

### DEPARTMENT OF PUBLIC WORKS



Fred Abadi, PhD, PE, Director fabadi@ci.waukesha.wi.us

ENGINEERING COMMENTS
FOR
PLAN COMMISSION
AGENDA
Wednesday
April 23, 2014

Time: 6:30 p.m.

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

- I. Call to Order
- II. Pledge of Allegiance
- III. Approval of Minutes
  - **A. ID#14-0127** April 9, 2014 Meeting Minutes
- IV. Business Items
  - A. PC14 -0022 Site Plan & Architectural Review Carroll University Science Building

#### General

- 1. The following items should be submitted:
  - a. Erosion Control Plan per Chapter 32.09(c).
  - b. Storm Water Management Plan per Chapter 32.10. Areas of the site have been reserved for bio-retention storm water facilities. Since the Storm Water Management Plan was not submitted to verify the sizing of the facilities, additional areas of the site may be needed for storm water facilities in order for the development to comply with the City's storm water management Ordinance.
  - c. Storm water facility maintenance agreement per Section Chapter 32.12
  - d. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council.
  - e. If disturbances of over 1 acre are proposed, a copy of the approved Wisconsin Department of Natural Resources NR 216 Notice of Intent permit should be submitted to the City for filing when received.

### 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

- f. Certified Survey Map (CSM). The existing site appears to containing several existing lots. The lots should be combined by a Certified Survey Map. All existing easement locations should be verified in the areas of proposed development.
- g. Permits needed for the project will include:
  - Construction Permit. A traffic control plan will be needed when the Contractor applies for a Construction Permit for paving work in the rightof-way.
  - ii. Storm Water/Erosion Control permit.
- h. 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.

#### Property Survey-Sheet 1, 2 &3

- 1. Wisconsin Administrative Code A-E 7: The document contains a Surveyor's Certificate stating that the document is a Plat of Survey. The document is also labeled as an "Existing Site Plan". The document should be labeled as a "Property Survey" or "Plat of Survey".
- 2. Note 2 states, "No iron pipes were placed as part of this Survey." Wisconsin Administrative Code A-E 7.03: The Surveyor shall set monuments marking the corners of the parcel unless monuments already exist.
  - a. Wisconsin Administrative Code A-E 7.01(2): If an agreement to exclude work from the requirements of this chapter has been made, a note should be prepared that includes the names of the parties making the agreement.
  - b. No existing property corners are shown in the vicinity of the proposed development. In addition, the Surveyor is showing the existing street to not be centered in the right-of-way with the excess to all be located on the Carroll University property. This lot line location may be correct. Several existing and proposed facilities, setbacks, proposed variances, and proposed block walls are located in close vicinity to the existing lot lines so an accurate identification of the lot lines is needed to be shown on a Property Survey. At a minimum, the property corners should be set to identify and monument the lot lines in theses areas of development.
- 3. Wisconsin Administrative Code A-E 7.04 Descriptions: A legal description for the property should be included on the Property Survey.
- 4. Wisconsin Administrative Code A-E 7.05 Maps:
  - a. (3) Show the length and boundaries of the parcels surveyed.
  - b. (4) Describe all monuments used for determining the location of the parcel.
  - c. (5) Identify the person whom the survey was made.
- 5. If existing easements are located on the property in the vicinity of the proposed work, the easements should be shown on all the Drawings.
- 6. Chapter 32.10(c)(4) & (5) of the City's Site Plan requirements list that ownership boundaries, bearings, and lengths, lot numbers and dimensions be shown. This information should be shown on the Property Survey in lieu of the Site Plan to preserve clarity on the Site Plan.

#### Site Plan, Sheet 200.CP

- 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.
- 2. The proposed driveway is shown to be installed using a curb cut. Curb cut installation of driveways is not allowed. A City Construction Permit will be needed for the driveway installation. The City has a driveway approach detail that can be emailed to the Design Engineer.
- 3. Verify if an ultimate concept plan is in place for the lands to the East and if the proposed site work will be connected to the areas to the East.
- 4. The concrete sidewalk at the corner of the intersection of North Barstow Street and West College Avenue is shown on private land. A sidewalk easement dedicated to the City will be needed.
- 5. Concrete pavers are shown in the sidewalk at the corner of the intersection of North Barstow Street and West College Avenue. Specifications for the paver block materials, installation requirements, and maintenance schedule should be added to the Drawings.
- 6. Proposed landscape walls are shown in the public right-of-way along North Barstow Street. An easement for the walls will be needed or the walls may need to be moved out of the right-of-way.
- 7. Add note stating that elevations are referenced to the City vertical datum and show the benchmarks that are being referenced to.
- 8. Chapter 32.10(c)(1): The graphic scale should be added to the plans.
- 9. Chapter 32.10(b)(A): The City's guiding principles for storm water management include reserving adequately sized areas for infiltration and treatment early in the planning process, distributing storm water bio-retention and infiltration BMP's through out the site plan. No storm water management plan was submitted so the storm water facility areas may need to be increased if they are not sized properly.
- 10. The loading dock shown along North Barstow Street does not show a driveway approach to North Barstow Street. Please clarify how the dock will be accessed.
- 11. Adequate snow storage areas should be provided.

#### Civil Utilities Plan, Sheet 200.CU

- 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.
- 2. Chapter 32.10(c)(1): The graphic scale should be added to the plans.
- 3. Chapter 32.10(c)(15): Locations of all available soil borings or soil profile evaluations with unique references to supplemental data report forms should be shown.
- 4. Chapter 32.10(c)(20): Locations and descriptive notes for all applicable setbacks.

- 5. Chapter 32.10(c)(21): Locations and descriptive notes for all applicable vision corners easements.
- 6. Chapter 32.10(c)(21): Locations of existing and proposed easements or other known site restrictions should be shown.
- 7. Chapter 32.10(d)(6)(B) as referenced by Chapter 32.09(c)(17): Perpetual drainage easements or other deed restrictions should be recorded to preserve major storm water flow paths and permanent storm water BMPs.
  - a. The City has a storm water maintenance agreement template that will be sent to the design Engineer.
  - b. The overland flow path should be shown.
- 8. Chapter 32.10(d)(6)(B) as referenced by Chapter 32.09(c)(17): Site grading should ensure positive flows away from all buildings. Clarify how the drainage from the loading dock will be collected. A trench drain may be needed.
- 9. Chapter 32.10(d)(6)(G) as referenced by Chapter 32.09(c)(17): Storm sewers should be designed in accordance with the City of Waukesha technical standards.
- 10. Chapter 32.10(d)(6)(H)(i) as referenced by Chapter 32.09(c)(17): The lowest elevation of the structure that is exposed to the ground surface shall be a minimum of two (2) feet above the maximum water elevation produced by the 100-year, 24 hour design storm. The structure should be set back at least 40 feet horizontally from any storm water BMP.
- 11. Specifications and design information for installing public and private storm sewer will need to be added to the Drawings.
- 12. Storm sewer in the public right-of-way should be reinforced concrete pipe.
- 13. Specifications and design elevations for connecting to the City's sanitary sewer will need to be added to the Drawings.
- 14. The proposed storm sewer should be relocated from underneath the proposed building near North Barstow Street.
- 15. The proposed storm sewer extension in North Barstow Street should be located 8 feet west of the sanitary sewer or centerline of N. Barstow Street, and in the pavement on the west side of N. Barstow Street.
- 16. Detailed specifications for abandoning the existing sanitary sewer lateral to Lowery Hall should be shown on the Plan.
- 17. Verify if the sanitary sewer lateral connection to the City's main for Rankin Hall can also be combined with the proposed lateral to reduce a manhole in College Avenue.
- 18. Bioretention design details will need to be added to the Drawings.
- 19. The curb ramp design should be updated to direct pedestrians west only along College Avenue.

### Civil Utilities Plan, Sheet 201.CU

- 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.
- 2. Specifications for connecting to the City's storm sewer will need to be added to the Drawings.

- 3. Two existing sanitary sewer manholes are shown in North Barstow Street near the proposed connection to the storm sewer. The pipes connected to the manholes and inverts should be shown on the Plan.
- **B.** PC14 -0023 Conditional Use Permit Oconomowoc Landscape Supply 2112 S. West Ave.

#### General

- 1. The following items should be submitted:
  - a. Erosion Control Plan per Chapter 32.09(c).
  - b. Applicable fees per Chapter 32.07(b). The Engineering Division requires any Bonds or Agreements required by the Plan Commission and Council.
  - c. Permits
    - i. <u>City Right-Of-Way Opening Permit.</u> A right-of-way opening permit will be needed to install the culvert in the City's right-of-way and complete the proposed ditching work.
    - ii. If grading of over 1 acre is proposed, a copy of the approved Wisconsin Department of Natural Resources NR 216 Notice of Intent permit should be submitted to the City for filing when received.
  - 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.

#### Site Plan

- 1. Certified Survey Map (CSM) No. 9368 shows existing floodplains and wetlands along the west line of the parcel. The existing wetland line and floodplain line should be shown. Cedar posts should be installed at 25 foot intervals to mark the wetland line. No disturbances, filling, grading or excavating should occur in those wetland and floodplain areas without getting the appropriate permit approvals.
- 2. Certified Survey Map (CSM) No. 9368 shows an existing 50 foot wide drainage & access easement along the south lot line. The document number for the easement is listed as 1161982. Please submit a copy of this easement to the City for review and filing. The easement line should be shown on the Site Plan.
- 3. A proposed driveway culvert is shown on the plan. The diameter, length, slope, invert elevations, and material for the culvert should be shown. The proposed driveway should be located outside the existing drainage easement.
- 4. A 2 foot x 2 foot block wall is proposed. The right-of-way line along S. West Avenue should be shown to verify that the block wall is not installed in the public right-of-way.
- 5. A note listing "(2) 8'x4' signs" is shown. This detail should be more specific. The proposed location of the signs should be shown.
- 6. Proposed ditching is shown along the east, north and south lot lines.
  - a. Certified Survey Map (CSM) No. 9368 shows an existing 10 foot wide slope easement for sidewalk construction along the east lot line. The easement line should be shown on the Site Plan.

- b. Sidewalk may be extended along the frontage of this lot in the future. If the sidewalk extension is still planned, the proposed ditching should not be located along the route of the sidewalk extension. The ditching may need to be relocated. City Staff will need to verify the potential planned extension.
- c. The extent of the ditching should be shown to verify that grading is not proposed on the adjacent lot.
- d. Proposed ditch grades should be shown to verify that ponding of runoff will not occur.
- e. The proposed ditching shows draining the north side of the lot towards S. West Avenue, then along south along S. West Avenue, and then west to the back lot line. It appears that directing runoff along the north lot line to the west would be more practicable.
- f. The proposed ditching shown along the south line appears to be very confined. Verify if the unlabeled structure or pile can be moved north to provide more room for drainage along the lot line.
- g. Please list how the areas of grading will be restored.
- 7. The cross section detail of the block wall shows a proposed tree in the right-of-way. The plan view does not show any proposed trees. Please verify.
- 8. The cross section detail labels a "paved surface". The plan view detail labels a "dustless surface". Please verify.
- 9. The plan view shows an unlabeled pipe from the office to the south lot line. Please label the pipe appropriately.
- 10. A raised tracking pad is shown in the right-of-way. Please confirm if the proposed material will be different than the "dustless" surface on site.