



DEPARTMENT OF PUBLIC WORKS

Fred Abadi, PhD, PE, Director

fabadi@ci.waukesha.wi.us



ENGINEERING COMMENTS FOR PLAN COMMISSION AGENDA Wednesday May 14, 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

IV. Business Items

A. PC14 -0044 Public Hearing - Creation of Tax Incremental Finance District No. 23

1. No comment.

B. ID#14-0340 Resolution for the creation of Tax Incremental Finance District No. 23.

1. No comment.

C. PC14 -0039 Wisconsin Window Concepts, 2001 S. West Ave. – Final Site Plan & Architectural Review.

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.

a. Based on the Wisconsin Department of Safety and Professional Services licensee lookup webpage on May 13, 2014, the Engineer signing and sealing these Drawings does not have a current license because the license expired July 31, 2010. Please verify if the license is current.

2. 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. Erosion Control Plan per Chapter 32.09(c). If over 3,000 square feet of disturbance is to occur, then an Erosion Control Plan is required.

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

- 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.
3. 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 in the right-of-way, 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.

D. PC14 -0035 Oberlin Filter, 809 & 831 Silvernail Road - 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.
 - b. 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.
 - c. Certified Survey Map (CSM). The existing site includes 2 lots. The 2 lots should be combined by a Certified Survey Map. All existing easement locations should be verified. A title report should be obtained.
 - 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.
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. The Plat of Survey should be stamped by a Professional Land Surveyor.

Plat of Survey, Sheet SV 1.0

1. The existing conditions plan has now been retitled as a "Plat of Survey".
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. The Plat of Survey should be stamped by a Professional Land Surveyor.
3. The existing poles are shown on private property along Silvernail Road. Verify if existing utility easements are present. If no easements are present, proposed easements should be conveyed to the utility companies. Verify if the poles need to be relocated.
4. Several references to the "City of Milwaukee" and "Milwaukee County" are included in the notes. Please update the notes.

Site Grading Plan, Sheet C1.0

1. Chapter 32.10(c)(1): The graphic scale does not scale to the stated scale.
2. 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.

3. In accordance with FAA Advisory Circular 150 5200-33B:
 - a. Dry ponds should be used in lieu of wet ponds with standing water.
 - b. The new swale to be located along the east, south, and west lot lines should also not have standing water.
4. Note 2 states a permit for work in CTH TJ is needed. This note should be updated because Silvernail Road is a City Street.
5. Chapter 32.10(c)(21): Locations of existing and proposed easements or other known site restrictions should be shown.
6. Chapter 32.10(d)(6)(A) 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 swale and storm sewer around the site, and pond should be in a drainage easement.
 - b. The City has a storm water maintenance agreement template that will be sent to the design Engineer.
7. The WinSLAMM input and output data sheets should be included in the storm water management plan.
8. Notes should be added so the center driveway apron is removed.
9. The plan states that the maximum elevation for the top of the building is 945 per the airport restrictions. The plans indicate the proposed building height is approximately 925.
10. 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 middle driveway should be shown for removal.

Site Utility Plan, Sheet C2.0

1. Specifications for connecting to the City's sanitary sewer will need to be added to the Drawings. The City can send a template for use. The manhole bench will also need to be built up with concrete.
2. Chapter 32.10(c)(21): Show any existing easements, if applicable. Please verify if a Title Report was obtained for the property.
 - a. An existing 20 inch storm sewer is shown under the proposed building. Please provide a copy of the easement for this pipe for City review and filing. Identify who owns the pipe and purpose of pipe. A new storm sewer and drainage easement will need to be prepared and recorded for the relocated pipe and swale. Waukesha County appears to be the grantee of the easement.
 - b. Due to the timing of this project, approval is being requested prior to release of the storm sewer and drainage easements across the property and conveying new storm sewer and drainage easements across the property. Prior to a building permit being issued, the existing storm sewer and drainage easements must be released and new easements conveyed to the applicable entity.
 - c. We understand that Waukesha County is currently determining the location of the storm sewer pipe.
3. Confirm that no existing connections to be sanitary sewer are in place.
4. A note references to sawcut pavement as needed and replace in kind per County requirements. The note should reference the City instead of the County. Also revise note #6.

Erosion Control Plan, Sheet C3.0

1. Chapter 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.
2. Chapter 32.09(d)(2)(xi): Final stabilization measures for the open channel should be provided.

3. Confirm that no existing wetlands are proposed to be disturbed or located on site.

Storm Water Management Plan

1. Chapter 32.10(d)(6)(A) as referenced by Chapter 32.09(c)(17): Perpetual drainage easements or other deed restrictions should be recorded on the property to preserve major storm water flow paths and permanent storm water BMP locations. Existing storm sewer easements should be shown on the Drawings.
2. Chapter 32.10(d)(6)(B) as referenced by Chapter 32.09(c)(17): Site grading should ensure positive flows away from all buildings, roads, driveways, and be coordinated with the general storm water drainage patterns for the area, and minimize adverse impacts on adjacent properties.
 - a. It appears that the proposed retaining wall along the east lot line should be shifted east and away from the lot line. Verify that the rerouting of the drainage ditch around the site will not cause increased flooding on the adjoining property to the east, west and north.
 - i. An existing and proposed 100-year high water elevation and cross section calculation should be prepared along each lot line as frequent as needed to show that no increased flooding is caused on the adjoining lots.
3. Chapter 32.10(d)(6)(H)(i): Flows generated by the 100-year, 24-hour design storm under planned land use conditions may exceed the design capacity of conveyance systems, but should not come in contact with any buildings. Verify the locations and elevations of the emergency overflow routes from on and off-site areas and 100-year high water storm event in swale areas around the entire site.
 - a. The swale design should be prepared and submitted for review so at a minimum, the 100-year high water event can be safely passed around the site as proposed.
 - b. Review and include the appropriate tailwater elevations for 2-year, 10-year, and 100-year storm for the pond design.
 - c. Waukesha County has sent previous storm water design information to the Design Engineer for reference. The Design Engineer should review and determine to his satisfaction how to utilize the information.
4. Chapter 32.10(e)(7): Locations, dimensions and surfacing material of proposed access lanes and delineation of easements should be shown to allow future maintenance of all storm water BMPs. The minimum width for an access easement is 15 feet. An adequate designed structural ramp at 6:1 slope is listed in the Wisconsin DNR Technical Standards as the recommended design. The access location should be labeled.
5. Provide sizing computations for the driveway culverts in Silvernail Road.

Storm Water Maintenance Agreement

1. A Storm water facility maintenance agreement per Section Chapter 32.12 should be prepared. The City's template can be sent to the Engineer for use.
2. Drainage easements for all storm water facilities should be added.

Demolition Plan

1. No comments.

Landscape Plan

1. Minimize the placement of trees within the banks of the storm water ponds.

Driveway Access to Silvernail Road

1. Due to the project timing, a field review of the site was completed by the City Staff related to the traffic components of the site and their relation to Silvernail Road.
2. Oberlin should be prepared to add some pavement to Silvernail Road across the street from their western driveway.
3. The City will require the formation of a westbound bypass lane for the western most driveway which will (as described below) take all of the entering traffic into the site.
4. They should be prepared to accept the fact that we may restrict their eastern driveway to an “Exit Only” driveway because of it’s proximity to the intersection of Silvernail & Bluemound Road (JJ).
5. As seen in the concept drawing from the County, they will be modifying the JJ & Silvernail Road intersection and will impact the eastern most driveway of the Oberlin site.
6. Oberlin may need to have all deliveries and entry into their site be on the western most driveway only.
7. Oberlin may need to create an internal connector road, in front of their future expansion to link their east and west driveway to complete internal circulation and to accommodate the fact that the east driveway may be exit only and possibly Right Out only at Silvernail.
8. The impacts of the County’s project on the east driveway may not be known until mid June or July 2014, when their consultant will issue a preliminary plan.
9. Signing may need to be installed restricting (no left turns) into the east driveway and have it be an “Exit Only” to JJ Bluemound Road
10. City and Oberlin will need to discuss how there employees, delivery trucks will get to their site (i.e. will most come from JJ to Silvernail or from the west). This will help determine how the driveways will be used.
11. There may be more issues that come up after the County finalizes plans for their work. Oberlin should be prepared to accommodate those changes if needed.
12. Prepare plan for final engineering review.

E. PC14 -0040 Carroll University, Van Male Fieldhouse, 100 N. East Avenue - Final Site Plan & Architectural Review

General

1. The following items should be submitted:
 - a. Permits needed for the project will include:
 - i. Storm Water/Erosion Control permit application.
 - 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.

F. ID#14-0329 Sauna, 1017 Oakland Avenue

1. No comments.

G. PC14 -0037 Broadway Cafe, 500 E. Broadway - Final Site Plan & Architectural Review

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.

H. PC14 -0036 Wewauk Dis. Center, 310 Merrill Hills Road - Final Site Plan & Architectural Review

General

1. We understand that Waukesha County has been contacted regarding the proposed By-Pass to be constructed along Merrill Hills Road C.T.H. "TT" and the County has no concerns related to this proposed site work.

I. PC14 -0007 Clearwater Apartments, Clearwater Lane - Preliminary Site Plan & Architectural PUD Review

General

1. The following items should be submitted:
 - a. Storm water facility maintenance agreement per Section Chapter 32.12
 - b. Erosion Control Plan per Chapter 32.09(c)
 - 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. 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. City of Waukesha Construction Permit
 - c. City of Waukesha Erosion Control Permit

Plat of Survey C-1

1. No comments.

Site Plan C-2

1. 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. All driveway widths should be labeled.
2. As proposed, this development includes two lots. The large storm water pond is on the south lot. A deed restriction will be needed so that the south lot with the storm water pond is not sold off to another party as a later date. In lieu of this condition, a Certified Survey Map should be prepared to combine the two lots into one lot, or the property line can be relocated.
3. Proposed buildings shown on Sheet C-2 are shown near the lot line between Lot 1, CSM 8781 and Lot 2, CSM 8945 on this sheet. Verify that the locations of the proposed buildings are outside the existing setbacks. If lot line adjustments are needed, the adjustments will need to be completed simultaneous with approval of the other development submittal items.
4. Proposed sidewalk will be needed along all street frontages and new ramps will be needed at the intersection. A City Construction permit will be needed for installation. The City of Waukesha typical driveway detail can be sent for use. Spot grades should be added for along all proposed sidewalk and at the driveway entrances. The cross-slope of all new sidewalk should be 1.5%.
5. Vehicle turning templates have been run through the site plan driveway areas to verify a fire truck can safely drive through the site.

6. The number and dimensions of parking stalls and ADA parking stalls needed for the site are listed.
7. The wetland delineation terminates midway along the west lot line of the property. A current wetland delineation is needed to verify the locations of wetlands along the entire west lot line of Lot 1, CSM 8781.
8. Verify Wisconsin DNR wetland setbacks.

Preliminary Grading Plan C-3

1. The site runoff from the site is proposed to discharge to a new pipe crossing Stillwater Circle. The pipe in Stillwater Circle is proposed to discharge south into a pond owned by the City of Waukesha located south of Stillwater Circle. The west end of Stillwater Circle should be restored as a cul-de-sac in accordance with the City's design requirements.
2. The connection and restoration to the South City Pond should be more clearly shown.
3. Chapter 32.10(d)(6)(B) as referenced by Chapter 32.09(c)(17): Site grading should minimize adverse impacts on adjacent properties.
4. Verify that adequate locations for snow storage are provided.
5. Chapter 32.10(d)(6)(H)(i): Flows generated by the 100-year, 24-hour design storm under planned land use conditions may exceed the design capacity of conveyance systems, but should not come in contact with any buildings. The lowest elevation of the structure that is exposed to the ground surface should be a minimum of two (2) feet above the maximum water elevation produced by the 100-year, 24 hour design storm. Verify flow elevations near the drainage swale located west of Lot 1, CSM 8781.
6. Two soil borings are needed in each storm water facility per DNR Technical Standards. If some areas of the site prove to not be feasible for siting a storm water facility, then other areas of the site will need to be explored. The location of the buildings may need to be adjusted after the soil borings are obtained.

Preliminary Utility Plan C-4

1. 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.
 - a. All existing pipe sizes and inverts for the South City Pond should be provided because this design information will be needed as part of the storm water management plan.
2. 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.
 - a. Existing storm sewer in Clear water Lane: A portion of the storm sewer runoff from the site was proposed to discharge directly into a catch basin in Clearwater Lane. The storm sewer sizing should be reviewed.
3. Trenching in Clearwater Lane for laterals should be minimized.

Phasing Plan C-5

1. The proposed sidewalk in Clearwater Lane should be included in the phasing plan.

Landscape Plan L 1.0

1. Trees and bushes are proposed to be located in the middle of several drainage swales. The trees and bushes should be relocated outside of the swales.
2. Drainage easements should be shown on the Landscape Plan. Tree and bushes should not typically be planted in storm water pond berms if the plantings would be within the storm water facility drainage easement. Plantings in the drainage easement are typically cleared out as part of routine maintenance.

Storm Water Management Plan

1. City Pond South of Site:
 - a. The site runoff from the site is proposed to discharge to a new pipe crossing Stillwater Circle. The pipe in Stillwater Circle is proposed to discharge south into a pond owned by the City of Waukesha located south of Stillwater Circle. The lot for the City's pond was created as part of the River's Crossing Subdivision. The Surveyor from Yaggy Colby sent the City copies of original storm sewer basin maps showing that this site proposed to be developed was included in the tributary area for the pond design. A Preliminary storm management plan analysis was completed. The analysis will need to show that the City's pond is designed to handle the flows from the existing River's Crossing tributary development and this development in accordance with the City's storm water standards. The City retrofitted the pond in 2010 to incorporate additional water quality measures. The pond will need to continue to address water quantity and water quality measures for all existing tributary areas in accordance with the City's storm water management Ordinance for the direct connection to be approved. The proposed pond size may need to increase based on the final design computations.
2. Chapter 32.10(d)(3) Infiltration: For residential developments, one of the following shall be met:
 - a. Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90% of the predevelopment infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 1% of the project site is required as an effective infiltration area.
 - b. Infiltrate 25% of the post-development runoff volume from the 2-year, 24-hour design storm with a type II distribution. Separate runoff curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes, not composite curve numbers, as prescribed in section 32.11. However, when designing appropriate infiltration systems to meet this requirement, no more than 1% of the project site is required as an effective infiltration area.
3. Chapter 32.11(d): Pretreatment should be incorporated in the storm water basins before infiltrating parking lot and road runoff.
4. Chapter 32.10(d)(2) Total Suspended Solids:
 - a. For new land development, 80% reduction in total suspended solids load should be removed.
5. Chapter 32.10(d)(4)(H)(i): The lowest elevation of a structure must be a minimum of two (2) feet above the maximum water elevation produced by the 100-year, 24 hour storm. The buildings must be set back 40 feet horizontally from the location of this high water elevation from the ponds.
 - a. This horizontal and vertical requirement should be reviewed for the homes backing on Basin A, Basin B, and Basin C. If horizontal or vertical separation requirements for Basin A or Basin B are not currently met, the separation distances should not be reduced as part of this proposed development. First floor elevations or walk-out basement elevations of homes adjacent to the ponds will need to be field survey located to verify these requirements.
 - b. Basin A and Basin B should be surveyed to verify the as-built elevations of the pond and outlet structure.
 - c. The locations of the emergency spillways for each pond should be verified.
 - d. The location of the overland flow path from the site to be developed should be shown. A culvert may be needed under Stillwater Circle as part of the street restoration.

6. Chapter 32.10(e)(7): Locations, dimensions and surfacing material of proposed access lanes and delineation of easements should be shown to allow future maintenance of all storm water BMPs. The minimum width for an access easement is 15 feet. An adequate designed structural ramp at 6:1 slope is listed in the Wisconsin DNR Technical Standards as the recommended design.
7. Chapter 32.10(e)(9): Detailed construction notes explaining all necessary procedures to be followed to properly implement the plan, including planting and landscaping specifications, timing and sequencing of construction and temporary measures to protect BMPs.
8. Chapter 32.10(e)(10): A detailed inspection plan should be included in the plans. A detailed construction inspection plan, outlining the critical elements in the plan that need to be surveyed or inspected by a representative of the project engineer and the timing and notifications involved should be prepared.
9. 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.
10. Chapter 32.10(e)(6): Location and dimensions of proposed drainage easements should be shown.
11. Chapter 32.10(C): Detailed cross sections and profiles of each BMP showing all critical design elements, side slopes, structures, soil profiles and applicable elevations, including seasonal high water table. The pipe material should be shown.
12. Storm water management facilities will need to be located in a storm water management easement. The storm water agreement should comply with Section 32.12. A copy of the City template can be sent to the Designer for use.
13. Depending on the final storm water design, bio-retention facilities may be needed instead of rain gardens.
14. Submit pre-development and post-development basin maps.
15. The basin D boundary can be seen on the basin map. Clearly delineate the other basin boundaries.
16. Please verify the appropriate tailwater elevations to be used in the storm water analysis.
17. Include the hydrograph combination summary picture with the storm water report.
18. The emergency overflow should be sized to handle flows if the primary outlet structure is plugged.
19. Chapter 32.10(b)(A.) Preserve natural watershed boundaries and drainage patterns. The designer appears to be requesting that 0.4 acres of the site be redirected away from Clearwater Lane to lower the volume of runoff directed towards the storm water management system and the City pond as compared to the existing condition.
 - a. This redirection of flow appears to lower the 100-year high water elevation of the City pond (Basin B) by 0.02 feet as compared to having the 0.4 acres be tributary to the City South pond. In general, existing drainage patterns appear to be maintained.

J. PC14 -0033 Avalon Square Exterior Renovation - 222 Park Place

1. No comment.

K. PC14 -0038 Standarski Builders, 1918 Madera Street - Preliminary Site Plan & Architectural Review
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. Property Survey per Wisconsin Administrative Code A-E 7
- d. Permits
 - i. City Construction Permit. A right-of-way opening permit will be needed to install utilities in the City's right-of-way.
- e. 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.

Proposed Site & Landscape Plan C1.0

1. No comments.

Existing Grading Plan C1.1

1. No comments.

Proposed Grading Plan C1.2

1. A proposed sanitary sewer lateral is shown. The existing sewer main and manholes should be shown with existing inverts and the proposed inverts, size, material, and slope of the lateral.
2. Specifications for the proposed sanitary sewer lateral should be shown. The City specifications for laterals can be sent to the Design Engineer.
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 Plan should be stamped and signed by a Professional Engineer.
4. Top and bottom spot grades should be shown on the retaining wall.
5. Spot grades to ensure positive drainage of a 1% minimum slope to front and back of lot should be shown between the retaining wall and the patios.

L. PC14 -0041 Wilde Subaru, 1710 STH 164 - 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).
 - b. Certified Survey Map (CSM). The previously submitted CSM still must be recorded. The CSM should not be approved until the Construction Drawings for the site development have been approved. Any lot reconfiguration or additional easements needed from the approved Drawings should be updated on the CSM.
 - i. Show updated storm sewer easement locations on CSM.
 - ii. Prepare document to release existing easement.
 - c. 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:
 - i. Wisconsin Department of Natural Resources NR 216 N.O.I. Permit
 - ii. City of Waukesha Construction Permit
 - iii. City of Waukesha Storm Water Permit
 - d. Documentation should be submitted that the impervious area will not be increased.

- e. 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 Sheet C1.0

1. A note on the survey states, "A non-exclusive easement for ingress and egress as set forth in warranty deed recorded January 11, 1984, on reel 587, image 158, as document no. 1242929 and warranty deed recorded January 11, 1984, on reel 587, image 158, as document no. 1242930 and depicted as "private right-of-way" of certified survey map no. 5415 recorded January 21, 1988 in volume 43 of certified survey maps on pages 301-305 as document no. 144703." A copy of document no. 1242929 that stipulates the legal access to this development should be submitted to the City for review and filing.
2. It appears that property corners either do not exist or were not set at several lot corners.
 - 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 building addition. Several existing and proposed work and proposed facilities, and potential variances are located in close vicinity to the existing lot lines. An accurate identification of the lot lines is needed to be shown on the Plat of Survey. At a minimum, the property corners should be set to identify and monument the lot lines in these 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.
 - a. A legal description is listed that would be correct if the CSM had already been recorded. The CSM has not been recorded. Verify the timing for recording of the CSM.
4. Wisconsin Administrative Code A-E 7.05 Maps:
 - a. (3) Show the length and boundaries of the parcels surveyed.
 - b. (5) Identify the person whom the survey was made.
5. The symbol used for bollards appears to also be used for iron pipes. Please review this discrepancy.
6. A note states, "existing drainage easement to be vacated by separate document." A copy of the recorded document should be submitted to the City for filing.

Grading and Erosion Control Plan-Sheet C2.0

1. Chapter 32.10(d)(6)(A) as referenced by Chapter 32.09(c)(17): Perpetual drainage easements or other deed restrictions should be recorded on the property to preserve major storm water flow paths and permanent storm water BMP locations. A note states, "proposed 20 foot wide private storm sewer easement". The area of the storm sewer easement is also the overland flow path for the 100-year storm event. The area of the site acting as the emergency overland route should be included in the easement. Buildings should not be flooded in the 100-year storm.
2. Chapter 32.10(d)(6)(B) as referenced by Chapter 32.09(c)(17): Site grading should ensure positive flows away from all buildings, roads, driveways, and be coordinated with the general storm water drainage patterns for the area, and minimize adverse impacts on adjacent properties.
 - a. Adequate spot grades should be added to the drawings to install the curb islands and parking lot areas. Several areas of proposed curb islands do not match the Erosion Control Plan.
3. Chapter 32.10(d)(6)(H)(i): Flows generated by the 100-year, 24-hour design storm under planned land use conditions may exceed the design capacity of conveyance systems, but should not come in contact with any buildings. Verify the locations and elevations of the emergency overflow routes and that the existing and proposed buildings will not come in contact with the 100-year high water storm event flows through the site. Additional spot grades should be added and analysis will be needed.

4. Sidewalk should be installed along the STH 164 right-of-way line to the intersection with E. Moreland Blvd. Proposed ramps should be shown.
5. Submit documentation that turning templates have been checked for the City's fire truck.
6. The construction sequence should include the timing for the storm sewer, building addition and parking lot improvements.
7. Chapter 32.09(d)(2)(B)(i):
 - a. The Surveyor's Certificate should be removed from the Drawing. The Project Engineer's name should be added.

Demolition Plan-Sheet C3.0

1. Material and installation specifications and restoration notes for abandoning the existing sanitary sewer lateral for the Culver's building should be added to the plan. Documentation of completion should be sent to the City for filing.
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.
 - a. The Surveyor's Certificate and stamp should be removed from the Drawing. A Professional Engineer's stamp should be added.

Utility Plan-Sheet C4.0

1. The existing buildings have 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 in the right-of-way, 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.
 - a. The Surveyor's Certificate and stamp should be removed from the Drawing. A Professional Engineer's stamp should be added.