
19. Show post relocation at southwest corner of site where sidewalk will be extended.
 - Unaware of post relocation.

General Engineering-Utility Plan

1. Existing storm sewer is shown along the west side of the property in University Drive. The City utility records show the pipe location to continue further to the north. The remaining existing pipe locations adjoining this property should be shown with rim and invert, and pipe diameter information.
 - Plans have been updated.
2. List vertical clearances of storm sewer and water main.
 - Plans have been updated, See Sheet C1.4.

CSM

Notes:

1. Only 1 sheet of CSM was submitted. The full stamped and signed CSM should be submitted for review.
 - Full CSM is included.

General:

1. Depending on the final design, the following permits or approvals may be needed:
 - a. City of Waukesha Storm Water Erosion Control Permit
 - b. Wisconsin DNR NOI, and NOI for fill site.
 - c. City of Waukesha – Engineering Division Construction Permit
 - d. City of Waukesha – Engineering Division Street Opening Permit
 - Understood.
2. Additional required submittals, fees, financial guaranties include:
 - a. Easements, if applicable
 - b. Utility Plan, Site and Grading Plan
 - c. A Developers Agreement will need to be prepared by the City, and approved prior to the start of construction.
 - e. Impact fees
 - f. Review fees
 - g. Letter of credits
 - h. Applicable sewer connection charges per Chapter 29.11(c) will be owed to the City for this project.
 - Understood.
3. The storm water management plan, construction drawings, storm water facility maintenance agreement, easements, Developer's Agreement, and Bonds should be reviewed and approved prior to the construction being started. If the location of any units

need to be changed as a result of the approved construction drawings, the Drawings should be updated to reflect the needed changes.

- Understood.
4. In accordance with Wisconsin Administrative Code A-E 2.02(4): Each sheet of plans, drawings, documents, specifications and reports for architectural, landscape architectural, professional engineering, design or land surveying practice should be signed, sealed, and dated by the registrant or permit holder who prepared, or directed and controlled preparation of, the written material.
- Understood.
5. Both corners along Brentwood Drive should be monumented.
- CSM has been updated.
6. A temporary 10 foot wide sidewalk slope easement along the street frontages of all lots shall be in effect until concrete sidewalks are installed. Said easement area shall not be permanently improved.
- Understood, CSM addresses.
7. A 15 foot radius easement permanent sidewalk/grading easement is hereby established upon each corner lot where street right of way lines intersect.
- CSM has been updated.
8. 22.53 Traffic, Loading, Parking and Access - (1) TRAFFIC VISIBILITY. (Am. #38-02) In all districts no structures, fences, or vegetation shall be permitted on a corner lot within twenty (20) feet of the point of intersection of the right-of-way lines (the "corner") which obstructs or interferes with traffic visibility. Vision corner easements: No structure, driveway or improvement of any kind is permitted within the vision triangle. No vegetation, bushes, trees, or other visual obstructions may exceed 24 inches in height within vision corner easements platted hereon. Said vision corner easement is granted to the City of Waukesha.
- CSM has been updated.
9. The CSM should be drafted to meet the requirements of the City Subdivision and Land Division Ordinance.
- Understood.
10. Provide drainage easement for storm water facility and 100-year flooding areas.
- CSM has been updated with proposed storm easement.

The drawings and calculations have been revised per your comments. Please accept for review and approval. Please let me know if you have any comments, questions, or need additional information.

Sincerely,



Eric Drazkowski, P.E.
Excel Engineering, Inc.