



# DEPARTMENT OF PUBLIC WORKS

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## ENGINEERING COMMENTS FOR PLAN COMMISSION AGENDA Wednesday November 12, 2014

Time: 6:30 p.m.

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

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I. Call to Order

II. Pledge of Allegiance

III. Roll Call

IV. Approval of Minutes

**ID#14-1314** Minutes for the Meeting of October 22, 2014.

V. Business Items

**PC14 -0129** Randle Dable Brisk Funeral Home, 1110 S. Grand Avenue - Final Site Plan & Architectural Review

1. The following items should be submitted:
  - a. Permits needed for the project will include:
    - i. Storm Water Permit
  - 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.
  - c. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council.

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**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

- 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.

Plat of Survey and Grading/Erosion Control Plan

1. Wisconsin Administrative Code A-E 7.05 Maps:
  - a. (3) Where the boundary lines show bearings, lengths or location which vary from those recorded in deeds, abutting plats, or other instruments there should be the following note placed along such lines, “recorded as (show recorded bearing, length, or location)”. The surveyor has listed (DEED) instead of the above language.
  - b. (4) Describe all monuments used for determining the location of the parcel. Indicate whether each monument is found or set. A legend should be added to the survey to differentiate between found pipes, set pipes and the outside diameter of the found and set pipes.
  - c. (6) The Surveyor’s statement should include the words, “the survey is correct to the best of the surveyor’s knowledge and belief”.
2. Wisconsin Administrative Code A-E 7.05 Maps:
  - a. (2) The minimum accuracy of linear measurements between points shall be 1 part in 3,000 on all property lines of boundary or interior survey.
  - b. The bearings and distances listed on the survey by the Surveyor compute to a legal description that does not close by 13.51 feet. The error of closure is 1:94. The survey should be updated.
3. 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.
4. Chapter 32.09(d)(2)(xiv): A construction sequence should be added to the Drawing. Inspection requirements should be added to verify that critical elements of the plan are successfully accomplished.

Sheet SD 1.1

1. No comments.

Sheet LSP 1.1

1. No comments.

**PC14 -0125** La Casa de Esperanza Kindergarden Classrooms, 403 Arcadian Avenue - Temporary 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. 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.

### ALTA/ACSM Survey

1. The Survey includes lands owned by the City of Waukesha as part of the site development submittal. Please submit easement documentation for City approval of use of the City lands for the development.
2. The Survey shows property lines around the City parking lot that differ from the City's records. Please submit copies of the legal description for the City parcel.
3. 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. The Survey is not signed, stamped, or sealed.
4. A 10-foot strip for right-of-way is shown south of the site. The document number for the document describing the right-of-way should be listed.
5. The symbols shown in the legend do not match the symbols used on the Survey for the set iron pipes.
6. According to the Waukesha County GIS aerial mapping, the parking lot for this site appears to be located on lands owned by the City of Waukesha.

### **PC14 -0134** GE JenBacher Breezeway, 324 N. Prairie Avenue - Final Site Plan & Architectural Review

1. The following items should be submitted:
  - a. 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.
  - b. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council.
  - 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.

**PC14 -0055** Timber View Estates Preliminary Plat: 37 single family lots.

General

1. The following items should be submitted:
  - a. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds, Fees or Agreements required by the Plan Commission and Council or Chapter 32.08(c).
    - i. The City will prepare a fee, and letter of credit summary.
  - b. Permits needed for the project will include:
    - i. City of Waukesha Storm Water/Erosion Control permit.
    - ii. City Construction Permit. (pavement repairs)
    - iii. Wisconsin Department of Natural Resources NR 216 Notice of Intent, if over 1 acre is disturbed with site grading.
  - c. Developer's Agreement.
    - i. This Agreement will need to be updated by City Staff and signed prior to the City signing the Plat.
  - 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.

Erosion Control Plan Sheet E1

1. No comments.

Master Grading Plan Sheet C1 and C2

1. Chapter 23.06(4)(d): The pavement of a turning circle at the end of a dead-end street shall have a minimum outside diameter of 90'. Mark Elena stated the diameter is 88 feet which does not meet the minimum diameter of 90 feet.
  - a. The cul-de-sac radius of Marie Circle was supposed to have been increased from 44 feet when constructed as a private road to a 45 foot radius when reconstructed to become a public cul-de-sac and meet City standards as part of construction drawings prepared by Ellena Engineering Consultants, LLC.
2. The retaining wall cross-section, design material specifications, base design, drain pipes, and installation specifications should be included on the Master Grading Plan or additional detail sheet.

Storm Water Management Plan Addendum

1. In order to move forward with this development, the City stated that an addendum to the original storm water management plan be prepared by the Owner/Developer stating the amount of impervious area that was decreased as part of the site changes. The assumption is that if the area of impervious area has decreased with the site changes, then the storm water management facilities would not be receiving higher volumes and flow of runoff.

2. The amount reduced impervious area was calculated by Mark Ellena to be 9,193 square feet on the 1<sup>st</sup> submittal dated March 18, 2014 and then was revised to 2,733 square feet on the 2<sup>nd</sup> submittal dated April 14, 2014. The reduced impervious area has now been revised to 550 square feet on the 3<sup>rd</sup> submittal letter dated May 12, 2014 and Exhibit A dated March 20, 2014.
3. Based on the above information, the current development plan addendum documents that the amount of impervious area on site was reduced as compared to the original development plan.

#### As-built Drawings for modified infrastructure including storm sewer and sanitary sewer

1. The requirements for the as-builts were previously sent to the Land Surveyor and Engineer.
2. Confirm is new sanitary sewer main was installed and the limits.
3. If new sanitary sewer main was installed, the manhole information and pipe information connecting the manholes should be listed, etc.

#### Final Plat

1. No comments.

#### Storm Water Facility Maintenance Agreement

1. Exhibit G needed to terminate storm water permit. Add to Page 1 of 17 and overall agreement.
2. Exhibit "F" should be stamped and signed by Professional Engineer.
3. Exhibit "E" which is the as-built survey is not legible. The individual pond as-built surveys should individually be shown on additional sheets.
4. Document any design or construction changes from the originally approved construction drawings in exhibit D or E that the Engineer is requesting approval for. Elevations differences between existing and proposed greater than 0.5 feet should be noted.

#### Tentative Punch list

1. The areas of asphalt pavement removals and replacements will be determined when the Contractor doing the asphalt work is issued a Construction Permit. This permit can be obtained at the City Hall Annex Engineering Department. Please contact Al Shook.

**PC14 -0130** The Ed Sedar Baseball Academy and Firm Fitness, 2242 Bluemound Road - 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, Fees or Agreements required by the Plan Commission and Council or Chapter 32.08(c). City Staff will prepare a fee, and letter of credit summary.
- 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.

**PC14 -0133** Super Lube Propane Dispenser, 2210 Silvernail Road - 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, Fees or Agreements required by the Plan Commission and Council or Chapter 32.08(c). City Staff will prepare a fee, and letter of credit summary.
  - 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.

**PC14 -0127** The Shoppes at Fox River - Certified Survey Map

1. The existing private utility easements should be released, as needed, at the development site.
  - a. CSM 10509 shows a 12' and 15' private utility easements on the development site. The easements were planned to be released.
  - b. Portions of the existing distribution easements are shown under the proposed building. The easements should be released and utilities relocated. Provide digital copy of release for City filing.
2. Several public sanitary sewer easements were conveyed from Opus Corporation to the City of Waukesha on CSM No. 10509. Ramco Fox River LLC now owns the property. The City has changed its policy and no longer desires to own or maintain sanitary sewer in easements outside of the public right-of-ways unless the sewer is an interceptor sewer. The permit and approval from the State of Wisconsin Department of Safety and Buildings has been obtained
  - a. The sanitary sewer easements should be released in the sections of sanitary sewer that will be transferred from City of Waukesha ownership to Ramco ownership. A sanitary sewer easement release document should be prepared and submitted to the City for review and approval.

3. Chapter 32.10(c)(21): Locations of existing and proposed easements or other known site restrictions should be shown.
  - a. A portion of the existing drainage easement is proposed to be released. The recorded document to release the easement should be provided to City staff for filing. The document number should be listed on the CSM that released the previous location of the storm water swale and pond easements.
  - b. The document number for the new storm water drainage easement and new storm sewer easement should be added to the CSM. The limits between the storm sewer easement and storm water drainage easement should be shown. The storm sewer easement is for the proposed storm sewer pipes. The storm water drainage easement is for the ponds.
4. Chapter 23.06(7)(c): Every lot shall have a minimum frontage of at least 40' on a public street. Proposed Lot 1 does not abut a public street. A note on Sheet 1 states, "Access to a public street is by other document." The document number of the access document should be listed on the CSM. A digital copy of the document should be submitted to the City for review and filing.
5. On Sheet 2, an existing public utility easement is shown that lists document numbers 3649709, 3570573, and 3548122. On Sheet 2, an existing public utility easement is shown that lists document numbers 3617894. List the grantee of the public utility easements. Digital copies of the documents should be submitted to the City for review and filing. If the grantee is the City of Waukesha, the easement should be released because the ownership of the sanitary sewer is changing ownership from the City to the property owner, Ramco. A note on Sheet 1 states, "City of Waukesha hereby releases all utility easements granted to the City in Certified Survey Map No. 10509 recorded on February 22, 2008 in Volume 110 in Pages 216-219 as Document No. 3547848. This document number does not match the previously listed numbers. Please clarify the easements to be released. Due to the number of easements existing on the site, the City easement rights should be completed by a separate easement release document and not using the CSM to release the easements.
6. Provide recorded copy of CSM to City Engineering Division after the CSM is recorded.
7. List the grantee of the public utility easement shown along the north side of the private drive from CSM 10925.
8. A new storm water maintenance facility easement agreement will be need to be prepared for the pond on the City's latest template.

**ID#14-1410** Land Use Plan Amendment - Change land use for 211 and 223 Maple Avenue from Industrial to Commercial.

1. No comments

**PC14 -0138** Rezone 211 and 223 Maple Avenue from M-2 and B-3 to B-3 PUD.

1. No comments

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

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.
  - 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 applicable.
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 fiber optic 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 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.
7. 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.
8. 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.
9. Confirm if the curb should be extended across the southwest driveway entrance with City staff.
10. 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.
11. 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.
12. 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.
13. The proposed drainage patterns around the railroad should not be adversely affected.
14. 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. The driveway width should be labeled.

15. Vehicle turning templates should be run through the site plan to verify a fire truck can safely drive through the site.
16. Verify number and dimensions of parking stalls and ADA parking stalls needed for the site.

#### 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 -0132** Public Hearing - Amendment I to the Project Plan for Tax Incremental Finance District No. 16

1. No Comments.

**ID#14-1289** Motion to open Public Hearing for: Amendment I to the Project Plan for Tax Incremental Finance District No. 16

1. No comments.

**ID#14-1290** Close Public Hearing for: Amendment I to the Project Plan for Tax Incremental Finance District No. 16

1. No comments.

**ID#14-1365** Resolution - Resolution for Amendment I to the Project Plan for Tax Incremental Finance District No. 16

1. No comments.