



DEPARTMENT OF PUBLIC WORKS

Fred Abadi, PhD, PE, Director

fabadi@ci.waukesha.wi.us



ENGINEERING COMMENTS FOR PLAN COMMISSION AGENDA Wednesday August 27, 2014

Time: 6:30 p.m.

Place: Waukesha City Hall, 201 Delafield Street, Council Chambers

- I. Call to Order
- II. Pledge of Allegiance
- III. Roll Call
- IV. Approval of Minutes

ID#14-0849 Minutes for the Meeting of August 13, 2014.

V. Business Items

PC14 -0091 Howell Oaks Addition No. 1 - Final Plat Review

General

1. The following items should be submitted:
 - a. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council.
 - b. Permits needed for the project will include:
 - i. City of Waukesha Storm Water/Erosion Control permit.
 - ii. City Construction Permit.
 - iii. Wisconsin Department of Natural Resources NR 216 Notice of Intent permit
 - c. Signage and Pavement marking plan. A signage plan should be prepared showing all proposed signs including but not limited to street name signs, stop signs, warning signs (on Sheet 2.1), etc.
 - d. Developer's Agreement.
 - e. Waukesha Water Utility approval.

☒ **ENGINEERING
DIVISION**
Paul G. Day, PE
City Engineer
130 Delafield St
Waukesha, WI 53188
262-524-3600
Fax – 262-524-3898

☐ **MUNICIPAL PARKING
SERVICES**
Patti Cruz
Parking Supervisor
241 South St
Waukesha, WI 53188
262-524-3622
Fax – 262-650-2573

☐ **STREETS
DIVISION**
300 Sentry Dr
Waukesha, WI 53186
262-524-3615
Fax – 262-524-3612

☐ **WASTEWATER
TREATMENT PLANT**
Jeff Harenda
WWTP Manager
600 Sentry Dr
Waukesha, WI 53186
262-524-3625
Fax – 262-524-3632

☐ **WAUKESHA METRO
TRANSIT**
Brian Engelking
Transit Director
2311 Badger Dr
Waukesha, WI 53188
262-524-3594
Fax – 262-524-3646

www.ci.waukesha.wi.us

2. Chapter 32.07(b)(2): Once all submittal items are completed, submit all items listed in sub.(b)(1)(A)-(G) in digital form for City filing.
3. A preconstruction meeting should occur prior to the start of work.
4. A City inspector must be on-site for public infrastructure construction work.
5. As-built Drawings will need to be submitted for the utilities listed below. The requirements for the as-builts were previously sent to the Land Surveyor and Engineer.
 - a. Storm Water Facilities
 - b. Public infrastructure including storm sewer and sanitary sewer

Sheet T1

1. No comments.

Sheet C1.0 Overall Site Grading Plan

1. No comments.
- 2.

Master Grading and Drainage Plan Sheet C2.1

1. No comments.

Master Grading and Drainage Plan Sheet C2.2

1. No comments.

Master Grading and Drainage Plan Sheet C2.3

1. The curb heads cannot be tapered down at pond access locations. The curb taper note should be removed.

Master Grading and Drainage Plan Sheet C2.4

1. No comments.

Erosion Control Plan Sheet C3.0

1. No comments.

Storm Sewer System Plan Sheet C4.0

1. No comments.

Roadway and Storm Sewer Plan & Profile Sheet C4.1

1. 3 ramp crossings at a T-intersection should be shown on the Drawings.

Roadway and Storm Sewer Plan & Profile Sheet C4.2

1. The curb heads cannot be tapered down at pond access locations. The curb taper note should be removed.

Roadway and Storm Sewer Plan & Profile Sheet C4.3

1. No comments.

Roadway and Storm Sewer Plan & Profile Sheet C4.4

1. Chapter 23.06(5)(a)(4): The grades of local streets shall not exceed 8%, except that where unusual or exceptional conditions exist, the Commission may modify this Chapter. The proposed grade of Olde Howell Road is 9.94%. The grade was designed with City Engineering Staff review in 2006 as layed out as it is an area of unusual and exceptional topography. Other surrounding streets also provide access to all connection points of this street. The Fire Department staff stated that the current design is acceptable.
2. Chapter 23.06(5)(c): All changes in street grades in excess of 1% shall be connected by vertical curves of a minimum length equal to 15 times the algebraic difference in the rate of grade. The length of curve of 150 feet should be at least 179 feet.
 - a. The 150-foot vertical curb is associated with the steep section of road along Olde Howell Road which was worked out with City Staff in 2006. This curve promotes better drainage at the intersection, directing runoff towards the inlets.
3. Verify that the inlets are at the low points.

Roadway and Storm Sewer Plan & Profile Sheet C4.5

1. No comments.

Roadway and Storm Sewer Plan & Profile Sheet C4.6

1. No comments.

Roadway and Storm Sewer Plan & Profile Sheet C4.7

1. No comments.

Roadway and Storm Sewer Plan & Profile Sheet C4.8

1. The Plat includes a 20-foot radius along the right-of-way line at the intersections. The sidewalk should follow along the right-of-way line curve at the intersections. This additional distance will allow the ramps to not be so steep. Many ramps are designed within the tolerances but are still steep.
2. Are rim elevations for inlets at gutter or flange? The City typically lists the gutter elevation.
3. Are grades for curb line top of curb? Or are some top of ramp opening? This detail should be noted.
4. Flange grades are shown 0.15' above gutter. The vertical difference should be 0.12'.
5. Some walks at intersections are backpitched. Positive drainage should be provided to the street. As stated above, the walk should follow the curved right-of-way line to provide more ramp length to address this issue.

6. Additional spot grades are needed at all intersection details, including but not limited to along the centerlines. High points and low points should be labeled. The sidewalk will need to be survey staked every 25 feet so spot grades in intersection areas should be at least every 25 feet and at critical points of deflection.
7. Prairie Song Drive & Madison Street Detail
 - a. Southwest walk is back pitched.
 - b. Superelevation extends past detail limits. Enlarge detail.
8. Prairie Song Drive & Olde Howell Road Detail
 - a. The graphic scale is listed as 1" = 10' but should be 1" = 20'.
 - b. The southwest and northwest walks are back pitched.
 - c. A low point in walk should be changed north of northwest corner.
9. Madison Street & Howell Oaks Drive Detail
 - a. West lane is shown for superelevation. What about east lane? Additional spot grades are needed.
 - b. More spot grades are needed along southeast radius. The high point should be labeled.
 - c. At southwest corner, curb slope changes from 7.6% across ramp for 6 feet to 0.7% for 6 feet. Curb slope should be even out around radius. The walk is back pitched.
 - d. At southeast corner, the curb is too flat south of inlet. Additional spot grades are needed.
10. Prairie Song Drive & Howell Oaks Drive
 - a. At northwest corner, the walk is back pitched, and the gutter is 5.4% which is too steep leading up to the inlet on Prairie Song Drive.
 - b. At the northeast corner, a high point should be considered to be added along the curb at mid point and should be labeled.
 - c. The spot grade at intersection of centerlines and along centerlines should be labeled.
11. Howell Oaks Drive & Olde Howell Road Detail
 - a. At southwest corner, label high point along flange.
 - b. Ramp at southeast corner is too flat. Walk needs to be more above curb adjacent to ramp. Add spot grades along sidewalk north and south of ramp at deflection points.

Roadway and Storm Sewer Plan & Profile Sheet C4.9

1. No comments.

Sanitary Sewer & Water Main System Plan C5.0

1. No comments.

Sanitary Sewer & Water Main Plan & Profile C5.1

1. No comments.

Sanitary Sewer & Water Main Plan & Profile C5.2

1. No comments.

Sanitary Sewer & Water Main Plan & Profile C5.3

1. No comments.

Sanitary Sewer & Water Main Plan & Profile C5.4

1. No comments.

Sanitary Sewer & Water Main Plan & Profile C5.5

1. No comments.

Sanitary Sewer & Water Main Plan & Profile C5.6

1. No comments.

Construction Notes and Details Sheet C6.0

1. No comments.

Construction Notes and Details Sheet C6.1

1. No comments.

Madison Street Detour Plan Sheet C6.2

1. In discussions with Engineering Staff, the Detour Plan should be changed to a Traffic Control Plan. The traffic in Madison Street should not be detoured while the work in Madison Street is being completed.

Storm Water Management Plan

1. No comments.

Storm Water Management Practice Maintenance Agreement

1. The addendums to the Agreement should be prepared, submitted for review and approval, and then recorded.

Final Plat

1. 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 approval of the Final Plat. If the location of any lot lines need to change as a result of the approved construction drawings, the Final Plat should be updated to reflect the needed changes.
2. Wisconsin State Statute 236.20(2)(a): The area listed in the legal description is 8.58 acres. The area encompassed by the legal description is 94.34 acres. The area listed in the description should be revised.
3. Chapter 23.06(7)(f): Side lot lines shall be approximately at right angles or radial to the right-of-way line of the street on which the lot faces.
 - a) The lot lines between lots 27 and 28 are at a 53 degree angle. The lot lines between lots 51 and 52 are at a 47 degree angle. The lot lines between lots 52 and 53 are at a 67 degree angle.
4. Chapter 23.06(3)(g) Subdivision and Platting: Easements across centered on rear or side lot lines should be provided for utilities where necessary and shall be at least 10' wide. These easements shall permit the utilities to extend their services within this area. Please coordinate with the applicable utilities and add the easements as requested by said utility companies to the Plat. Drainage easements should not overlap utility easements to the maximum extent practicable. If a crossing is needed, drainage easements and utility easements should cross perpendicular to each other.
 - a) The utility easements should be added to the Plat.
5. The vision corner easement note should list that no driveways shall be permitted within the vision corner.
6. After further discussion with Community Development Department, a table listing the Lot #, Elevation of Seasonal High Water Table, and Proposed Basement Floor Elevation should be shown on the Final Plat.
7. This note should be added to the Plat:
 - a) "Basement Restriction-Groundwater. Basement floor surface elevations shall not be lower than the proposed basement floor elevations shown in the table shown either on the Plat or on the Master Grading Plan and Erosion Control Plan due to the potential for the seasonal high water table. Minimum basement floor elevation changes may only be authorized upon further analysis compliant with the City of Waukesha Storm Water Management Ordinance and such analysis must be approved by the City of Waukesha Engineering Department.
8. Several temporary grading easements are shown on the Plat in Outlot 5. Outlot 5 is being conveyed to Waukesha County. The grantee and conditions for the easements should be listed. The condition for releasing the easement should also be specified.
9. Wisconsin State Statute 236.20(2)(c): Easements not parallel to a boundary or lot line should be shown by boundary bearings and distances.
 - a) The 20' storm sewer easement on lot 38 is not fully defined.
 - b) The vision corner easement exterior boundaries should be defined.
10. Confirm that the location of the right-of-way on the Plat along Madison Street just west of Prairie Song Drive is shown correctly. There appears to be a discrepancy between the northern extent of the existing parcel (WAKC1318999002) and the location shown on the plat. Provide documentation of the location of parcel WAKC1318999002 and the right-of-way of Madison Street.

11. Note #7 in the Conservancy restrictions lists the notes as not applying in Outlot 4. Verify if it is intended for Outlot 5.
12. The street name “Prairie Song Drive” should be changed to “South Prairie Song Drive.”

PC14 -0093 Carroll University, Maxon & Lowry Hall - Certified Survey Map

CSM

1. The following items should be submitted:
 - a. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council or Chapter 32.08(c). Development fees will be owed to the City for this project.
 - b. Chapter 32.07(b)(2): Once all submittal items are completed, submit all items listed in sub.(b)(1)(A)-(G) in digital form for City filing.
2. 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 approval of the Certified Survey Map (CSM). If the location of any lot lines need to change as a result of the approved construction drawings, the CSM should be updated to reflect the needed changes.
3. Wisconsin State Statute 236.20(2)(f) as referenced by 236.34(1)(a): The exact width of all easements, streets and alleys should be shown.
 - a. All existing easements should be shown. Also, confirm if any public utilities such as public sanitary sewer, storm sewer, or water main or located within the boundary of the CSM that need easements to be shown or conveyed.
 - b. The City’s Geographic Information System (GIS) shows a 12” storm sewer line along or near the north lot line of the CSM. Confirm if the storm sewer is located on the Carroll University property and is within the boundary of this CSM. If the pipe is on Carroll property, please confirm if an easement exists for the pipe that should be shown on the CSM. If no easement exists and the pipe is on Carroll property, an easement for the storm sewer should be added to the CSM and a separate document prepared.
 - c. A note should be added to the CSM referencing the separately recorded Storm Water Maintenance Agreement. The proposed storm water drainage easements should be added to the CSM.
 - d. The location description includes the language “and vacated alleys”. On Sheet 1, the Surveyor is showing an “alley” through the Van Male Fieldhouse. On Sheet 6, the alley is not shown. Please clarify. Also, the document number of the document vacating the alleys should be added to the CSM. Please provide a digital copy of this document to the City for filing.
 - e. Confirm if the existing City sidewalk is completely located in the right-of-way as shown. If the sidewalk is not located completely within the right-of-way, sidewalk easements may be needed.

4. Chapter 23.06(3)(g) Subdivision and Platting: Easements across centered on rear or side lot lines should be provided for utilities where necessary and shall be at least 10' wide. These easements shall permit the utilities to extend their services within this area. Please coordinate with the applicable utilities and add the easements as requested by said utility companies to the Plat. Drainage easements should not overlap utility easements to the maximum extent practicable. If a crossing is needed, drainage easements and utility easements should cross perpendicular to each other.
5. Wisconsin State Statute 236.20(2)(c) as referenced by 236.34(1)(c): Where the exterior boundary lines show bearings or lengths that vary from those recorded in abutting plats or certified surveys there shall be the following note placed along the lines, "recorded as (show recorded bearing or length or both)."
6. Wisconsin State Statute 236.20(2)(b) as referenced by 236.34(1)(c): The point of beginning listed in the legal description is described as a chisel mark on a sanitary sewer cover. The same point is also described as a concrete monument with brass cap on Sheet 1. The discrepancy should be corrected.
7. The widths of the Union Pacific Railroad right-of-way adjoining the north line of the CSM should be shown on the CSM.
8. The legend includes a symbol for "found iron pipes." However, no "found" iron pipes are shown on the entire block. Please confirm.
9. The legal description includes several calls along the adjoin property with tax key number WAKC 1308235-237. However, only 3 of the 6 calls include the document number of the deed describing that parcel. Please confirm this is the intent of the description.

Construction Drawings

1. 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.

Site Grading Plan, Sheet 200.CG

1. The cross-slope of all City sidewalk should be designed as 1.5% instead of 2%.

Site Layout Plan, Sheet 200.CP

1. Proposed 6" landscape curb edges are shown in the public right-of-way along College Avenue. The curbs should be moved out of the right-of-way.

Civil Utility Plan-South, Sheet 200.CU

1. No comments.

Erosion Control Plan-South, Sheet 200.EC

1. No comments.

Landscape Plan, Sheet 200.EC

1. No comments.

Storm water Plan-South, Sheet 200.SW

1. No comments.

Civil Utilities Plan-North, Sheet 201.CU

1. No comments.

Erosion Control Plan-North, Sheet 201.EC

1. No comments.

Storm water Plan, Sheet 201.SW

1. No comments.

Detail Sheets, Sheet 210, 211, 212, 220, 221, 222

1. No comments.

PC14 -0099 Turnberry Reserve Condominiums, Northview Road and Hwy. TT
(Meadowbrook) - Site Plan and Revised PUD Agreement

1. The following items should be submitted:
 - a. Chapter 32.07(b)(2): Once all submittal items are completed, submit all items listed in sub.(b)(1)(A)-(G) in digital form for City filing.

PC14 -0103 Boucher Imports Waukesha, 1537 E. Moreland Blvd. - Final Site Plan &
Architectural Review

General

1. The following items should be submitted:
 - a. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council or Chapter 32.08(c). Development fees will be owed to the City for this project.
 - b. Erosion Control Plan per Waukesha Ordinance Chapter 32.09(c). If over 3,000 square feet of disturbance is proposed, a Storm Water Permit is needed.
 - c. Chapter 32.07(b)(2): Once all submittal items are completed, submit all items listed in sub.(b)(1)(A)-(G) in digital form for City filing.

- d. 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 is 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.
2. 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.

Sheet SD 1.0

1. Employee parking should be signage should be provided.
2. The existing sanitary sewer lateral location should be shown.
3. Existing on site easements should be shown.
4. Proposed concrete stairs are shown. Spot grades should be added on a detail drawing.
5. The disturbance limits should be shown and a calculation provided on the plan. There appears to be new stairs and a dumpster pad.

PC14 -0101 Waukesha Mixed Martial Arts, 1933 S. West Avenue - Conditional Use Permit

1. The following items should be submitted:
 - a. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council or Chapter 32.08(c). Development fees will be owed to the City for this project.
 - b. Chapter 32.07(b)(2): Once all submittal items are completed, submit all items listed in sub.(b)(1)(A)-(G) in digital form for City filing.
 - c. 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 is 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.

PC14 -0023 Oconomowoc Landscape Supply, 2112 S. West Ave. - Conditional Use Permit

General

1. No comments.

PC14 -0102 330 Apartment Conversion, 330 Wisconsin Avenue - Conditional Use

1. The following items should be submitted:
 - a. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council or Chapter 32.08(c). Development fees will be owed to the City for this project.
 - b. Chapter 32.07(b)(2): Once all submittal items are completed, submit all items listed in sub.(b)(1)(A)-(G) in digital form for City filing.
 - c. 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 is 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.

ID#14-0889 Zoning Code Modification - Repeal Section 22.56(2) - Setback Averaging