



DEPARTMENT OF PUBLIC WORKS

Fred Abadi, PhD, PE, Director

fabadi@ci.waukesha.wi.us



ENGINEERING COMMENTS FOR PLAN COMMISSION AGENDA Wednesday January 14, 2015

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#14-1735 Minutes for the Meeting of December 10, 2014.

ID#14-1736 Minutes for the Meeting of December 16, 2014.

- V. Business Items

PC14-0135 Fox Head Residence, 221 Maple Avenue - Final Site Plan & Architectural PUD Review

**The updated storm water plan dated December 1, 2014 and updated drawings dated December 30, 2014 were not reviewed for this meeting due to the zoning change not being approved. The comments listed below are repeated from the previous review comments. The revised plan sets will need to be reviewed.

General

1. The following items should be submitted:

- a. Storm Water Management Plan per Chapter 32.10(d), if 0.5 acres of impervious area is added or as determined by the City Engineer. An exhibit should be prepared documenting the existing versus proposed impervious areas for the site development areas.

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

- b. Erosion Control Plan per Chapter 32.09(c)
 - c. Traffic Impact Analysis. A traffic study should be prepared documenting the traffic generated by this development on the surrounding streets. The railroad crossing vision clearances should be reviewed.
 - d. 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.
 - e. Demolition Plan.
 - f. A Certified Survey Map (CSM) should be prepared to combine the existing lots into one lot. Confirm existing right-of-way widths.
 - g. Construction specifications will need to be added to the Drawing set. Additional design specifications should be added for areas of work within the City right-of-way or City easements including connecting to the sanitary sewer lateral, etc.
 - h. A pre-construction meeting will be needed at the City of Waukesha prior to starting work.
 - i. Prepare signage plan and pavement marking plan.
 - j. Once all submittal items are completed, submit all items listed in sub.(b)(1)(A)-(G) in digital form for City filing.
2. Permits will be needed for the project. Provide copies of approved project permits to the City for filing. Permits that are needed include but are not limited to:
- a. Wisconsin Department of Natural Resources NR 216 N.O.I. Permit
 - b. State of Wisconsin Private Building Sanitary Sewer approval
 - c. City of Waukesha Storm Water Permit
 - d. City of Waukesha Street Opening Permit
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 approval of the Certified Survey Map (CSM). If the location of any lot lines needs to be changed as a result of the approved construction drawings, the CSM should be updated to reflect the needed changes.

Landscape Plan Sheet L1

1. Wisconsin State Statute 195.29 Railroad highway crossings.(6) Every person or corporation owning or occupying any land adjacent to any railroad highway grade crossing shall keep all brush cut and adequately trim all trees on the land within the triangles bounded on 2 sides by the railway and the highway, and on the 3rd side by a line connecting points on the center lines of the railway and the highway, 330 feet from the intersection of the center lines. This vision triangle should be shown on the Drawings.

- a. Proposed trees are shown in the railroad vision triangle and near the intersection of the two railroad right-of-ways. The Wisconsin Southern railroad runs east to west. The Canadian National Railroad runs southwest to northeast. The railroad vision clearances should not be obstructed with trees and brush.
- b. Proposed trees are shown in the railroad vision triangle and near the intersection of the Wisconsin and Southern Railroad running east to west and Maple Avenue running north to south. The railroad vision clearances should not be obstructed with trees and brush.

Existing Conditions Sheet 1 of 4

1. Existing City sanitary sewer is shown approximately 4 feet to the northwest of the Canadian National railroad right-of-way. The existing easement document number should be shown, if existing.
2. The City is planning on eliminating sanitary sewer laterals under the railroad tracks where possible. The line on the north side is planned for abandonment. The new sewer laterals should be directed to Maple Avenue.
3. Existing sanitary sewer laterals that are not proposed to be reused should be abandoned at the sanitary sewer main and filled with slurry. If the Applicant insists on utilizing laterals under the tracks, the line should be rehabilitated and a new maintenance agreement should be prepared for review and approval. The line would be considered privately owned.
4. Existing fiberoptic lines are shown at the northwest corner of the parcel. The existing easements and document numbers should be shown. If no easement exists, the Applicant should contact the utility and convey a new easement.

Site Plan Sheet 2 of 4

1. The plan proposed widening the City street by approximately 10 feet along Maple Avenue to add parking. The City street and sidewalk should remain in the public right-of-way. Additional right-of-way would need to be dedicated or an easement would need to be conveyed. The widened street and parking should be removed from the proposed drawings.
2. The proposed City sidewalk is shown as 7.5 feet wide. The standard City sidewalk width is 5 feet.
3. A retaining wall is shown along the railroad tracks. Proposed wall heights should be added.
4. A note states, "retaining wall design by others". The retaining wall design should be included as part of the approved plan set.
5. The proposed City sanitary sewer easement should be shown on the Plan.
6. The proposed emergency access location and pedestrian crossing are potentially creating a dangerous vehicle and pedestrian crossing of the railroad tracks. The Engineer should also review current railroad intersection design guidance and determine how the guidance relates to this proposed design.

The emergency access driveway access location and pedestrian crossing would not be typically allowed for safety considerations. Driveways should not be located near intersections of streets and railroads. In discussions with the Fire Department, this secondary access is only intended for emergency use only. Due to the safety issues at this location, the secondary access and pedestrian crossing should be connected to Maple Avenue, unless these crossings are approved by the railroad and the appropriate active warning devices are installed such as flashing light signals or automatic gates. If the driveway and pedestrian crossing are not allowed due to the City Quiet Zone requirements, then the driveway will need to be removed from the plans.

7. If the driveway and pedestrian crossing are approved by the railroad, the driveway should cross the tracks at 90 degree angle. Appropriate signage and active warning safety devices are needed on both sides of the tracks. Additional safety measures should be added to the Drawings.
8. Confirm if the curb should be extended across the southwest driveway entrance with City staff.
9. The proposed site plan should adhere to the design requirements of “A Policy on Geometric Design of Highways and Streets (latest edition)”.
 - a. Sight distance is a primary consideration at crossings.
 - b. The vision clearance triangles should be incorporated into the design of the drawings. The building locations will need to be revised.
10. A traffic study is required as part of the plan submittal process for this development. The study should include the railroad vision clearance and proposed driveway access components to the study.
11. The Wisconsin DOT FDM Section 17-25 should be referenced for the three (3) dimensions of the vision clearance to be added to the Drawings. The railroad crossing report, Form DT 1589, Attachment 1.2, should be completed and submitted for review and approval. The three considerations include the distance required to stop a motor vehicle if a train is blocking the crossing, the lateral visibility across the quadrants, and when a vehicle has stopped at a crossing and is about to proceed. The third factor should be reviewed in AASHTO “A Policy on Geometric Design of Highways and Streets (latest edition)”. The 2001 version reference as located at page 739, Exhibit 9-103. The building locations should be revised based on the results of this analysis.
12. The proposed drainage patterns around the railroad should not be adversely affected.

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.
14. Vehicle turning templates should be run through the site plan to verify a fire truck can safely drive through the site.
15. Verify number and dimensions of parking stalls and ADA parking stalls needed for the site.
16. Add 20 foot x 20 foot vision corner easement.
17. Add fence along full length of both railroad right-of-ways.

Grading Plan Sheet 3 of 4

1. Chapter 32.10(d)(6)(A): Perpetual drainage easements should be added to preserve major storm water flow paths or permanent storm water BMP locations.
2. Chapter 32.10(d)(6)(B): Site grading should minimize adverse impacts on adjacent properties. Please verify that no adverse impacts to adjacent properties could be encountered during catastrophic storm events.
3. Additional spot grades should be added at the driveway entrances to define the cross-slope of all new sidewalk to be 1.5% and define the driveway slopes.
4. Chapter 32.10(d)(6)(e): Basement floor surfaces shall be built 1 foot above the seasonal high water table.

Utility Plan Sheet 4 of 4

1. Chapter 32.10(d)(6)(G): Proposed storm sewer is shown on the Drawings to directly connect to City storm sewer in Maple Avenue. Storm sewer calculations should be provided to show that the City storm sewer is properly sized to handle the proposed site flows.
2. The City is planning on eliminating and moving the location of the existing sanitary sewer manholes in Maple Avenue. Contact the City Engineering Staff for design information.
3. Provide sanitary sewer calculations to confirm the need for the 8 inch laterals.
4. Chapter 32.10(c)(18): Location and descriptive notes for existing and proposed structures, including sanitary sewer, storm sewer pipes, culverts and existing utilities should be shown. Elevations and pipe sizes should be listed.
5. Chapter 32.10(d)(6)(G) as referenced by Chapter 32.09(c)(17): All storm sewers should be designed in accordance with the City of Waukesha's technical standards.

6. 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.

Lighting Plan Sheet E1

1. No comments.

Storm Water Management

1. Chapter 32.10(b)(I): Storm water plan designs should distribute storm water bio-retention and infiltration BMP(s), if appropriate. Roof runoff should be infiltrated, if possible.
2. Chapter 32.10(e)(6): Location and dimensions of proposed drainage easements should be shown.

PC14 -0145 Crush, 379 W. Main Street - Conditional Use Permit

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).
 - b. 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.
 1. No comments.

PC14-0144 CGR Products, 1011 Sentry Drive - Preliminary Site Plan & Architectural Review

1. The following items should be submitted:
 - a. Erosion Control Plan.
 - b. Permits needed for the project will include:
 - i. City Storm Water/Erosion Control permit, if over 3,000 square feet will be disturbed.

- c. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council.
- d. 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.
- e. 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.

Sheet C1.1

- 1. The proposed building addition overlaps the existing Railroad easement. A note states "As of Dec. 17th, CGR has canceled this easement with CN Railroad as the existing spur track is now abandoned. A recorded copy of the easement release should be submitted to the City for review and filing.
- 2. The proposed building addition overlaps the existing 12 foot wide WEPCO easement. A note states, "As of Dec. 23, CGR is in the process of canceling this easement with WEPCO/We Energies as with this new addition, there will be a new underground electrical service installed, and all existing overhead power lines will be removed. A recorded copy of the easement release should be submitted to the City for review and filing.
- 3. The side yard building setback distance to the north property line should be clearly labeled. The north property line is not clearly shown or labeled.
- 4. Some erosion control notes are shown on this sheet but an erosion control plan should be created.
 - a. Silt fence locations should be shown.
 - b. Chapter 32.09(c)(4): Locations of soil stockpiles should be shown, if applicable. Any soil stockpile that remains on the site for more than 30 days should be stabilized.
 - c. Chapter 32.09(c)(15): Temporary site stabilization requirements should be added. Any disturbed site that remains inactive for 7 days should be stabilized with temporary measures. Winter seeding and stabilization notes should be added.

5. 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.

Plat of Survey Sheet 1 of 1

1. No comments.

PC14-0150 Zoning Code Modification, 22.38(4) - Add processing, manufacturing, and storage of alcoholic beverages.

1. No comments.

PC14-0146 Raised Grain Brewing Co., 2244 W. Bluemound Road, Unit E - 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.
 - 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#14-1790 901 Northview Road Building - Land Use Plan Amendment

1. No comments.

PC14 -0149 901 Northview Road Building – Rezoning

1. No comments.

PC14 -0142 Only Kids University, 2444 N. Grandview Blvd. - 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.
 - 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 -0143 Christina's Restaurant, 350 Delafield Street - Final Site Plan & Architectural Review

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. 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.
2. Provide confirmation that a grease trap exists prior to discharge to the City's sanitary sewer. If a grease trap does not exist, a trap should be added.

ID#14-1618 Meadow Ridge Apartments - Final Site Plan Modification (revised transformer locations)

1. No comments.

PC14 -0151 Zoning Code Modification 22.52(3) - Allow the Plan Commission to modify minimum area requirements.

1. No comments.

PC14-0152 Zoning Code Modification 22.53(8)(a) - Referral from Ald. Patton to modify parking space requirements for multi-family dwellings.

1. No comments.