Planning Department

W240N3065 Pewaukee Road
Pewaukee, WI 53072
(262) 691-0770 Fax (262) 691-1798

PLAN COMMISSION
MEETING NOTICE AND AGENDA
Thursday, April 20, 2023
6:00 PM

Common Council Chambers
W240 N3065 Pewaukee Rd. Pewaukee, WI 53072

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1. Call to Order and Pledge of Allegiance

2. Discussion and Action Regarding Approval of the October 20, 2022 Meeting Minutes

3. Continued Discussion and Action Regarding a Request by Andev Group, LLC to Rezone Vacant Land Located at the Northwest Corner of Golf Road and Meadowbrook Road from A-1 Agricultural, LC Lowland Conservancy, and F-1 Floodplain to Rm-3 Multi-Family Residential, LC Lowland Conservancy, and F-1 Floodplain for the Purpose of Developing the Courtyard at Pewaukee, a Community Based Residential Facility (PWC 0940999001) (Public hearing opened and closed at the 3/16/23 Plan Commission meeting)

4. Continued Discussion and Action Regarding a Recommendation to the Common Council for a Comprehensive Master Plan Amendment to Change the Year 2050 Land Use/Transportation Plan Use Designation for the City of Pewaukee for the Courtyard at Pewaukee for Vacant Land Located at the Northwest Corner of Golf Road and Meadowbrook Road from Low-Medium Density Residential and Floodplains, Lowland & Upland Conservancy and Other Natural Areas to High Density Residential and Floodplains, Lowland & Upland Conservancy and Other Natural Areas (PWC 0940999001) (Originally discussed at the 3/16/23 Plan Commission meeting)

5. Continued Discussion and Action Regarding the Site and Building Plans for Andev Group, LLC for Vacant Land Located at the Northwest Corner of Golf Road and Meadowbrook Road for the Purpose of Developing the Courtyard at Pewaukee, a Community Based Residential Facility (PWC 0940999001) (Originally discussed at the 3/16/23 Plan Commission meeting)

6. Discussion and Action Regarding the Site & Building Plans for Common Transportation Located at W233 N2095 Ridgeview Parkway for the Purpose of Adding Loading Docks to the Building and Reconfiguring the North Parking Area to Accommodate Overnight Parking of Semi Trailers (PWC 0953986003)

7. Discussion and Action Regarding the Site and Building Plans for Fox River Congregational Church Located at N34 W23575 Capitol Drive For the Purpose of Constructing a Building Addition to the Existing Church (PWC 0907999001)

8. Discussion and Action Regarding a Conceptual Review for Bubbles Foam Farm for a Multi-Use Development on Vacant Land Located at W240 N2687 Pewaukee Road (PWC 0924995)

9. Discussion and Action Regarding a Request by Lake Pewaukee Sanitary District to Construct Two Generator Buildings Located at W265 N2989 Peterson Drive and W276 N2697 Rocky Point Road

(PWC 0930004 & PWC 0934045)

10. Discussion and Action Regarding a Two-Lot Certified Survey Map for the City of Pewaukee Department of Public Works for Properties Located at W225 N3131 Duplainville Road and W224 N3297 Duplainville Road for the Purpose of the Reconfiguration of Lot Lines for the New DPW Facility (PWC 0911993006 & PWC 0911989001)

11. Adjournment

Ami Hurd
Deputy Clerk

4/13/2023

NOTICE

It is possible that members of other governmental bodies of the municipality may be in attendance to gather information that may form a quorum. At the above stated meeting, no action will be taken by any governmental body other than the governmental body specifically referred to above in this notice.

Any person who has a qualifying disability under the Americans with Disabilities Act that requires the meeting or materials at the meeting to be in an accessible format must contact the City Planner, Nick Fuchs, at (262) 691-6007 three business days prior to the meeting so that arrangements may be made to accommodate your request.

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 2.

DATE: April 20, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding Approval of the October 20, 2022 Meeting Minutes

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

10.20.2022 Minutes

In attendance:
Mayor S. Bierce, Alderwoman C. Brown, T. Janka, D. Kiser, S. Sullivan, and C. Wunder.

Also in attendance:
City Planner & Community Development Director N. Fuchs, Administrator S. Klein, Department of Public Works Director M. Wagner, and Deputy Clerk A. Hurd.

1. Call to Order and Pledge of Allegiance

   Chairman Bierce called the meeting to order at 6:00pm and requested everyone stand for the Pledge of Allegiance.

2. Discussion and Action Regarding Approval of the April 21, 2022 Meeting Minutes

   A motion was made and seconded (C. Wunder, D. Kiser) to approve the April 21, 2022 meeting minutes. Motion Passed: 6-For, 0-Against.

3. Discussion and Action Regarding the Final Plat for Woodleaf Reserve Addition No. 5 (PWC 0865992 & PWC 0865175)

   Mr. Fuchs stated the plat consists of 11 lots and the extension of Timber Court. All lots meet the Rs-6 minimum area and width requirements, and it is in substantial conformance with the Preliminary Plat. Mr. Fuchs recommended approval of the Final Plat.

   A motion was made and seconded (T. Janka, D. Kiser) to approve the Final Plat for Woodleaf Reserve Addition No. 5. Motion Passed: 6-For, 0-Against.

4. Discussion and Action Regarding a Recommendation to the Common Council for a Comprehensive Master Plan Amendment to Change the Year 2050 Land Use/Transportation Plan Use Designation for the City of Pewaukee for Lake Pewaukee Sanitary District for Property Located at N25 W27675 Prospect Avenue from Medium Density Residential (6,500 sq. ft. – ½ ac./d.u.) to Government/Institutional (PWC 0935981)

   Mr. Fuchs stated LPSD was requesting to construct a new office and storage building. Staff does not object to the rezoning and the use of the property by LPSD in some capacity. He noted that the building size, site layout and design will be part of the site and building plan review that will come in the future. Mr. Fuchs noted that there will be no anticipated change in traffic.

   Chairman Bierce opened the public hearing at 6:09pm.

   Nancy Notley (W276 N2670 Lily Court West) stated she was opposed to the rezoning and was concerned about the decrease in home values. She discussed various car accidents near the proposed building. Ms. Notley felt the development would contribute to more traffic on a dangerous stretch of

road. She felt the proposal advocated for the unnecessary destruction of greenspace and wildlife habitats. Ms. Notley felt there were other areas in Pewaukee to development the building.

Tom Calvy (W278 N2471 Prospect Avenue) stated he was concerned about the safety of the street and the neighborhood.

Zach Thompson (W275 N2536 Wildflower Road) referred to the SEWRPC website regarding the Pewaukee River Watershed Protection Plan. He felt this development would have an impact on the adjacent watershed and environmental corridor. Mr. Thompson submitted a petition with 146 neighbor's signatures opposing the rezoning. He felt the development does not belong in the neighborhood.

Jill Olson (W278 N2946 Rocky Point Road) discussed being outbid on land by LPSD in order to preserve it as wetlands and a natural area. She felt LPSD lied to her, and she felt this was a bad use of the property.

Clark Bohnert (W275 N2581 Heather Lane) questioned if an operations review was done on the existing facility and questioned if anyone looked at remodeling alternatives. Mr. Bohnert questioned who would be paying for this, and he felt it should require a referendum.

Jim Tredwell (W275 N2437 Heather Lane) stated once a new zoning is created, LPSD would be allowed to build whatever they wanted within the institutional zoning. He felt the lands were purchased for a conservancy to protect the wetlands and it does not fit within the context of the neighborhood that is there. Mr. Tredwell was disappointed in LPSD and that this was happening this way.

Emily Jasinowski (W276 N2533 Wildflower Road) felt this would negatively impact her quality of life because of the noise pollution, traffic increase, and the safety concerns. She asked that the Commission not create more chaos in their lives and take away their peace.

Dejon Wirth (W275 N2496 Heather Lane) requested the Commission not support the agenda items. She felt it would destroy the rural and residential area. Ms. Wirth was shocked at the poor condition of the current LPSD property, and she felt they should take care of the property they have. She also felt the intersections were already busy and dangerous enough.

Amy Schoenemann (W277 N2788 Chicory Lane) questioned if the concept was feasible. She felt any screening done to the building would cause a safety issue for drivers on Prospect Avenue. She also felt the building would not fit on the site. Ms. Schoenemann suggested a different Pewaukee site for the building, as she felt it did not belong in the neighborhood.

John Nate (W275 N2485 Heather Lane) felt the property was supposed to be set aside in perpetuity, and he questioned if there were other locations for this building to cause less of a change to the surrounding footprint.

Tom Seeboth (W278 N2451 Prospect Avenue) felt LPSD was being selfish on what they want to do, when they own a lot of other properties around the area that would serve them much better. He requested this go to a referendum.

William Bachman (W278 N2619 Rocky Point Road) stated he was sad to see the area develop, and he was strongly opposed to it.

Kyle Wolff (W275 N2491 Wildflower Road) read aloud a SEWRPC document. He felt LPSD was putting a gigantic building on a primary environmental corridor. Mr. Wolff felt it was the City's job to

protect the upland portions from being developed. He felt the City should assess the woodlands to be incorporated into the primary environmental corridor.

Katie Thompson (W275 N2536 Wildflower Road) requested the Commission not amend the property. She reviewed the 2050 Land Use Plan and felt changing the plan and rezoning the site was inconsistent with the plan and inconsistent with the well-established surrounding residential neighborhoods. Ms. Thompson discussed land uses within the City and felt the current LPSD operation was an illegal, non-conforming use. She felt rezoning the land would be considered spot zoning.

Tracy Rath (W276 N2650 Lily Court West) felt this was another example of government overreach and she felt the City was trying to rezone the property without anyone knowing. Ms. Rath felt government needed to be fiscally responsible.

Maryann Jorgenson (W276 N2632 Wildflower Road) stated she does not want commercial in her neighborhood. She noted that Pewaukee is a hotbed for cyclists. She stated the road bends and turns quite drastically, and the speed limit changes, and she felt it would be very dangerous. Ms. Jorgenson questioned why LPSD would need a 16-spot parking lot.

Stuart Wogsland (W275 N2721 Oak Street) stated he wanted to keep the nice neighborhood in the area.

Alexandra Gaggl (W275 N2337 Oak Street) stated her property shares two boarders with LPSD and she was disappointed in LPSD for not reaching out to them since they are highly affected by the proposed change.

John Ruf (Beach Park Circle, Delafield) stated he is the President of Lake Pewaukee Sanitary District. He stated there will not be more traffic, and LPSD will be doing the same thing that it does at the original site. In an effort to be fiscally responsible, they did not want to put more money into the project until the rezoning was approved. They have no intent to put up a structure that asks for a variance. Mr. Ruf felt it was not feasible to have their location in an industrial park because of the size of the equipment.

Lori Seeboth (W278 N2451 Prospect Avenue) stated the LPSD trucks speed down the road and she felt the last thing they need is one more truck on the road.

Joseph Boland stated he is Secretary of the Lake Pewaukee Sanitary District. He felt the I-2 zoning was appropriate for this parcel, as it is owned by a government entity for a public purpose. He stated LPSD has outgrown its existing facility and they have acquired a lot more equipment that they need to take care of. The equipment is extremely large, and it is not easy to get it across the lake from a site miles away. Having a site close by is important from an operational standpoint.

Rainer Gedeit (W275 N2441 Heather Lane) stated this is the community in action and they expect their governmental leaders to listen to what they say.

Chairman Bierce closed the public hearing at 7:32pm.

Chairman Bierce stated he would be uncomfortable rezoning the property without having a clearer view of what it is being rezoned for. He stated he wanted to see what LPSD is planning.

Commissioner Janka referred to a letter written by Tom Koepp of LPSD and stated he was personally insulted. He questioned why LPSD was not clearing the buckthorn that was referred to in the letter. He

felt LPSD should have had a meeting with the citizens to inform them of their plans. Commissioner Janka felt the conference rooms being proposed would be a waste of taxpayer money. He stated he would not support the zoning change.

Commissioner Brown stated she met with the residents and Tom Koepp and looked at the existing property. She questioned why the property they purchased was not immediately rezoned, and she felt the land was initially purchased to protect the area. Ms. Brown did not believe this was appropriate for the area and she stated she would not vote for it and would like to keep it as Rs-1.

Commissioner Kiser felt this should have been done as a Conceptual Review instead.

A motion was made and seconded (C. Brown, T. Janka) to deny the Comprehensive Master Plan Amendment and Rezoning for Lake Pewaukee Sanitary District. Motion Passed: 5-For, 0-Against, 1-Abstain (Sullivan).

5. Discussion and Action and Public Hearing for Lake Pewaukee Sanitary District to Rezone Property Located at N25 W27675 Prospect Avenue from Rs-1 Single-Family Residential to I-2 Rural Institutional for the Purpose of Constructing a New Building (PWC 0935981)

Action taken in item #4.

6. Discussion and Action Regarding a Recommendation to the Common Council for a Conditional Use Permit for Keith Tubin for Property Located at N37 W26745 Kopmeier Drive for the Purpose of Constructing a Boathouse (PWC 0894014)

Mr. Fuchs stated the proposed boathouse is approximately 187 square feet and complies with the boathouse requirements. He noted there is a condition in the staff report that the applicant remove some of the concrete to meet the allowance for impervious surface. Staff was recommending approval of the Conditional Use.

Chairman Bierce noted that he was not against the size and placement of the boat house, but he did not think it would be fair to allow a metal boathouse when the City has not allowed metal buildings in the past.

Commissioner Brown stated she would not want to see a metal boathouse on the lake.

Mr. Tubin felt the metal siding would hold up better. He felt it was less of an eye sore than seeing gas cans and boat supplies around the lake.

A motion was made and seconded (C. Brown, S. Sullivan) to recommend approval of the Conditional Use Permit for Keith Tubin with staff making sure the outside building material was changed. Motion Passed: 6-For, 0-Against.

7. Discussion and Action Regarding Site and Building Plans for Interstate Partners for Vacant Land Located at Approximately N30 W22835 Green Road for the Purpose of Constructing a Speculative Industrial Building (PWC 0914987 & PWC 0914980)

Mr. Fuchs stated this building was originally brought forward to the Plan Commission in December of 2019. The Plan Commission recommended rezoning the two properties involved and recommended

approval of the CSM but did not take action on the site and building plans, as there were concerns with the architecture at that time.

The building has changed and is now approximately 116,000 square feet. It was originally around 160,000 square feet. The applicant is proposing to fence-in the back behind the building with a chain link barbwire fence with slats. Mr. Fuchs recommended approval with several conditions including review of a final landscape and lighting plan, final Engineering approval, limiting the illumination of signage between 10:00pm and 7:00am, and overnight parking limited to behind the building.

Chairman Bierce opened the public hearing at 8:00pm.

Larry Marincic (N30 W22121 Green Road) requested Chairman Bierce reiterate his comment about property rights.

Greg Zinda, owner of The Station Pub and Grill, questioned if there would be another public meeting after this. He stated he was concerned with water coming into his parking lot and building, depending on what happens with the grade on the property. Ms. Wagner stated she has not yet seen a storm water management plan. Mr. Zinda wanted to go on record that he wanted to see the plan.

Chairman Bierce closed the public hearing at 8:04pm.

Chairman Bierce felt the building was lacking. He felt there were deficiencies in the building and not a lot of architecture along the sides. There are still long expanses of solid concrete without much breaking it up. Chairman Bierce stated he was not opposed to the size of the building or what it would be used for.

Commissioner Sullivan agreed with Chairman Bierce and stated he was concerned with the stormwater management problems on the site. He questioned if the applicant has spoken to the residents across the street.

Commissioner Brown stated she did not see anything wrong with this. She questioned the difference between this building and other buildings in the City on Highway 16 and Highway M.

Caroline Brezinski with Interstate Partners stated they have talked to the neighbors across the street. She noted that they have changed colors and added windows, and the building is now much smaller, so the expanses are not as long.

Commissioner Kiser stated he had no issues with the building.

Ms. Wagner noted that Green Road is a weight restricted roadway from Duplainville Road to Pewaukee Road, so access will be a bit of a challenge. The weight restriction may have to be lifted. Ms. Brzezinski noted that they have already made a request with Waukesha County to lift the restriction. Discussion took place regarding the restrictions.

A motion was made and seconded (C. Brown, D. Kiser) to approve the Rezoning, Certified Survey Map, and Site and Building Plans, adhering to the recommendations from the City Planner and the stormwater management. Motion Passed: 4-For, 2-Against (Bierce, Janka).

8. Discussion and Action and Public Hearing for Interstate Partners to Rezone Vacant Land Located on Green Road from M-6 Mixed Industrial to M-2 Limited Industrial for the Purpose of Developing a

150,000 Square Foot Industrial Building (Previously Recommended for Approval at the 12/19/2019 Plan Commission Meeting) (PWC 0914987)

Action taken in item #7.

9. Discussion and Action and Public Hearing for Interstate Partners to Rezone Property Located on Green Road from Rs-3 Single-Family Residential to M-2 Limited Industrial for the Purpose of Developing a 150,000 Square Foot Industrial Building (Previously Recommended for Approval at the 12/19/2019 Plan Commission Meeting) (PWC 0914980)

   Action taken in item #7.

10. Discussion and Action Regarding a Certified Survey Map for Interstate Partners for Property Located on Green Road for the Purpose of Combining Two Existing Parcels (PWC 0914980 & PWC 0914987)

    Action taken in item #7.

11. Discussion and Action Regarding Site and Building Plans for John and Kari Stroschein for Property Located at W245 N4780 Swan Road for the Purpose of Constructing a Second Dwelling on the Property (PWC 0873999)

    Mr. Fuchs stated the property owner wants to build a new home on the far east side of the property and wants to keep the existing home on the property to be used as a wood working shop and for equipment storage. Within the existing home, they would like to keep the bathroom and make some changes. Mr. Fuchs stated the Upland Conservancy zoning allows for the Plan Commission to approve a second dwelling on the property, as opposed to going through a variance process or removing the bathroom so that it cannot be considered another dwelling unit. Mr. Fuchs noted the proposed home and driveway meet all the setback requirements and he recommended approval of the site and building plans.

    Discussion took place regarding sewer and water hook up.

    A motion was made and seconded (C. Brown, C. Wunder) to approve the Site and Building Plans for John and Kari Stroschein to construct a second dwelling. Motion Passed: 6-For, 0-Against.

12. Adjournment

    A motion was made and seconded (D. Kiser, S. Sullivan) to adjourn the meeting at 8:30pm. Motion Passed: 6-For, 0-Against.

Respectfully Submitted,

Ami Hurd
Deputy Clerk

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 3.

DATE: April 20, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Continued Discussion and Action Regarding a Request by Andev Group, LLC to Rezone Vacant Land Located at the Northwest Corner of Golf Road and Meadowbrook Road from A-1 Agricultural, LC Lowland Conservancy, and F-1 Floodplain to Rm-3 Multi-Family Residential, LC Lowland Conservancy, and F-1 Floodplain for the Purpose of Developing the Courtyard at Pewaukee, a Community Based Residential Facility (PWC 0940999001) (Public hearing opened and closed at the 3/16/23 Plan Commission meeting)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Courtyard at Pewaukee staff report 4.20.23

Courtyard at Pewaukee staff report 3.16.23

Courtyard at Pewaukee narrative

Courtyard at Pewaukee rezoning map

Courtyard at Pewaukee staff comment responses

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
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REPORT TO THE PLAN COMMISSION

Meeting of April 20, 2023

Date: 04/13/2023

Project Name: Comprehensive Master Plan Amendment, Rezoning, and Site & Building Plan Review

Project Address/Tax Key No.: Vacant land at the northwest corner of Golf Road and Meadowbrook Road/PWC 0940999001

Applicant: ANDEV Group, LLC

Property Owner: Robert J Stenz Family Trust

Current Zoning: LC Lowland Conservancy, F-1 Floodplain, and A-1 Agricultural

2050 Land Use Map Designation: Low-Medium Density Residential (1/2 Ac. – 2 Ac./D.U.) and Floodplains, Lowland & Upland Conservancy and Other Natural Areas

Use of Surrounding Properties: Golf Rd to the south, Lake Country Trail to the north, Oak Spring subdivision and Lakewood Baptist Church to the west, and Meadowbrook Rd to the east.

Project Description/Analysis:

The applicant, ANDEV Group LLC, submitted a Rezoning Petition, Comprehensive Master Plan Amendment, and a Site & Building Plan Review Application for a proposed Community Based Residential Facility (CBRF) on 28.3 acres of vacant land located at the northwest corner of Golf Road and Meadowbrook Road.

The Plan Commission previously discussed these applications at their March 16, 2023 meeting. Much of the discussion at the March Plan Commission meeting centered around the permanent cul-de-sac that needs to replace the temporary one at the end of Lakefield Drive.

Staff, including the Fire Chief and City Engineer, discussed the permanent cul-de-sac option and recommend that the cul-de-sac be sized to accommodate a WB-62 turning radius. The applicant preferred a smaller design; however, revised the plans to provide the recommended design.

The applicant also revised the plans to slightly enlarge the building footprint to add a total of four additional units. In summary, the revisions made following the March Plan Commission meeting include: a slightly larger building footprint; 80 proposed units versus 76; a cul-de-sac extending from Lakefield Drive; a retaining wall adjacent to the cul-de-sac; and a revised landscape plan, which provides landscaping around and adjacent to the cul-de-sac.

The March Plan Commission staff report is also attached for additional information regarding this development.

Recommendation:

A motion to recommend approval of the Rezoning for ANDEV Group LLC to rezone the property bearing Tax Key No. PWC 0940999001 from A-1, LC, and F-1 to Rm-3, LC, and F-1.[1]

A motion to recommend approval of the Comprehensive Master Plan Amendment for ANDEV Group LLC to amend the 2050 Land Use/Transportation Plan map designations for the property bearing Tax Key No. PWC 0940999001 from Low-Medium Density Residential and Floodplains, Lowland & Upland Conservancy and Other Natural Areas to High Density Residential and Floodplains, Lowland & Upland Conservancy and Other Natural Areas.[2]

and

A motion to approve the Site & Building Plans for the construction of a senior living facility upon property bearing Tax Key No. PWC 0940999001, subject to the conditions contained within this report.

[1] The LC Lowland Conservancy District and F-1 Floodplain District boundaries will be modified to follow the most up-to-date field delineations.

[2] The natural resources boundary for the future land use designation will be modified to follow the most up-to-date field delineations.

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fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of March 16, 2023

Date: 3/09/2023

Project Name: Comprehensive Master Plan Amendment, Rezoning, and Site & Building Plan Review.

Project Address/Tax Key No.: Vacant land at the northwest corner of Golf Road and Meadowbrook Road/PWC 0940999001

Applicant: ANDEV Group, LLC

Property Owner: Robert J Stenz Family Trust

Current Zoning: LC Lowland Conservancy, F-1 Floodplain, and A-1 Agricultural

2050 Land Use Map Designation: Low-Medium Density Residential (1/2 Ac. – 2 Ac./D.U.) and Floodplains, Lowland & Upland Conservancy and Other Natural Areas

Use of Surrounding Properties: Golf Rd to the south, Lake Country Trail to the north, Oak Spring subdivision and Lakewood Baptist Church to the west, and Meadowbrook Rd to the east.

Project Description/Analysis:

The applicant, ANDEV Group LLC, submitted a Rezoning Petition, Comprehensive Master Plan Amendment, and a Site & Building Plan Review Application for a proposed Community Based Residential Facility (CBRF) on 28.3 acres of vacant land located at the northwest corner of Golf Road and Meadowbrook Road. The Plan Commission previously discussed this proposal at a conceptual level at their October 21, 2021 meeting.

Site Plan

The subject property is 28.3 acres and the total site disturbance of the project will be 14.98 acres. The parcel contains a significant amount of wetland and floodplain on the north and west portions of the site. The project will result in approximately 3.4 acres of impervious surface with 24.9 acres remaining as greenspace, which is a ratio of about 88% greenspace. Note that a wetland delineation was completed in September of 2018 by Dave Meyer who is assured by the DNR.

The proposed development consists of a 76-unit senior living facility. The proposed building will consist of 40 apartments in an assisted living section, 36 units in a memory care section, and two courtyards, with one in each section of the building.

The building is orientated with the front facing north and the rear of the building facing south and Golf Road. According to the applicant, this was done due to the grading constraints of the site. A detached garage/accessory building for general storage and dumpsters is also located on the south side of the building. *Note that the proposed accessory building will not be greater than 18ft in height*.

Overall, the proposed development complies with Rm-3 District development standards.

Access

Ingress/Egress is proposed from Golf Road. Golf Road is a County Highway, so that access point will require Waukesha County review and approval. Staff has exchanged emails with the County and the location appears to meet their requirements.

Lakefield Drive currently terminates at this property with a temporary cul-de-sac as it was always planned to be extended with the development of the subject parcel.

The developer and adjacent homeowners have expressed that they do not wish for the road to be extended. With that, this cul-de-sac needs to be modified into a permanent turnaround.

The applicant has indicated that they are not able to comply with the City's typical design standards. It will be up to the Plan Commission to determine whether approval will be granted to deviate from those standards. Staff would not object to modifications as long as the cul-de-sac can accommodate the city's largest vehicles, such as fire trucks.

It should be noted that typically staff would recommend and hold a development to meeting City cul-de-sac standards. In this case, the cul-de-sac will solely be utilized for turning around and there are not driveways located around the cul-de-sac, which allows more flexibility for snow removal. With that, staff has less concerns with potential changes.

Note that the plans provided currently do not show a cul-de-sac at the end of Lakefield Drive. The Plan Commission should be aware that a permanent cul-de-sac will extend into this property and trees will have to be removed that are currently buffering this site and the adjacent residential homes.

Landscaping

The applicant is proposing to install 52 Deciduous Trees, 5 Ornamental Trees, 8 Evergreen Trees, 21 Street Trees, 68 Evergreen Shrubs, 173 Deciduous Shrubs, and a variety of Tall Ornamental Grass, Short Ornamental Grass, and Perennials.

There are at least nine different species of Deciduous Trees, Deciduous Shrubs, Evergreen Shrubs, Ornamental Grasses, and Perennials provided, four different species of Street Trees provided, and two different species of Evergreen Trees and Ornamental Trees provided.

The landscape plan focuses many plantings on screening the building from view along Golf Road and from the residential properties to the west. Plantings are also provided directly around the detached garage.

Parking

The site includes 68 new parking spaces of which four are ADA required spaces. Parking spaces are 10' x 18' (180 square feet), which is in compliance with Zoning Code standards. Staff finds the proposed parking sufficient.

Architecture

The proposed building exterior consists of fiber cement siding, fiber cement shakes, fiber cement panel, manufactured stone veneer, and asphalt shingles. The building contains a substantial amount of windows and dormers are also provided.

Signage

A monument sign is anticipated and shown for reference only in the plans. All signage must comply with standards set forth in Section 17.0700 of the City's Zoning Code and will require separate review and approval by the City Planner as well as a Sign Permit from the Building Services Department, prior to installation.

Utilities

Public sewer and water are available via a connection on Lakefield Drive which will serve the development.

Lighting

The Lighting Plan consists of 84 lights. Light levels are at 0.0 footcandles at the property lines. The peak height of the lights is roughly 17 feet, which complies with the 20-foot maximum height requirement of the Zoning Code. The wattage is under 150 and visibility is limited from adjacent streets or residential properties.

Recommendation:

A motion to recommend approval of the Rezoning for ANDEV Group LLC to rezone the property bearing Tax Key No. PWC 0940999001 from A-1, LC, and F-1 to Rm-3, LC, and F-1.[1]

A motion to recommend approval of the Comprehensive Master Plan Amendment for ANDEV Group LLC to amend the 2050 Land Use/Transportation Plan map designations for the property bearing Tax Key No. PWC 0940999001 from Low-Medium Density Residential and Floodplains, Lowland & Upland Conservancy and Other Natural Areas to High Density Residential and Floodplains, Lowland & Upland Conservancy and Other Natural Areas.[2]

and

A motion to approve the Site & Building Plans for the construction of a senior living facility upon property bearing Tax Key No. PWC 0940999001, subject to the conditions contained within this report.

[1] The LC Lowland Conservancy District and F-1 Floodplain District boundaries will be modified to follow the most up-to-date field delineations.

[2] The natural resources boundary for the future land use designation will be modified to follow the most up-to-date field delineations.

ANDEV GROUP
real estate development

January 24, 2023

Members of the Pewaukee Plan Commission

Re: Andev Group, LLC Petitions for Amendment of Master Plan, Rezoning District Plan Amendment, Conditional Use, and Application for Site and Building Plan Review regarding the property located at Golf Rd. and Meadowbrook Rd. to allow for development of a Senior Residential Housing Facility (CBRF) of 76 units.

Ladies and Gentlemen,

Andev Group, LLC is the contract purchaser of the approximately 28.3-acre parcel located at the northwest corner of Golf Rd. and Meadowbrook Rd., immediately north of I-94. The attached proposal is for a 76-unit senior living facility to be licensed as a CBRF under Wisconsin statutes. The property at this location is currently undeveloped land. The proposed purchaser of the property is ANDEV Group, LLC, or its nominee, who would be purchasing in order to provide the facility to be operated by Encore Senior Living, one of Wisconsin's largest provider of assisted living housing and services. ANDEV Group, LLC is a Midwest developer of senior housing having developed multiple sites located in Wisconsin and Illinois.

The approximately 11.28-acre area of the existing site upon which the development is planned to be constructed is zoned A-1 Agricultural; and the area to the north is zoned LC, lowland conservancy and F-1 floodland. We will require a rezoning of the A-1 portion of the property to RM-3 Multi-family Residential with a concordant change to the City's Comprehensive Master Plan along with Conditional Use approval for a senior living facility. The LC and F-1 portions of the property may retain their respective current zonings. Because of the existence of flood zones nearby, the developer has met with the Lake Pewaukee Sanitary District to address any capacity concerns they may have regarding the facility to be constructed. After reviewing our plans and their records, they have approved up to 90 units of the type proposed here.

The site is surrounded by zoning types: F-1, flood land to the north of the LC zoned land; F-1 and LC to the east across Meadowbrook Rd., a combination of R-2 and R-3 residential to the south across I-94 and R-4 to the west. Based on the use of the facility, the road, and driveway design and landscaping features, the impact on neighboring parcels will be minimal.

The building will house an assisted living section with 40 apartments and a memory care section with 36 units. Parking designed and suggested for the facility is 68 spaces, four of which will be designated for ADA. In Andev's and Encore's extensive experience this quantity is more than adequate to accommodate the staff, visitors, and the very few assisted living residents who may still own a private vehicle. That experience has established a workable ratio for parking of one-half space per residential unit. While the local ordinance calls for 1 parking space per unit, it allows for the Plan Commission to review the facts and circumstances for such developments and we are proposing the 68 spaces knowing

that neither the developer nor operator would invest the millions of dollars necessary to construct an under-parked building. In addition to the parking provided, the facility will provide transportation for the residents by van or bus. Visitation is typically light, with an increase on certain holidays or special events. The day shift is the maximum staffed shift and includes approximately 48 full time employees including all shifts. Shifts will most likely operate on a 7-3, 3-11 and 11-7, 24-hour rotation.

As residents of the memory care units are impaired and pose a wandering risk, that section of the building is a "secure" facility. The courtyards are enclosed and building exiting is controlled. Residents needing to go off-site are supervised. Fire exits are controlled through the use of code-approved delayed egress devices.

Like the country as a whole, Pewaukee's population is becoming significantly older, and the demographic and social changes that are beginning to affect the city will forever alter how the community looks and feels. With an aging population, this community will face both new opportunities and challenges in responding to older people's needs and wishes.

One out of eight people aged 65 and older (13 percent) has Alzheimer's disease. As older people move toward retirement, local governments, community and health organizations and families are becoming more aware of the challenges of our aging population:

- Local governments are realizing the demand for accessible, age-friendly infrastructure and transportation options.

- Families are navigating the social and economic challenges of parents and grandparents that require extra care and who may have to move from their homes and communities to access services and specialized accommodations.

All of ANDEV Group's senior housing establishments are conceived and designed specifically to meet the needs of the growing segment of the senior population, many of whom are no longer capable of independently performing activities of daily living such as cooking, cleaning, laundry, dressing, bathing, etc. but are not so ill or incapacitated that they need full-time nursing care. Additionally, many of these older persons suffer from dementia and memory loss. These people are at risk to themselves as they become easily confused, disoriented and lost. They are not, however, in need of being placed in a nursing home. Assisted living housing provides a safe and protective environment for them in which their needs can be met while maintaining a residential setting for their comfort.

Older adults are a vibrant cohort of all communities and contribute to the economy, support extended families, participate in volunteerism, and generally enhance the social health of our neighborhoods. By encouraging creative housing solutions such as assisted living communities, transportation alternatives, and social and recreational programs we have the opportunity to play an important role in facilitating the ability of older adults to age in place in Pewaukee.

With respect to the factors applicable to the Special Use contained within the City of Pewaukee's ordinance section 17.0416c and 17.0500 for ANDEV's proposed Senior Living Community we submit the following:

(1) We believe that the project will provide a variety of safe and secure senior housing alternatives for an aging population within a single integrated community.

(2) The project is consistent with applicable land-use policies contained in the City's Master Plan of current adoption in that all building codes and zoning restrictions are being incorporated and respected without variance.

(3) The project, as can be seen from the elevations and renderings has been designed, and will be constructed, landscaped, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such a use will not change the essential character of the same area. This area is currently vacant land covered with vegetation that is of no particular character and will improve that character with engineered stormwater control management, aesthetically pleasing buildings, and professional landscape design.

(4) The project will not adversely affect or be hazardous to existing neighboring uses. ANDEV has met with the neighbors and their representatives prior to presenting its application to the Plan Commission to ensure that their questions, opinions, and preferences are heard and satisfactorily addressed. The developer has been informed that the primary concern of the residents of the single-family homeowners that will be nearest to the project is that there be no connection with Lakeview Dr. that would allow for cut-through traffic from the east. The project design has respected this preference. The second concern is with regard to building height. Since the meeting with the neighbors, the building has been re-designed to be a one-story structure; having eliminated the two-story portion of the facility entirely. The side of the building nearest the existing homes and will have an extra-large setback accommodating the existing tree line to the greatest extent possible.

(5) The project will not be detrimental to the economic welfare of surrounding properties or the community. To the contrary, the project anticipates the direct creation of approximately 48 new full-time jobs and will support local businesses and suppliers – generating increased sales and real estate taxes that will benefit the residents of the entire city.

(6) The project is adequately served by public facilities, such as existing roads, schools, stormwater drainage, public safety, public transportation, and public recreation, or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide any such service. All of the utilities necessary for the project’s construction and maintenance are present and sized sufficiently to service the project.

(7) The project is adequately served by public sanitation facilities. The same factors listed above regarding roads, stormwater, etc. are applicable to the availability and capacity of the water main and sanitary sewer connections.

(8) The project will not involve uses, activities, processes, materials, and equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, or odors. The project has been specifically designed and engineered to provide all necessary traffic improvements to accommodate further development consistent with existing zoning to the north of the project without connecting to the

single-family neighborhood to the east, but still providing a second route for fire and emergency services from the north if necessary. Andev has commissioned a traffic report for the project, the guidelines of which will be followed in its planned construction.

(9) The project will not directly or indirectly have a substantial adverse impact on the natural resources of the Township, including, but not limited to, prime agricultural soils, water recharge areas, lakes, rivers, streams, major forests, wetlands, and wildlife areas, all of which are being respected in the design of stormwater detention and avoidance of natural wetlands. Andev has met with the representatives of the Lake Pewaukee Sanitary District and secured their endorsement of the construction on site of up to 90 resident units—14 more than the 76 units the project calls for.

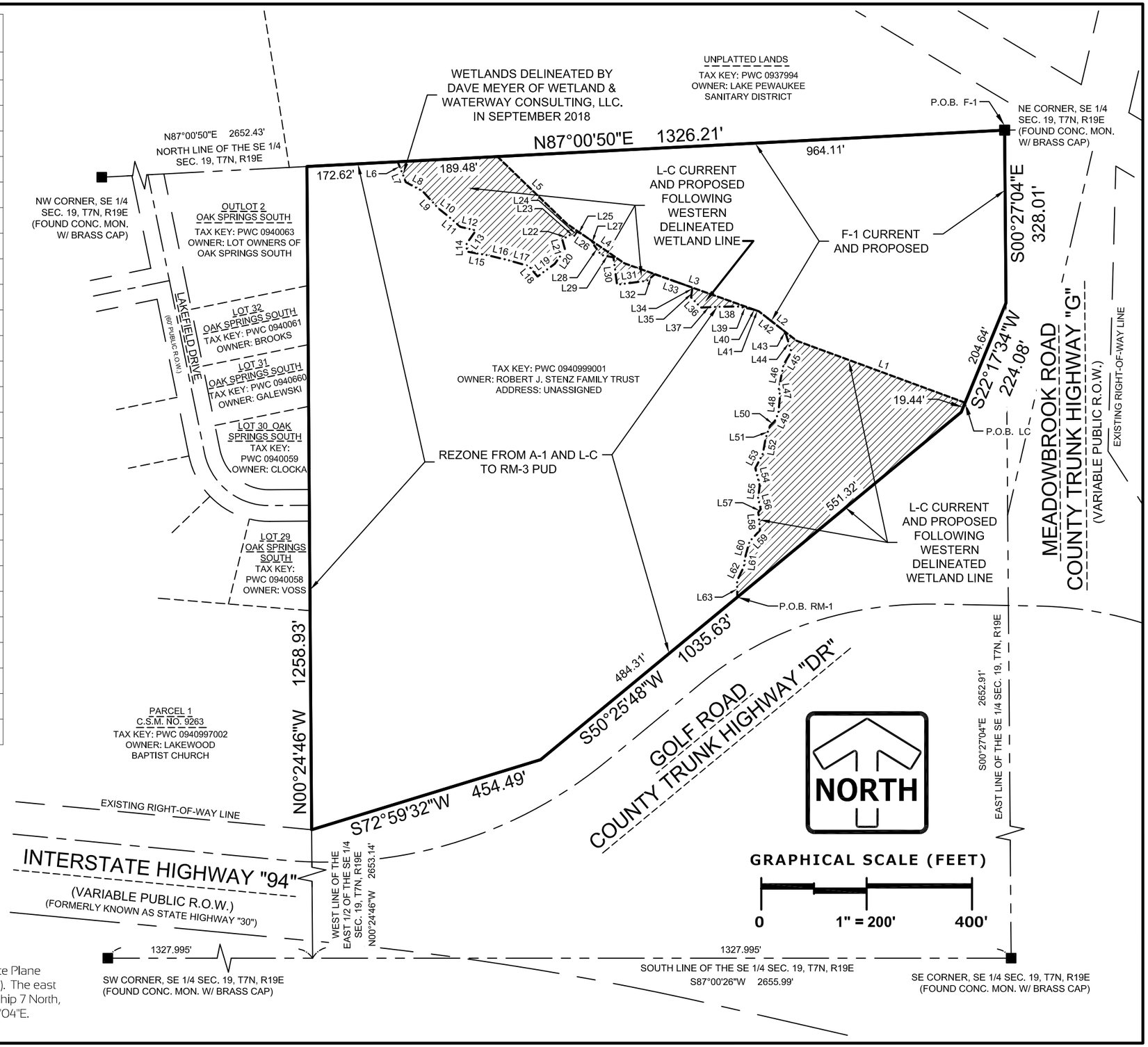
I am available to answer questions or provide further clarification, if necessary,

Very truly yours,

Michael D. Samuels, authorized agent for
Andev Group, LLC

LINE TABLE		
LINE NO.	BEARING	DISTANCE
L1	N69°49'44"W	340.51'
L2	N52°06'28"W	91.15'
L3	N70°20'57"W	270.60'
L4	N55°32'39"W	132.36'
L5	N45°57'55"W	183.92'
L6	S21°50'02"E	19.22'
L7	S21°20'44"E	22.26'
L8	S61°21'39"E	37.14'
L9	S42°23'42"E	44.26'
L10	S51°42'13"E	21.37'
L11	S49°03'46"E	32.34'
L12	S76°42'04"E	30.37'
L13	S35°14'34"W	30.49'
L14	S01°05'05"E	15.11'
L15	S79°53'19"E	44.21'
L16	S76°10'57"E	40.23'
L17	S73°48'57"E	36.77'
L18	S39°50'15"E	25.71'
L19	N53°30'55"E	40.69'
L20	N35°18'54"E	33.40'
L21	N15°36'58"W	19.34'
L22	N59°16'05"E	17.21'
L23	S80°43'17"E	10.15'
L24	N20°49'05"E	7.27'
L25	S74°35'43"E	8.38'
L26	S55°32'39"E	25.57'
L27	S13°42'51"E	3.99'
L28	S35°34'05"E	27.79'
L29	S79°38'43"E	23.96'
L30	S07°22'01"E	52.45'
L31	N82°34'03"E	57.35'
L32	N50°20'32"E	19.54'
L33	S70°20'57"E	75.25'
L34	S02°32'19"W	4.50'
L35	S08°46'26"W	14.29'
L36	S43°33'38"E	26.63'
L37	N87°49'43"E	30.61'

LINE TABLE		
LINE NO.	BEARING	DISTANCE
L38	N88°41'10"E	38.60'
L39	S79°35'55"E	29.90'
L40	S73°16'45"E	6.49'
L41	S70°20'57"E	5.92'
L42	S52°06'28"E	58.38'
L43	S33°59'43"E	10.46'
L44	S16°45'11"E	33.72'
L45	S31°03'52"W	28.18'
L46	S11°15'09"W	46.62'
L47	S09°02'17"E	14.49'
L48	S05°25'24"W	32.84'
L49	S25°33'11"W	16.46'
L50	S45°45'49"W	12.47'
L51	S19°11'13"W	24.79'
L52	S10°16'08"W	30.42'
L53	S27°24'03"W	30.78'
L54	S14°11'37"E	34.00'
L55	S07°30'42"W	24.85'
L56	S14°47'36"E	20.67'
L57	S39°14'22"W	7.57'
L58	S05°30'51"E	34.46'
L59	S42°50'37"W	29.13'
L60	S15°56'59"W	31.62'
L61	S07°36'46"W	17.65'
L62	S25°39'42"W	29.31'
L63	S00°47'15"E	31.27'



Bearings referenced to the Wisconsin State Plane Coordinate System, South Zone (N.A.D. 1927). The east line of the Southeast 1/4 of Section 19, Township 7 North, Range 19 East has a bearing of S00°27'04"E.

REZONING EXHIBIT

01/26/2023

PINNACLE ENGINEERING GROUP
20725 WATERTOWN ROAD | SUITE 100 | BROOKFIELD, WI 53186 | WWW.PINNACLE-ENGR.COM

PLAN | DESIGN | DELIVER

PEG JOB#1338.10

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

Date:	February 21, 2023
To:	ANDEV Group, LLC
From:	Nick Fuchs, Planner & Community Development Director
RE:	Staff Comments - Site & Building Plan Review

Comments and Recommendations:

Below are comments and recommendations for the proposed development application for property located at the northwest corner of Golf Road and Meadowbrook Road (Tax Key No. PWC 0940999001).

1. Site Plan
    a. As recommended by the Fire Chief, please widen the drives and drive aisle widths to a minimum of 24 feet.
    Per discussion with Chief Bierce on 02/23/23 the site is allowed 20 feet drives as long as there are pitched roofs on the site. Which the current building has, see architectural plans for details.
    b. Staff recommends orienting the front of the building to Golf Road. Alternatively, the south elevation could be revised to more closely match the entrance of the building on the opposite side. However, staff also recommends that the shed and dumpster enclosure be located on the north side of the building.
    As discussed in the review meeting, grading constraints dictate the orientation as well as the elevation. Shed and dumpster architectural modifications have been included to allow for the shed and dumpster to remain on the south side.
    c. It is suggested that walking trails and seating areas be provided onsite, perhaps adjacent to the bioretention basin.
    As discussed 2/22/23 no walking trails will be added as there is an amenity space in the center courtyards for the residents. Additionally, the owner would prefer to keep the residents away from any safety concerns.
2. Landscaping
    a. Staff recommends additional trees be planted throughout the site to better compensate for the tree removal that will occur with this development. Additional plantings should be considered adjacent to the east and west sides of the building, particularly abutting the Oak Springs South subdivision.
    Additional tress have been added throughout the site to satisfy the comment, see updated landscape plans for details.
    b. What was the minimum size of tree identified in the tree survey of the property?
    The minimum tree size that was identified in the plans was a 6-Inch. Tree survey has been included in the submittal.
3. Signage
    a. Please be aware that signage will require separate review and approval by the City Planner as well as a Sign Permit from the Building Services Department prior to installation.
    Understood will be done at a later date.

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b. Also note that per section 17.0706(c) a ground sign located within 660 feet of a residential zoning district boundary shall not be illuminated during the seven-hour period beginning at eleven (11) PM and ending at six (6) AM.
Understood will be done at a later date.

c. Staff would also note that the entire coordinate address will be required to be displayed on the monument sign.
Understood will be done at a later date.

4. Lighting
   a. Please confirm that the total peak height of all lighting is no more than 20 feet as measured from grade. This includes the base, pole, and fixture as well as the mounting height of building lights.
   Understood Photometric plans have been updated to reflect this.
   b. Please provide a cut sheets/catalog pages of all fixtures.
   Understood Photometric plans have been updated to reflect this.

5. Engineering Department Comments:
   a. Construction Plans
      i. Permits will need to be obtained from Waukesha County for work performed within the CTH DR right-of-way.
      Understood will provide at a later date.
      ii. Provide right-of-way within the parcel extending from the end of Lakefield Drive large enough to accommodate a permanent cul-de-sac. This right-of-way and permanent cul-de-sac construction will be required of any site plan which doesn't include extension of public roadway from Lakefield Drive to Golf Road.
      In response to the meeting on 02/22/23 the City Staff was instructed to give an appropriate size and location. The applicant would prefer the right of way to be off the property. Applicant is looking for comments/feedback from planning commission.
      iii. It is recommended that different size storm sewers connecting to a single structure match top of pipe elevations to prevent backflowing during larger storm events.
      Understood will provide at a later date.
      iv. If inverts into bioretention basins are placed at bottom of basin elevation the tailwater during the 10-year storm event must be considered in the storm sewer sizing calculations.
      Understood will provide at a later date.
      v. Additional fire hydrants will likely be required on the east side and north sides of the building.
      Chief Bierce will advise on hydrant locations per our meeting on 02/23/23.
   b. Stormwater Management Plan
      i. This site will not be exempt from infiltration requirements. Implementation of non-structural infiltration features to achieve a maximum extent practicable approach will be required if a basin will not be feasible.
      Understood will provide at a later date.

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ii. The emergency spillway of the bio-retention basin should be designed with a 1-foot minimum freeboard from the 100-year water surface elevation. Include calculations showing that the emergency spillway can convey the 100-year undetained flow going to the bio-retention basin.
Understood will provide at a later date.

iii. Analysis for storm water peak runoff rate needs to include the entire parcel which the site is located on.
Understood will provide at a later date.

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 4.

DATE: April 20, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Continued Discussion and Action Regarding a Recommendation to the Common Council for a Comprehensive Master Plan Amendment to Change the Year 2050 Land Use/Transportation Plan Use Designation for the City of Pewaukee for the Courtyard at Pewaukee for Vacant Land Located at the Northwest Corner of Golf Road and Meadowbrook Road from Low-Medium Density Residential and Floodplains, Lowland & Upland Conservancy and Other Natural Areas to High Density Residential and Floodplains, Lowland & Upland Conservancy and Other Natural Areas (PWC 0940999001) (Originally discussed at the 3/16/23 Plan Commission meeting)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Courtyard at Pewaukee comp plan map

Courtyard at Pewaukee comp plan Ordinance

Courtyard at Pewaukee comp plan Resolution

LINE TABLE		
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L1	S21°50'02"E	19.22'
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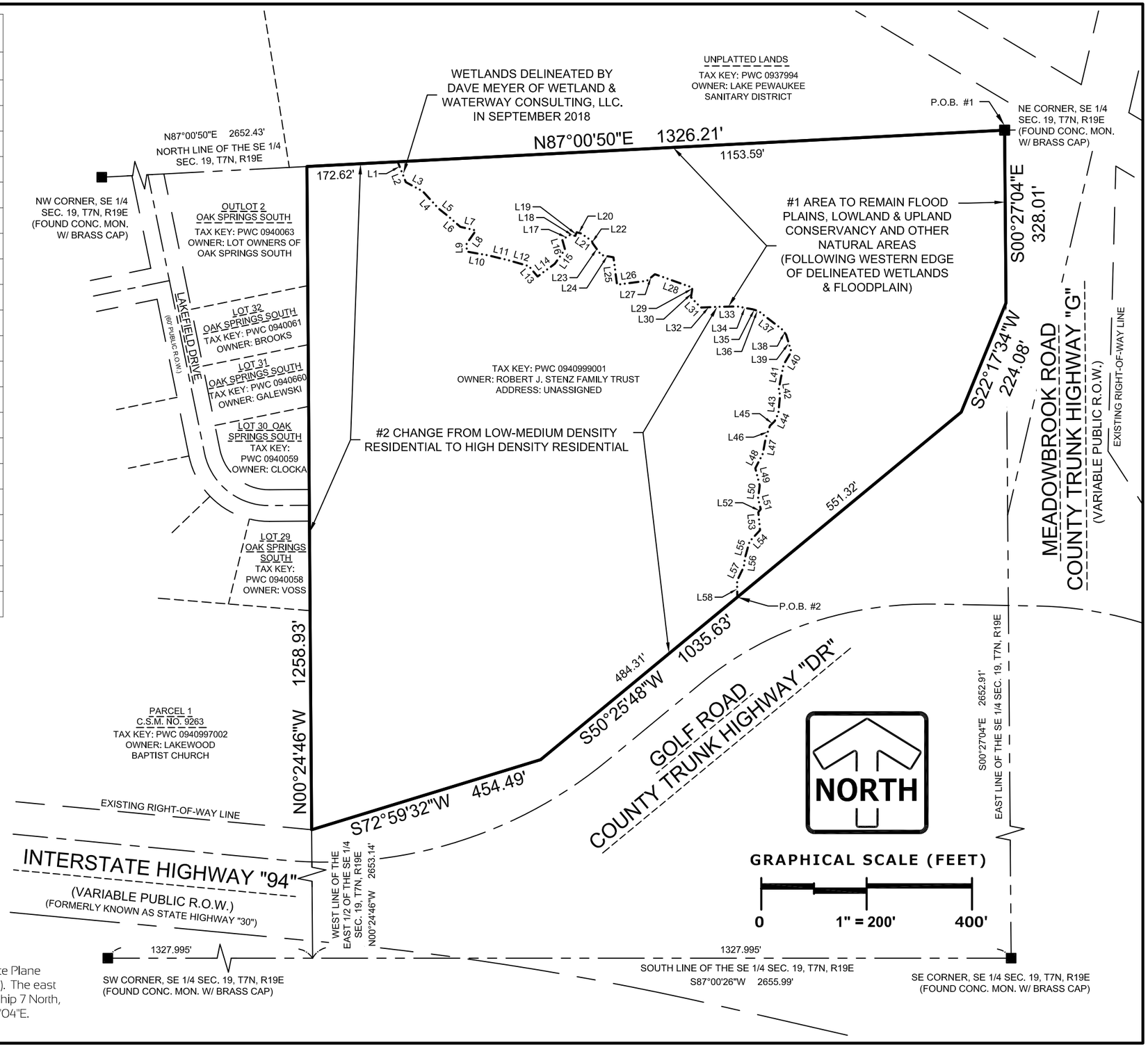


Bearings referenced to the Wisconsin State Plane Coordinate System, South Zone (N.A.D. 1927). The east line of the Southeast 1/4 of Section 19, Township 7 North, Range 19 East has a bearing of S00°27'04"E.

COMPREHENSIVE MASTER PLAN AMENDMENT EXHIBIT

01/26/2023

PINNACLE ENGINEERING GROUP
20725 WATERTOWN ROAD | SUITE 100 | BROOKFIELD, WI 53186 | WWW.PINNACLE-ENGR.COM

PLAN | DESIGN | DELIVER

PEG JOB#1338.10

WAUKESHA COUNTY CITY OF PEWAUKEE STATE OF WISCONSIN

ORDINANCE NO. __-__

AN ORDINANCE TO AMEND THE CITY OF PEWAUKEE 2035 COMPREHENSIVE MASTER PLAN AND NEIGHBORHOOD PLANS 2015-2050 TO CHANGE THE YEAR 2050 LAND USE/TRANSPORTATION PLAN OF A PROPERTY LOCATED AT THE NORTHWEST CORNER OF GOLF ROAD AND MEADOWBROOK ROAD BEARING TAX KEY NO. 0940 999 001 FROM LOW-MEDIUM DENSITY RESIDENTIAL AND FLOODPLAINS, LOWLAND & UPLAND CONSERVANCY AND OTHER NATURAL AREAS TO HIGH DENSITY RESIDENTIAL AND FLOODPLAINS, LOWLAND & UPLAND CONSERVANCY AND OTHER NATURAL AREAS

WHEREAS, pursuant to Wis. Stat. §§ 62.23(2) and (3) and 66.1001(4), the City of Pewaukee is authorized to prepare and adopt and to amend a comprehensive plan as defined in Wis. Stat. §§ 66.1001(1)(a) and 66.1001(2); and

WHEREAS, ANDEV Group, LLC has applied for an amendment to the Comprehensive Master Plan to change the Year 2050 Land Use/Transportation Plan of a property located at the northwest corner of Golf Road and Meadowbrook Road bearing Tax Key No. 0940 999 001 from Low-Medium Density Residential (1/2 Ac. – 2 Ac. / D.U.) and Floodplains, Lowland & Upland Conservancy and Other Natural Areas to High Density Residential (< 6,500 Sq. Ft. / D.U.) and Floodplains, Lowland & Upland Conservancy and Other Natural Areas as depicted upon the Comprehensive Master Plan Amendment Exhibit dated January 26, 2023 on file with the Planner and Community Development Department; and

WHEREAS, the Plan Commission of the City of Pewaukee by a majority vote of the entire Commission on March 16, 2023, recorded in its minutes, has adopted a resolution recommending to the Common Council the adoption of the Ordinance to Amend the City of Pewaukee Comprehensive Master Plan to change the Year 2050 Land Use/Transportation Plan of a property located at the northwest corner of Golf Road and Meadowbrook Road bearing Tax Key No. 0940 999 001 from Low-Medium Density Residential (1/2 Ac. – 2 Ac. / D.U.) and Floodplains, Lowland & Upland Conservancy and Other Natural Areas to High Density Residential (< 6,500 Sq. Ft. / D.U.) and Floodplains, Lowland & Upland Conservancy and Other Natural Areas; and

WHEREAS, the City of Pewaukee held a public hearing upon this proposed Ordinance, in compliance with the requirements of Wis. Stat. § 66.1001(4)(d); the Common Council having received input from the public at a duly noticed public hearing on April 3, 2023; and

NOW THEREFORE, BE IT RESOLVED, by the Mayor and Common Council of the City of Pewaukee, Wisconsin, do ordain as follows:

SECTION 1: Adoption

The City of Pewaukee Comprehensive Master Plan is hereby amended to change the Year 2050 Land Use/Transportation Plan of a property located at the northwest corner of Golf Road and Meadowbrook Road bearing Tax Key No. 0940 999 001 from Low-Medium Density Residential (1/2 Ac. – 2 Ac. / D.U.) and Floodplains, Lowland & Upland Conservancy and Other Natural Areas to High Density Residential (< 6,500 Sq. Ft. / D.U.) and Floodplains, Lowland & Upland Conservancy and Other Natural Areas as depicted upon the Comprehensive Master Plan Amendment Exhibit dated January 26, 2023 on file with the Planner and Community Development Department.

SECTION 2: Document Transmittal

The City Common Council hereby directs the City Clerk/Treasurer to transmit a copy of the amendment as well as a signed copy of both the Resolution No. PC __-__-__ and this Ordinance No. __-__ to the Wisconsin Department of Administration, the Southeastern Wisconsin Regional Planning Commission, the Waukesha Park and Land Use Department, the Pewaukee Public Library and to each town, village and city that abuts the City of Pewaukee.

SECTION 3: Severability

The several sections and portions of this ordinance are declared to be severable. If any section or portion thereof shall be declared by a decision of a court of competent jurisdiction to be invalid, unlawful, or unenforceable, such decision shall apply only to the specific section or portion thereof directly specified in the decision, and shall not affect the validity of all other provisions, sections, or portions thereof of the ordinance. The remainder of the ordinance shall remain in full force and effect. Any other ordinances whose terms are in conflict with the provisions of this ordinance are hereby repealed as to those terms that conflict.

SECTION 4: Effective Date

This ordinance shall take effect immediately upon passage and posting of publication as provided by law.

Passed and adopted this 3rd day of April, 2023.

FOR THE COMMON COUNCIL OF THE CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN

ATTEST:

_____
Steve Bierce, Mayor

_____
Kelly Tarczewski, Clerk/Treasurer

WAUKESHA COUNTY CITY OF PEWAUKEE STATE OF WISCONSIN

RESOLUTION NO. __-__

A RESOLUTION RECOMMENDING THE ADOPTION OF AN ORDINANCE TO AMEND THE CITY OF PEWAUKEE 2035 COMPREHENSIVE MASTER PLAN AND NEIGHBORHOOD PLANS 2015-2050 TO CHANGE THE YEAR 2050 LAND USE/TRANSPORTATION PLAN OF A PROPERTY LOCATED AT THE NORTHWEST CORNER OF GOLF ROAD AND MEADOWBROOK ROAD BEARING TAX KEY NO. 0940 999 001 FROM LOW-MEDIUM DENSITY RESIDENTIAL AND FLOODPLAINS, LOWLAND & UPLAND CONSERVANCY AND OTHER NATURAL AREAS TO HIGH DENSITY RESIDENTIAL AND FLOODPLAINS, LOWLAND & UPLAND CONSERVANCY AND OTHER NATURAL AREAS, PURSUANT TO WIS. STAT. § 66.1001(4)(b)

WHEREAS, pursuant to Wis. Stat. §§ 62.23(2) and (3) and 66.1001(4), the City of Pewaukee is authorized to prepare and adopt and to amend a comprehensive plan as defined in Wis. Stat. §§ 66.1001(1)(a) and 66.1001(2); and

WHEREAS, pursuant to Wis. Stat. § 66.1001(4)(b), the Plan Commission may recommend the amendment of the Comprehensive Master Plan to the Common Council by adopting a resolution by a majority vote of the entire Commission, which vote shall be recorded in the official minutes of the Plan Commission; and

WHEREAS, ANDEV Group, LLC has applied for an amendment to the Comprehensive Master Plan to change the Year 2050 Land Use/Transportation Plan of a property located at the northwest corner of Golf Road and Meadowbrook Road bearing Tax Key No. 0940 999 001 from Low-Medium Density Residential (1/2 Ac. – 2 Ac. / D.U.) and Floodplains, Lowland & Upland Conservancy and Other Natural Areas to High Density Residential (< 6,500 Sq. Ft. / D.U.) and Floodplains, Lowland & Upland Conservancy and Other Natural Areas as depicted upon the Comprehensive Master Plan Amendment Exhibit dated January 26, 2023 on file with the Planner and Community Development Department.

WHEREAS, the Plan Commission having determined that the proposed amendment in form and content as presented to the Commission on March 16, 2023, is consistent with the Comprehensive Master Plan's goals, objectives and policies and in proper form and content for adoption by the Common Council as an amendment to the Comprehensive Master Plan, subject to such modifications the Common Council may consider reasonable and necessary, following public hearing, in order to protect and promote the health, safety and welfare of the City of Pewaukee.

NOW, THEREFORE, BE IT RESOLVED, by the Plan Commission of the City of Pewaukee, Wisconsin, that the application for and the proposed ordinance to amend the City of Pewaukee Comprehensive Master Plan to change the Year 2050 Land

Use/Transportation Plan of a property located at the northwest corner of Golf Road and Meadowbrook Road from Low-Medium Density Residential (1/2 Ac. – 2 Ac. / D.U.) and Floodplains, Lowland & Upland Conservancy and Other Natural Areas to High Density Residential (< 6,500 Sq. Ft. / D.U.) and Floodplains, Lowland & Upland Conservancy and Other Natural Areas as depicted upon the Comprehensive Master Plan Amendment Exhibit dated January 26, 2023 on file with the Planner and Community Development Department, such property bearing Tax Key No. 0940 999 001, be and the same is hereby recommended for adoption and incorporation into the Comprehensive Master Plan by the Common Council:

Passed and adopted this 16th day of March, 2023.

FOR THE PLAN COMMISSION OF THE CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN

ATTEST:

_____
Steve Bierce, Mayor

_____
Colleen Brown, Plan Commission Secretary

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 5.

DATE: April 20, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Continued Discussion and Action Regarding the Site and Building Plans for Andev Group, LLC for Vacant Land Located at the Northwest Corner of Golf Road and Meadowbrook Road for the Purpose of Developing the Courtyard at Pewaukee, a Community Based Residential Facility (PWC 0940999001) (Originally discussed at the 3/16/23 Plan Commission meeting)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Courtyard at Pewaukee architectural plans
Courtyard at Pewaukee tree survey
Courtyard at Pewaukee storm water management plan
Courtyard at Pewaukee civil set
Courtyard at Pewaukee landscape plans
Courtyard at Pewaukee plan view
Courtyard at Pewaukee lighting plan
Courtyard at Pewaukee traffic report
Courtyard at Pewaukee updates
Courtyard at Pewaukee before and after

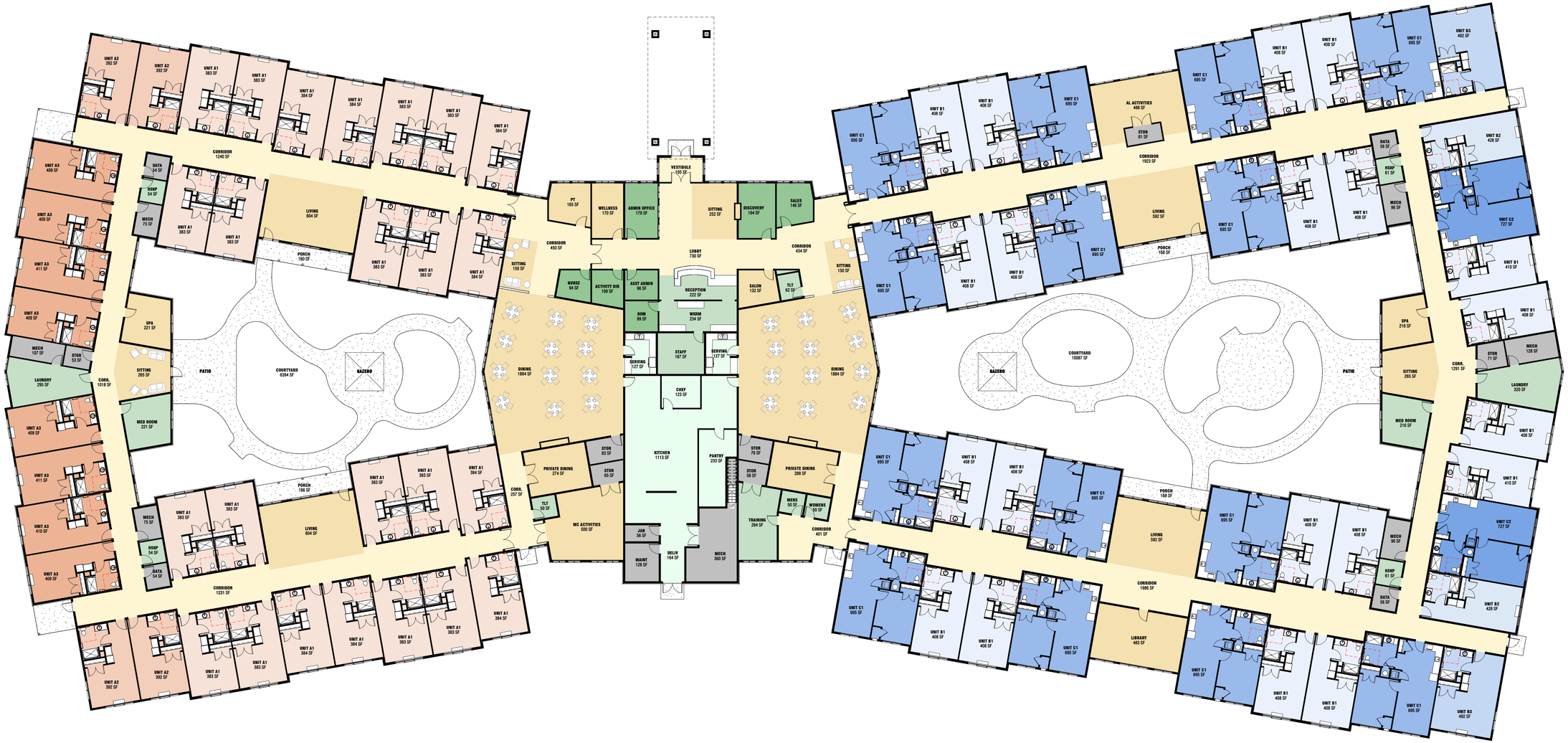
BUILDING INFORMATION

OVERALL BUILDING
FIRST FLOOR S.F. = 67,578 s.f.
CANOPY & PORCHES S.F. = 1,678 s.f.
TOTAL S.F. = 69,256 s.f.

TOTAL UNITS = 76
MEMORY CARE UNITS: 36
(24) UNIT A1 - MC STUDIO @ 383 s.f.
(4) UNIT A2 - MC STUDIO @ 392 s.f.
(8) UNIT A3 - MC STUDIO @ 410 s.f.
ASSISTED LIVING UNITS: 40
(20) UNIT B1 - AL STUDIO @ 408 s.f.
(2) UNIT B2 - AL STUDIO @ 428 s.f.
(7) UNIT B3 - AL STUDIO @ 492 s.f.
(14) UNIT C1 - AL ONE BED @ 695 s.f.
(2) UNIT C2 - AL ONE BED @ 727 s.f.

S.F. / UNIT = 911 s.f.

CONGREGATE AREA REQUIRED = (76 residents x 90 s.f.) = 6,840 s.f.
CONGREGATE AREA PROVIDED = 10,173 s.f.



OVERALL PRESENTATION FLOOR PLAN

SCALE: 1/16" = 1'-0"

SITE PLAN REVIEW 03-06-2023

Ganther Construction Architecture, Inc.
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Oshkosh, Wisconsin 54901
tel. 920.426.4774 fax
920.426.4788 www.ganther.com

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PROPOSED PROJECT FOR:

THE COURTYARD AT PEWAUKEE

PEWAUKEE, WI

REVISIONS

#	DATE

Project Number	21-1016
Date	03/06/2023
Drawn By	JR
Checked By	AI

OVERALL PRESENTATION FLOOR PLAN

A1

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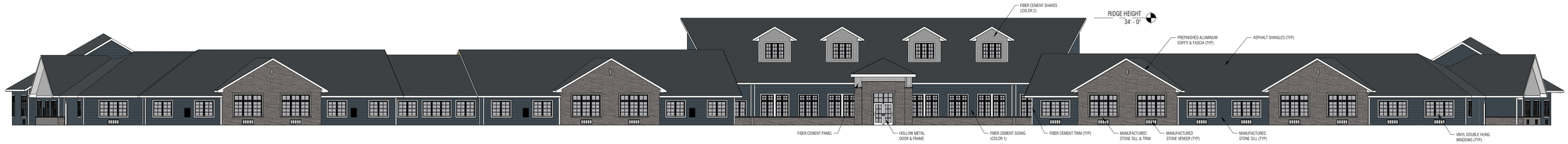
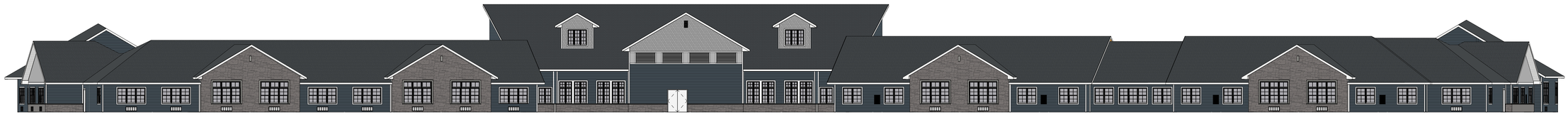


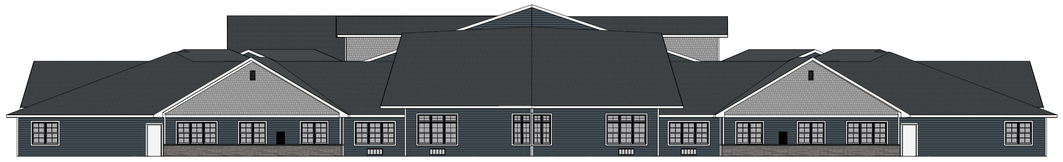
1 / A2 MAIN BUILDING - NORTH

SCALE: 1/16" = 1'-0"



2 / A2 MAIN BUILDING - SOUTH

SCALE: 1/16" = 1'-0"



3 / A2 MAIN BUILDING - EAST

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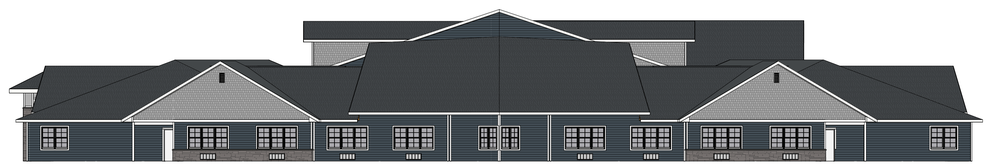

4 / A2 MAIN BUILDING - WEST

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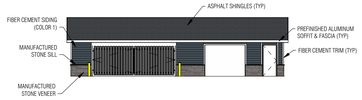


5 / A2 GARAGE - NORTH

SCALE: 1/16" = 1'-0"

6 / A2 GARAGE - SOUTH

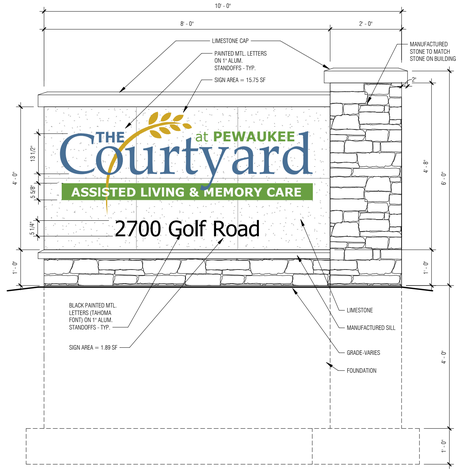
SCALE: 1/16" = 1'-0"

7 / A2 GARAGE - WEST

SCALE: 1/16" = 1'-0"

8 / A2 GARAGE - EAST

SCALE: 1/16" = 1'-0"



9 / A2 MONUMENT SIGN

SCALE: 1/2" = 1'-0"

SITE PLAN REVIEW 03-06-2023

Ganther Construction Architecture, Inc.
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PROPOSED PROJECT FOR:

THE COURTYARD AT PEWAUKEE

PEWAUKEE, WI

REVISIONS

#	DATE

Project Number	21-1016
Date	03/06/2023
Drawn By	JR
Checked By	AI

PRESENTATION EXTERIOR ELEVATIONS

A2

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STREET ENTRANCE RENDERING

SCALE: NOT TO SCALE

MAIN ENTRANCE RENDERING

SCALE: NOT TO SCALE

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PROPOSED PROJECT FOR:

THE COURTYARD AT PEWAUKEE

PEWAUKEE, WI

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Project Number	21-1016
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Drawn By	Author
Checked By	Checker

PRESENTATION RENDERINGS

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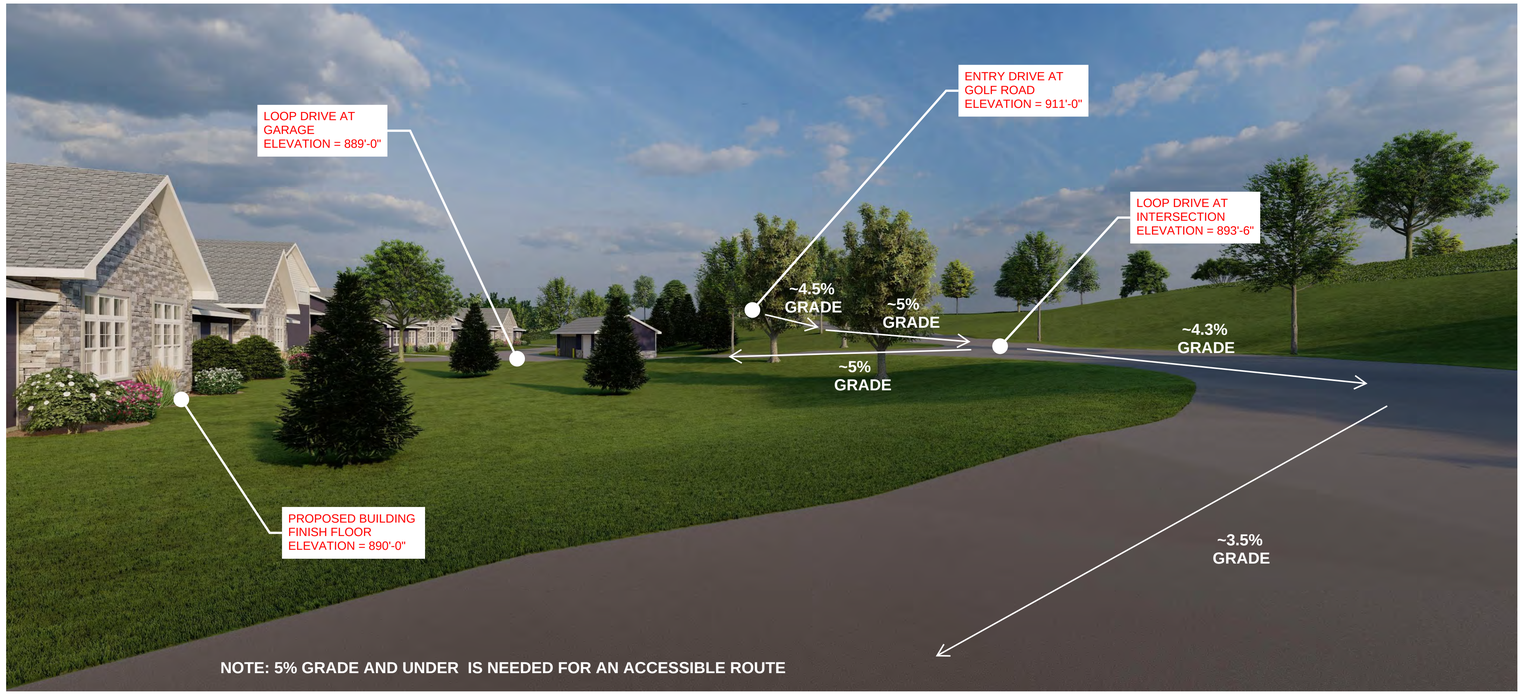

SOUTHWEST LOOP DRIVE RENDERING

SCALE: 1 1/2" = 1'-0"

SOUTHEAST LOOP DRIVE RENDERING

SCALE: 1 1/2" = 1'-0"

SITE PLAN REVIEW 03-06-2023

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PROPOSED PROJECT FOR:

THE COURTYARD AT PEWAUKEE

PEWAUKEE, WI

REVISIONS

#	DATE	

Project Number	21-1016
Date	03/06/2023
Drawn By	Author
Checked By	Checker

PRESENTATION RENDERINGS

A4

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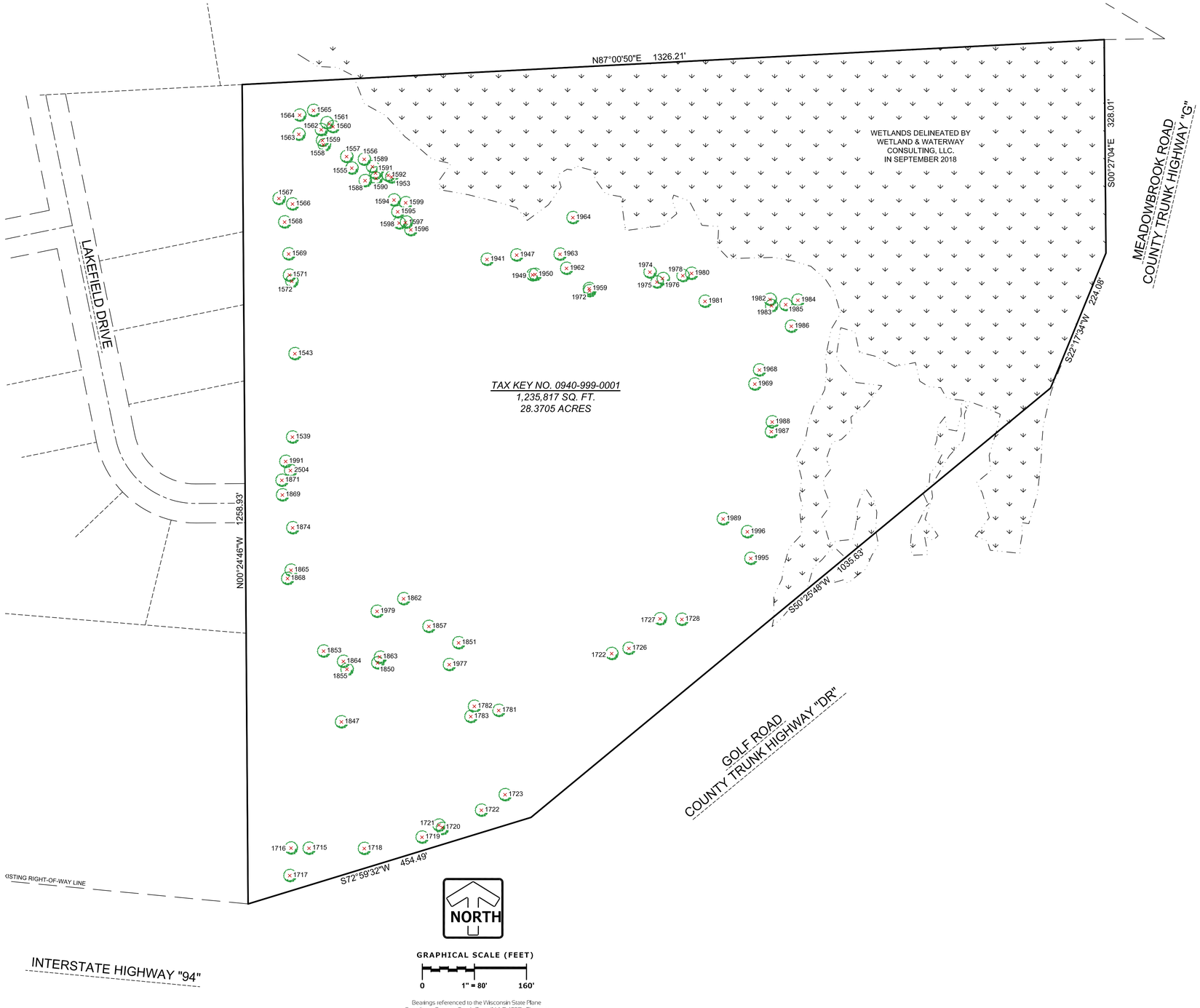

Bearings referenced to the Wisconsin State Plane Coordinate System, South Zone (NAD 1927). The east line of the Southeast 1/4 of Section 19, Township 7 North, Range 19 East has a bearing of S00°27'04"E.

DRAFTED: ST
DESIGNED:
REVIEWED: JPK

PLAN | DESIGN | DELIVER
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PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING
CHICAGO | MILWAUKEE | NATIONWIDE

WISCONSIN OFFICE:
15850 W. BLUEMOUND ROAD
BROOKFIELD, WI 53005
(262) 754-8888

GOLF ROAD

PART OF THE NE 1/4 OF THE SE 1/4 SEC. 19, T7N, R19E, CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN

TREE INVENTORY

REVISIONS

PEG JOB No. 1338.00
PEG PM. -
DATE 12/24/18
SCALE 1"=80'

SHEET 1 OF 1

SURVEY

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STORMWATER MANAGEMENT PLAN

THE COURTYARD AT PEWAUKEE

Pewaukee, Wisconsin

PEG Project Number: 1338.10-WI

January 24, 2023

PINNACLE ENGINEERING GROUP
20725 Watertown Road | Suite 100 | Brookfield, WI 53186
www.pinnacle-engr.com

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DESIGN CRITERIA……2
EXISTING CONDITIONS……2
POST DEVELOPMENT CONDITIONS……3
ANALYSIS METHODS……4
SUMMARY OF RESULTS……4
Existing Conditions……4
Proposed Conditions……4
Runoff Water Quality……5
Infiltration……5
Protective Areas……5
CONCLUSION……6

APPENDICIES

APPENDIX 1 – MAPS, DETAILS

- Vicinity Map
- FEMA FIRM Map
- Existing County GIS Contours
- Detail of pond outfall structure
- Pond Cross Section
- Spillway

APPENDIX 2 – PRE-DEVELOPMENT CONDITIONS RATE ATTENUATION

- Hydrology Exhibit – Existing Conditions
- Hydrographs

APPENDIX 3 – POST-DEVELOPMENT CONDITIONS RATE ATTENUATION – CITY CODE

- Hydrology Exhibit – Proposed Conditions
- Hydrographs

APPENDIX 4 – POST-DEVELOPMENT CONDITIONS (WATER QUALITY)

- TSS Exhibit
- WinSLAMM Schematic
- WinSLAMM Modeling Input Data & Output Computations

APPENDIX 5 – GEOTECH AND WETLAND REPORT

APPENDIX 6 – CALCULATIONS

- Storm Sewer Calculations

APPENDIX 7 – MAINTENANCE AGREEMENT

Questions and comments can be directed to:
Mark T. Seidl, P.E.
Project Manager
Phone: 262.754.8888 | Fax: 262.754.8850
mseidl@pinnacle-engr.com

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INTRODUCTION

The proposed project is located at the northwest corner of Golf Rd and Meadowbrook Rd., Pewaukee, WI. The project site is approx. 28.72 acres, The site will entail a single senior living facility. The improvements will disturb more than 1 acre and thus will require stormwater management. The site is located within the Pewaukee River – Fox River watershed. The City of Pewaukee and the Wisconsin DNR have jurisdiction on the site with regards to stormwater requirements. PEG has prepared a plan which utilizes a Bioretention Basin to meet the stormwater goals.

DESIGN CRITERIA

City of Pewaukee:..... Chapter 19 of the municipal code

Wisconsin Department of Natural Resources:.....NR 216 & NR 151

Water Quantity (rate attenuation): In accordance with the City of Pewaukee stormwater management practices, the post-development peak discharge rates shall not exceed the pre-development discharge rates for the 1-year, 2-year, 10-year, and 100-year, 24-hour design storms. Pre-settlement conditions and the runoff curve numbers shall be used.

Water Quality: Since the project site will be evaluated as a new development. Since the site is new development, it will need to meet the minimum City and DNR requirements of 80% removal of the total suspended solids (TSS) load on an average annual basis.

Infiltration: The soils are composed of lean clay, which have poor infiltration rates. Per NR 151.12(5(c) this site will be exempted from the requirements to install infiltration devices.

Protective Areas: A delineated wetland exists on the northern half of the project site. The delineation can be found in **Appendix 5** of the attached report. The wetlands will remain undisturbed. In addition to the existing wetlands on site there is also a flood plain which also remain undisturbed.

Erosion Control: Erosion BMP'S to be used on site include: inlet protection, rip rap, hydroseeding and erosion blanket.

EXISTING CONDITIONS

The existing site is approximately 15.76 acres in size and is located in the northwest quadrant of the intersection of Golf Rd. and Meadowbrook Rd. The on-site soils consist of mainly Clay or clayey silt. See USDA Soil Maps in **Appendix 1** and the geotechnical report in **Appendix 6**. In addition to the various soil types on site mainly consisting of clay the site also has bedrock throughout that prevents any infiltration from occurring. The existing soils on site have a hydrologic soil group rating of C. The existing site is a vacant lot with various vegetation growing around site. The site and applicable offsite areas are divided into two (2) drainage basins which includes the Existing site, and an offsite are that runs onto the site. An Existing Drainage Area Map and HydroCAD Modeling and hydrographs can be found in **Appendix 2** of this report.

Existing Basins

The **Existing Condition** consists of the entire 15.76-acre site, and generally drains from Southwest corner to the northwest end of the site. At this point it reaches the onsite wetland that takes it from the site which is the ultimate discharge point.

The **Offsite area** is an approximately 1.624-acre area that drains from golf road , and offsite grass areas south of the site. This water discharges onto the site and takes the water to the ultimate discharge point north of the site.

POST-DEVELOPMENT CONDITIONS

The proposed development is 15.76 acres and includes an approximately 65,700 SF senior living facility, with parking as well as landscaping.

The site and surrounding contributing areas under post-development conditions will be split into five (5) drainage basins. 4 (4) basins are located onsite and drain to either the site bmp's or are undetained. While one (1) basin is an offsite tributary area previously described in this report. The offsite basin has the same tributary area, but Tc have been modified to account for the new flow path. In order to meet the stormwater performance standards, a Bio-Retention basin will be utilized. Wetlands previously described will remain in the post development condition and left undisturbed.

A Proposed Hydrology exhibit has been prepared (see **Appendix 3**). Due to the topography, the outermost areas around the perimeter of the site will be undetained and discharged to the existing wetland. These areas have been accounted for to meet WDNR and City of Pewaukee Stormwater Regulations.

Proposed Basins

The **Offsite basin** has been described in the Pre-Development portion of this report. The basin is still ultimately being routed through the site and discharging to the existing wetland which is located to the North of the site.

Proposed Site: is the entire 67,500 S.F in addition to onsite grass, and pavement that runs through storm sewer, or overland flow and discharges into the Bio-retention Pond.

Grass Swale: is 4.206 acres of grass that flow to the proposed Bio-retention via a swale on the west side of the site.

Undetained Grass: consists of approximately 1.30 acres of the proposed landscape areas that are undetained and left untreated.

Undetained Undisturbed Grass: This is described as the area west of the site that will be untreated but hasn't been disturbed thus keeping the original curve number established as the pre-development curve number of 70 rather than 74 as is denoted in the proposed conditon.

ANALYSIS METHODS

HydroCAD® (Version 10.00) software has been used to analyze stormwater characteristics for this stormwater management plan. HydroCAD uses the accepted TR-55 methodology for determining peak discharge runoff rates. Rainfall depths for the 1-year, 2-year, 10-year and 100-year storm events are 2.39, 2.70, 3.82 and 6.21 inches in accordance with Pewaukee city code, and using MSE-3 for rainfall distribution.

TSS reduction characteristics for the proposed water quality facilities were determined using WinSLAMM® (Version 10.1) Source Loading and Management Model. Rainfall file used for analysis was "Milwaukee 69", and using the winter dates from December 6 – March 28.

SUMMARY OF RESULTS

Existing Conditions

As previously discussed, the site can generally be divided into two existing drainage basins.

Existing Drainage Data

Area	Area (ac)	CN	Tc (min)	Peak Flows 1-year (cfs)	Peak Flows 2-year (cfs)	Peak Flows 10-year (cfs)	Peak Flows 100-year (cfs)
Existing Condition	15.760	70	21.5	5.28	7.89	19.43	50.22
Offsite	1.624	82	35.0	1.19	1.50	2.72	5.52
Existing Total	**17.384**	**-**	**-**	**6.31**	**9.14**	**21.67**	**54.53**

Proposed Conditions

Proposed Drainage Data

Area	Area (ac)	C N	Tc (min)	Peak Flows 1-year (cfs)	Peak Flows 2-year (cfs)	Peak Flows 10-year (cfs)	Peak Flows 100-year (cfs)
Proposed Site	7.800	84	6.0*	14.46	17.84	30.63	58.91
Grass Swale	4.260	74	8.8	3.35	4.66	9.92	22.94
Offsite	1.624	82	24.7	1.45	1.83	3.32	6.71
Undetained Undisturbed Grass	2.400	70	21.0	0.82	1.22	3.00	7.74
Undetained grass	1.300	74	6.0*	1.19	1.63	3.41	7.80
Proposed Total before detention	17.384	-	-	21.27	27.18	50.28	104.1
Proposed Total After Detention	**17.384**	**-**	**-**	**1.41**	**2.04**	**9.29**	**46.03**

* A Tc of 6.0 min is used if the actual computed Tc is less than the minimum allowable Tc of 6.0 min per TR 55.

Basin Data –Bio-Retention Basin

Pond	Pond Bottom Elev.	Peak W.S. Elev. 1-year	Peak W.S. Elev. 2-year	Peak W.S. Elev. 10-year	Peak W.S. Elev. 100-year	Spillway Elev.	Pond Top Elev.
1	881.00	882.16	882.42	882.75	883.55	884.00	885.00

The modeling indicates that the Wet Pond will detain the flows so that the peak discharge for the 1,2,10 & 100-year storm will not exceed existing discharge rates.

Runoff Water Quality

Post-development water quality will be obtained in the Bio-retention Basin. Since this site will be considered a new development, 80% TSS removal rates are required.

Water Quality Summary

Area/Pond	Pounds of TSS Generated	Pounds of TSS Remaining	Pounds Removal	Percent Removal
Total Site	2568	480.7	2087.3	**81.28%**

The Bio-Retention Basin will remove in excess of the minimum TSS required to achieve the TSS removal goals.

Infiltration

The soils are composed of lean clay, which have poor infiltration rates. Per NR 151.12(5(c)) this site will be exempted from the requirements to install infiltration devices.

Protective Areas

No wetlands or floodplains are disturbed on the site. A Wetland delineation can be found in **Appendix 5** of the report.

CONCLUSION

The stormwater management features for the development have been designed to comply with Village, and WDNR regulations. This includes water quality & rate attenuation. The proposed Bio-Retention Basin will serve to meet and exceed all requirements. Maintenance is expected to occur on a regular basis to maintain a functional stormwater facility. An agreement with the Village of Pewaukee will be executed to ensure this occurs.

APPENDIX 1
MAPS, DETAILS

MAP WAUKESHA county

Waukesha County GIS Map

Legend

- Civil Division Boundary
- Parks
- Assessment Data
- Environmental Corridors 2
  - Water
  - Isolated Natural Resource Ar
  - Isolated Natural Resource Ar
  - Primary Env. Corridor
  - Primary Env. Corridor Water
  - Secondary Env. Corridor
  - Secondary Env. Corridor Wa
- Parcels
- Plats
- Retired Parcels
- Retired Plats
- Municipal Boundary_2K
- FacilitySites_2K_Labels
- Lots_2K
  - Lot
  - Unit
  - General Common Element
  - Outlot
- SimultaneousConveyance
  - Assessor Plat
  - CSM
  - Condominium
  - Subdivision
- Cartoline_2K
  - <all other values>
  - EA-Easement_Line
  - PL-DA
  - PL-Extended_Tie_line
  - PL-Meander_Line
  - PL-Note
  - PL-Tie
  - PL-Tie_Line
- Road Centerlines_2K
- Railroad_2K
- TaxParcel_2K

0 449.73 Feet

The information and depictions herein are for informational purposes and Waukesha County specifically disclaims accuracy in this reproduction and specifically admonishes and advises that if specific and precise accuracy is required, the same should be determined by procurement of certified maps, surveys, plats, Flood Insurance Studies, or other official means. Waukesha County will not be responsible for any damages which result from third party use of the information and depictions herein, or for use which ignores this warning.

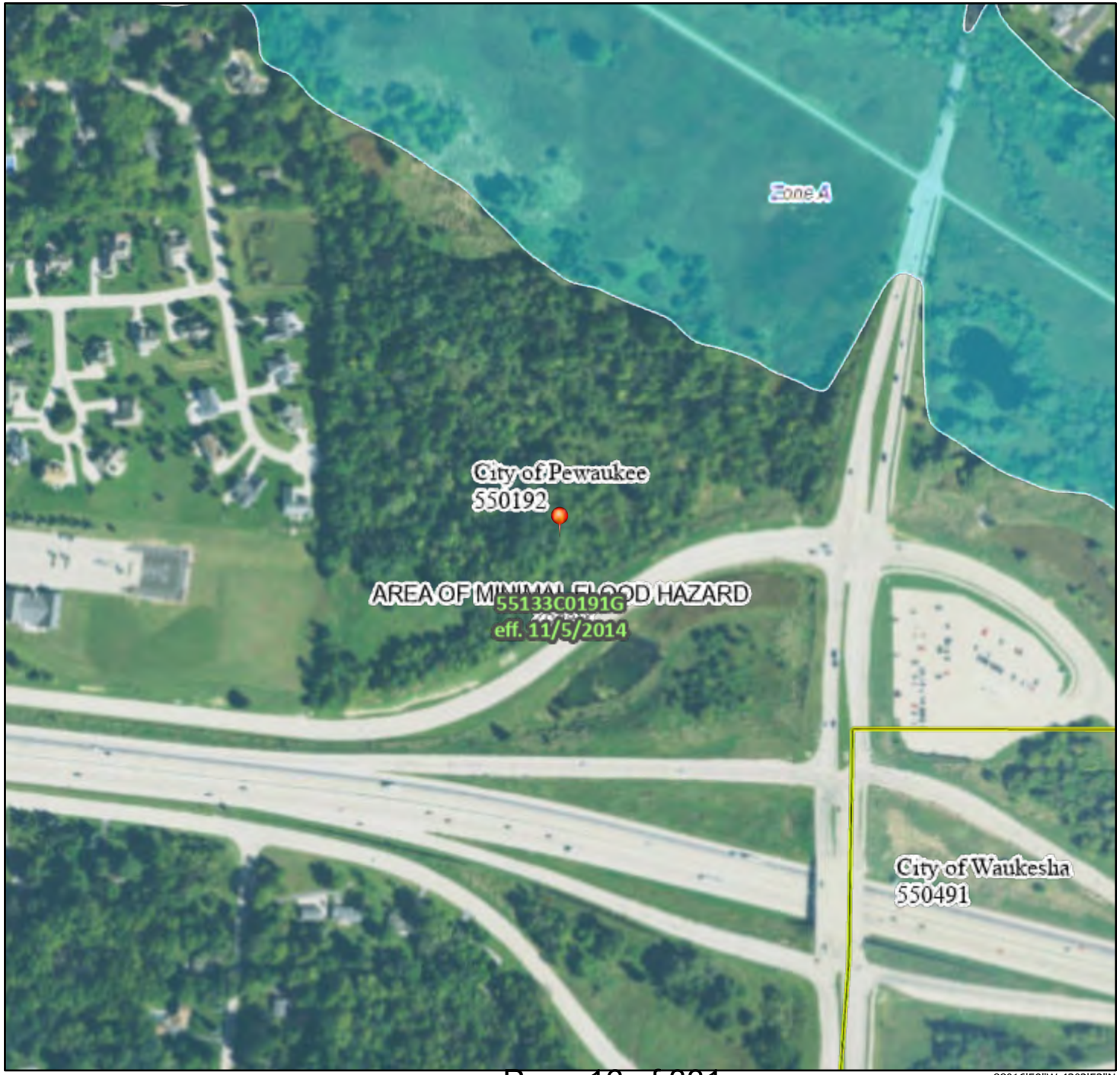
Notes:

Printed: 12/27/2021

National Flood Hazard Layer FIRMette

FEMA

88°17'37"W 43°3'19"N



88°16'59"W 43°2'52"N

0 250 500 1,000 1,500 2,000 Feet 1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 — Cross Sections with 1% Annual Chance
- 17.5 — Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/27/2021 at 12:30 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

MAP WAUKESHA county

Waukesha County GIS Map

Legend

- Civil Division Boundary
- Parks
- Assessment Data
- Parcels
- Plats
- Retired Parcels
- Retired Plats
- Index Contours
  - Index Contour
  - Index Depression
- Municipal Boundary_2K
- FacilitySites_2K_Labels
- Lots_2K
  - Lot
  - Unit
  - General Common Element
  - Outlot
- SimultaneousConveyance
  - Assessor Plat
  - CSM
  - Condominium
  - Subdivision
- Cartoline_2K
  - <all other values>
  - EA-Easement_Line
  - PL-DA
  - PL-Extended_Tie_line
  - PL-Meander_Line
  - PL-Note
  - PL-Tie
  - PL-Tie_Line
- Road Centerlines_2K
- Railroad_2K
- TaxParcel_2K
- Waterbodies_2K_Labels
- Waterlines_2K_Labels
- Municipal Boundary_5K

0 224.86 Feet

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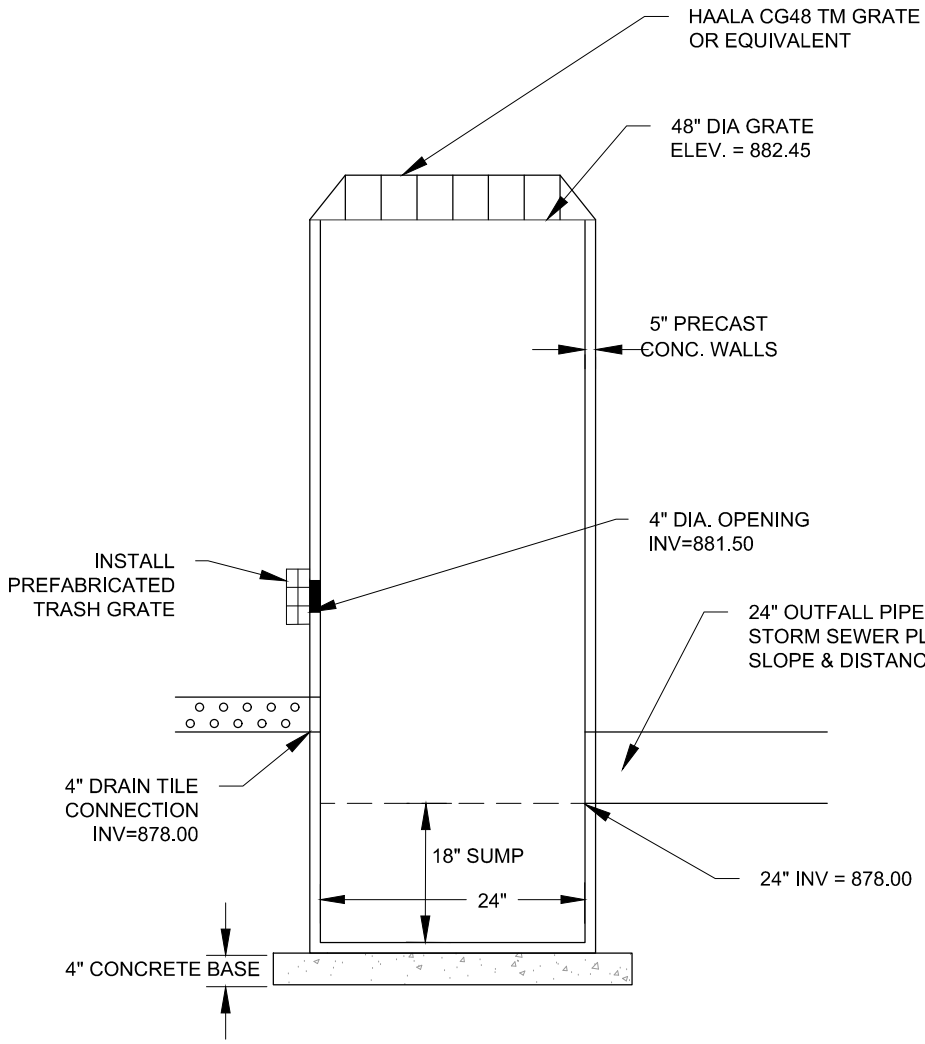
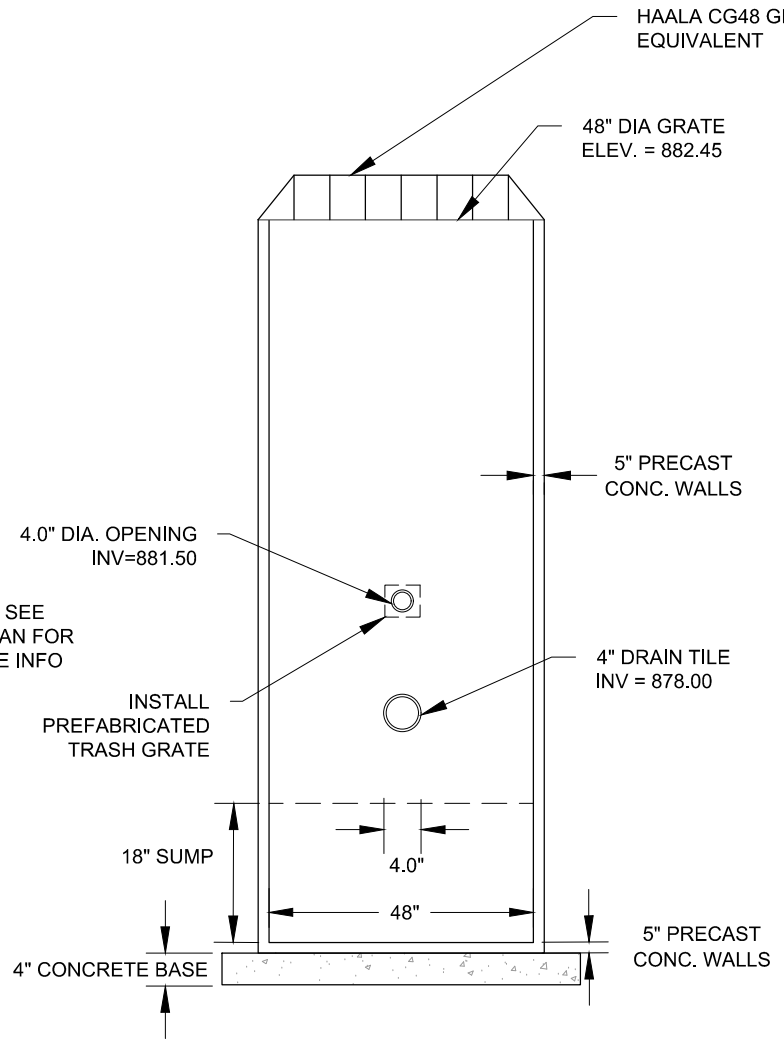
Notes:

Printed: 12/27/2021

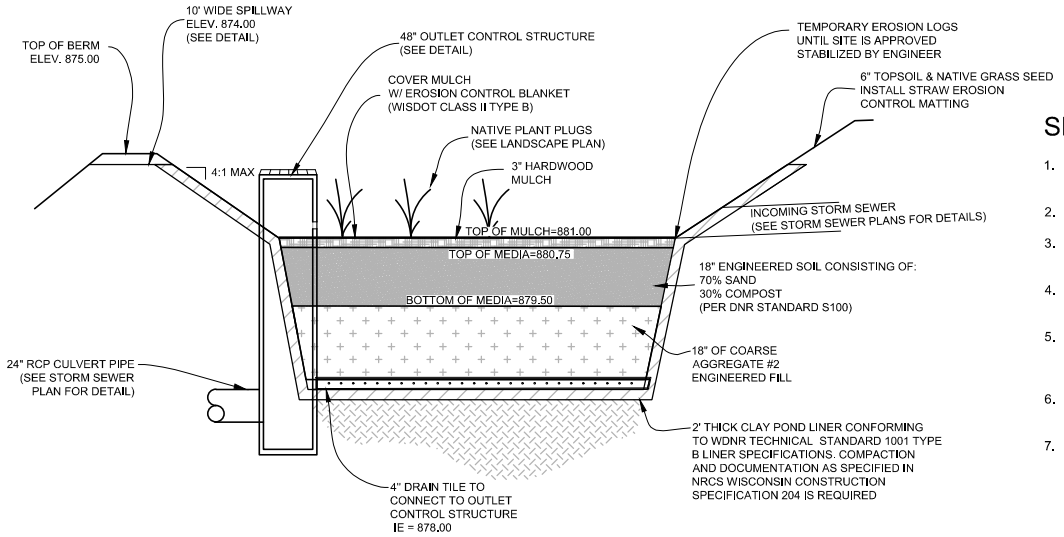


SIDE VIEW



FRONT VIEW

BIO-RETENTION OUTLET CONTROL STRUCTURE DETAIL



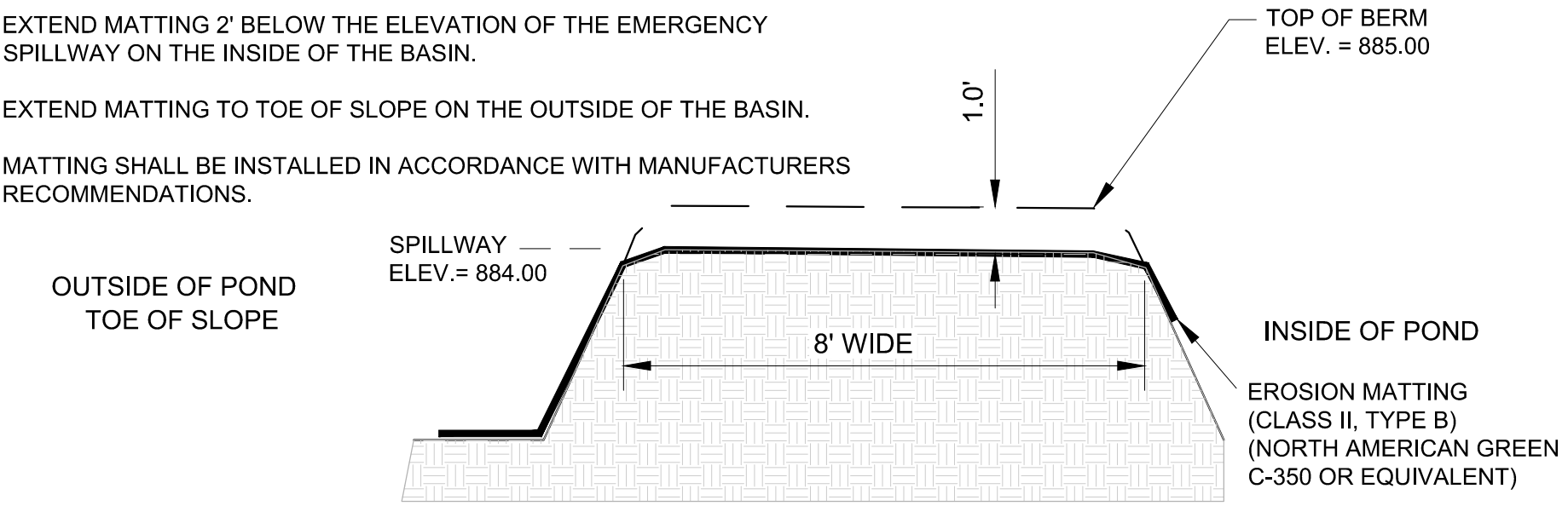
SPECIFICATIONS:

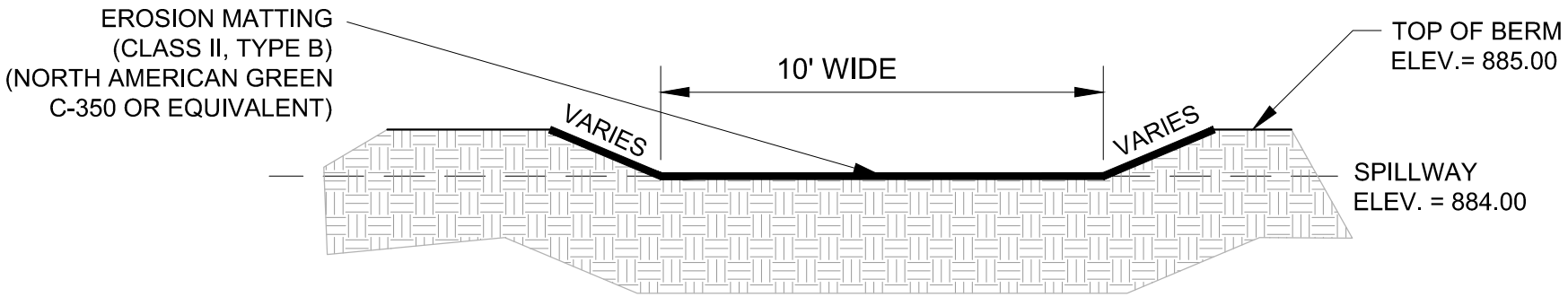
1. BASIN TO BE USED AS SEDIMENT CONTROL DEVICE DURING CONSTRUCTION (SEE GRADING PLAN AND EROSION CONTROL PLAN SITE SEQUENCING AND BIO RETENTION OUTLET CONTROL STRUCTURE FOR DETAILS)
2. DO NOT USE HEAVY EQUIPMENT IN THE BASIN.
3. DO NOT PLACE TOPSOIL, MEDIA, MULCH, OR PLANTS UNTIL AFTER THE PAVING OPERATIONS ARE COMPLETE AND THE SITE IS STABILIZED.
4. PRIOR TO COMPLETING THE GARDEN, REMOVE ANY SEDIMENT THAT HAS ACCUMULATED AND REMOVE FINAL FOOT AND LOOSEN BOTTOM SOIL PRIOR TO PLACEMENT OF ANY FINISH MATERIALS.
5. ONCE THE ENGINEERED SOIL OR TOPSOIL IS PLACED, THE SURFACE SHALL BE COVERED WITH A VARIOUS AREAS OF PLANTINGS AND/OR SEEDING AS SPECIFIED ON THE LANDSCAPE PLAN. HARDWOOD MULCH MAY NOT BE USED WITHIN 30' OF THE OUTLET TO AVOID WASHOUTS. DECORATIVE 6" STONE SHALL BE USED INSTEAD.
6. EROSION CONTROL MATTING SHALL BE ANCHORED, OVERLAPPED, STAKED AND ENTRENCHED PER THE MANUFACTURER'S RECOMMENDATIONS.
7. CONTRACTOR TO PROVIDE A COPY OF ALL GEOTECHNICAL REPORTS AND DATA PERTAINING TO THE PONDS TO THE ENGINEER FOR APPROVAL. ENGINEER SHALL SUBMIT COPIES TO THE CITY FOR APPROVAL ALONG WITH THE RECORD DRAWINGS.

BIO-RETENTION DETAIL

NOTES:

1. EXTEND MATTING 2' BELOW THE ELEVATION OF THE EMERGENCY SPILLWAY ON THE INSIDE OF THE BASIN.
2. EXTEND MATTING TO TOE OF SLOPE ON THE OUTSIDE OF THE BASIN.
3. MATTING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.





BIO-RETENTION EMERGENCY SPILLWAY

APPENDIX 2
PRE-DEVELOPMENT CONDITIONS RATE ATTENTUATION

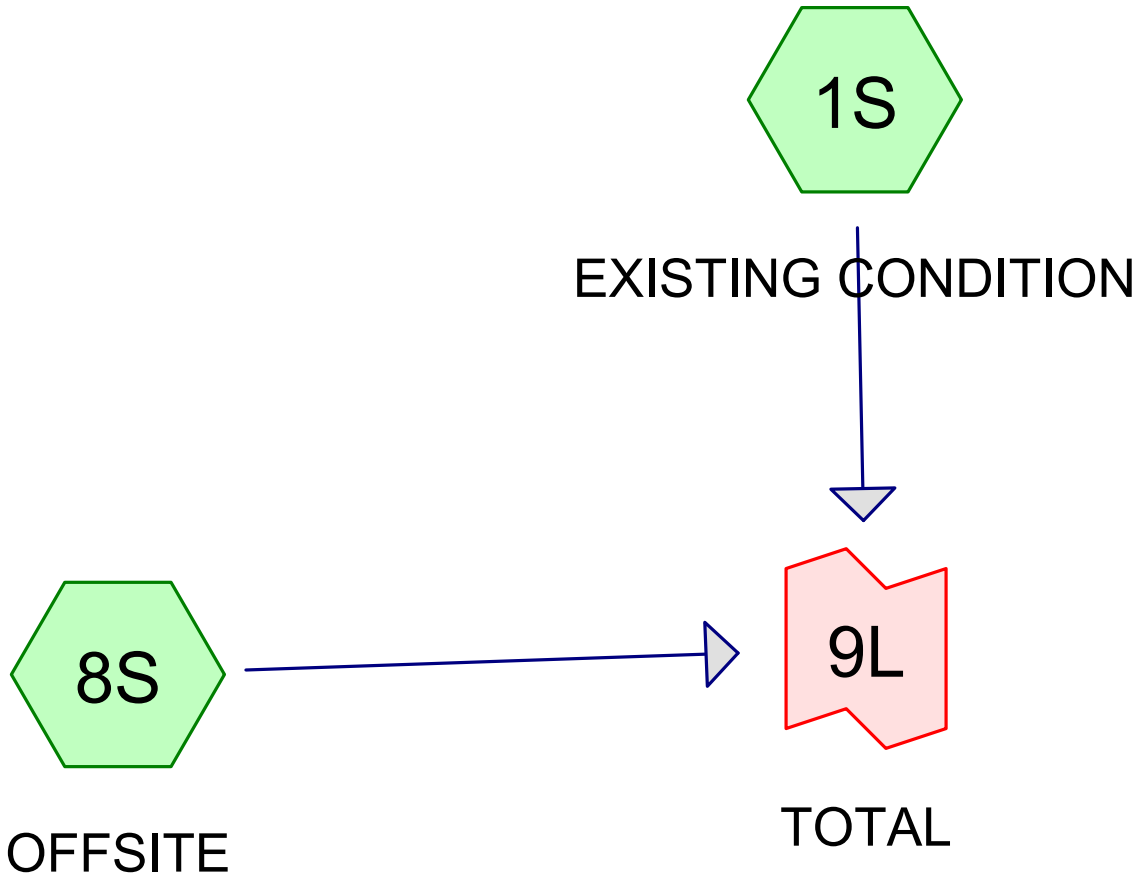
THE COURTYARD AT PEWAUKEE EXISTING HYDROLOGY

01/24/2023

PINNACLE ENGINEERING GROUP
20725 WATERTOWN ROAD | SUITE 100 | BROOKFIELD, WI 53186 | WWW.PINNACLE-ENGR.COM |

PLAN | DESIGN | DELIVER **PEG JOB#** 1338.10

Z:\PROJECTS\2018\1338.10-WI\CAD\EXHIBITS\1338.10 EXISTING HYDROLOGY.DWG 1/24/2023 2:41 PM



Subcat Reach Pond Link

Routing Diagram for 2021-12-27 HYDROCAD
Prepared by Pinnacle Engineering Group, Printed 1/24/2023
HydroCAD® 10.20-2g s/n 07894 © 2022 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1- YEAR EVENT	MSE 24-hr	3	Default	24.00	1	2.39	2
2	2- YEAR EVENT	MSE 24-hr	3	Default	24.00	1	2.70	2
3	10- YEAR EVENT	MSE 24-hr	3	Default	24.00	1	3.82	2
4	100- YEAR EVENT	MSE 24-hr	3	Default	24.00	1	6.21	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.097	74	>75% Grass cover, Good, HSG C (8S)
0.527	98	PAVEMENT (8S)
15.760	70	SOIL GROUP C PRE-DEVELOPMENT CURVE NUMBER (1S)
17.384	**71**	**TOTAL AREA**

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: EXISTING CONDITION Runoff Area=15.760 ac 0.00% Impervious Runoff Depth=0.40"
Flow Length=807' Tc=21.5 min CN=70 Runoff=5.28 cfs 0.530 af

Subcatchment8S: OFFSITE Runoff Area=1.624 ac 32.45% Impervious Runoff Depth=0.92"
Flow Length=1,297' Tc=35.0 min CN=82 Runoff=1.19 cfs 0.124 af

Link 9L: TOTAL Inflow=6.31 cfs 0.655 af
Primary=6.31 cfs 0.655 af

Total Runoff Area = 17.384 ac Runoff Volume = 0.655 af Average Runoff Depth = 0.45"
96.97% Pervious = 16.857 ac 3.03% Impervious = 0.527 ac

Summary for Subcatchment 1S: EXISTING CONDITION

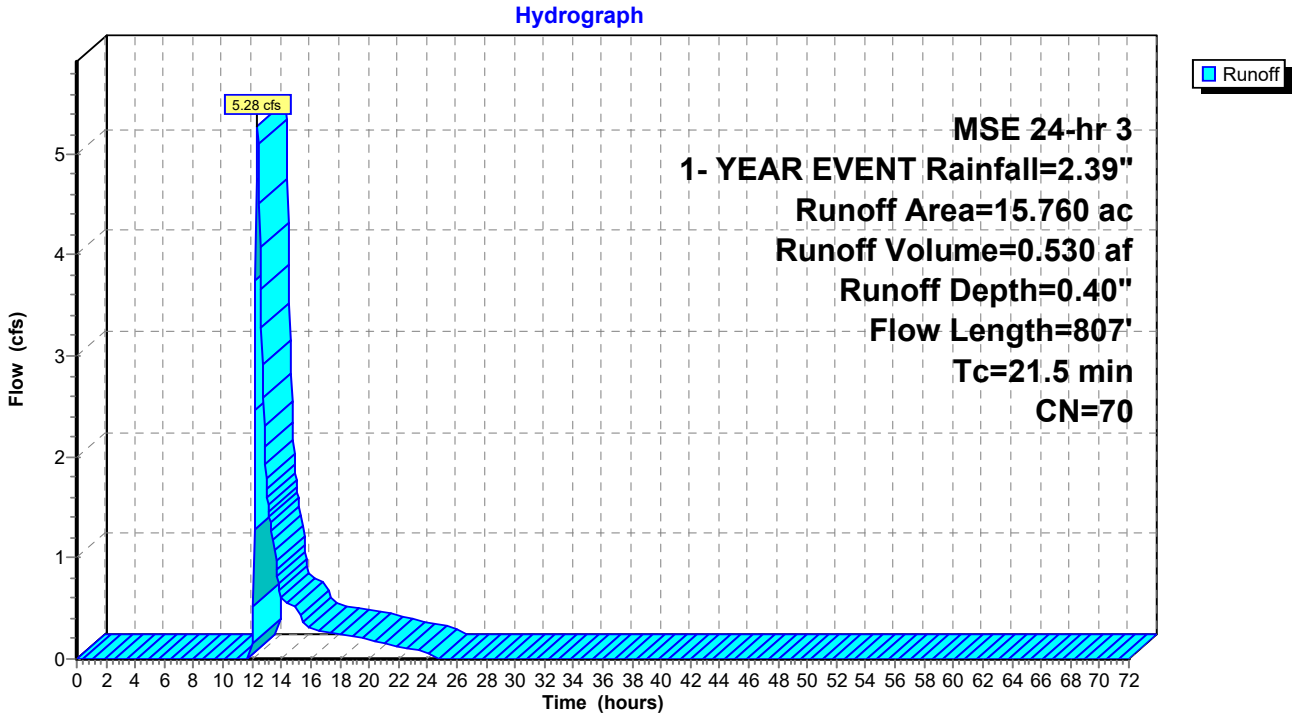
Runoff = 5.28 cfs @ 12.38 hrs, Volume= 0.530 af, Depth= 0.40"
Routed to Link 9L : TOTAL

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1- YEAR EVENT Rainfall=2.39"

	Area (ac)	CN	Description
*	15.760	70	SOIL GROUP C PRE-DEVELOPMENT CURVE NUMBER
	15.760		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.2	100	0.1250	0.15		**Sheet Flow, SHEET FLOW** Woods: Light underbrush n= 0.400 P2= 2.70"
10.3	707	0.0523	1.14		**Shallow Concentrated Flow, SHALLOW CONCETRATED FLOW** Woodland Kv= 5.0 fps
21.5	807	Total			

Subcatchment 1S: EXISTING CONDITION



Summary for Subcatchment 8S: OFFSITE

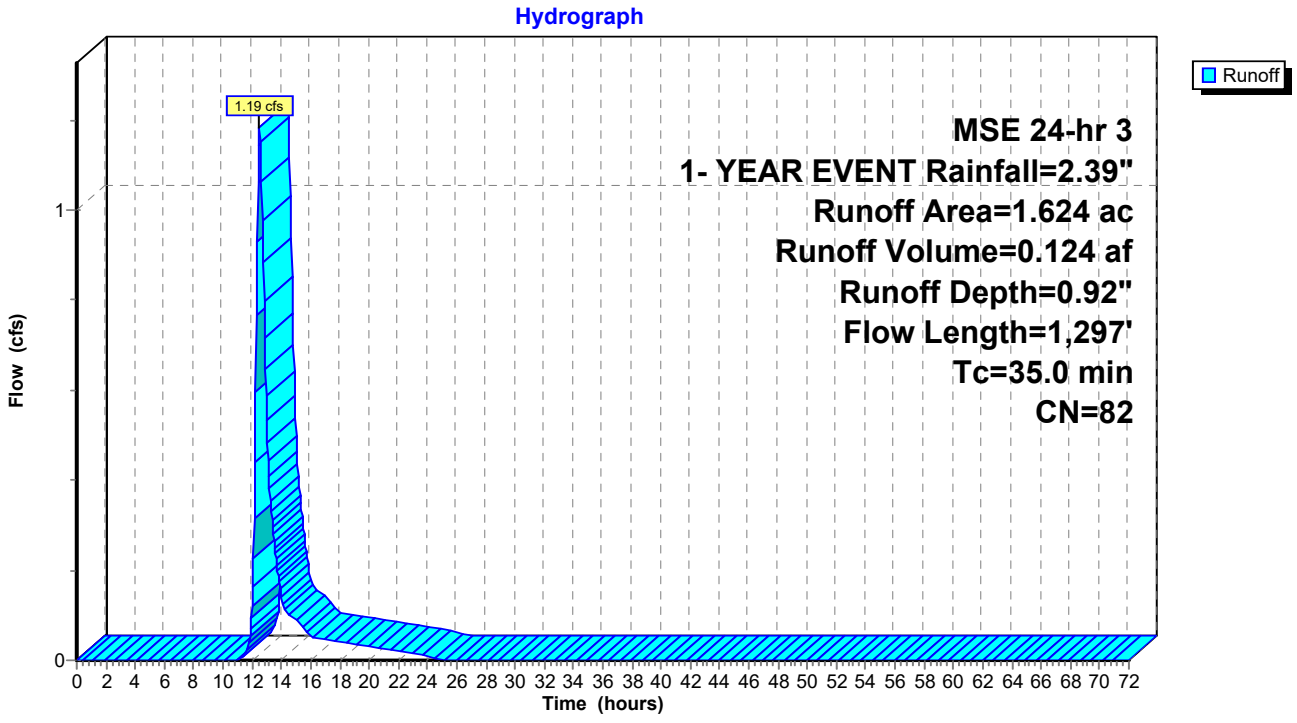
Runoff = 1.19 cfs @ 12.52 hrs, Volume= 0.124 af, Depth= 0.92"
Routed to Link 9L : TOTAL

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1- YEAR EVENT Rainfall=2.39"

	Area (ac)	CN	Description
*	0.527	98	PAVEMENT
	1.097	74	>75% Grass cover, Good, HSG C
	1.624	82	Weighted Average
	1.097		67.55% Pervious Area
	0.527		32.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, SHEET FLOW** Grass: Short n= 0.150 P2= 2.70"
20.9	1,197	0.0366	0.96		**Shallow Concentrated Flow, SHALLOW CONCENTRATED FLOW** Woodland Kv= 5.0 fps
35.0	1,297	Total			

Subcatchment 8S: OFFSITE

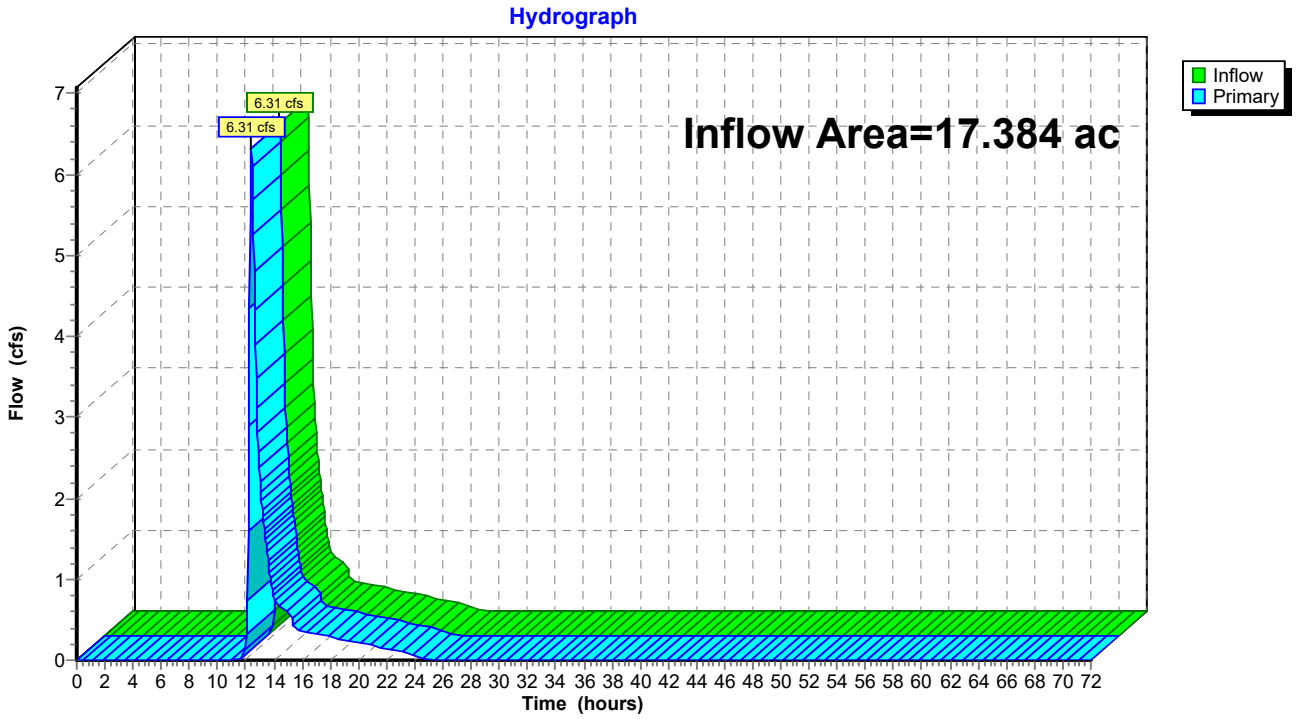


Summary for Link 9L: TOTAL

Inflow Area = 17.384 ac, 3.03% Impervious, Inflow Depth = 0.45" for 1- YEAR EVENT event
Inflow = 6.31 cfs @ 12.40 hrs, Volume= 0.655 af
Primary = 6.31 cfs @ 12.40 hrs, Volume= 0.655 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 9L: TOTAL



Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: EXISTING CONDITION Runoff Area=15.760 ac 0.00% Impervious Runoff Depth=0.55"
Flow Length=807' Tc=21.5 min CN=70 Runoff=7.89 cfs 0.728 af

Subcatchment8S: OFFSITE Runoff Area=1.624 ac 32.45% Impervious Runoff Depth=1.15"
Flow Length=1,297' Tc=35.0 min CN=82 Runoff=1.50 cfs 0.155 af

Link 9L: TOTAL Inflow=9.14 cfs 0.883 af
Primary=9.14 cfs 0.883 af

Total Runoff Area = 17.384 ac Runoff Volume = 0.883 af Average Runoff Depth = 0.61"
96.97% Pervious = 16.857 ac 3.03% Impervious = 0.527 ac

Summary for Subcatchment 1S: EXISTING CONDITION

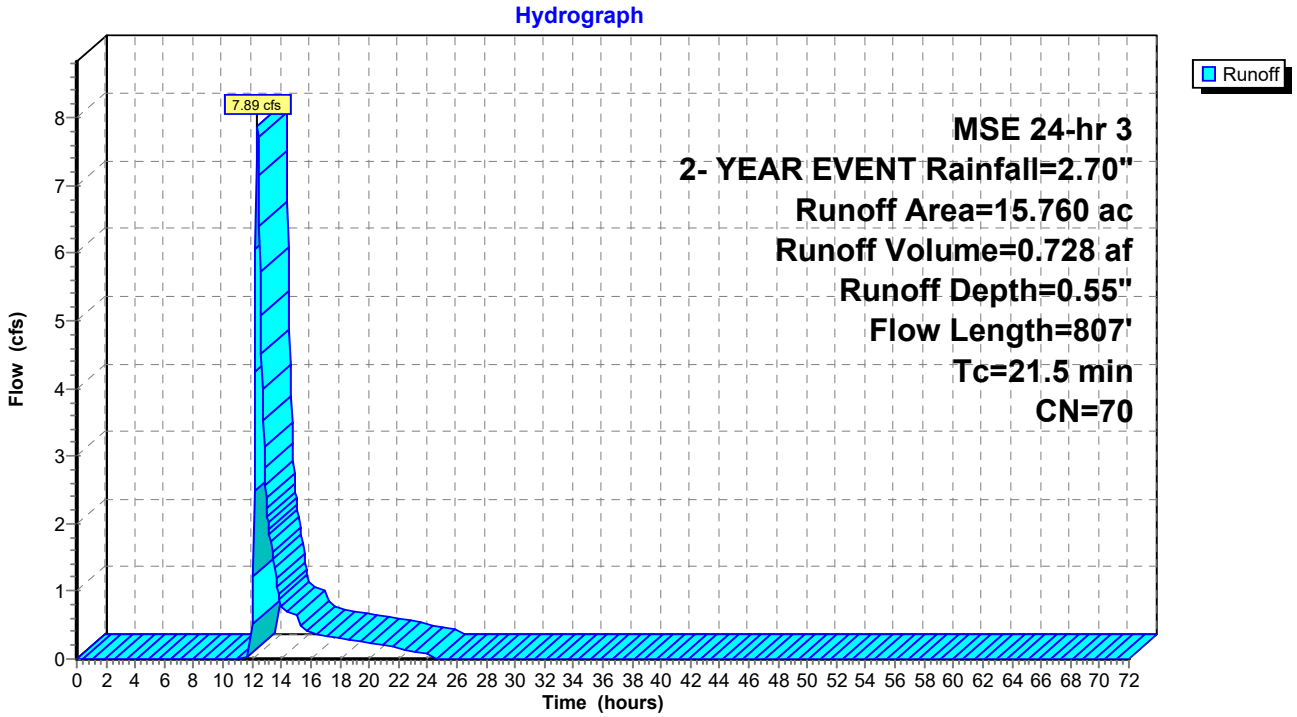
Runoff = 7.89 cfs @ 12.36 hrs, Volume= 0.728 af, Depth= 0.55"
Routed to Link 9L : TOTAL

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2- YEAR EVENT Rainfall=2.70"

	Area (ac)	CN	Description
*	15.760	70	SOIL GROUP C PRE-DEVELOPMENT CURVE NUMBER
	15.760		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.2	100	0.1250	0.15		**Sheet Flow, SHEET FLOW** Woods: Light underbrush n= 0.400 P2= 2.70"
10.3	707	0.0523	1.14		**Shallow Concentrated Flow, SHALLOW CONCETRATED FLOW** Woodland Kv= 5.0 fps
21.5	807	Total			

Subcatchment 1S: EXISTING CONDITION



Summary for Subcatchment 8S: OFFSITE

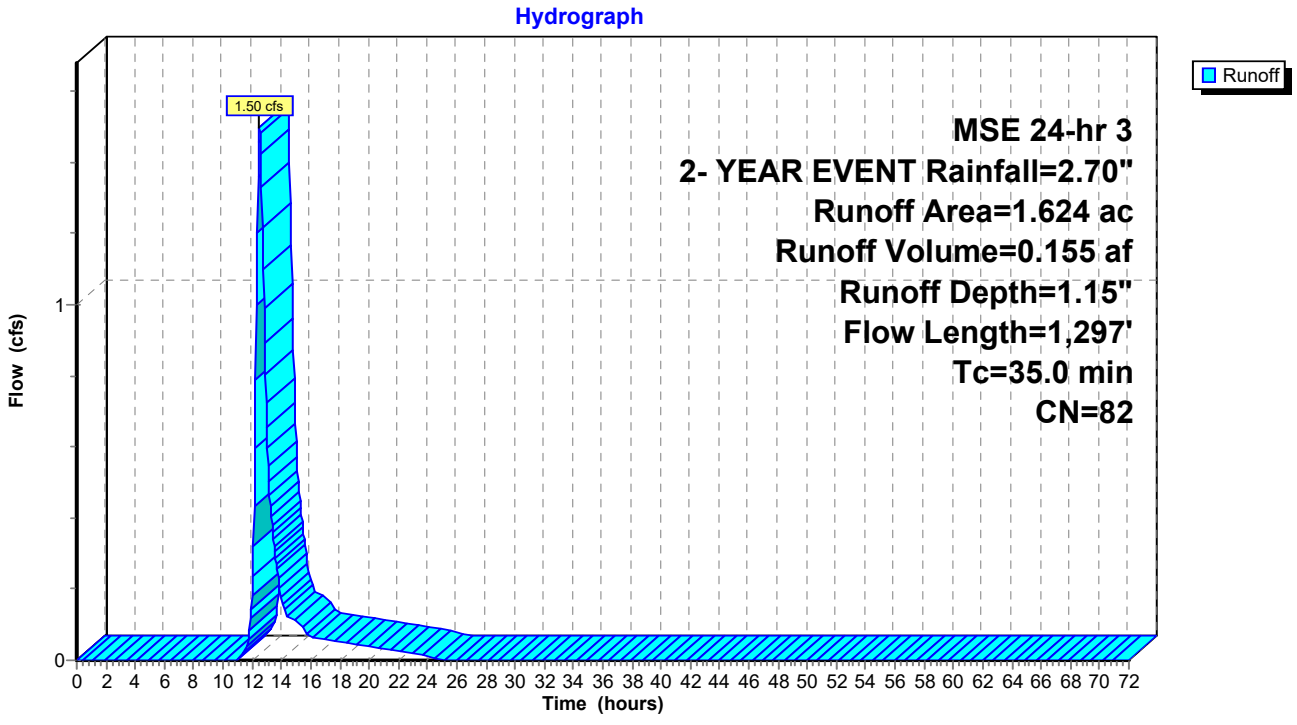
Runoff = 1.50 cfs @ 12.51 hrs, Volume= 0.155 af, Depth= 1.15"
Routed to Link 9L : TOTAL

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2- YEAR EVENT Rainfall=2.70"

	Area (ac)	CN	Description
*	0.527	98	PAVEMENT
	1.097	74	>75% Grass cover, Good, HSG C
	1.624	82	Weighted Average
	1.097		67.55% Pervious Area
	0.527		32.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, SHEET FLOW** Grass: Short n= 0.150 P2= 2.70"
20.9	1,197	0.0366	0.96		**Shallow Concentrated Flow, SHALLOW CONCENTRATED FLOW** Woodland Kv= 5.0 fps
35.0	1,297	Total			

Subcatchment 8S: OFFSITE

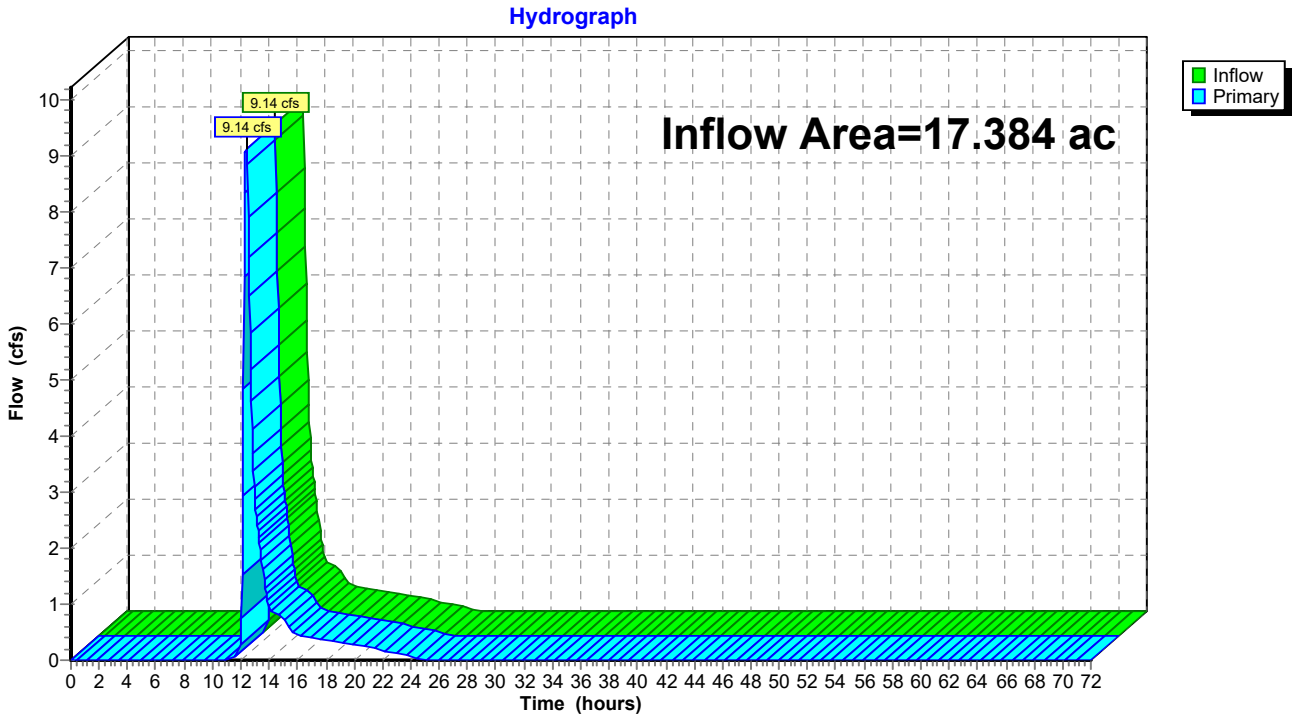


Summary for Link 9L: TOTAL

Inflow Area = 17.384 ac, 3.03% Impervious, Inflow Depth = 0.61" for 2- YEAR EVENT event
Inflow = 9.14 cfs @ 12.38 hrs, Volume= 0.883 af
Primary = 9.14 cfs @ 12.38 hrs, Volume= 0.883 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 9L: TOTAL



Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: EXISTING CONDITION Runoff Area=15.760 ac 0.00% Impervious Runoff Depth=1.21"
Flow Length=807' Tc=21.5 min CN=70 Runoff=19.43 cfs 1.591 af

Subcatchment8S: OFFSITE Runoff Area=1.624 ac 32.45% Impervious Runoff Depth=2.05"
Flow Length=1,297' Tc=35.0 min CN=82 Runoff=2.72 cfs 0.277 af

Link 9L: TOTAL Inflow=21.67 cfs 1.868 af
Primary=21.67 cfs 1.868 af

Total Runoff Area = 17.384 ac Runoff Volume = 1.868 af Average Runoff Depth = 1.29"
96.97% Pervious = 16.857 ac 3.03% Impervious = 0.527 ac

Summary for Subcatchment 1S: EXISTING CONDITION

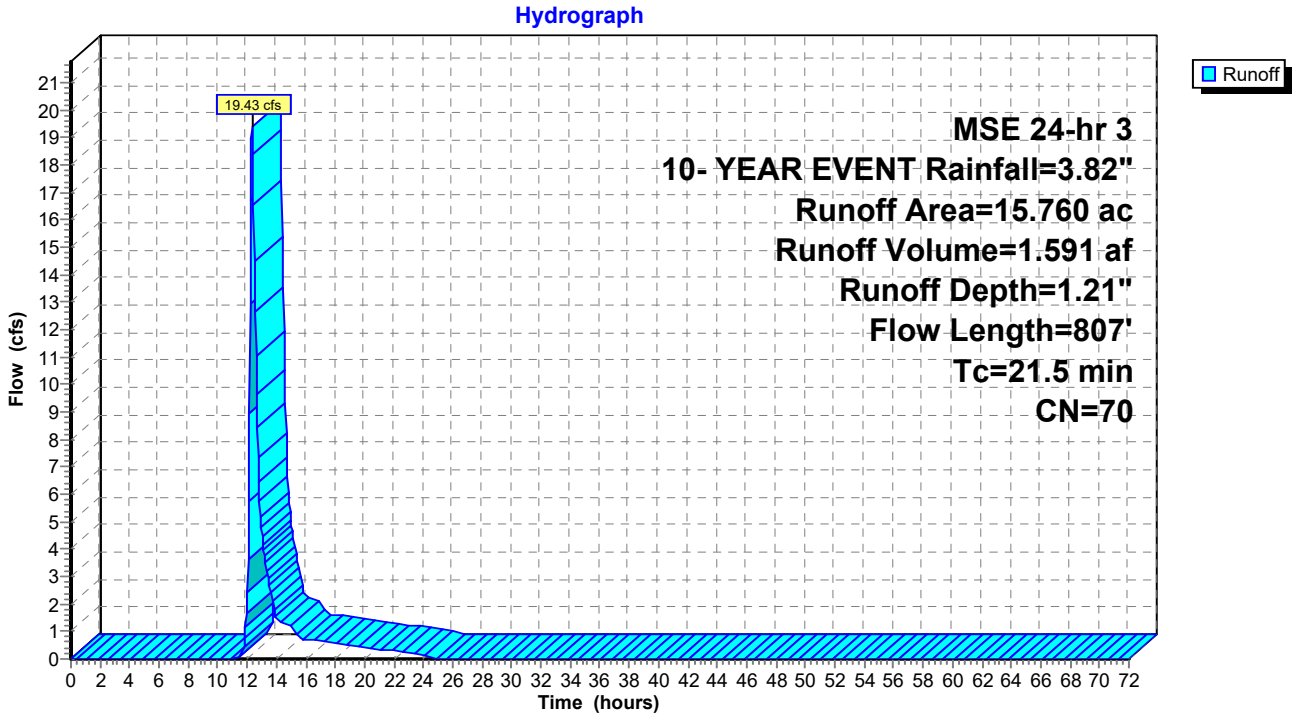
Runoff = 19.43 cfs @ 12.34 hrs, Volume= 1.591 af, Depth= 1.21"
Routed to Link 9L : TOTAL

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10- YEAR EVENT Rainfall=3.82"

	Area (ac)	CN	Description
*	15.760	70	SOIL GROUP C PRE-DEVELOPMENT CURVE NUMBER
	15.760		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.2	100	0.1250	0.15		**Sheet Flow, SHEET FLOW** Woods: Light underbrush n= 0.400 P2= 2.70"
10.3	707	0.0523	1.14		**Shallow Concentrated Flow, SHALLOW CONCETRATED FLOW** Woodland Kv= 5.0 fps
21.5	807	Total			

Subcatchment 1S: EXISTING CONDITION



Summary for Subcatchment 8S: OFFSITE

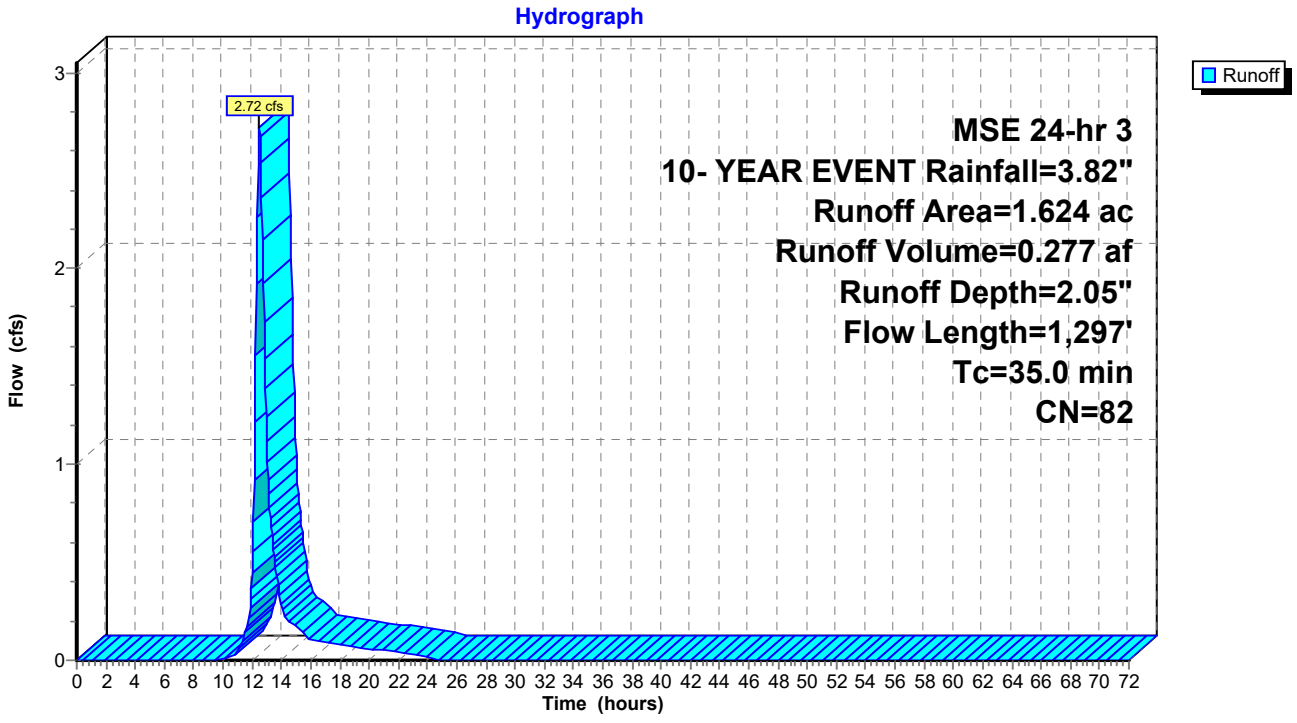
Runoff = 2.72 cfs @ 12.50 hrs, Volume= 0.277 af, Depth= 2.05"
Routed to Link 9L : TOTAL

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10- YEAR EVENT Rainfall=3.82"

	Area (ac)	CN	Description
*	0.527	98	PAVEMENT
	1.097	74	>75% Grass cover, Good, HSG C
	1.624	82	Weighted Average
	1.097		67.55% Pervious Area
	0.527		32.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, SHEET FLOW** Grass: Short n= 0.150 P2= 2.70"
20.9	1,197	0.0366	0.96		**Shallow Concentrated Flow, SHALLOW CONCENTRATED FLOW** Woodland Kv= 5.0 fps
35.0	1,297	Total			

Subcatchment 8S: OFFSITE

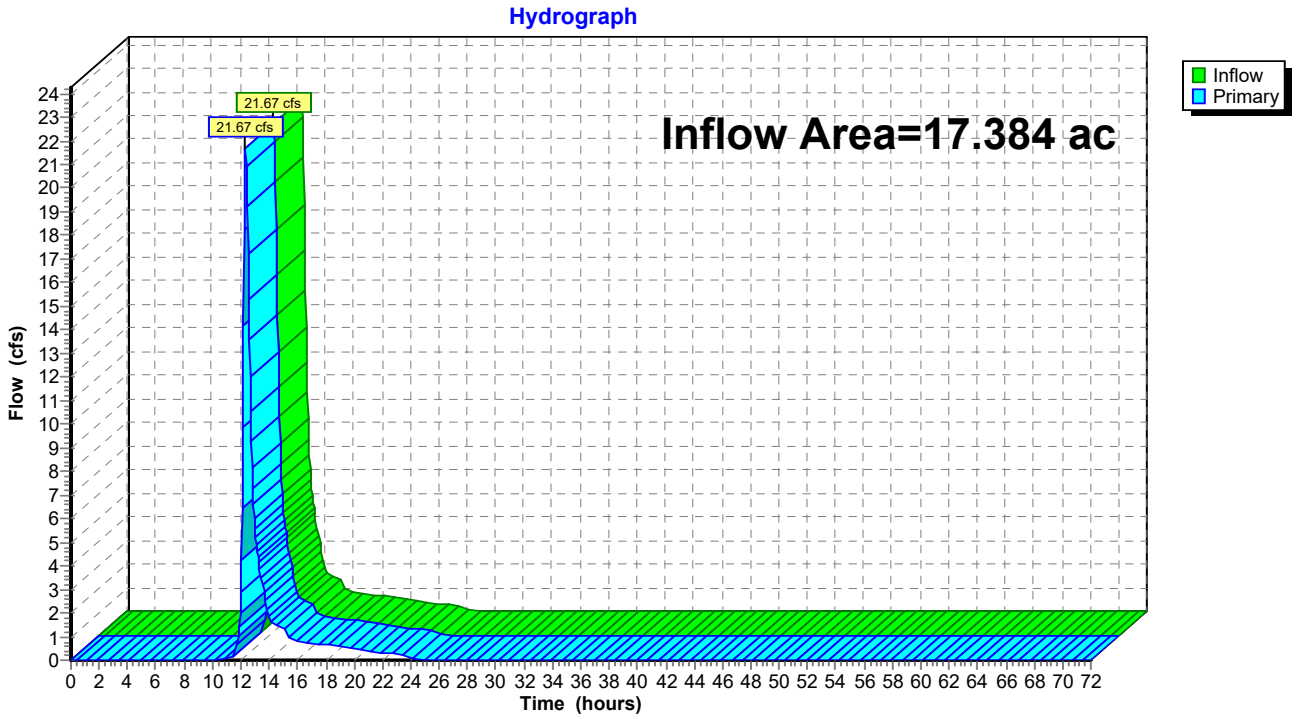


Summary for Link 9L: TOTAL

Inflow Area = 17.384 ac, 3.03% Impervious, Inflow Depth = 1.29" for 10- YEAR EVENT event
Inflow = 21.67 cfs @ 12.35 hrs, Volume= 1.868 af
Primary = 21.67 cfs @ 12.35 hrs, Volume= 1.868 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 9L: TOTAL



Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: EXISTING CONDITION Runoff Area=15.760 ac 0.00% Impervious Runoff Depth=2.97"
Flow Length=807' Tc=21.5 min CN=70 Runoff=50.22 cfs 3.904 af

Subcatchment8S: OFFSITE Runoff Area=1.624 ac 32.45% Impervious Runoff Depth=4.18"
Flow Length=1,297' Tc=35.0 min CN=82 Runoff=5.52 cfs 0.566 af

Link 9L: TOTAL Inflow=54.53 cfs 4.470 af
Primary=54.53 cfs 4.470 af

Total Runoff Area = 17.384 ac Runoff Volume = 4.470 af Average Runoff Depth = 3.09"
96.97% Pervious = 16.857 ac 3.03% Impervious = 0.527 ac

Summary for Subcatchment 1S: EXISTING CONDITION

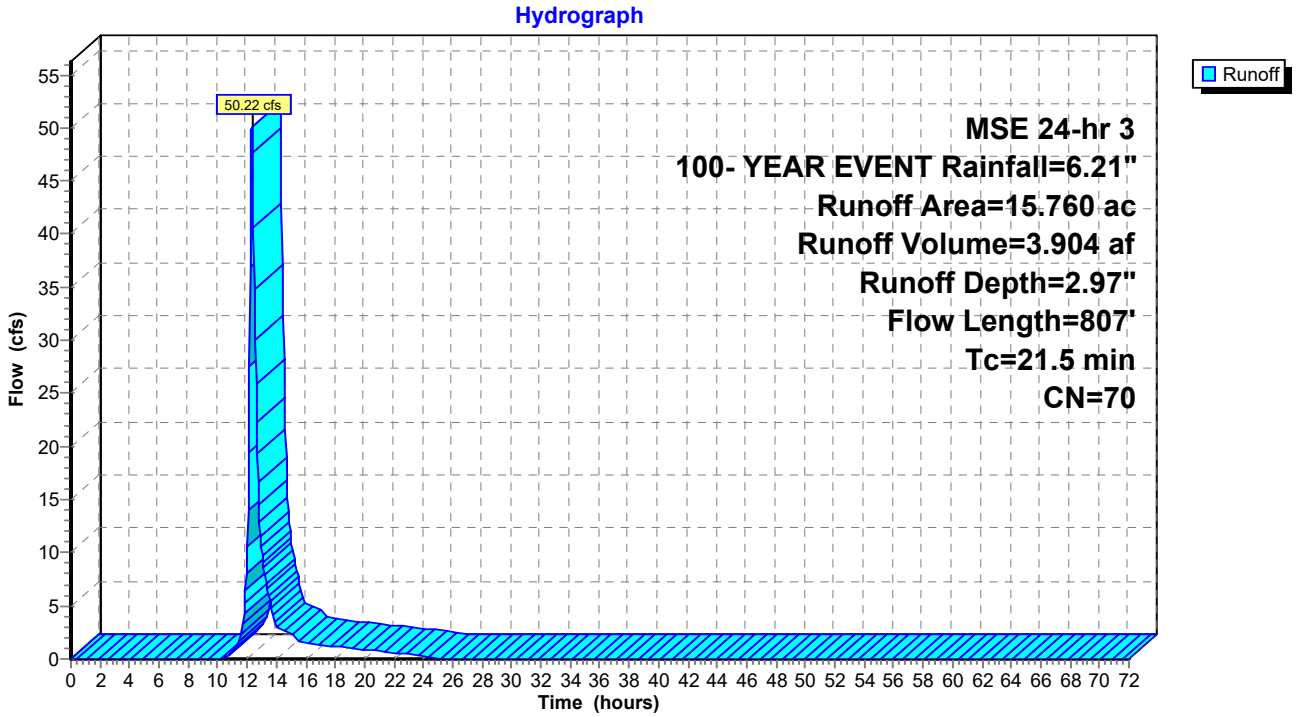
Runoff = 50.22 cfs @ 12.32 hrs, Volume= 3.904 af, Depth= 2.97"
Routed to Link 9L : TOTAL

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100- YEAR EVENT Rainfall=6.21"

	Area (ac)	CN	Description
*	15.760	70	SOIL GROUP C PRE-DEVELOPMENT CURVE NUMBER
	15.760		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.2	100	0.1250	0.15		**Sheet Flow, SHEET FLOW** Woods: Light underbrush n= 0.400 P2= 2.70"
10.3	707	0.0523	1.14		**Shallow Concentrated Flow, SHALLOW CONCETRATED FLOW** Woodland Kv= 5.0 fps
21.5	807	Total			

Subcatchment 1S: EXISTING CONDITION



Summary for Subcatchment 8S: OFFSITE

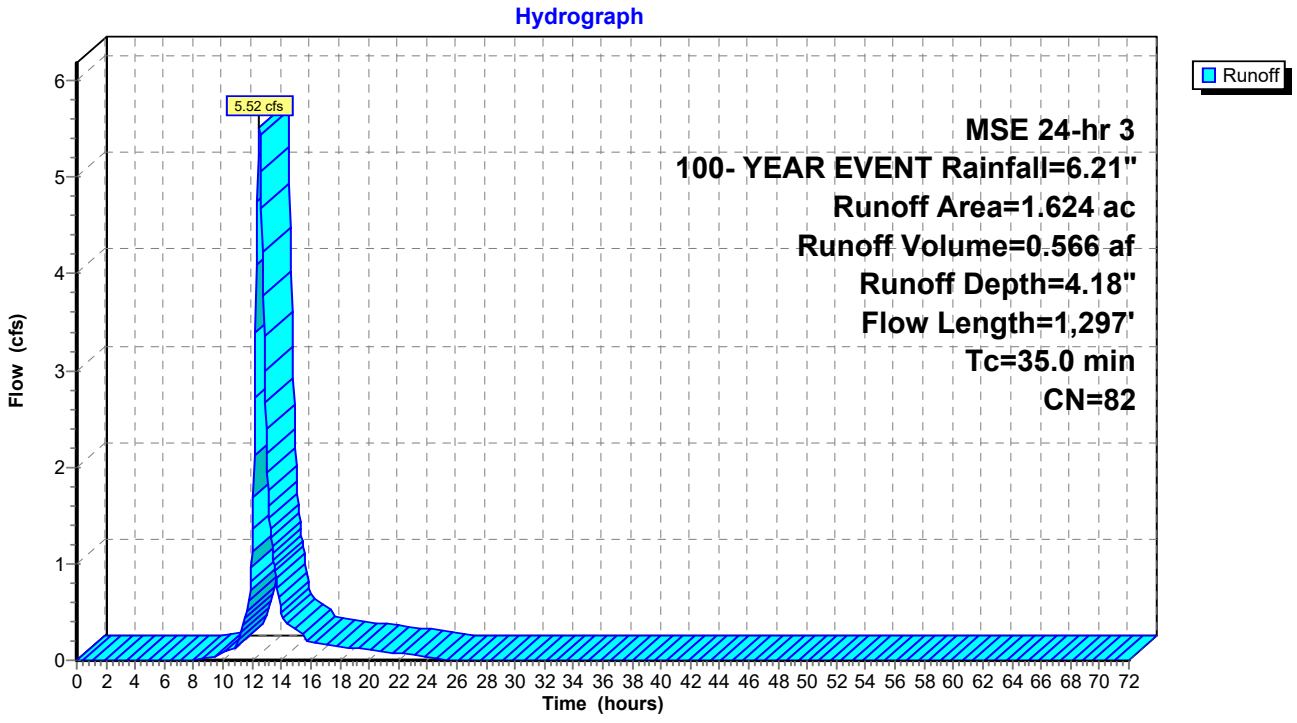
Runoff = 5.52 cfs @ 12.49 hrs, Volume= 0.566 af, Depth= 4.18"
Routed to Link 9L : TOTAL

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100- YEAR EVENT Rainfall=6.21"

	Area (ac)	CN	Description
*	0.527	98	PAVEMENT
	1.097	74	>75% Grass cover, Good, HSG C
	1.624	82	Weighted Average
	1.097		67.55% Pervious Area
	0.527		32.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, SHEET FLOW** Grass: Short n= 0.150 P2= 2.70"
20.9	1,197	0.0366	0.96		**Shallow Concentrated Flow, SHALLOW CONCENTRATED FLOW** Woodland Kv= 5.0 fps
35.0	1,297	Total			

Subcatchment 8S: OFFSITE

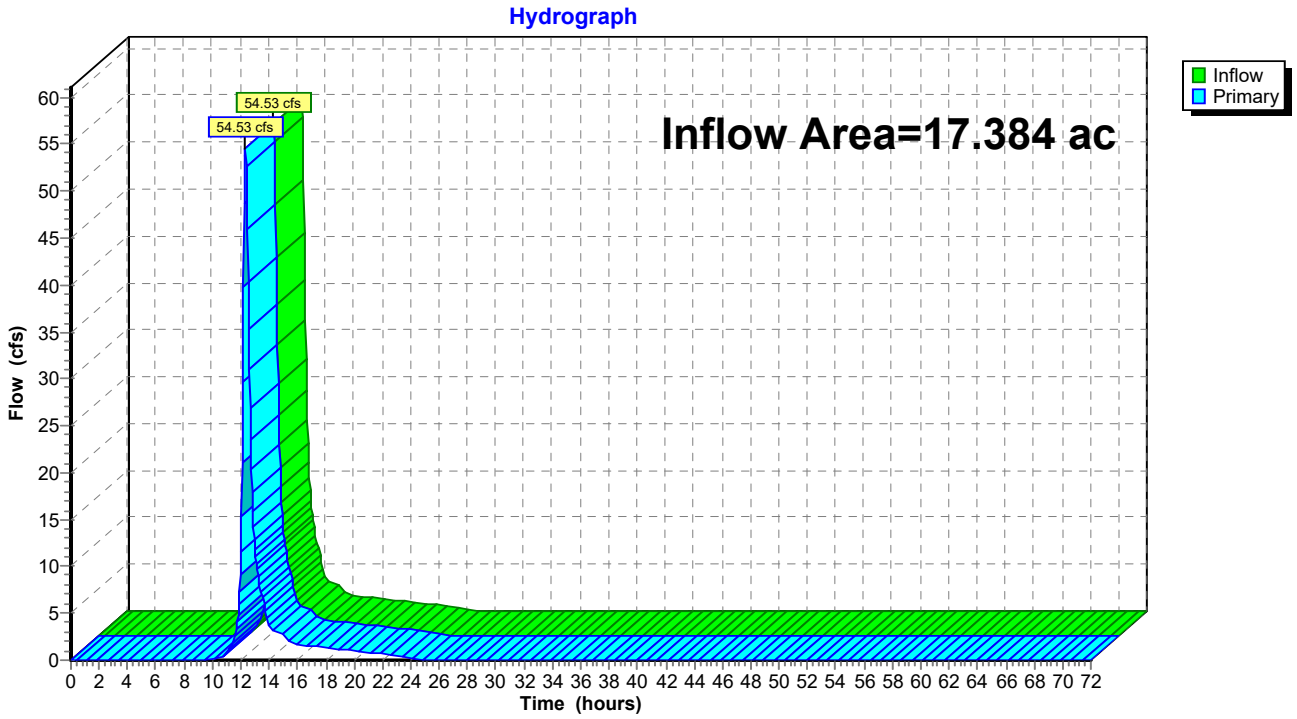


Summary for Link 9L: TOTAL

Inflow Area = 17.384 ac, 3.03% Impervious, Inflow Depth = 3.09" for 100- YEAR EVENT event
Inflow = 54.53 cfs @ 12.33 hrs, Volume= 4.470 af
Primary = 54.53 cfs @ 12.33 hrs, Volume= 4.470 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 9L: TOTAL



APPENDIX 3
POST-DEVELOPMENT CONDITIONS RATE ATTENTUATION – CITY CODE

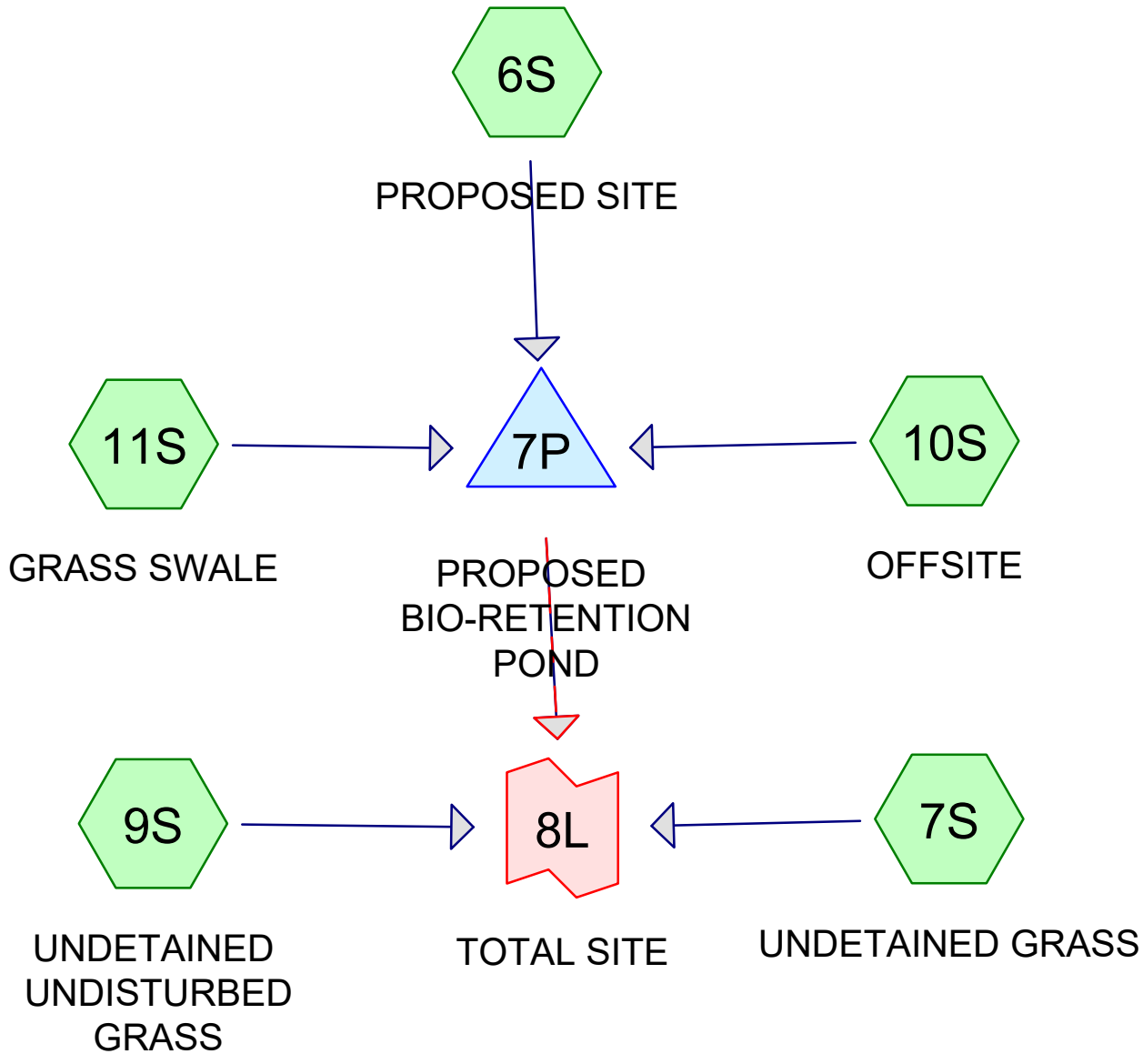
Z:\PROJECTS\2018\1338.10-WI\CAD\EXHIBITS\1338.10 PROPOSED HYDROLOGY.DWG 1/24/2023 2:00 PM

THE COURTYARD AT PEWAUKEE PROPOSED HYDROLOGY

01/24/2023

PINNACLE ENGINEERING GROUP
20725 WATERTOWN ROAD | SUITE 100 | BROOKFIELD, WI 53186 | WWW.PINNACLE-ENGR.COM |

PLAN | DESIGN | DELIVER **PEG JOB#** 1338.10



Subcat Reach Pond Link

Routing Diagram for 2021-12-27 HYDROCAD
Prepared by Pinnacle Engineering Group, Printed 1/25/2023
HydroCAD® 10.20-2g s/n 07894 © 2022 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1- YEAR EVENT	MSE 24-hr	3	Default	24.00	1	2.39	2
2	2- YEAR EVENT	MSE 24-hr	3	Default	24.00	1	2.70	2
3	10- YEAR EVENT	MSE 24-hr	3	Default	24.00	1	3.82	2
4	100- YEAR EVENT	MSE 24-hr	3	Default	24.00	1	6.21	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
5.357	74	>75% Grass cover, Good, HSG C (10S, 11S)
1.550	98	BUILDING (6S)
5.690	74	GRASS (6S, 7S)
2.387	98	PAVEMENT (6S, 10S)
2.400	70	PRE DEVELOPMENT GRASS (9S)
17.384	**79**	**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	5.357	0.000	0.000	5.357	>75% Grass cover, Good	10S, 11S
0.000	0.000	0.000	0.000	1.550	1.550	BUILDING	6S
0.000	0.000	0.000	0.000	5.690	5.690	GRASS	6S, 7S
0.000	0.000	0.000	0.000	2.387	2.387	PAVEMENT	6S, 10S
0.000	0.000	0.000	0.000	2.400	2.400	PRE DEVELOPMENT GRASS	9S
0.000	**0.000**	**5.357**	**0.000**	**12.027**	**17.384**	**TOTAL AREA**	

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment6S: PROPOSED SITE Runoff Area=7.800 ac 43.72% Impervious Runoff Depth=1.03"
Tc=6.0 min CN=84 Runoff=14.46 cfs 0.670 af

Subcatchment7S: UNDETAINED GRASS Runoff Area=1.300 ac 0.00% Impervious Runoff Depth=0.55"
Tc=6.0 min CN=74 Runoff=1.19 cfs 0.059 af

Subcatchment9S: UNDETAINED Runoff Area=2.400 ac 0.00% Impervious Runoff Depth=0.40"
Flow Length=777' Tc=21.0 min CN=70 Runoff=0.82 cfs 0.081 af

Subcatchment10S: OFFSITE Runoff Area=1.624 ac 32.45% Impervious Runoff Depth=0.92"
Flow Length=1,583' Tc=24.7 min CN=82 Runoff=1.45 cfs 0.124 af

Subcatchment11S: GRASS SWALE Runoff Area=4.260 ac 0.00% Impervious Runoff Depth=0.55"
Flow Length=743' Tc=8.8 min CN=74 Runoff=3.35 cfs 0.194 af

Pond 7P: PROPOSED BIO-RETENTION Peak Elev=882.16' Storage=33,377 cf Inflow=18.13 cfs 0.989 af
Primary=0.30 cfs 0.630 af Secondary=0.00 cfs 0.000 af Outflow=0.30 cfs 0.630 af

Link 8L: TOTAL SITE Inflow=1.41 cfs 0.770 af
Primary=1.41 cfs 0.770 af

Total Runoff Area = 17.384 ac Runoff Volume = 1.129 af Average Runoff Depth = 0.78"
77.35% Pervious = 13.447 ac 22.65% Impervious = 3.937 ac

Summary for Subcatchment 6S: PROPOSED SITE

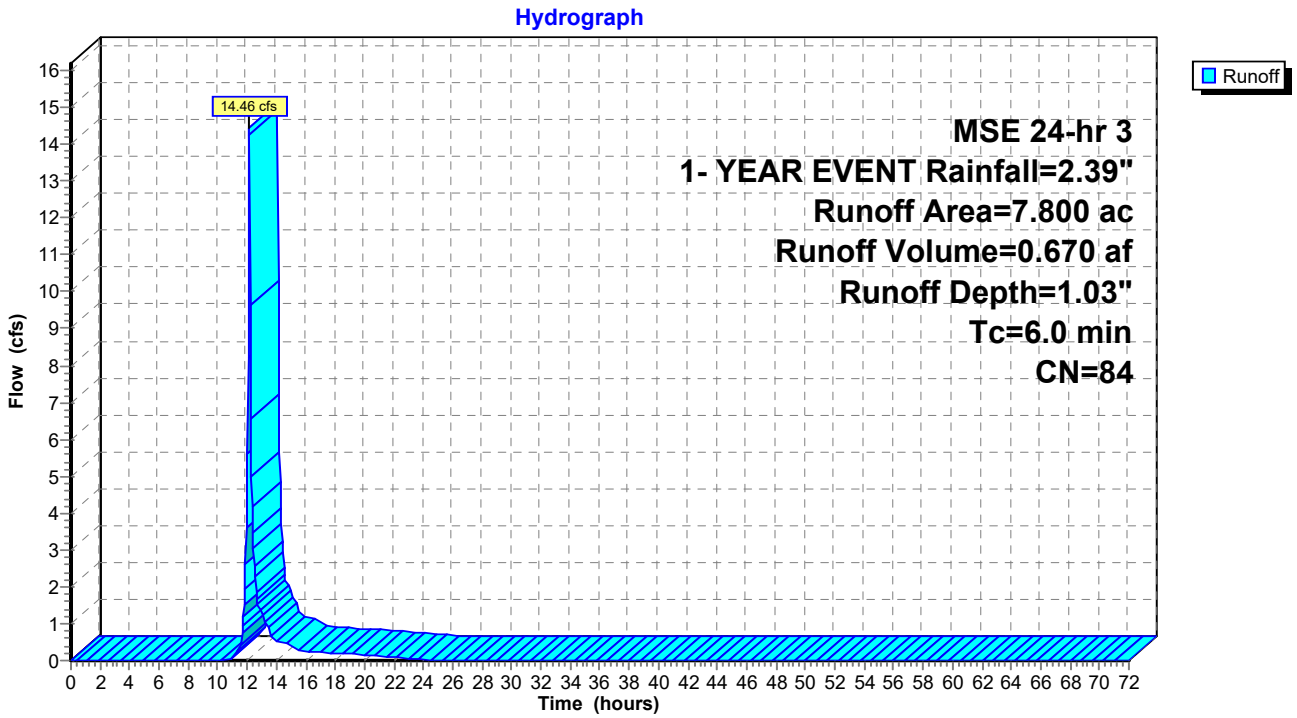
Runoff = 14.46 cfs @ 12.14 hrs, Volume= 0.670 af, Depth= 1.03"
Routed to Pond 7P : PROPOSED BIO-RETENTION POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1- YEAR EVENT Rainfall=2.39"

	Area (ac)	CN	Description
*	1.550	98	BUILDING
*	1.860	98	PAVEMENT
*	4.390	74	GRASS
	7.800	84	Weighted Average
	4.390		56.28% Pervious Area
	3.410		43.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, MINIMUM TC 6**

Subcatchment 6S: PROPOSED SITE



Summary for Subcatchment 7S: UNDETAINED GRASS

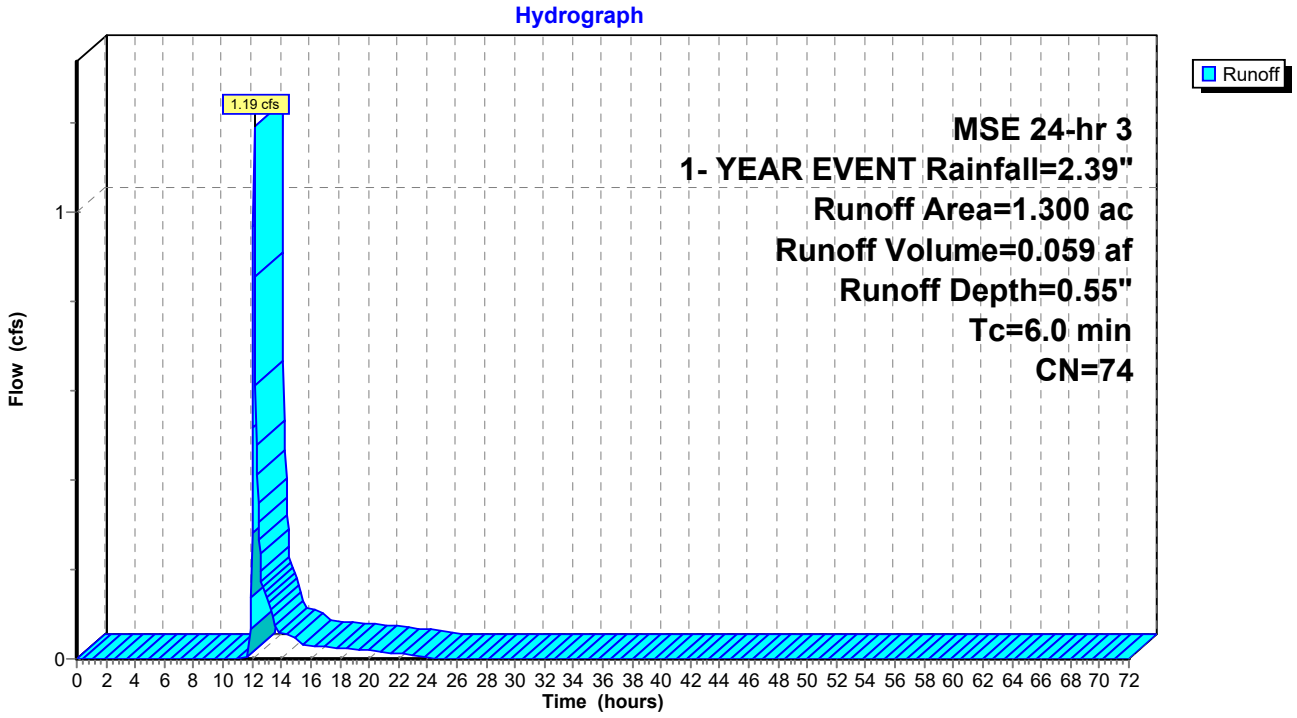
Runoff = 1.19 cfs @ 12.14 hrs, Volume= 0.059 af, Depth= 0.55"
Routed to Link 8L : TOTAL SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1- YEAR EVENT Rainfall=2.39"

	Area (ac)	CN	Description
*	1.300	74	GRASS
	1.300		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, MINIMUM TC**

Subcatchment 7S: UNDETAINED GRASS



Summary for Subcatchment 9S: UNDETAINED UNDISTURBED GRASS

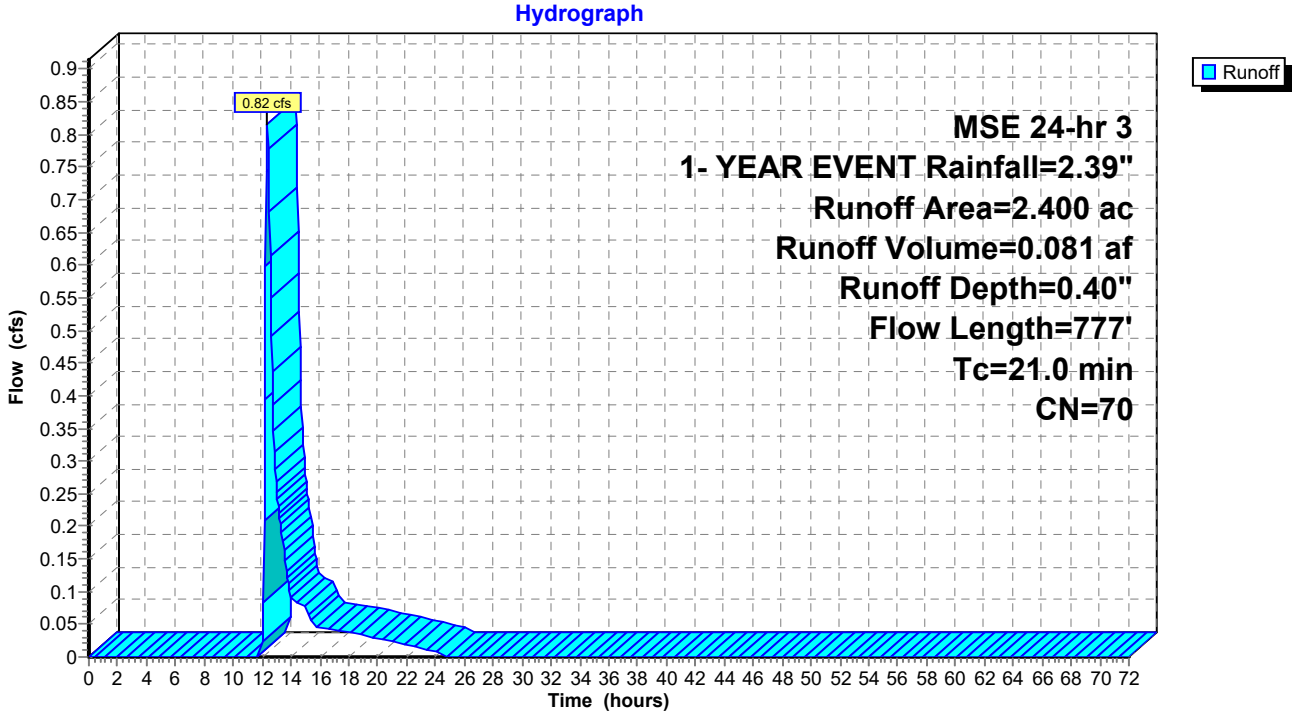
Runoff = 0.82 cfs @ 12.37 hrs, Volume= 0.081 af, Depth= 0.40"
Routed to Link 8L : TOTAL SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1- YEAR EVENT Rainfall=2.39"

	Area (ac)	CN	Description
*	2.400	70	PRE DEVELOPMENT GRASS
	2.400		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	100	0.1350	0.15		**Sheet Flow, SHEET FLOW** Woods: Light underbrush n= 0.400 P2= 2.70"
10.1	677	0.0502	1.12		**Shallow Concentrated Flow, SHALLOW FLOW** Woodland Kv= 5.0 fps
21.0	777	Total			

Subcatchment 9S: UNDETAINED UNDISTURBED GRASS



Summary for Subcatchment 10S: OFFSITE

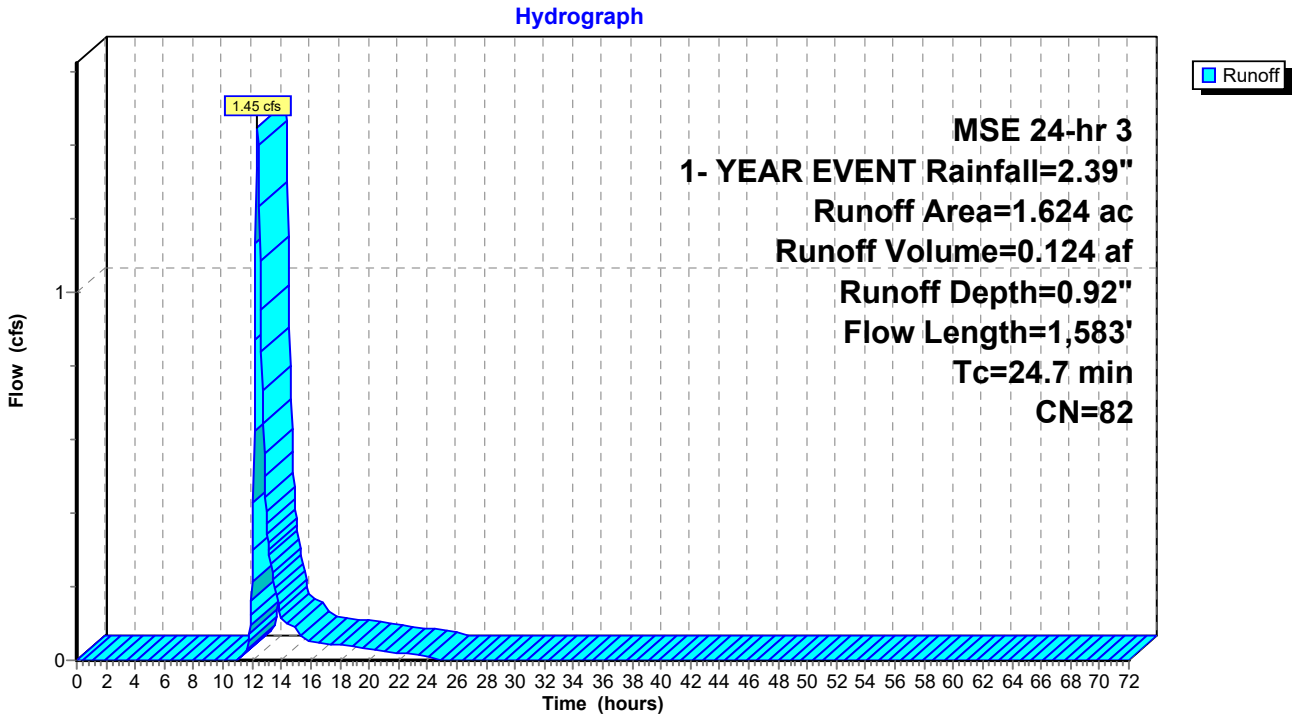
Runoff = 1.45 cfs @ 12.37 hrs, Volume= 0.124 af, Depth= 0.92"
Routed to Pond 7P : PROPOSED BIO-RETENTION POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1- YEAR EVENT Rainfall=2.39"

	Area (ac)	CN	Description
*	0.527	98	PAVEMENT
	1.097	74	>75% Grass cover, Good, HSG C
	1.624	82	Weighted Average
	1.097		67.55% Pervious Area
	0.527		32.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, SHEET FLOW** Grass: Short n= 0.150 P2= 2.70"
10.6	1,483	0.0240	2.32		**Shallow Concentrated Flow, SHALLOW CONTRATED FLOW** Grassed Waterway Kv= 15.0 fps
24.7	1,583	Total			

Subcatchment 10S: OFFSITE



Summary for Subcatchment 11S: GRASS SWALE

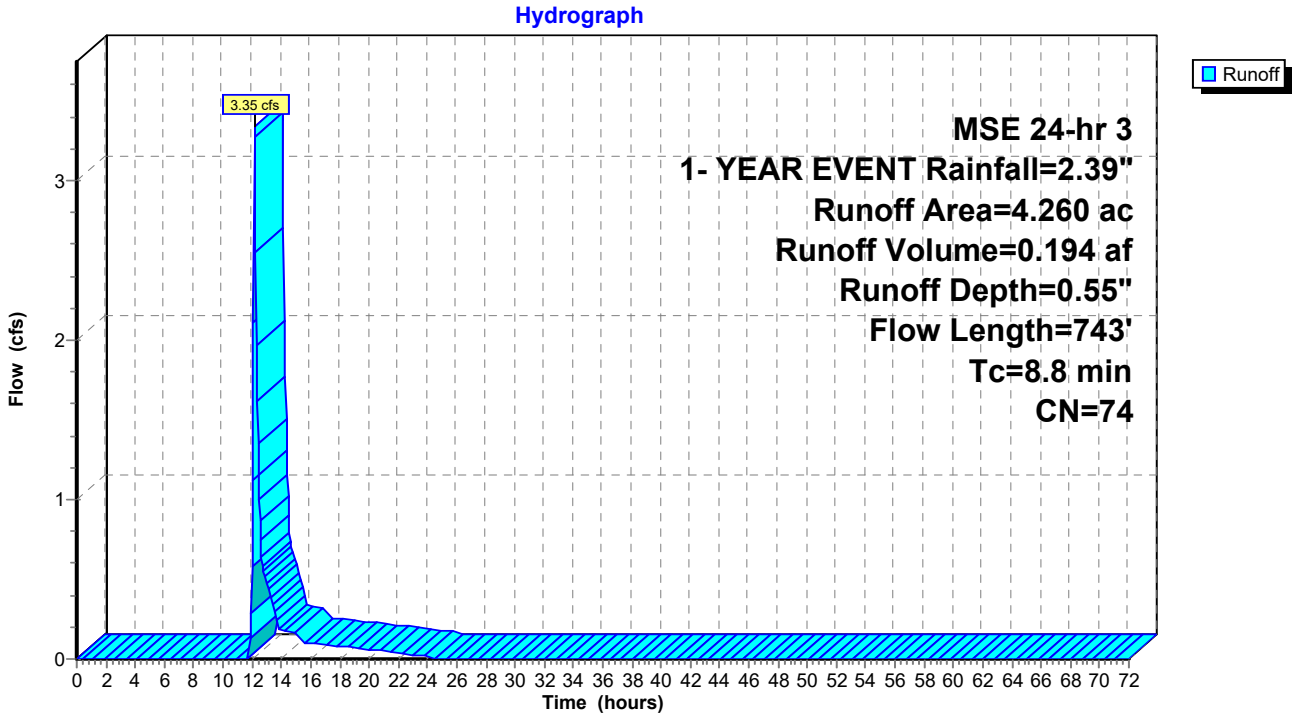
Runoff = 3.35 cfs @ 12.18 hrs, Volume= 0.194 af, Depth= 0.55"
Routed to Pond 7P : PROPOSED BIO-RETENTION POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1- YEAR EVENT Rainfall=2.39"

Area (ac)	CN	Description
4.260	74	>75% Grass cover, Good, HSG C
4.260		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	100	0.1400	0.34		**Sheet Flow, SHEET FLOW** Grass: Short n= 0.150 P2= 2.70"
3.9	643	0.0342	2.77		**Shallow Concentrated Flow, SHALLOW FLOW** Grassed Waterway Kv= 15.0 fps
8.8	743	Total			

Subcatchment 11S: GRASS SWALE



Summary for Pond 7P: PROPOSED BIO-RETENTION POND

Inflow Area = 13.684 ac, 28.77% Impervious, Inflow Depth = 0.87" for 1- YEAR EVENT event
Inflow = 18.13 cfs @ 12.14 hrs, Volume= 0.989 af
Outflow = 0.30 cfs @ 18.70 hrs, Volume= 0.630 af, Atten= 98%, Lag= 393.4 min
Primary = 0.30 cfs @ 18.70 hrs, Volume= 0.630 af
Routed to Link 8L : TOTAL SITE
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 8L : TOTAL SITE

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 882.16' @ 18.70 hrs Surf.Area= 31,638 sf Storage= 33,377 cf

Plug-Flow detention time= 994.4 min calculated for 0.629 af (64% of inflow)
Center-of-Mass det. time= 907.7 min (1,731.9 - 824.2)

Volume	Invert	Avail.Storage	Storage Description
#1	881.00'	143,322 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

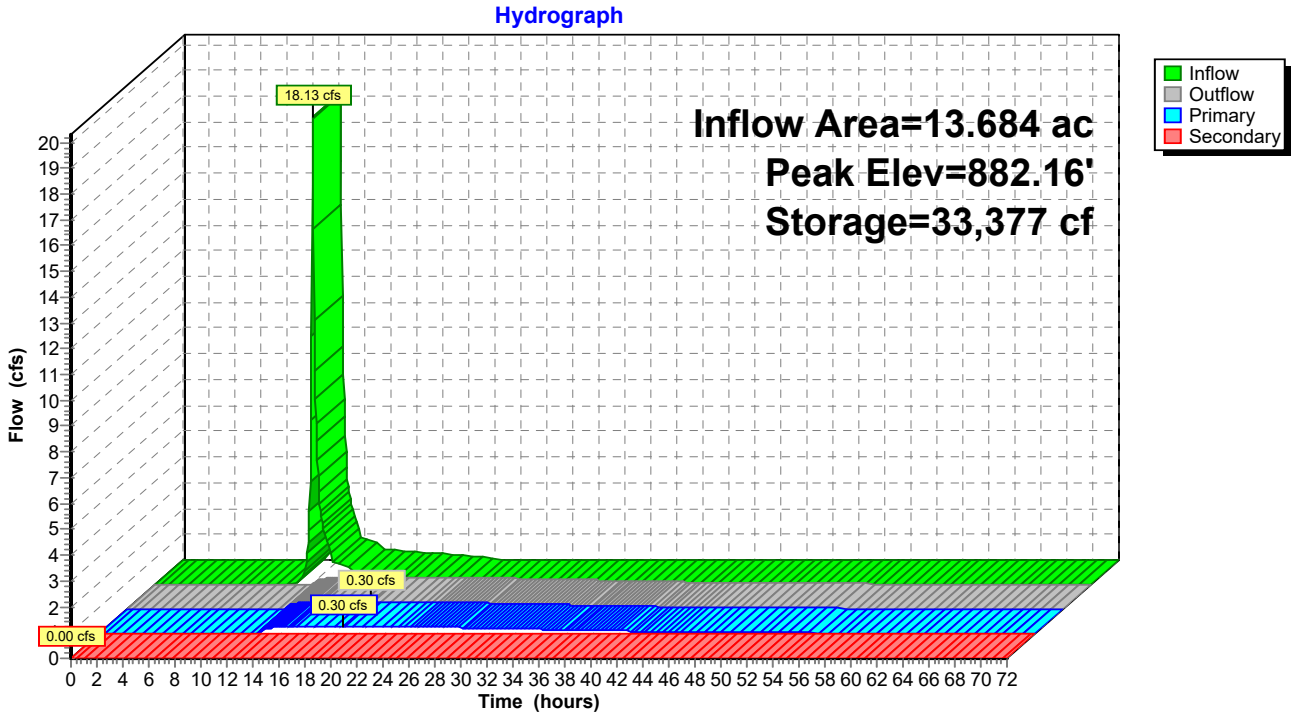
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
881.00	25,830	0	0
885.00	45,831	143,322	143,322

Device	Routing	Invert	Outlet Devices
#1	Primary	878.00'	**24.0" Round Culvert** L= 98.3' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 878.00' / 875.00' S= 0.0305 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	881.50'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	882.45'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	884.00'	**10.0' long x 8.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Primary OutFlow Max=0.30 cfs @ 18.70 hrs HW=882.16' (Free Discharge)
└**1=Culvert** (Passes 0.30 cfs of 26.90 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 0.30 cfs @ 3.39 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=881.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 7P: PROPOSED BIO-RETENTION POND

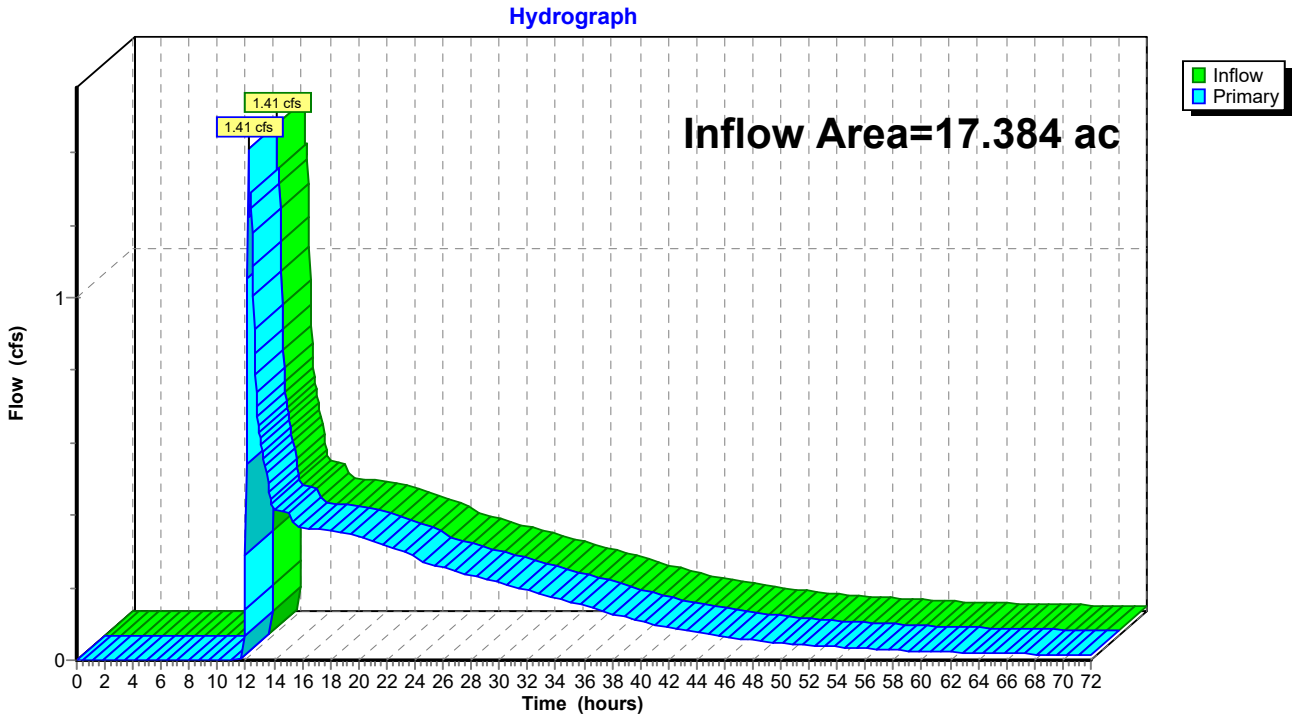


Summary for Link 8L: TOTAL SITE

Inflow Area = 17.384 ac, 22.65% Impervious, Inflow Depth > 0.53" for 1- YEAR EVENT event
Inflow = 1.41 cfs @ 12.16 hrs, Volume= 0.770 af
Primary = 1.41 cfs @ 12.16 hrs, Volume= 0.770 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 8L: TOTAL SITE



Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment6S: PROPOSED SITE Runoff Area=7.800 ac 43.72% Impervious Runoff Depth=1.27"
Tc=6.0 min CN=84 Runoff=17.84 cfs 0.828 af

Subcatchment7S: UNDETAINED GRASS Runoff Area=1.300 ac 0.00% Impervious Runoff Depth=0.72"
Tc=6.0 min CN=74 Runoff=1.63 cfs 0.078 af

Subcatchment9S: UNDETAINED Runoff Area=2.400 ac 0.00% Impervious Runoff Depth=0.55"
Flow Length=777' Tc=21.0 min CN=70 Runoff=1.22 cfs 0.111 af

Subcatchment10S: OFFSITE Runoff Area=1.624 ac 32.45% Impervious Runoff Depth=1.15"
Flow Length=1,583' Tc=24.7 min CN=82 Runoff=1.83 cfs 0.155 af

Subcatchment11S: GRASS SWALE Runoff Area=4.260 ac 0.00% Impervious Runoff Depth=0.72"
Flow Length=743' Tc=8.8 min CN=74 Runoff=4.66 cfs 0.257 af

Pond 7P: PROPOSED BIO-RETENTION Peak Elev=882.42' Storage=41,869 cf Inflow=22.92 cfs 1.240 af
Primary=0.37 cfs 0.871 af Secondary=0.00 cfs 0.000 af Outflow=0.37 cfs 0.871 af

Link 8L: TOTAL SITE Inflow=2.04 cfs 1.061 af
Primary=2.04 cfs 1.061 af

Total Runoff Area = 17.384 ac Runoff Volume = 1.429 af Average Runoff Depth = 0.99"
77.35% Pervious = 13.447 ac 22.65% Impervious = 3.937 ac

Summary for Subcatchment 6S: PROPOSED SITE

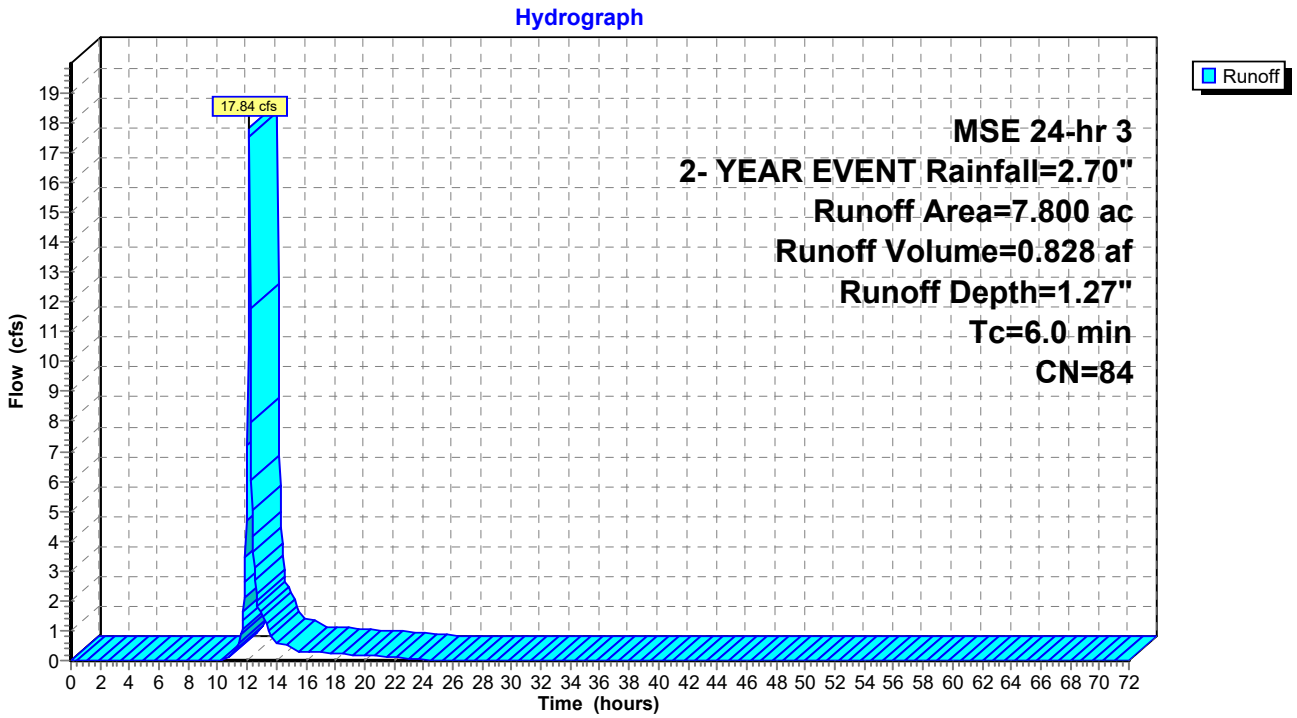
Runoff = 17.84 cfs @ 12.14 hrs, Volume= 0.828 af, Depth= 1.27"
Routed to Pond 7P : PROPOSED BIO-RETENTION POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2- YEAR EVENT Rainfall=2.70"

	Area (ac)	CN	Description
*	1.550	98	BUILDING
*	1.860	98	PAVEMENT
*	4.390	74	GRASS
	7.800	84	Weighted Average
	4.390		56.28% Pervious Area
	3.410		43.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, MINIMUM TC 6**

Subcatchment 6S: PROPOSED SITE



Summary for Subcatchment 7S: UNDETAINED GRASS

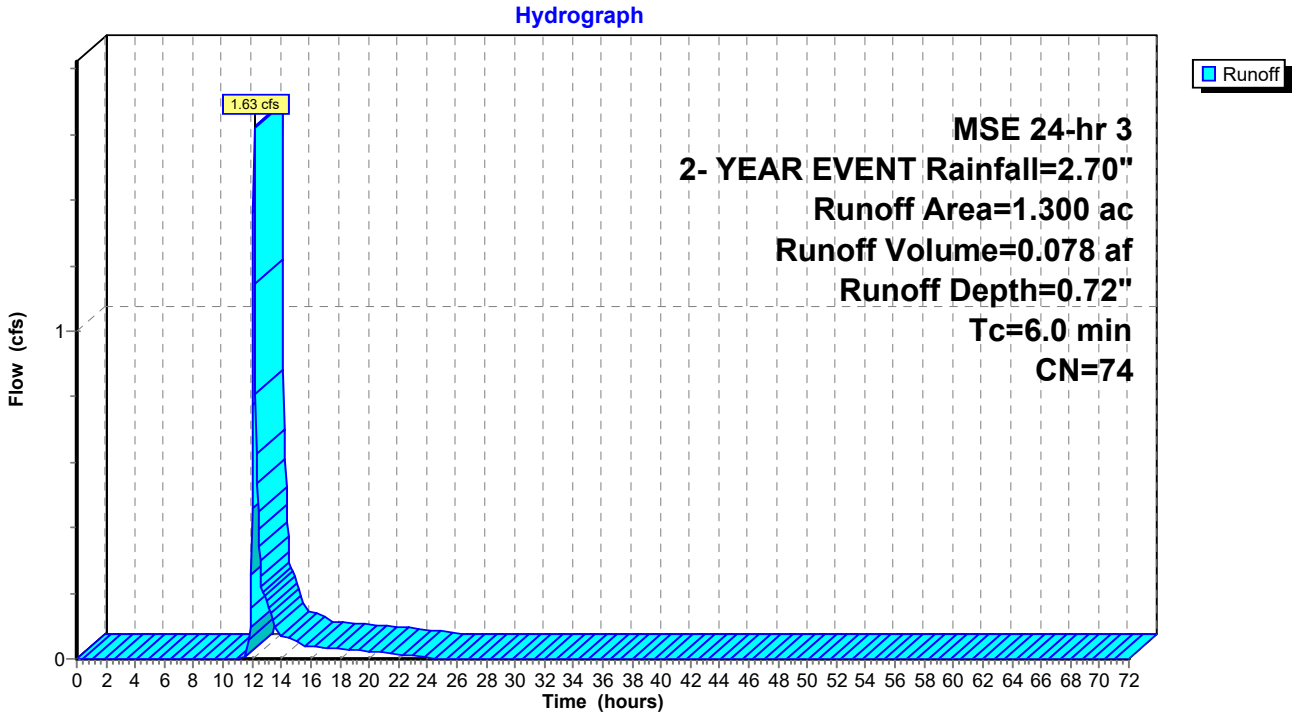
Runoff = 1.63 cfs @ 12.14 hrs, Volume= 0.078 af, Depth= 0.72"
Routed to Link 8L : TOTAL SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2- YEAR EVENT Rainfall=2.70"

	Area (ac)	CN	Description
*	1.300	74	GRASS
	1.300		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, MINIMUM TC**

Subcatchment 7S: UNDETAINED GRASS



Summary for Subcatchment 9S: UNDETAINED UNDISTURBED GRASS

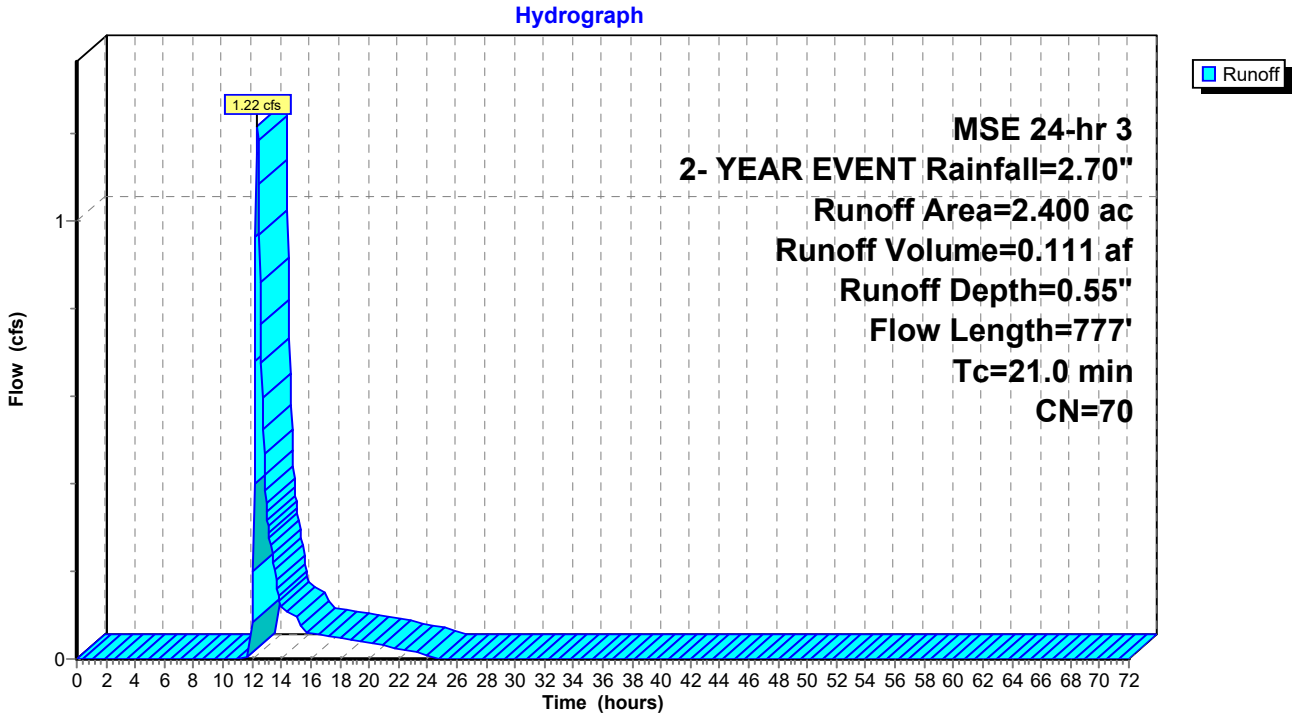
Runoff = 1.22 cfs @ 12.36 hrs, Volume= 0.111 af, Depth= 0.55"
Routed to Link 8L : TOTAL SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2- YEAR EVENT Rainfall=2.70"

	Area (ac)	CN	Description
*	2.400	70	PRE DEVELOPMENT GRASS
	2.400		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	100	0.1350	0.15		**Sheet Flow, SHEET FLOW** Woods: Light underbrush n= 0.400 P2= 2.70"
10.1	677	0.0502	1.12		**Shallow Concentrated Flow, SHALLOW FLOW** Woodland Kv= 5.0 fps
21.0	777	Total			

Subcatchment 9S: UNDETAINED UNDISTURBED GRASS



Summary for Subcatchment 10S: OFFSITE

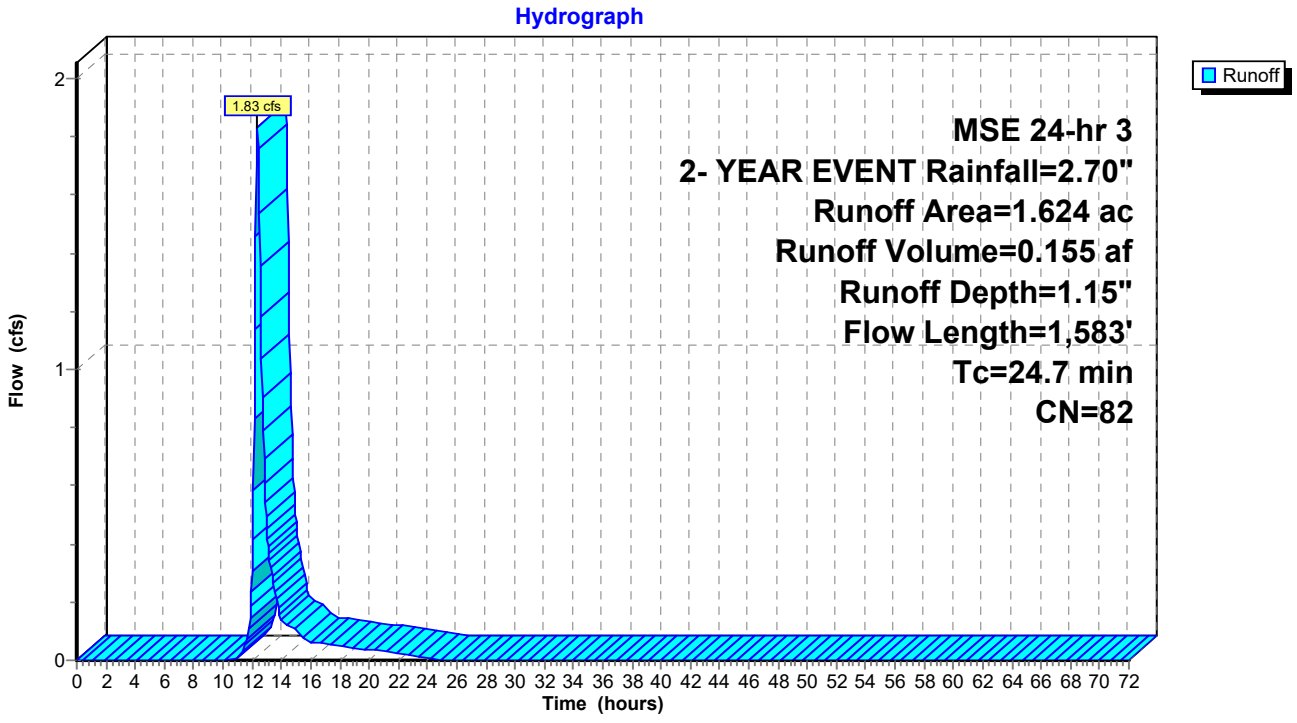
Runoff = 1.83 cfs @ 12.37 hrs, Volume= 0.155 af, Depth= 1.15"
Routed to Pond 7P : PROPOSED BIO-RETENTION POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2- YEAR EVENT Rainfall=2.70"

	Area (ac)	CN	Description
*	0.527	98	PAVEMENT
	1.097	74	>75% Grass cover, Good, HSG C
	1.624	82	Weighted Average
	1.097		67.55% Pervious Area
	0.527		32.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, SHEET FLOW** Grass: Short n= 0.150 P2= 2.70"
10.6	1,483	0.0240	2.32		**Shallow Concentrated Flow, SHALLOW CONTRATED FLOW** Grassed Waterway Kv= 15.0 fps
24.7	1,583	Total			

Subcatchment 10S: OFFSITE



Summary for Subcatchment 11S: GRASS SWALE

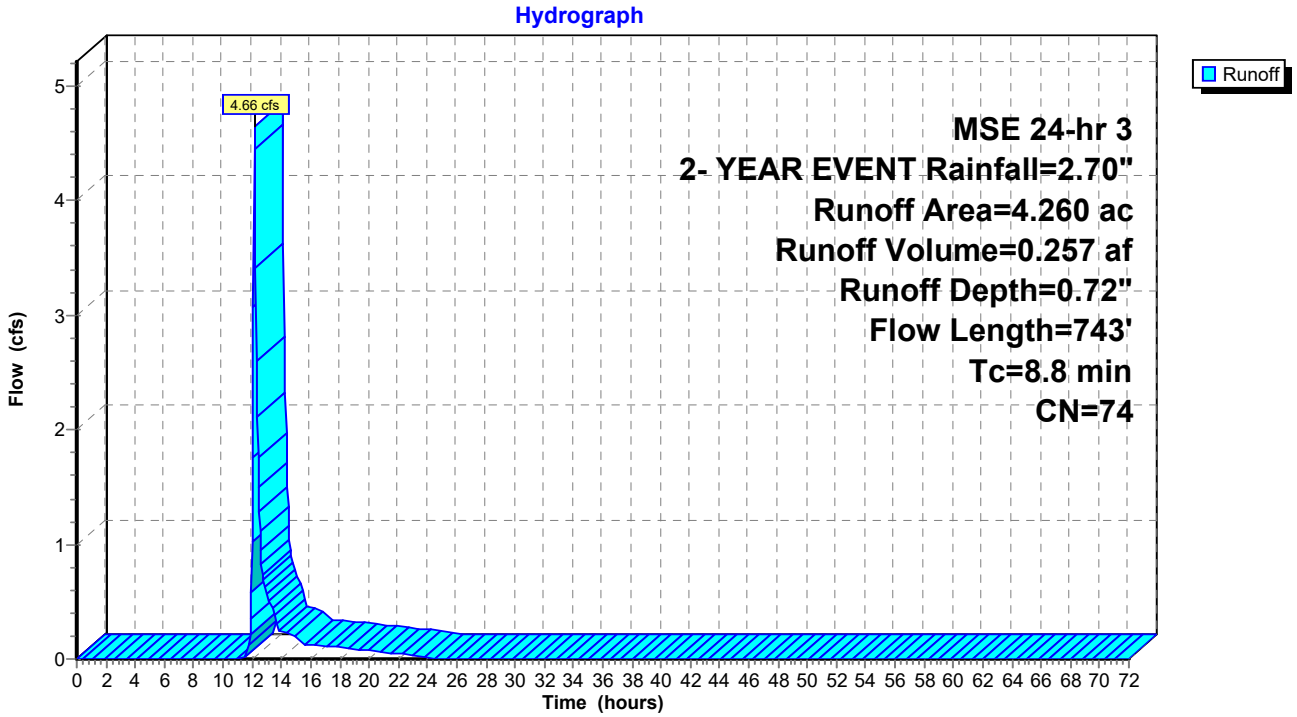
Runoff = 4.66 cfs @ 12.17 hrs, Volume= 0.257 af, Depth= 0.72"
Routed to Pond 7P : PROPOSED BIO-RETENTION POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2- YEAR EVENT Rainfall=2.70"

Area (ac)	CN	Description
4.260	74	>75% Grass cover, Good, HSG C
4.260		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	100	0.1400	0.34		**Sheet Flow, SHEET FLOW** Grass: Short n= 0.150 P2= 2.70"
3.9	643	0.0342	2.77		**Shallow Concentrated Flow, SHALLOW FLOW** Grassed Waterway Kv= 15.0 fps
8.8	743	Total			

Subcatchment 11S: GRASS SWALE



Summary for Pond 7P: PROPOSED BIO-RETENTION POND

Inflow Area = 13.684 ac, 28.77% Impervious, Inflow Depth = 1.09" for 2- YEAR EVENT event
Inflow = 22.92 cfs @ 12.14 hrs, Volume= 1.240 af
Outflow = 0.37 cfs @ 18.48 hrs, Volume= 0.871 af, Atten= 98%, Lag= 380.2 min
Primary = 0.37 cfs @ 18.48 hrs, Volume= 0.871 af
Routed to Link 8L : TOTAL SITE
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 8L : TOTAL SITE

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 882.42' @ 18.48 hrs Surf.Area= 32,953 sf Storage= 41,869 cf

Plug-Flow detention time= 1,064.8 min calculated for 0.871 af (70% of inflow)
Center-of-Mass det. time= 984.1 min (1,803.6 - 819.5)

Volume	Invert	Avail.Storage	Storage Description
#1	881.00'	143,322 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

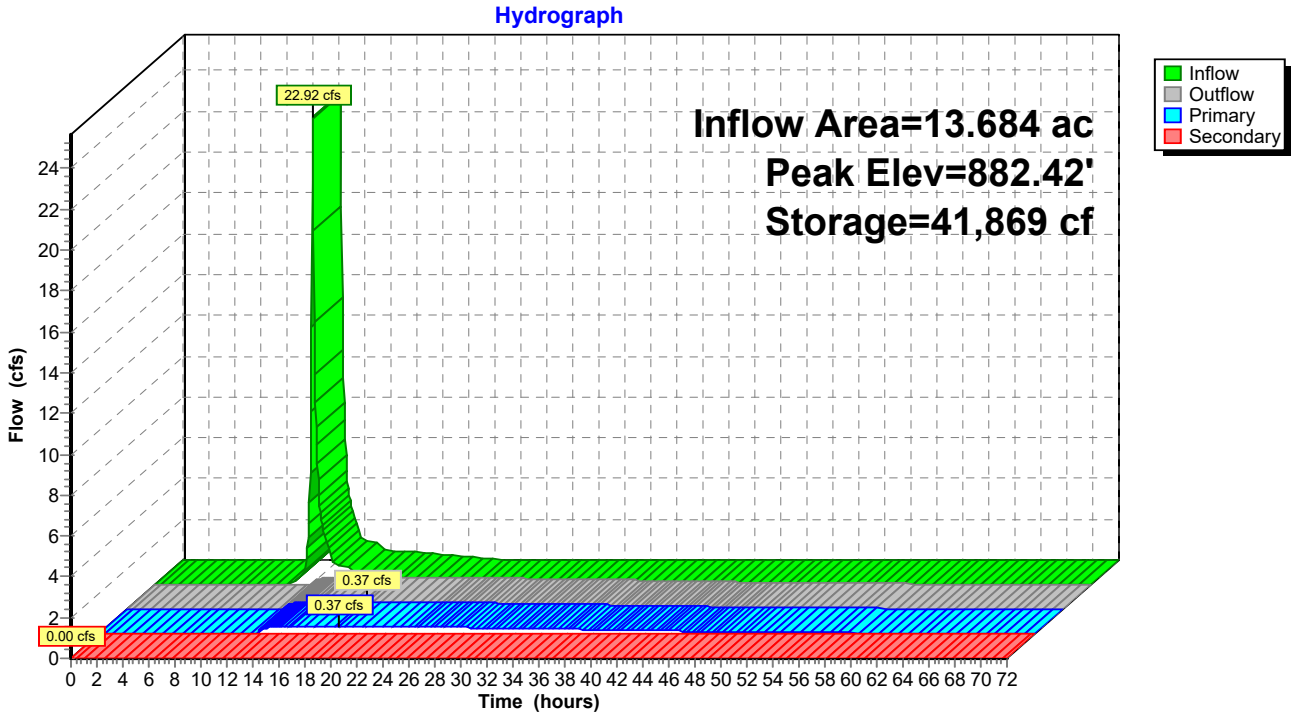
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
881.00	25,830	0	0
885.00	45,831	143,322	143,322

Device	Routing	Invert	Outlet Devices
#1	Primary	878.00'	**24.0" Round Culvert** L= 98.3' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 878.00' / 875.00' S= 0.0305 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	881.50'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	882.45'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	884.00'	**10.0' long x 8.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Primary OutFlow Max=0.37 cfs @ 18.48 hrs HW=882.42' (Free Discharge)
└**1=Culvert** (Passes 0.37 cfs of 27.99 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 0.37 cfs @ 4.19 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=881.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 7P: PROPOSED BIO-RETENTION POND

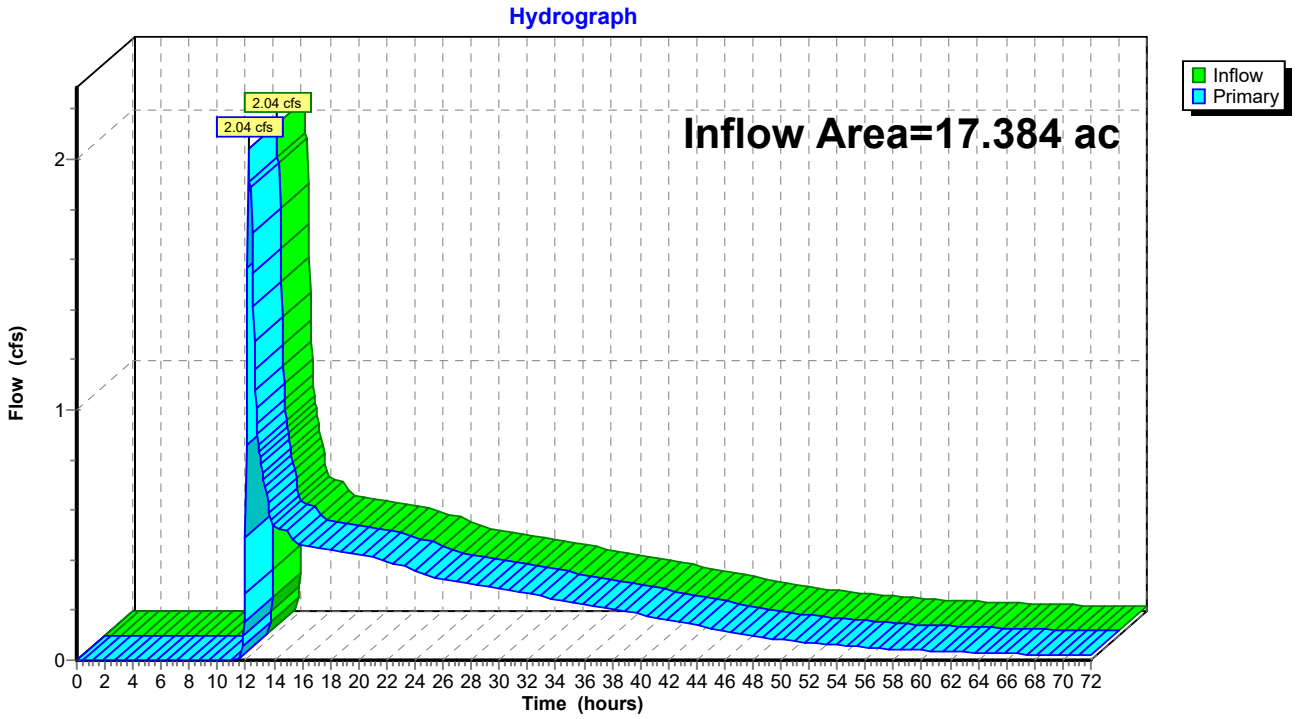


Summary for Link 8L: TOTAL SITE

Inflow Area = 17.384 ac, 22.65% Impervious, Inflow Depth > 0.73" for 2- YEAR EVENT event
Inflow = 2.04 cfs @ 12.16 hrs, Volume= 1.061 af
Primary = 2.04 cfs @ 12.16 hrs, Volume= 1.061 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 8L: TOTAL SITE



Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment6S: PROPOSED SITE Runoff Area=7.800 ac 43.72% Impervious Runoff Depth=2.21"
Tc=6.0 min CN=84 Runoff=30.63 cfs 1.439 af

Subcatchment7S: UNDETAINED GRASS Runoff Area=1.300 ac 0.00% Impervious Runoff Depth=1.47"
Tc=6.0 min CN=74 Runoff=3.41 cfs 0.159 af

Subcatchment9S: UNDETAINED Runoff Area=2.400 ac 0.00% Impervious Runoff Depth=1.21"
Flow Length=777' Tc=21.0 min CN=70 Runoff=3.00 cfs 0.242 af

Subcatchment10S: OFFSITE Runoff Area=1.624 ac 32.45% Impervious Runoff Depth=2.05"
Flow Length=1,583' Tc=24.7 min CN=82 Runoff=3.32 cfs 0.277 af

Subcatchment11S: GRASS SWALE Runoff Area=4.260 ac 0.00% Impervious Runoff Depth=1.47"
Flow Length=743' Tc=8.8 min CN=74 Runoff=9.92 cfs 0.520 af

Pond 7P: PROPOSED BIO-RETENTION Peak Elev=882.75' Storage=52,726 cf Inflow=41.53 cfs 2.236 af
Primary=7.07 cfs 1.865 af Secondary=0.00 cfs 0.000 af Outflow=7.07 cfs 1.865 af

Link 8L: TOTAL SITE Inflow=9.29 cfs 2.265 af
Primary=9.29 cfs 2.265 af

Total Runoff Area = 17.384 ac Runoff Volume = 2.637 af Average Runoff Depth = 1.82"
77.35% Pervious = 13.447 ac 22.65% Impervious = 3.937 ac

Summary for Subcatchment 6S: PROPOSED SITE

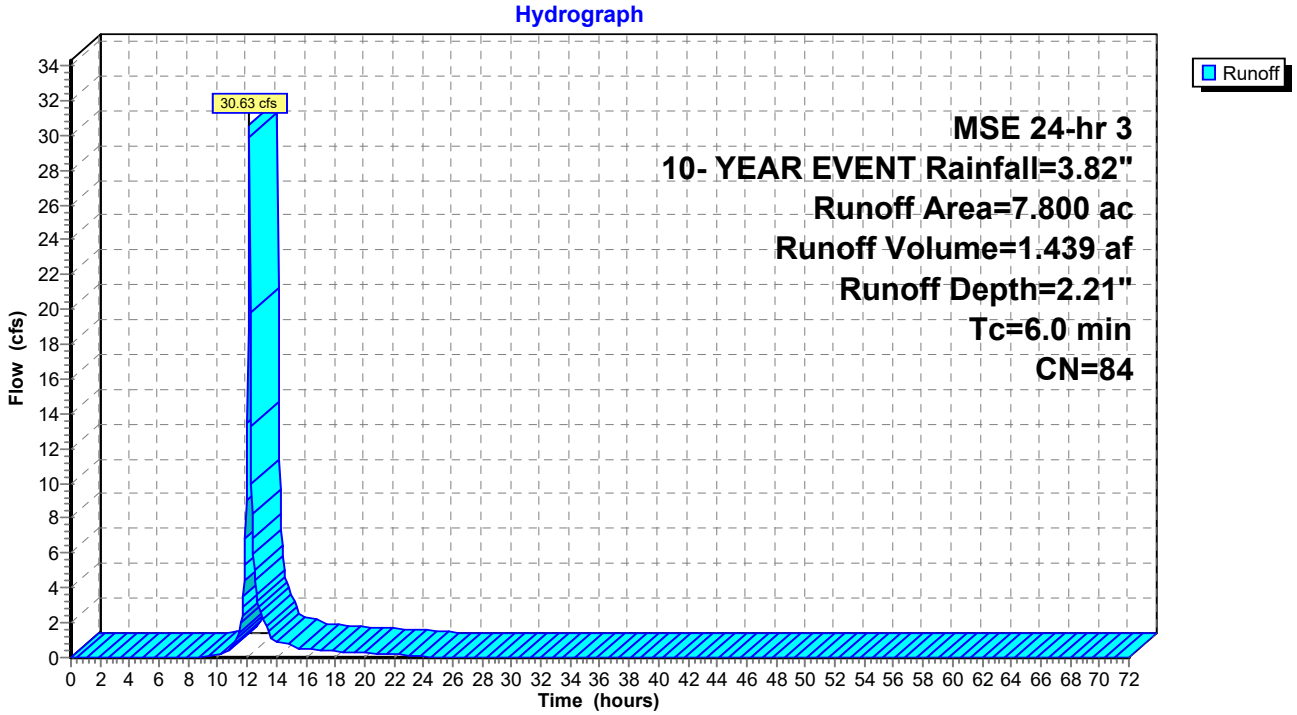
Runoff = 30.63 cfs @ 12.13 hrs, Volume= 1.439 af, Depth= 2.21"
Routed to Pond 7P : PROPOSED BIO-RETENTION POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10- YEAR EVENT Rainfall=3.82"

	Area (ac)	CN	Description
*	1.550	98	BUILDING
*	1.860	98	PAVEMENT
*	4.390	74	GRASS
	7.800	84	Weighted Average
	4.390		56.28% Pervious Area
	3.410		43.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, MINIMUM TC 6**

Subcatchment 6S: PROPOSED SITE



Summary for Subcatchment 7S: UNDETAINED GRASS

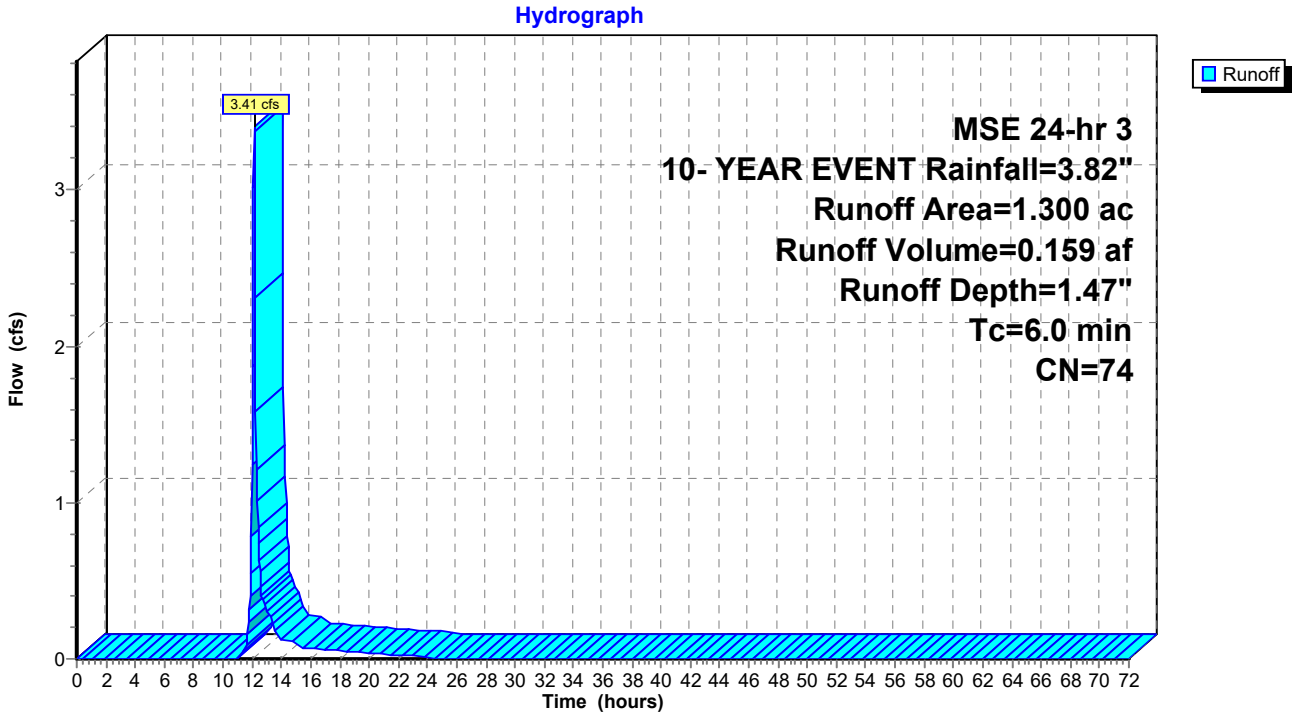
Runoff = 3.41 cfs @ 12.14 hrs, Volume= 0.159 af, Depth= 1.47"
Routed to Link 8L : TOTAL SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10- YEAR EVENT Rainfall=3.82"

	Area (ac)	CN	Description
*	1.300	74	GRASS
	1.300		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, MINIMUM TC**

Subcatchment 7S: UNDETAINED GRASS



Summary for Subcatchment 9S: UNDETAINED UNDISTURBED GRASS

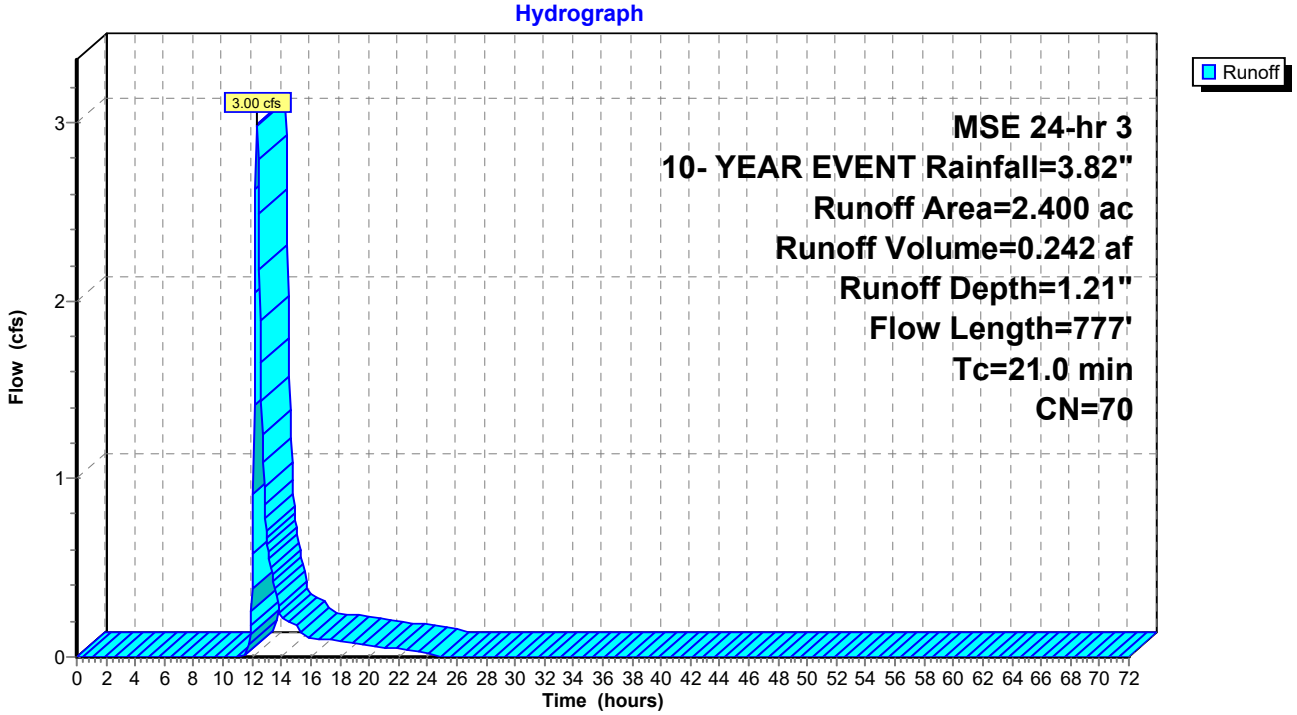
Runoff = 3.00 cfs @ 12.33 hrs, Volume= 0.242 af, Depth= 1.21"
Routed to Link 8L : TOTAL SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10- YEAR EVENT Rainfall=3.82"

	Area (ac)	CN	Description
*	2.400	70	PRE DEVELOPMENT GRASS
	2.400		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	100	0.1350	0.15		**Sheet Flow, SHEET FLOW** Woods: Light underbrush n= 0.400 P2= 2.70"
10.1	677	0.0502	1.12		**Shallow Concentrated Flow, SHALLOW FLOW** Woodland Kv= 5.0 fps
21.0	777	Total			

Subcatchment 9S: UNDETAINED UNDISTURBED GRASS



Summary for Subcatchment 10S: OFFSITE

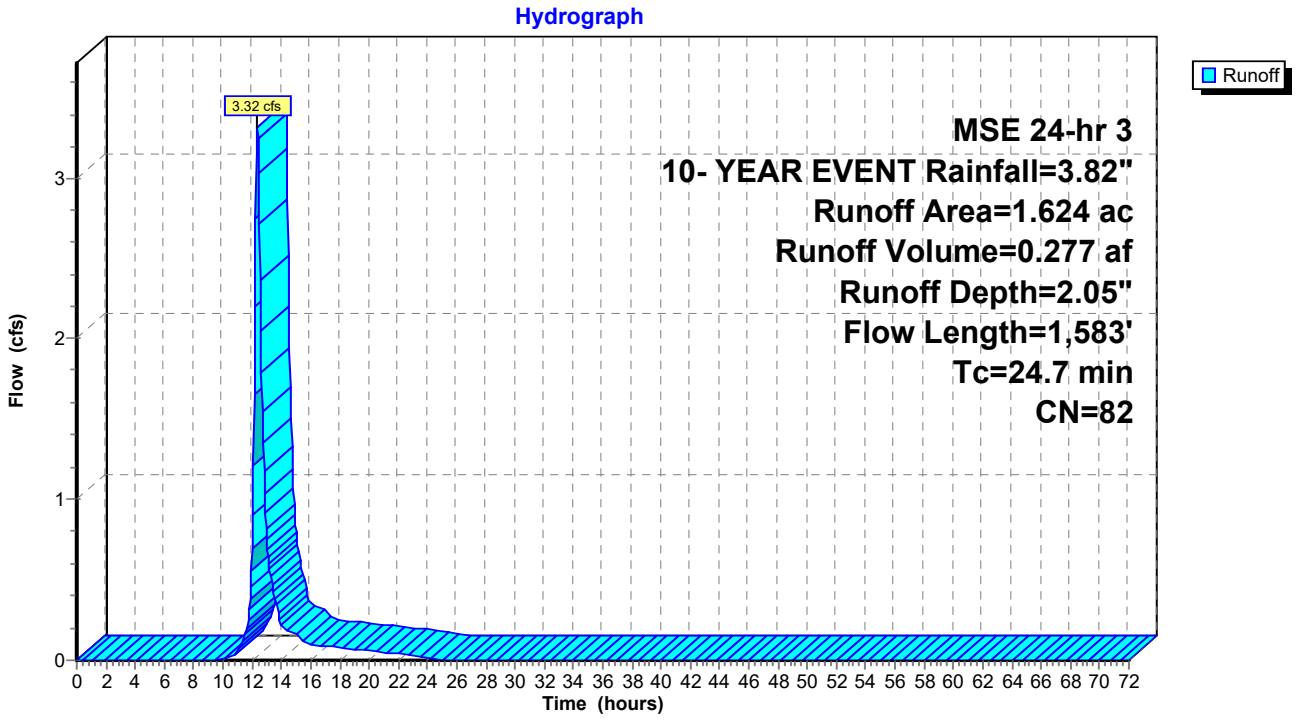
Runoff = 3.32 cfs @ 12.36 hrs, Volume= 0.277 af, Depth= 2.05"
Routed to Pond 7P : PROPOSED BIO-RETENTION POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10- YEAR EVENT Rainfall=3.82"

	Area (ac)	CN	Description
*	0.527	98	PAVEMENT
	1.097	74	>75% Grass cover, Good, HSG C
	1.624	82	Weighted Average
	1.097		67.55% Pervious Area
	0.527		32.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, SHEET FLOW** Grass: Short n= 0.150 P2= 2.70"
10.6	1,483	0.0240	2.32		**Shallow Concentrated Flow, SHALLOW CONTRATED FLOW** Grassed Waterway Kv= 15.0 fps
24.7	1,583	Total			

Subcatchment 10S: OFFSITE



Summary for Subcatchment 11S: GRASS SWALE

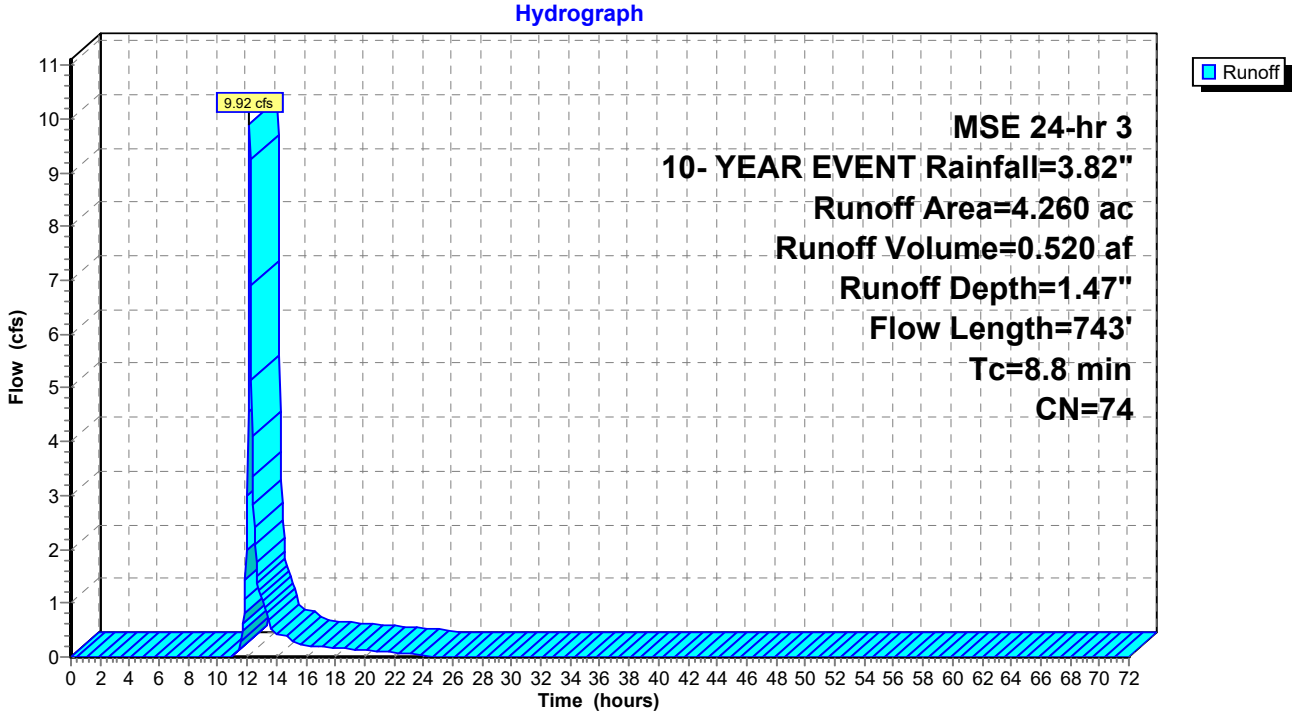
Runoff = 9.92 cfs @ 12.17 hrs, Volume= 0.520 af, Depth= 1.47"
Routed to Pond 7P : PROPOSED BIO-RETENTION POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10- YEAR EVENT Rainfall=3.82"

Area (ac)	CN	Description
4.260	74	>75% Grass cover, Good, HSG C
4.260		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	100	0.1400	0.34		**Sheet Flow, SHEET FLOW** Grass: Short n= 0.150 P2= 2.70"
3.9	643	0.0342	2.77		**Shallow Concentrated Flow, SHALLOW FLOW** Grassed Waterway Kv= 15.0 fps
8.8	743	Total			

Subcatchment 11S: GRASS SWALE



Summary for Pond 7P: PROPOSED BIO-RETENTION POND

Inflow Area = 13.684 ac, 28.77% Impervious, Inflow Depth = 1.96" for 10- YEAR EVENT event
Inflow = 41.53 cfs @ 12.14 hrs, Volume= 2.236 af
Outflow = 7.07 cfs @ 12.62 hrs, Volume= 1.865 af, Atten= 83%, Lag= 28.9 min
Primary = 7.07 cfs @ 12.62 hrs, Volume= 1.865 af
Routed to Link 8L : TOTAL SITE
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 8L : TOTAL SITE

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 882.75' @ 12.62 hrs Surf.Area= 34,561 sf Storage= 52,726 cf

Plug-Flow detention time= 593.0 min calculated for 1.865 af (83% of inflow)
Center-of-Mass det. time= 533.7 min (1,341.3 - 807.7)

Volume	Invert	Avail.Storage	Storage Description
#1	881.00'	143,322 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

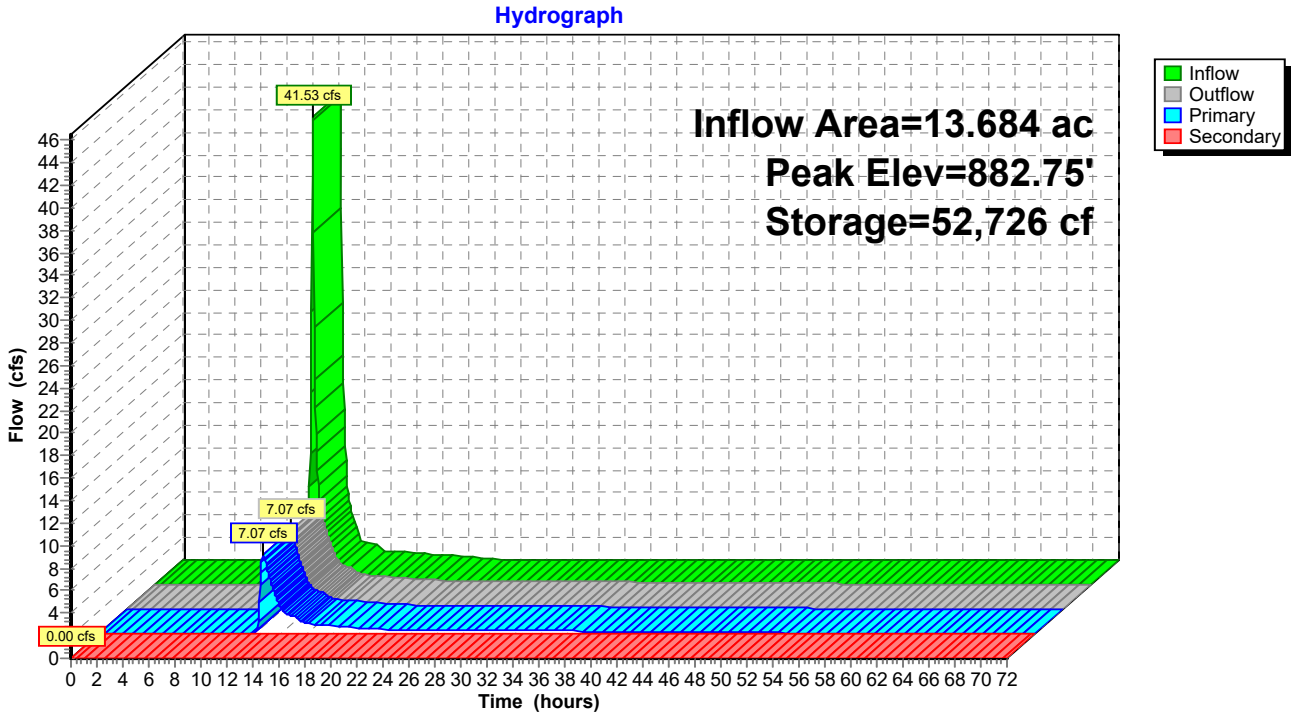
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
881.00	25,830	0	0
885.00	45,831	143,322	143,322

Device	Routing	Invert	Outlet Devices
#1	Primary	878.00'	**24.0" Round Culvert** L= 98.3' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 878.00' / 875.00' S= 0.0305 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	881.50'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	882.45'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	884.00'	**10.0' long x 8.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Primary OutFlow Max=7.03 cfs @ 12.62 hrs HW=882.75' (Free Discharge)
└**1=Culvert** (Passes 7.03 cfs of 29.27 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 0.44 cfs @ 5.00 fps)
└**3=Orifice/Grate** (Weir Controls 6.60 cfs @ 1.78 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=881.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 7P: PROPOSED BIO-RETENTION POND

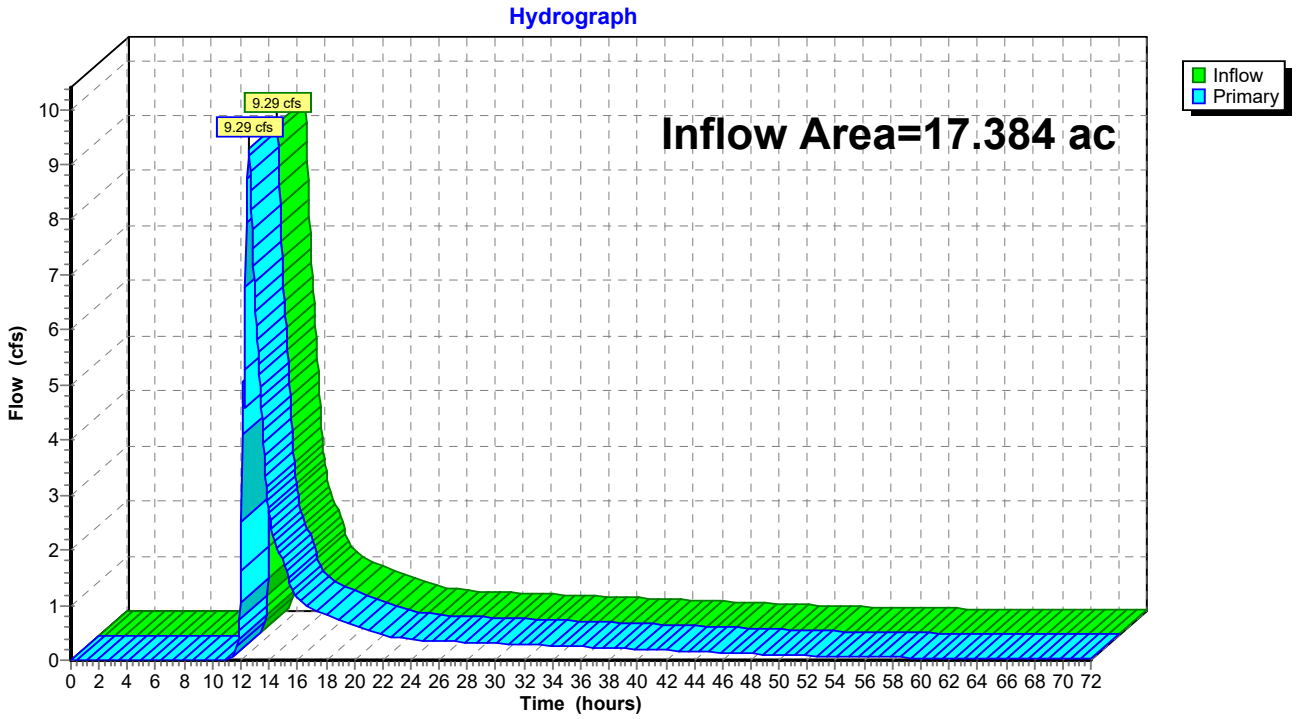


Summary for Link 8L: TOTAL SITE

Inflow Area = 17.384 ac, 22.65% Impervious, Inflow Depth > 1.56" for 10- YEAR EVENT event
Inflow = 9.29 cfs @ 12.55 hrs, Volume= 2.265 af
Primary = 9.29 cfs @ 12.55 hrs, Volume= 2.265 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 8L: TOTAL SITE



Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment6S: PROPOSED SITE Runoff Area=7.800 ac 43.72% Impervious Runoff Depth=4.39"
Tc=6.0 min CN=84 Runoff=58.91 cfs 2.856 af

Subcatchment7S: UNDETAINED GRASS Runoff Area=1.300 ac 0.00% Impervious Runoff Depth=3.36"
Tc=6.0 min CN=74 Runoff=7.80 cfs 0.364 af

Subcatchment9S: UNDETAINED Runoff Area=2.400 ac 0.00% Impervious Runoff Depth=2.97"
Flow Length=777' Tc=21.0 min CN=70 Runoff=7.74 cfs 0.595 af

Subcatchment10S: OFFSITE Runoff Area=1.624 ac 32.45% Impervious Runoff Depth=4.18"
Flow Length=1,583' Tc=24.7 min CN=82 Runoff=6.71 cfs 0.566 af

Subcatchment11S: GRASS SWALE Runoff Area=4.260 ac 0.00% Impervious Runoff Depth=3.36"
Flow Length=743' Tc=8.8 min CN=74 Runoff=22.94 cfs 1.194 af

Pond 7P: PROPOSED BIO-RETENTION Peak Elev=883.55' Storage=82,090 cf Inflow=84.17 cfs 4.615 af
Primary=32.26 cfs 4.242 af Secondary=0.00 cfs 0.000 af Outflow=32.26 cfs 4.242 af

Link 8L: TOTAL SITE Inflow=42.63 cfs 5.201 af
Primary=42.63 cfs 5.201 af

Total Runoff Area = 17.384 ac Runoff Volume = 5.574 af Average Runoff Depth = 3.85"
77.35% Pervious = 13.447 ac 22.65% Impervious = 3.937 ac

Summary for Subcatchment 6S: PROPOSED SITE

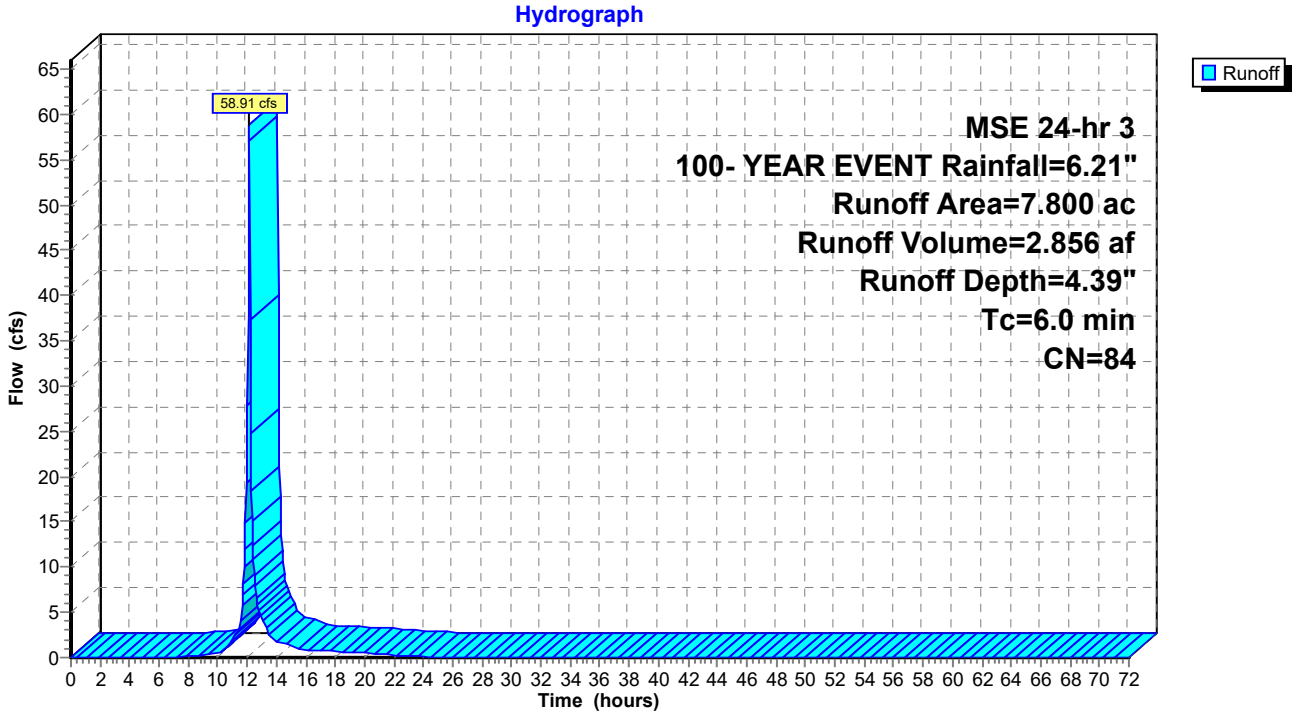
Runoff = 58.91 cfs @ 12.13 hrs, Volume= 2.856 af, Depth= 4.39"
Routed to Pond 7P : PROPOSED BIO-RETENTION POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100- YEAR EVENT Rainfall=6.21"

	Area (ac)	CN	Description
*	1.550	98	BUILDING
*	1.860	98	PAVEMENT
*	4.390	74	GRASS
	7.800	84	Weighted Average
	4.390		56.28% Pervious Area
	3.410		43.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, MINIMUM TC 6**

Subcatchment 6S: PROPOSED SITE



Summary for Subcatchment 7S: UNDETAINED GRASS

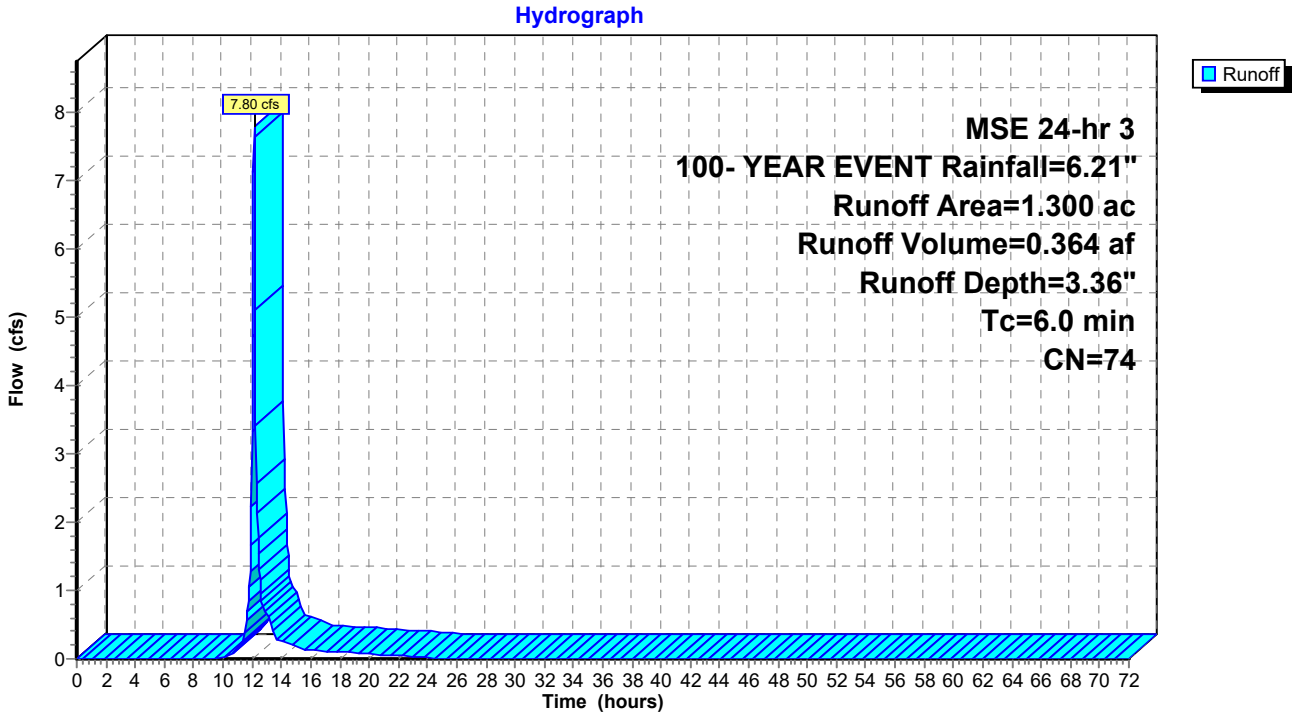
Runoff = 7.80 cfs @ 12.13 hrs, Volume= 0.364 af, Depth= 3.36"
Routed to Link 8L : TOTAL SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100- YEAR EVENT Rainfall=6.21"

	Area (ac)	CN	Description
*	1.300	74	GRASS
	1.300		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, MINIMUM TC**

Subcatchment 7S: UNDETAINED GRASS



Summary for Subcatchment 9S: UNDETAINED UNDISTURBED GRASS

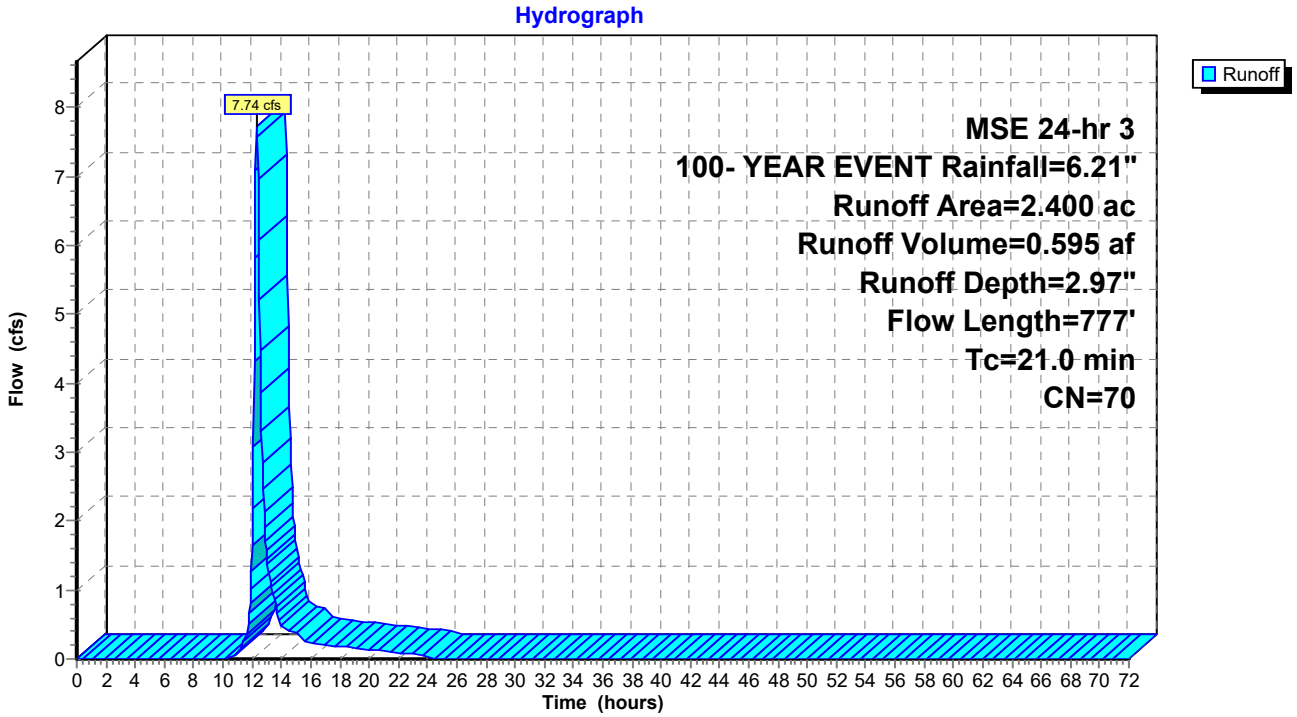
Runoff = 7.74 cfs @ 12.32 hrs, Volume= 0.595 af, Depth= 2.97"
Routed to Link 8L : TOTAL SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100- YEAR EVENT Rainfall=6.21"

	Area (ac)	CN	Description
*	2.400	70	PRE DEVELOPMENT GRASS
	2.400		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	100	0.1350	0.15		**Sheet Flow, SHEET FLOW** Woods: Light underbrush n= 0.400 P2= 2.70"
10.1	677	0.0502	1.12		**Shallow Concentrated Flow, SHALLOW FLOW** Woodland Kv= 5.0 fps
21.0	777	Total			

Subcatchment 9S: UNDETAINED UNDISTURBED GRASS



Summary for Subcatchment 10S: OFFSITE

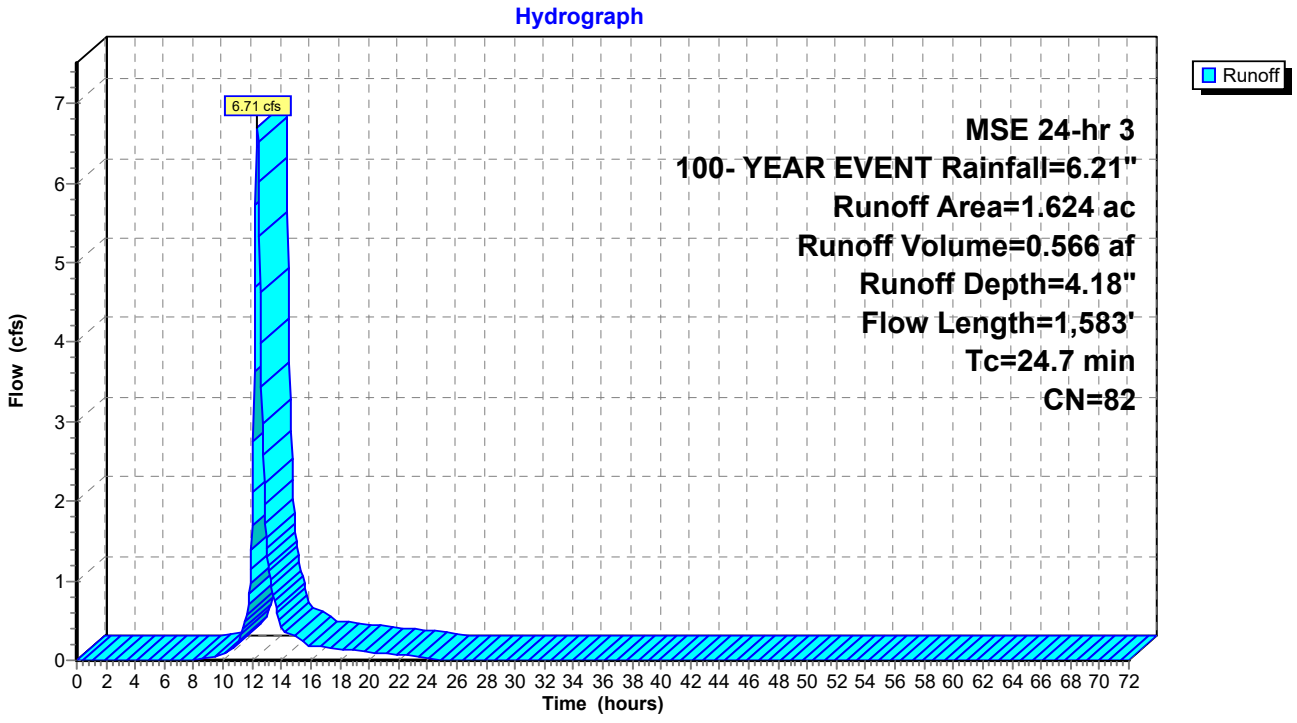
Runoff = 6.71 cfs @ 12.35 hrs, Volume= 0.566 af, Depth= 4.18"
Routed to Pond 7P : PROPOSED BIO-RETENTION POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100- YEAR EVENT Rainfall=6.21"

	Area (ac)	CN	Description
*	0.527	98	PAVEMENT
	1.097	74	>75% Grass cover, Good, HSG C
	1.624	82	Weighted Average
	1.097		67.55% Pervious Area
	0.527		32.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, SHEET FLOW** Grass: Short n= 0.150 P2= 2.70"
10.6	1,483	0.0240	2.32		**Shallow Concentrated Flow, SHALLOW CONTRATED FLOW** Grassed Waterway Kv= 15.0 fps
24.7	1,583	Total			

Subcatchment 10S: OFFSITE



Summary for Subcatchment 11S: GRASS SWALE

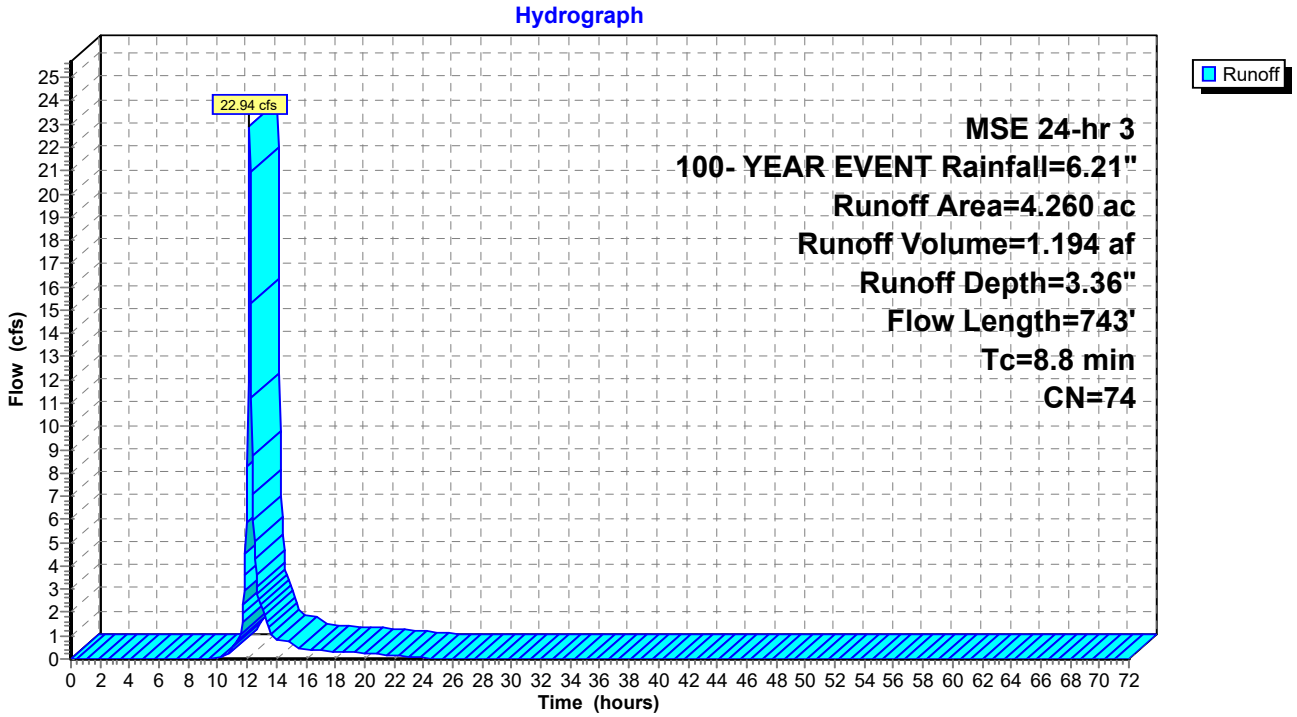
Runoff = 22.94 cfs @ 12.16 hrs, Volume= 1.194 af, Depth= 3.36"
Routed to Pond 7P : PROPOSED BIO-RETENTION POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100- YEAR EVENT Rainfall=6.21"

Area (ac)	CN	Description
4.260	74	>75% Grass cover, Good, HSG C
4.260		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	100	0.1400	0.34		**Sheet Flow, SHEET FLOW** Grass: Short n= 0.150 P2= 2.70"
3.9	643	0.0342	2.77		**Shallow Concentrated Flow, SHALLOW FLOW** Grassed Waterway Kv= 15.0 fps
8.8	743	Total			

Subcatchment 11S: GRASS SWALE



Summary for Pond 7P: PROPOSED BIO-RETENTION POND

Inflow Area = 13.684 ac, 28.77% Impervious, Inflow Depth = 4.05" for 100- YEAR EVENT event
Inflow = 84.17 cfs @ 12.14 hrs, Volume= 4.615 af
Outflow = 32.26 cfs @ 12.34 hrs, Volume= 4.242 af, Atten= 62%, Lag= 11.8 min
Primary = 32.26 cfs @ 12.34 hrs, Volume= 4.242 af
Routed to Link 8L : TOTAL SITE
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 8L : TOTAL SITE

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 883.55' @ 12.34 hrs Surf.Area= 38,576 sf Storage= 82,090 cf

Plug-Flow detention time= 293.1 min calculated for 4.239 af (92% of inflow)
Center-of-Mass det. time= 258.7 min (1,052.3 - 793.6)

Volume	Invert	Avail.Storage	Storage Description
#1	881.00'	143,322 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

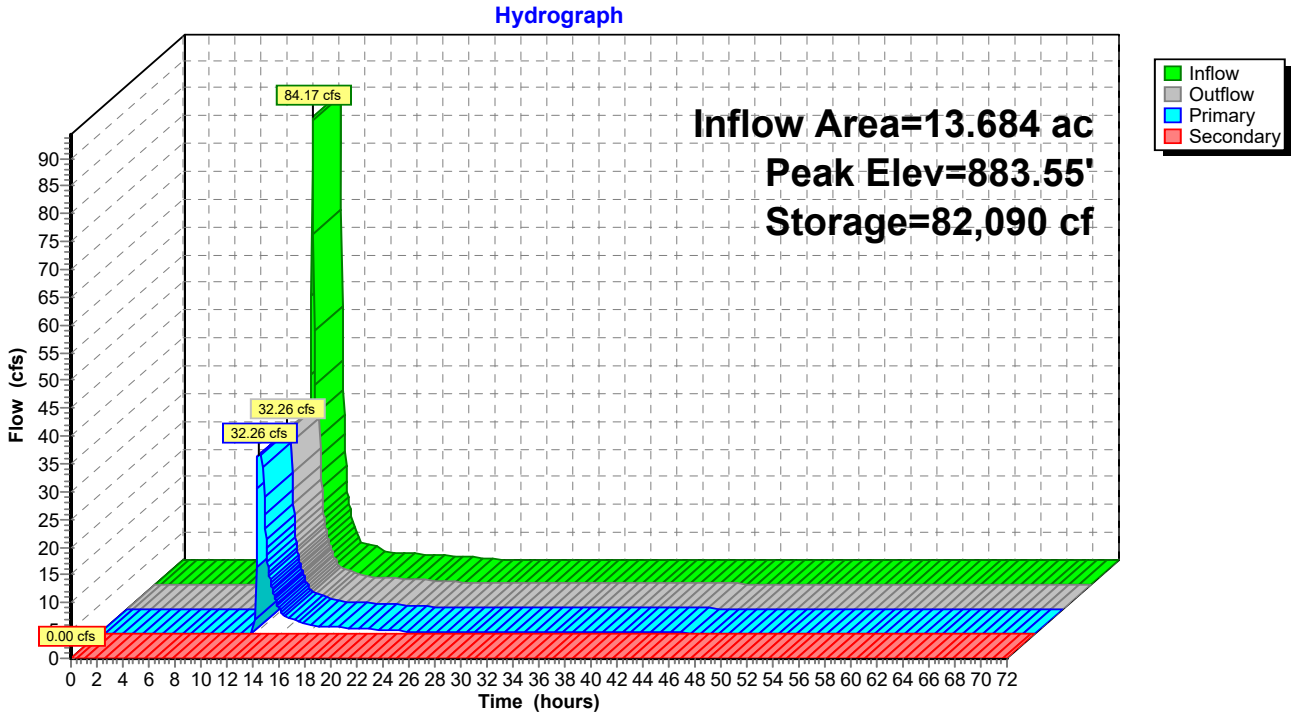
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
881.00	25,830	0	0
885.00	45,831	143,322	143,322

Device	Routing	Invert	Outlet Devices
#1	Primary	878.00'	**24.0" Round Culvert** L= 98.3' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 878.00' / 875.00' S= 0.0305 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	881.50'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	882.45'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	884.00'	**10.0' long x 8.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Primary OutFlow Max=32.25 cfs @ 12.34 hrs HW=883.55' (Free Discharge)
└**1=Culvert** (Inlet Controls 32.25 cfs @ 10.27 fps)
├**2=Orifice/Grate** (Passes < 0.58 cfs potential flow)
└**3=Orifice/Grate** (Passes < 47.20 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=881.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 7P: PROPOSED BIO-RETENTION POND

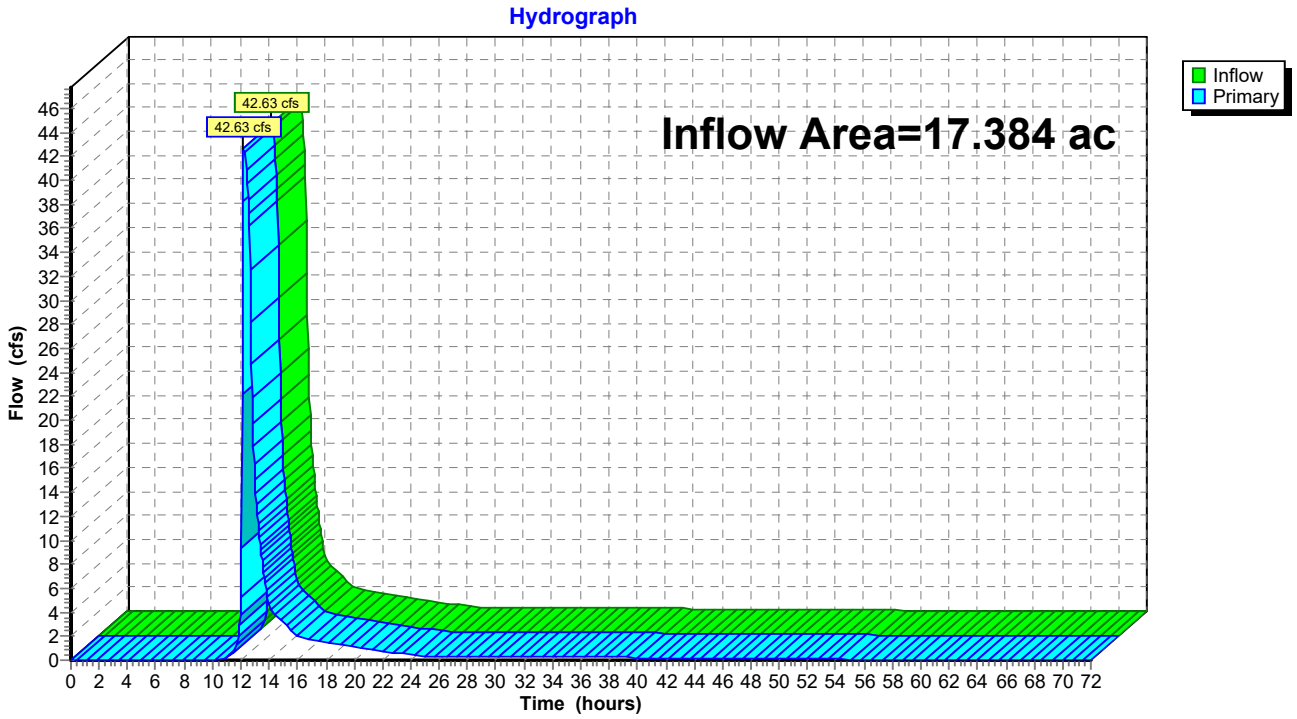


Summary for Link 8L: TOTAL SITE

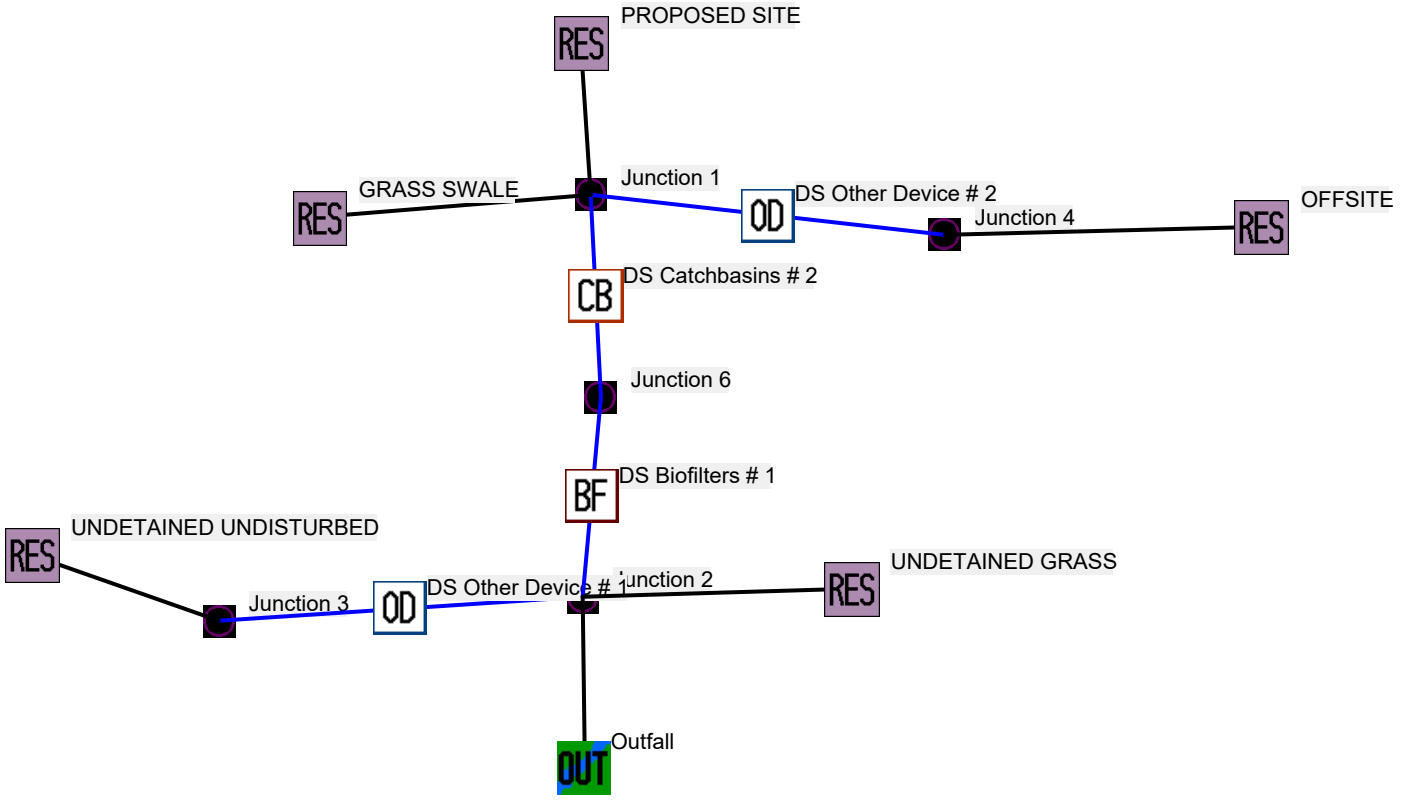
Inflow Area = 17.384 ac, 22.65% Impervious, Inflow Depth > 3.59" for 100- YEAR EVENT event
Inflow = 42.63 cfs @ 12.20 hrs, Volume= 5.201 af
Primary = 42.63 cfs @ 12.20 hrs, Volume= 5.201 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 8L: TOTAL SITE



APPENDIX 4
POST-DEVELOPMENT CONDITIONS (WATER QUALITY)


PROPOSED SITE
RES
GRASS SWALE
RES
Junction 1
OD
DS Other Device # 2
Junction 4
RES
OFFSITE
CB
DS Catchbasins # 2
Junction 6
BF
DS Biofilters # 1
UNDETAINED UNDISTURBED
RES
Junction 3
OD
DS Other Device # 1
Junction 2
RES
UNDETAINED GRASS
OUT
Outfall

Data file name: Z:\Projects\2018\1338.10-WI\DESIGN\SWMP\SLAMM\2023-01-19 winslamm.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WI Milwaukee 69.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
If Other Device Pollutant Load Reduction Values = 1, Off-site Pollutant Loads are Removed from Pollutant Load % Reduction calculations
Seed for random number generator: -42
Study period starting date: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Date: 01-25-2023 Time: 10:53:47
Site information:

LU# 1 - Residential: PROPOSED SITE Total area (ac): 7.800
  1 - Roofs 1: 1.550 ac. Pitched Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
  13 - Paved Parking 1: 1.860 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
  51 - Small Landscaped Areas 1: 4.390 ac. Normal Clayey Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Residential: GRASS SWALE Total area (ac): 4.260
  51 - Small Landscaped Areas 1: 4.260 ac. Normal Clayey Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 3 - Residential: UNDETAINED GRASS Total area (ac): 1.300
  51 - Small Landscaped Areas 1: 1.300 ac. Normal Clayey Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 4 - Residential: UNDETAINED UNDISTURBED   Total area (ac): 2.400
     51 - Small Landscaped Areas 1: 2.400 ac.   Normal Silty   Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 5 - Residential: OFFSITE   Total area (ac): 1.624
     13 - Paved Parking 1: 0.527 ac.   Connected   Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
     51 - Small Landscaped Areas 1: 1.097 ac.   Normal Silty   Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Biofilter CP# 1 (DS) - DS Biofilters # 1
1. Top area (square feet) = 45831
2. Bottom aea (square feet) = 25830
3. Depth (ft): 7
4. Biofilter width (ft) - for Cost Purposes Only: 10
5. Infiltration rate (in/hr) = 0.04
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 0.001
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 1.5
10. Porosity of rock filled volume = 0.35
11. Engineered soil infiltration rate: 3.6
12. Engineered soil depth (ft) = 1.5
13. Engineered soil porosity = 0.4
14. Percent solids reduction due to flow through engineered soil = 80
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil
User-Defined Soil Type 1.000

Biofilter Outlet/Discharge Characteristics:
Outlet type: Broad Crested Weir
1. Weir crest length (ft): 10
2. Weir crest width (ft): 8
3. Height of datum to bottom of weir opening: 6
Outlet type: Vertical Stand Pipe
1. Stand pipe diameter (ft): 4
2. Stand pipe height above datum (ft): 5
Outlet type: Surface Discharge Pipe
1. Surface discharge pipe outlet diameter (ft): 0.33
2. Pipe invert elevation above datum (ft): 3.5
3. Number of surface pipe outlets: 1
Outlet type: Drain Tile/Underdrain
1. Underdrain outlet diameter (ft): 0.33
2. Invert elevation above datum (ft): 0

3. Number of underdrain outlets: 1

Control Practice 2: Other Device CP# 1 (DS) - DS Other Device # 1
Fraction of drainage area served by device (ac) = 1.00
Particulate Concentration reduction fraction = 1.00
Filterable Concentration reduction fraction = 1.00
Runoff volume reduction fraction = 0

Control Practice 3: Other Device CP# 2 (DS) - DS Other Device # 2
Fraction of drainage area served by device (ac) = 1.00
Particulate Concentration reduction fraction = 1.00
Filterable Concentration reduction fraction = 1.00
Runoff volume reduction fraction = 0

Control Practice 4: Catchbasin Cleaning CP# 1 (DS) - DS Catchbasins # 2
1. Fraction of area served by catchbasins = 1.00
2. Number of catchbasins = 4
3. Average sump depth below catchbasin outlet invert (feet) = 2
4. Depth of sediment in catchbasin sump at beginning of study period (ft) = 0
5. Typical outlet pipe diameter (ft) = 1
6. Typical outlet pipe Mannings n = 0.012
7. Typical outlet pipe slope (ft/ft) = 0.005
8. Typical catchbasin sump surface area (square feet) = 12.6
9. Total catchbasin depth (feet) = 6
10. Inflow hydrograph peak to average flow ratio = 3.8
11. Leakage rate through sump bottom (in/hr) = 0
12. Catchbasin Critical Particle Size File Name: Not needed - calculated by program
13. Catchbasin cleaning frequency: Annually

SLAMM for Windows Version 10.4.1
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Data file name: Z:\Projects\2018\1338.10-WI\DESIGN\SWMP\SLAMM\2023-01-19 winslamm.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WI Milwaukee 69.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
If Other Device Pollutant Load Reduction Values = 1, Off-site Pollutant Loads are Removed from Pollutant Load % Reduction calculations
Seed for random number generator: -42
Study period starting date: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Model Run Start Date: 01/05/69 Model Run End Date: 12/31/69
Date of run: 01-25-2023 Time of run: 10:51:37
Total Area Modeled (acres): 17.384
Years in Model Run: 0.99

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	426764	-	96.38	2568	-
Outfall Total with Controls:	338311	20.73%	22.76	480.7	81.28%
Annualized Total After Outfall Controls:	343010			487.4	

APPENDIX 5
GEOTECH AND WETLAND REPORT

CGC, Inc.
Construction • Geotechnical
Consulting Engineering/Testing

July 2, 2019
CM19076

Mr. Jim Forester
1520 LLC
1405 Capitol Drive
Pewaukee, WI 53072

Re: Stormwater Evaluation
Proposed Golf Road Development
NWC Golf Road and Meadowbrook Road
Pewaukee, Wisconsin

Dear Mr. Forester:

Construction • Geotechnical Consultants, Inc. (CGC) has completed the subsurface exploration for the proposed Golf Road development at the above-noted property in Pewaukee, Wisconsin. The purpose of this exploration was to evaluate the subsurface conditions across the site and to provide recommendations regarding the infiltration properties of the soils on the property. An electronic copy of this report is provided for your use. An additional electronic copy was forwarded to Mr. Tony Zanon with Pinnacle Engineering Group (Pinnacle).

PROJECT DESCRIPTION

The subject site is located at the northwest corner of the intersection of Golf Road (CTH DR) and Meadowbrook Road (CTH G), in the City of Pewaukee, Wisconsin. We understand the overall project will consist of construction of sixteen (16) 2- to 4-unit buildings, a community building (42 beds) and a clubhouse with associated roadways, drive lanes and surface parking lots. In addition, the development is proposed to contain three (3) stormwater management basins along the northern edges of the site. Details regarding the infiltration basins, including bottom elevations, was not known at the time of this report. The scope of services for this report was to evaluate the soils at the planned three (3) stormwater management basins for infiltration purposes. In addition, in accordance with the request of the City of Pewaukee, an evaluation of the infiltration characteristics across the overall site for possible additional infiltration areas was performed.

Existing site grades across the property slope from the southwest corner of the property (between about EL 925 to 930 ft) down to the north/northeast to about EL 860 ft in the northeast portion of the property (within an existing wetland area). The site is generally much lower in elevation than Golf Road to the south and Meadowbrook Road to the east, but generally level with the neighboring residential properties located to the west. Based on information provided by Pinnacle, the ground surface elevations at the soil boring locations within the currently planned stormwater management basins (Borings 1 through 6) range between EL 874.0 to 878.3 ft. The ground surface elevations at the remaining borings range between EL 883.9 to 887.0 ft at Borings 7 through 11 (drilled within the

336 S. Curtis Road
West Allis, WI 53214
Telephone: 414/443-2000
FAX: 414/443-2099

central portion of the site) and between EL 902.1 and 929.6 ft at Borings 12 through 17 (drilled in the higher elevation southwest portion of the site).

EXPLORATION PROGRAM

A. Exploration Program

Seventeen (17) Standard Penetration Test (SPT) soil borings were drilled for this exploration to depths ranging from about 2.5 to 12 ft below existing site grades. The borings were drilled at locations staked in the field by Pinnacle Engineering Group (Pinnacle). The borings were scheduled to be drilled to depths ranging from 10 to 18 ft below existing site grades; however, only Borings 15 through 17, drilled in the higher elevation southwest portion of the site, were drilled to the planned depth of 12 ft. Borings 1 through 14 were terminated shallower than planned, at depths ranging from 2.5 to 10 ft, due to auger refusal on probable bedrock. The borings were drilled on May 20, 2019 by GeoServe, Inc (under subcontract to CGC, Inc.) using an all-terrain vehicle (ATV) mounted Geoprobe drill rig equipped with hollow-stem augers and an automatic SPT hammer. The ground surface elevations were provided by Pinnacle. Specific procedures used for drilling and sampling within the borings are described in Appendix A. The approximate boring locations are shown in plan on the Soil Boring Location Map enclosed in Appendix B.

Representative samples of the subsoils were collected during the field exploration for classification and laboratory testing. The soils were classified by a geotechnical engineer using the Unified Soil Classification System (USCS), and in accordance with the descriptive procedures, terminology and interpretations presented by the *USDA - NRCS Field Book for Describing and Sampling Soils* (version 2.0, dated September 2002). Pocket penetrometer readings were obtained on intact cohesive samples recovered during the exploration, where appropriate, to aid in the evaluation of their shear strength properties. Natural moisture content determination testing was completed on representative samples of the clayey soils. In addition, five (5) grain-size tests to determine the percentage of fine soil particles (i.e., silt and clay) passing the No. 200 sieve (P-200) were performed on representative samples of the more granular soils encountered in the southwest portion of the site (Borings 12, 13, 14, 16 and 17). Laboratory test results are presented on the individual logs. The final logs and Soil and Site Evaluation-Storm form prepared by the engineer per the USCS and USDA procedures are presented in Appendices B and C, respectively.

SITE CONDITIONS

A. Surface Conditions

The proposed development area is depicted on the Soil Boring Location Map attached in Appendix B. Neighboring properties include residences to the west, a bike/pedestrian trail to the

north, Meadowbrook Road to the east and Golf Road to the south. The site is currently vacant and overall heavily wooded, with the exception of an existing wetland area located to the north/northeast portion of the site. Based on review of topography information obtained from the Waukesha County GIS Mapping website and spot grades at the test boring locations, provided by Pinnacle, the site grades slope from the southwest corner of the site (between about EL 925 to 930 ft) down to the northern portion of the planned development area (between about EL 874 to 878 ft).

A review of historical aerial photographs, dated between 1941 and 2017, was performed using the Waukesha County GIS Mapping System and Google Earth to assist in establishing the past history of the site. Based on that review, the site appears to have been undeveloped and vacant throughout that time period. However, in the 1941 through 1963 aerial photographs, a possible gravel pit area is evident in the southwestern corner of the site. Between 1970 and 2000 the possible gravel pit area appears to have grown over with vegetation. However, in 2005, the possible gravel pit area appears to have been cleared, and generally remained that way through the 2017 aerial photograph.

B. Regional Geology

Pedological mapping of the project area obtained from the USDA Web *Soil Survey for Milwaukee and Waukesha Counties, Wisconsin* is shown on the Soil Survey Map included in Appendix B. Surficial soil deposits (i.e., upper 5± ft) vary across the project site within the planned development areas. Soils within the development areas in the central and northern portions of the site consist of Hochheim loam (HmB), Knowles silt loam (KwB), Lamartine silt loam (LmB) and Theresa silt loam (ThB) and are generally described as silt loam, loam, clay loam, sandy clay loam and/or gravelly clay loam soils which are underlain by loam, sandy loam, gravelly loam, gravelly sandy loam and/or loam. An exception was within the Knowles silt loam area where bedrock is indicated to be at depths of about 27 to 31 in.

Soils within the development areas in the west-central and southwest portions of the site consist of Casco loam (CeB and CeC2), Fox silt loam (FsB), Hochheim loam (HmD2) and Loamy land (Lu) with a small area indicated as Gravel pit (GP) along the west property line. These soils are generally described as loam, clay loam, silt loam, silty clay loam soils to depths of about 15 to 31 in., underlain by very gravelly to extremely gravelly coarse sand, stratified sand to gravel and/or gravelly loam.

The following Table 1 presents a summary of the properties of the predominant Casco, Fox, Hochheim, Knowles, Lamartine and Theresa soil series mapped within the planned development limits.

Table 1
Summary of Soil Series

Soil Name	Drainage Characteristics	Description	Depth to Seasonally High-Water Table (in)
Casco loam (CeB, CeC2)	Somewhat excessively drained	Loamy alluvium over calcareous, stratified sand and gravelly outwash	>72
Fox silt loam (FsB)	Well-drained	Loess over loamy till glaciofluvial deposits over sandy and gravelly outwash	>72
Hochheim loam (HmB, HmC2 and HmD2)	Well-drained	Loamy till over calcareous, dense loamy till	>72
Knowles silt loam (KwB)	Well-drained	Loess over loamy till over dolomite bedrock	>72
Lamartine silt loam (LmB)	Somewhat poorly-drained	Loess over loamy till	20 (Dec. through May)
Theresa silt loam (ThB)	Well-drained	Thin loess over calcareous, dense loamy till	>72

Note: Reference - USDA Soil Conservation Service Web *Soil Survey of Milwaukee and Waukesha Counties, Wisconsin.*

C. Subsurface Conditions

With few exceptions, the exploration program completed on the subject site reveals a somewhat variable soil profile beneath roughly the northern and southern portions of the site. A summary of the conditions encountered in the borings performed in the northern portion of the site and those encountered in the southern portion of the site are included as follows:

Northern Borings (Borings 1 through 11):

- Surface materials consist of about 9 to 14 in. of ***topsoil*** consisting of dark brown to black organic clay; underlain by
- Natural ***lean clay*** generally with trace sand and gravel extending to depths ranging from about 2 ft to 4.5 ft; underlain by
- Possible ***weathered bedrock*** extending to depths of about 2.5 to 6.5 ft, where auger refusal on probable ***bedrock*** was encountered.

Exceptions to the above-described generalized soil conditions were encountered as follows:

- Natural lean clay soils were not encountered at Boring 4, where the surficial 9 in. of topsoil was underlain by possible weathered bedrock.

- Natural ***clayey silt*** with variable organic materials were encountered below the surface topsoil at Borings 5 and 6 to depths of about 2.5 and 2 ft, respectively.

- Natural ***sandy clay*** with trace gravel was encountered at Boring 9 between depths of about 3 to 4.5 ft.

- Natural ***sandy clayey silt*** with some gravel was encountered at Boring 10 between depths of about 3 to 6 ft.

Southern Borings (Borings 12 through 17):

- Surface materials consist of about 8 to 14 in. of ***topsoil*** consisting of dark brown to black organic clay; underlain by

- Natural ***lean clay to silty clay*** generally with trace to some sand and gravel extending to depths ranging from about 2 ft to 6 ft; underlain by

- Natural ***clayey silt*** with some sand and gravel to depths ranging from about 6.5 to at least 12 ft at Borings 12, 14 and 15 or natural ***fine to coarse sand to sand gravel*** to depths of about 6.5 ft at Boring 13 to 12 ft, the maximum depth explored, at Borings 16 and 17; underlain by

- ***Weathered bedrock*** extending to a depth of about 9 ft, the maximum depth explored, at Boring 13 or probable bedrock at depths of about 10 and 10.5 ft at Borings 12 and 14, respectively, where auger refusal was encountered.

Exceptions to the above-described generalized soil conditions were encountered as follows:

- Natural lean clay to silty clay soils were not encountered at Boring 16.

- The silty clay soils observed to a depth of about 3 ft underlain by the sand and gravel soils to a depth of about 5 ft at Boring 17 were classified as ***possible fill***.

The encountered cohesive ***natural lean clay, silty clay to clayey silt*** soils exhibited unconfined compressive strengths (as measured with a hand penetrometer) ranging from 0.5 to 2.5 tons per square foot (tsf) which corresponds to a medium stiff to very stiff consistency. Natural moisture

testing performed on representative samples of the natural clayey soils indicated the natural moisture contents range between about 5 to 37 percent (typically 21 to 33 percent). The natural ***sand to sand gravel*** soils exhibited SPT N-values ranging from 8 to 39 blows per foot (bpf) which corresponds to a loose to dense condition. The possible weathered bedrock materials exhibited SPT N-values ranging from 40 to 89 bpf which corresponds to dense to very dense conditions. Auger refusal at Borings 1 through 14 was encountered at depths ranging from 2.5 to 10.5 ft, which corresponds to between about EL 870 to 896.1 ft.

The results of the P200 testing on representative samples collected from the granular soil layers encountered in Borings 12 (6.5 to 8 ft), 13 (5.5 to 7.5 ft), 14 (2 to 6 ft) and 17 (5 to 12 ft) indicated the soils had fines (i.e., silt and clay particles) contents ranging from 1.9 to 17.7 percent. The results of the P200 testing on the sand and gravel sample from Boring 16 (3.5 to 5 ft) indicated the sample had no fines content (P200 = 0 percent). Results of the laboratory testing program are presented on the logs in Appendix B.

D. Groundwater Conditions

Free groundwater was encountered within Borings 9, 13 and 14 ft at depths ranging from about 4.5 to 6.5 ft below existing site grade during the drilling operations; however, no free water was encountered upon completion of drilling. No free water was encountered within the remaining borings either during or upon completion of drilling. We anticipate the water encountered at Borings 9, 13 and 14 represents perched water above and/or within the possible weathered bedrock/bedrock surface. Based on the general lack of free water and soil coloration, we anticipate the long-term water table was at depths greater than those explored at the boring locations. However, considering the presence of the wetland area in the northerly portion of the site and the relatively shallow depth to bedrock, we anticipate the lower elevations portions of the site are subject to relatively shallow and/or ponded water conditions at least seasonally. Groundwater levels can be expected to fluctuate based on seasonal variations in precipitation, infiltration, evapotranspiration, and other factors.

More detailed information regarding the subsurface and groundwater conditions is presented on the soil boring logs contained in Appendix B.

SITE EVALUATION AND RECOMMENDATIONS

A. Stormwater Design Considerations

Based on the variable conditions encountered in the northern and southern portions of the site, a discussion of the infiltration characteristics encountered in each area are provided in the following paragraphs.

1. Northern Area (Borings 1 through 11)

The soils encountered in Borings 1 through 11 consist of predominantly silty clay, silty clay loam, sandy clay and sandy clay loam extending to depths ranging from about 9 to 72 inches where weathered bedrock and/or sound bedrock was encountered. It is our opinion that the silty clay, silty clay loam, sandy clay and sandy clay loam soils encountered in the areas of Borings 1 through 11 have a very limited capacity for infiltration of stormwater through the use of infiltration devices. Therefore, based on the soil classifications at Borings 1 through 11 and guidelines in the current Wisconsin DNR *Technical Standard* 1002, this area of the site should be eligible for *exemption* under Chapter NR 151 Wis. Adm. Code guidelines, in our opinion.

Should infiltration be performed in the lower elevation northern portion of the site, the following parameters should be considered for design of infiltration features in the area of Borings 1 through 11:

Infiltration Potential: The following infiltration parameters were estimated using Table 2 of the WDNR Conservation Practice Standard 1002, *Site Evaluation for Storm Water Infiltration*. The estimated infiltration rates are as follows:

- Silty clay loam (SiCL) 0.04 in./hr.
- Sandy clay (SC) 0.04 in/hr.
- Silty clay (SIC) 0.07 in./hr.
- Sandy clay loam (SCL) 0.11 in/hr.

Note that the infiltration rates should be considered approximate since they are merely based on soil texture and do not account for in-place soil density and other factors, which will affect the infiltration rate.

Groundwater: Groundwater was encountered in Boring 9 at a depth of about 4.5 ft while drilling and is anticipated to represent perched water above the anticipated bedrock surface, encountered at a depth of about 5 ft. The long-term groundwater table is estimated to be below the depths explored, however, the lower elevation areas of the site are considered to be susceptible to a relatively shallow water table considering the shallow bedrock depths and the adjacent wetland area. Groundwater levels should be expected to fluctuate, as previously discussed.

Bedrock: Auger refusal on probable bedrock was encountered within Borings 1 through 11 at depths ranging from about 2.5 to 6.5 ft.

2. Southern Area (Borings 12 through 17)

The soils encountered in Borings 12 through 17 consist of a combination of silty clay, silty clay loam, sandy clay loam and sandy loam extending to depths ranging from about 10 to at least 12 ft at Borings 12 and 15, respectively, and to depths ranging from about 2 to 6 ft at Borings 13, 14, 16 and 17. Below depths of about 2 to 6 ft at Borings 13, 14, 16 and 17, sand, gravelly sand and gravelly to very gravelly loamy sand was encountered at Boring 13 to a depth of about 6.5 ft, at Boring 14 to a depth of about 6 ft, and at Borings 16 and 17 to at least a depth of 12 ft, the maximum depth explored. Weathered and/or sound bedrock was encountered at Borings 12 through 14 at depths ranging from about 9 to 10.5 ft. It is our opinion that the sand, gravelly sand and gravelly to very gravelly loamy sand soils encountered at Borings 13, 14, 16 and 17 have a high potential for infiltration. The silty clay, silty clay loam, sandy clay loam and sandy loam soils encountered at Borings 12 and 15 are considered to have a lower limited capacity for infiltration of stormwater through the use of infiltration devices

Therefore, we recommend the following parameters be considered for design of infiltration features in the area of Borings 12 through 17:

Infiltration Potential: The following infiltration parameters were estimated using Table 2 of the WDNR Conservation Practice Standard 1002, *Site Evaluation for Storm Water Infiltration*. The estimated infiltration rates are as follows:

- Silty clay loam (SiCL) 0.04 in./hr.
- Silty clay (SIC) 0.07 in./hr.
- Sandy clay loam (SCL) 0.11 in/hr.
- Sandy loam (SL) 0.50 in/hr.
- Loamy sand (LS) 1.63 in/hr.
- Sand (S) 3.60 in/hr.

Note that the infiltration rates should be considered approximate since they are merely based on soil texture and do not account for in-place soil density and other factors, which will affect the infiltration rate.

Groundwater: Groundwater was encountered in Borings 13 and 14 at a depth of about 6.5 ft while drilling and is anticipated to represent perched water above the anticipated weathered bedrock/bedrock surface, encountered at depths of about 6.5 to 10.5 ft. The long-term groundwater table at Borings 15 through 17 is estimated to be below the depth explored of 12 ft. Groundwater levels should be expected to fluctuate, as previously discussed.

Bedrock: Auger refusal on probable bedrock was encountered within Borings 12 through 14 at depths ranging from about 9 to 10.5 ft. No bedrock was encountered within Borings 15 through 17 to the maximum depth of the borings, 12 ft.

During construction of the proposed buildings and related site work, appropriate erosion control measures should be provided to prevent eroded soil from contaminating potential infiltration areas. Where appropriate, basin design should include pretreatment to remove fine-grained soils (silt/clay) from stormwater prior to entering the infiltration area(s). Additionally, a regular maintenance plan should be developed to remove silt/clay soils that may accumulate in the bottom of the basins over time. Failure to adequately control fine-grained soils from entering the infiltration area(s) or failure to regularly remove fine-grained soils that accumulate at the base of the basins will likely cause the basin to fail. Refer to WDNR Conservation Practice Standard 1002 and NR 151 for additional information.

The Soil and Site Evaluation-Storm form prepared by the Certified Soil Tester per USDA procedures is presented in Appendix C.

* * * * *

It has been a pleasure to serve you on this project. We trust this information is satisfactory for preliminary assessment of the site and for general planning purposes. Additional information regarding the recommendations presented in this report are discussed in Appendix D. If you have any questions or need additional consultation, please contact us.

Sincerely,

CGC, Inc.

Paul J. Giese, P.E., C.S.T.
Consulting Professional

Nathan I. Springstead, P.E., C.S.T.
Project Engineer

Encl: Appendix A - Field Exploration
Appendix B - Soil Survey Map
Soil Boring Location Map
Logs of Test Borings (17)
Log of Test Boring - General Notes
Unified Soil Classification System
Appendix C - Soil and Site Evaluation - Storm Form (Borings 1 through 17)
Appendix D - Document Qualifications

cc: Mr. Tony Zanon (Pinnacle Engineering Group)

APPENDIX A

FIELD EXPLORATION

APPENDIX A

FIELD EXPLORATION

Seventeen (17) Standard Penetration Test (SPT) soil borings were drilled for this exploration to depths ranging from about 2.5 to 12ft below existing site grades. The borings were drilled at locations staked in the field by Pinnacle Engineering Group (Pinnacle). The borings were scheduled to be drilled to depths ranging from 10 to 18 ft below existing site grades; however, the majority of the borings were terminated at shallower depths than planned due to auger refusal on possible bedrock. The borings were drilled on May 20, 2019 by GeoServe, Inc (under subcontract to CGC, Inc.) using an all-terrain vehicle (ATV) mounted Geoprobe drill rig equipped with hollow-stem augers and an automatic SPT hammer. The ground surface elevations were provided by Pinnacle. The approximate boring locations are shown in plan on the Soil Boring Location Map enclosed in Appendix B.

Soil samples were obtained at 2.5-foot intervals to the boring termination depths. The soil samples were obtained in general accordance with specifications for standard penetration testing, ASTM D 1586. The specific procedures used for drilling and sampling are described below.

1. Boring Procedures between Samples

   The boring is extended downward, between samples, by a hollow-stem auger.

2. Standard Penetration Test and Split-Barrel Sampling of Soils
   (ASTM Designation: D 1586)

   This method consists of driving a 2-inch outside diameter split-barrel sampler using a 140-pound weight falling freely through a distance of 30 inches. The sampler is first seated 6 inches into the material to be sampled and then driven 12 inches. The number of blows required to drive the sampler the final 12 inches is recorded on the log of borings and is known as the Standard Penetration Resistance.

During the field exploration, the driller visually classified the soil and prepared a field log. *Field screening of the soil samples for possible environmental contaminants was not conducted by the drillers as environmental site assessment activities were not part of CGC's work scope.* Water level observations were made in each boring during and after drilling and are shown at the bottom of each boring log. Upon completion of drilling, the borings were backfilled with bentonite (where required) to satisfy WDNR regulations. The soil samples were delivered to our laboratory for visual classification and laboratory testing. The soil samples were visually classified by a geotechnical engineer/certified soil tester (CST) using the Unified Soil Classification System (USCS) and the United States Department of Agriculture (USDA) classification system. The final logs prepared by the engineer/CST and a description of the Unified Soil Classification System are presented in Appendix B and the Soil and Site Evaluation – Storm Form is enclosed in Appendix C.

APPENDIX B

SOIL SURVEY MAP
SOIL BORING LOCATION MAP
LOGS OF TEST BORINGS (17)
LOG OF TEST BORING - GENERAL NOTES
UNIFIED SOIL CLASSIFICATION SYSTEM

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CeB	Casco loam, 2 to 6 percent slopes	1.8	5.8%
CeC2	Casco loam, 6 to 12 percent slopes, eroded	3.2	10.1%
FsB	Fox silt loam, 2 to 6 percent slopes	2.9	9.2%
GP	Gravel pit	0.1	0.3%
HmB	Hochheim loam, 2 to 6 percent slopes	9.6	30.4%
HmC2	Hochheim loam, 6 to 12 percent slopes, eroded	0.1	0.4%
HmD2	Hochheim loam, 12 to 20 percent slopes, eroded	0.1	0.3%
HtA	Houghton muck, 0 to 2 percent slopes	2.7	8.5%
KwB	Knowles silt loam, 2 to 6 percent slopes	0.8	2.6%
LmB	Lamartine silt loam, 0 to 3 percent slopes	6.1	19.3%
Lu	Loamy land	1.0	3.2%
ThB	Theresa silt loam, 2 to 6 percent slopes	3.1	9.8%
Totals for Area of Interest		**31.7**	**100.0%**

Notes

1. Exhibit is an excerpt from the NRCS Soil Survey Website

Job No.		SOIL SURVEY MAP GOLF ROAD DEVELOPMENT NWC GOLF ROAD AND MEADOWBROOK ROAD PEWAUKEE, WISCONSIN
CM19076	GGC, Inc.	
Date: June 2019		

N

Reduced Scale

Legend

Denotes approximate location and number of soil borings.

Notes

1. Soil borings were conducted by GeoServe, Inc. (under subcontract with CGC, Inc.) on May 20, 2019.
2. Borings drilled at locations staked in the field by Pinnacle Engineering Group.
3. Base map is an excerpt of the *1338.00 BORINGs 04-24-19.pdf* drawing prepared and provided by Pinnacle Engineering Group.

Date: **June, 2019**	**CGC, Inc.**	**SOIL BORING LOCATION MAP** **GOLF ROAD DEVELOPMENT** **NWC GOLF ROAD AND MEADOWBROOK ROAD** **PEWAUKEE, WISCONSIN**
Job No. **CM19076**		

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **1**
Surface Elevation (ft) **876.5**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	P200
						14" Dark Brown to Black Clayey TOPSOIL					
1		12	M	18		Stiff, Brown Lean CLAY; Trace Sand and Gravel (CL)	(1.5)	33.1			
						Possible WEATHERED BEDROCK (Light Brown Fine to Coarse Sand and Gravel)					
2		14	M	89							
					5	End of Boring & Refusal at 5 ft on Possible Bedrock Backfilled with Auger Cuttings					
					10						
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe**
Logger **Matt** Editor **PJG** **7822**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **2**
Surface Elevation (ft) **878.3**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	P200
						14" Dark Brown to Black Clayey TOPSOIL					
1		6	M	7		Stiff, Brown Lean CLAY; Trace Sand and Gravel (CL)	(1.5)	24.1			
						Possible WEATHERED BEDROCK (Light Brown Fine to Coarse Sand and Gravel)					
2		6	M	50/2"		End of Boring & Refusal at 3.7 ± ft on Possible Bedrock Backfilled with Auger Cuttings					
					5						
					10						
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe 7822**
Logger **Matt** Editor **PJG**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **3**
Surface Elevation (ft) **878.0**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	P200
						12" Dark Brown to Black Clayey TOPSOIL					
1		16	M	54		Very Stiff, Brown Lean CLAY; Trace Sand and Gravel (CL)	(2.5)				
						Possible WEATHERED BEDROCK (Light Brown Fine to Coarse Sand and Gravel)					
2			M	50							
					5	End of Boring & Refusal at 4 ft on Possible Weathered Bedrock Backfilled with Auger Cuttings					
					10						
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe 7822**
Logger **Matt** Editor **PJG**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **4**
Surface Elevation (ft) **878.0**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	P200
						9" Black Clayey TOPSOIL					
1		6	M	50		Possible WEATHERED BEDROCK (Light Brown Fine to Coarse Sand and Gravel)					
					5	End of Boring & Refusal at 2.5 ft on Possible Bedrock Backfilled with Auger Cuttings					
					10						
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe 7822**
Logger **Matt** Editor **PJG**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **5**
Surface Elevation (ft) **874.0**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	P200
						12" Dark Brown to Black Clayey TOPSOIL					
1		8	M	5		Loose, Dark Brown Clayey SILT; Little Organic Material (CL-ML)	(0.5)	30.6			
						Possible WEATHERED BEDROCK (Light Brown Fine to Coarse Sand and Gravel)					
2		4	M	50							
					5	End of Boring & Refusal at 4 ft on Possible Bedrock Backfilled with Auger Cuttings					
					10						
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe 7822**
Logger **Matt** Editor **PJG**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **6**
Surface Elevation (ft) **876.6**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	P200
						10" Dark Brown to Black Clayey TOPSOIL					
1		16	M	5		Medium Stiff to Stiff, Black Organic Clayey SILT (OL)	(1.0)	30.5			
						Stiff, Brown Silty CLAY; Some Sand and Gravel (CL)					
2		4	M	50		Possible WEATHERED BEDROCK (Light Brown Fine to Coarse Sand and Gravel)		23.7			
					5	End of Boring & Refusal at 4 ft on Possible Bedrock Backfilled with Auger Cuttings					
					10						
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe**
Logger **Matt** Editor **PJG** **7822**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **7**
Surface Elevation (ft) **884.9**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	P200
						10" Black Clayey TOPSOIL					
1		10	M	4		Stiff to Very Stiff, Brown Mottled Lean CLAY; Trace Sand and Gravel (CL)	(2.0)	24.0			
2		16	M	49	5	Possible WEATHERED BEDROCK (Brown Gray Fine to Coarse Sand and Gravel)					
						End of Boring at 5.5 ft on Possible Bedrock Backfilled with Auger Cuttings					
					10						
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe**
Logger **Matt** Editor **PJG** **7822**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **8**
Surface Elevation (ft) **883.4**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	P200
						12" Black Clayey TOPSOIL					
1		12	M	5		Stiff, Brown Mottled Lean CLAY; Trace Sand and Gravel (CL)	(1.5)	27.5			
2			M	50		Possible WEATHERED BEDROCK (Light Brown Fine to Coarse Sand and Gravel)					
					5	End of Boring & Refusal at 3.7 ft on Possible Bedrock Backfilled with Auger Cuttings					
					10						
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe 7822**
Logger **Matt** Editor **PJG**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **9**
Surface Elevation (ft) **885.8**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	P200
						12" Dark Brown to Black Clayey TOPSOIL					
1		12	M	6		Medium Stiff to Stiff, Brown Lean CLAY; Trace Sand and Gravel (CL)	(1.0)	36.8			
						Dense, Light Brown Sandy CLAY; Trace Gravel (CL)					
2		14	M/W	56	▽			10.1			
					5	Possible WEATHERED BEDROCK (Light Brown Fine to Coarse Sand and Gravel)					
						End of Boring & Refusal at 5 ft on Possible Bedrock Backfilled with Auger Cuttings					
					10						
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **4.5'** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe 7822**
Logger **Matt** Editor **PJG**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **10**
Surface Elevation (ft) **887.0**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	P200
						12" Black Clayey TOPSOIL					
1		14	M	5		Stiff to Very Stiff, Brown Mottled Lean CLAY; Trace Sand and Gravel (CL)	(2.0)	22.1			
2		18	M	17		Medium Dense, Light Brown Sandy Clayey SILT; Some Fine to Coarse Gravel (CL-ML)		7.7			
					5						
3		2	M	50		Possible WEATHERED BEDROCK (Light Brown Fine to Coarse Sand and Gravel)					
						End of Boring & Refusal at 6.5 ft on Possible Bedrock Backfilled with Auger Cuttings					
					10						
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe 7822**
Logger **Matt** Editor **PJG**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **11**
Surface Elevation (ft) **885.3**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	qu (qa) (tsf)	W	LL	PL	P200
						12" Dark Brown to Black Clayey TOPSOIL					
1		12	M	7		Stiff, Brown Mottled Lean CLAY; Trace Sand and Gravel (CL)	(1.5)	23.6			
2			M	50		Possible WEATHERED BEDROCK (Light Brown Fine to Coarse Sand and Gravel)		23.0			
					5	End of Boring & Refusal at 4 ft on Possible Bedrock Backfilled with Auger Cuttings					
					10						
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe 7822**
Logger **Matt** Editor **PJG**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **12**
Surface Elevation (ft) **904.4**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	P200
						10" Dark Brown Clayey TOPSOIL					
1		16	M	5		Stiff to Very Stiff, Brown Lean CLAY; Trace Sand and Gravel (CL)	(2.0)	20.9			
2		16	M	8	5	Stiff, Brown Clayey SILT; Some Fine to Coarse Sand and Gravel (CL-ML)	(1.5)	4.8			
3		8	M	42		Dense, Brown Fine SAND; Some Silt and Fine to Coarse Gravel (SM)					17.7
4		16	M	67	10	Very Dense, Brown Clayey SILT; Little to Some Fine to Coarse Gravel (CL-ML)					
						End of Boring & Refusal at 10 ft on Probable Bedrock Backfilled with Bentonite Chips					
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe**
Logger **Matt** Editor **PJG** **7822**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **13**
Surface Elevation (ft) **905.1**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	qu (qa) (tsf)	W	LL	PL	P200
						13" ± Dark Brown to Black Clayey TOPSOIL					
1		18	M	4		Medium Stiff to Stiff, Reddish Brown Silty CLAY; Some Fine Sand (CL)	(1.75)	15.3			
2		18	M	8			(1.0)				
					5	Loose, Brown Fine SAND; Trace Silt and Gravel (SP)					6.8
3		16	W	50	▽	Possible WEATHERED BEDROCK (Gray Fine to Coarse Crushed Gravel)					
4		2	M	50							
					10	End of Boring & Refusal at 9 ft on Possible Bedrock Backfilled with Auger Cuttings					
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **6.5'** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe 7822**
Logger **Matt** Editor **PJG**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **14**
Surface Elevation (ft) **902.1**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	qu (qa) (tsf)	W	LL	PL	P200
						10" Black Clayey TOPSOIL					
1		12	M	11		Medium Stiff to Stiff, Brown Lean CLAY; Some Fine to Coarese Sand and Gravel (CL)	(1.0)	21.4			
						Dense, Brown Fine to Coarse SAND & GRAVEL; Some Silt, Possible Cobbles and/or Boulders (SM-GM)					
2		16	M	33							12.2
					5						
3		12	W	26	▽	Medium Dense to Dense, Brown Clayey SILT; Some Fine to Coarse Sand and Gravel (CL-ML)		8.3			
4		4	W	39							
					10	End of Boring & Auger Refusal at 10.5 ft on Possible Bedrock Backfilled with Bentonite Chips					
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **6.5'** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe 7822**
Logger **Matt** Editor **PJG**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **15**
Surface Elevation (ft) **924.2**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	P200
						14" Dark Brown to Black Clayey TOPSOIL					
1		18	M	2		Stiff, Brown Lean CLAY; Trace Sand and Gravel, Trace Fine Roots (CL)	(1.5)	24.4			
2		18	M	8			(2.5)	19.2			
					5						
3		16	M	7		Loose to Medium Dense, Brown Mottled Clayey SILT; Some Sand, Trace Gravel (CL-ML)		9.8			
4		6	M	21				11.4			
					10						
5		14	M	21							
						End of Boring at 12 ft Backfilled with Bentonite Chips					
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽	NW	Upon Completion of Drilling	NW	
Time After Drilling				
Depth to Water				▼
Depth to Cave in				

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe 7822**
Logger **Matt** Editor **PJG**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **16**
Surface Elevation (ft) **920.0**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	P200
						8" TOPSOIL (Dark Brown Organic Silty Sand)					
1		12	M	18		Medium Dense, Brown Fine to Coarse SAND & GRAVEL (SP-GP)					
2		14	M	16	5						0.0
3		16	M	37		Medium Dense to Dense, Brown Fine to Coarse SAND & GRAVEL; Possible Cobbles/Boulders (SP-GP)					
4		10	M	27	10						
5		16	M	39		Dense, Brown Fine to Coarse SAND; Some Fine to Coarse Gravel, Trace Silt (SP-GP)					
					15	End of Boring at 12 ft Backfilled with Bentonite Chips					
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe 7822**
Logger **Matt** Editor **PJG**
Drill Method **2.25" HSA**

CGC Inc.

LOG OF TEST BORING

Project **Golf Road Development**
NWC Golf Road & Meadowbrook Road
Location **Pewaukee, Wisconsin**

Boring No. **17**
Surface Elevation (ft) **929.6**
Job No. **CM19076**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	P200
						9" TOPSOIL (Dark Brown Organic Clayey Topsoil)					
1		12	M	13		Stiff to Very Stiff, Brown Silty CLAY; Some Sand and Gravel (CL) (POSSIBLE FILL)	(2.0)				
2		12	M	8		Loose, Brown Fine to Coarse SAND & GRAVEL (SP-GP) (POSSIBLE FILL)					
3		12	M	10	5	Loose to Medium Dense, Brown Fine SAND; Trace Fine Gravel, Trace Silt (SP)					1.9
4		12	M	15							
5		12	M	17	10						
						End of Boring at 12 ft Backfilled with Bentonite Chips					
					15						
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **5/20/19** End **5/20/19**
Driller **GeoServe** Chief **Eddie** Rig **Geoprobe 7822**
Logger **Matt** Editor **PJG**
Drill Method **2.25" HSA**

CGC, Inc.

LOG OF TEST BORING

General Notes

Descriptive Soil Classification

GRAIN SIZE TERMINOLOGY

Soil Fraction	Particle Size	U.S. Standard Sieve Size
Boulders	Larger than 12"	Larger than 12"
Cobbles	3" to 12"	3" to 12"
Gravel: Coarse	3/4" to 3"	3/4" to 3"
Fine	4.76 mm to 3/4"	#4 to 3/4"
Sand: Coarse	2.00 mm to 4.76 mm	#10 to #4
Medium	0.42 to mm to 2.00 mm	#40 to #10
Fine	0.074 mm to 0.42 mm	#200 to #40
Silt	0.005 mm to 0.074 mm	Smaller than #200
Clay	Smaller than 0.005 mm	Smaller than #200

Plasticity characteristics differentiate between silt and clay.

GENERAL TERMINOLOGY

Physical Characteristics
Color, moisture, grain shape, fineness, etc.,
Major Constituents
Clay, silt, sand, gravel
Structure
Laminated, varved, fibrous, stratified, cemented, fissured, etc.
Geologic Origin
Glacial, alluvial, eolian, residual, etc.

RELATIVE DENSITY

Term	"N" Value
Very Loose	0-4
Loose	4-10
Medium Dense	10-30
Dense	30-50
Very Dense	Over 50

RELATIVE PROPORTIONS OF OF COHESIONLESS SOILS

Proportional Term	Defining Range by Percentage of Weight
Trace	0%-5%
Little	5%-12%
Some	12%-35%
And	35%-50%

CONSISTENCY

Term	q_u-tons/sq. ft.
Very Soft	0.0 to 0.25
Soft	0.25 to 0.50
Medium	0.50 to 1.0
Stiff	1.0 to 2.0
Very Stiff	2.0 to 4.0
Hard	Over 4.0

ORGANIC CONTENT BY COMBUSTION METHOD

Soil Description	Loss on Ignition
Non Organic	Less than 4%
Organic Silt/Clay	4-12%
Sedimentary Peat	12-50%
Fibrous and Woody Peat	More than 50%

PLASTICITY

Term	Plastic Index
None to Slight	0-4
Slight	5-7
Medium	8-22
High to Very High	Over 22

The penetration resistance, N, is the summation of the number of blows required to effect two successive 6" penetrations of the 2" split-barrel sampler. The sampler is driven with a 140 lb. weight falling 30" and is seated to a depth of 6" before commencing the standard penetration test.

SYMBOLS

DRILLING AND SAMPLING

CS--Continuous Sampling
RC--Rock Coring: Size AW, BW, NW, 2"W
RQD--Rock Quality Designator
RB--Rock Bit
FT--Fish Tail
DC--Drove Casing
C--Casing: Size 2 1/2", NW, 4", HW
CW--Clear Water
DM--Drilling Mud
HSA--Hollow Stem Auger
FA--Flight Auger
HA--Hand Auger
COA--Clean-Out Auger
SS--2" Diameter Split-Barrel Sample
2ST--2" Diameter Thin-Walled Tube Sample
3ST--3" Diameter Thin-Walled Tube Sample
PT--3" Diameter Piston Tube Sample
AS--Auger Sample
WS--Wash Sample
PTS--Peat Sample
PS--Pitcher Sample
NR--No Recovery
S--Sounding
PMT--Borehole Pressuremeter Test
VS--Vane Shear Test
WPT--Water Pressure Test

LABORATORY TESTS

q_a--Penetrometer Reading, tons/sq. ft.
q_u--Unconfined Strength, tons/sq. ft.
W--Moisture Content, %
LL--Liquid Limit, %
PL--Plastic Limit, %
SL--Shrinkage Limit, %
LI--Loss on Ignition, %
D--Dry Unit Weight, lbs/cu. ft.
pH--Measure of Soil Alkalinity or Acidity
FS--Free Swell, %

WATER LEVEL MEASUREMENT

▽ --Water Level at time shown
NW--No Water Encountered
WD--While Drilling
BCR--Before Casing Removal
ACR--After Casing Removal
CW--Caved and Wet
CM--Caved and Moist

Note: Water level measurements shown on the boring logs represent conditions at the time indicated and may not reflect static levels, especially in cohesive soils.

CGC, Inc.

Madison - Milwaukee

UNIFIED SOIL CLASSIFICATION SYSTEM

UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART

COARSE-GRAINED SOILS (more than 50% of material is larger than No. 200 sieve size.)			
GRAVELS More than 50% of coarse fraction larger than No. 4 sieve size	Clean Gravels (Less than 5% fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
	Gravels with fines (More than 12% fines)	GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
SANDS 50% or more of coarse fraction smaller than No. 4 sieve size	Clean Sands (Less than 5% fines)	SW	Well-graded sands, gravelly sands, little or no fines
		SP	Poorly graded sands, gravelly sands, little or no fines
	Sands with fines (More than 12% fines)	SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS (50% or more of material is smaller than No. 200 sieve size.)			
SILTS AND CLAYS Liquid limit less than 50%		ML	Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silty clays of low plasticity
SILTS AND CLAYS Liquid limit 50% or greater		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS		PT	Peat and other highly organic soils

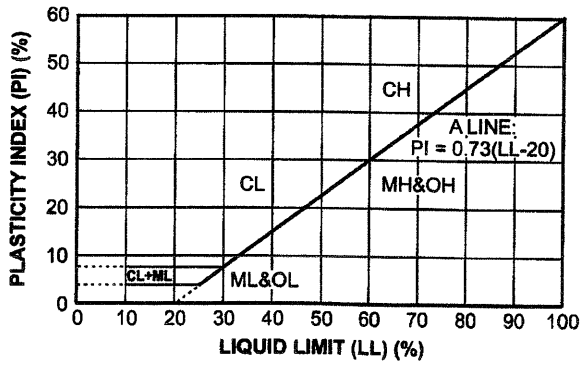
LABORATORY CLASSIFICATION CRITERIA

GW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3	
GP	Not meeting all gradation requirements for GW	
GM	Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols
GC	Atterberg limits above "A" line with P.I. greater than 7	
SW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3	
SP	Not meeting all gradation requirements for GW	
SM	Atterberg limits below "A" line or P.I. less than 4	Limits plotting in shaded zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols.
SC	Atterberg limits above "A" line with P.I. greater than 7	

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

Less than 5 percent ..... GW, GP, SW, SP
More than 12 percent ..... GM, GC, SM, SC
5 to 12 percent ..... Borderline cases requiring dual symbols

PLASTICITY CHART



APPENDIX C

SOIL AND SITE EVALUATION - STORM FORM
(BORINGS 1 THROUGH 17)

Wisconsin Department of Commerce
Division of Safety and Buildings

SOIL AND SITE EVALUATION - STORM

In accordance with SPS 382.365, 385, Wis. Adm. Code, and WDNR Standard 1002

Attach complete site plan on paper not less than 8 1/2 x 11 inches in size. Plan must include, but not limited to: vertical and horizontal reference point (BM), direction and percent slope, scale or dimensions, north arrow, and BM referenced to nearest road.

Please print all information.

Personal information you provide may be used for secondary purposes (Privacy Law, s.15.04 (1) (m)).

County	Waukesha
Parcel I.D.	PWC 0940999001
Review by	**Date**

Property Owner		**Property Location**	Golf Road
Robert J. Stenz Family Trust c/o Aimee Petrovsky		**Govt. Lot**	E 1/2 SE 1/4 S 19 T 7 N 19 E
Property Owner's Mailing Address		**Lot #** / **Block #** / **Subd. Name or CSM#**	
2371 Jacob Row			
City / **State** / **Zip Code** / **Phone Number**		[X] **City** [ ] **Village** [ ] **Town**	**Nearest Road**
Lake Havasu City	AZ 86404-9536	Pewaukee	Meadowbrook Road

Drainage area: _____ [ ] sq. ft. [ ] acres

Test Site Suitable for (check all that apply) [ ] Site not suitable

[ ] Bioretention [ ] Subsurface Dispersal System

[ ] Reuse [ ] Irrigation [ ] Other _____

Hydraulic Application Test Method

[X] Morphological Evaluation

[ ] Double-Ring Infiltrometer

[ ] Other (Specify)_____

Soil Moisture

Date of soil borings: 5/20/19

USDA-NRCS WETS Value:

[ ] Dry = 1

[X] Normal = 2

[ ] Wet = 3

1 **Obs. #** [X] Boring [ ] Pit **Ground Surface Elev.** 876.5 ft **Elevation of limiting factor** 874.5 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-14	10YR3/4		SICL	1mabk	mfr	c	<5	>60	0.04
2	14-24	10YR4/3		SIC	2mabk	mfi	g	<5	>60	0.07
3	24-60	Weathered Bedrock					-	-	-	

Comments: No free water encountered during or upon completion of drilling.

2 **Obs. #** [X] Boring [ ] Pit **Ground Surface Elev.** 878.3 ft **Elevation of limiting factor** 875.3 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-14	10YR3/2		SICL	2mabk	mfr	c	<5	>60	0.04
2	14-36	10YR4/3		SIC	2mabk	mfi	g	<5	>60	0.07
3	36-44.5	Weathered Bedrock					-	-	-	

Comments: No free water encountered during or upon completion of drilling.

CST/PSS Name (Please Print)	**Signature**	**CST Number**
Paul J. Giese, CST	Paul J. Giese	41442
Address	**Date Evaluation Conducted**	**Telephone Number**
336 S. Curtis Road, West Allis, WI 53214	6/21/19	(414) 443-2000

SBD-10793 (R.01/17)

19076 Soil & Site Eval.xls

Property Owner Robert J. Stenz Family Trust c/o Aimee Petrovsky **Parcel ID#** PWC 0940999001 **Page** 2 **of** 6

3 **Obs. #** [X] Boring [ ] Pit **Ground Surface Elev.** 878.0 ft **Elevation of limiting factor** 875.0 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-12	10YR3/2		SICL	1mabk	mfr	c	<5	>60	0.04
2	12-36	10YR4/3		SIC	1mabk	mfi	g	<5	>60	0.07
3	36-48	Weathered Bedrock					-	-	-	

Comments: No free water encountered during or upon completion of drilling.

4 **Obs. #** [X] Boring [ ] Pit **Ground Surface Elev.** 876.0 ft **Elevation of limiting factor** 875.3 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-9	10YR3/2		SICL	1mabk	mfr	c	<5	>60	0.04
2	9-30	Weathered Bedrock								

Comments: No free water encountered during or upon completion of drilling.

5 **Obs. #** [X] Boring [ ] Pit **Ground Surface Elev.** 874.0 ft **Elevation of limiting factor** 871.5 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-12	10YR3/2		SICL	1mabk	mfr	c	<5	>60	0.04
2	12-30	10YR3/2		SICL	2mabk	mfr	g	<5	>60	0.04
3	30-48	Weathered Bedrock								

Comments: No free water encountered during or upon completion of drilling.

Property Owner: Robert J. Stenz Family Trust c/o Aimee Petrovsky Parcel ID#: PWC 0940999001 Page 3 of 6

6 Obs. # [X] Boring [ ] Pit Ground Surface Elev. 876.6 ft Elevation of limiting factor 873.1 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-10	10YR3.2		SICL	1mabk	mfr	c	<5	>60	0.04
2	10-24	10YR2/2		SICL	1mabk	mfr	g	<5	>60	0.04
3	24-42	10YR5/4		SIC	2mabk	mfi	g	<5	>60	0.07
4	42-48	Weathered Bedrock								

Comments: No free water encountered during or upon completion of drilling.

7 Obs. # [X] Boring [ ] Pit Ground Surface Elev. 884.9 ft Elevation of limiting factor 884.1 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-10	10YR3/2		SICL	1mabk	mfr	c	<5	>60	0.04
2	10-54	10YR4/3	f1f 10YR4/6	SIC	0m	mfi	g	<15	>60	0.07
3	54-66	Weathered Bedrock								

Comments: No free water encountered during or upon completion of drilling.

8 Obs. # [X] Boring [ ] Pit Ground Surface Elev. 883.4 ft Elevation of limiting factor 882.4 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-12	10YR3/2		SICL	1mabk	mfr	c	<5	>60	0.04
2	12-42	10YR4/3	f1f 10YR4/6	SIC	0m	mfi	g	<15	>60	0.07
3	42-44.5	Weathered Bedrock								

Comments: No free water encountered during or upon completion of drilling.

Property Owner Robert J. Stenz Family Trust c/o Aimee Petrovsky **Parcel ID#** PWC 0940999001 **Page** 4 **of** 6

9 **Obs. #** [X] **Boring** [ ] **Pit** **Ground Surface Elev.** 885.8 ft **Elevation of limiting factor** 881.3 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-12	10YR3/2		SICL	1mabk	mfr	c	<5	>60	0.04
2	12-36	10YR4/3		SIC	0m	mfi	g	<15	>60	0.07
3	36-54	10YR7/4		SC	1mabk	mfr	g	<15	>60	0.04
4	54-60	Weathered Bedrock								

Comments: Water encountered at 4.5 ft while drilling. No free water upon completion of drilling.

10 **Obs. #** [X] **Boring** [ ] **Pit** **Ground Surface Elev.** 887.0 ft **Elevation of limiting factor** 886.0 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-12	10YR4/2		SICL	1mabk	mfr	c	<5	>60	0.04
2	12-36	10YR4/3	f2d 10YR3/4	SIC	0m	mfi	g	<5	>60	0.07
3	36-72	10YR7/4		SCL	2mabk	mfr	g	<5	>60	0.11
4	72-78	Weathered Bedrock								

Comments: No free water encountered during or upon completion of drilling.

11 **Obs. #** [X] **Boring** [ ] **Pit** **Ground Surface Elev.** 885.3 ft **Elevation of limiting factor** 884.3 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-12	10YR3/2		SICL	1mabk	mfr	c	<5	>60	0.04
2	12-42	10YR4/3	f1d 10YR3/4	SIC	0m	mfi	g	<15	>60	0.07
3	42-48	Weathered Bedrock								

Comments: No free water encountered during or upon completion of drilling.

Property Owner Robert J. Stenz Family Trust c/o Aimee Petrovsky **Parcel ID#** PWC 0940999001 **Page** 5 **of** 6

12 **Obs. #** [X] **Boring** [ ] **Pit** **Ground Surface Elev.** 904.4 ft **Elevation of limiting factor** 894.4 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-10	10YR4/2		SICL	2mabk	mfr	c	<5	>60	0.04
2	10-48	10YR4/4		SIC	0m	mvfi	g	<5	>60	0.07
3	48-78	10YR5/4		GRSCL	1mabk	mfr	g	15-35	-	0.11
4	78-96	10YR5/4		GRSL	0f-cgr	mfr	g	15.6	17.7	0.50
5	96-120	10YR5/4		SICL	2mabk	mfi	g	<15	>60	0.04
6	@ 120	Bedrock								

Comments: No free water encountered during or upon completion of drilling.

13 **Obs. #** [X] **Boring** [ ] **Pit** **Ground Surface Elev.** 905.1 ft **Elevation of limiting factor** 898.6 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-13	10YR3/2		SICL	2mabk	mfr	c	<5	>60	0.04
2	13-54	7.5YR4/4		SCL	2mabk	mfi	g	<5	>60	0.11
3	54-78	10YR5/4		S	0fgr	mfr	g	0.9	6.8	3.60
4	78-108	Weathered Bedrock								

Comments: Water observed at 6.5 ± ft while drilling.

14 **Obs. #** [X] **Boring** [ ] **Pit** **Ground Surface Elev.** 902.1 ft **Elevation of limiting factor** 891.6 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-10	10YR3/2		SICL	2mabk	mfr	c	<5	>60	0.04
2	10-24	10YR4/3		SIC	1mabk	mfi	g	<15	>60	0.07
3	24-72	10YR5/4		VGRLS	0f-cgr	mfr	g	46.0	12.2	1.63
4	72-126	10YR5/4		GRSICL	0f-cgr	mfr		15-35	-	0.04
5	@ 126	Bedrock								

Comments: Water observed at 6.5 ± ft while drilling.

Property Owner Robert J. Stenz Family Trust c/o Aimee Petrovsky **Parcel ID#** PWC 0940999001 **Page** 6 **of** 6

15 **Obs. #** [X] Boring [ ] Pit **Ground Surface Elev.** 924.2 ft **Elevation of limiting factor** <912.2 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-14	10YR3/2		SICL	1mabk	mfr	c	<5	>60	0.04
2	14-72	10YR5/4		SIC	2mabk	mfi	g	<5	>60	0.07
3	72-144	10YR5/4		SL	`0f-cgr	mfr	-	<15	>60	0.50

Comments: No free water encountered during or upon completion of drilling.

16 **Obs. #** [X] Boring [ ] Pit **Ground Surface Elev.** 920.0 ft **Elevation of limiting factor** <908.0 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-8	10YR3/3		SICL	1mabk	mfr	c	<5	>60	0.04
2	8-72	10YR4/4		VGRS	0f-cgr	mfr	-	48.0	0.0	3.60
3	72-120	10YR6/3		VGRS	0f-cgr	mfr	-	35-65	-	3.60
4	120-144	10YR4/4		GRLS	0f-cgr	mfr	-	15-35	-	1.63

Comments: No free water encountered during or upon completion of drilling.

17 **Obs. #** [X] Boring [ ] Pit **Ground Surface Elev.** 929.6 ft **Elevation of limiting factor** <917.6 ft

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-9	10YR4/2		SICL	1mabk	mfr	c	<5	>60	0.04
2	9-36	10YR4/3		SICL	2mabk	mfi	g	<15	>60	0.04
3	36-60	10YR6/3		GRS	0f-cgr	mfr	g	15-35	-	3.60
4	60-144	10YR5/4		S	0fgr	mfr	-	<5		3.60

Comments: No free water encountered during or upon completion of drilling.

APPENDIX D

DOCUMENT QUALIFICATIONS

APPENDIX D
DOCUMENT QUALIFICATIONS

I. GENERAL RECOMMENDATIONS/LIMITATIONS

CGC, Inc. should be provided the opportunity for a general review of the final design and specifications to confirm that earthwork and foundation requirements have been properly interpreted in the design and specifications. CGC should be retained to provide soil engineering services during excavation and subgrade preparation. This will allow us to observe that construction proceeds in compliance with the design concepts, specifications and recommendations, and also will allow design changes to be made in the event that subsurface conditions differ from those anticipated prior to the start of construction. CGC does not assume responsibility for compliance with the recommendations in this report unless we are retained to provide construction testing and observation services.

This report has been prepared in accordance with generally accepted soil and foundation engineering practices and no other warranties are expressed or implied. The opinions and recommendations submitted in this report are based on interpretation of the subsurface information revealed by the test borings indicated on the location plan. The report does not reflect potential variations in subsurface conditions between or beyond these borings. Therefore, variations in soil conditions can be expected between the boring locations and fluctuations of groundwater levels may occur with time. The nature and extent of the variations may not become evident until construction.

II. IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING REPORT

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. *No one except you* should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one - not even you* - should apply the report for any purpose or project except the one originally contemplated.

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A GEOTECHNICAL ENGINEERING REPORT IS BASED ON A UNIQUE SET OF PROJECT-SPECIFIC FACTORS

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, *do not rely on a geotechnical engineering report* that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes - even minor ones - and request an assessment of their impact. *CGC cannot accept responsibility or liability for problems that occur because our reports do not consider developments of which we were not informed.*

SUBSURFACE CONDITIONS CAN CHANGE

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

MOST GEOTECHNICAL FINDINGS ARE PROFESSIONAL OPINIONS

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgement to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ - sometimes significantly - from those indicated in your report. Retaining

the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A REPORT'S RECOMMENDATIONS ARE NOT FINAL

Do not over-rely on the construction recommendations included in your report. *Those recommendations are not final,* because geotechnical engineers develop them principally from judgement and opinion. Geotechnical engineers can finalize their recommendations only by observing actual subsurface conditions revealed during construction. *CGC cannot assume responsibility or liability for the report's recommendations if we do not perform construction observation.*

A GEOTECHNICAL ENGINEERING REPORT IS SUBJECT TO MISINTERPRETATION

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having CGC participate in prebid and preconstruction conferences, and by providing construction observation.

DO NOT REDRAW THE ENGINEER'S LOGS

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

GIVE CONTRACTORS A COMPLETE REPORT AND GUIDANCE

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited;
encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

READ RESPONSIBILITY PROVISIONS CLOSELY

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce such risks, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineer's responsibilities begin and end, to help others recognize their own responsibilities and risks. Read these provisions closely. Ask questions. Your geotechnical engineer should respond fully and frankly.

GEOENVIRONMENTAL CONCERNS ARE NOT COVERED

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

RELY ON YOUR GEOTECHNICAL ENGINEER FOR ADDITIONAL ASSISTANCE

Membership in ASFE exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with CGC, a member of ASFE, for more information.

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NORTH

GRAPHICAL SCALE (FEET)

0 1" = 80' 160'

UNPLATTED LANDS
OWNER: LAKE PEWAUKEE SANITARY DISTRICT

100 YEAR FLOOD PLAIN PER FEMA MAP NO. 55133C0191G (GRAPHIC PLOTTING ONLY)

WETLANDS DELINEATED BY DAVE MEYER OF WETLAND & WATERWAY CONSULTING, LLC. IN SEPTEMBER 2018

OUTLOT 2 (TO LAKE PEWAUKEE SANITARY DISTRICT)
493,678 SF (11.3333 AC)

OWNER: WISCONSIN ELECTRIC POWER COMPANY
UNPLATTED LANDS

MEADOWBROOK ROAD
COUNTY TRUNK HIGHWAY "G"
(VARIABLE PUBLIC R.O.W.)

OUTLOT 2 OAK SPRINGS SOUTH

LAKEFIELD DRIVE
(60' PUBLIC R.O.W.)

LOT 32 OAK SPRINGS SOUTH

LOT 31 OAK SPRINGS SOUTH

LOT 30 OAK SPRINGS SOUTH

LOT 29 OAK SPRINGS SOUTH

PARCEL 1 C.S.M. NO. 9263

KwB
BOR 1 EL = 876.5
Refusal = 871.5
OUTLOT 1 73,766 SF (1.6934 AC)
PROP STORM WATER MANAGEMENT

ThB
Refusal = 879.3
BOR 2 EL = 878.3
BLDG #6 2-UNITS
BLDG #7 2-UNITS

Refusal = 874.0
BOR 3 EL = 878.0
PROP STORM WATER MANAGEMENT

Refusal = 875.5
BOR 4 EL = 878.0

BLDG #13 2-UNITS
BLDG #12 2-UNITS
BLDG #8 2-UNITS

Refusal = 876.5
BOR 5 EL = 874.0
PROP STORM WATER MANAGEMENT
OUTLOT 3 37,544 SF (0.8619 AC)

HmB
Refusal = 872.6
BOR 6 EL = 876.6

BLDG #5 4-UNITS
LOT 4 62,706 SF (1.4395 AC)
BLDG #4 4-UNITS

BOR 11 EL = 885.3
Refusal = 881.8
Refusal = 880.5
BOR 10 EL = 887.0

FsB
BOR 9 EL = 885.8
Refusal = 880.8

BOR 8 EL = 883.4
Refusal = 879.9
LOT 5 143,917 SF (3.3039 AC)

BLDG #11 2-UNITS
Refusal = 879.4
BOR 7 EL = 884.9

BLDG #9 4-UNITS
BLDG #10 4-UNITS
BLDG #15 4-UNITS

LOT 6 81,354 SF (1.8676 AC)

BLDG #14 4-UNITS
BLDG #16 4-UNITS

LuB
Refusal = 891.6
BOR 14 EL = 902.1

LOT 2 29,349 SF (0.6738 AC)
CLUB HOUSE

BLDG #3 4-UNITS
LOT 3 91,402 SF (2.0983 AC)
BLDG #2 4-UNITS
BLDG #1 4-UNITS

CeD2
BOR 12 EL = 904.4
Refusal = 894.4
BOR 13 EL = 905.1
Refusal = 896.1

PROP. RETAINING WALL (3' MAX HEIGHT) WALL FACES BLDG #3

GP
BOR 17 EL = 929.6

COMMUNITY LIVING ARRANGEMENT 42 BEDS (EQUIVALENT TO 12 UNITS (3.5 PEOPLE PER UNIT))

LOT 1 118,072 SF (2.7106 AC)

BOR 16 EL = 920.0
BOR 15 EL = 924.2

CeB

HmD2

GOLF ROAD
COUNTY TRUNK HIGHWAY "DR"

ONE ACCESS POINT ALLOWED 690.8'

FsB

INTERSTATE HIGHWAY "94"
(VARIABLE PUBLIC R.O.W.)

NOTES:

1. ROBERT J. STENZ FAMILY TRUST PROPERTY, TAK KEY NUMBER PWC 0940999001 PART OF SE 1/4 SEC 19, T7N, R19E.
2. CURRENT CITY OF PEWAUKEE ZONING: A-1 (AGRICULTURAL), L-C (LOWLAND CONSERVANCY) AND F-1 (FLOODLAND)
3. 2050 LAND USE PLAN: LOW-MEDIUM DENSITY RESIDENTIAL (1/2 AC - 2 AC/DU), FLOODPLAINS, LOWLANDS, UPLAND CONSERVANCY AND NATURAL AREAS. PROPOSED LAND USE IS MEDIUM DENSITY RESIDENTIAL (6,500 SF - 1/2 AC/DU), FLOODPLAINS, LOWLANDS, UPLAND CONSERVANCY AND NATURAL AREAS.
4. PROPOSED TO BE REZONED TO FLOODLAND,LOWLAND CONSERVANCY AND MULTIPLE-FAMILY RESIDENTIAL DEVELOPMENT (RM-1 PUD)

SETBACKS	RM-1	RM-1 PUD	PROPOSED
STREET	35'	24.5'	24.5'
SIDEYARD	25'	17.5'	20' BETWEEN BUILDINGS
REAR	35'	24.5'	30'
FLOODPLAIN	75'	75'	75'
WETLAND	25'	25'	50' (DNR NR 151) & 25' (CITY)

AREA CALCULATIONS

1. Total lot area = total site area - LPSD area (outlot 2) - proposed public road right-of-way dedication
   Total site area = 1,235,817 square feet
   LPSD area (outlot 2) = 493,678 square feet
   Proposed public road right-of-way dedication = 104,028 sf
   Total lot area = 1,235,817 sf - 493,678 sf - 104,028 sf = **638,111 sf**
2. **Proposed impervious on site (outside of public road ROW) = 256,651 sf**
   Proposed impervious on site = 256,651 sf / 638,111 sf = **40.2 %** (max 60% per City requirements)
3. **Upland open space =** total lot area - impervious on site
   = 638,111 sf - 256,651 sf = **381,460 sf**
4. **Total open space =** 381,460 sf
   = 381,460 sf / 638,111 sf = **59.8% open space** (min 40% per City requirements)

DENSITY CALCULATIONS

Rm-1 = 6.0 du/net acre (allowed)
Net acre = Total lot area
Net acre = 638,111 sf = 14.6 acres
14.6 acres * 6 du/net acre = **87 units (allowed)**
Proposed 62 units
Proposed density = 62 units / 16.4 acres = **3.8 du/net acre**

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE
WIS STATUTE 182(0750974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE
MIL.W. AREA 259-1181

NOTE: The location and size of the underground structures and utilities shown hereon have been located to a reasonable degree of accuracy, but the Engineer and/or Surveyor does not guarantee their exact location or the location of others not shown.
Contact Diggers Hotline, Inc., Etc.

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
WISCONSIN OFFICE:
15850 W. BLUEMOUND ROAD
BROOKFIELD, WI 53005
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

STENZ PROPERTY

CITY OF PEWAUKEE, WAUKESHA CO., WISCONSIN

SITE PLAN

REVISIONS

PEG JOB No. 1338.00-WI
PEG PM ASZ
START DATE 04-05-19
SCALE 1" = 80'

SHEET C-1
C-1

© COPYRIGHT 2019

SITE PLAN

REVIEWED: ASZ
DESIGNED: ASZ
DRAFTED: BR

Z:\PROJECTS\2018\1338.00-WI\CAD\SHEETS\CONCEPT PLAN.DWG

Wetland & Waterway Consulting, LLC
Dave Meyer
S83 W23915 Artesian Avenue • Big Bend, WI 53103
262-719-4286 • Fax 262-364-2197
E-Mail • *dave@wetlandwi.com*

1-14-19

Mr. Jim Forester
1405 Capitol Dr.
Pewaukee WI 53072

Dear Mr. Forester:

Wetland & Waterway Consulting (WWC) has conducted a wetland delineation on property located in Sec.19, T7N, R19E, City of Pewaukee, Waukesha County. The delineation was conducted on 8-27-18 and 8-29-18 at your request. This site is under consideration for future development; therefore, location of the wetlands prior to construction is necessary. The purpose of the delineation was to identify and flag all wetlands within the boundaries identified on the attached maps.

Investigator

Dave Meyer, lead delineator, is an independent environmental consultant providing wetland delineations, environmental permitting services, site assessments, and planning advice. He obtained a master's degree in Natural Resources Management from Southern Illinois University-Carbondale in 1977. Mr. Meyer has held technical and administrative positions in wetland and water resources specialties with the Wisconsin Department of Natural Resources and the U.S. Army Corps of Engineers. He has satisfactorily completed the Reg IV Wetland Delineation training offered by the U.S. Army Corps of Engineers, the Advanced Wetland Delineation training conducted by the University of Wisconsin-LaCrosse in 2002 and 2007, the USACOE/WIDNR 1987 Wetland Delineation Manual Midwest Region Supplement Training in 2009, the USACOE/WIDNR 1987 Wetland Delineation Manual Northcentral/Northeast Region Supplement Training in 2010, the Basic Hydric Soil ID training conducted by the University of Wisconsin-LaCrosse in 2011, the Wetland Training Institute's Advanced Hydrology for Jurisdictional Determinations in 2016, and the SEWRPC Environmental Corridor Delineation Workshops in 2004 and 2015. Mr. Meyer is recognized by the Wisconsin Department of Natural Resources as an Assured Delineator.

Methods

The site visit was conducted according to the guidelines identified in the U.S. Army Corps of Engineers' 1987 manual and the Northcentral/Northeast Regional Supplement. The plot size used was a 30 foot radius circle for trees, shrub/saplings, and woody vines, and a 5 foot radius circle for herbaceous vegetation.

Sampling points were located in the areas that exhibited wetland characteristics as well as upland characteristics. Data was collected on the vegetation, soils, and hydrology at each sampling point. The wetlands were identified using the technical approach described in the USACOE 1987 Manual. The wetland boundary was flagged using breaks in topography, transitions between hydric and upland vegetation, identification of wetland hydrology, and the presence of hydric soils. Roadside ditches were identified if they displayed hydric vegetation. Flags were placed in the middle of the ditches at their beginning and ending points for the surveyor to locate. If the ditch was very long or had unusual bends or

turns in it, additional flags were placed within the central parts of the ditch to assist in its location. The flags were located in the field by a registered land surveyor and a wetland map was produced which identifies all flagged wetland complexes and ditches within the subject boundaries. Refer to the wetland map attached to the end of this report for locations.
Resources utilized in the investigation included the NRCS county soil survey, Wisconsin Wetland Inventory mapping, topo mapping, aerial photos, and county plat mapping. Significant literature consulted includes:

Curtis, John. 1971. The Vegetation of Wisconsin. University of Wisconsin Press, Madison, Wisconsin. 173 pp.

Eggers, Steve and Donald Reed. 2011. Wetland Plants and Plant Communities of Minnesota and Wisconsin – 3rd Edition. St. Paul District, U.S. Army Corps of Engineers, St. Paul, MN 478 pp.

Peterson, Roger and Margaret McKenny. 1968. A Field Guide to Wildflowers of Northeastern and Northcentral North America. Houghton Mifflin Company, Boston, Mass. 420 pp.

Swink, Floyd and Gerould Wilhelm. 1994. Plants of the Chicago Region. The Morton Arboretum, Lisle, Illinois. 921 pp.

Results and Discussion

* This approximately 28.37 acre vacant site is situated on the northwest corner of the intersection of Golf Road and CTH G in the City of Pewaukee.

The site consists of upland shrubby areas, upland meadow, stands of upland hardwood trees and shrubs, and wetlands. The parcel slopes from south to north at slopes of between 5% and 10% grades. The ROW on Golf Road and CTH G slopes down to the site at a 30%+ grade. No roadside ditches are present. Three culverts at the toe-of-slope (Photo E) on Golf Road regularly discharge storm water to the subject parcel. This discharge has caused three depressional channels to form that carry surface water downslope to the large wetland complex that occupies the northern portion of the property. The eastern-most of these three channels (DP #6) lies primarily to the south of the property boundary. Significant portions of the other two channels (DP #'s 8, 11, and 12) are on site but also continue offsite to the south to their junction with the culverts.

* This site has not been previously delineated.

* The soil types mapped within the project boundaries are Casco loam (CeB, CeC2), Fox silt loam (FsB), Gravel pit (GP), Hochheim loam (HmB, HmD2), Houghton muck (Ht), Knowles silt loam (KwB), Lamartine silt loam (LmB), Loamy Land (Lu), and Theresa silt loam (ThB).

* The Wisconsin Wetland Inventory map shows an S3/E2K complex occupying the northern portion of the site. This complex was found and flagged in the general location and configuration as shown on the WWI. In addition, the drainage channels described above were also flagged. These channels are directly connected to the larger complex.

*** The following wetland complex was flagged and is present on the parcel:**

The 8.89 acre wetland consists of a combination of wet meadow (DP #'s 1, 8, 11, 12), shallow water marsh (DP #'s 3 and 5), and stands of lowland hardwood trees and shrubs (DP #6) occupying a shallow depressional basin and/or shallow depressional channels in the northern and eastern parts of the property. Flags were placed around the topo breaks along the upper edges of the depressional basin and depressional channels which coordinated closely with discernable shifts in vegetation, hydrology, and soils from hydric to upland conditions. This complex extends offsite for undetermined distances to the north and south. This complex is considered a combination of "moderately susceptible" with a protective area of 50 feet for impervious surfaces and "less susceptible" with a protective area of 10% of the average wetland width ranging between not less than 10 feet and not more than 30 feet for impervious surfaces.

The vegetative, soil, and hydrology characteristics at each data point are described on the individual data sheets. Collectively, the data points show that the wet meadow areas are dominated by common buckthorn in the sapling/shrub stratum and reed canary grass, prairie cord grass, giant goldenrod, and devil's pitchfork in the herbaceous stratum. Soils meet the F3 and F6 indicators, and hydrology indicators of Surface Water, High Water Table, Saturation, Geomorphic Position, and/or the FAC-Neutral Test are present.

The shallow water marsh areas are dominated by narrowleaf cattail, reed canary grass, and giant goldenrod in the herbaceous stratum. Soils meet the A1 and F6 indicators and hydrology indicators of Geomorphic Position and the FAC-Neutral Test are present.

The lowland hardwood tree and shrub areas are dominated by American elm and Chinese elm in the tree stratum; common buckthorn in the sapling/shrub stratum; reed canary grass, devil's pitchfork, and common buckthorn in the herbaceous stratum; and riverbank grape in the woody vine stratum. Soils meet the F6 indicator and hydrology indicators of High Water Table, Saturation, Geomorphic Position, and the FAC-Neutral Test are present.

The adjacent upland data points (DP #'s 2, 4, 7, 9, 10, and 13) all describe stands of upland hardwood trees and shrubs. The vegetative, soil, and hydrology characteristics at each data point are described on the individual data sheets. Collectively, the upland areas are dominated in the tree stratum by shagbark hickory, black walnut, common buckthorn, green ash, and box elder; common buckthorn and honeysuckle in the sapling/shrub stratum; white snakeroot, common buckthorn, Kentucky bluegrass, false nettle, and Queen Anne's lace in the herbaceous stratum; and riverbank grape in the woody vine stratum. Neither soil nor the required hydrology indicators are present at any of these data points.

Additional Data Points

Three additional data points were located across the site in representative locations to demonstrate the absence of wetland characteristics at these locations.

Upland DP #14 is located in the southwest corner of the site in a grassy area dominated by Queen Anne's lace and Kentucky bluegrass in the herbaceous stratum. Neither soil nor the required hydrology indicators are present.

DP #15 is located in the west-central portion of the property in a stand of upland hardwood trees and shrubs dominated by northern red oak and black walnut in the tree stratum; common buckthorn in the sapling/shrub stratum; and periwinkle and stickseed in the herbaceous stratum. Neither soil nor the required hydrology indicators are present.

DP #16 is located in the center of the property in a stand of upland hardwood trees and shrubs dominated by American elm in the tree stratum; autumn olive in the sapling/shrub stratum; and prairie cordgrass, Queen Anne's lace, and bird's foot trefoil in the herbaceous stratum. Neither soil nor the required hydrology indicators are present.

Precipitation Data

Precipitation data from the websites of the USDA Natural Resource Conservation Service, the National Oceanic and Atmospheric Administration (NOAA), and Oconomowoc WETS station WI6200 was examined. This antecedent data was reviewed and considered while making determinations concerning the presence and/or absence of wetlands during the field investigation.

Because the antecedent precipitation was normal, direct observation of saturated soils, and even the possibility of standing water, was potentially anticipated, although not expected. Other primary indicators as well as the secondary indicators were also searched for.

Note that when a site is delineated in the second half of the month, the current month and the previous 2 months are taken into consideration.

Condition Value Dry = 1 Normal = 2 Wet = 3

	Month	Normal	3 yrs. In 10 less than	3 yrs. In 10 more than	Observed precip.	Condition dry, wet, normal	Condition value	Month weight value	Product of previous two columns
current month	August	4.52	3.14	5.38	9.03	wet	3	3	9
1st prior month	July	4.21	2.95	4.99	2.94	dry	1	2	2
2nd prior month	June	3.97	2.69	4.74	6.62	wet	3	1	3
								sum	14

If sum is	
6 - 9	drier than normal
10 - 14	normal
15 - 18	wetter than normal

Conclusion

Antecedent precipitation was normal.

Conclusion

The wetland lines staked in the field and referred to in this report are the best estimate of the wetland boundaries based on the conditions present at the time of delineation. The wetlands identified for this report may be subject to federal regulation under the jurisdiction of the U.S. Army Corps of Engineers, state regulation under the jurisdiction of Wisconsin DNR, and local jurisdiction under your local county, town, city, or village. Because this delineation was conducted by Mr. Meyer, an Assured Delineator, obtaining a concurrence letter from the Wisconsin Department of Natural Resources is not necessary. Concurrence with these wetland lines by the U.S. Army Corps of Engineers, however, must be obtained before undertaking any alterations or modifications of this property. Activities affecting wetlands or surface waters may require permits from the U.S. Army Corps of Engineers, the Wisconsin Department of Natural Resources, and local municipal authorities. The client must obtain authorization from all proper regulatory authorities before altering, modifying, or using the property. If the required authorizations are not obtained, Wetland & Waterway Consulting, LLC shall not be liable or responsible for any resulting damages.

Sincerely,

Dave Meyer

Attachments
1. Data points
2. Soil Survey maps
3. Wisconsin Wetland Inventory map
4. USGS topo map
5. Location map
6. Site photographs
7. Wetland boundary map

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-27-18
Applicant/Owner: State: WI Sampling Point: #1 wet
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): depressional basin Local relief (concave, convex, none): concave
Slope (%): 5 Lat.: Long.: Datum:
Soil Map Unit Name: Theresa silt loam ThB NWI Classification: S3/E2K
Are climatic/hydrologic conditions of the site typical for this time of the year? see report (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	Is the sampled area within a wetland?	Y
Hydric soil present?	Y		
Indicators of wetland hydrology present?	Y	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	___	No	✓	Depth (inches):
Water table present?	Yes	✓	No	___	Depth (inches):
Saturation present? (includes capillary fringe)	Yes	✓	No	___	Depth (inches): 14

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 1

Tree Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		= Total Cover		

Sapling/Shrub Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		= Total Cover		

Herb Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1	Solidago sigantea	50	✓	FACW
2				
3				
4	Spartina pectinata	60	✓	FACW
5				
6				
7	Urtica dioica	20		FAC
8				
9				
10	Aster ericoides	5		FACU
11				
12				
13				
14				
15				
		135 = Total Cover		

Woody Vine Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum		
Sapling/Shrub Stratum		
Herb Stratum		2
Woody Vine Stratum		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species ____ x 1 = ____

FACW species ____ x 2 = ____

FAC species ____ x 3 = ____

FACU species ____ x 4 = ____

UPL species ____ x 5 = ____

Column totals ____ (A) ____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ✓ Rapid test for hydrophytic vegetation
- ✓ Dominance test is >50%
- ___ Prevalence Index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-9	10YR 4/1	90	10YR 4/4	10	C	M	Silt loam	
9-24	10YR 2/1	80	10YR 3/6	20	C	M	Silt loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? Y

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-27-18
Applicant/Owner: State: WI Sampling Point: #2 up
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave
Slope (%): 3 Lat.: Long.: Datum:
Soil Map Unit Name: Hochheim loam HmB NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? see rmrk (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	N	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ___	No ✓	Depth (inches): ___
Water table present?	Yes ___	No ✓	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes ___	No ✓	Depth (inches): ___

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 2

Tree Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1 Carya ovata	20	✓	FACU
2			
3			
4 Juglans nigra	50	✓	FACU
5			
6			
7			
8			
9			
10			
	70 = Total Cover		

Sapling/Shrub Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1 Rhamnus cathartica	5	✓	FAC
2			
3			
4			
5			
6			
7			
8			
9			
10			
	5 = Total Cover		

Herb Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1 Ageratina altissima	100	✓	FACU
2			
3			
4 Boehmeria cylindrica	5		OBL
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
	105 = Total Cover		

Woody Vine Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1			
2 Vitis riparia	10	✓	FAC
3			
4			
5			
	10 = Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum	1	1
Sapling/Shrub Stratum		1
Herb Stratum		1
Woody Vine Stratum		1

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation
___ Dominance test is >50%
___ Prevalence index is ≤3.0*
___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-14	10YR 3/2	100					Silt loam	
14-24	10YR 4/2	95	10YR 3/6	5	C	M	clay loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-27-18
Applicant/Owner: State: WI Sampling Point: #3 wet
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): depressional basin Local relief (concave, convex, none): Concave
Slope (%): ~3 Lat.: Long.: Datum:
Soil Map Unit Name: Lamartine silt loam LmB NWI Classification: PSS1/EZK
Are climatic/hydrologic conditions of the site typical for this time of the year? see report (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	Is the sampled area within a wetland?	Y
Hydric soil present?	Y		
Indicators of wetland hydrology present?	Y	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ___	No ✓	Depth (inches):		Indicators of wetland hydrology present? Y
Water table present?	Yes ___	No ✓	Depth (inches):		
Saturation present? (includes capillary fringe)	Yes ✓	No ___	Depth (inches):	19	

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 3

Tree Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		= Total Cover		

Sapling/Shrub Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		= Total Cover		

Herb Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1	Typha angustifolia	50	✓	OBL
2				
3				
4	Phalaris arundinacea	35	✓	FACW
5				
6	Solidago gigantea	60	✓	FACW
7				
8				
9	Verbena hastata	2		FACW
10				
11				
12				
13				
14				
15				
		147 = Total Cover		

Woody Vine Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum		
Sapling/Shrub Stratum		
Herb Stratum	1	2
Woody Vine Stratum		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ✓ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-7	10YR 3/1	95	10YR 5/6	5	C	M	silt loam	
7-24	10YR 2/1	100					muck	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ✓ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? Y

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-27-18
Applicant/Owner: State: WI Sampling Point: #4 UP
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex
Slope (%): ~5 Lat.: Long.: Datum:
Soil Map Unit Name: Hochheim loam HmB NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? see remarks (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	N	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ___	No ✓	Depth (inches):	
Water table present?	Yes ___	No ✓	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes ___	No ✓	Depth (inches):	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 4

Tree Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1 Juglans nigra		45	✓	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
		45	= Total Cover	

Sapling/Shrub Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
			= Total Cover	

Herb Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1 Asclepias altissima		100	✓	FACU
2				
3				
4				
5 Boehmeria cylindrica		5		OBL
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		105	= Total Cover	

Woody Vine Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
			= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum		1
Sapling/Shrub Stratum		
Herb Stratum		1
Woody Vine Stratum		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence Index is ≤3.0*
- ___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-15	10YR 3/2	100					Silt loam	
15-19	10YR 2/2	100					Silt loam	
19-24	10YR 2/1	100					Silt loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-27-18
Applicant/Owner: State: WI Sampling Point: #5 wet
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): depressional basin Local relief (concave, convex, none): concave
Slope (%): 0-5 Lat.: Long.: Datum:
Soil Map Unit Name: Lamartine silt loam Lm15 NWI Classification: PSS/EEK
Are climatic/hydrologic conditions of the site typical for this time of the year? see report (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y	**Is the sampled area within a wetland?** Y
Hydric soil present? Y	
Indicators of wetland hydrology present? Y	If yes, optional wetland site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)
- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)
- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ___	No ✓	Depth (inches): ___
Water table present?	Yes ✓	No ___	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes ✓	No ___	Depth (inches): 16

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 5

Tree Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		= Total Cover		

Sapling/Shrub Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		= Total Cover		

Herb Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1	Typha Shyustifolia	65	✓	OBL
2				
3				
4	Phalaris arundinacea	30	✓	FACW
5				
6				
7	Solidago Sigantea	35	✓	FACW
8				
9				
10				
11				
12				
13				
14				
15				
		130 = Total Cover		

Woody Vine Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum		
Sapling/Shrub Stratum		
Herb Stratum	2	1
Woody Vine Stratum		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ✓ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-11	10YR 3/1	90	10YR 4/6	10	C	M	Silt loam	
11-21	10YR 2/1	100					muck	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ✓ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? Y

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-27-18
Applicant/Owner: State: WI Sampling Point: #6 West
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): depressional basin Local relief (concave, convex, none): Concave
Slope (%): ~5 Lat.: Long.: Datum:
Soil Map Unit Name: Lamartine silt loam LmB NWI Classification: S3/E2K
Are climatic/hydrologic conditions of the site typical for this time of the year? see report (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	Is the sampled area within a wetland?	Y
Hydric soil present?	Y		
Indicators of wetland hydrology present?	Y	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	___	No	✓	Depth (inches):
Water table present?	Yes	✓	No	___	Depth (inches): 11
Saturation present? (includes capillary fringe)	Yes	✓	No	___	Depth (inches): surface

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 6

Tree Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Ulmus americana	40	✓	FACW
2			
3			
4 Ulmus pumila	20	✓	FACU
5			
6			
7 Rhamnus cathartica	5		FAC
8			
9			
10			
	65	= Total Cover	

Sapling/Shrub Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Rhamnus cathartica	80	✓	FAC
2			
3			
4			
5			
6			
7			
8			
9			
10			
	80	= Total Cover	

Herb Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Rhamnus cathartica	30	✓	FAC
2			
3			
4 Phalaris arundinacea	20	✓	FACW
5			
6			
7 Urtica dioica	5		FAC
8			
9			
10 Bidens frondosa	40	✓	FACW
11			
12			
13 Scirpus atrovirens	5		OBL
14			
15			
	100	= Total Cover	

Woody Vine Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1			
2 Vitis riparia	5	✓	FAC
3			
4			
5			
	5	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	1	1
Sapling/Shrub Stratum		1
Herb Stratum	1	2
Woody Vine Stratum		1

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across all Strata: 7 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 86 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ✓ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-6	10YR 2/2	95	10YR 3/6	5	C	M	silt loam	
6-13	10YR 3/2	90	10YR 3/6	10	C	M	silt loam	
13-24	10YR 2/1	90	10YR 3/6	10	C	M	silt loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? Y

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-27-18
Applicant/Owner: State: WI Sampling Point: #7 UP
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave
Slope (%): ~10 Lat.: Long.: Datum:
Soil Map Unit Name: Hochheim silt loam HmB NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? see remarks (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ___	No ✓	Depth (inches): ___
Water table present?	Yes ___	No ✓	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes ___	No ✓	Depth (inches): ___

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 7

Tree Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Rhamnus cathartica	5	✓	FAC
2			
3			
4 Fraxinus pennsylvanica	10	✓	FACW
5			
6			
7 Acer negundo	10	✓	FAC
8			
9			
10			
	25	= Total Cover	

Sapling/Shrub Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Rhamnus cathartica	90	✓	FAC
2			
3			
4			
5			
6			
7			
8			
9			
10			
	90	= Total Cover	

Herb Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Rhamnus cathartica	25	✓	FAC
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
	25	= Total Cover	

Woody Vine Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1			
2 Vitis riparia	10	✓	FAC
3			
4			
5			
	10	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	1	2
Sapling/Shrub Stratum		1
Herb Stratum		1
Woody Vine Stratum		1

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ✓ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-10	10YR2/2	100					silt loam	
10-24	10YR4/4	95	10YR4/6	5	C	M	Clay loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-29-18
Applicant/Owner: State: WI Sampling Point: #1 Wet
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): depressional channel Local relief (concave, convex, none): concave
Slope (%): ~3 Lat.: Long.: Datum:
Soil Map Unit Name: Hochheim silt loam HmB NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? see rmrk (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	Y
Hydric soil present?	Y		
Indicators of wetland hydrology present?	Y	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ✓ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ✓	No ___	Depth (inches):	2
Water table present?	Yes ✓	No ___	Depth (inches):	Surface
Saturation present? (includes capillary fringe)	Yes ✓	No ___	Depth (inches):	Surface

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 8

Tree Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		= Total Cover		

Sapling/Shrub Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		= Total Cover		

Herb Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1	Bidens frondosa	40	✓	FACW
2				
3				
4	Phalaris arundinacea	60	✓	FACW
5				
6				
7	Solidago gigantea	5		FACW
8				
9				
10	Impatiens capensis	2		FACW
11				
12				
13				
14				
15				
		107 = Total Cover		

Woody Vine Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum		
Sapling/Shrub Stratum		
Herb Stratum	1	1
Woody Vine Stratum		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ✓ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-7	10YR3/1	100					silt loam	
7-17	10YR3/1	90	10YR4/6	10	C	M	silt loam	
17-24	10YR4/2	70	10YR4/6	30	C	M	silty loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) **(LRR R, MLRA 149B)**
___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) **(LRR K, L)**
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
✓ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) **(LRR K, L, R)**
___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
___ Dark Surface (S7) **(LRR K, L**
___ Polyvalue Below Surface (S8) **(LRR K, L)**
___ Thin Dark Surface (S9) **(LRR K, L)**
___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? Y

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-29-18
Applicant/Owner: State: WI Sampling Point: #9 UP
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex
Slope (%): ~5 Lat.: Long.: Datum:
Soil Map Unit Name: Lamartine silt loam 6 to 12% NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? see report (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	Is the sampled area within a wetland?	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ___	No ✓	Depth (inches): ___
Water table present?	Yes ___	No ✓	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes ___	No ✓	Depth (inches): ___

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 9

Tree Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1 Acer negundo	15	—	FAC
2			
3			
4 Juglans nigra	25	/	FACW
5			
6			
7			
8			
9			
10			
	40	= Total Cover	

Sapling/Shrub Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1 Lonicera x bella	60	/	FACU
2			
3			
4 Rhamnus cathartica	15	/	FAC
5			
6			
7			
8			
9			
10			
	75	= Total Cover	

Herb Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1 Poa pratensis	20	/	FACU
2			
3			
4 Boehmeria cylindrica	80	/	OBL
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
	100	= Total Cover	

Woody Vine Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
		= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	1	1
Sapling/Shrub Stratum	1	1
Herb Stratum	1	1
Woody Vine Stratum		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	80	x 1 =	80
FACW species		x 2 =	
FAC species	30	x 3 =	90
FACU species	105	x 4 =	420
UPL species		x 5 =	
Column totals	215 (A)		590 (B)

Prevalence Index = B/A = 2.74

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ✓ Prevalence index is ≤3.0*
- ___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-13	10YR 3/2	100					Silt loam	
13-24	10YR 4/4	100					Clay loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? A1

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-29-18
Applicant/Owner: State: WI Sampling Point: #1041
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Convex
Slope (%): ~5 Lat.: Long.: Datum:
Soil Map Unit Name: Lamartine silt loam LmB NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? see report (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	N	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ___	No ✓	Depth (inches):	
Water table present?	Yes ___	No ✓	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes ___	No ✓	Depth (inches):	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 10

Tree Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1 Acer negundo	10		FAC
2			
3			
4			
5			
6			
7			
8			
9			
10			
	10 = Total Cover		

Sapling/Shrub Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1 Rhamnus cathartica	25		FAC
2			
3			
4 Lonicera x bella	25	/	FACU
5			
6			
7			
8			
9			
10			
	50 = Total Cover		

Herb Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1 Daucus carota	60	/	UPL
2			
3			
4 Eutrochium dubium ssp.	2		FACW
5			
6			
7 Poa pratensis	25	/	FACU
8			
9			
10 Agrostis gigantea	5		FACU
11			
12			
13			
14			
15			
	92 = Total Cover		

Woody Vine Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum		1
Sapling/Shrub Stratum		2
Herb Stratum	1	1
Woody Vine Stratum		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-9	10YR 3/2	100					Silt loam	
9-24	10YR 4/4	100					Clay loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-29-18
Applicant/Owner: State: WI Sampling Point: #11 wet
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): depressional channel Local relief (concave, convex, none): Concave
Slope (%): <3 Lat.: Long.: Datum:
Soil Map Unit Name: Lamartine silt loam Conn NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? see rpt (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal circumstances" present? Y
Are vegetation N, soil N, or hydrology N naturally problematic?
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y Hydric soil present? Y Indicators of wetland hydrology present? Y	Is the sampled area within a wetland? Y If yes, optional wetland site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ___	No ✓	Depth (inches): ___
Water table present?	Yes ___	No ✓	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes ✓	No ___	Depth (inches): 12

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 11

Tree Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		= Total Cover		

Sapling/Shrub Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1	Rhamnus cathartica	40	/	FAC
2				
3				
4	Lonicera x bella	5		FACU
5				
6				
7				
8				
9				
10				
		45 = Total Cover		

Herb Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1	Boehmeria cylindrica	15		OBL
2	Solidago sigantea	5		FACW
3				
4	Bidens frondosa	15		FACW
5				
6				
7	Phalaris arundinacea	20	/	FACW
8				
9	Rhamnus cathartica	30	/	FAC
10				
11				
12				
13				
14				
15				
		85 = Total Cover		

Woody Vine Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum		
Sapling/Shrub Stratum		1
Herb Stratum		2
Woody Vine Stratum		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 66 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ✓ Dominance test is >50%
- ___ Prevalence Index is ≤3.0*
- ___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-4	10YR 2/2	100					Silt loam	
4-16	10YR 2/2	95	10YR 4/4	5	C	M	Silt loam	
16-24	10YR 4/4	100					Clay loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? Y

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-29-18
Applicant/Owner: State: WI Sampling Point: #12 wet
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): depressional channel Local relief (concave, convex, none): Concave
Slope (%): ~2 Lat.: Long.: Datum:
Soil Map Unit Name: Hochheim Silt Loam Horn B NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? see remarks (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y Hydric soil present? Y Indicators of wetland hydrology present? Y	Is the sampled area within a wetland? Y If yes, optional wetland site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)
- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)
- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	✓ No	✓	Depth (inches):
Water table present?	Yes	✓ No		Depth (inches): 3
Saturation present? (includes capillary fringe)	Yes	✓ No		Depth (inches): Surface

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 12

Tree Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
	= Total Cover		

Sapling/Shrub Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1 Rhamnus Cathartica	25	✓	FAC
2			
3			
4			
5			
6			
7			
8			
9			
10			
	25 = Total Cover		

Herb Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1 Bidens frondosa	55	✓	FACW
2			
3 Phalaris arundinacea	25	✓	FACW
4 Typha angustifolia	20		OBL
5			
6			
7			
8 Daucus Carota	2		UPL
9			
10			
11			
12			
13			
14			
15			
	102 = Total Cover		

Woody Vine Stratum Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum		
Sapling/Shrub Stratum		1
Herb Stratum	1	1
Woody Vine Stratum		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ✓ Rapid test for hydrophytic vegetation
- Dominance test is >50%
- Prevalence index is ≤3.0*
- Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-5	10YR 3/2	100					silt loam	
5-14	10YR 4/2	95	10YR 4/6	5	C	M	silt loam	
14-24	10YR 4/4	100					clay loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) (LRR K, L, MLRA 149B
- ___ Coast Prairie Redox (A16) (LRR K, L, R)
- ___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ___ Dark Surface (S7) (LRR K, L
- ___ Polyvalue Below Surface (S8) (LRR K, L)
- ___ Thin Dark Surface (S9) (LRR K, L)
- ___ Iron-Manganese Masses (F12) (LRR K, L, R)
- ___ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ___ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? Y

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-29-18
Applicant/Owner: State: WI Sampling Point: #15UP
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave
Slope (%): <10 Lat.: Long.: Datum:
Soil Map Unit Name: Lamartine silt loam, 6 to 12 % slopes NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? See rmrk (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	N	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ___	No ___	Depth (inches): ___
Water table present?	Yes ___	No ___	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes ___	No ___	Depth (inches): ___

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 13

Tree Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Juglans nigra	10	✓	FACU
2			
3			
4			
5			
6			
7			
8			
9			
10			
	10 = Total Cover		

Sapling/Shrub Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Rhamnus cathartica	45	✓	FAC
2			
3			
4			
5			
6			
7			
8			
9			
10			
	45 = Total Cover		

Herb Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Daucus carota	65	✓	UPL
2			
3			
4 Poa pratensis	60	✓	FACU
5			
6			
7 Erigeron annuus	2		FACU
8			
9			
10 Achillea millefolium	5		FACU
11			
12			
13			
14			
15			
	132 = Total Cover		

Woody Vine Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum		1
Sapling/Shrub Stratum		1
Herb Stratum		2
Woody Vine Stratum		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 4 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphogical adaptations* (provide supporting data in Remarks or on s separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-9	10YR3/2	100					Silt loam	
9-24	10YR4/4	100					Clay loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-29-18
Applicant/Owner: State: WI Sampling Point: #14UP
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex
Slope (%): 3 Lat.: Long.: Datum:
Soil Map Unit Name: Casco loam CeC2 NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? see report (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N Hydric soil present? N Indicators of wetland hydrology present? N	Is the sampled area within a wetland? N If yes, optional wetland site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ___	No /	Depth (inches): ___
Water table present?	Yes ___	No /	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes ___	No /	Depth (inches): ___

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 14

Tree Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		= Total Cover		

Sapling/Shrub Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		= Total Cover		

Herb Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1	Daucus Carota	60		UPL
2				
3				
4	Poa pratensis	30	/	FACU
5				
6				
7	Lotus corniculatus	20		FACU
8				
9				
10				
11				
12				
13				
14				
15				
		110 = Total Cover		

Woody Vine Stratum	Plot Size ( )	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum		
Sapling/Shrub Stratum		
Herb Stratum	1	1
Woody Vine Stratum		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? NI

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-6	10YR3/2	100					silt loam	
6-15	10YR5/3	100					silt loam	
15-24	10YR4/4	100					clay loam w/	10% gravel

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-29-18
Applicant/Owner: State: WI Sampling Point: #15 GP
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave
Slope (%): ~10 Lat.: Long.: Datum:
Soil Map Unit Name: Fox silt loam, 2-6% NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N	**Is the sampled area within a wetland?** N
Hydric soil present? N	
Indicators of wetland hydrology present? N	If yes, optional wetland site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ___	No ✓	Depth (inches): ___
Water table present?	Yes ___	No ✓	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes ___	No ✓	Depth (inches): ___

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 15

Tree Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Quercus rubra	20	✓	FACU
2			
3			
4 Fagus grandifolia	15	✓	FACU
5			
6			
7 Prunus serotina	10		FACU
8			
9			
10 Acer negundo	10		FAC
	55 = Total Cover		

Sapling/Shrub Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Rhamnus cathartica	60	✓	FAC
2			
3			
4 Lonicera tatarica	5		FACU
5			
6			
7			
8			
9			
10			
	65 = Total Cover		

Herb Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Ageratina altissima	10		FACU
2			
3 Vinca minor	50	✓	UPL
4			
5 Verbena urticifolia	10		FAC
6			
7 Juncus dudleyi	5		FACW
8			
9 Circaea canadensis	5		FACU
10			
11 Hackelia virginiana	20	✓	FACU
12			
13			
14			
15			
	100 = Total Cover		

Woody Vine Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum		2
Sapling/Shrub Stratum		1
Herb Stratum	1	1
Woody Vine Stratum		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 20 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-8	10YR 3/2	100					silt loam	
8-24	10YR 4/4	100					silt loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Golf Road City/County: Pewaukee Sampling Date: 8-29-18
Applicant/Owner: State: WI Sampling Point: #11, up
Investigator(s): Meyer Section, Township, Range: Sec. 19 T7N R19E
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex
Slope (%): 3 Lat.: Long.: Datum:
Soil Map Unit Name: Hochheim silt loam HmB NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? see rmk (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal
Are vegetation N, soil N, or hydrology N naturally problematic? circumstances" present? Y
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N Hydric soil present? N Indicators of wetland hydrology present? N	**Is the sampled area within a wetland?** N If yes, optional wetland site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)
- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leeves (B9)
- ___ Aquatic Fauna (B13)
- ___ Mari Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)
- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ___	No ✓	Depth (inches):
Water table present?	Yes ___	No ✓	Depth (inches):
Saturation present? (includes capillary fringe)	Yes ___	No ✓	Depth (inches):

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: 16

Tree Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Ulmus americana	10	✓	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	10 = Total Cover		

Sapling/Shrub Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Elaeagnus umbellata	20	✓	UPL
2			
3			
4			
5			
6			
7			
8			
9			
10			
	20 = Total Cover		

Herb Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1 Achillea millefolium	15		FACU
2 Monarda fistulosa	20		FACU
3 Lotus corniculatus	30	✓	FACU
4 Daucus carota	40	✓	UPL
5 Poa pratensis	20		FACU
6 Spartina pectinata	35	✓	FACW
7			
8			
9			
10			
11			
12			
13			
14			
15			
	160 = Total Cover		

Woody Vine Stratum (Plot Size ( ))	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum		1
Sapling/Shrub Stratum		1
Herb Stratum		3
Woody Vine Stratum		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL **Sampling Point:** 16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-7	10YR 3/2	100					Silt loam	
7-16	10YR 5/3	100					Silt loam	
16-24	10YR 4/4	100					Clay loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Suface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:

Surface Water Data Viewer Map

Legend

- NRCS Wisconsin Soils
  - Soil Mapping Unit
  - Water
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN_Image_Basemap_Leaf Off

Notes

0.1 0 0.06 0.1 Miles

NAD_1983_HARN_Wisconsin_TM

1: 3,960

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Soil Map—Milwaukee and Waukesha Counties, Wisconsin

Map Scale: 1:3,260 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 45 90 180 270

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

Report—Hydric Soil List - All Components

Hydric Soil List - All Components–WI602-Milwaukee and Waukesha Counties, Wisconsin					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
CeB: Casco loam, 2 to 6 percent slopes	Casco	80-90	Outwash plains	No	—
	Fox	5-11	Outwash plains	No	—
	Boyer	5-9	Outwash plains	No	—
CeC2: Casco loam, 6 to 12 percent slopes, eroded	Casco-Eroded	80-90	Moraines	No	—
	Fox	5-11	Moraines	No	—
	Rodman	5-9	Moraines	No	—
FsB: Fox silt loam, 2 to 6 percent slopes	Fox	80-90	Outwash plains	No	—
	Casco	5-10	Outwash plains	No	—
	St. Charles-Gravelly substratum	5-10	Outwash plains	No	—
GP: Gravel pit	Pits-Gravel	99	—	Unranked	—
	Aquents	1	Depressions	Yes	2,3
HmB: Hochheim loam, 2 to 6 percent slopes	Hochheim	85-92	Drumlins	No	—
	Theresa	5-8	Drumlins	No	—
	Lamartine	3-7	Drumlins	No	—
HmD2: Hochheim loam, 12 to 20 percent slopes, eroded	Hochheim-Eroded	80-91	Drumlins	No	—
	Theresa	6-12	Drumlins	No	—
	Hochheim	3-8	Drumlins	No	—
HtA: Houghton muck, 0 to 2 percent slopes	Houghton-Muck	84-95	Depressions	Yes	1,2,3
	Houghton-Ponded	2-5	Depressions	Yes	1,3
	Palms	1-3	Lakebeds (relict)	Yes	1,3
	Adrian	1-3	Lakebeds (relict)	Yes	1,3
	Edwards	1-2	Depressions	Yes	1,3
	Willette-Muck	0-3	Depressions	Yes	1,3
KwB: Knowles silt loam, 2 to 6 percent slopes	Knowles	100	Ground moraines	No	—
LmB: Lamartine silt loam, 0 to 3 percent slopes	Lamartine	80-91	Interdrumlins	No	—
	Pella	6-11	Drainageways	Yes	2,3
	Ossian	3-9	Depressions	Yes	2,3
Lu: Loamy land	Loamy land	90	—	No	—
	Wetter soils		Depressions	Yes	2

Hydric Soil List - All Components–WI602-Milwaukee and Waukesha Counties, Wisconsin					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
ThB: Theresa silt loam, 2 to 6 percent slopes	Theresa	80-92	Drumlins	No	—
	Hochheim	5-14	Drumlins	No	—
	Lamartine	3-6	Drumlins	No	—

Data Source Information

Soil Survey Area: Milwaukee and Waukesha Counties, Wisconsin
Survey Area Data: Version 13, Oct 6, 2017

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CeB	Casco loam, 2 to 6 percent slopes	1.6	5.7%
CeC2	Casco loam, 6 to 12 percent slopes, eroded	3.1	11.4%
FsB	Fox silt loam, 2 to 6 percent slopes	2.7	10.0%
GP	Gravel pit	0.1	0.2%
HmB	Hochheim loam, 2 to 6 percent slopes	9.4	34.1%
HmD2	Hochheim loam, 12 to 20 percent slopes, eroded	0.1	0.3%
HtA	Houghton muck, 0 to 2 percent slopes	2.0	7.2%
KwB	Knowles silt loam, 2 to 6 percent slopes	0.8	3.0%
LmB	Lamartine silt loam, 0 to 3 percent slopes	5.0	18.2%
Lu	Loamy land	0.7	2.7%
ThB	Theresa silt loam, 2 to 6 percent slopes	2.0	7.2%
Totals for Area of Interest		**27.6**	**100.0%**

Surface Water Data Viewer Map

Legend

- Wetland Identifications and Confirmations
- Wetland Class Points
  - Dammed pond
  - Excavated pond
  - Filled excavated pond
  - Filled/drained wetland
  - Wetland too small to delineate
- Filled Points
- Wetland Class Areas
  - Wetland
  - Upland
- Filled Areas
- Wetland Class Points
  - Dammed pond
  - Excavated pond
  - Filled excavated pond
  - Filled/drained wetland
  - Wetland too small to delineate
- Filled Points
- Wetland Class Areas
  - Wetland
  - Upland
- Filled Areas
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads

Notes

0.1 0 0.06 0.1 Miles

NAD_1983_HARN_Wisconsin_TM

1: 3,960

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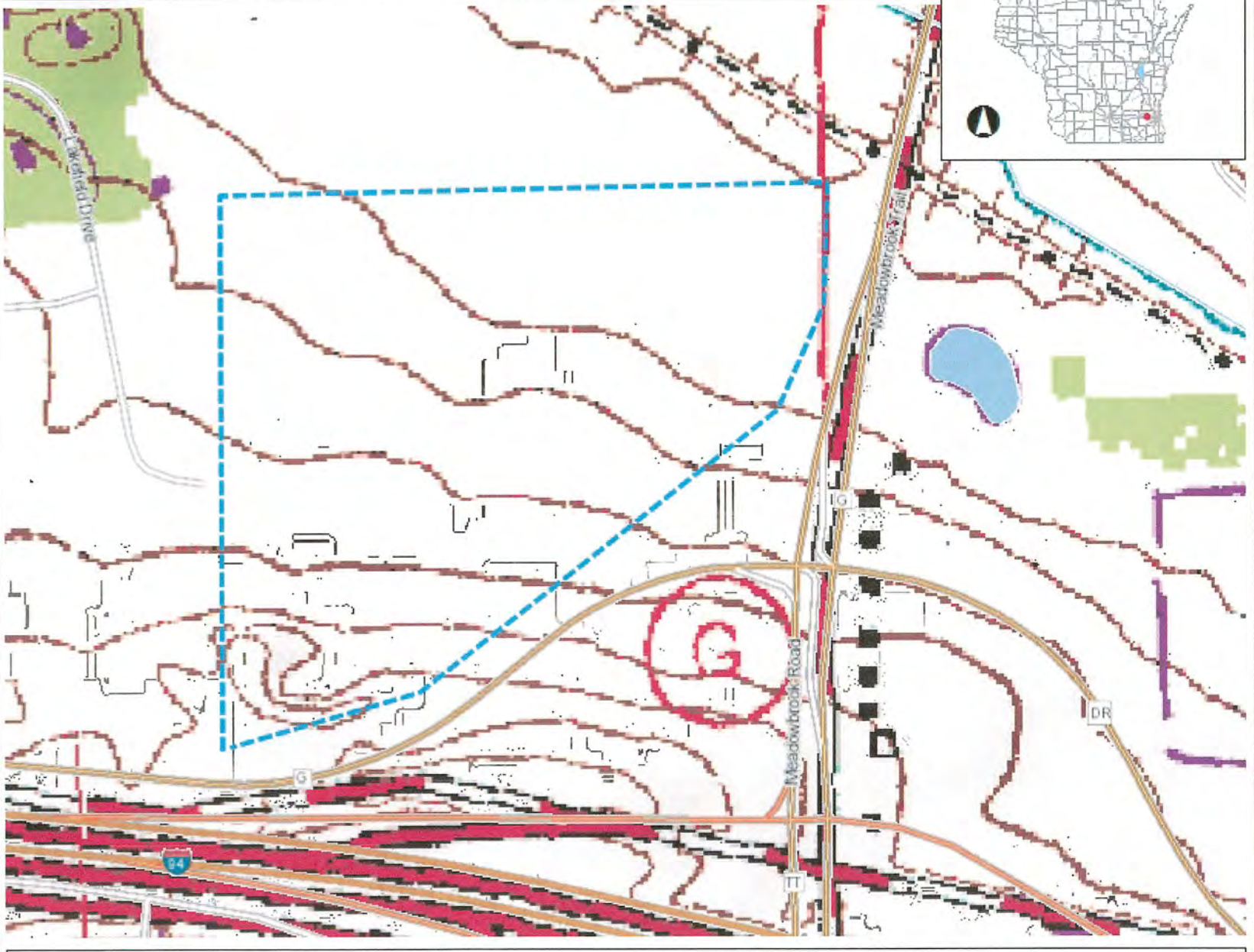
Surface Water Data Viewer Map



Legend

- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- 24K USGS Quad Index - Level 7 - 16
- Index to EN_Image_Basemap_Leaf Off

Notes

0.1 0 0.06 0.1 Miles

NAD_1983_HARN_Wisconsin_TM

1: 3,960

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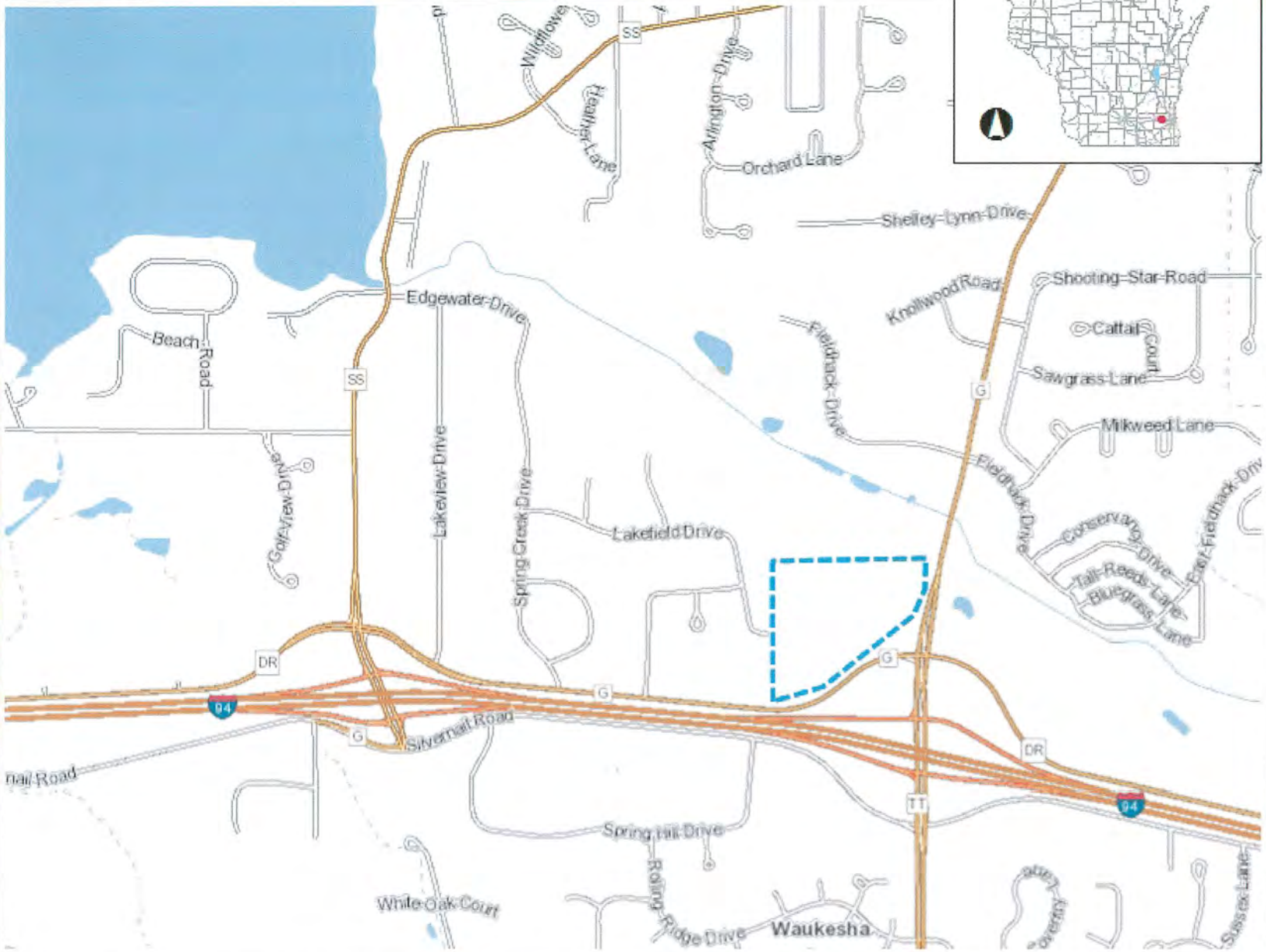
Surface Water Data Viewer Map



Legend

- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water

Notes

0.5 0 0.25 0.5 Miles

NAD_1983_HARN_Wisconsin_TM

1: 15,840

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PHOTOGRAPHS

Photo A.....Typical view of wetland complex at DP #'s 1, 3, and 5.

Photo B.....Typical view of upland conditions in the vicinity of DP #'s 2 and 4.

Photo C.....Typical view of upland drainage channels at DP #'s 8, 11, and 12.

Photo D.....Typical view of upland shrubby areas throughout the site.

Photo E.....One of the culverts that discharge to the depressional channels.

LEGAL DESCRIPTION:

All that part of the East 1/2 of the Southeast 1/4 of Section 19 in Township 7 North, Range 19 East, in the Town of Pewaukee, Waukesha County, Wisconsin lying North of the location of old State Highway No. 30, excepting and reserving therefrom 12.80 acres conveyed to Waukesha County for highway purposes by Warranty Deed recorded April 15, 1957 in Volume 736 of Deeds, Page 356 as Document No. 457247. Excepting therefrom those lands granted to the State of Wisconsin Department of Transportation described as Award of Damages recorded on July 1, 1999 as Document No. 2479003.
TAX KEY NO.: PWC 0940-999-001

LEGEND

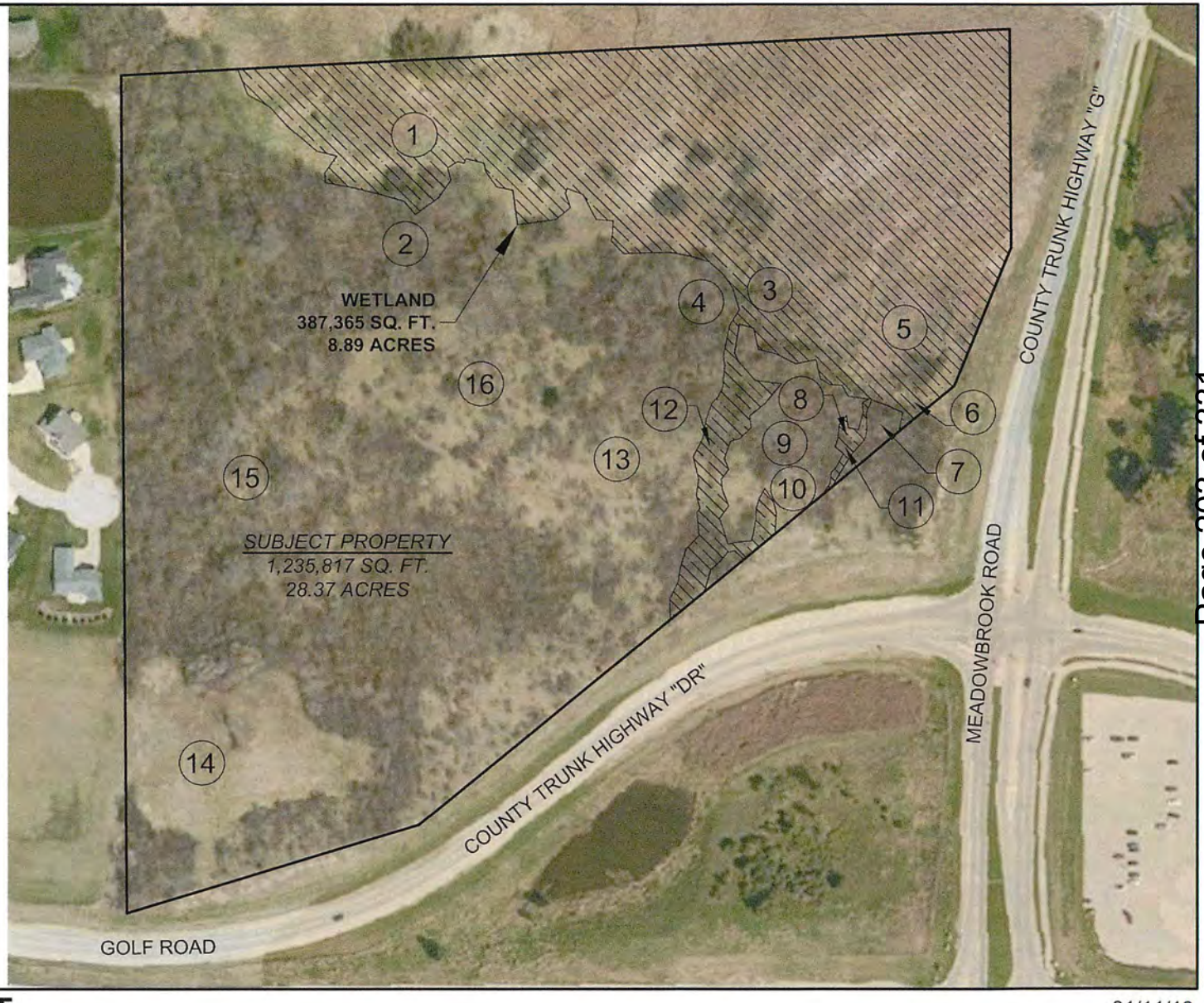
(1) = DATA POINT

WETLANDS DELINEATED BY
WETLAND & WATERWAY CONSULTING, LLC.
AUGUST 27 AND AUGUST 29, 2018

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 150' 300'



WETLAND EXHIBIT

01/11/18

PINNACLE ENGINEERING GROUP
15850 W. BLUEMOUND ROAD | SUITE 210 | BROOKFIELD, WI 53005 | WWW.PINNACLE-ENGR.COM

PLAN | DESIGN | DELIVER

PEG JOB#1338.00

APPENDIX 6
CALCULATIONS

PINNACLE ENGINEERING GROUP
Plan | Design | Deliver
www.pinnacle-engr.com

STORM SEWER COMPUTATIONS
FOR
STENZ SENIOR LIVING

PEWAUKEE, WI

SHEET 1 OF 1
DESIGN BY: ACT
PROJECT NUMBER: 1338.10
DATE: 1/23/2023

DESIGN DATA

County: Waukesha | **Design Storm:** 10 yr | **Storm Duration:** 10 min | **DESIGN INTENSITY (I):** 5.28 in/hr | Intensity calculated using SEWRPC IDF equations.

STRUCTURE DATA			DRAINAGE AREA AND FLOW DATA (Flow is determined by Rational Method Q = CIA)				PIPE DATA				PIPE CAPACITY INFORMATION (Pipe capacity is determined by Manning's Equation $Q = 1.486/n\ AR^{2/3}\ S^{1/2}$)					ELEVATIONS		
Notes	Upstream Structure	Downstream Structure	Individual Acres A	Individual Coefficient C	Individual Flow Q (cfs)	Cumulative Flow (cfs)	Length (ft)	Diameter (in)	Slope (%)	Manning Coefficient	Required Drop (ft)	Actual Drop (ft)	Percent Full (%)	Actual Velocity (fps)	Max. Capacity (cfs)	Rim/Toc Up	Invert Up	Invert Down
	CB 1	CB 2	0.20	0.85	0.89	0.89	245.70	8	3.75	0.012	1.13	9.21	39%	6.45	2.63	901.15	898.31	889.10
	CB 2	CB 3	0.19	0.90	0.92	1.81	80.50	10	0.80	0.012	0.47	0.64	76%	4.37	2.28	893.00	889.10	888.45
	CB 3	CB 4	0.04	0.90	0.19	3.39	158.80	12	0.80	0.012	1.22	1.27	86%	5.01	3.71	891.10	884.95	883.68
	CB 4	CB 5	0.12	0.66	0.42	6.19	131.50	15	1.00	0.012	1.03	1.32	78%	6.44	7.53	887.94	883.68	882.37
	CB 5	ES 6	0.16	0.59	0.49	6.68	136.70	15	1.00	0.012	1.24	1.37	84%	6.49	7.53	886.57	882.37	881.00
100 YEAR	CB 7	CB 3	0.30	0.27	0.62	1.13	65.40	12	0.30	0.012	0.06	0.20	53%	2.74	2.27	888.18	885.15	884.95
	BC 14	CB 4	0.15	0.71	0.86	2.13	40.50	10	2.00	0.012	0.33	0.81	60%	6.51	3.61	890.00	884.49	883.68
100 YEAR	CB 8	CB 9	0.23	0.79	1.40	1.53	132.95	12	0.60	0.012	0.21	0.80	51%	3.83	3.22	888.15	884.73	883.93
100 YEAR	CB 9	CB 10	0.11	0.56	0.47	4.04	147.10	15	0.60	0.012	0.49	0.88	68%	4.84	5.83	888.72	883.93	883.05
100 YEAR	CB 10	MH 11	0.14	0.53	0.58	7.30	136.30	18	0.50	0.012	0.56	0.68	80%	5.16	8.66	887.54	883.05	882.36
100 YEAR	MH 11	MH 12	0.00	0.00	0.00	10.79	136.70	24	0.50	0.012	0.26	0.68	59%	5.82	18.64	888.89	882.36	881.68
100 YEAR	MH 12	ES 13	0.00	0.00	0.00	12.44	113.35	24	0.60	0.012	0.29	0.68	61%	6.44	20.42	889.12	881.68	881.00
	BC 15	MH 11	0.24	0.72	1.33	3.23	24.40	10	2.00	0.012	0.45	0.49	85%	7.01	3.61	890.00	882.85	882.36
	DS 1	MH 12	0.35	0.90	1.65	1.65	439.00	10	1.25	0.012	2.12	5.49	59%	5.13	2.85	890.00	887.17	881.68
100 YEAR	CB 9.1	CB 9	0.59	0.25	1.15	1.15	22.40	12	0.50	0.012	0.02	0.11	44%	3.33	2.94	887.04	884.04	883.93
100 YEAR	CB 10.1	CB 10	0.65	0.25	1.28	2.43	13.04	12	0.80	0.012	0.05	0.10	65%	4.76	3.71	887.44	883.15	883.05

APPENDIX 7
MAINTENANCE AGREEMENT

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

www.pinnacle-engr.com

ONSITE CIVIL ENGINEERING INFRASTRUCTURE PLANS

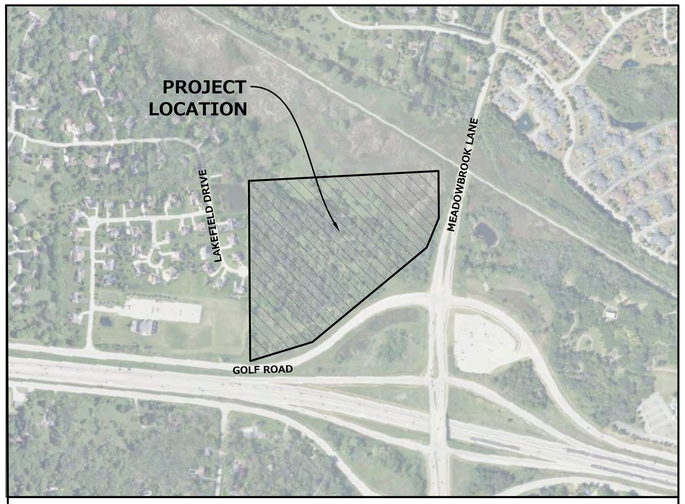
FOR

THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

PLANS PREPARED
FOR

ANDEV GROUP, LLC
680 N. LAKE SHORE DR. UNIT 1103
CHICAGO, IL 60611



LOCATION MAP
SCALE: 1" = 500'

LEGEND

	EXISTING	PROPOSED
SANITARY SEWER MANHOLE		
STORM SEWER MANHOLE		
STORM SEWER AREA DRAIN		
STORM SEWER INLET (ROUND CASTING)		
STORM SEWER INLET (RECTANGULAR CASTING)		
PRECAST FLARED END SECTION		
CONCRETE HEADWALL		
VALVE VAULT		
VALVE BOX		
FIRE HYDRANT		
BUFFALO BOX		
CLEANOUT		
SANITARY SEWER		
FORCE MAIN		
STORM SEWER		
DRAIN TILE		
WATER MAIN	W	W
UTILITY CROSSING		
LIGHTING		
ELECTRICAL CABLE	E	E
OVERHEAD WIRES	OHW	OHW
CAUTION EXISTING UTILITIES NEARBY		CAUTION
ELECTRICAL TRANSFORMER OR PEDESTAL	E	
POWER POLE		
POWER POLE WITH LIGHT		
STREET SIGN		
GAS MAIN	G	G
TELEPHONE LINE	T	T
CONTOUR	749	749
SPOT ELEVATION	×(750.00)	×750.00
WETLANDS		
FLOODWAY		
FLOODPLAIN		
HIGH WATER LEVEL (HWL)		
NORMAL WATER LEVEL (NWL)		
DIRECTION OF SURFACE FLOW		
DITCH OR SWALE		
DIVERSION SWALE		
OVERFLOW RELIEF ROUTING		
TREE WITH TRUNK SIZE		
SOIL BORING		
TOPSOIL PROBE		
FENCE LINE, TEMPORARY SILT	SF	SF
FENCE LINE, WIRE		
FENCE LINE, CHAIN LINK OR IRON		
FENCE LINE, WOOD OR PLASTIC		
CONCRETE SIDEWALK		
CURB AND GUTTER		
DEPRESSED CURB		
REVERSE PITCH CURB & GUTTER		
EASEMENT LINE		

ABBREVIATIONS

BL	BASE LINE	NWL	NORMAL WATER LEVEL
C	LONG CHORD OF CURVE	PC	POINT OF CURVATURE
C & G	CURB AND GUTTER	PT	POINT OF TANGENCY
CB	CATCH BASIN	PVI	POINT OF VERTICAL INTERSECTION
CL	CENTERLINE	R	RADIUS
D	DEGREE OF CURVE	ROW	RIGHT-OF-WAY
EP	EDGE OF PAVEMENT	SAN	SANITARY SEWER
FF	FINISHED FLOOR	ST	STORM SEWER
FG	FINISHED GRADE	T	TANGENCY OF CURVE
FL	FLOW LINE	TB	TOP OF BANK
FP	FLOODPLAIN	TC	TOP OF CURB
FR	FRAME	TF	TOP OF FOUNDATION
FW	FLOODWAY	TP	TOP OF PIPE
HWL	HIGH WATER LEVEL	TS	TOP OF SIDEWALK
INV	INVERT	TW	TOP OF WALK
L	LENGTH OF CURVE	WM	WATER MAIN
MH	MANHOLE	Δ	INTERSECTION ANGLE
NTS	NOT TO SCALE		

GENERAL NOTES

1. THE INTENTION OF THE PLANS AND SPECIFICATIONS IS TO SET FORTH PERFORMANCE AND CONSTRUCTION MATERIAL STANDARDS FOR THE PROPER EXECUTION OF WORK. ALL WORKS CONTAINED WITHIN THE PLANS AND SPECIFICATIONS SHALL BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL, STATE, FEDERAL OR OTHER GOVERNING AGENCY'S LAWS, REGULATIONS, JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., AND THE OWNER'S DIRECTION.
2. A GEOTECHNICAL REPORT DATED JULY 2, 2019 HAS BEEN PREPARED BY CONSTRUCTION GEOTECHNICAL CONSULTANTS, INC. FOR THE PROJECT SITE. THE DATA ON SUB-SURFACE SOIL CONDITIONS IS NOT INTENDED AS A REPRESENTATION OR WARRANTY OF THE CONTINUITY OF SUCH CONDITIONS BETWEEN BORINGS OR INDICATED SAMPLING LOCATIONS. IT SHALL BE EXPRESSLY UNDERSTOOD THAT OWNER WILL NOT BE RESPONSIBLE FOR ANY INTERPRETATIONS OR CONCLUSIONS DRAWN THERE FROM BY THE CONTRACTOR. DATA IS MADE AVAILABLE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY ADDITIONAL SOILS INVESTIGATIONS THEY FEEL IS NECESSARY FOR THE PROPER EVALUATION OF THE SITE FOR PURPOSES OF PLANNING, BIDDING, OR CONSTRUCTING THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS, PRIOR TO SUBMISSION OF A BID PROPOSAL.
4. THE CONTRACTOR SHALL PROMPTLY REPORT ANY ERRORS OR AMBIGUITIES LEARNED AS PART OF THEIR REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS.
5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON ITS OWN COMPUTATIONS AND IN NO SUCH INSTANCE RELY ON THE ENGINEER'S ESTIMATE.
6. QUESTIONS/CLARIFICATIONS WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL RESPONSES SHALL BE BINDING ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD-OF-MOUTH DIALOG CONSTITUTE AN OFFICIAL RESPONSE.
7. PRIOR TO START OF WORK, CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE, AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, LIMITATIONS OF WORK ACCESS, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OF JOB EXTRAS.
8. COMMENCEMENT OF CONSTRUCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS REVIEWED THE PLANS AND SPECIFICATIONS IN ENTIRETY AND CERTIFIES THAT THEIR SUBMITTED BID PROPOSAL CONTAINS PROVISIONS TO COMPLETE THE PROJECT, WITH THE EXCEPTION OF UNFORESEEN FIELD CONDITIONS; ALL APPLICABLE PERMITS HAVE BEEN OBTAINED; AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS OF THE PROJECT.
9. SHOULD ANY DISCREPANCIES OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY THE DISCREPANCIES/CONFLICTS SHALL NOT COMMENCE, OR CONTINUE, UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS DISTRIBUTED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, SPECIFICATIONS AND PLANS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.
10. THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT. OBTAINING PERMITS, OR DELAYS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE. CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS.
11. THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND DIGGER'S HOTLINE IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS.
12. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN CONNECTION WITH THE WORK.
13. CONTRACTOR SHALL KEEP THE JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OPERATE UNDER GENERAL "GOOD HOUSEKEEPING."
14. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, ENGINEER, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.

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FURTHERMORE, PINNACLE ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY OR THE MEANS AND METHODS OF CONSTRUCTION.

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COVER SHEET

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
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GENERAL SPECIFICATIONS FOR CONSTRUCTION ACTIVITIES

1. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER & WATER IN WISCONSIN, AND WISCONSIN ADMINISTRATIVE CODE, SPS 360, 382-383, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR EXECUTION OF THE WORK. THE CONTRACTOR SHALL CONDUCT THEIR WORK ACCORDING TO THE REQUIREMENTS OF THE PERMITS.
3. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MUNICIPALITY FORTY- EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.
4. THE MUNICIPALITY SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE PUBLIC PORTIONS OF THE WORK. THE OWNER SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF ALL PRIVATE PORTIONS OF THE WORK.
5. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC, FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
6. SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
7. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL UTILITY INFORMATION SHOWN ON THE PLANS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CALL DIGGER'S HOTLINE AT 1-800-242-8511 TO NOTIFY THE UTILITIES OF HIS INTENTIONS, AND TO REQUEST FIELD STAKING OF EXISTING UTILITIES.
8. SILT FENCE AND OTHER EROSION CONTROL FACILITIES MUST BE INSTALLED PRIOR TO CONSTRUCTION OR ANY OTHER LAND DISTURBING ACTIVITY. FOLLOW THE SEQUENCE OF CONSTRUCTION ON THE GRADING & EROSION CONTROL PLAN FOR MORE DETAILS. INSPECTIONS SHALL BE MADE WEEKLY OR AFTER EVERY RAINFALL OF 0.5" OR MORE. REPAIRS SHALL BE MADE IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL FACILITIES ONCE THE THREAT OF EROSION HAS PASSED WITH THE APPROVAL OF THE GOVERNING AGENCY.
9. ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR.
10. TRASH AND DEBRIS SHALL BE NOT BE ALLOWED TO ACCUMULATE ON THIS SITE AND THE SITE SHALL BE CLEAN UPON COMPLETION OF WORK.
11. THE OWNER SHALL HAVE THE RIGHT TO HAVE ALL MATERIALS USED IN CONSTRUCTION TESTED FOR COMPLIANCE WITH THESE SPECIFICATIONS.
12. SPOT ELEVATIONS REPRESENT THE GRADE ON PAVEMENT SURFACE OR FLOW LINE UNLESS OTHERWISE NOTED.
13. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER/OWNER IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION.
14. WORK WITHIN ANY ROADWAY RIGHT-OF-WAY SHALL BE COORDINATED WITH THE APPROPRIATE MUNICIPAL OFFICIAL PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FEES. GRADING WITHIN RIGHT-OF-WAY IS SUBJECT TO APPROVAL BY SAID OFFICIALS. RESTORATION OF RIGHT-OF-WAY IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF GRADING. RESTORATION SHALL INCLUDE ALL ITEMS NECESSARY TO RESTORE RIGHT-OF-WAY IN-KIND INCLUDING LANDSCAPING.
15. CONTRACTOR SHALL COMPLY WITH ALL WAUKESHA COUNTY CONSTRUCTION STANDARDS/ORDINANCES.
16. LANDSCAPE AND TURF AREAS SHALL HAVE A MINIMUM OF 4-INCH TOPSOIL REPLACEMENT.

SPECIFICATIONS FOR GRADING & EROSION CONTROL

1. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT. CONTRACTOR SHALL NOTIFY OWNER OF THE NEED TO IMPORT OR HAUL OFF SOIL. ON-SITE LOCATIONS SUITABLE FOR BORROW OR FILL MAY BE PRESENT. COORDINATE WITH OWNER.
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER.
3. SITE SHALL BE CLEARED TO THE LIMITS SHOWN ON THE PLANS. REMOVE VEGETATION FROM THE SITE. BURNING IS NOT PERMITTED. PROTECT TREES AND OTHER FEATURES FROM DAMAGE WITH FENCING. STOCKPILES SHALL NOT BE LOCATED CLOSER THAN 25' TO A DRAINAGE STRUCTURE OR FEATURE AND SHALL BE SURROUNDED WITH SILT FENCE.
4. THE GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR VERIFYING COMPACTION AND FILL PLACEMENT IN THE FIELD. THE GEOTECHNICAL ENGINEER MAY SUPERCEDE THESE SPECIFICATIONS IF THERE IS GOOD CAUSE TO DO SO. AN EXPLANATION MUST BE SUBMITTED TO THE ENGINEER IN WITTING BEFORE ANY DEVIATIONS ARE MADE.
5. IF NO GEOTECHNICAL RECOMMENDATION IS AVAILABLE, THEN THE FOLLOWING SPECIFICATIONS SHALL APPLY. ALL FILL SHALL BE CONSIDERED STRUCTURAL FILL AND SHALL BE PLACED IN ACCORDANCE WITH THE FOLLOWING: THE COMPACTED FILL SUBGRADE SHALL CONSIST OF AND SHALL BE UNDERLAIN BY SUITABLE BEARING MATERIALS, FREE OF ALL ORGANIC, FROZEN OR OTHER DELETERIOUS MATERIAL AND INSPECTED AND APPROVED BY THE RESIDENT GEOTECHNICAL ENGINEER. PREPARATION OF THE SUBGRADE, AFTER STRIPPING, SHALL CONSIST OF PROOF-ROLLING TO DETECT UNSTABLE AREAS THAT MIGHT BE UNDERCUT, AND COMPACTING THE SCARIFIED SURFACE TO THE SAME MINIMUM DENSITY INDICATED BELOW. THE COMPACTED FILL MATERIALS SHALL BE FREE OF ANY DELETERIOUS, ORGANIC OR FROZEN MATTER AND SHALL HAVE A MAXIMUM LIQUID LIMIT (ASTM-D-423) AND PLASTICITY INDEX (ASTM D-424) IF 30 AND 10 RESPECTFULLY. UNLESS SPECIFICALLY TESTED AND FOUND TO HAVE LOW EXPANSIVE PROPERTIES AND APPROVED BY AN EXPERIENCED SOILS ENGINEER. THE TOP TWELVE (12") INCHES OF COMPACTED FILL SHOULD HAVE A MAXIMUM THREE (3") INCH PARTICLE DIAMETER AND ALL UNDERLYING COMPACTED FILL A MAXIMUM SIX (6") INCH PARTICLE DIAMETER UNLESS SPECIFICALLY APPROVED BY AN EXPERIENCED SOILS ENGINEER. ALL FILL MATERIAL MUST BE TESTED AND APPROVED UNDER THE DIRECTION AND SUPERVISION OF AN EXPERIENCED SOILS ENGINEER PRIOR TO PLACEMENT, IF THE FILL IS TO PROVIDE NON-FROST SUSCEPTIBLE CHARACTERISTICS, IT MUST BE CLASSIFIED AS A CLEAN GW, GP, SW, OR SP PER UNITED SOIL CLASSIFICATION SYSTEM (ASTM D-2487). FOR STRUCTURAL FILL THE DENSITY OF THE STRUCTURAL COMPACTED FILL AND SCARIFIED SUBGRADE AND GRADES SHALL NOT BE LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D-698) WITH THE EXCEPTION TO THE TOP 12 INCHES OF PAVEMENT SUBGRADE WHICH SHALL A MINIMUM IN-SITU DENSITY OF 100 PERCENT OF THE MAXIMUM DRY DENSITY, OR 5 PERCENT HIGHER THAN UNDERLYING FILL MATERIALS. THE MOISTURE CONTENT OF COHESIVE SOIL SHALL NOT VARY BY MORE THAN -1 TO +3 PERCENT AND GRANULAR SOIL ±3 PERCENT OF OPTIMUM WHEN PLACED AND COMPACTED OR RECOMPACTED, UNLESS SPECIFICALLY APPROVED BY THE SOILS ENGINEER TAKING INTO CONSIDERATION THE TYPE OF MATERIALS AND COMPACTION EQUIPMENT BEING USED. THE COMPACTION EQUIPMENT SHOULD CONSIST OF SUITABLE MECHANICAL EQUIPMENT SPECIFICALLY DESIGNED FOR SOIL COMPACTION. BULLDOZERS OR SIMILAR TRACKED VEHICLES ARE TYPICALLY NOT SUITABLE FOR COMPACTION. MATERIAL THAT IS TOO WET TO PERMIT PROPER COMPACTION MAY BE SPREAD ON THE FILL AND PERMITTED TO DRY. DISCING, HARROWING OR PULVERIZING MAY BE NECESSARY TO REDUCE THE MOISTURE CONTENT TO A SATISFACTORY VALUE, AFTER WHICH IT SHALL BE COMPACTED. THE FINISHED SUBGRADE AREAS OF THE SITE SHALL BE COMPACTED TO 100 PERCENT OF THE STANDARD PROCTOR (ASTM D-398) MAXIMUM DENSITY.
6. NO FILL SHALL BE PLACED ON A WET OR SOFT SUBGRADE. THE SUBGRADE SHALL BE PROOF-ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER BEFORE ANY MATERIAL IS PLACED.
7. SUBGRADE TOLERANCES ARE +/-1" FOR LANDSCAPE AREAS AND +/- ½" FOR ALL PAVEMENT AND BUILDING AREAS.
8. TOPSOIL SHALL BE FREE OF DELETERIOUS MATERIALS, ROOTS, OLD VEGETATION, ROCKS OVER 2" DIAMETER AND SHALL NOT BE EXCESSIVELY CLAYEY IN NATURE. NO CLUMPS LARGER THAN 4" ARE ACCEPTABLE. TOPSOIL MAY BE AMENDED AS NEEDED WITH SAND OR COMPOST TO BE LOOSE WHEN SPREAD.
9. THE CONTRACTOR SHALL MAINTAIN SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE THE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEVIATE WATER PONDING. ANY DEWATERING SHALL NOT GO DIRECTLY TO STREAMS, CREEKS, WETLANDS OR OTHER ENVIRONMENTALLY SENSITIVE AREAS WITHOUT BEING TREATED FIRST. A DIRT BAG OR OTHER DEWATERING TREATMENT DEVICE MAY BE USED TO CAPTURE SEDIMENT FROM THE PUMPED WATER.
10. CONTRACTOR IS ADVISED THAT ALL MUD AND DEBRIS MUST NOT BE DEPOSITED ONTO THE ADJACENT ROADWAYS PER THE REQUIREMENT OF THE MUNICIPALITY OR OTHER APPROPRIATE GOVERNMENT AGENCIES. IN THE EVENT THIS OCCURS, THE ROADWAYS SHALL BE POWER SWEPT IMMEDIATELY AND ALL SEDIMENT REMOVED FROM DOWNSTREAM FACILITIES.

SPECIFICATIONS FOR PRIVATE UTILITIES

1. BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
2. ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORED CONNECTIONS. CONNECTIONS TO WATERMAIN SHALL BE WET TAPED WITH A STAINLESS STEEP TAPPING SLEEVE.
3. PROPOSED SANITARY SEWER AND INTERNALLY CONNECTED STORM SEWER SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL. THE EXACT LOCATION OF ALL DOWN SPOUTS CONNECTIONS SHALL BE PER THE ARCHITECTURAL PLANS.
4. CONTRACTOR SHALL NOT SHUT OFF WATER OR PLUG SANITARY SEWER IN MUNICIPAL LINES WITHOUT PRIOR APPROVAL.
5. MATERIALS FOR STORM SEWER SHALL BE AS FOLLOWS: STORM SEWER PIPE 48" OR LESS SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) CORRUGATED PIPE WITH AN INTEGRALLY FORMED SMOOTH WATERWAY SUCH AS ADS N-12. FOR PIPE 10" OR LESS IN DIAMETER, PVC, ASTM D-3034, SDR-26, MAY ALSO BE USED. WHERE SPECIFICALLY REQUIRED, REINFORCED CONCRETE PIPE (RCP), ASTM C-76, CLASS III OR HIGHER, MAY BE USED. TRENCH SECTION SHALL BE CLASS "B" FOR PVC AND HDPE AND CLASS "C" FOR CONCRETE (PER STANDARD SPECIFICATIONS). MANHOLES, INLETS AND CATCH BASINS SHALL BE PRE CAST REINFORCED CONCRETE, ASTM C-478. CASTINGS SHALL BE HEAVY DUTY CAST IRON. AREA DRAINS SHALL BE PER DETAIL ON PLAN OR EQUIVALENT AND SHALL BE A MINIMUM OF 24" IN DIAMETER. CONNECTIONS TO EXISTING PIPES SHALL BE MADE WITH INSERTA WYE OR EQUIVALENT. LAST (3) THREE JOINTS SHALL BE RESTRAINED WITH RODS.
6. MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS: SANITARY SEWER SHALL BE PVC, ASTM D-3034, SDR-35 WITH RUBBER GASKETED JOINTS, CONFORMING TO ASTM D-3212. TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. CONNECTIONS SHALL BE MAD WITH A INSERTA WYE OR EQUIVALENT. A MINIMUM OF 6' OF COVER IS REQUIRED FOR ALL SANITARY SEWER.
7. MATERIALS FOR WATER SERVICES AND PRIVATE HYDRANTS SHALL BE AS FOLLOWS: WATER SERVICES SHALL BE PVC, HDPE, OR DI AS ALLOWED BY MUNICIPAL CODE, PVC SHALL BE AWWA C-900. DI SHALL BE AWWA C151, CLASS 52 (OR AS REQUIRED BY LOCAL CODE). TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. CONNECTION SHALL BE MADE WITH A WET TAP, CORPORATE STOP AND VALVE BOX PER MUNICIPAL STANDARDS. A MINIMUM OF 6' COVER IS REQUIRED FOR ALL WATERMAIN. VALVES SHALL BE NONRISING STEM, RESILIENT SEATED GATE VALVES COMPLYING WITH AWWA C509 WITH A THREE PIECE CAST IRON VALVE BOX. INSTALL THRUST BLOCKS AT ALL BENDS AND TEES. DISINFECT ALL NEW LINES AND OBTAIN SAFE WATER SAMPLE PRIOR TO USE.
8. EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER & WITHIN 5 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED.
9. TRACER WIRE (NO. 12 SINGLE STRAND COPPER) AND WARNING TAPE SHALL BE INSTALLED ON ALL UTILITIES IN ACCORDANCE WITH THE LOCAL AND STATE CODES. TRACER WIRE SHALL TERMINATE IN A VALVECO TERMINAL BOX AT EACH END.
10. MANDREL TESTING ON SANITARY LINES AND PRESSURE TESTING ON WATERMAIN MAY BE REQUIRED BY THE OWNER OR MUNICIPALITY.
11. UPON COMPLETION OF FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.
12. 45° BENDS SHALL BE USED IN PLACE OF 90° BENDS WHEREVER POSSIBLE

SPECIFICATIONS FOR PAVING

1. ALL DIMENSIONS ARE TO FACE OF CURB OR FACE OF BUILDING UNLESS NOTED OTHERWISE. ALL UTILITY DIMENSIONS ARE TO OUTSIDE OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED. ALL PAVING DIMENSIONS ARE TO FACE OF CURB OR TO EDGE OF PAVEMENT; EXCEPT FOR THE SETBACK FROM PARKING LOTS, MANEUVERING LANES AND FIRE ACCESS LANES, WHERE THE SETBACK IS MEASURED FROM THE BACK OF CURB TO THE PROPERTY LINE.
2. AGGREGATES USED IN THE CRUSHED STONE BASE SHALL CONFORM TO THE GRADATION REQUIREMENTS SECTIONS 301.2 AND 305.2.2 OF THE STANDARD SPECIFICATIONS. THICKNESS SHALL BE PER THE DETAIL ON THE PLANS. BASE SHALL BE 1 ½ INCH DIAMETER LIMESTONE UNLESS NOTED OTHERWISE. RECYCLED MATERIALS MAY BE ALLOWED WITH APPROVAL FROM THE OWNER.
3. SUBGRADE SHALL BE PROOFROLLED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF STONE BASE. EXCAVATE UNSUITABLE AREAS AND REPLACE WITH BREAKER RUN STONE AND RECOMPACT. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL SPECIFICATIONS.
4. EXISTING PAVEMENT SHALL BE SAWCUT IN NEAT STRAIGHT LINES TO FULL DEPTH AT ANY POINT WHERE EXISTING PAVEMENT IS REMOVED. CURB AND WALK SHALL BE REMOVED TO THE NEAREST JOINT. REMOVED PAVEMENT SHALL BE REPLACED WITH THE SAME SECTION AS EXISTING. MUNICIPAL STANDARDS MAY REQUIRE ADDITIONAL WORK.
5. ASPHALT FOR PARKING AREAS AND THE PRIVATE ROAD SHALL BE PER THE DETAILS. MATERIALS AND PLACEMENT SHALL CONFORM TO THE DOT STANDARD SPECIFICATIONS, SECTION 450 AND 460 TYPE LT IS REQUIRED UNLESS NOTED OTHERWISE. A COMMERCIAL GRADE MIX MAY BE SUBSTITUTED ONLY WITH APPROVAL FROM THE OWNER.
6. CONCRETE FOR CURB, DRIVEWAY, WALKS AND NON-FLOOR SLABS SHALL CONFORM TO THE SECTION 415 OF THE STANDARD SPECIFICATIONS, GRADE A, ASTM C-94, 6 BAG MIX, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI. JOINTING SHALL BE PER SECTION 415.3.7 OF THE STANDARD SPECIFICATION WITH CONSTRUCTION JOINTS HAVING A MAXIMUM SPACING OF 10'. EXPANSION JOINTS SHALL BE PROVIDED EVERY 50'. CONCRETE SHALL BE FINISHED PER SECTION 415.3.8 WITH A MEDIUM BROOM TEXTURE. A CURING MEMBRANE IN CONFORMANCE WITH SECTION 415.3.12 IS REQUIRED.
7. PROVIDE CONTRACTOR GRADE ACRYLIC, STRIPING PAINT FOR NEW ASPHALT OR COATED ASPHALT. APPLY MARKING PAINT AT A RATE OF ONE (1) GALLON PER THREE TO FOUR HUNDRED (300-400) LINEAL FEET OF FOUR (4) INCH WIDE STRIPES OR TO MANUFACTURER'S SPECIFICATION, WHICHEVER IS GREATER.
8. THOROUGHLY CLEAN SURFACES FREE OF DIRT, SAND, GRAVEL, OIL AND OTHER FOREIGN MATTER. CONTRACTOR RESPONSIBLE TO INSPECT EXISTING PAVEMENT SURFACES FOR CONDITIONS AND DEFECTS THAT WILL ADVERSELY AFFECT QUALITY OF WORK, AND WHICH CANNOT BE PUT INTO AN ACCEPTABLE CONDITION THROUGH NORMAL PREPARATORY WORK AS SPECIFIED.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN EPA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL TECHNICAL STANDARDS AND PROVISIONS IN EFFECT AT THE TIME OF CONSTRUCTION. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMP'S). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF, AND UNDERSTAND, THE BMP'S PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
2. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL CONTROL MEASURES AS DIRECTED BY OWNER/ENGINEER OR GOVERNING AGENCIES SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
3. MODIFICATIONS TO THE APPROVED SWPPP IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMP'S. ALL MODIFICATIONS MUST BE APPROVED BY OWNER/ENGINEER/GOVERNING AGENCY PRIOR TO DEVIATION OF THE APPROVED PLAN.
4. INSTALL PERIMETER EROSION CONTROL MEASURES (SUCH AS CONSTRUCTION ENTRANCES, SILT FENCE AND EXISTING INLET PROTECTION) PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE COVER, AS SHOWN ON PLAN IN ORDER TO PROTECT ADJACENT PROPERTIES/STORM SEWER SYSTEMS FROM SEDIMENT TRANSPORT.
5. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL LOCATIONS OF VEHICLE INGRESS/EGRESS POINTS. CONTRACTOR IS RESPONSIBLE TO COORDINATE LOCATION(S) WITH THE PROPER AUTHORITIES. PROVIDE NECESSARY FEES AND OBTAIN ALL REQUIRED APPROVALS OR PERMITS. ADDITIONAL CONSTRUCTION ENTRANCES OTHER THAN AS SHOWN ON THE PLANS MUST BE APPROVED BY THE APPLICABLE GOVERNING AGENCIES PRIOR TO INSTALLATION.
6. PAVED SURFACES ADJACENT TO CONSTRUCTION ENTRANCES SHALL BE SWEPT AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST IMMEDIATELY AND AS REQUESTED BY THE GOVERNING AGENCIES.
7. ALL EXISTING STORM SEWER FACILITIES THAT WILL COLLECT RUNOFF FROM DISTURBED AREAS SHALL BE PROTECTED TO TO PREVENT SEDIMENT DEPOSITION WITHIN STORM SEWER SYSTEMS. INLET PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER AND SILT FENCE SHALL BE IMMEDIATELY FITTED AT ALL INSTALLED CULVERT INLETS . ALL INLETS, STRUCTURES, PIPES, AND SWALES SHALL BE KEPT CLEAN AND FREE OF SEDIMENTATION AND DEBRIS.
8. EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, WATER MAIN, ETC.) OUTSIDE OF THE PERIMETER CONTROLS SHALL INCORPORATE THE FOLLOWING:

   PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.

   BACKFILL, COMPACT AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.

   DISCHARGE TRENCH WATER INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH BMP'S PRIOR TO RELEASE INTO STORM SEWER OR DITCHES.
9. AT A MINIMUM, SEDIMENT BASINS AND NECESSARY TEMPORARY DRAINAGE PROVISIONS SHALL BE CONSTRUCTED AND OPERATIONAL BEFORE BEGINNING OF SIGNIFICANT MASS GRADING OPERATIONS TO PREVENT OFFSITE DISCHARGE OF UNTREATED RUNOFF.
10. IF APPLICABLE, ALL WATERCOURSES AND WETLANDS SHALL BE PROTECTED WITH DOUBLE ROW OF SILT FENCE TO PREVENT ANY DIRECT DISCHARGE FROM DISTURBED SOILS.
11. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR INSPECTION AND REPAIR DURING CONSTRUCTION. THE OWNER WILL BE RESPONSIBLE IF EROSION CONTROL IS REQUIRED AFTER THE CONTRACTOR HAS COMPLETED THE PROJECT.
12. TOPSOIL STOCKPILES SHALL HAVE A BERM OR TRENCH AROUND THE CIRCUMFERENCE AND PERIMETER SILT FENCE TO CONTROL SILT. IF TOPSOIL STOCKPILE REMAINS UNDISTURBED FOR MORE THAN SEVEN (7) DAYS, TEMPORARY SEEDING AND STABILIZATION IS REQUIRED.
13. EROSION CONTROL MEASURES TEMPORARILY REMOVED FOR UNAVOIDABLE CONSTRUCTION ACTIVITIES SHALL BE IN WORKING ORDER IMMEDIATELY FOLLOWING COMPLETION OF SUCH ACTIVITIES OR PRIOR TO THE COMPLETION OF EACH WORK DAY, WHICH EVER OCCURS FIRST.
14. MAINTAIN SOIL EROSION CONTROL DEVICES THROUGH THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCES ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.
15. PUMPS MAY BE USED AS BYPASS DEVICES. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS. PUMP DISCHARGE SHALL BE DIRECTED INTO AN APPROVED FILTER BAG OR APPROVED SETTLING DEVICE.
16. GRADING EFFORTS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES. ALL DISTURBED AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF FOURTEEN (14) DAYS REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH TECHNICAL STANDARDS.
17. ALL DISTURBED SLOPES EXCEEDING 4:1, SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S75BN EROSION MATTING (OR APPROVED EQUAL) AND ALL CHANNELS SHALL BE STABILIZED WITH NORTH AMERICAN GREEN C125BN (OR APPROVED EQUAL) OR APPLICATION OF AN APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. EROSION MATTING AND/OR NETTING USED ONSITE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
18. DURING PERIODS OF EXTENDED DRY WEATHER, THE CONTRACTOR SHALL KEEP A WATER TRUCK ON SITE FOR THE PURPOSE OF WATERING DOWN SOILS WHICH MAY OTHERWISE BECOME AIRBORNE.THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING WIND EROSION (DUST) DURING CONSTRUCTION AT HIS/HER EXPENSE.
19. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE VISUALLY INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM ON A DAILY BASIS.
20. QUALIFIED PERSONNEL (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5-INCH, OR MORE, PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERVAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH OF THE GENERAL PERMIT. CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
21. SEE ADDITIONAL DETAILS AND NOTES ON SITE STABILIZATION AND CONSTRUCTION DETAILS.

DEMOLITION NOTES

1. PERIMETER SILT FENCING AND CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO ANY DEMOLITION. PLEASE REFER TO GRADING AND EROSION AND SEDIMENT CONTROL PLAN SHEETS FOR FURTHER DETAILS.
2. EXISTING FEATURES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR/OWNER SHALL CALL "MISS DIG" PRIOR TO ANY DEMOLITION.
3. CONTRACTOR SHALL PERFORM ALL DEMOLITION WORK IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
4. COORDINATE WITH ALL APPLICABLE UTILITY COMPANIES AND THE MUNICIPALITY TO PROTECT EXISTING FUNCTIONING UTILITIES, BULKHEAD/REMOVE CONNECTIONS AS NECESSARY, AND TO ENSURE ALL UTILITIES ARE INACTIVE PRIOR TO ANY DEMOLITION ACTIVITIES. CONTRACTOR SHALL TAKE ADEQUATE PRECAUTIONS TO ENSURE PROTECTION OF EXISTING UTILITIES THAT ARE NOT TO BE IMPACTED. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR OF ANY EXISTING UTILITIES DAMAGED AS A RESULT OF THE DEMOLITION.
5. VOIDS LEFT BY REMOVAL OF FEATURES SHALL BE MODIFIED/FILLED TO PREVENT PONDING OF WATER.
6. DEMOLISH AND DISPOSE EXISTING PIPING, CABLE/WIRES, STRUCTURES, OR OTHER SURFACE FEATURES INDICATED ON THE PLANS TO BE REMOVED.
7. CLEARING AND GRUBBING DESIGNATIONS SHALL INCLUDE CLEARING, GRUBBING, REMOVING, AND DISPOSING OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS OF CONSTRUCTION, AS DESIGNATED ON THE PLANS. CONTRACTOR SHALL REMOVE ONLY THOSE TREES ABSOLUTELY NECESSARY TO ALLOW FOR CONSTRUCTION.
8. CONTRACTOR SHALL REMOVE EXISTING FENCING IN A MANNER TO ALLOW REUSE. ANY FENCING MATERIAL TO BE REUSED IN THE CONSTRUCTION OF RELOCATED FENCE LINES SHALL BE PRESENTED TO ENGINEER FOR INSPECTION AND PROPOSED CONTRACT DEDUCT ASSOCIATED WITH REUSE OF THE SALVAGED MATERIAL. ENGINEER OR OWNER WILL PROVIDE WRITTEN ACCEPTANCE OF THE PROPOSED SALVAGED MATERIAL.
9. CONTRACTOR SHALL COORDINATE WITH THE MUNICIPALITY FOR TERMINATION OF PUBLIC UTILITY CONNECTIONS TO SITE.
10. CONTRACTOR SHALL COORDINATE STOCKPILE LIMITS AND LOCATIONS WITH ENGINEER/OWNER PRIOR TO DEMOLITION.

REVIEWED: DESIGNED: ACT DRAFTED: DMS

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ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
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BROOKFIELD, WI 53186
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SHEET C-4

UNPLATTED LANDS
OWNER: LAKE PEWAUKEE SANITARY DISTRICT

N87°00'50"E 1326.21'

NE CORNER, SE 1/4 SEC. 19, T7N, R19E (FOUND CONC. MON. W/ BRASS CAP) N=388,833.26, E=2,458,246.85 (WISCONSIN STATE PLANE CO-ORDINATE SYSTEM, SOUTH ZONE) P.O.B.

N87°00'50"E 2652.43'
NORTH LINE OF THE SE 1/4 SEC. 19, T7N, R19E
(R) 1325.67' PER PLAT OF OAK SPRINGS SOUTH)

1326.21'

EXISTING BUILDING

18" PVC RIM=877.00 ELBOW INV.=874.32

18" PVC RIM=877.56 ELBOW INV.=874.69

SET 34" X 18" IRON REBAR

POND OUTFALL 12" NE=874.26 RIM=877.26 24" NE=874.98 SUMP=874.41

EAST LINE OF OAK SPRINGS SOUTH SUBDIVISION WEST OF PROPERTY LINE 0.54' (GAP)

OUTLOT 2
OAK SPRINGS SOUTH

12'

EDGE PF WATER 04/16/19 EL.=872.4

FOUND 1" IRON PIPE 0.40' WEST OF PROPERTY LINE

ELECTRIC EASEMENT

LOT 32
OAK SPRINGS SOUTH

FOUND 1" IRON PIPE 0.43' WEST OF PROPERTY LINE

LOT 31
OAK SPRINGS SOUTH

20'

DRAINAGE EASEMENT

FOUND 1" IRON PIPE 1.01' EAST OF PROPERTY LINE

LOT 30
OAK SPRINGS SOUTH

FOUND 2" IRON PIPE WEST 0.47' OF PROPERTY LINE

LAKEFIELD DRIVE
(60' PUBLIC R.O.W.)

LC CITY ZONING
A-1 CITY ZONING

CONCRETE CURB
ASPHALT
CONCRETE CURB
ASPHALT PAVEMENT
ASPHALT

SITE BENCHMARK: NW FLANGE BOLT HYDRANT EL.=892.38

SANITARY MANHOLE RIM=881.70

SANITARY MANHOLE RIM=887.95 8"=E=878.02 8"=SW=877.91

TEMPORARY TURN AROUND EASEMENT

LOT 29
OAK SPRINGS SOUTH

EAST LINE OF OAK SPRINGS SOUTH SUBDIVISION WEST OF PROPERTY LINE 0.47' (GAP)

N00°24'46"W 1268.58'
(R) N00°25'57"W
(OAK SPRINGS SOUTH & C.S.M. NO. 9263)

WATER MAIN EASEMENT

30'

30'

PARCEL 1
C.S.M. NO. 9263

100 YEAR FLOOD PLAIN PER FEMA MAP NO. 55133C0191G (GRAPHIC PLOTTING ONLY)

WETLANDS DELINEATED BY DAVE MEYER OF WETLAND & WATERWAY CONSULTING, LLC. IN SEPTEMBER 2018

TAX KEY NO.
PWC 0940-999-001
1,235,817 SQ. FT.
28.3705 ACRES

S00°27'04"E 328.01'

MEADOWBROOK ROAD
COUNTY TRUNK HIGHWAY "G"
(VARIABLE PUBLIC R.O.W.)

EXISTING RIGHT-OF-WAY LINE

SET 34" X 18" IRON REBAR

S22°17'34"W 2244.08'

SET 34" X 18" IRON REBAR

REFERENCE LINE MEADOWBROOK ROAD - COUNTY TRUNK HIGHWAY G PER STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION INTERSTATE HIGHWAY 94 R/W PROJECT NUMBER 1065-10-20 4.06

OWNER: WISCONSIN ELECTRIC POWER COMPANY
UNPLATTED LANDS

42" RCP CULVERT INV.=885.16

S50°25'48"W 1035.63'

NO ACCESS PER DOC. 2479003

590.83' RIGHT OF ACCESS TO GOLF ROAD VIA ONE (1) ACCESS POINT PER DOC. 2479003

ASPHALT PAVEMENT

GOLF ROAD
COUNTY TRUNK HIGHWAY "DR"

REFERENCE LINE GOLF ROAD PER STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION INTERSTATE HIGHWAY 94 R/W PROJECT NUMBER 1065-10-20 4.06

S00°27'04"E 2652.91'

EAST LINE OF THE SE 1/4 SEC. 19, T7N, R19E

FOUND 1/2" IRON REBAR 0.26' EAST, 0.67' SOUTH

S72°59'32"W 454.49'

EXISTING RIGHT-OF-WAY LINE

EAST LINE OF C.S.M. NO. 9263 WEST OF PROPERTY LINE 0.64' (GAP)

FOUND CAPPED 1/2" IRON ROD

GRAVEL
ASPHALT PAVEMENT

CONCRETE CURB

INTERSTATE HIGHWAY "94"
(VARIABLE PUBLIC R.O.W.)
(FORMERLY KNOWN AS STATE HIGHWAY "30")

REFERENCE LINE INTERSTATE HIGHWAY 94 PER STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION INTERSTATE HIGHWAY 94 R/W PROJECT NUMBER 1065-10-20 4.06

SHEET C-5

LEGEND

SANITARY MANHOLE		STORM SEWER	
STORM MANHOLE		WATER MAIN	W
CATCH BASIN		LIGHTING	
INLET		ELECTRICAL CABLE	E
PRECAST FLARED END SECTION		ELECTRICAL TRANSFORMER OR PEDESTAL	
CONCRETE HEADWALL		POWER POLE	
VALVE VAULT		POWER POLE WITH LIGHT	
VALVE BOX		GUY WIRE	
FIRE HYDRANT		STREET SIGN	
BUFFALO BOX		GAS MAIN	G
CLEANOUT		TELEPHONE LINE	T
SANITARY SEWER		CONTOUR	749
FORCE MAIN		TREE	
CONCRETE SIDEWALK		EASEMENT LINE	

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

EXISTING CONDITIONS SURVEY:

EXISTING CONDITIONS SURVEY PROVIDED BY PINNACLE ENGINEERING GROUP. ALTHOUGH PEG HAS NO REASON TO BELIEVE THE SURVEY IS INACCURATE, PEG MAKES NO WARRANTS THAT EXISTING INFORMATION CONTAINED WITHIN THESE PLANS IS ALL-INCLUSIVE OR ACCURATE. CONTRACTOR SHALL UNDERTAKE NECESSARY EFFORTS TO VERIFY THE EXISTING CONDITIONS PRIOR TO THE START OF MATERIAL PROCUREMENT AND CONSTRUCTION EFFORTS/ACTIVITIES.

CONTRACTOR RESPONSIBILITY:

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NORTH

GRAPHICAL SCALE (FEET)
0 1" = 80' 160'

REVIEWED:
DESIGNED: ACT
DRAFTED: DMS

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BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

EXISTING CONDITIONS & DEMO OVERVIEW

REVISIONS

PEG JOB No.: 1338.10
PEG PM: MTS
START DATE: 07-27-22
SCALE: 1" = 80'

SHEET
C-3
C-18

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EXISTING CONDITIONS & DEMO OVERVIEW

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Z:\PROJECTS\2018\1338.10-WI\CAD\SHEETS\1338.10 EXISTING CONDITIONS & DEMO PLAN.DWG

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UNPLATTED LANDS
OWNER: LAKE PEWAUKEE SANITARY DISTRICT

LEGEND

SANITARY MANHOLE	STORM SEWER
STORM MANHOLE	WATER MAIN W
CATCH BASIN	LIGHTING
INLET	ELECTRICAL CABLE E
PRECAST FLARED END SECTION	ELECTRICAL TRANSFORMER OR PEDESTAL
CONCRETE HEADWALL	POWER POLE
VALVE VAULT	POWER POLE WITH LIGHT
VALVE BOX	GUY WIRE
FIRE HYDRANT	STREET SIGN
BUFFALO BOX	GAS MAIN G
CLEANOUT	TELEPHONE LINE T
SANITARY SEWER	CONTOUR 749
FORCE MAIN	TREE
CONCRETE SIDEWALK	EASEMENT LINE

18" PVC RIM=877.00
ELBOW INV.=874.32

EXISTING BUILDING

SET 3/4" X 18" IRON REBAR

N87°00'50"E 2652.43'
NORTH LINE OF THE SE 1/4 SEC. 19, T7N, R19E
((R) 1325.67' PER PLAT OF OAK SPRINGS SOUTH)

1326.215'

1326.215'

N87°00'50"E 1326.21'

18" PVC RIM=877.56
ELBOW INV.=874.69

POND OUTFALL STRUCTURE
RIM=877.26
24" NE=874.98
SUMP=874.41

EAST LINE OF OAK SPRINGS SOUTH SUBDIVISION WEST OF PROPERTY LINE 0.54' (GAP)

OUTLOT 2
OAK SPRINGS SOUTH

12'

EDGE PF WATER
04/16/19
EL.=872.4

FOUND 1" IRON PIPE 0.40' WEST OF PROPERTY LINE

ELECTRIC EASEMENT

LOT 32
OAK SPRINGS SOUTH

FOUND 1" IRON PIPE 0.47' WEST OF PROPERTY LINE

LAKEFIELD DRIVE
(60' PUBLIC R.O.W.)

6'

LOT 31
OAK SPRINGS SOUTH

20'

DRAINAGE EASEMENT

FOUND 1" IRON PIPE 1.01' EAST OF PROPERTY LINE

LOT 30
OAK SPRINGS SOUTH

FOUND 2" IRON PIPE WEST 0.47' OF PROPERTY LINE

CONCRETE CURB
ASPHALT
CONCRETE CURB
ASPHALT PAVEMENT
ASPHALT

SANITARY MANHOLE
RIM=887.95
8" E=878.02
8" SW=877.91

8.93'

PER PLAT OF OAK SPRINGS SOUTH & C.S.M. NO. 9263)

EXISTING SANITARY MANHOLE TO REMAIN

EXISTING TREE TO BE REMOVED

SITE BENCHMARK:
NW FLANGE BOLT
HYDRANT EL.=892.38

SANITARY MANHOLE
RIM=891.02
8" W=880.79

100 YEAR FLOOD PLAIN PER FEMA MAP NO. 551333C0191G (GRAPHIC PLOTTING ONLY)

WETLANDS DELINEATED BY DAVE MEYER OF WETLAND & WATERWAY CONSULTING, LLC. IN SEPTEMBER 2018

EXISTING TREES TO REMAIN (TYP)

EXISTING TREES TO BE REMOVED (TYP)

TAX KEY NO.
PWC 0940-999-001
1,235,817 SQ. FT.
28.3705 ACRES

MATCH LINE SEE SHEET C-5

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

EXISTING CONDITIONS SURVEY:

EXISTING CONDITIONS SURVEY PROVIDED BY PINNACLE ENGINEERING GROUP. ALTHOUGH PEG HAS NO REASON TO BELIEVE THE SURVEY IS INACCURATE, PEG MAKES NO WARRANTS THAT EXISTING INFORMATION CONTAINED WITHIN THESE PLANS IS ALL-INCLUSIVE OR ACCURATE. CONTRACTOR SHALL UNDERTAKE NECESSARY EFFORTS TO VERIFY THE EXISTING CONDITIONS PRIOR TO THE START OF MATERIAL PROCUREMENT AND CONSTRUCTION EFFORTS/ACTIVITIES.

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NORTH

GRAPHICAL SCALE (FEET)
0 1" = 40' 80'

REVIEWED:
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THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

EXISTING CONDITIONS & DEMO PLAN

REVISIONS

PEG JOB NO. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 40'

SHEET
C-4
C-18

EXISTING CONDITIONS & DEMO PLAN

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MATCH LINE SEE SHEET C-4

SANITARY MANHOLE
RIM=887.95
8" E=878.02
8" SW=877.91

TEMPORARY TURN AROUND EASEMENT

LOT 29
OAK SPRINGS SOUTH

EAST LINE OF OAK SPRINGS SOUTH SUBDIVISION WEST OF PROPERTY LINE 0.47' (GAP)

N00°24'46"W 1258.38'
((R) N00°25'03"W PER PLA

WATER MAIN EASEMENT
30'

PARCEL 1
C.S.M. NO. 9263

EXISTING TREES TO BE REMOVED (TYP)

EXISTING RETAINING WALL TO BE REMOVED

STONE WALL

690.83' RIGHT OF ACCESS TO GOLF ROAD VIA ONE (1) ACCESS POINT PER DOC. 2479003

EXISTING SIGN TO REMAIN

ASPHALT PAVEMENT

NO ACCESS PER DOC. 2479003
S50°25'48"W 1035.63'

EXISTING FIBER OPTIC STRUCTURE AND HYDRANT TO REMAIN

GOLF ROAD
COUNTY TRUNK HIGHWAY "DR"

CLEAR AND GRUB EXISTING WOODED AREAS. SEE GRADING PLAN FOR REMOVAL LIMITS

FOUND 1/2" IRON REBAR
0.23' EAST, 0.61' SOUTH

S72°59'32"W 454.49'

EXISTING RIGHT-OF-WAY LINE

EAST LINE OF C.S.M. NO. 9263 WEST OF PROPERTY LINE 0.44' (GAP)

FOUND CAPPED 1/2" IRON ROD

GRAVEL
ASPHALT PAVEMENT

CONCRETE CURB

INTERSTATE HIGHWAY "94"
(VARIABLE PUBLIC R.O.W.)
(FORMERLY KNOWN AS STATE HIGHWAY "30")

REFERENCE LINE INTERSTATE HIGHWAY 94
PER STATE OF WISCONSIN DEPARTMENT OF
TRANSPORTATION INTERSTATE HIGHWAY 94
R/W PROJECT NUMBER 1065-10-20 4.06

LEGEND

SANITARY MANHOLE		STORM SEWER	
STORM MANHOLE		WATER MAIN	W
CATCH BASIN		LIGHTING	
INLET		ELECTRICAL CABLE	E
PRECAST FLARED END SECTION		ELECTRICAL TRANSFORMER OR PEDESTAL	
CONCRETE HEADWALL		POWER POLE	
VALVE VAULT		POWER POLE WITH LIGHT	
VALVE BOX		GUY WIRE	
FIRE HYDRANT		STREET SIGN	
BUFFALO BOX		GAS MAIN	G
CLEANOUT		TELEPHONE LINE	T
SANITARY SEWER		CONTOUR	749
FORCE MAIN		TREE	
CONCRETE SIDEWALK		EASEMENT LINE	

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

EXISTING CONDITIONS SURVEY:

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NORTH

GRAPHICAL SCALE (FEET)
0 1" = 40' 80'

REVIEWED:
DESIGNED: ACT
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GOLF RD & MEADOWBROOK LN

EXISTING CONDITIONS & DEMO PLAN

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 40'

SHEET
C-5
C-18

EXISTING CONDITIONS & DEMO PLAN

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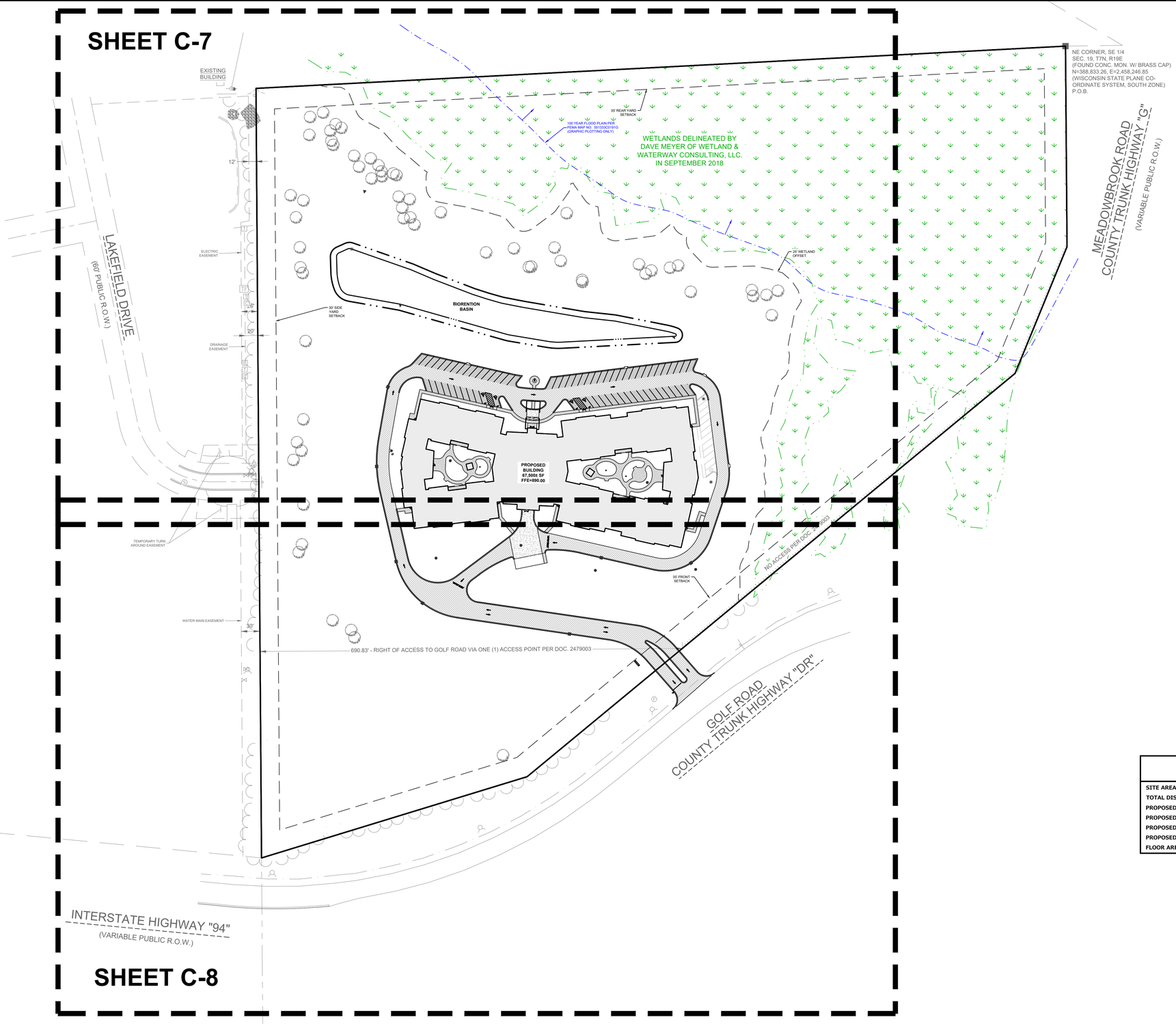

LEGEND

- **LIGHT DUTY ASPHALT PAVEMENT**
  - 8" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 3" HMA PAVEMENT (2 LIFTS)
    - 2" BINDER COURSE - 3 LT 58-28 S
    - 1" SURFACE COURSE - 5 LT 58-28 S
- **HEAVY DUTY ASPHALT PAVEMENT**
  - 10" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 4" HMA PAVEMENT (2 LIFTS)
    - 2 2" BINDER COURSE - 3 LT 58-28 S
    - 1 & 1" SURFACE COURSE - 5 LT 58-28 S
- **CONCRETE PAVEMENT**
  - 6" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 6" PCC
- **CONCRETE SIDEWALK**
  - 4" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 5" PCC
- (A) **4" WHITE STRIPE**
- (B) **4" DIAGONAL AT 45° SPACED 2' O.C.**
- (C) **BOLLARD MOUNTED ADA SIGN (SEE DETAIL)**
- (D) **18" CURB & GUTTER (SEE DETAIL)**
- (E) **18" REVERSE CURB & GUTTER (SEE DETAIL)**
- (F) **ADA COMPLIANT RAMP W/ TRUNCATED DOMES (SEE DETAIL). TAPER CURB HEAD AND DEPRESS WALK/CURB**
- (G) **ADA STALL INSIGNIA**
- (H) **CONCRETE WHEEL STOP (SEE DETAIL)**
- (18) **PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)**

SITE DATA

SITE AREA:	**28.37 AC**
TOTAL DISTURBED AREA:	**14.98 AC**
PROPOSED CAR PARKING SPACES:	**68 SPACES (4 ADA SPOTS)**
PROPOSED PAVEMENT AREA:	**1.86 AC**
PROPOSED TOTAL IMPERVIOUS:	**3.40 AC = 12%**
PROPOSED GREEN SPACE:	**24.97 AC = 88%**
FLOOR AREA RATIO:	**1.55 AC = 6%**

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 80' 160'

REVIEWED:
DESIGNED: ACT
DRAFTED: DMS

PLAN | DESIGN | DELIVER
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ENGINEERING | NATURAL RESOURCES | SURVEYING

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BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

SITE DIMENSIONAL & PAVING OVERVIEW

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 80'

SHEET
C-6
C-18

SITE DIMENSIONAL & PAVING OVERVIEW

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    - 2 ½" BINDER COURSE - 3 LT 58-28 S
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  - 6" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
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- (A) 4" WHITE STRIPE
- (B) 4" DIAGONAL AT 45° SPACED 2' O.C.
- (C) BOLLARD MOUNTED ADA SIGN (SEE DETAIL)
- (D) 18" CURB & GUTTER (SEE DETAIL)
- (E) 18" REVERSE CURB & GUTTER (SEE DETAIL)
- (F) ADA COMPLIANT RAMP W/ TRUNCATED DOMES (SEE DETAIL). TAPER CURB HEAD AND DEPRESS WALK/CURB
- (G) ADA STALL INSIGNIA
- (H) INTEGRAL CURB & WALK (SEE DETAIL)
- (I) TAPER CURB HEAD (SEE DETAIL)
- (18) PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)

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CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

EXISTING BUILDING

OHW

12'

ELECTRIC EASEMENT

LAKEFIELD DRIVE
(60' PUBLIC R.O.W.)

26'

20'

DRAINAGE EASEMENT

30' SIDE YARD SETBACK

265.8'

35' REAR YARD SETBACK

100 YEAR FLOOD PLAIN PER FEMA MAP NO. 551333C0191G (GRAPHIC PLOTTING ONLY)

WETLANDS DELINEATED BY DAVE MEYER OF WETLAND & WATERWAY CONSULTING, LLC. IN SEPTEMBER 2018

25' WETLAND OFFSET

BIORENTION BASIN

CONCRETE FLUME (TYP) (SEE DETAIL)

PROPOSED FLAGPOLE

PROPOSED FDC

PROPOSED BUILDING 67,500± SF FFE=890.00

PROPOSED GAZEBO (TYP)

PROPOSED FUTURE PARKING

MATCH LINE SEE SHEET C-8

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 40' 80'

SITE DIMENSIONAL & PAVING PLAN

REVIEWED:

DESIGNED: ACT

DRAFTED: DMS

PLAN | DESIGN | DELIVER
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SITE DIMENSIONAL & PAVING PLAN

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 40'

SHEET
C-7
C-18

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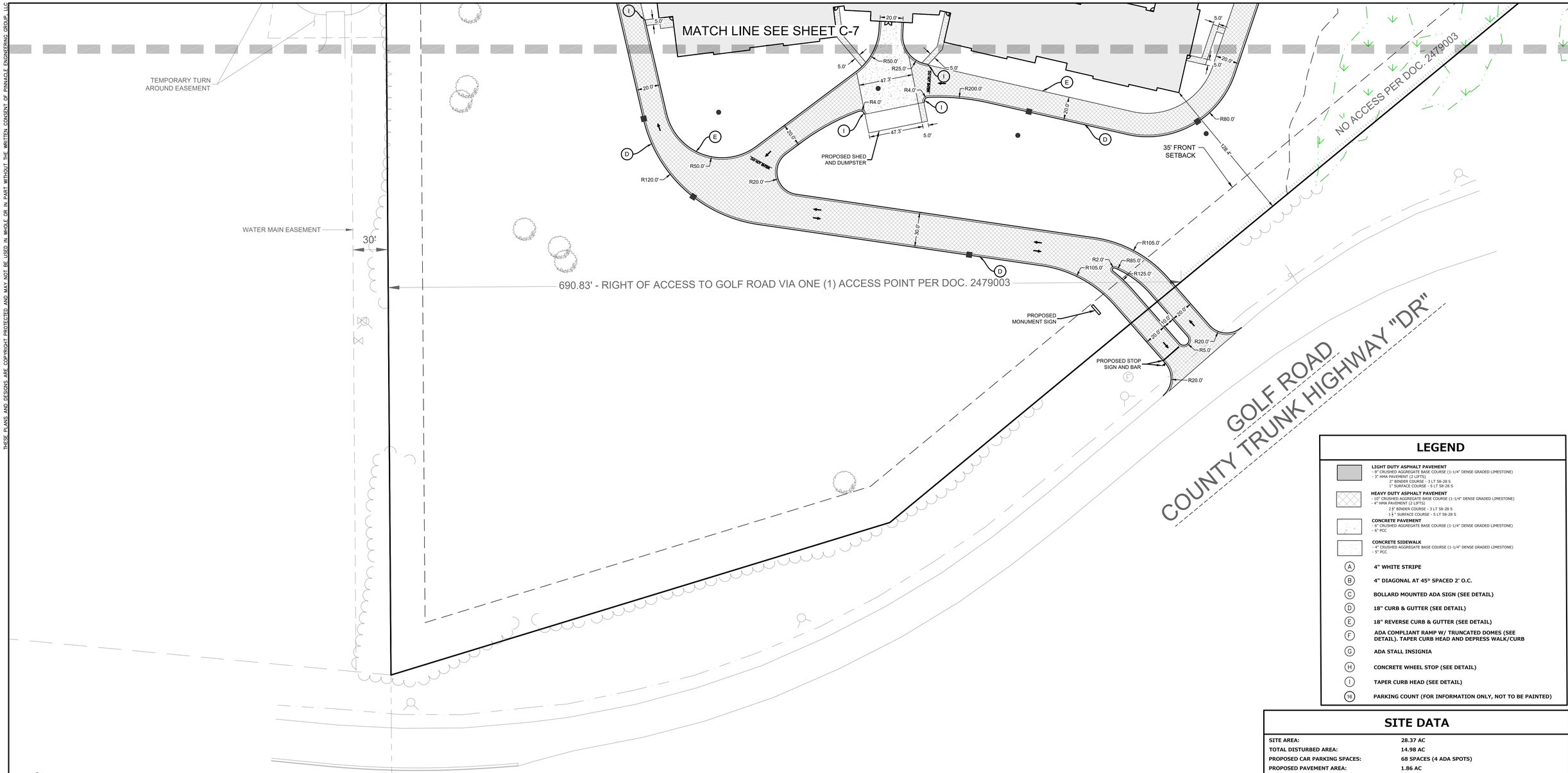

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(I)	TAPER CURB HEAD (SEE DETAIL)
(16)	PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)

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CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 40' 80'

REVIEWED:
DESIGNED: ACT
DRAFTED: DMS

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SITE DIMENSIONAL & PAVING PLAN

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 40'

SHEET
C-8
C-18

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SITE DIMENSIONAL & PAVING PLAN

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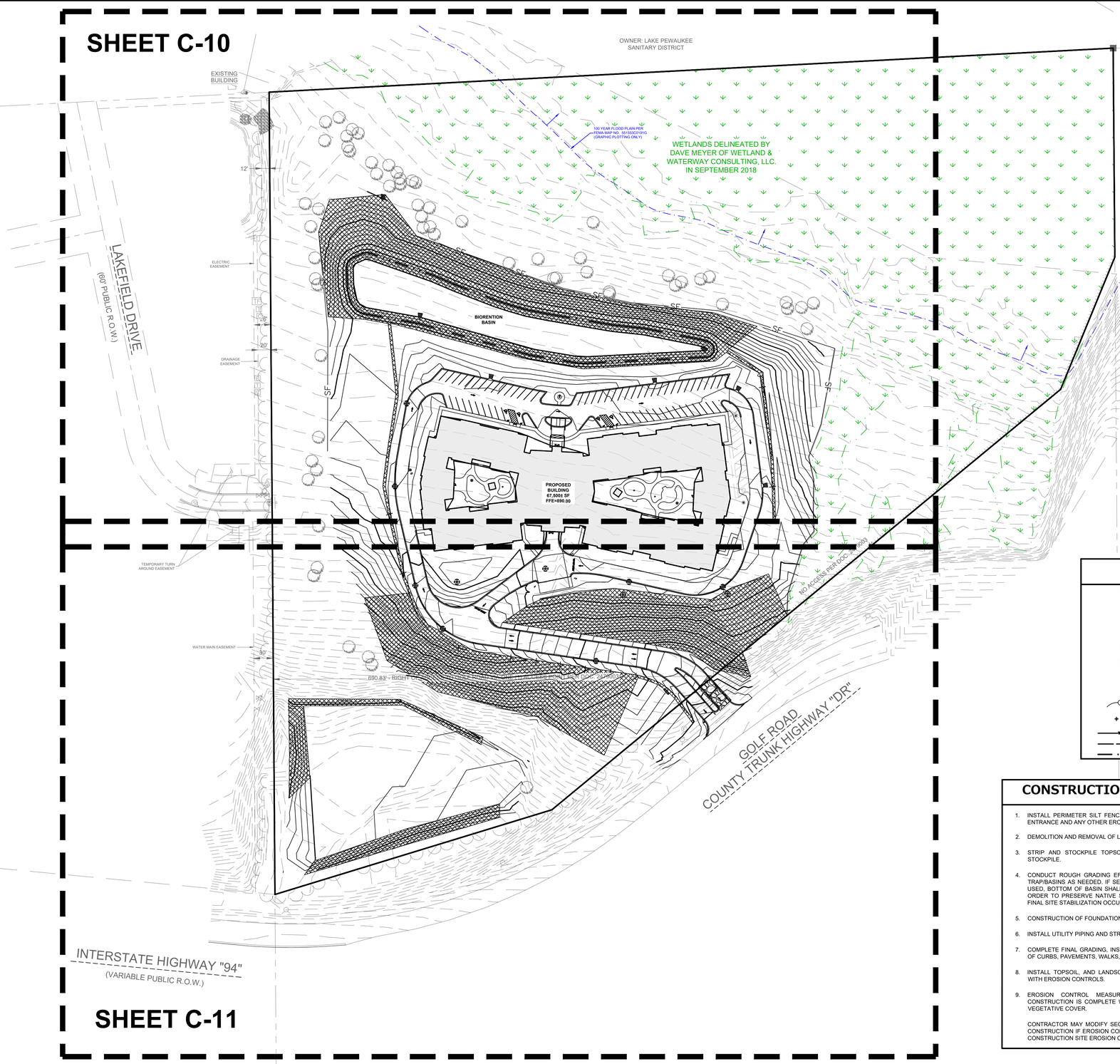
SHEET C-10



SHEET C-11

LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM STORM CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- PROPOSED CONTOUR
- 750.0 PROPOSED SPOT ELEVATION
- WETLANDS
- FLOODPLAIN
- HIGH WATER LEVEL (HWL)
- NORMAL WATER LEVEL (NWL)
- DITCH OR SWALE
- DIVERSION SWALE
- SF SILT FENCE
- TYPE D INLET PROTECTION
- CONSTRUCTION ENTRANCE
- HYDROSEED (PER MANUFACTURER SPECIFICATIONS)
- EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S75 OR EQUAL)
- RIP RAP

CONSTRUCTION SITE SEQENCING

1. INSTALL PERIMETER SILT FENCE, INLET PROTECTION, TEMPORARY CONSTRUCTION ENTRANCE AND ANY OTHER EROSION CONTROL MEASURES
2. DEMOLITION AND REMOVAL OF LANDSCAPING.
3. STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE.
4. CONDUCT ROUGH GRADING EFFORTS AND INSTALL CHECK DAMS AND SEDIMENT TRAP/BASINS AS NEEDED. IF SEDIMENT BASINS (BIO RETENTION BASINS) ARE TO BE USED, BOTTOM OF BASIN SHALL BE LEFT A MINIMUM OF 1' ABOVE FINAL GRADE IN ORDER TO PRESERVE NATIVE SOIL INTERFACE. DO NOT EXCAVATE FINAL 1' UNTIL FINAL SITE STABILIZATION OCCURS.
5. CONSTRUCTION OF FOUNDATIONS AND BUILDING.
6. INSTALL UTILITY PIPING AND STRUCTURES, IMMEDIATELY INSTALL INLET PROTECTION.
7. COMPLETE FINAL GRADING, INSTALLATION OF GRAVEL BASE COURSES, PLACEMENT OF CURBS, PAVEMENTS, WALKS, ETC.
8. INSTALL TOPSOIL, AND LANDSCAPING. IMMEDIATELY STABILIZE DISTURBED AREAS WITH EROSION CONTROLS.
9. EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.

CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM 1 AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS.

NOTE :

REMAINING DISTURBED AREAS OF SLOPES 5:1 OR FLATTER TO BE HYDROSEEDED

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 80' 160'

DRAFTED: DMS DESIGNED: AGT REVIEWED:

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GRADING & EROSION CONTROL OVERVIEW

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 80'

SHEET C-9 C-18

GRADING & EROSION CONTROL OVERVIEW

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NOTE :

REMAINING DISTURBED AREAS OF SLOPES 5:1 OR FLATTER TO BE HYDROSEEDED

LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM STORM CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- WETLANDS
- FLOODPLAIN
- HIGH WATER LEVEL (HWL)
- NORMAL WATER LEVEL (NWL)
- DITCH OR SWALE
- DIVERSION SWALE
- SILT FENCE
- TYPE D INLET PROTECTION
- CONSTRUCTION ENTRANCE
- HYDROSEED (PER MANUFACTURER SPECIFICATIONS)
- EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S75 OR EQUAL)
- RIP RAP

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EXISTING BUILDING

OHW

12'

ELECTRIC EASEMENT

LAKEFIELD DRIVE

(60' PUBLIC R.O.W.)

26'

20'

DRAINAGE EASEMENT

100 YEAR FLOOD PLAIN PER FEMA MAP NO. 551333C0191G (GRAPHIC PLOTTING ONLY)

WETLANDS DELINEATED BY DAVE MEYER OF WETLAND & WATERWAY CONSULTING, LLC IN SEPTEMBER 2018

SILT FENCE (TYP)

RIP RAP (TYP) (SEE DETAIL)

BIORENTION BASIN

INLET PROTECTION (TYP)

STRAW BALE DITCH CHECK (SEE DETAIL)

PROTECTION FENCE (TYP)

RIP RAP (TYP) (SEE DETAIL)

PROPOSED BUILDING 67,500± SF FFE=890.00

MATCH LINE SEE SHEET C-11

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 40' 80'

REVIEWED:

DESIGNED: ACT

DRAFTED: DMS

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GRADING & EROSION CONTROL PLAN

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 40'

SHEET
C-10
C-18

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GRADING & EROSION CONTROL PLAN

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MATCH LINE SEE SHEET C-10

TEMPORARY TURN AROUND EASEMENT

WATER MAIN EASEMENT 30'

STRAW BALE DITCH CHECK (SEE DETAIL)

INLET PROTECTION (TYP)

PROTECTION FENCE (TYP)

NO ACCESS PER DOC. 2479003

690.83' RIGHT OF ACCESS TO GOLF ROAD VIA ONE (1) ACCESS POINT PER DOC. 2479003

CONSTRUCTION ENTRANCE (SEE DETAIL)

GOLF ROAD
COUNTY TRUNK HIGHWAY "DR"

INTERSTATE HIGHWAY "94"
(VARIABLE PUBLIC R.O.W.)

LEGEND

SANITARY SEWER MANHOLE	NORMAL WATER LEVEL (NWL)
STORM SEWER MANHOLE	DITCH OR SWALE
STORM STORM CATCH BASIN (ROUND CASTING)	DIVERSION SWALE
STORM SEWER CATCH BASIN (RECTANGULAR CASTING)	SILT FENCE
PRECAST FLARED END SECTION	TYPE D INLET PROTECTION
CLEANOUT	CONSTRUCTION ENTRANCE
VALVE BOX	HYDROSEED (PER MANUFACTURER SPECIFICATIONS)
FIRE HYDRANT	EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S75 OR EQUAL)
PROPOSED CONTOUR	RIP RAP
750.0 PROPOSED SPOT ELEVATION	
WETLANDS	
FLOODPLAIN	
HIGH WATER LEVEL (HWL)	

CONSTRUCTION SITE SEQENCING

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GRAPHICAL SCALE (FEET)
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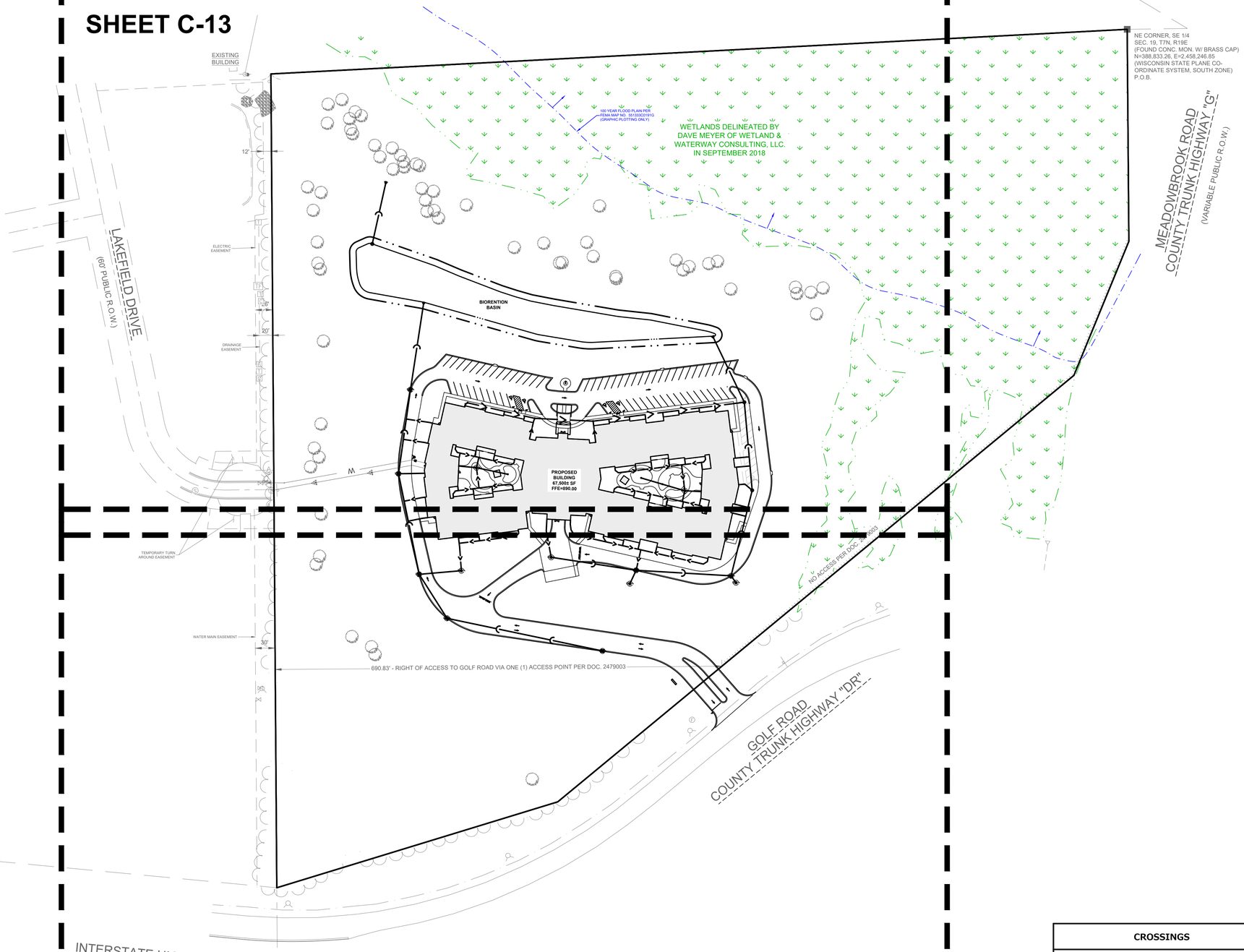
SHEET C-13



SHEET C-14

LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST CONCRETE FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- SANITARY SEWER
- FORCE MAIN
- DOWNSPOUT CONNECTIONS
- STORM SEWER
- DRAIN TILE
- W — WATER MAIN
- FP — FIRE PROTECTION
- UTILITY CROSSING
- E — ELECTRICAL CABLE
- G — GAS MAIN
- T — TELEPHONE LINE
- OHW — OVERHEAD WIRES
- LIGHTING
- ELECTRICAL TRANSFORMER OR PEDESTAL
- POWER POLE
- POWER POLE WITH LIGHTS
- STREET SIGN

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

CROSSINGS

1. 15" STM OVER 8" WAT — 8" WAT T.O.P. = 881.69
2. 15" STM OVER 8" SAN — 8" SAN T.O.P. = 882.61

NOTE:
ALL INLETS SHALL HAVE UNDERDRAIN INSTALLED PER DETAIL ON SHEET C-18

CONTRACTOR TO PROVIDE MINIMUM OF 2.5' OF COVER AT ALL DOWNSPOUT CONNECTIONS TO STORM SEWER. CONNECTIONS TO BE MADE WITH 6" SDR-35 PVC AND FITTED WITH WYE CONNECTIONS.

NORTH

GRAPHICAL SCALE (FEET)

0 — 1" = 80' — 160'

REVIEWED:
DESIGNED: ACT
DRAFTED: DMS

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BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

STORM SEWER OVERVIEW

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 80'

SHEET
C-12
C-18

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STORM SEWER OVERVIEW

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CONTRACTOR TO PROVIDE MINIMUM OF 2.5' OF COVER AT ALL DOWNSPOUT CONNECTIONS TO STORM SEWER. CONNECTIONS TO BE MADE WITH 6" SDR-35 PVC AND FITTED WITH WYE CONNECTIONS.

NOTE:
ALL INLETS SHALL HAVE UNDERDRAIN INSTALLED PER DETAIL ON SHEET C-18

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST CONCRETE FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- SANITARY SEWER
- FORCE MAIN
- DOWNSPOUT CONNECTIONS
- STORM SEWER
- DRAIN TILE
- W — WATER MAIN
- FP — FIRE PROTECTION
- UTILITY CROSSING
- E — ELECTRICAL CABLE
- G — GAS MAIN
- T — TELEPHONE LINE
- OHW — OVERHEAD WIRES
- LIGHTING
- ELECTRICAL TRANSFORMER OR PEDESTAL
- POWER POLE
- POWER POLE WITH LIGHTS
- STREET SIGN

CROSSINGS

1. 15" STM OVER 8" WAT — 15" STM B.O.P. = 883.36 — 8" WAT T.O.P. = 881.69
2. 15" STM OVER 8" SAN — 15" STM B.O.P. = 883.45 — 8" SAN T.O.P. = 882.61

EXISTING BUILDING

18" PVC RIM=877.00
ELBOW INV.=874.32

OHW

18" PVC RIM=877.56
ELBOW INV.=874.69

POND OUTFALL STRUCTURE
RIM=877.26
24" NE=874.98
SUMP=874.41

12'

ES OUTFALL
INV=875.00 (24")

98.3 L.F. 24" RCP
@ S=3.05%

O.C.S. (SEE SHEET C-18 FOR DETAIL)

100 YEAR FLOOD PLAIN PER FEMA MAP NO. 551333C0191G (GRAPHIC PLOTTING ONLY)

WETLANDS DELINEATED BY DAVE MEYER OF WETLAND & WATERWAY CONSULTING, LLC. IN SEPTEMBER 2018

ELECTRIC EASEMENT

LAKEFIELD DRIVE
(60' PUBLIC R.O.W.)

26'

20'

DRAINAGE EASEMENT

BIORENTION BASIN

ES 6
INV=881.00 (15")

136.8 L.F. 15" HDPE
@ S=1.00%

ES 13
INV=881.00 (24")

113.3 L.F. 24" HDPE
@ S=0.60%

CB 5
48" DIA
RIM= 886.57
INV=882.37 (15" S)
INV=882.37 (15" N)

106.5 L.F. 10" SDR-35
@ S=1.25%

235.8 L.F. 10" SDR-35
@ S=1.25%

90.4 L.F. 10" SDR-35
@ S=1.25%

MH 12
48" DIA
RIM= 888.92
INV=881.68 (10" W)
INV=881.68 (24" S)
INV=881.68 (24" NW)

DS 100
INV=887.14 (10")

131.3 L.F. 15" HDPE
@ S=1.00%

CB 14.1

AD 15.3

AD 15.2

AD 14.2

CB 15.1

136.7 L.F. 24" HDPE
@ S=0.50%

PROPOSED BUILDING
67,500± SF
FFE=890.00

CB 4
48" DIA
RIM= 887.93
INV=883.68 (12" S)
INV=883.68 (15" N)

BC 14
INV=884.18 (10")

BC 15
INV=882.66 (12")

MH 11
48" DIA
RIM= 889.16
INV=882.36 (18" S)
INV=882.36 (24" N)

MATCH LINE SEE SHEET C-14

NORTH

GRAPHICAL SCALE (FEET)
0 — 1" = 40' — 80'

www.pinnacle-engr.com

STORM SEWER PLAN

REVIEWED:
DESIGNED: ACT
DRAFTED: DMS

PLAN I DESIGN I DELIVER
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STORM SEWER PLAN

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 40'

SHEET
C-13
C-18

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MATCH LINE SEE SHEET C-13

TEMPORARY TURN AROUND EASEMENT

WATER MAIN EASEMENT

30'

158.8 L.F. 12" HDPE @ S=0.80%

CB 7
48" DIA
RIM= 1777.21
INV=885.15 (12" W)

CB 8
48" DIA
RIM= 888.15
INV=884.73 (12" E)

136.3 L.F. 18" HDPE @ S=0.51%

CB 3
48" DIA
RIM= 891.10
INV=884.95 (12" E)
INV=888.45 (10" SE)
INV=884.95 (12" N)

65.5 L.F. 12" HDPE @ S=0.31%

TOPSOIL BERM

132.9 L.F. 12" HDPE @ S=0.60%

22.9 L.F. 12" HDPE @ S=0.48%

CB 9.1
48" DIA
RIM= 887.04
INV=884.04 (12" NE)

CB 9
48" DIA
RIM= 888.22
INV=883.93 (12" W)
INV=883.93 (12" SW)
INV=883.93 (15" E)

147.1 L.F. 15" HDPE @ S=0.60%

13.0 L.F. 12" HDPE @ S=0.77%

CB 10
48" DIA
RIM= 887.54
INV=883.05 (12" SE)
INV=883.05 (15" W)
INV=883.05 (18" N)

CB 10.1
48" DIA
RIM= 887.44
INV=883.15 (12" NW)

NO ACCESS PER DOC. 2479003

80.5 L.F. 10" HDPE @ S=0.81%

CB 2
48" DIA
RIM= 893.00
INV=889.10 (8" E)
INV=889.10 (10" NW)

245.7 L.F. 8" HDPE @ S=3.75%

690.83' - RIGHT OF ACCESS TO GOLF ROAD VIA ONE (1) ACCESS POINT PER DOC. 2479003

CB 1
48" DIA
RIM= 901.15
INV=898.31 (8" W)

GOLF ROAD
COUNTY TRUNK HIGHWAY "DR"

INTERSTATE HIGHWAY "94"
(VARIABLE PUBLIC R.O.W.)

LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST CONCRETE FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- SANITARY SEWER
- FORCE MAIN
- DOWNSPOUT CONNECTIONS
- STORM SEWER
- DRAIN TILE
- W — WATER MAIN
- FP — FIRE PROTECTION
- UTILITY CROSSING
- E — ELECTRICAL CABLE
- G — GAS MAIN
- T — TELEPHONE LINE
- OHW — OVERHEAD WIRES
- LIGHTING
- ELECTRICAL TRANSFORMER OR PEDESTAL
- POWER POLE
- POWER POLE WITH LIGHTS
- STREET SIGN

CROSSINGS

1 — 15" STM OVER 8" WAT
15" STM B.O.P. = 883.36
8" WAT T.O.P. = 881.69

2 — 15" STM OVER 8" SAN
15" STM B.O.P. = 883.45
8" SAN T.O.P. = 882.61

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

CONTRACTOR TO PROVIDE MINIMUM OF 2.5' OF COVER AT ALL DOWNSPOUT CONNECTIONS TO STORM SEWER. CONNECTIONS TO BE MADE WITH 6" SDR-35 PVC AND FITTED WITH WYE CONNECTIONS.

NOTE:
ALL INLETS SHALL HAVE UNDERDRAIN INSTALLED PER DETAIL ON SHEET C-18

NORTH

GRAPHICAL SCALE (FEET)
0 — 1" = 40' — 80'

REVIEWED:
DESIGNED: ACT
DRAFTED: DMS

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STORM SEWER PLAN

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 40'

SHEET
C-14
C-18

STORM SEWER PLAN

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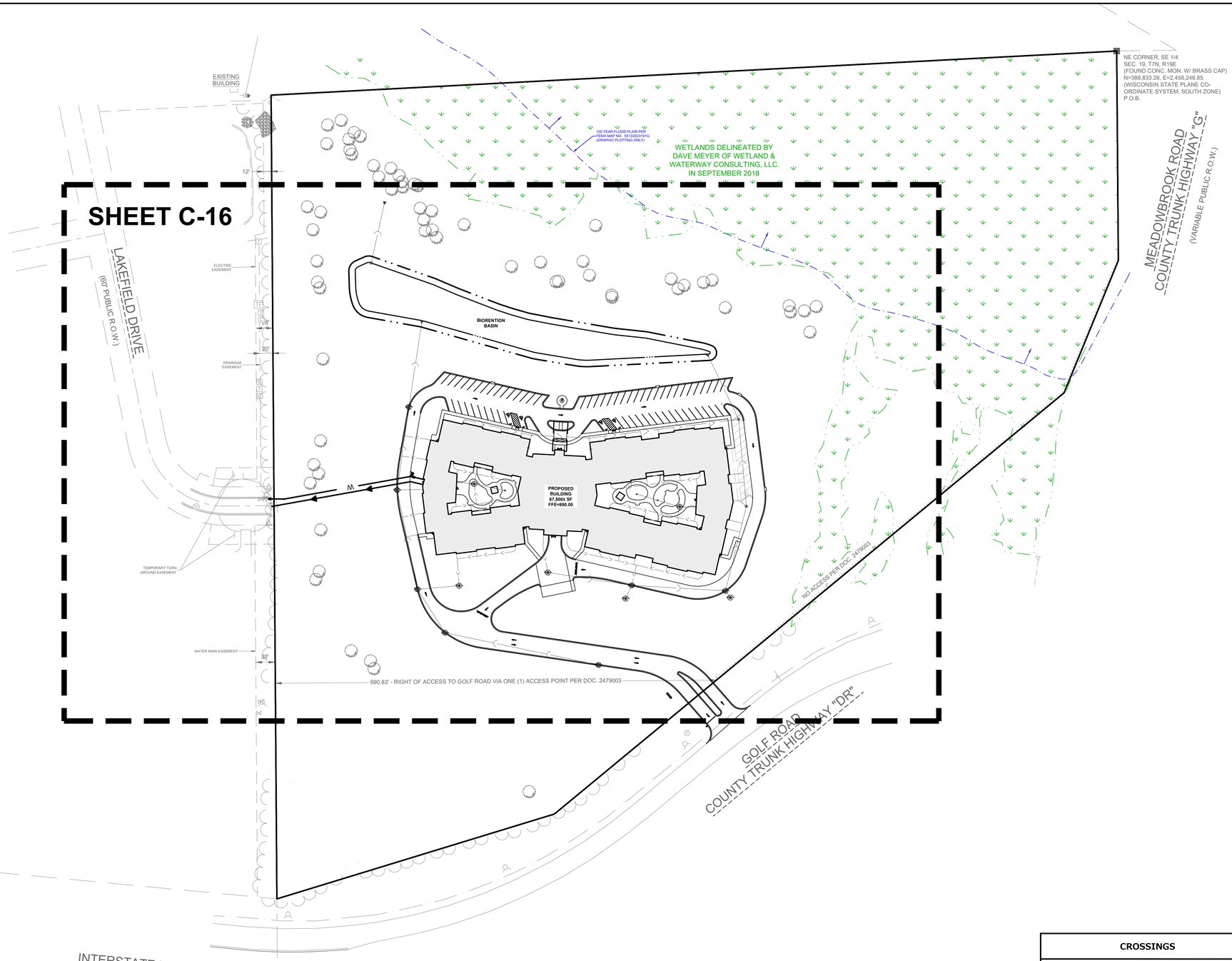

LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
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CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

CROSSINGS

1. 15" STM OVER 8" WAT — 15" STM B.O.P. = 883.36 — 8" WAT T.O.P. = 881.69
2. 15" STM OVER 8" SAN — 15" STM B.O.P. = 883.45 — 8" SAN T.O.P. = 882.61

NOTE:
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CONTRACTOR TO PROVIDE MINIMUM OF 2.5' OF COVER AT ALL DOWNSPOUT CONNECTIONS TO STORM SEWER. CONNECTIONS TO BE MADE WITH 6" SDR-35 PVC AND FITTED WITH WYE CONNECTIONS.

NORTH

GRAPHICAL SCALE (FEET)

0 — 1" = 80' — 160'

DRAFTED: DMS
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SANITARY & WATERMAIN OVERVIEW

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 80'

SHEET
C-15
C-18

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SANITARY & WATERMAIN OVERVIEW

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LAKEFIELD DRIVE
(60' PUBLIC R.O.W.)

ELECTRIC EASEMENT

DRAINAGE EASEMENT

26'

20'

NOTE:
ALL INLETS SHALL HAVE UNDERDRAIN INSTALLED PER DETAIL ON SHEET C-18

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
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- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
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CROSSINGS

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   15" STM B.O.P. = 883.36
   8" WAT T.O.P. = 881.69
2. 15" STM OVER 8" SAN
   15" STM B.O.P. = 883.45
   8" SAN T.O.P. = 882.61

BIORENTION BASIN

PROPOSED HYDRANT W/ AUX VALVE WITH 5 LF 6" HYDRANT LEAD @ S=5.00%
NOZZLE = 888.68
GROUND = 887.18
INV = 881.19 (6" SW)

8 X 8 X 6 TEE
INV=880.86
INV=880.86

2.1 L.F. 8" C-900 WATER MAIN @ S=5.00%

22.5° BEND
INV=880.75

3.0 L.F. 8" C-900 WATER MAIN @ S=5.00%

8" GATE VALVE
INV=881.01

16.8 L.F. 8" C-900 WATER MAIN @ S=5.00%

WAT BC
INV=881.85 (8")

PROPOSED FDC LOCATION

SAN BC
INV=882.14

22.5° BEND
INV=882.04

20.2 L.F. SDR-35 @ S=0.52%

24.2 L.F. 8" C-900 WATER MAIN @ S=-4.72%

200.9 L.F. 8" C-900 WATER MAIN @ S=-1.00%

11.25° BEND
INV=882.76

220.6 L.F. SDR-35 @ S=0.52%

CONNECT TO EXISTING 12" WM WITH 12 X 8 REDUCER.
INV=883.90±
CONTRACTOR TO NOTIFY ENGINEER OF ANY DIESCREPANCIES

CONNECT TO EXISTING SANITARY MANHOLE
RIM=891.02
880.79 (8" W) (EXISTING)
880.89 (8" E) (PROPOSED)

SANITARY MANHOLE
RIM=887.95
8" E=878.02
8" SW=877.91

TEMPORARY TURN AROUND EASEMENT

PROPOSED BUILDING 67,500± SF FFE=890.00

WATER MAIN EASEMENT

30'

690.83' - RIGHT OF ACCESS TO GOLF ROAD VIA ONE (1) ACCESS POINT PER DOC. 2479003

NO ACCESS PER DOC. 2479003

GOLF ROAD
COUNTY TRUNK HIGHWAY "DR"

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 40' 80'

DRAFTED: DMS
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SANITARY & WATERMAIN PLAN

REVISIONS

PEG JOB No. 1338.10
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START DATE 07-27-22
SCALE 1" = 40'

SHEET
C-16
C-18

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SANITARY & WATERMAIN PLAN

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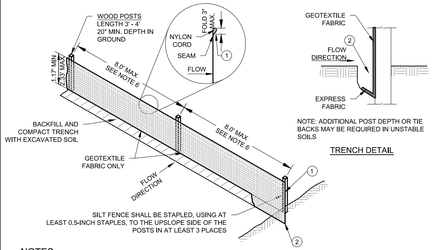


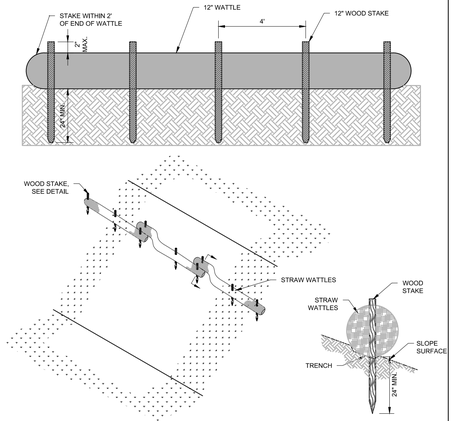
TRENCH DETAIL

NOTES:

1. ALL SILT FENCE MATERIALS AND INSTALLATION SHALL BE IN CONFORMANCE WITH WI DNR TECHNICAL STANDARD 1056.
2. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS I WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
3. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8-INCHES OF FABRIC IN A 4-INCH WIDE AND 6-INCH DEEP TRENCH OR 6-INCH DEEP V-TRENCH ON THE UPSLOPE SIDE OF THE FENCE. TRENCHES SHALL NOT BE EXCAVATED WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.
4. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
5. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1.125-INCHES x 1.125-INCHES OF DRIED OAK OR HICKORY.
6. SILT FENCE TO EXTEND ABOVE THE TOP OF PIPE, WHERE APPLICABLE.
7. POST SPACING SHALL BE SELECTED BASED ON GEOTEXTILE FABRIC (8-FEET FOR WOVEN AND 3-FEET FOR NON-WOVEN).

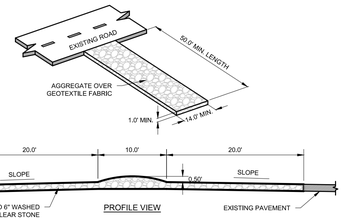
SILT FENCE

#SWC 1525.01



STRAW WATTLE

#137 06/01/15

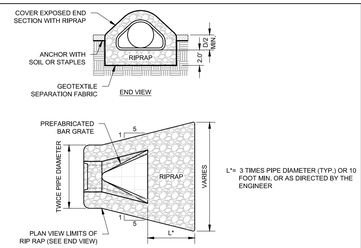


NOTES:

1. TRACKING PADS SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE SITE. CONTRACTOR SHALL VERIFY LOCATION WITH OWNER.
2. THE AGGREGATE FOR TRACKING PADS SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGATE GRADATIONS, CA-1, CA-2, CA-3, OR CA-4 AND BE PLACED ACCORDING TO CONSTRUCTION SPECIFICATIONS 25 ROCKFILL USING PLACEMENT METHOD 1 AND CLASS III COMPACTION.
3. THE AGGREGATE SHALL BE PLACED IN A LAYER AT LEAST 12-INCHES THICK, ON SITES WHERE SATURATED CONDITIONS ARE EXPECTED DURING THE LIFE OF THE PAD, THE PAD SHALL BE UNDERLAIN WITH GEOTEXTILE FABRIC WHICH MEETS MATERIAL SPECIFICATION 592 GEOTEXTILE, TABLE 1 OR 2, CLASS I, II OR IV, TO PREVENT MIGRATION OF UNDERLYING SOILS INTO THE STONE LAYER.
4. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT. MINIMUM WIDTH IS 14 FEET FOR ONE-WAY TRAFFIC AND 20 FEET FOR TWO-WAY TRAFFIC, WITH AN ADDITIONAL INCREASE OF 4 FEET FOR TRAILER TRAFFIC. THE TRACKING PAD SHALL BE A MINIMUM 50-FEET LONG.
5. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, AT THE END OF EACH WORKING DAY.
6. TRACKING PADS SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24-HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5-INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.
7. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.

CONSTRUCTION ENTRANCE

#TCE 1525.01

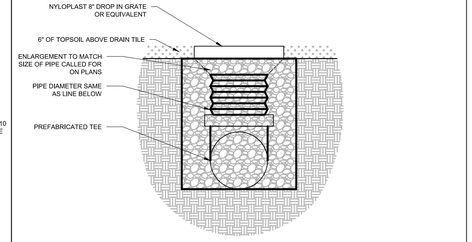


NOTES:

1. RIP RAP AND GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS FOR STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

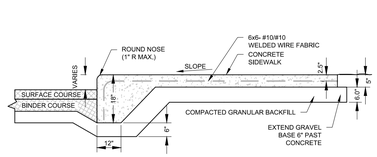
RIP RAP AT END SECTIONS

#TRAP 1525.01



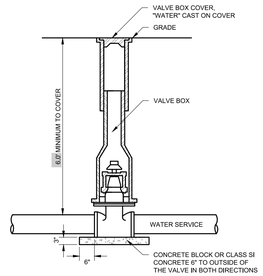
AREA DRAIN

#ADR 1525.01



INTEGRAL CURB AND SIDEWALK

#617 12-20-13

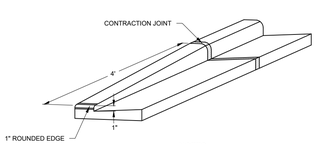


NOTES:

1. THE CONTRACT UNIT PRICE EACH FOR VALVES OF THE SIZE AND TYPE SPECIFIED SHALL INCLUDE PROVIDING & INSTALLING THE VALVE BOX

SERVICE VALVE

#SVB 1525.01



NOTES:

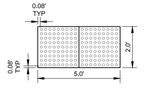
1. CONTRACTION JOINTS SHALL BE PLACED EVERY 10 FEET
2. EXPANSION JOINTS (3/4" EXPANSION FIBER MATERIAL) SHALL BE PLACED EVERY 300 FEET AND AT EVERY PC/PT AND 3 FEET FROM STRUCTURES

TAPER CURB HEAD

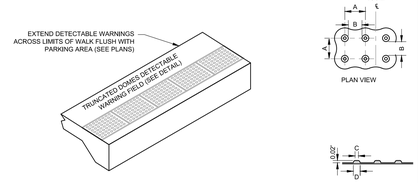
#625 1525.01

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION



DETECTABLE WARNING FIELD (TYPICAL)*



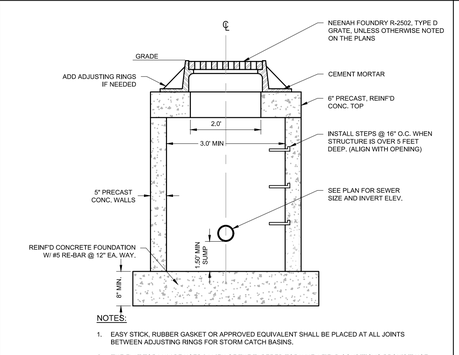
TRUNCATED DOMES DETECTABLE WARNING PATTERN DETAIL

NOTES:

1. DETECTABLE WARNING FIELDS TO BE NEENAH FOUNDRY DETECTABLE WARNING FIELDS (OR APPROVED EQUAL), UNPAINTED NATURAL COLOR AND FIELD WEATHERED PRIOR TO INSTALLATION (VERIFY COLOR WITH OWNER PRIOR TO INSTALLATION.

DETECTABLE WARNING TRUNCATED DOMES

#DWF 1525.01

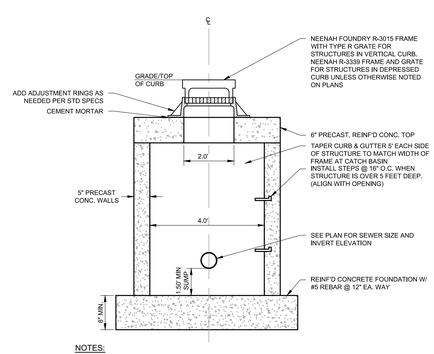


NOTES:

1. EASY STICK, RUBBER GASKET OR APPROVED EQUIVALENT SHALL BE PLACED AT ALL JOINTS BETWEEN ADJUSTING RINGS FOR STORM CATCH BASINS.
2. THE FLAT TOP MAY BE USED IN LIEU OF THE TAPERED TOP WHEN FIELD CONDITIONS PROHIBIT USE OF A TAPERED TOP.
3. STRUCTURE TO BE 4.0' DIA. OR AS INDICATED ON THE PLANS.

CATCH BASIN

#SCB 1525.01

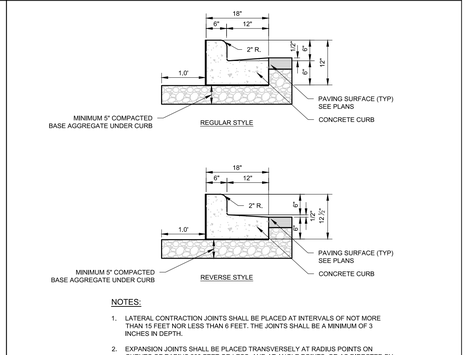


NOTES:

1. EASY STICK, RUBBER GASKET OR APPROVED EQUIVALENT SHALL BE PLACED AT ALL JOINTS BETWEEN ADJUSTING RINGS FOR STORM CATCH BASINS.
2. THE FLAT TOP MAY BE USED IN LIEU OF THE TAPERED TOP WHEN FIELD CONDITIONS PROHIBIT USE OF A TAPERED TOP.
3. STRUCTURES TO BE 4' DIA. OR AS INDICATED ON THE PLANS.

CATCH BASIN - CURB

#SCBC 1525.01

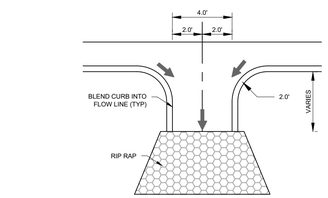


NOTES:

1. LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15 FEET NOR LESS THAN 6 FEET. THE JOINTS SHALL BE A MINIMUM OF 3 INCHES IN DEPTH.
2. EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT RADIUS POINTS ON CURVES OF RADIUS 200 FEET OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER OF RECORD. THE EXPANSION JOINTS FILLER SHALL BE A ONE PIECE FIBERBOARD OR THE APPROVED EQUIVALENT MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 0.5 INCH THICK.
3. IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE.
4. REVERSE STYLE CURB LOCATIONS ARE NOTED ON THE PLANS.

18" VERTICAL FACE CURB

#VCC/VD 1525.01



NOTES:

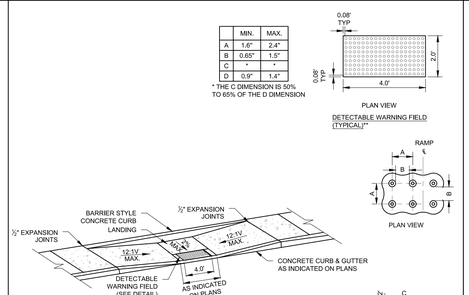
1. PITCH CONCRETE AT 2% FROM FLOW LINE OF GUTTER SECTION TO C/L OF FLUME.

CONCRETE FLUME

#FGB 1525.01

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

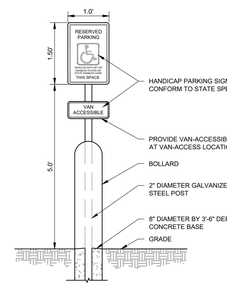
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION



TRUNCATED DOMES DETECTABLE WARNING PATTERN DETAIL

TYPICAL ACCESSIBLE RAMP - SPLIT

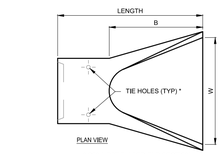
#TAR 1525.01



ADA SIGN

#HPS 1525.01

PIPE DIAMETER D	LENGTH	T	A	B	W	WEIGHT PER SECTION
INCHES	FEET	INCHES	INCHES	INCHES	INCHES	LBS.
12	6'-0"	2	4	24	24	530
15	6'-0"	2 1/4	6	27	30	740
18	6'-0"	2 1/2	9	27	36	990
21	6'-0"	2 3/4	9	36	42	1280
24	6'-0"	3	9 1/2	43 1/2	48	1520
27	6'-0"	3 1/4	10 1/2	49 1/2	54	1930
30	6'-0"	3 1/2	12	54	60	2190
33	6'-6"	3 3/4	13 1/2	58 1/2	66	3850
36	8'-2"	4	15	63	72	4100
42	8'-2"	4 1/2	21	63	78	5380
48	8'-2"	5	24	72	84	6550
54	8'-2 1/2"	5 1/2	27	65	90	8240
60	8'-3"	6	35	60	96	8730



FLARED END SECTION

#FES 1525.01

REVIEWED:

DESIGNED: ACT

DRAFTED: DMS

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

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BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

CONSTRUCTION DETAILS

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 40'

SHEET
C-17
C-18

CONSTRUCTION DETAILS

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1.0 POTENTIAL POLLUTANT SOURCES

GIVEN THE PROPOSED ACTIVITY ON THE PROJECT SITE, THE PRIMARY POTENTIAL POLLUTANT SOURCE ASSOCIATED WITH THIS CONSTRUCTION PROJECT IS SOIL EROSION AND TRANSPORTATION; REFER TO SECTION 4 OF THIS PLAN. ADDITIONAL POTENTIAL SOURCES OF POLLUTION MAY INCLUDE: FUEL TANKS, WASTE CONTAINERS, OIL OR OTHER PETROLEUM PRODUCTS, DETERGENTS, PAINTS, CONSTRUCTION DEBRIS, SANITARY STATIONS, FERTILIZERS, AND DUST; REFER TO SECTION 5 OF THIS PLAN.

2.0 EROSION AND SEDIMENT CONTROL IMPLEMENTATION

THE FOLLOWING ARE DESCRIPTIONS OF THE EROSION AND SEDIMENT CONTROL PRACTICES THAT SHALL BE IMPLEMENTED DURING CONSTRUCTION OF THIS PROJECT, IN ADDITION TO THESE MEASURES, CONTRACTOR SHALL DISTURB ONLY AREAS NECESSARY TO COMPLETE THE CONSTRUCTION PROJECT. ALL PRACTICES SHALL BE CONDUCTED IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES (BMP).

2.1 CONSTRUCTION AND EROSION CONTROL SEQUENCING

CONSTRUCTION SEQUENCING WILL BE UTILIZED AS A MEANS OF CONTROLLING EROSION AND LIMITING SEDIMENT TRANSPORT. SEQUENCING AS LISTED BELOW IS GENERAL IN NATURE AND MAY VARY DEPENDING ON WEATHER CONDITIONS AND/OR PHASING OF CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A DETAILED SITE SEQUENCING PLAN TO OWNER FOR APPROVAL AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM 6 AS NEEDED TO COMPLETE CONSTRUCTION ONLY IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL REQUIREMENTS.

1. INSTALL TEMPORARY CONSTRUCTION ENTRANCES, INLET PROTECTION ON EXISTING STORM SEWER AND CULVERT INLET LOCATIONS, AND PERIMETER SILT FENCING.
2. INSTALL SILT FENCING ALONG THE PERIMETER OF PROPOSED TOPSOIL STOCKPILE LOCATIONS. THE FIRST TOPSOIL DEPOSITED WITHIN THE STOCKPILE LIMITS SHALL BE PLACED TO CREATE TEMPORARY BERMING ALONG THE SILT FENCE TO PREVENT DIRECT STORMWATER RUNOFF AGAINST SILT FENCING. CONTRACTOR SHALL LIMIT LAND DISTURBING ACTIVITIES ASSOCIATED WITH TEMPORARY BERMING TO A MINIMUM.
3. STRIP TOPSOIL WITHIN THE LIMITS OF THE SEDIMENT TRAPS THAT WILL BE USED FOR TEMPORARY SEDIMENT CONTROL, STRIPPED TOPSOIL SHALL BE PLACED TO CONSTRUCT DIVERSION BERMING OR PLACED WITHIN THE STOCKPILE LIMITS.
4. STRIP TOPSOIL ALONG THE REMAINDER OF DIVERSION BERMING AND IMMEDIATELY PLACE TOPSOIL TO CREATE THE BERMING. MASS TOPSOIL STRIPPING SHALL NOT OCCUR UNTIL ALL DOWNSTREAM SEDIMENT CONTROLS ARE IN PLACE.
5. CONDUCT ROUGH GRADING OPERATIONS AND UTILITY PIPING INSTALLATION. DRAIN TILE SHALL NOT BE INSTALLED UNTIL UPLAND AREAS CONTRIBUTING STORMWATER RUNOFF ARE STABILIZED. DITCH CHECKS SHALL BE INSTALLED WITHIN DRAINAGE DITCHES IMMEDIATELY FOLLOWING CREATION OF DITCHES AND INLET PROTECTION SHALL BE INSTALLED TO PROTECT ANY STORM SEWER OR CULVERTS THAT WILL FUNCTION DURING CONSTRUCTION.
6. FINE GRADE SUB-GRADE SOILS WITHIN PAVEMENT AND BUILDING LIMITS. PLACE STONE BASE MATERIAL AS SOON AS POSSIBLE FOLLOWING COMPLETION OF FINE GRADING EFFORTS.
7. FINE GRADE REMAINING DISTURBED AREAS. PLACE SALVAGED TOPSOIL, EROSION BLANKETS/MATTING, AND SEED/MULCH AS SOON AS POSSIBLE FOLLOWING COMPLETION OF FINE GRADING EFFORTS.
8. EROSION CONTROLS SHALL NOT BE REMOVED UNTIL SITE IS FULLY STABILIZED OR 70% VEGETATIVE COVER IS ESTABLISHED. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF SILT FENCE, TEMPORARY FENCING/FRETTECTION, DITCH CHECKS, AND OTHER TEMPORARY CONTROLS, AND RESTORATION PRACTICES AS NECESSARY, TO THE SATISFACTION OF THE OWNER.

2.2 STABILIZATION PRACTICES

THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR, WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, AND WHEN STABILIZATION MEASURES ARE INITIATED, SHALL BE RECORDED ON THE STABILIZATION SCHEDULE FOR MAJOR GRADING ACTIVITIES.

STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. NO MORE THAN SEVEN (7) DAYS SHALL PASS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS PERMANENTLY CEASED UNLESS:

THE INITIATION OF STABILIZATION MEASURES BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE IS PRECLUDED BY SNOW COVER. IN THAT EVENT, STABILIZATION MEASURE SHALL BE INITIATED AS SOON AS PRACTICABLE.

CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN FOURTEEN (14) DAYS FROM WHEN ACTIVITIES CEASED, (I.E. THE TOTAL TIME PERIOD THAT THE CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN FOURTEEN (14) DAYS), IN THAT EVENT, STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED. SEE THE SOIL PROTECTION CHART PRESENTED IN THE CONSTRUCTION DOCUMENTS FOR RATES OF PERMANENT AND TEMPORARY VEGETATION.

STABILIZATION MEASURES SHALL BE DETERMINED BASED ON SITE CONDITIONS AT THE TIME CONSTRUCTION ACTIVITY HAS CEASED, INCLUDING BUT NOT LIMITED TO WEATHER CONDITIONS AND LENGTH OF TIME MEASURE MUST BE EFFECTIVE. THE FOLLOWING ARE ACCEPTABLE STABILIZATION MEASURES.

PERMANENT SEEDING; IN ACCORDANCE WITH APPROVED LANDSCAPING PLAN
TEMPORARY SEEDING MAY CONSIST OF SPRING OATS (100LBS/ACRE) AND/OR WHEAT OR CEREAL RYE (150LBS/ACRE)
HYDRO-MULCHING WITH A TACKIFIER
GEOTEXTILE EROSION MATTING
SODDING

2.3 STRUCTURAL PRACTICES

THE FOLLOWING ARE DESCRIPTIONS OF STRUCTURAL PRACTICES TO BE IMPLEMENTED TO DIVERT FLOWS FROM EXPOSED SOILS, STORE FLOWS, OR OTHERWISE LIMIT THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE INCLUDING THE PROPOSED AND EXISTING WETLAND AREAS. SUCH PRACTICES COULD INCLUDE SILT FENCE, PROTECTION FENCE, CONSTRUCTION ENTRANCE, DITCH CHECK, EROSION CONTROL MATTING, DIVERSION BERM/SWALE, SEDIMENT TRAP, LEVEL SPREADER, INLET PROTECTION, OUTLET PROTECTION, AND TEMPORARY OR PERMANENT SEDIMENT BASIN. THE FOLLOWING STRUCTURAL PRACTICES ARE TO BE UTILIZED DURING THIS PROJECT.

SILT FENCE SHALL BE PLACED DOWN SLOPE OF DISTURBED AREAS OF THE CONSTRUCTION SITE AND AROUND THE PERIMETER OF THE TOPSOIL STOCKPILE. THIS INCLUDES PROTECTION OF EXISTING WETLAND AREAS TO BE MAINTAINED. SILT FENCE MAY ALSO BE USED AS A TEMPORARY CONTROL DEVICE WHERE SEDIMENTATION RUNOFF IS DISCOVERED.

CONSTRUCTION ENTRANCE SHALL BE INSTALLED TO REDUCE SOIL EROSION POLLUTANTS FROM LEAVING THE SITE DURING CONSTRUCTION ACTIVITIES. IF THE CRUSHED STONE DOES NOT ADEQUATELY REMOVE MUD FROM VEHICLE TIRES, THEY SHALL BE HOSED OFF BEFORE ENTERING A PAVED ROADWAY. ANY SOIL DEPOSITED ON THE PUBLIC PAVED ROAD WAY SHALL BE REMOVED IMMEDIATELY.

DITCH CHECK (STRAW BALES) SHALL BE INSTALLED IN DRAINAGE CHANNELS AS NEEDED.

EROSION CONTROL MATTING SHALL BE PLACED ON AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 3H:1V, BEFORE VEGETATION IS ESTABLISHED.

DIVERSION BERM/SWALE SHALL BE CONSTRUCTED TO DIVERT RUNOFF AROUND THE SITE AND TO DIVERT RUNOFF FROM THE DISTURBED AREA TO A SEDIMENT TRAP OR OTHER CONTROL. BERMS/SWALES SHALL BE STABILIZED WITH EQUIPMENT TRACKING AND TEMPORARY SEEDING.

SEDIMENT TRAPS/BASIN SHALL BE CONSTRUCTED TO COLLECT RUNOFF AND RUNOFF FROM SITE DIVERSION BERMS/SWALES.

INLET PROTECTION SHALL BE INSTALLED AT STORMWATER DRAINAGE INLETS TO REDUCE SEDIMENT WITHIN STORM SEWER CONVEYANCE FEATURES.

OUTLET SCOUR PROTECTION SHALL BE INSTALLED AT STORMWATER DRAINAGE OUTLETS TO DIFFUSE FLOWS.

3.0 ADDITIONAL PRACTICES

ADDITIONAL POLLUTANT CONTROL MEASURES TO BE IMPLEMENTED DURING CONSTRUCTION ACTIVITIES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING.

CONSTRUCTION WASTE SHALL BE PROPERLY DISPOSED OF. THIS INCLUDES ALL CONSTRUCTION SITE WASTE MATERIAL, SANITARY WASTE, AND WASTE FROM VEHICLE TRACKING OF SEDIMENTS. THE CONTRACTOR SHALL ENSURE THAT NO MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, BURNED, OR DISCHARGED TO THE WATERS OF THE STATE, VEHICLES HAULING MATERIAL AWAY FROM THE SITE SHALL BE COVERED WITH A TARPAULIN TO PREVENT BLOWING DEBRIS.

DUST CONTROL SHALL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:

COVERING 30% OR MORE OF THE SOIL SURFACE WITH A NON-ERODIBLE MATERIAL.

ROUGHENING (EQUIPMENT TRACKING) THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND. RIDGES SHALL BE AT LEAST SIX (6) INCHES IN HEIGHT.

FREQUENT WATERING OF EXCAVATION AND FILL AREAS.

PROVIDING GRAVEL OR PAVING AT ENTRANCE/EXIT DRIVES, PARKING AREAS AND TRANSIT PATHS.

STREET SWEEPING SHALL BE PERFORMED TO IMMEDIATELY REMOVE ANY SEDIMENT TRACKED ON PAVEMENTS.

4.0 EROSION AND SEDIMENT STRUCTURAL PRACTICE MAINTENANCE

THE FOLLOWING MAINTENANCE PRACTICES SHALL BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATING CONDITIONS. VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES, AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN. UPON IDENTIFICATION, DEFICIENCIES IN STORMWATER CONTROLS SHALL BE ADDRESSED IMMEDIATELY. THE MAINTENANCE PROCEDURES FOR THIS DEVELOPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO THE BELOW.

SILT FENCE - REPAIR OR REPLACE ANY DAMAGED FILTER FABRIC AND/OR STAKES. REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

CONSTRUCTION ENTRANCE - AS NEEDED, ADD STONE TO MAINTAIN CONSTRUCTION ENTRANCE DIMENSIONS AND EFFECTIVENESS.

DITCH CHECK (STRAW BALES) - RE-SECURE STAKES; ADJUST OR REPOSITION BALES TO ADDRESS PROPER FLOW OF STORMWATER; AND REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE HEIGHT OF THE BALE.

EROSION CONTROL MATTING - REPAIR MATTING IMMEDIATELY IF INSPECTION REVEALS BREACHED OR FAILED CONDITIONS. REPAIR AND RE-GRADE SOIL WHERE CHANNELIZATION HAS OCCURRED.

DIVERSION BERM/SWALE - REPLACE OR RE-COMPACT THE CONSTRUCTION MATERIALS AS NECESSARY.

SEDIMENT TRAP - REMOVE AND DISPOSE OF THE ACCUMULATED SEDIMENT WHEN IT HAS REACHED THE SEDIMENT STORAGE ELEVATION.

INLET PROTECTION - CLEAN, REPAIR OR REPLACE FILTER FABRIC AND/OR STONE WHEN CONTROL MEASURE IS CLOGGED. INLET FILTER BAGS SHALL BE REPLACED ONCE ONE-HALF FULL OF SEDIMENT.

OUTLET PROTECTION - CLEAN, REPAIR OR REPLACE FILTER FABRIC, TURF REINFORCEMENT MATTING AND/OR STONE WHEN CONTROL MEASURE IS ONE-HALF FULL OF SEDIMENT.

SEDIMENT BASIN - AT THE END OF CONSTRUCTION, CONTRACTOR SHALL REMOVE AND DISPOSE OF THE ACCUMULATED SEDIMENT AND RESTORE BASIN AREA TO INTENDED POST-CONSTRUCTION DESIGN GRADES.

5.0 INSPECTION

INSPECTIONS SHALL BE COMPLETED WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A RAINFALL EVENT THAT IS ONE-HALF INCH OR GREATER OR EQUIVALENT SNOWFALL, OR AT A MINIMUM ONCE EVERY SEVEN (7) CALENDAR DAYS. INSPECTIONS SHALL BE UNDERTAKEN BY QUALIFIED PERSONNEL PROVIDED BY THE CONTRACTOR, AND SHALL INCLUDE: DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. A STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT SHALL BE COMPLETED AND ADDED TO THE SWPPP. RAINFALL SHALL BE RECORDED ON THE SWPPP RAINFALL LOG. CONTRACTOR SHALL IMMEDIATELY ARRANGE FOR REPAIR OR REPLACEMENT OF ANY DAMAGED OR DEFICIENT CONTROL MEASURES OBSERVED DURING THE INSPECTION.

QUALIFIED PERSONNEL MEANS A PERSON KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICES OF EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS A LICENSED PROFESSIONAL ENGINEER, A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL, A CERTIFIED EROSION SEDIMENT OR STORMWATER INSPECTOR, OR OTHER TRAINED INDIVIDUAL.

6.0 SPILL PREVENTION

6.1 GENERAL MATERIAL MANAGEMENT PRACTICES

THE GOOD HOUSEKEEPING PRACTICES LISTED BELOW SHALL BE FOLLOWED THROUGHOUT THE CONSTRUCTION PROJECT.

1. CONTRACTOR SHALL STORE ONLY ENOUGH PRODUCTS REQUIRED TO COMPLETE THIS PROJECT.
2. ALL MATERIAL SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR ORIGINAL CONTAINERS CONTAINING MANUFACTURER'S LABEL.
3. MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
4. MATERIALS REQUIRED TO HAVE A MATERIAL SAFETY DATA SHEET (MSDS) SHALL HAVE A COPY STORED IN THE PROJECT'S MSDS DATABASE.

6.2 SPILL CONTROL PRACTICES

THE PRACTICES LISTED BELOW SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP.

1. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE MAINTAINED ONSITE.
2. IMMEDIATELY UPON DISCOVERY, ALL SPILLS SHALL BE CLEANED UP ACCORDING TO THE MANUFACTURERS' RECOMMENDED METHODS.
3. PERSONNEL CLEANING UP A SPILL SHALL USE PERSONAL PROTECTIVE EQUIPMENT.
4. IMMEDIATELY UPON DISCOVERY, SPILLS OF TOXIC OR HAZARDOUS MATERIALS SHALL BE REPORTED TO THE OWNER AND GENERAL CONTRACTOR.
5. NOTIFICATION AND REPORTING TO THE APPROPRIATE FEDERAL, STATE, AND LOCAL GOVERNMENT AGENCIES SHALL BE MADE AS REQUIRED.

GENERAL INFORMATION:

THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN DEVELOPED TO FULFILL ONE OF THE REQUIREMENTS OF THE GENERAL ENVIRONMENTAL PROTECTION AGENCY (EPA) NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (WISCONSIN POLLUTION DISCHARGE ELIMINATION SYSTEM "WPDES" PERMIT NO. WI-S0067831-4) FOR THE DISCHARGE OF STORMWATER ASSOCIATED WITH CONSTRUCTION PROJECTS DISTURBING ONE ACRE OR MORE. THE OWNER AND CONTRACTORS SHALL COMPLY WITH ALL REQUIREMENTS OF THE WPDES FOR ALL SUCH CONSTRUCTION PROJECTS. THE STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY FROM THIS SITE ARE SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF THE PERMITS.

THE EXECUTED OWNER CERTIFICATION AND THE CONTRACTOR CERTIFICATIONS SHALL BE KEPT ONSITE WITH THE APPROVED PLANS.

SWPPP AVAILABILITY:

THE OWNER SHALL RETAIN A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF THE PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

KEEPING PLANS CURRENT:

THE CONTRACTOR SHALL AMEND THE PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE PLAN OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SITE ACTIVITY. IN ADDITION, THE PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR THAT WILL IMPLEMENT A MEASURE OF THE PLAN. AMENDMENTS TO THE PLAN MAY BE REQUIRED BY THE MUNICIPALITY, OWNER, OR OTHER REVIEWING AGENCY. COPIES OF THE AMENDMENTS SHALL BE KEPT ONSITE AS PART OF THE SWPPP.

RETENTION OF RECORDS:

THE OWNER SHALL RETAIN COPIES OF THIS AND ALL REPORTS AND NOTICES REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE PERMIT COVERAGE EXPIRES OR IS TERMINATED. THIS PERIOD MAY BE EXTENDED BY THE REQUEST OF THE AGENCY AT ANY TIME. IN ADDITION, THE OWNER SHALL RETAIN A COPY OF THE PLAN REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

A NOTICE OF INTENT (NOI) APPLICATION MUST BE COMPLETED AND INCORPORATED INTO THE SWPPP.

WPDES NOTICE OF TERMINATION GUIDANCE:

WHEN A SITE HAS BEEN FINALLY STABILIZED AND ALL STORMWATER DISCHARGES FROM CONSTRUCTION SITES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED, THE OWNER OF THE FACILITY MUST SUBMIT A COMPLETED NOTICE OF TERMINATION THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT. CONTRACTOR SHALL SUBMIT A COMPLETED NOTICE OF TERMINATION TO OWNER FOR EXECUTION PRIOR TO THEIR FINAL PAY APPLICATION REQUEST.

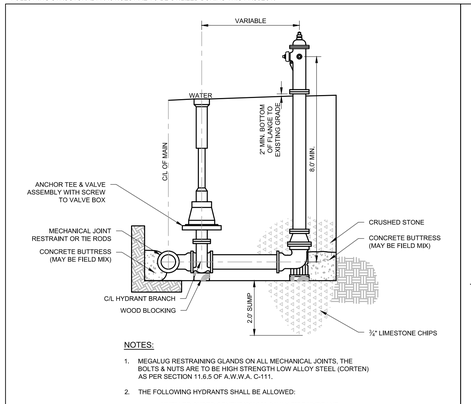
CONTROL MEASURE GROUP	CONTROL MEASURE	CONTROL MEASURE CHARACTERISTICS
VEGETATIVE SOIL COVER	TEMPORARY SEEDING	PROVIDES QUICK TEMPORARY COVER TO CONTROL EROSION WHEN PERMANENT SEEDING IS NOT DESIRED OR TIME OF YEAR IS INAPPROPRIATE.
	PERMANENT SEEDING	PROVIDES PERMANENT VEGETATIVE COVER TO CONTROL EROSION, FILTERS SEDIMENT FROM WATER, MAY BE PART OF FINAL LANDSCAPE PLAN.
NON VEGETATIVE SOIL COVER	AGGREGATE COVER	PROVIDES TEMPORARY COVER ON ROADS AND PARKING LOTS AND AREAS WHERE VEGETATION CANNOT BE ESTABLISHED. PREVENTS MUD FROM BEING PICKED UP AND TRANSPORTED OFF-SITE.
	PAVING	PROVIDES PERMANENT COVER ON PARKING LOTS AND ROADS OR OTHER AREAS WHERE VEGETATION CANNOT BE ESTABLISHED.
DIVERSIONS	DIVERSION BERM / SWALE	DIVERTS RUNOFF TO A SEDIMENT TRAP OR OTHER CONTROL.
ENCLOSED DRAINAGE	STORM SEWER	CONVEYS SEDIMENT LADEN WATER TO A SEDIMENT BASIN.
OUTLETS	APRON ENDWALL OR RIPRAP	PROTECTS DOWNSTREAM CHANNEL FROM HIGH VELOCITY OF FLOW DISCHARGING FROM STRUCTURE.
SEDIMENT BASINS	TEMPORARY SEDIMENT TRAP	CONSTRUCTED TO REMOVE SILTATION FROM RUNOFF FROM SITE DIVERSION BERMS/SWALES AND IN OVERLAND FLOOD ROUTE, CAN BE CONVERTED TO PERMANENT SEDIMENT BASIN.
SEDIMENT FILTERS	SILT FENCE	PLACED DOWN SLOPE OF DISTURBED AREA TO KEEP RUNOFF CONTAINED ON-SITE.
	INLET PROTECTION	INSTALLED IN OPEN GRATE STRUCTURES TO COLLECT SEDIMENT.
	DITCH CHECK	PLACED IN DRAINAGE CHANNELS TO FILTER SEDIMENT FROM RUNOFF.
MUD AND DUST CONTROL	CONSTRUCTION ENTRANCE	REDUCES SOIL EROSION POLLUTANTS BEING TRANSPORTED OFF-SITE.
	STREET SWEEPING	REDUCES POLLUTANTS TRACKED FROM CONSTRUCTION SITE.
	DUST CONTROL	PREVENTS DUST FROM LEAVING CONSTRUCTION SITE.

STABILIZATION EFFECTIVENESS (TIME OF YEAR)

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
	STABILIZATION UTILIZATION PERIODS											
PERMANENT SEEDING			A	*	*	*	*	*	*			
DORMANT SEEDING	B										B	
TEMPORARY SEEDING			C	*	*	*	D	*				
SODDING			E	*	*	*	*	*	*			

A. KENTUCKY BLUEGRASS 90 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 30 LBS/ACRE.
B. KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 45 LBS/ACRE + 2 TONS STRAW MULCH/ACRE.
C. SPRING OATS 100 LBS/ACRE.
D. WHEAT OR CEREAL RYE 150 LBS/ACRE.
E. SOD.
F. STRAW MULCH 2 TONS/ACRE.

* IRRIGATION/WATERING REQUIRED TO SUPPORT ESTABLISHMENT AS NEEDED.

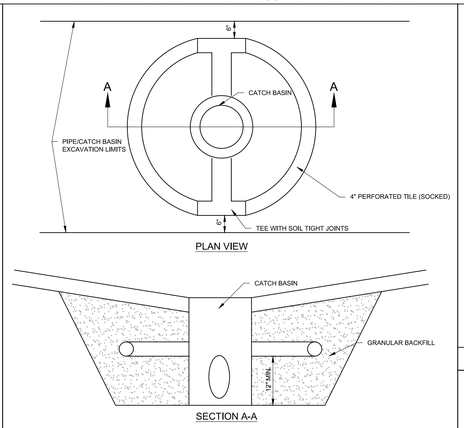


NOTES:

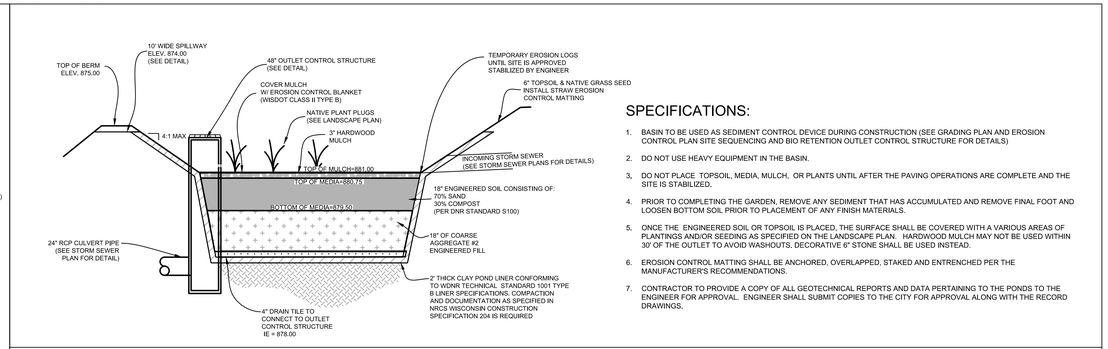
1. MEGALUG RESTRAINING GLANDS ON ALL MECHANICAL JOINTS. THE BOLTS & NUTS ARE TO BE HIGH STRENGTH LOW ALLOY STEEL (CORTEN) AS PER SECTION 11.6.5 OF A.W.W.A. C-111.
2. THE FOLLOWING HYDRANTS SHALL BE ALLOWED:

   MUELLER SUPER CENTURION 250 3-WAY FIRE HYDRANT
   U.S. PIPE METROPOLITAN / M-94 DUCTILE IRON FIRE HYDRANT
   WATEROUS 5½" PACER FIRE HYDRANT

FIRE HYDRANT



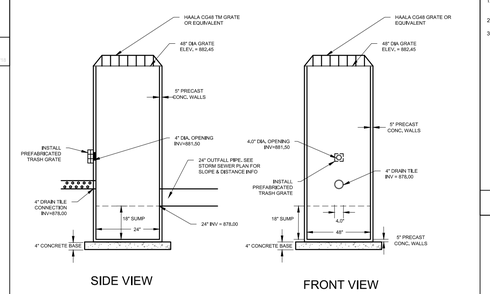
CATCH BASIN - UNDERDRAIN



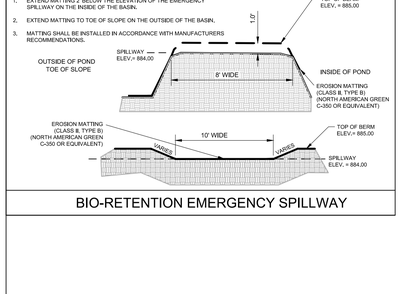
SPECIFICATIONS:

1. BASIN TO BE USED AS SEDIMENT CONTROL DEVICE DURING CONSTRUCTION (SEE GRADING PLAN AND EROSION CONTROL PLAN SITE SEQUENCING AND BIO RETENTION OUTLET CONTROL STRUCTURE FOR DETAILS)
2. DO NOT USE HEAVY EQUIPMENT IN THE BASIN.
3. DO NOT PLACE TOPSOIL, MEDIA, MULCH, OR PLANTS UNTIL AFTER THE PAVING OPERATIONS ARE COMPLETE AND THE SITE IS STABILIZED.
4. PRIOR TO COMPLETING THE GARDEN, REMOVE ANY SEDIMENT THAT HAS ACCUMULATED AND REMOVE FINAL FOOT AND LOOSEN BOTTOM SOIL PRIOR TO PLACEMENT OF ANY FINISH MATERIALS.
5. ONCE THE ENGINEERED SOIL OR TOPSOIL IS PLACED, THE SURFACE SHALL BE COVERED WITH A VARIOUS AREAS OF PLANTINGS AND/OR SEEDING AS SPECIFIED ON THE LANDSCAPE PLAN. HARDWOOD MULCH MAY NOT BE USED WITHIN 30' OF THE OUTLET TO AVOID WASHOUTS, DECORATIVE 6" STONE SHALL BE USED INSTEAD.
6. EROSION CONTROL MATTING SHALL BE ANCHORED, OVERLAPPED, STAKED AND ENTRENCHED PER THE MANUFACTURER'S RECOMMENDATIONS.
7. CONTRACTOR TO PROVIDE A COPY OF ALL GEOTECHNICAL REPORTS AND DATA PERTAINING TO THE PONDS TO THE ENGINEER FOR APPROVAL. ENGINEER SHALL SUBMIT COPIES TO THE CITY FOR APPROVAL ALONG WITH THE RECORD DRAWINGS.

BIO-RETENTION DETAIL



BIO-RETENTION OUTLET CONTROL STRUCTURE DETAIL



BIO-RETENTION EMERGENCY SPILLWAY

REVIEWED:
DESIGNED: ACT
DRAFTED: DMS

PLAN I DESIGN I DELIVER
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PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

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(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

CONSTRUCTION DETAILS

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 40'

SHEET
C-18
C-18

CONSTRUCTION DETAILS

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Z:\PROJECTS\2018\1338.10-WI\CAD\SHEETS\1338.10 CONSTRUCTION DETAILS.DWG

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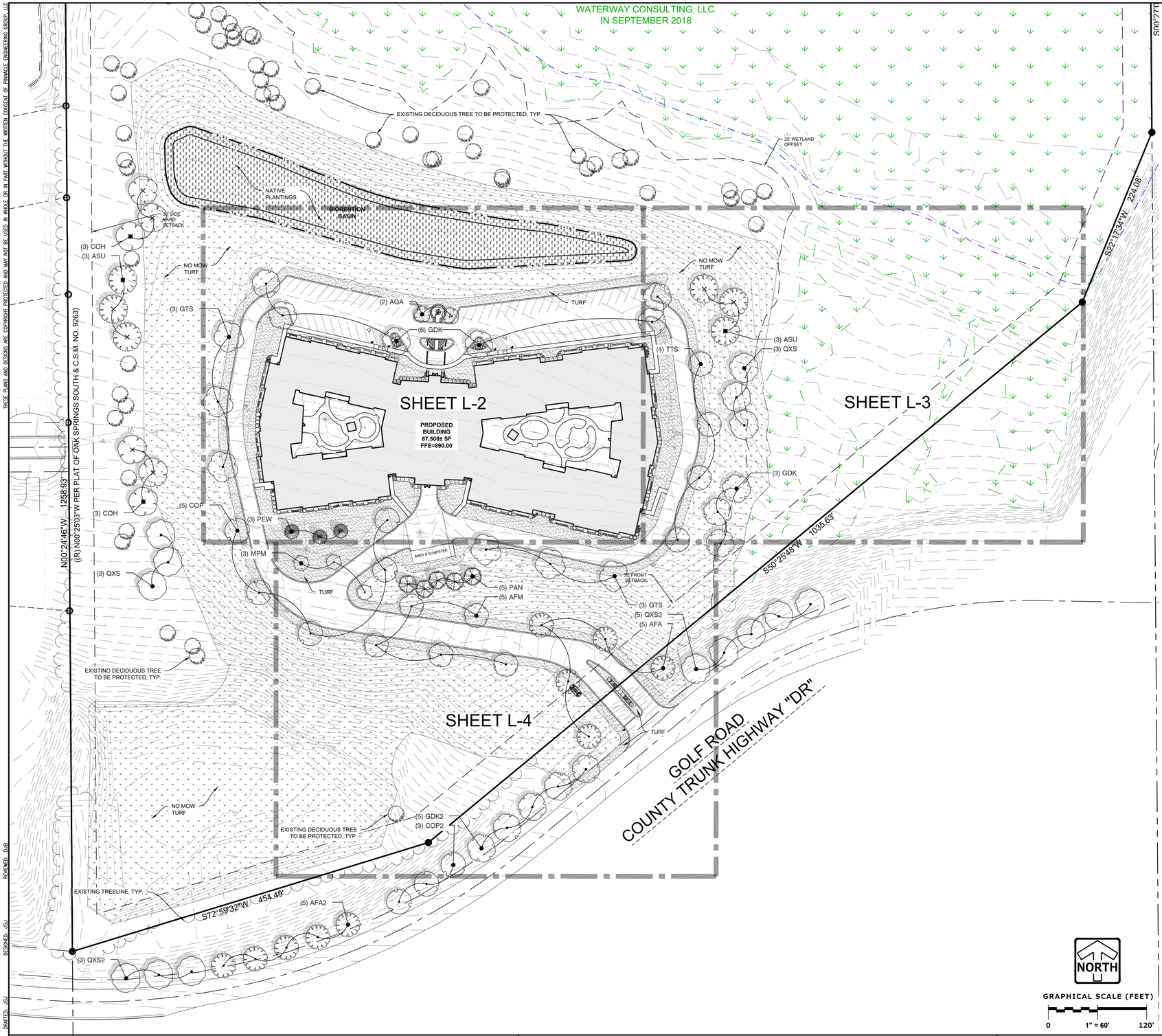
WATERWAY CONSULTING, LLC.
IN SEPTEMBER 2018



PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
AFA	5	Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple	2" Cal.	45` T x 35` W
ASU	6	Acer saccharum / Sugar Maple	2" Cal.	60` T x 45` W
AFM	5	Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple	2" Cal.	55` T x 45` W
COH	6	Carya ovata / Shagbark Hickory	2" Cal.	80` T x 40` W
COP	5	Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry	2" Cal.	50` T x 40` W
GTS	6	Gleditsia triacanthos inermis `Shademaster` / Shademaster Locust	2" Cal.	60` T x 50` W
GDK	9	Gymnocladus dioica / Kentucky Coffee Tree	2" Cal.	60` T x 45` W
QXS	6	Quercus x schuetti / Swamp Bur Oak	2" Cal.	70` T x 65` W
TTS	4	Tilia tomentosa `Sterling` / Sterling Silver Linden	2" Cal.	60` T x 35` W

EVERGREEN TREES	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
PAN	5	Picea abies / Norway Spruce	5` Ht.	60` T x 28` W
PEW	3	Pinus strobus / Eastern White Pine	5` Ht.	65` T x 30` W

ORNAMENTAL TREES	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
AGA	2	Amelanchier x grandiflora `Autumn Brilliance` / Autumn Brilliance Serviceberry	7` Ht.	20` T x 20` W
MPM	3	Malus x `Prairie Maid` / Prairie Maid Crabapple	1.5" Cal.	20` T x 25` W

STREET TREES	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
AFA2	5	Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple	2.5" Cal.	45` T x 35` W
COP2	3	Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry	2.5" Cal.	50` T x 40` W
GDK2	5	Gymnocladus dioica / Kentucky Coffee Tree	2.5" Cal.	60` T x 45` W
QXS2	8	Quercus x schuetti / Swamp Bur Oak	2.5" Cal.	70` T x 65` W

SHRUBS	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
ACB	10	Aronia arbutifolia `Brilliantissima` / Brilliant Red Chokeberry	3 gal.	7` T x 6` W
CAF	34	Cornus stolonifera `Arctic Fire` / Arctic Fire Dogwood	2 gal.	3` T x 3` W
HIS	12	Hydrangea arborescens 'NCHA1' / Invincibelle Spirit Hydrangea	2 gal.	4` T x 3` W
HVS	12	Hydrangea p `Vanilla Strawberry` / Vanilla Strawberry Hydrangea	3 gal.	6` T x 5` W
HRS	13	Hydrangea quercifolia 'Ruby Slippers' / Ruby Slippers Hydrangea	2 gal.	4` T x 5' W
ISS	12	Itea virginica 'SMNIVDFC' / Scentlandia Sweetspire	3 gal.	3` T x 3' W
RPP	4	Rosa rugosa `Purple Pavement` / Purple Pavement Rugosa Rose	2 gal.	5` T x 5` W
RCC	6	Rosa x `Coral Cove` / Coral Cove Rose	2 gal.	3` T x 3` W
SBL	10	Sambucus nigra `Black Lace` / Black Lace Elderberry	3 gal.	6` T x 6` W
SMC	24	Spiraea japonica `Magic Carpet` / Magic Carpet Spirea	2 gal.	2` T x 3` W
SMP	4	Syringa meyeri `Palibin` / Dwarf Korean Lilac	3 gal.	5` T x 5` W
SBP	12	Syringa x 'SMNJRPI' / Bloomerang Dwarf Pink Lilac	3 gal.	3` T x 3' W
SB5	11	Syringa x 'SMSJBP7' TM / Bloomerang Dark Purple Lilac	2 gal.	4` T x 5' W
WWR	9	Weigela florida `Wine & Roses` / Wine & Roses Weigela	3 gal.	5` T x 5` W

EVERGREEN SHRUBS	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
JSP	2	Juniperus chinensis `J.N. Select Blue` / Star Power Juniper	4` Ht.	16` T x 8` W
JO2	7	Juniperus chinensis `Old Gold` / Old Gold Juniper	3 gal.	3` T x 5` W
JCS	11	Juniperus chinensis `Sea Green` / Sea Green Juniper	3 gal.	5` T x 5` W
JSB	8	Juniperus sabina `Buffalo` / Buffalo Juniper	3 gal.	1` T x 7` W
JGO	5	Juniperus virginiana `Grey Owl` / Eastern Redcedar Juniper	3 gal.	3` T x 5` W
PMS	3	Pinus mugo `Slowmound` / Slowmound Mugo Pine	3 gal.	3` T x 3` W
TMT	10	Taxus x media `Tauntonii` / Tauton Yew	3 gal.	4` T x 5` W
TTE	11	Thuja occidentalis `BailJohn` / Technito Arborvitae	4` Ht.	12` T x 5` W
TDG	5	Thuja occidentalis `Nigra` / Dark Green Arborvitae	4` Ht.	20`T x 8'W
TFC	6	Thuja occidentalis 'Congabe' / Fire Chief Arborvitae	2 gal.	2`T x 3'W

ORNAMENTAL GRASSES	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
AGD	17	Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem	1 gal.	36" T x 30" W
CKF	20	Calamagrostis x a `Karl Foerster` / Karl Foerster Reed Grass	1 gal.	36" T x 24" W
CFO	34	Calamagrostis x a `Overdam` / Overdam Reed Grass	1 gal.	24" T x 24" W
CBZ	20	Carex flacca 'Blue Zinger' / Blue Zinger Sedge	1 gal.	14" T x 24" W
HAG	6	Hakonechloa macra 'Aureola' / Golden Variegated Forest Grass	1 gal.	18" T x 24" W
HPB	31	Hystrix patula / Bottlebrush Grass	1 gal.	30" T x 18" W
MSO	27	Miscanthus sinensis `Oktoberfest` / Oktoberfest Miscanthus	1 gal.	48" T x 36" W
PNW	41	Panicum virgatum `Northwind` / Northwind Switch Grass	1 gal.	42" T x 28" W
PBB	10	Pennisetum alopecuroides 'Burgundy Bunny' / Burgundy Bunny Dwarf Fountain Grass	1 gal.	12" T x 15" W
SLB	28	Schizachyrium scoparium `Blue Heaven` / Blue Heaven Little Bluestem Grass	1 gal.	30" T x 28" W
STD	12	Sporobolus heterolepis `Tara` / Prairie Dropseed	1 gal.	15" T x 20" W

PERENNIALS	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
AHA	16	Amsonia c `Halfway to Arkansas` / Halfway to Arkansas Blue-star	4.5" cont.	30" T x 30" W
AGB	16	Aruncus dioicus / Goatsbeard	4.5" cont.	40" T x 40" W
AVR	7	Astilbe chinensis `Vision in Red` / Vision in Red Astilbe	4.5" cont.	15" T x 18" W
ADD	6	Astilbe x `Deutschland` / Deutschland False Spiraea	4.5" Cont.	20" T x 20" W
CMW	24	Calamintha nepeta 'Montrose White' / Montrose White Calamint	4.5" cont.	18" T x 18" W
CVZ	26	Coreopsis verticillata `Zagreb` / Zagreb Coreopsis	4.5" cont.	20" T x 16" W
EMS	9	Echinacea purpurea `Magnus Superior` / Magnus Superior Coneflower	4.5" Cont.	28" T x 16" W
GMT	18	Geum x `Mai Tai` / Mai Tai Grecian Rose	4.5" Cont.	16" T x 12" W
HRT	46	Helenium a `Ruby Tuesday` / Ruby Tuesday Helen`s Flower	4.5" Cont.	24" T x 18" W
HPP	35	Heuchera m `Palace Purple` / Palace Purple Coral Bells	4.5" Cont.	18" T x 18" W
HGS	10	Hosta x `Gold Standard` / Gold Standard Hosta	4.5" cont.	20" T x 50" W
LGF	30	Leucanthemum x superbum 'Goldfinch' / Goldfinch Shasta Daisy	4.5" cont.	18" T x 22" W
PLS	26	Perovskia atriplicifolia 'Little Spire' / Little Spire Russian Sage	4.5" cont.	24" T x 24" W
SAJ	4	Sedum `Autumn Joy` / Autumn Joy Sedum	4.5" Cont.	12" T x 24" W

GROUND COVERS	QTY	BOTANICAL / COMMON NAME	REMARKS
	6,100,984	Native Plantings / Agrecol Rainwater Renewal Seed Mix	
	8,796,373	Turf Hydroseed / Reinders - Cadet 70/30 Fescue/Blue Mix	
	46,572,836	Turf Hydroseed Low Grow / Reinders No Mow/Low Grow Mix	

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 60' 120'

REVIEWED: DJB
DESIGNED: JSJ
DRAFTED: JSJ

PLAN I DESIGN I DELIVER
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PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

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THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

LANDSCAPE OVERVIEW

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 60'

SHEET
L-1
L-6

LANDSCAPE OVERVIEW

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Z:\PROJECTS\2018\1338.10-WI\CAD\SHEETS\1338.10 LANDSCAPE PLAN.DWG

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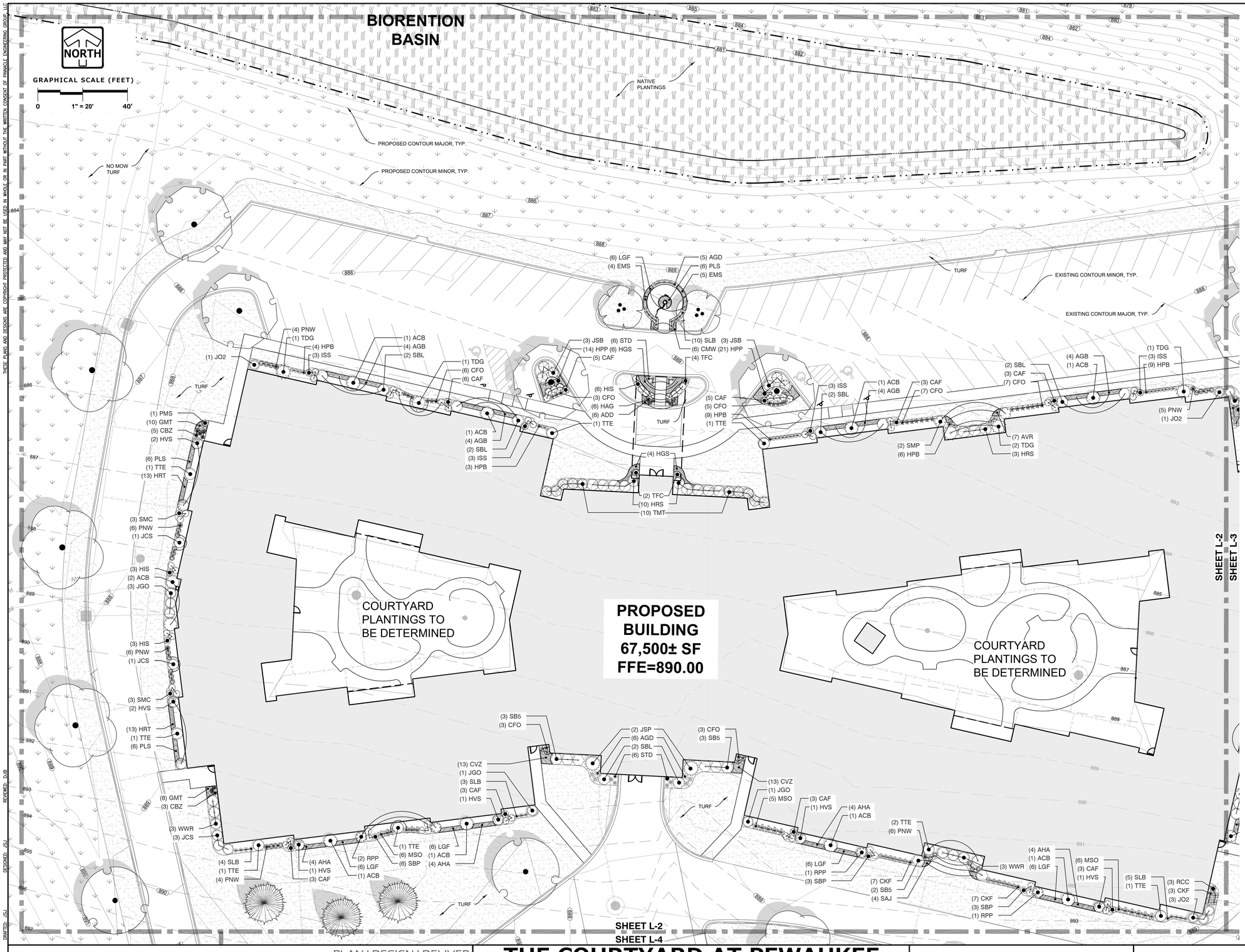

PLANT KEY

TREES	
DECIDUOUS	BOTANICAL / COMMON NAME
AFA	Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple
ASU	Acer saccharum / Sugar Maple
AFM	Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple
COH	Carya ovata / Shagbark Hickory
COP	Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
GTS	Gleditsia triacanthos inermis `Shademaster` / Shademaster Locust
GDK	Gymnocladus dioica / Kentucky Coffee Tree
QXS	Quercus x schuetti / Swamp Bur Oak
TTS	Tilia tomentosa `Sterling` / Sterling Silver Linden

EVERGREEN	BOTANICAL / COMMON NAME
PAN	Picea abies / Norway Spruce
PEW	Pinus strobus / Eastern White Pine

ORNAMENTAL	BOTANICAL / COMMON NAME
AGA	Amelanchier x grandiflora `A B` / Autumn Brilliance Serviceberry
MPM	Malus x `Prairie Maid` / Prairie Maid Crabapple

STREET	BOTANICAL / COMMON NAME
AFA2	Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple
COP2	Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
GDK2	Gymnocladus dioica / Kentucky Coffee Tree
QXS2	Quercus x schuetti / Swamp Bur Oak

SHRUBS	BOTANICAL / COMMON NAME
ACB	Aronia arbutifolia `Brilliantissima` / Brilliant Red Chokeberry
CAF	Cornus stolonifera `Arctic Fire` / Arctic Fire Dogwood
HIS	Hydrangea arborescens 'NCHA1' / Invincibelle Spirit Hydrangea
HVS	Hydrangea p `Vanilla Strawberry` / Vanilla Strawberry Hydrangea
HRS	Hydrangea quercifolia 'Ruby Slippers' / Ruby Slippers Hydrangea
ISS	Itea virginica 'SMNIVDFC' / Scentlandia Sweetspire
RPP	Rosa rugosa `Purple Pavement` / Purple Pavement Rugosa Rose
RCC	Rosa x `Coral Cove` / Coral Cove Rose
SBL	Sambucus nigra `Black Lace` / Black Lace Elderberry
SMC	Spiraea japonica `Magic Carpet` / Magic Carpet Spirea
SMP	Syringa meyeri `Palibin` / Dwarf Korean Lilac
SBP	Syringa x 'SMNJRPI' / Bloomerang Dwarf Pink Lilac
SB5	Syringa x 'SMSJBP7' TM / Bloomerang Dark Purple Lilac
WWR	Weigela florida `Wine & Roses` / Wine & Roses Weigela

EVERGREEN	BOTANICAL / COMMON NAME
JSP	Juniperus chinensis `J.N. Select Blue` / Star Power Juniper
JO2	Juniperus chinensis `Old Gold` / Old Gold Juniper
JCS	Juniperus chinensis `Sea Green` / Sea Green Juniper
JSB	Juniperus sabina `Buffalo` / Buffalo Juniper
JGO	Juniperus virginiana `Grey Owl` / Eastern Redcedar Juniper
PMS	Pinus mugo `Slowmound` / Slowmound Mugo Pine
TMT	Taxus x media `Tauntonii` / Tauton Yew
TTE	Thuja occidentalis `BailJohn` / Technito Arborvitae
TDG	Thuja occidentalis `Nigra` / Dark Green Arborvitae
TFC	Thuja occidentalis 'Congabe' / Fire Chief Arborvitae

GRASSES	
ORNAMENTAL	BOTANICAL / COMMON NAME
AGD	Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem
CKF	Calamagrostis x a `Karl Foerster` / Karl Foerster Reed Grass
CFO	Calamagrostis x a `Overdam` / Overdam Reed Grass
CBZ	Carex flacca 'Blue Zinger' / Blue Zinger Sedge
HAG	Hakonechloa macra 'Aureola' / Golden Variegated Forest Grass
HPB	Hystrix patula / Bottlebrush Grass
MSO	Miscanthus sinensis `Oktoberfest` / Oktoberfest Miscanthus
PNW	Panicum virgatum `Northwind` / Northwind Switch Grass
PBB	Pennisetum alopecuroides 'B B' / Burgundy Bunny Dwarf Fountain Grass
SLB	Schizachyrium scoparium `B H` / Blue Heaven Little Bluestem Grass
STD	Sporobolus heterolepis `Tara` / Prairie Dropseed

PERENNIALS	BOTANICAL / COMMON NAME
AHA	Amsonia c `Halfway to Arkansas` / Halfway to Arkansas Blue-star
AGB	Aruncus dioicus / Goatsbeard
AVR	Astilbe chinensis `Vision in Red` / Vision in Red Astilbe
ADD	Astilbe x `Deutschland` / Deutschland False Spiraea
CMW	Calamintha nepeta 'Montrose White' / Montrose White Calamint
CVZ	Coreopsis verticillata `Zagreb` / Zagreb Coreopsis
EMS	Echinacea purpurea `Magnus Superior` / Magnus Superior Coneflower
GMT	Geum x `Mai Tai` / Mai Tai Grecian Rose
HRT	Helenium a `Ruby Tuesday` / Ruby Tuesday Helen`s Flower
HPP	Heuchera m `Palace Purple` / Palace Purple Coral Bells
HGS	Hosta x `Gold Standard` / Gold Standard Hosta
LGF	Leucanthemum x superbum 'Goldfinch' / Goldfinch Shasta Daisy
PLS	Perovskia atriplicifolia 'Little Spire' / Little Spire Russian Sage
SAJ	Sedum `Autumn Joy` / Autumn Joy Sedum

GROUND COVERS	BOTANICAL / COMMON NAME
	Native Plantings / Agrecol Rainwater Renewal Seed Mix
	Turf Hydroseed / Reinders - Cadet 70/30 Fescue/Blue Mix
	Turf Hydroseed Low Grow / Reinders No Mow/Low Grow Mix

REVIEWED: DJB
DESIGNED: JSJ
DRAFTED: JSJ

PLAN | DESIGN | DELIVER
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PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
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BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE | NATIONWIDE

THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

LANDSCAPE ENLARGEMENT

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 20'

SHEET L-2 L-6

LANDSCAPE ENLARGEMENT

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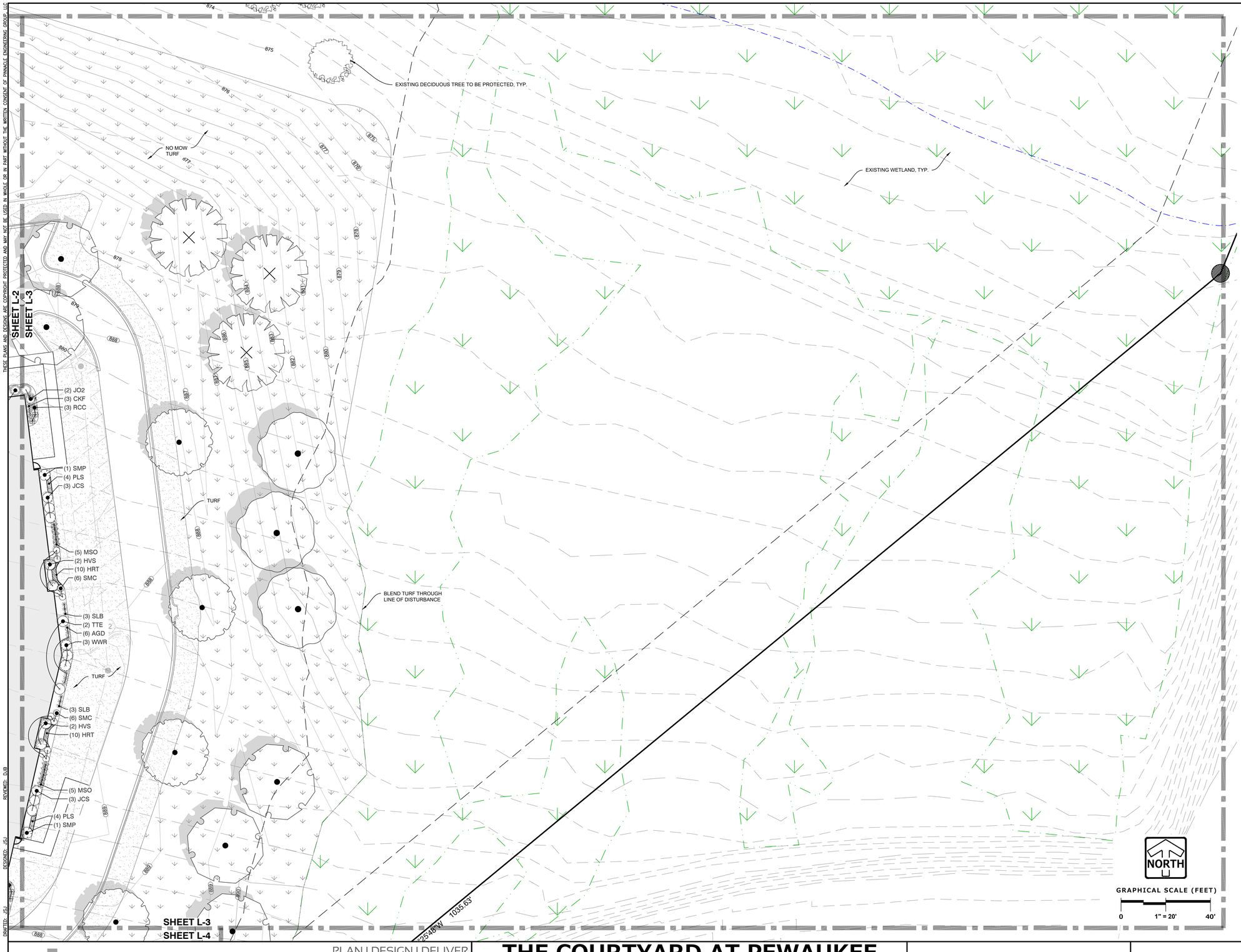

PLANT KEY

TREES

DECIDUOUS	BOTANICAL / COMMON NAME
AFA	Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple
ASU	Acer saccharum / Sugar Maple
AFM	Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple
COH	Carya ovata / Shagbark Hickory
COP	Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
GTS	Gleditsia triacanthos inermis `Shademaster` / Shademaster Locust
GDK	Gymnocladus dioica / Kentucky Coffee Tree
QXS	Quercus x schuetti / Swamp Bur Oak
TTS	Tilia tomentosa `Sterling` / Sterling Silver Linden

EVERGREEN	BOTANICAL / COMMON NAME
PAN	Picea abies / Norway Spruce
PEW	Pinus strobus / Eastern White Pine

ORNAMENTAL	BOTANICAL / COMMON NAME
AGA	Amelanchier x grandiflora `A B` / Autumn Brilliance Serviceberry
MPM	Malus x `Prairie Maid` / Prairie Maid Crabapple

STREET	BOTANICAL / COMMON NAME
AFA2	Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple
COP2	Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
GDK2	Gymnocladus dioica / Kentucky Coffee Tree
QXS2	Quercus x schuetti / Swamp Bur Oak

SHRUBS	BOTANICAL / COMMON NAME
ACB	Aronia arbutifolia `Brilliantissima` / Brilliant Red Chokeberry
CAF	Cornus stolonifera `Arctic Fire` / Arctic Fire Dogwood
HIS	Hydrangea arborescens 'NCHA1' / Invincibelle Spirit Hydrangea
HVS	Hydrangea p `Vanilla Strawberry` / Vanilla Strawberry Hydrangea
HRS	Hydrangea quercifolia 'Ruby Slippers' / Ruby Slippers Hydrangea
ISS	Itea virginica 'SMNIVDFC' / Scentlandia Sweetspire
RPP	Rosa rugosa `Purple Pavement` / Purple Pavement Rugosa Rose
RCC	Rosa x `Coral Cove` / Coral Cove Rose
SBL	Sambucus nigra `Black Lace` / Black Lace Elderberry
SMC	Spiraea japonica `Magic Carpet` / Magic Carpet Spirea
SMP	Syringa meyeri `Palibin` / Dwarf Korean Lilac
SBP	Syringa x 'SMNJRPI' / Bloomerang Dwarf Pink Lilac
SB5	Syringa x 'SMSJBP7' TM / Bloomerang Dark Purple Lilac
WWR	Weigela florida `Wine & Roses` / Wine & Roses Weigela

EVERGREEN	BOTANICAL / COMMON NAME
JSP	Juniperus chinensis `J.N. Select Blue` / Star Power Juniper
JO2	Juniperus chinensis `Old Gold` / Old Gold Juniper
JCS	Juniperus chinensis `Sea Green` / Sea Green Juniper
JSB	Juniperus sabina `Buffalo` / Buffalo Juniper
JGO	Juniperus virginiana `Grey Owl` / Eastern Redcedar Juniper
PMS	Pinus mugo `Slowmound` / Slowmound Mugo Pine
TMT	Taxus x media `Tauntonii` / Tauton Yew
TTE	Thuja occidentalis `BailJohn` / Technito Arborvitae
TDG	Thuja occidentalis `Nigra` / Dark Green Arborvitae
TFC	Thuja occidentalis 'Congabe' / Fire Chief Arborvitae

GRASSES

ORNAMENTAL	BOTANICAL / COMMON NAME
AGD	Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem
CKF	Calamagrostis x a `Karl Foerster` / Karl Foerster Reed Grass
CFO	Calamagrostis x a `Overdam` / Overdam Reed Grass
CBZ	Carex flacca 'Blue Zinger' / Blue Zinger Sedge
HAG	Hakonechloa macra 'Aureola' / Golden Variegated Forest Grass
HPB	Hystrix patula / Bottlebrush Grass
MSO	Miscanthus sinensis `Oktoberfest` / Oktoberfest Miscanthus
PNW	Panicum virgatum `Northwind` / Northwind Switch Grass
PBB	Pennisetum alopecuroides 'B B' / Burgundy Bunny Dwarf Fountain Grass
SLB	Schizachyrium scoparium `B H` / Blue Heaven Little Bluestem Grass
STD	Sporobolus heterolepis `Tara` / Prairie Dropseed

PERENNIALS	BOTANICAL / COMMON NAME
AHA	Amsonia c `Halfway to Arkansas` / Halfway to Arkansas Blue-star
AGB	Aruncus dioicus / Goatsbeard
AVR	Astilbe chinensis `Vision in Red` / Vision in Red Astilbe
ADD	Astilbe x `Deutschland` / Deutschland False Spiraea
CMW	Calamintha nepeta 'Montrose White' / Montrose White Calamint
CVZ	Coreopsis verticillata `Zagreb` / Zagreb Coreopsis
EMS	Echinacea purpurea `Magnus Superior` / Magnus Superior Coneflower
GMT	Geum x `Mai Tai` / Mai Tai Grecian Rose
HRT	Helenium a `Ruby Tuesday` / Ruby Tuesday Helen`s Flower
HPP	Heuchera m `Palace Purple` / Palace Purple Coral Bells
HGS	Hosta x `Gold Standard` / Gold Standard Hosta
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DRAWN: DJB
DESIGNED: SJ
CHK'D: SJ
REVIEWED: DJB

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SHEET
L-3
L-6

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SHEET L-2
SHEET L-3
SHEET L-4

SHED & DUMPSTER

TURF

35' FRONT SETBACK

BLEND TURF THROUGH LINE OF DISTURBANCE

TURF

(10) PBB
(10) PNW
(6) SMC
(12) CBZ
(2) PMS
(3) SB5
(18) CMW
(2) JSB
MONUMENT SIGN

NO MOW TURF

BLEND TURF THROUGH LINE OF DISTURBANCE

EXISTING DECIDUOUS TREE TO BE PROTECTED, TYP.

EXISTING TREELINE, TYP.

GOLF RO
COUNTY TRUNK

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 20' 40'

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DRAFTED: JSJ
DESIGNED: JSJ
REVIEWED: DJB

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START DATE 07-27-22
SCALE 1" = 20'

SHEET
L-4
L-6

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LANDSCAPE ENLARGEMENT

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Z:\PROJECTS\2018\1338.10-WI\CAD\SHEETS\1338.10 LANDSCAPE PLAN.DWG

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GENERAL PLANTING NOTES

1. THE LAYOUT OF ALL PLANTING BEDS AND INDIVIDUAL TREES AND SHRUBS SHALL BE STAKED BY THE CONTRACTOR IN ADVANCE OF INSTALLATION. FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS SCALED FROM THE PLANS. AN APPROVED REPRESENTATIVE WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAKE MINOR ADJUSTMENTS AS NECESSARY. BED LAYOUT SHALL ALSO INCLUDE PERENNIAL GROUPINGS BY SPECIES.
2. THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE LANDSCAPE PLANS. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
3. NO PLANT MATERIAL OR PLANT SIZE SUBSTITUTIONS WILL BE ACCEPTED WITHOUT APPROVAL BY THE LANDSCAPE ARCHITECT. ANY CHANGES SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO INSTALLATION.
4. ALL BNB STOCK SHALL BE NURSERY GROWN IN A CLAY LOAM SOIL FOR A MINIMUM OF THREE GROWING SEASONS WITHIN 200 MILES OF PROJECT LOCATION, IN A ZONE COMPATIBLE WITH USDA HARDINESS ZONE 5A. SEED SHALL BE PROVIDED FROM A NURSERY (WITHIN 200 MILES) WITH A SIMILAR PLANT HARDINESS ZONE AS PROJECT LOCATION. EXISTING SOIL SHALL BE AMENDED PER SOIL ANALYSIS REPORT TO ENSURE A PROPER GROWING MEDIUM IS ACHIEVED.
5. ALL PLANT MATERIAL SHALL COMPLY WITH STANDARDS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK - Z60.1 ANSI. LANDSCAPE ARCHITECT OR OWNERS AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND POTENTIALLY REJECT ANY PLANT MATERIAL DEEMED TO NOT MEET THE REQUIRED STANDARDS.
6. ALL STOCK SHALL BE FREE OF DISEASES AND HARMFUL INSECTS, DAMAGE, DISORDERS AND DEFORMITIES.
7. TREES SHALL HAVE SINGLE, STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. MUTLI-STEM TREES SHALL HAVE 3-4 STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. HEIGHT-TO-CALIPER RATIOS SHALL BE CONSISTENT WITH THE LATEST EDITION OF ANSI Z60.1.
8. ROOT SYSTEMS SHALL BE LARGE ENOUGH TO ALLOW FOR FULL RECOVERY OF THE TREE, AND SHALL CONFORM TO STANDARDS AS THEY APPEAR IN THE MOST CURRENT REVISION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD OF NURSERY STOCK ANSI Z60.1.
9. BNB TREES SHALL BE DUG WITH A BALL OF SOIL, NOT SOFT BALLED OR POTTED AND SHALL BE FIRM IN THEIR ROOTBALL. ROOT BALL SHALL BE WRAPPED (WITH BIODEGRADABLE MATERIAL). THE TREE ROOT FLARE, OR COLLAR, SHALL BE AT OR WITHIN THE TOP THREE INCHES OF GRADE.
10. ALL SPRING TREES MUST BE FRESHLY DUG IN THE MOST RECENT SPRING.
11. ALL AUTUMN TREES MUST BE FRESHLY DUG IN THE MOST RECENT AUTUMN.
12. TREES SHALL BE ALIVE, HEALTHY AND APPROPRIATELY MOIST, AT TIME OF DELIVERY. TREES SHALL BE SUBJECT TO INSPECTION FOR CONFORMITY TO SPECIFICATION REQUIREMENTS AND APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE. THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY TREES THAT DO NOT MEET THE SPECIFICATIONS OR THAT HAVE BEEN DAMAGED DURING SHIPMENT. THE LANDSCAPE INSTALLER MUST RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT FOR ANY SUBSTITUTIONS OR ALTERATIONS.
13. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH PLANTING DETAILS.
14. ALL PLANTING BEDS SHALL HAVE A MINIMUM 10" DEPTH OF PREPARED SOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 10" OF SOIL. REFER TO SOIL PLACEMENT NOTES.
15. WHILE PLANTING TREES AND SHRUBS, BACKFILL ⅔ OF PLANTING HOLE AND WATER TREE THOROUGHLY BEFORE INSTALLING THE REMAINDER OF SOIL MIXTURE. AFTER ALL SOIL HAS BEEN PLACED INTO THE PLANTING HOLE WATER THOROUGHLY AGAIN.
16. THE CONTRACTOR MUST LABEL ALL TREES WITH THE COMMON AND BOTANICAL NAMES PRIOR TO FINAL INSPECTION.
17. ALL PLANTING BEDS SHALL BE MULCHED WITH 3" DEEP SHREDDED HARDWOOD MULCH, AND ALL TREES PLANTED IN TURF AREAS SHALL RECEIVE A 3" DEEP SHREDDED HARDWOOD MULCHED RING AS SHOWN IN PLANTING DETAILS.
18. ALL PLANTING BEDS AND TREE RINGS SHALL HAVE A 4" DEEP TRENCHED BED EDGE CREATED BY EITHER A FLAT LANDSCAPE SPADE OR MECHANICAL EDGER. BED EDGES ARE TO BE CUT CLEAN AND SMOOTH AS SHOWN ON LANDSCAPE PLANS WITH A CLEAN DEFINITION BETWEEN TURF AND PLANTING AREAS.
19. ALL TURF SEED AREAS SHALL RECEIVE A MINIMUM OF 6" DEPTH OF TOPSOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 6" OF SOIL AS INDICATED IN THE SOIL PLACEMENT NOTES. REQUIRED AMENDMENTS SHALL BE DETERMINED BASED ON A SOIL ANALYSIS TO BE PERFORMED. ALL TOPSOIL AMENDMENT SHALL BE AGED WEED FREE MANURE OR CLASS 1 ORGANIC MATTER.
20. FOR LAWN SEEDING, APPLY A STARTER FERTILIZER AND SEED UNIFORMLY AT THE RATE RECOMMENDED BY MANUFACTURER, AND PROVIDE A MULCH COVERING THAT IS SUITABLE TO PROMOTE SEED GERMINATION AND TURF ESTABLISHMENT. CONTRACTOR TO PROVIDE FERTILIZER, SEED, AND MULCH SPECIFICATIONS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. EROSION CONTROL MEASURES ARE TO BE INSTALLED IN THOSE AREAS REQUIRING STABILIZATION (SWALES, SLOPES EXCEEDING 1:3, AND THOSE LOCATIONS INDICATED IN CIVIL DRAWINGS).
21. THE CONTRACTOR TO ENSURE A SMOOTH, UNIFORM QUALITY TURF IS ACHIEVED WITH NO BARE SPOTS LARGER THAN 6" X 6". ANY BARE SPOTS LARGER THAN 6" X6" AT THE END OF ESTABLISHMENT PERIOD SHALL BE RESEEDED AT THE CONTRACTORS EXPENSE TO OBTAIN A DENSE, UNIFORM LAWN.
22. ALL FINISH GRADING AND LAWN AREAS TO BE INSTALLED BY LANDSCAPE CONTRACTOR.
23. ALL DISTURBED AREAS WITHIN THE PROJECT SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
24. ALL DISTURBED AREAS OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OWNER.
25. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, INCLUDING ANY IRRIGATION LINES, PRIOR TO DIGGING. CONSULT DIGGERS HOTLINE.
26. TREES SHALL BE INSTALLED NO CLOSER THAN:
    - -10 FEET FROM ANY FIRE HYDRANT
    - - 7 FEET FROM STORM SEWER, SANITARY SEWER LATERALS, AND WATER SERVICE
27. THE CONTRACTOR SHALL ENSURE THAT SOIL CONDITIONS AND COMPACTION ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AROUND THE CONSTRUCTION SITE. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN ALL AREAS
28. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, AND LICENSES NECESSARY FOR THE INSTALLATION OF THIS PLAN.
29. THE CONTRACTOR IS TO REVIEW ALL SITE ENGINEERING DOCUMENTS PRIOR TO INSTALLATION. ANY CONFLICTS MUST BE REPORTED TO THE LANDSCAPE ARCHITECT. THESE LANDSCAPE DRAWINGS ARE FOR THE INSTALLATION OF PLANT MATERIALS ONLY UNLESS OTHERWISE STATED.
30. THE CONTRACTOR SHALL PROVIDE WATERING AND MAINTENANCE SERVICES FOR A PERIOD OF 60 DAYS TO ENSURE VEGETATIVE ESTABLISHMENT. UPON COMPLETION OF THE PROJECT, CONTRACTOR SHALL SUPPLY THE OWNER IN WRITING WITH ONGOING WATERING AND MAINTENANCE INSTRUCTIONS.
31. PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM TIME OF OWNER ACCEPTANCE. ONLY ONE REPLACEMENT PER PLANT WILL BE REQUIRED DURING THE WARRANTY PERIOD EXCEPT IN THE EVENT OF FAILURE TO COMPLY WITH THE SPECIFIED REQUIREMENTS.
32. THE CONTRACTOR IS RESPONSIBLE TO CONDUCT A FINAL WALK THROUGH WITH THE LANDSCAPE ARCHITECT AND OR OWNERS REPRESENTATIVE TO ANSWER QUESTIONS, PROVIDE INSTRUCTIONS, AND ENSURE THAT PROJECT REQUIREMENTS HAVE BEEN MET.

SOIL PLACEMENT NOTES

1. LOOSEN SUBGRADE TO A MINIMUM DEPTH INDICATED IN PLANTING NOTES USING A CULTI-MULCHER OR SIMILAR EQUIPMENT, AND REMOVE STONES MEASURING OVER 1-1/2 INCHES IN ANY DIMENSION, STICKS, RUBBISH AND OTHER EXTRANEOUS MATTER. AREAS ADJACENT TO WALKS AND PAVEMENT SHALL BE FREE OF EXCESS STONE AND PAVING MATERIALS SO AS TO PROVIDE AN UNINTERRUPTED CROSS SECTION OF SOIL. INTERNAL PARKING ISLANDS SHALL BE LOOSENED TO A DEPTH OF 30".
2. THOROUGHLY BLEND PLANTING SOIL MIX FOR PLANTING BED AREAS. (1 PART EXISTING SOIL, 1 PART TOPSOIL, 1 PART ORGANIC SOIL AMENDMENT, 2.9 POUNDS PER CUBIC YARD OF 4-4-4 ANALYSIS SLOW-RELEASE FERTILIZER)
3. TREE AND SHRUB HOLES SHALL BE FILLED WITH A PREPARED PLANTING MIXTURE OF 1 PART TOPSOIL, 2 PARTS PLANTING SOIL MIX.
4. SPREAD SOIL AND SOIL AMENDMENTS TO DEPTH INDICATED ON DRAWINGS, BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. (FINISH GRADE OF PLANTING BEDS SHALL BE 3" BELOW ALL ADJACENT SURFACES. FINISH GRADE OF TURF SEEDING AREAS SHALL BE 1" BELOW ALL ADJACENT HARD SURFACES, WALKS, AND CURBS.)
5. PLACE APPROXIMATELY 1/2 OF TOTAL AMOUNT OF SOIL REQUIRED. WORK INTO TOP OF LOOSENED SUBGRADE TO CREATE A TRANSITION LAYER, THEN PLACE REMAINDER OF THE SOIL. SOIL TRANSITION LAYER SHALL BE TILLED TO A MINIMUM DEPTH OF 6" BELOW THE DEPTH OF NEWLY PLACED SOIL. PARKING LOT ISLANDS SHALL BE CROWNED TO A HEIGHT OF 6" TO PROVIDE PROPER DRAINAGE UNLESS OTHERWISE NOTED.
6. DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
7. FINISH GRADING: GRADE SOIL TO A SMOOTH, UNIFORM SURFACE PLANE WITH A LOOSE, UNIFORMLY FINE TEXTURE.
8. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES.
9. RESTORE PLANTING BEDS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.

NATIVE SEEDING PLANTINGS

ESTABLISHMENT OF A VIABLE VEGETATION COMMUNITY WITHIN THE BIO INFILTRATION BASINS WILL BE COMPLETED BY HAND-BROADCASTING OF PRE-DESIGNED SEED MIXES AND PLANTING OF PERENNIALS TO CREATE A DYNAMIC PLANTING.

PRIOR TO SEEDING PLANTING:

A. ALL WEEDS AND EXISTING VEGETATION SHALL BE REMOVED. EXISTING VEGETATION SHALL BE TREATED WITH GLYPHOSATE OR SIMILAR HERBICIDE BY A LICENSED PROFESSIONAL. TREATMENT SHALL OCCUR A MINIMUM OF 10 DAYS PRIOR TO SEEDING/PLANTING. VEGETATION STILL ALIVE AFTER INITIAL HERBICIDE TREATMENT SHALL BE TREATED A SECOND TIME PRIOR TO TILLING INTO THE SOIL.TREATED VEGETATION SHALL BE TILLED INTO THE SOIL NO EARLIER THAN 1 DAY PRIOR TO SEEDING.

B. PREPARATION OF SOIL PRIOR TO SEEDING
   1. REFER TO CIVIL PLANS FOR SOIL MIXTURE.
   2. ALL FOREIGN MATERIALS LARGER THAN 1-INCH SHALL BE REMOVED FROM THE SOIL PRIOR TO SEEDING OR PLANTING.
   3. AREA SHOULD BE FREE FROM UNSIGHTLY VARIATIONS, RIDGES, AND DEPRESSIONS.
   4. AVOID DRIVING OVER THE SPECIFIED AREA WITH MACHINERY.

SPECIFICATIONS FOR HAND BROADCASTING:

SEEDING SHALL BE CONDUCTED IN LATE FALL (SEPTEMBER 1- SOIL FREEZE) SO THAT SEEDS MAY LIE DORMANT DURING THE WINTER, ALLOWING FOR STRATIFICATION, OR SPRING (MARCH 1-JUNE 1) TO ALLOW A COMPLETE GROWING SEASON TO BECOME ESTABLISHED.

A. COVER CROP
   1. ANNUAL RYE SHALL BE SPREAD AT A DENSITY OF 20 POUNDS PER ACRE DURING THE PLANTING OR SEEDING OF THE NATIVE PLANT SPECIES TO STABILIZE THE SOIL AND REDUCE THE GROWTH OF UNWANTED VEGETATION. THIS ANNUAL GRASS GROWS RAPIDLY WITHOUT COMPETING WITH THE WILDFLOWERS AND GRASSES THAT ARE PLANTED IN THE TARGET AREAS.
   2. WINTER WHEAT OR PERENNIAL RYE SHALL NOT BE USED AS A COVER CROP. THESE GRASSES MAY OUT COMPETE PRAIRIE SEEDLINGS, LEADING TO A REDUCTION IN THE SUCCESS OF THE PLANTINGS.

B. SEED MIX:
   1. MIX ALL NATIVE SEED WITH VERMICULITE ACCORDING TO AGRECOL RECOMMENDATIONS AND INSTALLATION GUIDELINES.
   2. BROADCAST HALF THE SEED OVER THE ENTIRE SITE OR TARGET AREA.
   3. BROADCAST THE OTHER HALF OF SEED PERPENDICULAR TO THE DIRECTION THAT THE FIRST HALF OF THE SEED WAS BROADCAST.
   4. COVER SEED WITH ¼-INCH TO ½-INCH OF SOIL (USE ANY EXCESS SOIL FROM THE SITE) WITH RAKE OR DRAG.
   5. ROLL SITE TO ENSURE FIRM SEED-TO-GROUND CONTACT.
   6. KEEP SEED CONSTANTLY WET THROUGH GERMINATION PERIOD. GENERALLY 3 WEEKS.

ALL SEEDING SHALL BE COVERED WITH 1-INCH OF CLEAN, NON-INVASIVE STRAW (NO MARSH HAY, OR REED CANARY GRASS) WITHOUT SEEDS, WITHIN SEVEN DAYS. WHEAT, RYE, OATS, OR BARLEY ARE ACCEPTABLE FORMS OF STRAW. THOSE AREAS OF SLOPES STEEPER THAN 8:1 (EIGHT FEET HORIZONTAL TO ONE FOOT VERTICAL) SHALL BE PLANTED NO LATER THAN OCTOBER 1 AND STAKED WITH AN EROSION CONTROL BLANKET TO PREVENT EROSION.

NATIVE PLANTINGS:

WEED SUPPRESSION MEASURES:

1st YEAR - PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS. THIS SHOULD OCCUR APPROXIMATELY EVERY MONTH OF THE GROWING SEASON AFTER NATIVE PLANTINGS HAVE BEEN ROUGH GRADED.

2nd YEAR - IN MAY/JUNE MOW NATIVE PLANTINGS AT 6" HEIGHT TO SUPPRESS THE WEEDS. PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS. HAVE PROFESSIONAL ASSESS PLANTINGS. REPEAT MOWING NATIVE PLANTINGS AND SPOT-SPRAY IN EARLY JULY.

3rd YEAR - IN MAY/JUNE MOW NATIVE PLANTINGS AT 8" HEIGHT TO SUPPRESS THE WEEDS. PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS.

4th YEAR - IN MAY PERFORM A PRESCRIBED BURN. IN JUNE HAVE A QUALIFIED PROFESSIONAL ASSESS PLANTINGS. IF A PRESCRIBED BURN CAN NOT BE UTILIZED, NATIVE PLANTINGS SHALL BE CUT TO THE GROUND AND ALL CUT MATERIAL SHALL BE REMOVED AND DISPOSED OF OFF SITE.

www.pinnacle-engr.com

REVIEWED: DJB
DESIGNED: JSJ
DRAFTED: JSJ

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

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CHICAGO | MILWAUKEE : NATIONWIDE

THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

LANDSCAPE GENERAL NOTES

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE NA

SHEET
L-5
L-6

LANDSCAPE GENERAL NOTES

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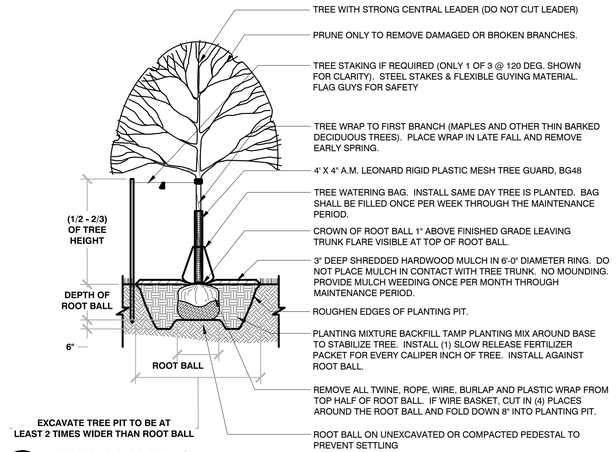
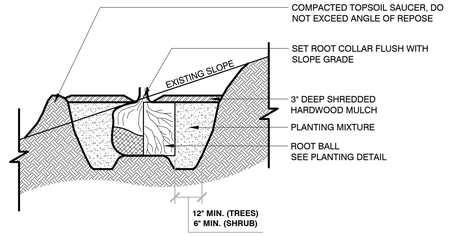


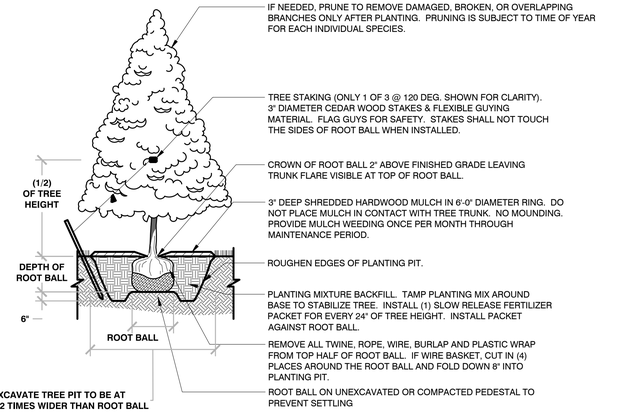
1 TREE PLANTING

1/4" = 1'-0" 329343-01



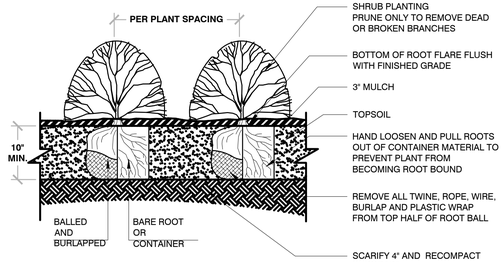
2 TREE PLANTING ON SLOPE

3/8" = 1'-0" 329343-02



3 EVERGREEN TREE PLANTING

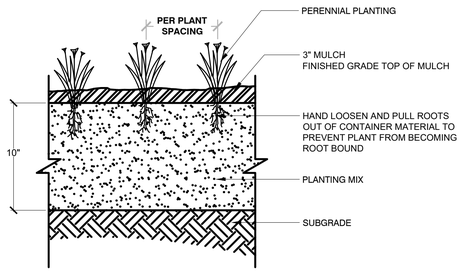
1/4" = 1'-0" 329343-03



BAREROOT PLANTING NOTES:
1. SOAK ROOTS IN WATER FOR AT LEAST ONE HOUR BUT NOT MORE THAN 24 HOURS PRIOR TO PLANTING.
2. SCARIFY SIDES AND BOTTOMS OF HOLE.
3. PROCEED WITH CORRECTIVE PRUNING OF THE TOP AND BOTTOM ROOTS.
4. TRANSFER PLANT DIRECTLY FROM WATER TO HOLE. SET PLANT SO THE ROOT FLARE IS APPROXIMATELY AT THE FINISHED SOIL ELEVATION. SPREAD ROOTS OUT EVENLY. PLUMB AND IMMEDIATELY BACKFILL WITH PLANTING SOIL MIX.
5. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
6. BACKFILL VOIDS AND WATER SECOND TIME.
7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

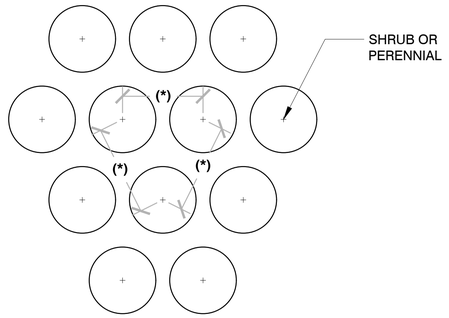
4 SHRUB PLANTING

1/2" = 1'-0" 329333-02



5 PERENNIAL PLANTING

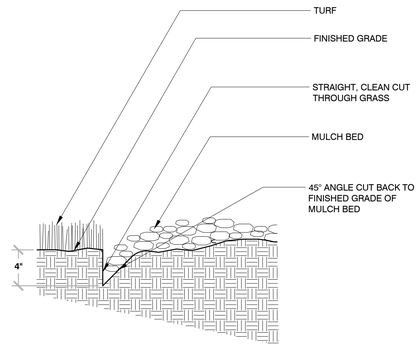
1" = 1'-0" 3293-01



(*) = SPECIFIED PLANT SPACING PER PLANTING LIST

6 PLANT SPACING

3/4" = 1'-0" 3293-02



7 TRENCHED BED EDGE

3/4" = 1'-0" 3293-03

DRAWN: JSJ
DESIGNED: JSJ
REVIEWED: DJB

PLAN | DESIGN | DELIVER
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LANDSCAPE DETAILS

REVISIONS

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE VARIES

SHEET L-6 L-6

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LANDSCAPE DETAILS

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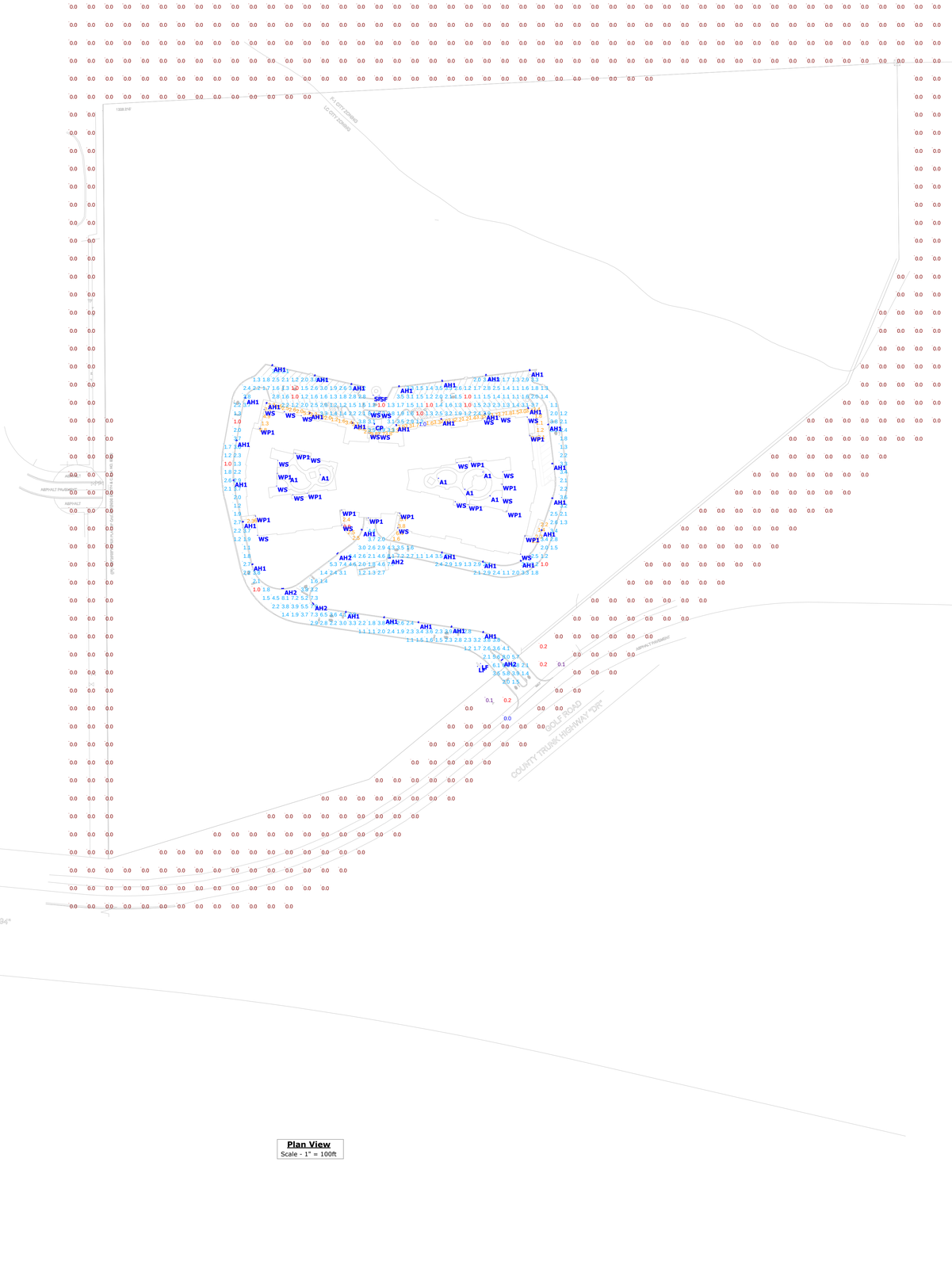
Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number
	A1	6	RAB LIGHTING INC.	ALED5T52N/D10 w\ 10ft Pole
	AH1	32	RAB LIGHTING INC. RC LIGHTING	IVAT2-75LPA740ZU w\ 15ft pole
	AH2	5	RAB LIGHTING INC.	IVAT5S-100LPA740ZU w\ 15ft pole
	CP	1	RAB	VANLED10NFFR
	LF	2	RAB LIGHTING INC. RC LIGHTING	FFLEDS/PCU
	SF	2	RAB LIGHTING INC. RC LIGHTING	BULLET12NA w\ MPMP17A
	WP1	14	RAB Lighting Inc.	SLIM17FA15ADJ
	WS	22	RAB LIGHTING INC. RC LIGHTING	CDLED4WD-20W-80D940-K

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Drive Lane & Parking	+	2.7 fc	8.9 fc	1.0 fc	8.9:1	2.7:1
End Of Driveway	+	0.1 fc	0.2 fc	0.0 fc	N/A	N/A
Outside Property	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A
Sidewalk	+	3.4 fc	9.9 fc	1.0 fc	9.9:1	3.4:1



Plan View
Scale - 1" = 100ft

Courtyard at Pewaukee

Designer	
Date	1/23/2023
Scale	Not to Scale
Drawing No.	
Summary	

1 of 1

ALED5T52N

High output LED pole top area light with IES type V circular distribution. Wide and uniform 360 degree pattern ideal for large outdoor areas such as parking lots, corporate parks, and retail settings.

Color: Bronze

Weight: 22.1 lbs

Project:	Type:
Prepared By:	Date:

Driver Info

Type	Constant Current
120V	0.45A
208V	0.26A
240V	0.23A
277V	0.19A
Input Watts	52.8W

LED Info

Watts	52W
Color Temp	4000K (Neutral)
Color Accuracy	70 CRI
L70 Lifespan	100,000 Hours
Lumens	6,978 lm
Efficacy	132.2 lm/W

Technical Specifications

Compliance

UL Listed:

Suitable for wet locations

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.
DLC Product Code: PIUUV79T

LED Characteristics

LEDs:

4x13W high-output, long-life LEDs

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Wattage Equivalency:

Equivalent to 150W Metal Halide

Construction

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Effective Projected Area:

EPA = 1.2

Housing:

Precision die-cast aluminum, Type V distribution

Support Arms:

Extruded aluminum

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Technical Specifications (continued)

Construction

Lens:

Clear tempered glass lens

Reflector:

Specular vacuum-metallized polycarbonate, Type V distribution

Gaskets:

High-temperature silicone

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Optical

BUG Rating:

B3 U0 G2

Other

Patents:

The designs of the ALED5T52 are protected by patents pending in US, Canada, China, Taiwan and Mexico

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Electrical

Drivers:

Constant Current, Class 2 with 6kV surge protection, 120-277VAC, 50/60 Hz, 120V: 0.45A, 208V: 0.26A, 240V: 0.19A, 277V: 0.12A

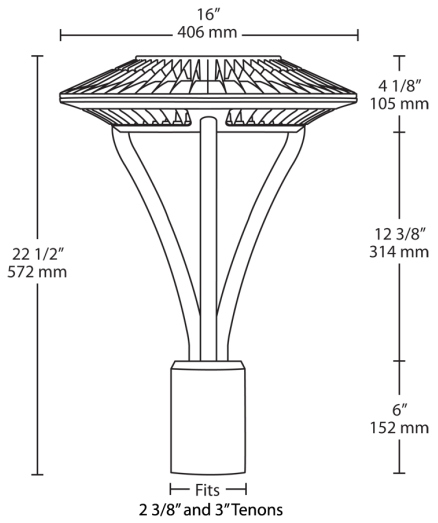
THD:

3.27% at 120V, 6.42% at 277V

Power Factor:

99.9% at 120V, 96.4% at 277V

Dimensions



Features

- IES type V (circular) distribution
- 100,000-hour LED lifespan
- Compatible with standard 2 3/8" and 3" tenons
- "Air-Flow" fins for maximum heat dissipation
- 5-Year, No-Compromise Warranty

Ordering Matrix

Family	Distribution	Wattage	Color Temp	Finish	Driver Option	Options	Other Options
ALED	5T	52	N				
	5T = Type V	**26 =** 26W **52 =** 52W **78 =** 78W	**Blank =** 5000K Cool **N =** 4000K Neutral **Y =** 3000K Warm	**Blank =** Bronze **W =** White **K =** Black **RG =** Gray	**Blank =** 120-277V **/D10 =** Dimmable **/BL =** Bi-Level **/480 =** 480V **/480/D10 =** 480V w/ Dimmable	**Blank =** No Option **/LC =** Lightcloud® Controller **/PCT =** 120-277V Twistlock Photocell **/PCT4 =** 480V Twistlock Photocell	**Blank =** Standard **USA =** BAA Compliant

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BULLET12NA

RAB

12W LED equivalent to 75W BR30/halogen/wide flood. Available in black, white, bronze and verde green.

Color: Bronze

Weight: 1.7 lbs

Project:	Type:
Prepared By:	Date:

Driver Info

Type	Constant Current
120V	0.10A
208V	N/A
240V	N/A
277V	N/A
Input Watts	11.2W

LED Info

Watts	12W
Color Temp	4000K (Neutral)
Color Accuracy	85 CRI
L70 Lifespan	100,000 Hours
Lumens	1,071 lm
Efficacy	95.6 lm/W

Technical Specifications

Compliance

UL Listed:

Suitable for wet locations. Suitable for mounting within 4 feet of the ground.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

Other

Note:

All values are typical (tolerance +/- 10%)

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

LED Characteristics

LEDs:

Multi-chip, high-output, long-life LEDs

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Wattage Equivalency:

75W PAR30

Construction

Thermal Management:

Superior heat sinking with external Air-Flow fins

Housing:

Die-cast aluminum housing, lens frame and mounting plate

Reflector:

Semi-specular, vacuum-metalized polycarbonate

Lens:

Microprismatic diffusion lens for smooth and even light distribution

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Technical Specifications (continued)

Construction

Mounting:

Heavy-duty mounting arm with "O" ring seal and stainless steel screws

Gaskets:

High-temperature silicone gaskets

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Optical

NEMA Type:

NEMA Beam Spread of 6H x 6V

Electrical

Driver:

Innovative integrated driver technology with 120V TRIAC and ELV dimming

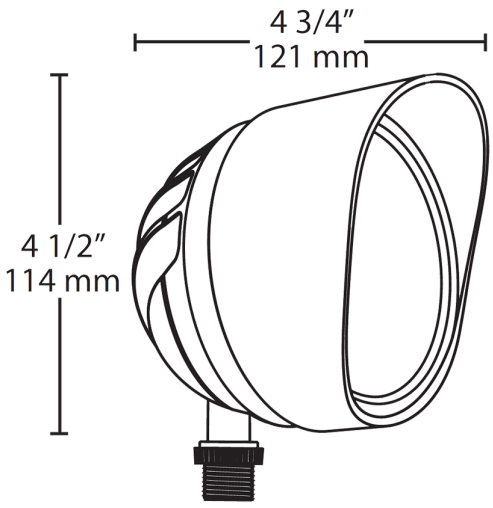
THD:

11.9% at 120V

Power Factor:

99% at 120V

Dimensions



Features

- 12W LED equivalent to 75W BR30/halogen/wide flood
- Mount as an uplight or downlight on a RAB Mighty Post or junction box
- Microprismatic diffusion lens for smooth and even light distribution
- 100,000-hour LED Lifespan

Ordering Matrix

Family	Wattage	Color Temp	Finish	Other Options
BULLET	12	N	A	
	12 = 12W	**Blank =** 5000K Cool **N =** 4000K Neutral **Y =** 3000K Warm	**A =** Bronze **B =** Black **VG =** Verde Green **W =** White	**Blank =** Standard

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CDLED4WD-20W-80D940-K

Cylinders are a complete design solution. They are available in various sizes, mounting options, colors and beam angles, and suitable for indoor/outdoor use.

Color: Matte black

Weight: 5.1 lbs

Project:	Type:
Prepared By:	Date:

Driver Info

Type	Constant Current
120V	0.18A
208V	0.11A
240V	0.10A
277V	0.09A
Input Watts	19.8W

LED Info

Watts	20W
Color Temp	4000K (Neutral)
Color Accuracy	90 CRI
R9	52
L70 Lifespan	50,000 Hours
Lumens	1,808 lm
Efficacy	91.3 lm/W

Technical Specifications

Compliance

UL Listed:

Suitable for wet locations

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80

Electrical

Driver:

Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: 0.18A, 208V: 0.11A, 240V: 0.10A, 277V: 0.09A

Dimming Driver:

0 - 10V (at 120-277V), TRIAC and ELV (at 120V only)

THD:

13.6% at 120V, 23.1% at 277V

Power Factor:

98.1% at 120V, 85.9% at 277V

Optical

Optics:

80°

Performance

Lifespan:

50,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

LED Characteristics

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Construction

Cold Weather Starting:

The minimum starting temperature is -30°C (-22°F)

Maximum Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Lens:

Solite Glass Lens and Microprismatic Diffusion Lens

Reflector:

Vacuum-metalized polycarbonate

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Technical Specifications (continued)

Construction

Housing:

Extruded aluminum

Mounting:

Wall direct light only

Gaskets:

High-temperature silicone

Green Technology:

Mercury and UV free. RoHS-compliant components.

Finish:

Formulated for high durability and long-lasting color

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

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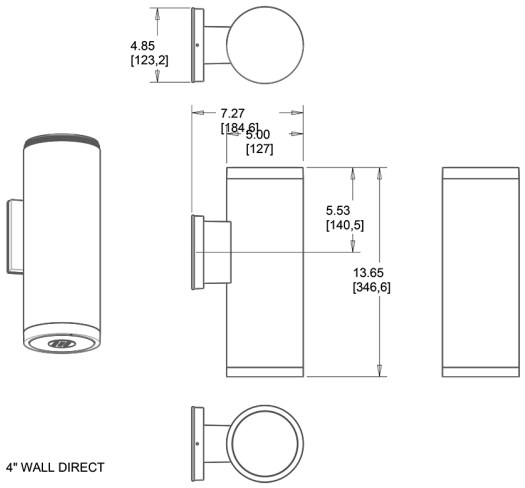
Dimensions



Features

- Sleek, contemporary, architectural-grade design
- Universal dimming driver (TRIAC, ELV and 0-10V)
- 50,000-Hour LED lifespan

Ordering Matrix

Family	Size	Mounting		Wattage		Optic	CRI/Color Temp		Finish
CDLED	4	WD	–	20W	–	80D	940	–	K
	2 = 2"	**WD** = Wall Direct (Downlight) Only		**10W** = 10W		**20D** = 20°	**927** = 90 CRI, 2700K		**W** = Matte White
	4 = 4"	**WU** = Wall Indirect (Uplight) Only		**20W** = 20W		**30D** = 30°	**930** = 90 CRI, 3000K		**K** = Matte Black
	6 = 6"	**W** = Wall Direct/Indirect (Downlight/Uplight)		**26W** = 26W		**40D** = 40°	**935** = 90 CRI, 3500K		**S** = Matte Silver
		S = Surface (Ceiling Mount)		**40W** = 40W		**50D** = 50°	**940** = 90 CRI, 4000K		**Z** = Bronze
		PC = Pendant Cord 48" Standard				**80D** = 80°	**950** = 90 CRI, 5000K		
		PS = Pendant Stem				**WW** = Wall Wash			

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IVAT2-75LPA740ZU

Low profile, low glare. Edge-lit technology unlike any other.

Color: Bronze

Weight: 14.0 lbs

Project:	Type:
Prepared By:	Date:

Driver Info

Type	Constant Current
120V	0.58A
208V	0.34A
240V	0.29A
277V	0.25A
Input Watts	67W

LED Info

Watts	67W
Color Temp	4000K (Neutral)
Color Accuracy	73 CRI
L70 Lifespan	100,000 Hours
Lumens	7,484 lm
Efficacy	111.7 lm/W

Technical Specifications

Compliance

UL Listed:

Suitable for wet locations

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80

Title 24 Compliant:

An IVELOT edge-lit area light can be used with a motion sensor or photocell control option to comply with 2016 Title 24 Part 6 Section 130.2 (a,b,v)

IP Rating:

Ingress protection rating of IP66 for dust and water

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.
DLC Product Code: S-GDPZ7M

Electrical

Driver:

Class 2, 50/60Hz, 120-277V, 4kV standard, 10kV optional

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD:

12.82% at 120V, 13.68% at 277V

Power Factor:

98.7% at 120V, 93.4% at 277V

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations at 25°C

LED Characteristics

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

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Technical Specifications (continued)

Construction

Maximum Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Housing:

Precision die-cast aluminum

IES Classification:

The Type II distribution is ideal for wide walkways, on ramps and entrance roadways, bike paths and other long and narrow lighting applications. This type is meant for lighting larger areas and usually is located near the roadside. This type of lighting is commonly found on smaller side streets or jogging paths.

Mounting:

Universal pole adapter

Lens:

Diffused Polymethyl Methacrylate (PMMA)

Effective Projected Area:

EPA = 0.61

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Optical

BUG Rating:

B2 U0 G2

Other

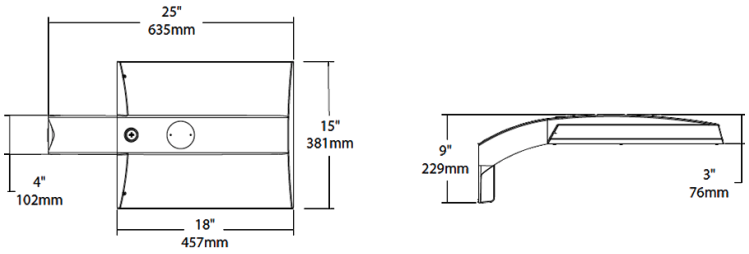
Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Dimensions



Features

0-10V Dimming, standard

100,000-Hour LED lifespan

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Ordering Matrix

Family	Distribution		Lumen Output	Mounting	CRI/Color Temp	Finish	Voltage/Driver	Sensor Options	Lightcloud Option
IVA	T2	–	75L	PA	740	Z	U		
	T2 = Type II * **T3 =** Type III * **T4 =** Type IV * **T5S =** Type V Square * **FT =** Forward Throw *		**45L =** 4,500 lumens (38W) **75L =** 7,500 lumens (67W) **100L =** 10,000 lumens (94W) **130L =** 13,000 lumens (117W) [1]	**PA =** Universal Pole Mount **WM =** Wall mount **SF =** Slipfitter	**750 =** 70CRI 5000K **740 =** 70CRI 4000K **730 =** 70CRI 3000K	**Z =** Bronze **W =** White **G =** Roadway Gray **K =** Black	**U =** 120-277V 0-10V Dimming **H =** 347-480V, 0-10V Dimming	**Blank =** No Options **/WS =** 8ft lens Wattstopper **/WS2 =** 20ft lens Wattstopper **/WS4 =** 40ft lens Wattstopper **/7PR =** 7-Pin receptacle	**Blank =** No Lightcloud® **/LC =** Lightcloud® Controller [2]

[1] *Applies to Type IV, V Square*

[2] *Applies 120-277V*

* *All values are nominal with +/- 10% tolerance. See spec sheet for more details.*

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IVAT5S-100LPA740ZU

Low profile, low glare. Edge-lit technology unlike any other.

Color: Bronze

Weight: 15.0 lbs

Project:	Type:
Prepared By:	Date:

Driver Info

Type	Constant Current
120V	0.83A
208V	0.48A
240V	0.42A
277V	0.36A
Input Watts	94.6W

LED Info

Watts	94W
Color Temp	4000K (Neutral)
Color Accuracy	72 CRI
L70 Lifespan	100,000 Hours
Lumens	11,508 lm
Efficacy	121.6 lm/W

Technical Specifications

Compliance

UL Listed:

Suitable for wet locations

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80

Title 24 Compliant:

An IVELOT edge-lit area light can be used with a motion sensor or photocell control option to comply with 2016 Title 24 Part 6 Section 130.2 (a,b,v)

IP Rating:

Ingress protection rating of IP66 for dust and water

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.
DLC Product Code: S-VW1OGJ

Electrical

Driver:

Class 2, 50/60Hz, 120-277V, 4kV standard, 10kV optional

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD:

4.8% at 120V, 8.3% at 277V

Power Factor:

99.8% at 120V, 96.6% at 277V

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations at 25°C

LED Characteristics

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

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Technical Specifications (continued)

Construction

Maximum Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Housing:

Precision die-cast aluminum

IES Classification:

Type VS distributes light in a square symmetrical pattern and is meant for large, commercial parking lot lighting as well as areas where sufficient, evenly distributed light is necessary

Mounting:

Universal pole adapter

Lens:

Diffused Polymethyl Methacrylate (PMMA)

Effective Projected Area:

EPA = 0.61

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Optical

BUG Rating:

B3 U0 G3

Other

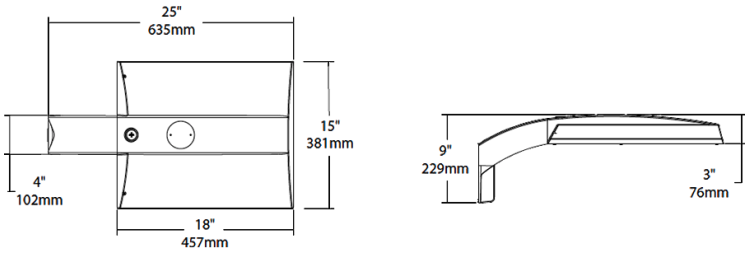
Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Dimensions



Features

0-10V Dimming, standard

100,000-Hour LED lifespan

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Ordering Matrix

Family	Distribution		Lumen Output	Mounting	CRI/Color Temp	Finish	Voltage/Driver	Sensor Options	Lightcloud Option
IVA	T5S	–	100L	PA	740	Z	U		
	T2 = Type II **T3 =** Type III **T4 =** Type IV **T5S =** Type V Square **FT =** Forward Throw		**45L =** 4,500 lumens (38W) **75L =** 7,500 lumens (67W) **100L =** 10,000 lumens (94W) **130L =** 13,000 lumens (117W)	**PA =** Universal Pole Mount **WM =** Wall mount **SF =** Slipfitter	**750 =** 70CRI 5000K **740 =** 70CRI 4000K **730 =** 70CRI 3000K	**Z =** Bronze **W =** White **G =** Roadway Gray **K =** Black	**U =** 120-277V 0-10V Dimming **H =** 347-480V, 0-10V Dimming	**Blank =** No Options **/WS =** 8ft lens Wattstopper **/WS2 =** 20ft lens Wattstopper **/WS4 =** 40ft lens Wattstopper **/7PR =** 7-Pin receptacle	**Blank =** No Lightcloud® **/LC =** Lightcloud® Controller

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FFLEDS/PCU

Color: Bronze

Weight: 5.1 lbs

Project:	Type:
Prepared By:	Date:

Driver Info

Type	Constant Current
120V	0.25A
208V	0.14A
240V	0.13A
277V	0.11A
Input Watts	18-46.4W

LED Info

Watts	26W
Color Temp	4000K/5000K
Color Accuracy	82-83 CRI
L70 Lifespan	100,000 Hours
Lumens	2615-6243 lm
Efficacy	134.5-145.8 lm/W

Technical Specifications

Field Adjustability

Field Adjustable:

Field Adjustable Light Output:
39W/26W/18W (factory default 39W)
Color temperature (selectable by 4000K and 5000K)

Compliance

UL Listed:

Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

IP Rating:

Ingress protection rating of IP66 for dust and water

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.
DLC Product Code: P201EN30

LED Characteristics

LEDs:

Long-life, high-efficacy, discrete, surface-mount LEDs

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for (SSL) Products, ANSI C78.377-2017.

Electrical

Driver:

18W: Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: 0.15A, 208V: 0.09A, 240V: 0.08A, 277V: 0.07A

26W: Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: 0.25A, 208V: 0.14A, 240V: 0.13A, 277V: 0.11A

39W: Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: 0.38A, 208V: 0.22A, 240V: 0.19A, 277V: 0.17A

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD:

1.93% at 120V, 10.57% at 277V

Power Factor:

99.92% at 120V, 90.54% at 277V

Photocell:

120-277V Button photocell included. Photocell is compatible with 120V-277V.

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Technical Specifications (continued)

Electrical

Surge Protection:

4kV

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Wattage Equivalency:

39W: 200W Metal Halide
26W: 150W Metal Halide
18W: 100W Metal Halide

Optical

NEMA Type:

NEMA Beam Spread of 7H x 6V

Construction

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Housing:

Die-cast aluminum

Mounting:

Robust knuckle mount with 180° adjustable swivel arm. Tilt angle in 10° increments.

Effective Projected Area:

EPA = 0.32

Lens:

Ultra clear, tempered glass

Reflector:

Vacuum metalized polycarbonate

Gaskets:

High-temperature silicone gaskets

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of ten (10) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

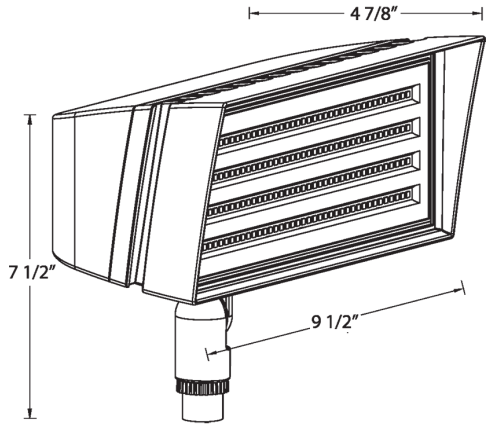
Trade Agreements Act Compliant:

This product is a product of Cambodia and a "designated country" end product that complies with the Trade Agreements Act

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Dimensions



Features

- Ultra-efficient LED and optical design
- 100,000-hour life based on LM-80 results and TM-21 calculations
- DLC Premium Listed
- 10-Year, No-Compromise Warranty

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Ordering Matrix

Family	Housing Size	Color Temp	Mounting	Finish	Voltage	Options
FFLED	S					/PCU
	XS = Field Adjustable 18W/13W/9W **S =** Field Adjustable 39W/26W/18W **M =** Field Adjustable 80W/52W **L =** Field Adjustable 230W/180W/120W	**Blank =** Field Adjustable 5000K/4000K **Y =** 3000K Warm	**Blank =** Knuckle Mount **SF =** Slipfitter **T =** Trunnion	**Blank =** Bronze **W =** White	**Blank =** 120-277V, 0-10V Dimming **/480 =** 480V, 0-10V Dimming	**Blank =** No Option **/7PR =** 7Pin Receptacle **/PCU =** 120-277V Button Photocell

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SLIM17FA15ADJ

Color: Bronze

Weight: 3.0 lbs

Project:	Type:
Prepared By:	Date:

Driver Info

Type	Constant Current
120V	0.13A
208V	0.07A
240V	0.06A
277V	0.05A
Input Watts	14.2/14/14.2W

LED Info

Watts	15W
Color Temp	3000K/4000K/5000K
Color Accuracy	70 CRI
L70 Lifespan	100,000 Hours
Lumens	1761/1904/1852 lm
Efficacy	124/136.2/130.3 lm/W

Technical Specifications

Field Adjustability

Field Adjustable:

Color temperature selectable by 3000K, 4000K and 5000K

Compliance

UL Listed:

Suitable for wet locations

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80

IP Rating:

Ingress protection rating of IP65 for dust and water

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.
DLC Product Code: PL0MVJOV62Q3

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Wattage Equivalency:

Equivalent to 70W Metal Halide

LED Characteristics

LEDs:

Long-life, high-efficiency, surface-mount LEDs

Electrical

Driver:

Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: 0.13A, 208V: 0.07A, 240V: 0.06A, 277V: 0.05A

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

Photocell:

120-277V Integrated button photocell included.

Construction

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in up to 50°C (122°F)

Housing:

Precision die-cast aluminum housing and door frame

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Technical Specifications (continued)

Construction

Lens:

Polycarbonate lens

Mounting:

Hinged wiring access and conduit entries on the back, sides, top and bottom make installation a snap

Cut Off:

Adjustable from 0° (full cutoff) to 90°. 7 settings at 15° each.

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Other

Note:

All values are typical (tolerance +/- 10%)

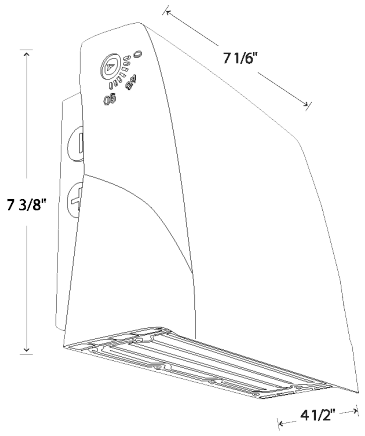
5 Yr Limited Warranty:

The RAB 5-year, limited warranty covers light output, driver performance and paint finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Dimensions



Features

- Selectable CCT
- Adjustable cutoff
- Integrated photocell
- 0-10V dimming standard

Ordering Matrix

Family	Wattage	Style
SLIM17FA	15	ADJ
	15 = 15W **30 =** 30W	**ADJ =** Angle Adjustable

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VANLED10NFFR

Low-profile vandal-resistant fixture covers the footprint of most traditional canopy lights. Available in flat or drop lens with frosted and unfrosted options.

Color: Bronze

Weight: 10.8 lbs

Project:	Type:
Prepared By:	Date:

Driver Info

Type	Constant Current
120V	0.12A
208V	0.07A
240V	0.06A
277V	0.05A
Input Watts	14.6W

LED Info

Watts	10W
Color Temp	4000K (Neutral)
Color Accuracy	84 CRI
L70 Lifespan	100,000 Hours
Lumens	1,945 lm
Efficacy	133.2

Technical Specifications

Compliance

UL Listed:

Suitable for Wet Locations. Covered Ceiling Mount Only.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

IP Rating:

Ingress protection rating of IP66 for dust and water

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.
DLC Product Code: PL6FU3H2 (DLC Premium: Stairwell and Passageway Luminaires)
DLC Product Code: S-RLSEHN (DLC Standard: Canopy Lighting)

Electrical

Driver:

Class 2, Constant Current, 120-277V, 50-60Hz, 120V: 0.12A, 208V: 0.07A, 240V: 0.06A, 277V: 0.05A

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD:

16.56% at 120V, 12.14% at 277V

Power Factor:

96.6% at 120V, 94% at 277V

LED Characteristics

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Color Stability:

RAB LEDs exceed industry standards for chromatic stability

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

Maximum Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

Lens:

Vandal-resistant polycarbonate textured opaque for low glare frosted flat lens

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Technical Specifications (continued)

Construction

Housing:

Die-cast aluminum housing and lens frame with (4) 1/2" NPS side conduit entries and weatherproof rear wire plug and access plate

Mounting:

Ceiling mount to recessed junction with knockout template or directy to ceiling surface, utilizing side conduit entry points

Air Tight:

Housing certified Air Tight as per ASTM E283

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

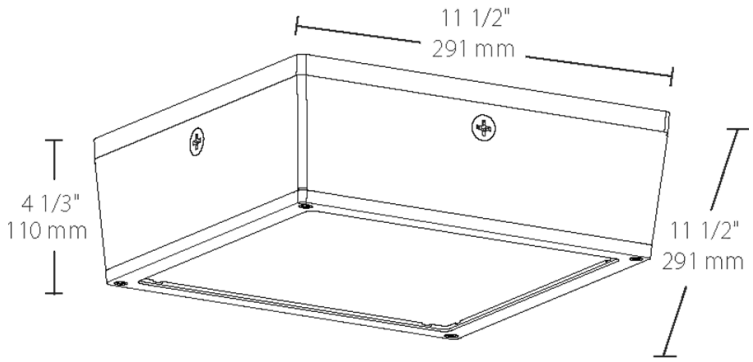
RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Performance

Wattage Equivalency:

Equivalent to 70W Metal Halide

Dimensions



Features

- Fits the footprint of older canopy lights
- Vandal resistant and UV resistant lens
- Ultra-high efficiency
- Clean, contemporary, low-profile design
- Available with drop lens or flat lens
- IP66 rated, keeps dust, bugs and water out
- Photo and motion sensor options available

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Ordering Matrix

Family	Wattage	Color Temp	Lens-Optics	Finish	Voltage	Options
VANLED	10	N	FFR			
	10 = 10W **20 =** 20W **28 =** 28W **40 =** 40W **52 =** 52W **65 =** 65W **75 =** 75W	**Blank =** 5000K Cool **N =** 4000K Neutral **Y =** 3000K Warm	**Blank =** Drop lens **F =** Flat lens [1] **FR =** Frosted Drop Lens **FFR =** Frosted Flat Lens [1]	**Blank =** Bronze **W =** White	**Blank =** 120-277V, 0-10V Dimming **/480 =** 480V, 0-10V Dimming	**/PCS =** 120V Swivel Photocell **/PCS2 =** 277V Swivel Photocell **/PCS4 =** 480V Swivel Photocell **/WS =** Wattstopper, 8ft **/WS2 =** Wattstopper, 20ft **/MVS =** Microwave Motion Sensor [1] **Blank =** No Options **/E2 =** Battery Backup, 120-277V only **/LC =** Lightcloud® Controller

[1] */MVS option not available with F and FFR lens*

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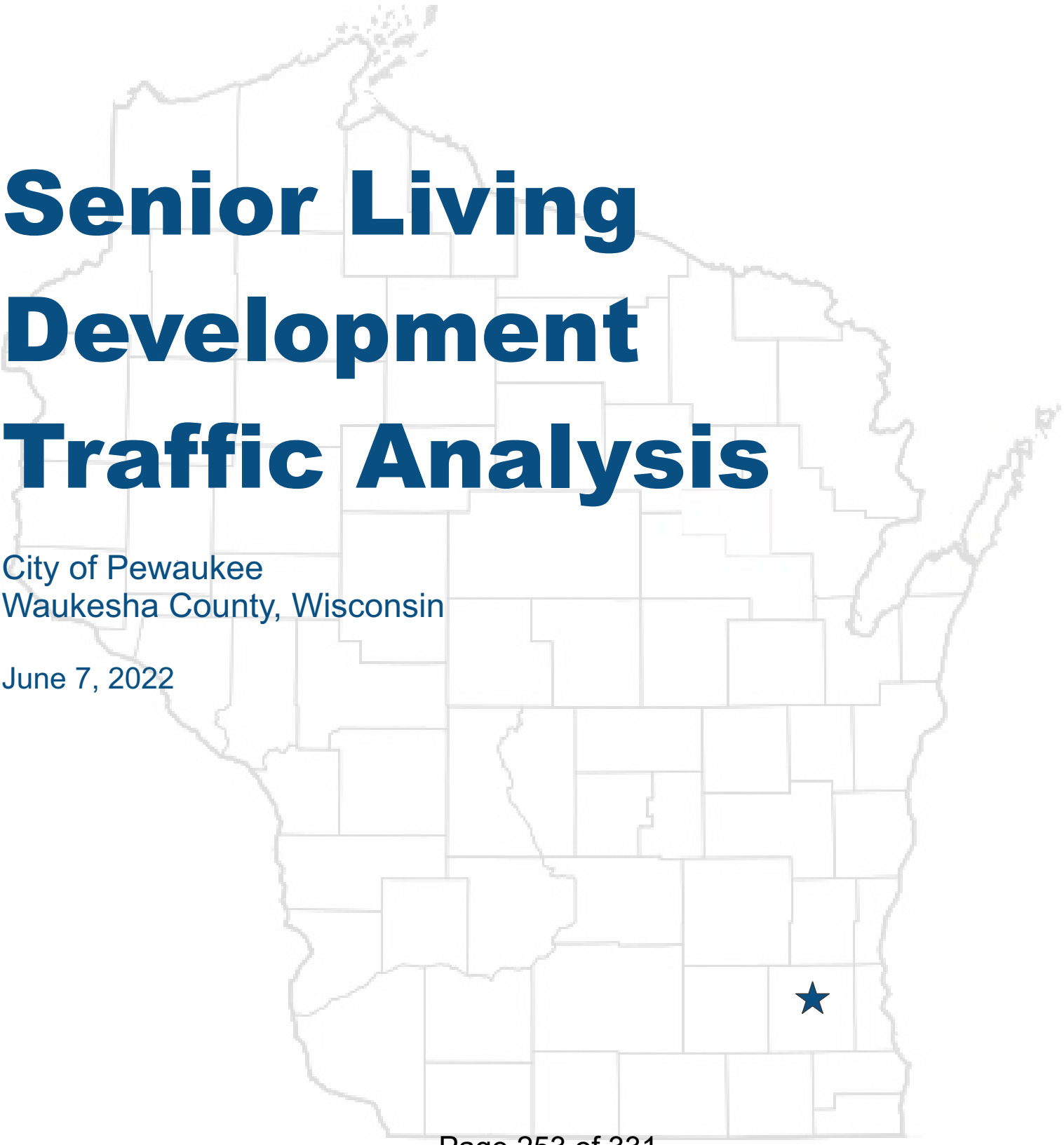
TRAFFIC ANALYSIS & DESIGN, INC.

P.O. Box 128
Cedarburg, WI 53012
800.605.3091
www.tadi-us.com

Senior Living Development Traffic Analysis

City of Pewaukee
Waukesha County, Wisconsin

June 7, 2022



Date: June 7, 2022

Traffic Impact Analysis

To: Michael D. Samuels
General Counsel

From: Don J. Lee, P.E.
John A. Bieberitz, P.E. PTOE

cc List:

Subject: Senior Living Development
CTH G/Golf Road
Waukesha County, Wisconsin

PART A – INTRODUCTION

A senior living development is proposed to be located north of County Trunk Highway (CTH) DR/Golf Road and west of CTH G/Meadowbrook Road in Waukesha County, Wisconsin.

This traffic study summarizes the trip generation and traffic operations anticipated with the completion of the proposed senior living development for the opening year traffic volume conditions.

PART B – STUDY AREA

An aerial of the study area with the site location is included in Exhibit 1. A conceptual site plan for the proposed development is shown in Exhibit 2.

Based on discussions with Waukesha County, the study area includes the CTH G intersection with CTH DR/Golf Road as well as the CTH G intersection with the proposed development driveway. Exhibit 3 shows the existing transportation detail of the study area intersection.

CTH G/Meadowbrook Road is a four-lane minor arterial highway with a posted speed limit of 35-mph and a year 2018 WisDOT AADT of 7,000 vehicles per day (vpd) north of CTH DR/Golf Road and 9,400-vpd (2019 count) to the south. A multi-use path is present on the east side of CTH G through the study area.

CTH DR/Golf Road is a two-lane undivided minor arterial highway with a posted speed limit of 45-mph east of CTH G and 50-mph west of CTH G. The year 2015 WisDOT AADT on CTH DR/Golf Road was 1,900-vpd immediately to the west of the development site. A multi-use path is present on the south side of CTH DR/Golf Road east of CTH G.

As part of the development, a new access driveway is being proposed with CTH DR/Golf Road approximately 600-feet (centerline-to-centerline) west of CTH G.

PART C – TRAFFIC VOLUMES

C1. Year 2022 Existing Traffic Volumes

TADI performed weekday morning (6:00 to 9:00am) and weekday evening (3:00 to 6:00pm) turning movement traffic counts at the CTH G intersection with CTH DR/Golf Road in late-May of 2022. The weekday morning and evening peak hours were identified as 7:00 to 8:00am and 3:30 to 4:30pm, respectively. Exhibit 4 shows the Year 2022 existing peak hour traffic volumes. The turning movement counts are included in Appendix A of this memorandum.

C2. Trip Generation

The traffic volumes expected to be generated by the senior living development are based on the development size of 126 units and on trip rates as published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition.* The Continuing Care Retirement Community (CCRC) land use (LU255) was utilized for this study. Per the ITE description, this land use provides multiple elements of senior adult living. A CCRC enables a resident to transition in place from independent living to increased care as the medical needs of the resident change. Housing options may include various combinations of senior adult housing, congregate care, assisted living, and nursing home. The senior living development trip generation table is shown in Exhibit 5.

As shown, the proposed senior living development is expected to generate approximately 310 new trips (155 in/155 out) during a typical weekday (24-hour period), 20 new trips (15 in/5 out) during a typical weekday morning peak hour, and 25 new trips (10 in/15 out) during a typical weekday evening peak hour.

C3. Trip Distribution

The trip distribution for the proposed senior living development was determined based on the existing traffic patterns and the type of proposed land uses. The expected trip distribution for the proposed development, also shown in table format on Exhibit 5, is summarized as follows:

- 50% traffic to/from the south on CTH G
- 40% traffic to/from the north on CTH G
- 10% traffic to/from the west on Golf Road

C4. Trip Assignment

The senior living development new trips were assigned to the study area using the trip distribution previously outlined. The senior living development new trips are shown in Exhibit 6.

C5. Year 2022 Build Traffic Volumes

The Year 2022 build traffic volumes, shown in Exhibit 7, were determined by summing the Year 2022 existing traffic volumes (Exhibit 4) and the senior living development new trips (Exhibit 6).

PART D – INTERSECTION CAPACITY ANALYSIS

D1. Level of Service Definitions

The study area intersections were analyzed based on the procedures set forth in the *Highway Capacity Manual, 6th Edition* (HCM). Intersection operation is defined by "Level of Service". Level of Service (LOS) is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good, represented by LOS 'A', to very poor, represented by LOS 'F'. For the purpose of this study, and as is standard for use in urban areas in southeast Wisconsin, LOS D or better was used to define desirable peak hour operating conditions at the study area intersections. Descriptions of the various levels of service are as follows:

LOS A is the highest level of service that can be achieved. Under this condition, intersection approaches appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation. At signalized and unsignalized intersections, average delays are less than 10 seconds.

LOS B represents stable operation. At signalized intersections, average vehicle delays are 10 to 20 seconds. At unsignalized intersections, average delays are 10 to 15 seconds.

LOS C still represents stable operation, but periodic backups of a few vehicles may develop behind turning vehicles. Most drivers begin to feel restricted, but not objectionably so. At signalized intersections, average vehicle delays are 20 to 35 seconds. At unsignalized intersections, average delays are 15 to 25 seconds.

LOS D represents increasing traffic restrictions as the intersection approaches instability. Delays to approaching vehicles may be substantial during short peaks within the peak period, but periodic clearance of long lines occurs, thus preventing excessive backups. At signalized intersections, average vehicle delays are 35 to 55 seconds. At unsignalized intersections, average delays are 25 to 35 seconds.

LOS E represents the capacity of the intersection. At signalized intersections, average vehicle delays are 55 to 80 seconds. At unsignalized intersections, average delays are 35 to 50 seconds.

LOS F represents jammed conditions where the intersection is over capacity and acceptable gaps for unsignalized intersections in the mainline traffic flow are minimal. At signalized intersections, average vehicle delays exceed 80 seconds. At unsignalized intersections, average delays exceed 50 seconds.

The analysis was performed using the HCM 6th Edition module in the Synchro 11 software. The LOS, delay (reported in seconds) and 95th percentile queue lengths (reported in feet) were reported from the HCM 6th Edition module.

D2. Intersection Operations

The Year 2022 existing and Year 2022 build (with proposed development) traffic volumes were analyzed using the existing transportation detail shown in Exhibit 3 and the existing traffic signal timings, which were obtained from Waukesha County. The traffic signal timings are included in Appendix B of this memorandum. Tables 1 and 2 show the results of the analysis (LOS, delay and queue length) for each movement and for each intersection under the Year 2022 existing and Year 2022 build (with proposed development) traffic conditions.

Table 1
Year 2022 Existing Traffic Peak Hour Operating Conditions
With Existing Geometrics and Traffic Control

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
Node 100: CTH G & CTH DR (Golf Road) *Traffic Signal Control*		*Lanes->*	*1*	*1*	*1*	*1*	*1*		*1*	*2*	*1*	*1*	*2*	*1*	
	AM	LOS	B	B	B	B	B		A	A	A	A	A	A	A
		Delay	13	12	12	13	12		8	9	9	8	9	9	9
		Queue	25'	25'	25'	30'	25'		25'	55'	25'	25'	45'	25'	
	PM	LOS	B	B	B	B	B		A	A	A	A	B	A	B
		Delay	13	12	12	13	13		8	9	9	9	11	9	11
		Queue	25'	25'	25'	40'	50'		25'	65'	25'	25'	65'	25'	

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.

Table 2
Full Build Traffic Peak Hour Operating Conditions
With Existing Geometrics and Traffic Control

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
Node 100: CTH G & CTH DR (Golf Road) *Traffic Signal Control*		*Lanes->*	*1*	*1*	*1*	*1*	*1*		*1*	*2*	*1*	*1*	*2*	*1*	
	AM	LOS	B	B	B	B	B		A	A	A	A	A	A	A
		Delay	13	12	12	13	12		8	9	9	8	9	9	9
		Queue	25'	25'	25'	30'	25'		25'	55'	25'	25'	45'	25'	
	PM	LOS	B	B	B	B	B		A	A	A	A	B	A	B
		Delay	13	12	12	13	13		8	9	9	9	11	9	11
		Queue	25'	25'	25'	40'	50'		25'	65'	25'	25'	65'	25'	
Node 200: CTH DR (Golf Road) & Private Drive *One-Way Stop Control*		*Lanes->*	*1*		-	-	*1*		-	-		*1*			
	AM	LOS	A		-	-	*		-	-		A			A
		Delay	7		-	-	*		-	-		9			1
		Queue	25'		-	-	*		-	-		25'			
	PM	LOS	A		-	-	*		-	-		A			A
		Delay	8		-	-	*		-	-		9			1
		Queue	25'		-	-	*		-	-		25'			

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.

As shown in Tables 1 and 2, all movements at study area intersections are expected to operate at LOS B or better conditions under existing conditions and with the full build out of the proposed senior living development with no geometric modifications and no modifications to the signal phasing or timing plans.

All analysis outputs are included in Appendices C & D.

PART E – RECOMMENDED MODIFICATIONS

The following modifications, shown in Exhibit 8, are recommended to accommodate traffic with the full build-out of the proposed senior living development.

Modifications are for jurisdictional consideration and are not legally binding. Waukesha County reserves the right to determine alternative solutions.

CTH G & CTH DR/Golf Road

- No modifications are expected to be necessary.

CTH DR/Golf Road & Proposed Driveway

- Provide one shared left-turn/right-turn lane on the north (southbound) approach.
- Install stop control on the north approach to CTH DR/Golf Road.

It is noted that left-turn lane and right-turn lane warrants were evaluated at the proposed driveway location onto Golf Road. Based on the low turning volumes expected from the proposed development, separate dedicated right-turn lane and left-turn lanes are neither warranted nor recommended. All warrant backup calculations are included in Appendix E.

In addition, a by-pass lane was also evaluated at the new intersection. Based on the Waukesha County Code of Ordinances (*Section 15-54; Access Point Design Criteria*), a by-pass lane is required at any new "T" type intersection when the mainline AADT volumes are greater than 2,500 vehicles per day (vpd). Based on historic WisDOT AADT count information, the CTH DR/Golf Road AADT within the limits of the new driveway connection under the existing (no development) conditions is approximately 1,900-vpd. Therefore, a by-pass lane is not required at the new driveway location per the Waukesha County code.

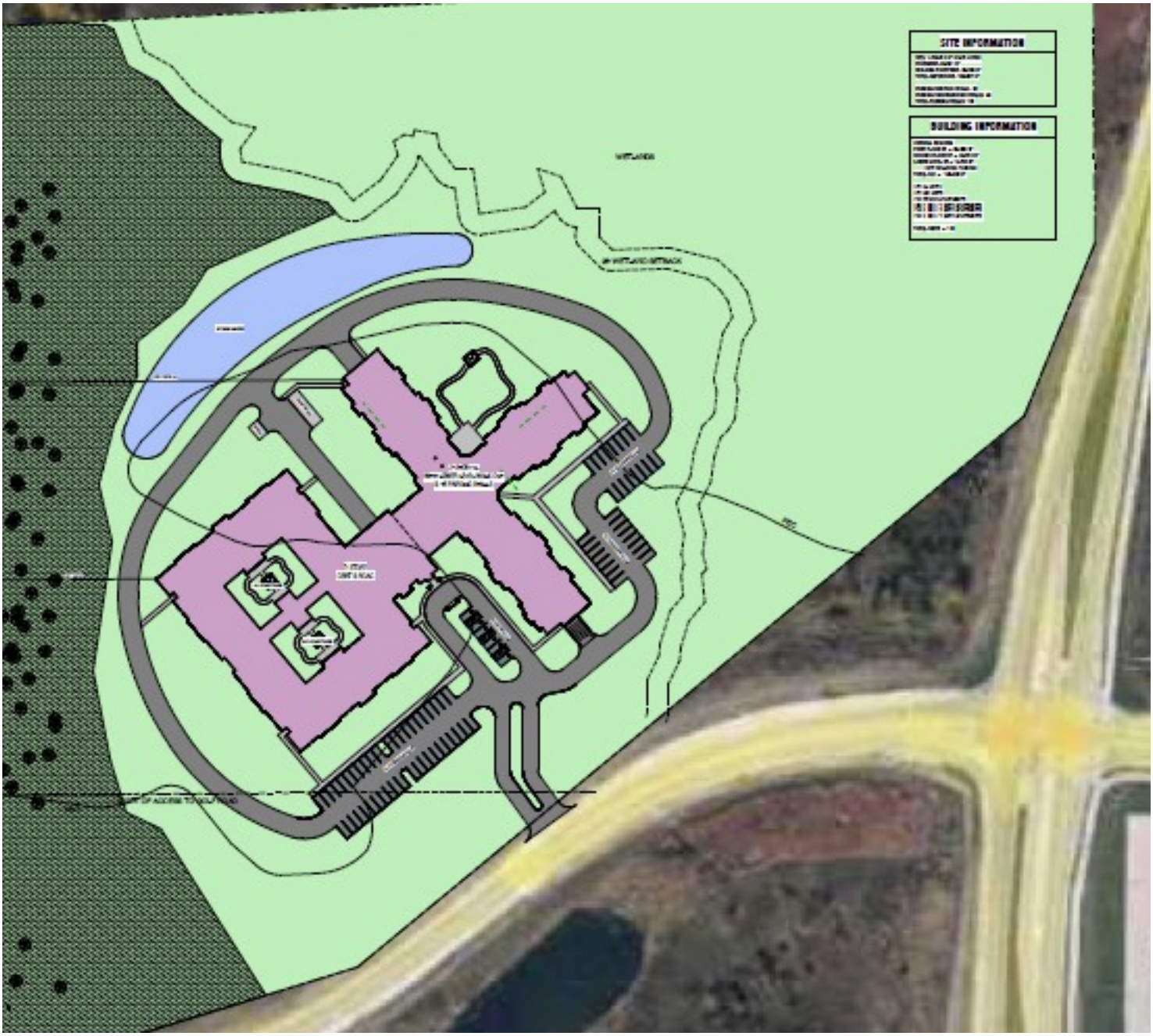
PART F – CONCLUSION

The CTH G intersection with CTH DR/Golf Road is expected to operate safely and efficiently with the full buildout of the proposed senior living development without any signal modifications. The proposed driveway intersection with CTH DR/Golf Road is expected to operate safely and efficiently if properly designed and constructed per Waukesha County guidelines.

TRAFFIC ANALYSIS & DESIGN, INC.
2888; 06-07-2022

EXHIBIT 1
STUDY AREA AERIAL

WAUKESHA COUNTY, WISCONSIN



TRAFFIC ANALYSIS & DESIGN, INC.
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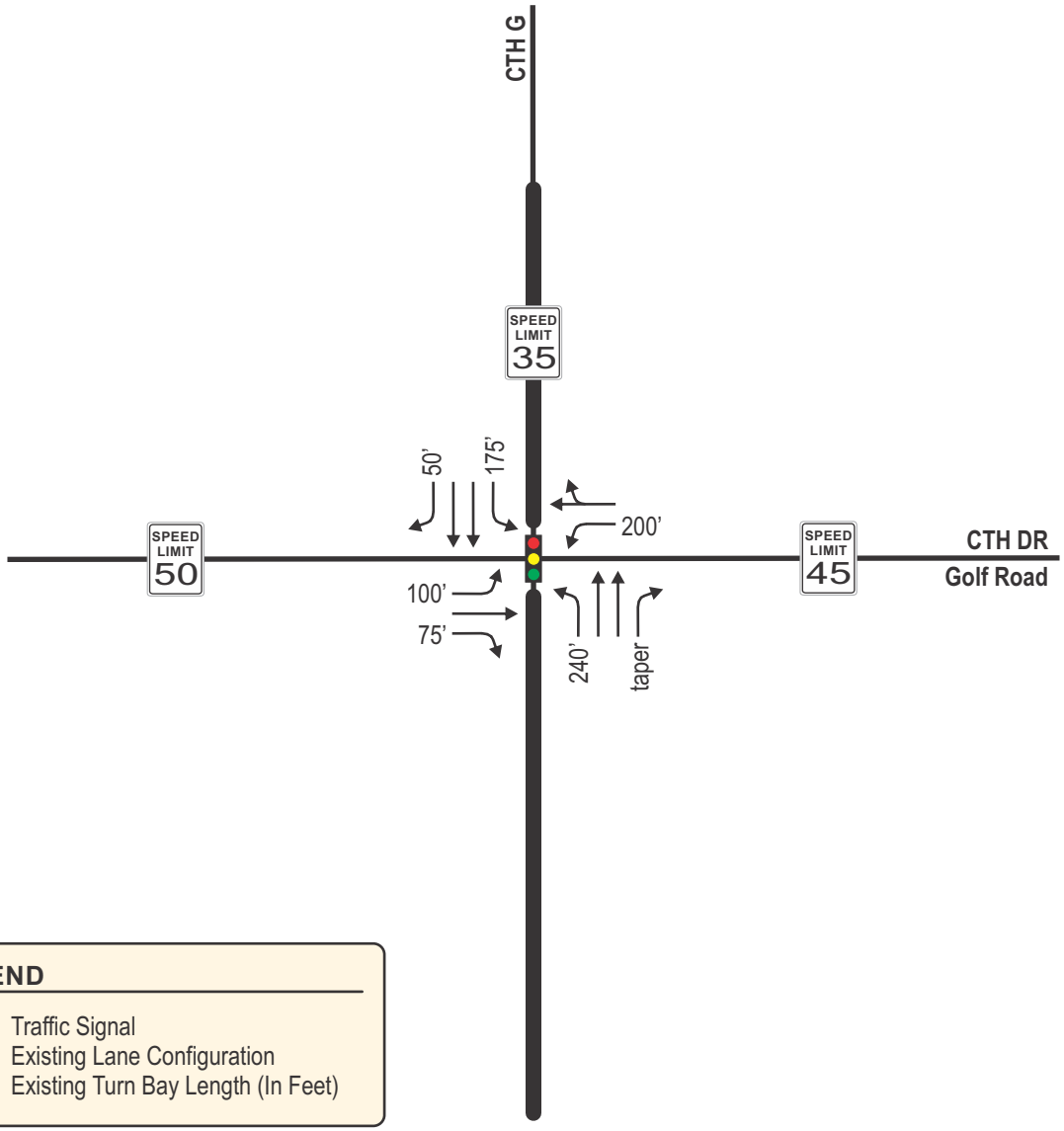
EXHIBIT 2
CONCEPTUAL SITE PLAN

WAUKESHA COUNTY, WISCONSIN

N

NOT TO SCALE



LEGEND

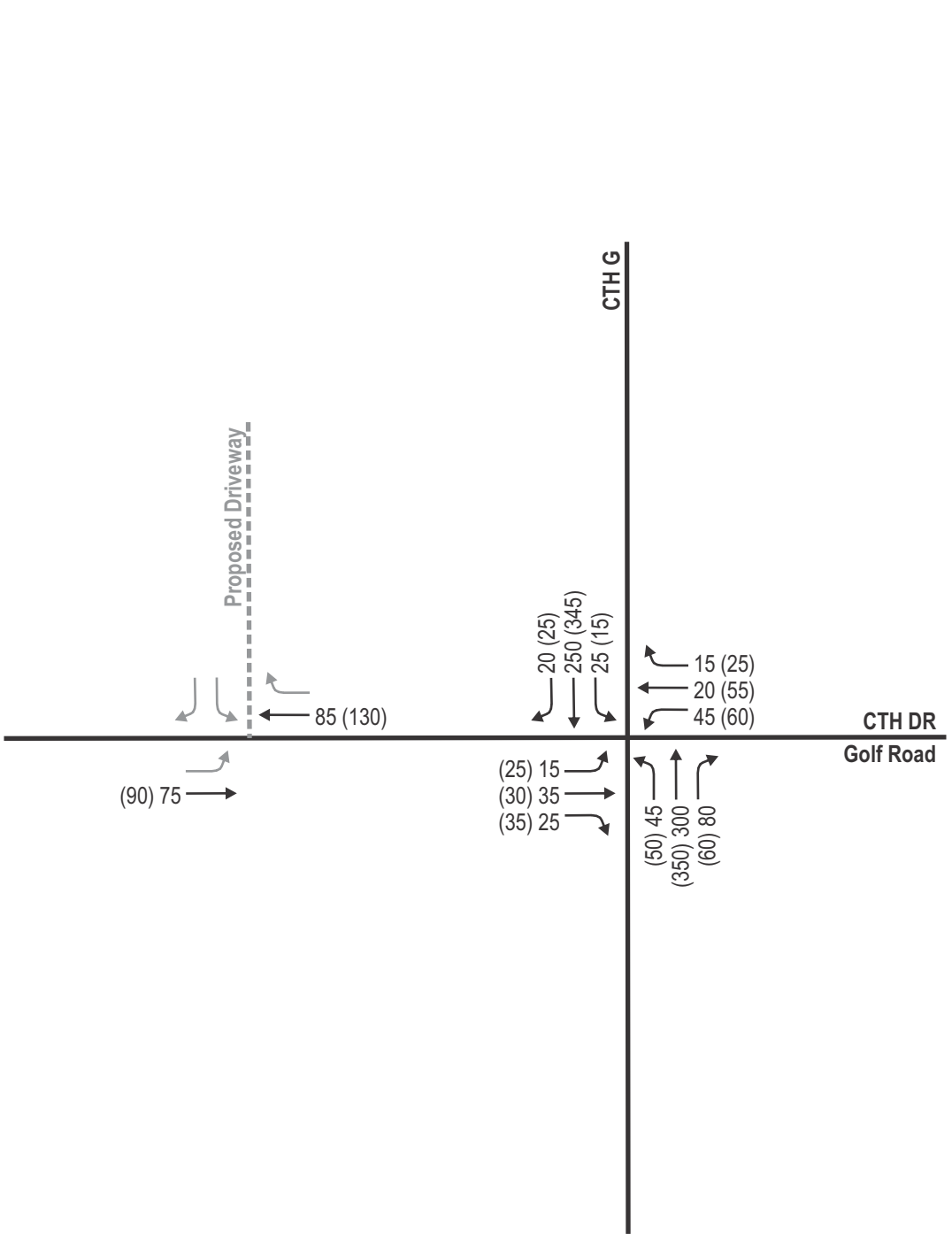
- Traffic Signal
- Existing Lane Configuration
- XX' Existing Turn Bay Length (In Feet)

TRAFFIC ANALYSIS & DESIGN, INC.

2888; 06-07-2022

EXHIBIT 3
EXISTING TRANSPORTATION DETAIL

WAUKESHA COUNTY, WISCONSIN



LEGEND

XX	AM Peak Hour Volumes (7:00:-8:00 AM)
(XX)	PM Peak Hour Volumes (3:30-4:30 PM)
–	Negligible Traffic Volumes (Fewer than 2 vph)

TRAFFIC ANALYSIS & DESIGN, INC.
2888; 06-07-2022

EXHIBIT 4
YEAR 2022 EXISTING TRAFFIC VOLUMES

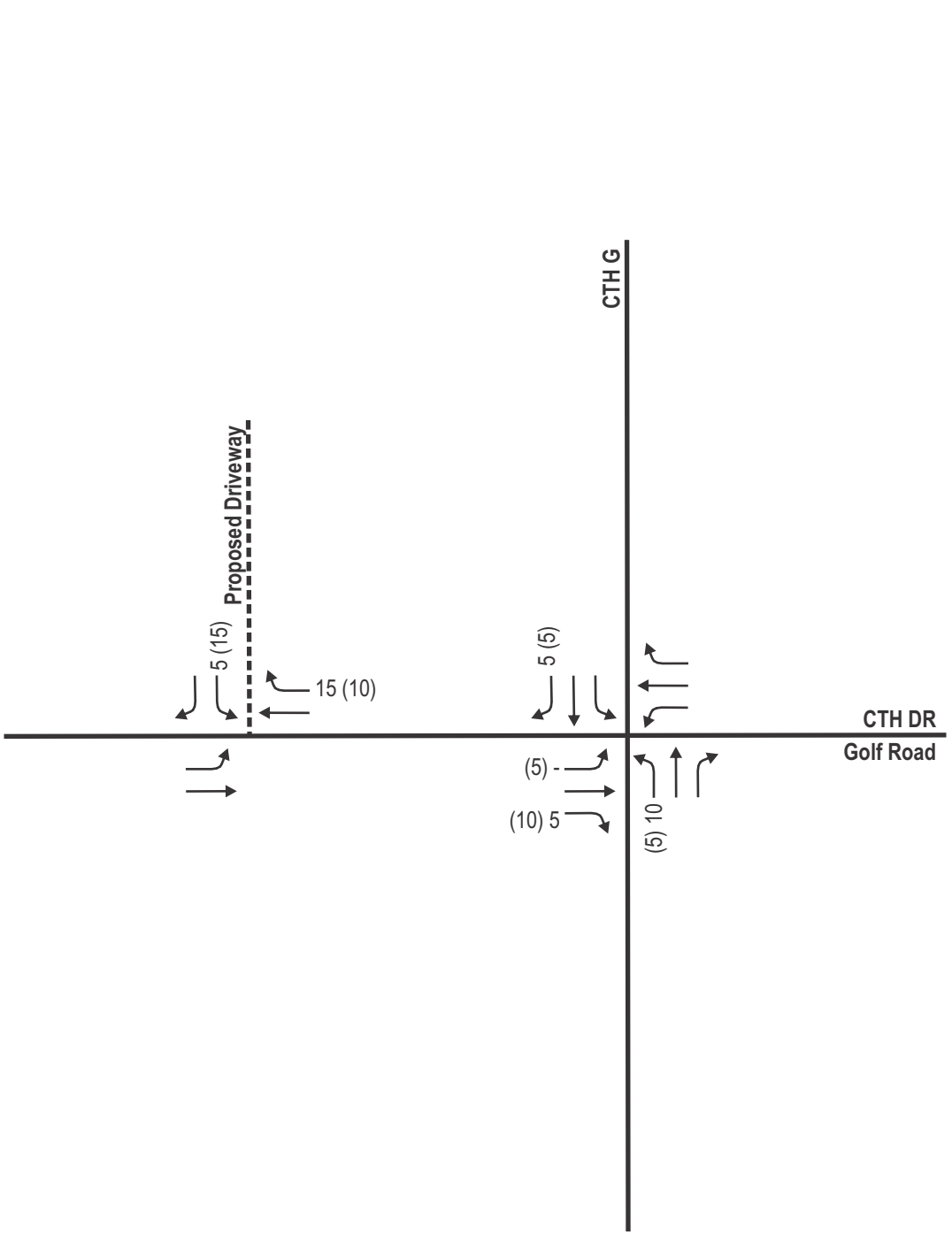
WAUKESHA COUNTY, WISCONSIN

Exhibit 5
Proposed Senior Living Development Trip Generation Table

Land Use	ITE Code	Proposed Size	Weekday Daily	AM Peak In	AM Peak Out	AM Peak Total	PM Peak In	PM Peak Out	PM Peak Total
Continuing Care Retirement Community	255	126 Units	310 (2.47)	15 (65%)	5 (35%)	20 (0.15)	10 (39%)	15 (61%)	25 (0.19)
Total New Trips			**310**	**15**	**5**	**20**	**10**	**15**	**25**

TRIP DISTRIBUTION

South on CTH G	50%	160	10	5		5	10
North on CTH G	40%	120	5	0		5	5
West on Golf Road	10%	30	0	0		0	0
	100%	***310***	***15***	***5***		***10***	***15***



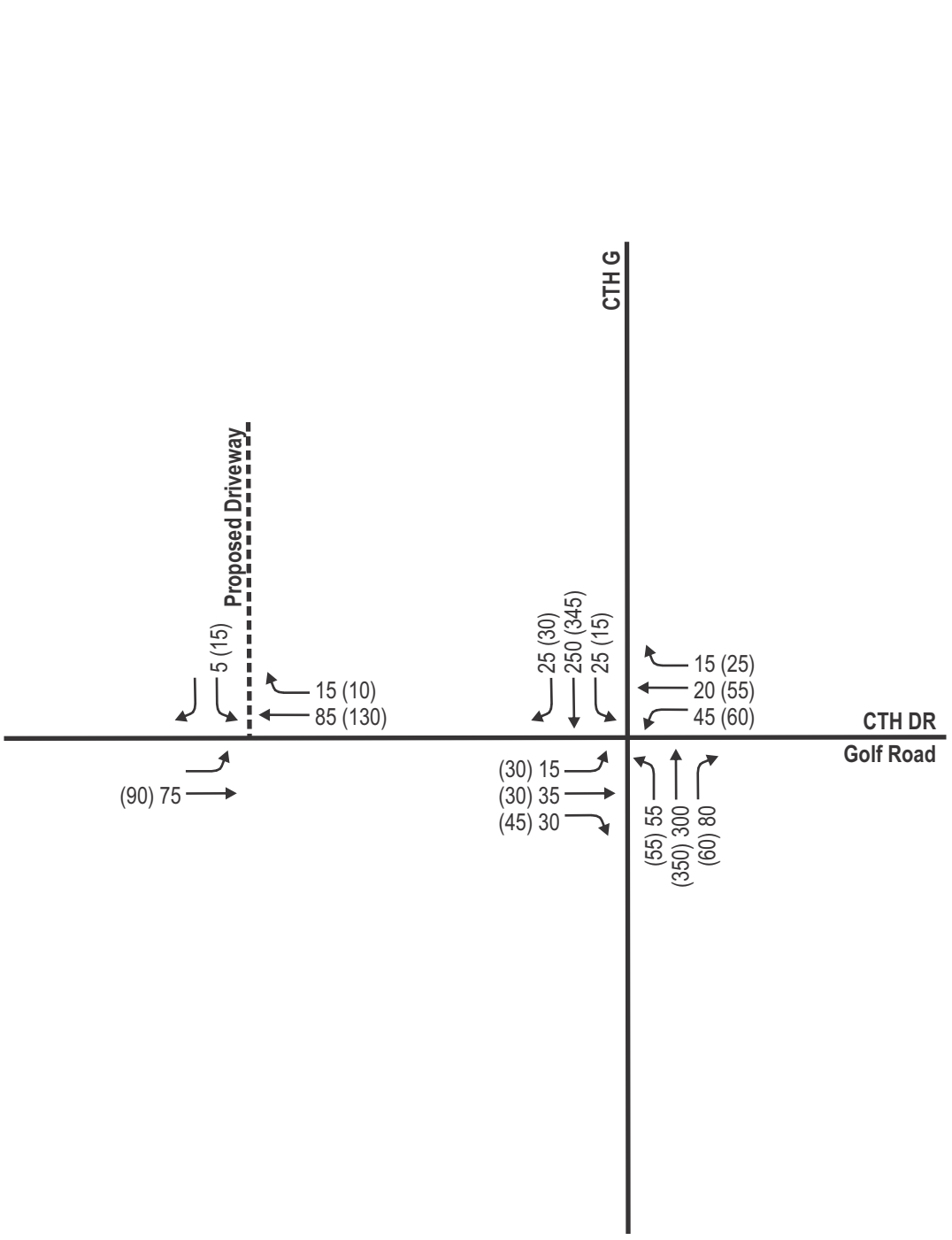
LEGEND

XX	AM Peak Hour Volumes (7:00:-8:00 AM)
(XX)	PM Peak Hour Volumes (3:30-4:30 PM)
–	Negligible Traffic Volumes (Fewer than 2 vph)

TRAFFIC ANALYSIS & DESIGN, INC.
2888; 06-07-2022

EXHIBIT 6
PROPOSED SENIOR LIVING DEVELOPMENT NEW TRIPS

WAUKESHA COUNTY, WISCONSIN



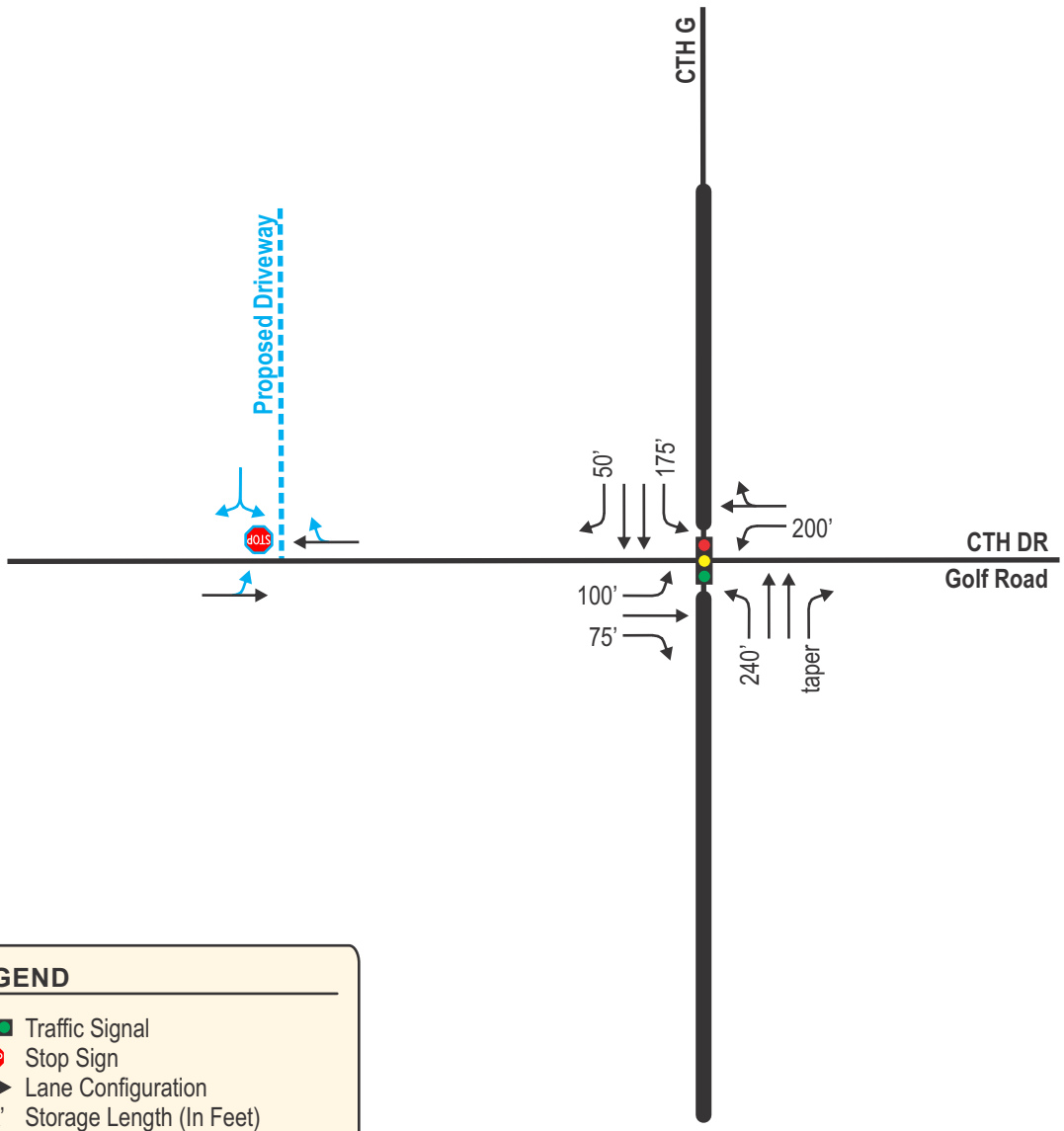
LEGEND

XX	AM Peak Hour Volumes (7:00:-8:00 AM)
(XX)	PM Peak Hour Volumes (3:30-4:30 PM)
–	Negligible Traffic Volumes (Fewer than 2 vph)

TRAFFIC ANALYSIS & DESIGN, INC.
2888; 06-07-2022

EXHIBIT 7
YEAR 2022 BUILD TRAFFIC VOLUMES
EXISTING PLUS SENIOR LIVING DEVELOPMENT

WAUKESHA COUNTY, WISCONSIN



LEGEND

- Traffic Signal
- Stop Sign
- Lane Configuration
- XX' Storage Length (In Feet)

BLACK Existing Configuration
BLUE Recommended Modification

TRAFFIC ANALYSIS & DESIGN, INC.
2888; 06-07-2022

EXHIBIT 8
RECOMMENDED MODIFICATIONS

 WAUKESHA COUNTY, WISCONSIN

APPENDIX A

Existing Traffic Counts

Intersection Traffic Volume Report

Count Basics	Version 2013.J4.1		Page 1 of 13
Start Date:	Wednesday, May 25, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 6		Non-Holiday	No Special Events

Base Information, Observed (6) Hour and Estimated (24) Hour Volume Summaries

Intersection of: CTH G-Meadowbrook Rd and Golf Road

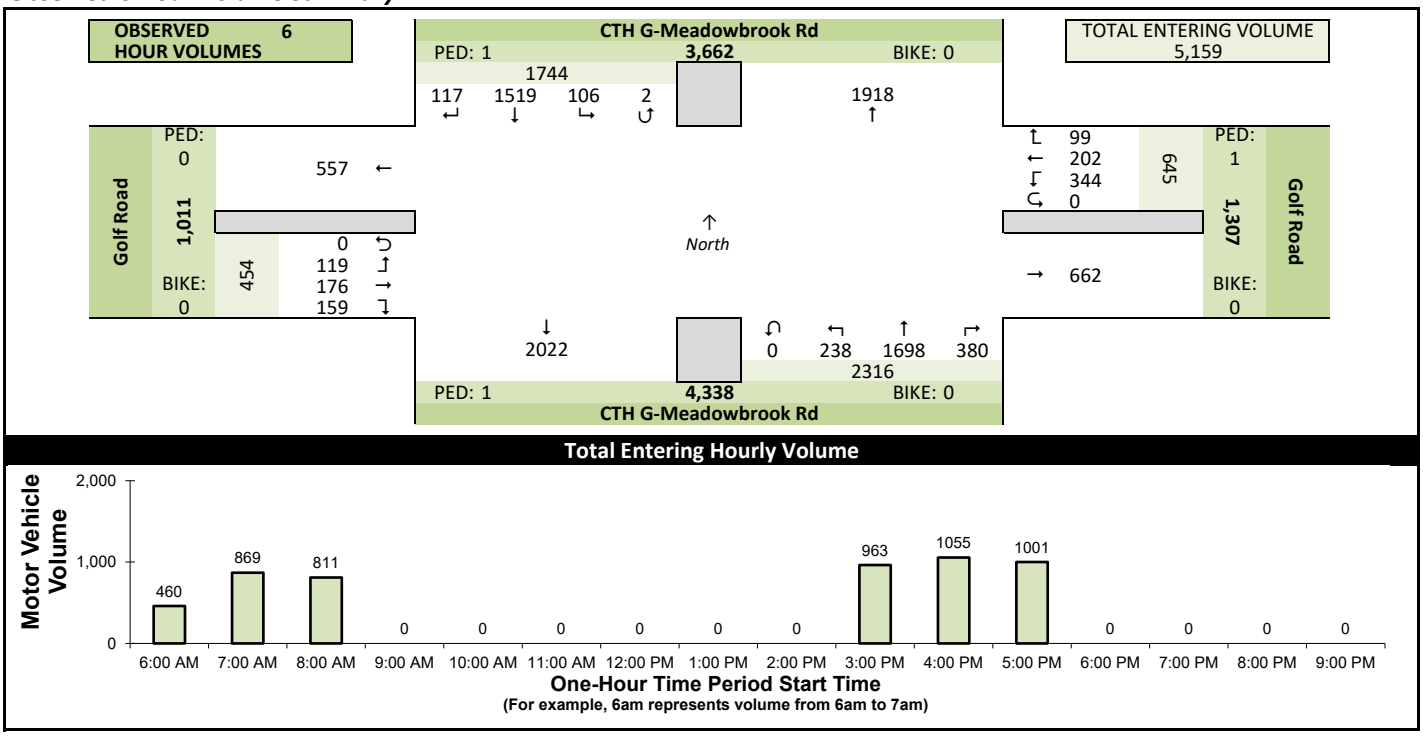
Site Information

Municipality	City of Pewaukee		
County	Waukesha	WisDOT Region	SE
Traffic Control	Traffic Signal		
Roadway Names		North Direction	↑
North Leg	CTH G-Meadowbrook Rd		
East Leg	Golf Road		
South Leg	CTH G-Meadowbrook Rd		
West Leg	Golf Road		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None		

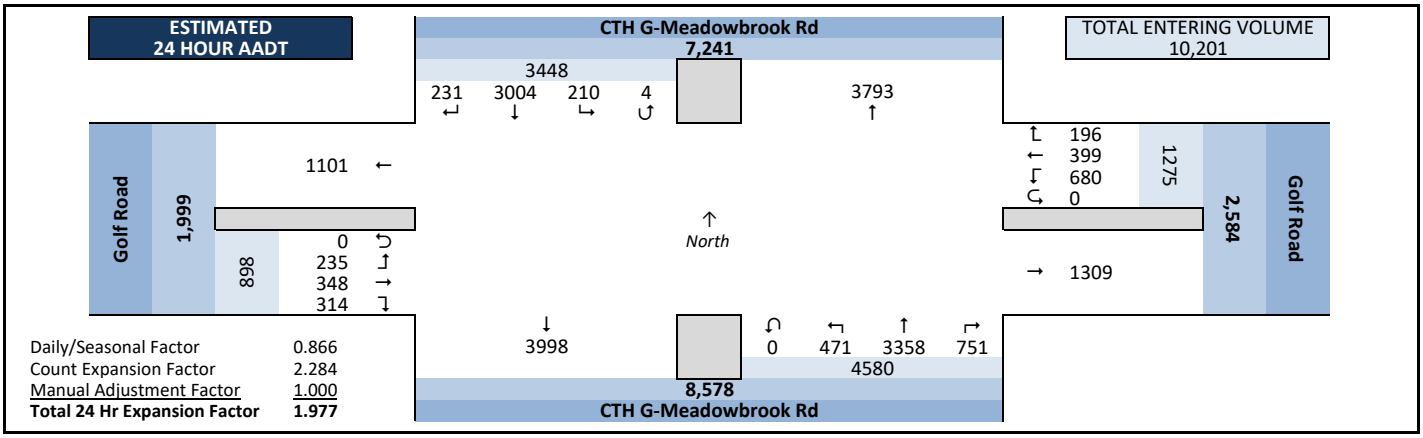
Count Information

Hrs Counted:	6:00 AM-9:00 AM and 3:00 PM-6:00 PM				
1st Day of Count	Wednesday, May 25, 2022			Weather	
AM Peak Period	Thursday, May 26, 2022			Clear & Dry	
Midday Peak Period	Thursday, May 26, 2022			Clear & Dry	
PM Peak Period	Wednesday, May 25, 2022			Clear & Dry	
Calculated Peak Hours					
AM	7:00-8:00am	MD		PM	3:30-4:30pm
Peak Hours Selected for Analysis					
AM	7:00-8:00am	MD		PM	3:30-4:30pm
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	0.866	Count Expansion Factor	2.284		
Company Name	TADI, Inc.			Manual Adj.	1.000
Observers	AM Peak Period	Amy Scheuerlein			
	Midday Peak Period	None			
	PM Peak Period	Emily Eissens			
Comments	2019 DOT Seasonal Factors				

Observed 6 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

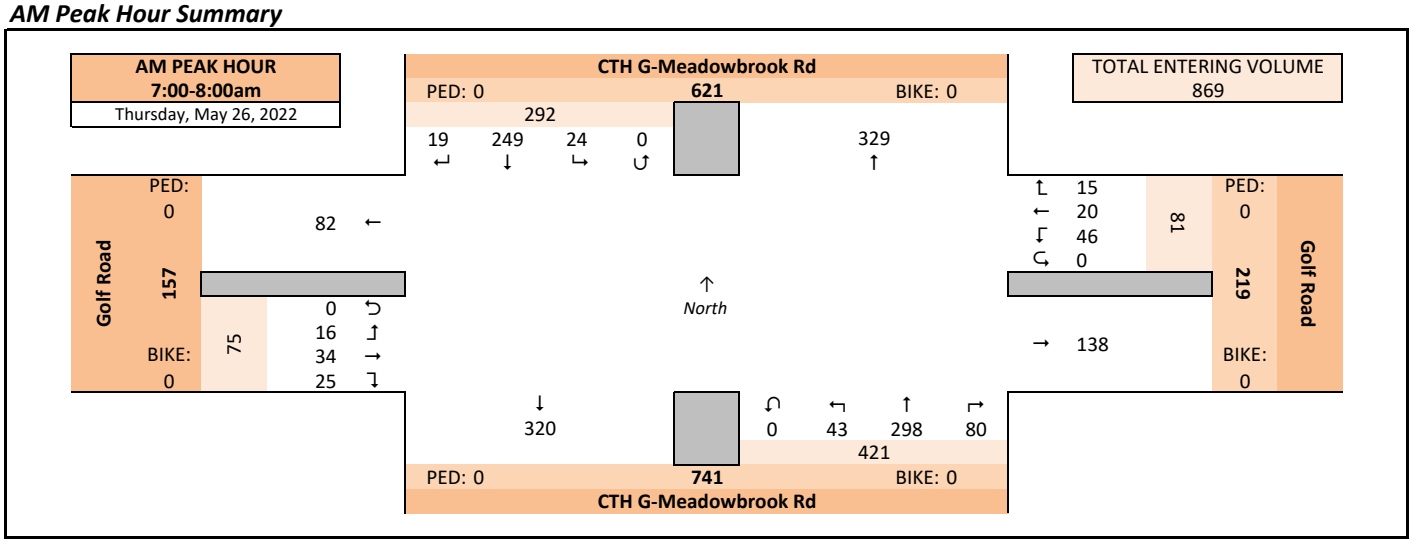
Count Basics			Page 2 of 13
Start Date:	Wednesday, May 25, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 6		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

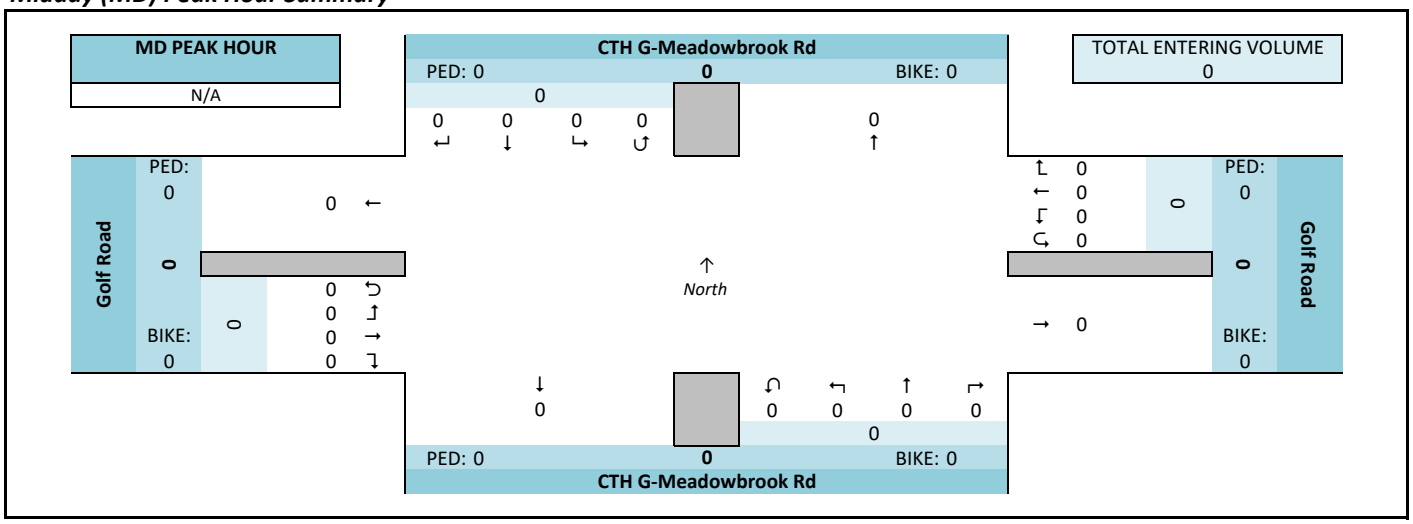
CTH G-Meadowbrook Rd and Golf Road

All Motor Vehicles

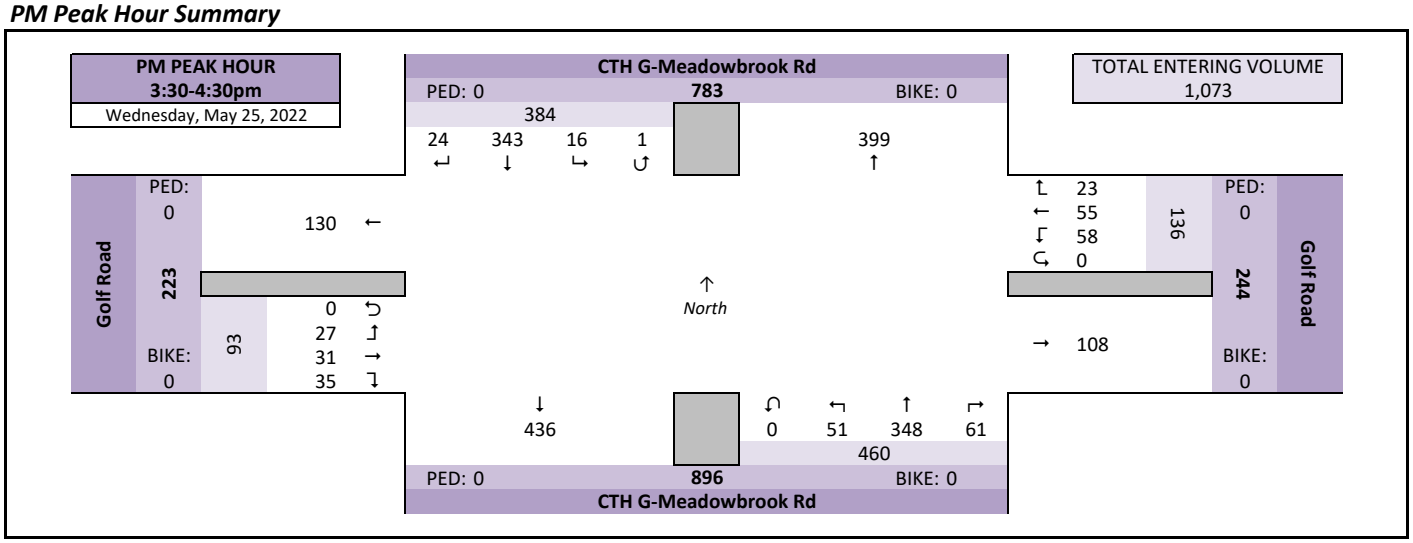
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics			Page 3 of 13
Start Date:	Wednesday, May 25, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 6		Non-Holiday	No Special Events

Peak Hour Volume Summary

CTH G-Meadowbrook Rd and Golf Road

All Motor Vehicles

Peak Hour Volumes, Truck Percentages, and PHFs

Thursday, May 26, 2022		From North					From East					From South					From West					
	AM Peak Hour	CTH G-Meadowbrook Rd					Golf Road					CTH G-Meadowbrook Rd					Golf Road					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	7:00 AM	7	54	5	0	66	4	5	9	0	18	13	81	8	0	102	4	9	3	0	16	202
	7:15 AM	5	59	5	0	69	3	7	15	0	25	30	62	18	0	110	10	8	4	0	22	226
	7:30 AM	3	74	8	0	85	4	3	14	0	21	17	75	7	0	99	6	10	4	0	20	225
	7:45 AM	4	62	6	0	72	4	5	8	0	17	20	80	10	0	110	5	7	5	0	17	216
	Peak Hour Volume	19	249	24	0	292	15	20	46	0	81	80	298	43	0	421	25	34	16	0	75	869
	Rounded Hourly Volume	20	250	25	0	295	15	20	45	0	80	80	300	45	0	425	25	35	15	0	75	875
	% Single Unit Trucks	5.3	2.4	0.0	0.0	2.4	6.7	10.0	4.3	0.0	6.2	0.0	5.0	9.3	0.0	4.5	8.0	0.0	0.0	0.0	2.7	3.8
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	% Trucks (Total)	5.3	2.4	0.0	0.0	2.4	6.7	10.0	6.5	0.0	7.4	0.0	5.0	9.3	0.0	4.5	8.0	0.0	0.0	0.0	2.7	3.9
	Peak Hour Factor (PHF)	0.68	0.84	0.75	0.00	0.86	0.94	0.71	0.77	0.00	0.81	0.67	0.92	0.60	0.00	0.96	0.62	0.85	0.80	0.00	0.85	0.96

N/A		From North					From East					From South					From West					
	MD Peak Hour	CTH G-Meadowbrook Rd					Golf Road					CTH G-Meadowbrook Rd					Golf Road					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Wednesday, May 25, 2022		From North					From East					From South					From West					
	PM Peak Hour	CTH G-Meadowbrook Rd					Golf Road					CTH G-Meadowbrook Rd					Golf Road					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	3:30 PM	6	86	6	0	98	1	12	11	0	24	15	95	15	0	125	5	8	5	0	18	265
	3:45 PM	7	97	4	1	109	3	9	9	0	21	16	69	13	0	98	9	10	6	0	25	253
	4:00 PM	6	76	5	0	87	14	20	25	0	59	15	82	13	0	110	6	8	11	0	25	281
	4:15 PM	5	84	1	0	90	5	14	13	0	32	15	102	10	0	127	15	5	5	0	25	274
	Peak Hour Volume	24	343	16	1	384	23	55	58	0	136	61	348	51	0	460	35	31	27	0	93	1073
	Rounded Hourly Volume	25	345	15	0	385	25	55	60	0	140	60	350	50	0	460	35	30	25	0	90	1075
	% Single Unit Trucks	4.2	2.3	0.0	0.0	2.3	4.3	0.0	3.4	0.0	2.2	1.6	1.4	2.0	0.0	1.5	0.0	0.0	3.7	0.0	1.1	1.9
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.7	1.6	0.0	2.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.3
	% Trucks (Total)	4.2	2.3	0.0	0.0	2.3	4.3	0.0	5.2	0.0	2.9	3.3	1.4	3.9	0.0	2.0	0.0	0.0	3.7	0.0	1.1	2.1
	Peak Hour Factor (PHF)	0.86	0.88	0.67	0.25	0.88	0.41	0.69	0.58	0.00	0.58	0.95	0.85	0.85	0.00	0.91	0.58	0.77	0.61	0.00	0.93	0.95

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike Volume
		CTH G-Meadowbrook Rd			Golf Road			CTH G-Meadowbrook Rd			Golf Road			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics			Page 4 of 13
Start Date:	Wednesday, May 25, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 6		Non-Holiday	No Special Events

Hourly Volume Summary - Motor Vehicle Data

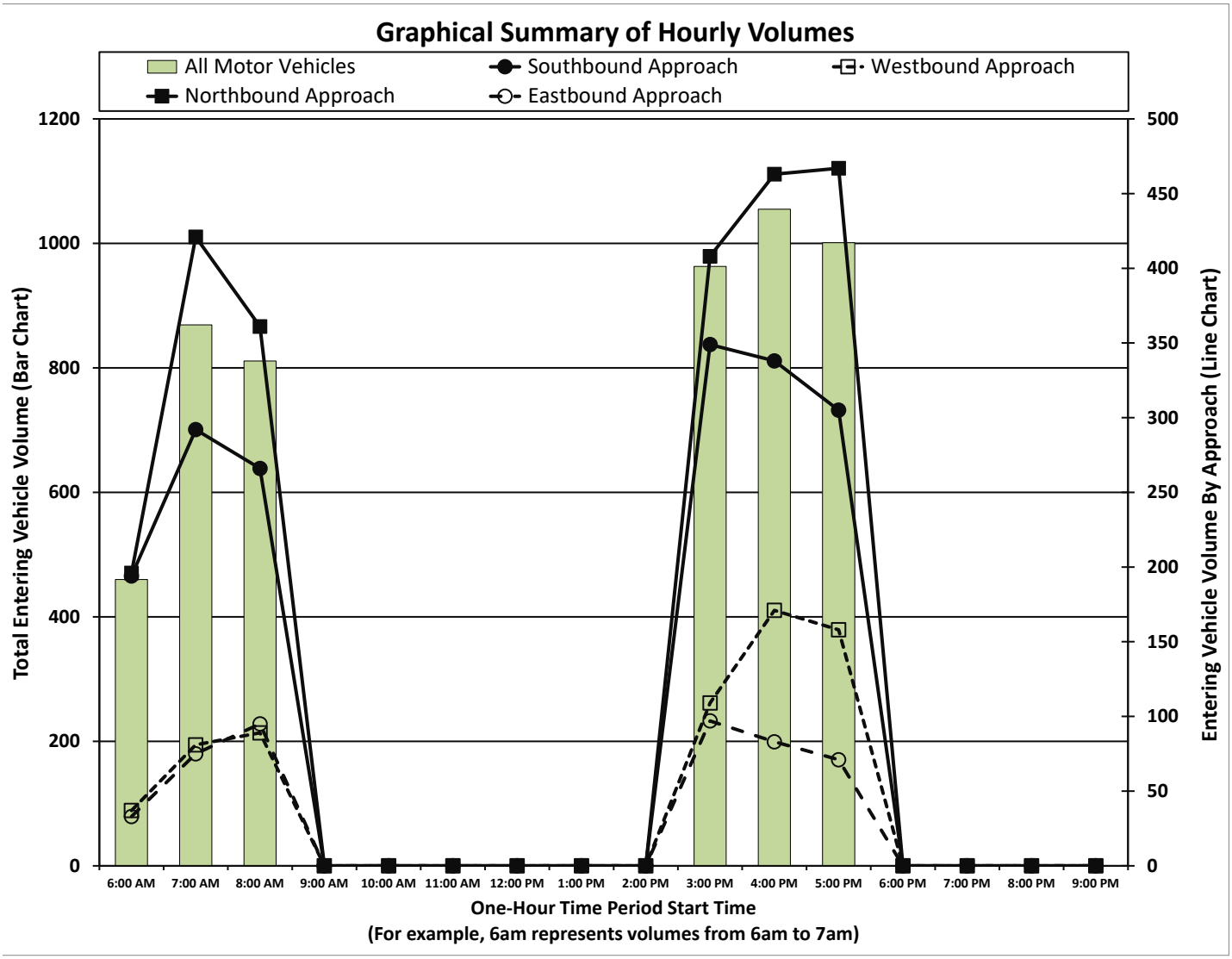
All Motor Vehicles

CTH G-Meadowbrook Rd and Golf Road

One-Hour Motor Vehicle Data

One-Hour Time Period Start Time		From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					Total Vehicle Volume	Directional Volume Totals E/W	Directional Volume Totals N/S
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total			
AM	6:00 AM	9	170	15	0	194	7	10	20	0	37	38	142	16	0	196	12	14	7	0	33	460	70	390
AM	7:00 AM	19	249	24	0	292	15	20	46	0	81	80	298	43	0	421	25	34	16	0	75	869	156	713
AM	8:00 AM	22	217	26	1	266	12	30	47	0	89	97	220	44	0	361	36	42	17	0	95	811	184	627
AM	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	3:00 PM	26	305	17	1	349	15	41	53	0	109	59	300	49	0	408	32	36	29	0	97	963	206	757
PM	4:00 PM	20	308	10	0	338	29	59	83	0	171	51	365	47	0	463	31	28	24	0	83	1055	254	801
PM	5:00 PM	21	270	14	0	305	21	42	95	0	158	55	373	39	0	467	23	22	26	0	71	1001	229	772
PM	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals		117	1519	106	2	1744	99	202	344	0	645	380	1698	238	0	2316	159	176	119	0	454	5159	1099	4060

Graphical Summary of Hourly Volumes



Intersection Traffic Volume Report

Count Basics			Page 5 of 13
Start Date:	Wednesday, May 25, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 6		Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

CTH G-Meadowbrook Rd and Golf Road

15-Minute Motor Vehicle Data

15-Minute Time Period		From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					15-Min	Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
AM Peak Period	6:00 AM	2	24	5	0	31	1	3	3	0	7	11	11	3	0	25	2	0	2	0	4	67	460	0.71
	6:15 AM	2	31	6	0	39	1	1	8	0	10	10	25	2	0	37	2	4	2	0	8	94	595	0.74
	6:30 AM	1	54	2	0	57	1	3	6	0	10	5	49	5	0	59	3	7	1	0	11	137	727	0.80
	6:45 AM	4	61	2	0	67	4	3	3	0	10	12	57	6	0	75	5	3	2	0	10	162	815	0.90
	7:00 AM	7	54	5	0	66	4	5	9	0	18	13	81	8	0	102	4	9	3	0	16	202	869	0.96
	7:15 AM	5	59	5	0	69	3	7	15	0	25	30	62	18	0	110	10	8	4	0	22	226	864	0.96
	7:30 AM	3	74	8	0	85	4	3	14	0	21	17	75	7	0	99	6	10	4	0	20	225	824	0.92
	7:45 AM	4	62	6	0	72	4	5	8	0	17	20	80	10	0	110	5	7	5	0	17	216	819	0.93
	8:00 AM	6	50	4	0	60	3	7	13	0	23	20	59	11	0	90	9	5	10	0	24	197	811	0.92
	8:15 AM	3	52	3	0	58	5	6	9	0	20	19	49	11	0	79	12	14	3	0	29	186		
	8:30 AM	9	64	9	0	82	2	7	12	0	21	33	53	13	0	99	5	12	1	0	18	220		
	8:45 AM	4	51	10	1	66	2	10	13	0	25	25	59	9	0	93	10	11	3	0	24	208		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 PM	6	66	3	0	75	8	11	19	0	38	17	79	9	0	105	7	10	12	0	29	247	963	0.91
	3:15 PM	7	56	4	0	67	3	9	14	0	26	11	57	12	0	80	11	8	6	0	25	198	997	0.89
	3:30 PM	6	86	6	0	98	1	12	11	0	24	15	95	15	0	125	5	8	5	0	18	265	1073	0.95
	3:45 PM	7	97	4	1	109	3	9	9	0	21	16	69	13	0	98	9	10	6	0	25	253	1062	0.94
	4:00 PM	6	76	5	0	87	14	20	25	0	59	15	82	13	0	110	6	8	11	0	25	281	1055	0.94
	4:15 PM	5	84	1	0	90	5	14	13	0	32	15	102	10	0	127	15	5	5	0	25	274	1032	0.94
	4:30 PM	4	82	2	0	88	6	15	21	0	42	8	95	9	0	112	2	6	4	0	12	254	1033	0.94
	4:45 PM	5	66	2	0	73	4	10	24	0	38	13	86	15	0	114	8	9	4	0	21	246	1033	0.94
	5:00 PM	8	70	1	0	79	9	12	35	0	56	17	77	10	0	104	6	8	5	0	19	258	1001	0.91
	5:15 PM	7	76	10	0	93	6	9	22	0	37	16	99	6	0	121	5	9	10	0	24	275		
	5:30 PM	3	66	2	0	71	3	8	21	0	32	8	114	12	0	134	7	3	7	0	17	254		
	5:45 PM	3	58	1	0	62	3	13	17	0	33	14	83	11	0	108	5	2	4	0	11	214		
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		117	1519	106	2	1744	99	202	344	0	645	380	1698	238	0	2316	159	176	119	0	454	5159		

Peak Hour All Vehicle Volume Summary

Hourly Time Period		From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					Total Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	7:00 AM	19	249	24	0	292	15	20	46	0	81	80	298	43	0	421	25	34	16	0	75	869	0.96
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM	3:30 PM	24	343	16	1	384	23	55	58	0	136	61	348	51	0	460	35	31	27	0	93	1073	0.95

Intersection Traffic Volume Report

Count Basics			*Page 6 of 13*
Start Date:	Wednesday, May 25, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 6		Non-Holiday	No Special Events

15-Minute Automobile Data

Automobiles (Cars, Light Trucks, & Motorcycles)

CTH G-Meadowbrook Rd and Golf Road

15-Minute Automobile Data

15-Minute Time Period	Start Time	From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					15-Min Totals	Hourly Sum
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM	1	24	5	0	30	0	3	3	0	6	9	11	3	0	23	2	0	2	0	4	63	437
	6:15 AM	2	31	6	0	39	1	1	7	0	9	10	24	2	0	36	2	4	2	0	8	92	564
	6:30 AM	1	54	2	0	57	0	3	6	0	9	4	45	5	0	54	3	7	1	0	11	131	693
	6:45 AM	3	58	2	0	63	3	3	2	0	8	10	54	6	0	70	5	3	2	0	10	151	779
	7:00 AM	6	51	5	0	62	4	4	8	0	16	13	76	7	0	96	4	9	3	0	16	190	835
	7:15 AM	5	59	5	0	69	3	6	13	0	22	30	61	18	0	109	9	8	4	0	21	221	828
	7:30 AM	3	72	8	0	83	3	3	14	0	20	17	71	6	0	94	6	10	4	0	20	217	787
	7:45 AM	4	61	6	0	71	4	5	8	0	17	20	75	8	0	103	4	7	5	0	16	207	783
	8:00 AM	6	49	4	0	59	3	7	11	0	21	18	55	9	0	82	7	5	9	0	21	183	778
	8:15 AM	3	51	3	0	57	4	6	7	0	17	19	49	10	0	78	11	14	3	0	28	180	
	8:30 AM	9	61	9	0	79	2	7	11	0	20	32	51	13	0	96	5	12	1	0	18	213	
	8:45 AM	4	47	10	1	62	2	10	12	0	24	25	59	8	0	92	10	11	3	0	24	202	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	5	65	3	0	73	8	10	17	0	35	17	77	9	0	103	7	10	12	0	29	240	940
	3:15 PM	7	52	4	0	63	3	9	14	0	26	10	56	12	0	78	11	8	5	0	24	191	973
	3:30 PM	6	81	6	0	93	1	12	11	0	24	15	95	15	0	125	5	8	5	0	18	260	1050
	3:45 PM	7	97	4	1	109	3	9	9	0	21	14	69	11	0	94	9	10	6	0	25	249	1035
	4:00 PM	6	75	5	0	86	13	20	23	0	56	15	79	13	0	107	6	8	10	0	24	273	1027
	4:15 PM	4	82	1	0	87	5	14	12	0	31	15	100	10	0	125	15	5	5	0	25	268	1008
	4:30 PM	4	76	2	0	82	6	15	21	0	42	7	93	9	0	109	2	6	4	0	12	245	1012
	4:45 PM	5	64	2	0	71	4	10	22	0	36	13	85	15	0	113	8	9	4	0	21	241	1019
	5:00 PM	8	70	1	0	79	9	12	35	0	56	15	75	10	0	100	6	8	5	0	19	254	989
	5:15 PM	7	76	10	0	93	6	9	21	0	36	15	98	6	0	119	5	9	10	0	24	272	
	5:30 PM	3	66	2	0	71	3	8	21	0	32	8	113	12	0	133	6	3	7	0	16	252	
	5:45 PM	3	55	1	0	59	3	13	17	0	33	14	83	11	0	108	5	2	4	0	11	211	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		112	1477	106	2	1697	93	199	325	0	617	365	1654	228	0	2247	153	176	116	0	445	5006	

Peak Hour Automobile Volume Summary

Hourly Time Period	Start Time	From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					Total Hourly Volume
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM	7:00 AM	18	243	24	0	285	14	18	43	0	75	80	283	39	0	402	23	34	16	0	73	835
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	3:30 PM	23	335	16	1	375	22	55	55	0	132	59	343	49	0	451	35	31	26	0	92	1050

Intersection Traffic Volume Report

Count Basics			*Page 7 of 13*
Start Date:	Wednesday, May 25, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 6		Non-Holiday	No Special Events

15-Minute Single Unit (SU) Truck & Bus Data

Single Unit (SU) Trucks & Buses

CTH G-Meadowbrook Rd and Golf Road

15-Minute Single Unit (SU) Truck & Bus Data

15-Minute Time Period	Start Time	From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					15-Min Totals	Hourly Sum
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM	1	0	0	0	1	1	0	0	0	1	2	0	0	0	2	0	0	0	0	0	4	22
	6:15 AM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2	30
	6:30 AM	0	0	0	0	0	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	5	32
	6:45 AM	1	3	0	0	4	1	0	1	0	2	2	3	0	0	5	0	0	0	0	0	11	35
	7:00 AM	1	3	0	0	4	0	1	1	0	2	0	5	1	0	6	0	0	0	0	0	12	33
	7:15 AM	0	0	0	0	0	0	1	1	0	2	0	1	0	0	1	1	0	0	0	1	4	35
	7:30 AM	0	2	0	0	2	1	0	0	0	1	0	4	1	0	5	0	0	0	0	0	8	37
	7:45 AM	0	1	0	0	1	0	0	0	0	0	0	5	2	0	7	1	0	0	0	1	9	36
	8:00 AM	0	1	0	0	1	0	0	2	0	2	2	4	2	0	8	2	0	1	0	3	14	33
	8:15 AM	0	1	0	0	1	1	0	2	0	3	0	0	1	0	1	1	0	0	0	1	6	
	8:30 AM	0	3	0	0	3	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	7	
	8:45 AM	0	4	0	0	4	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	6	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	1	1	0	0	2	0	1	2	0	3	0	2	0	0	2	0	0	0	0	0	7	19
	3:15 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	5	20
	3:30 PM	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	20
	3:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	2	24
	4:00 PM	0	1	0	0	1	1	0	2	0	3	0	3	0	0	3	0	0	1	0	1	8	27
	4:15 PM	1	2	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5	23
	4:30 PM	0	6	0	0	6	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	9	21
	4:45 PM	0	2	0	0	2	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	5	14
	5:00 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	4	12
	5:15 PM	0	0	0	0	0	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	3	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2	
	5:45 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		5	41	0	0	46	6	3	17	0	26	12	44	9	0	65	6	0	3	0	9	146	

Peak Hour Single Unit (SU) Truck & Buses Volume Summary

Hourly Time Period	Start Time	From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					Total Hourly Volume
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM	7:00 AM	1	6	0	0	7	1	2	2	0	5	0	15	4	0	19	2	0	0	0	2	33
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	3:30 PM	1	8	0	0	9	1	0	2	0	3	1	5	1	0	7	0	0	1	0	1	20

Intersection Traffic Volume Report

Count Basics			*Page 8 of 13*
Start Date:	Wednesday, May 25, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 6		Non-Holiday	No Special Events

15-Minute Semi-Truck Data

Semi-Trucks

CTH G-Meadowbrook Rd and Golf Road

15-Minute Semi-Truck Data

15-Minute Time Period		From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					15-Min	Hourly
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	6:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	2
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	3:15 PM	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2	4
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	3:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	2	3
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		0	1	0	0	1	0	0	2	0	2	3	0	1	0	4	0	0	0	0	0	7	

Peak Hour Semi-Truck Volume Summary

Hourly Time Period		From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					Total Hourly
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume
AM	7:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	3:30 PM	0	0	0	0	0	0	0	1	0	1	1	0	1	0	2	0	0	0	0	0	3

Intersection Traffic Volume Report

Count Basics			*Page 9 of 13*
Start Date:	Wednesday, May 25, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 6		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)

CTH G-Meadowbrook Rd and Golf Road

15-Minute Heavy Vehicle Data

15-Minute Time Period		From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					15-Min	Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum
AM Peak Period	6:00 AM	1	0	0	0	1	1	0	0	0	1	2	0	0	0	2	0	0	0	0	0	4	23
	6:15 AM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2	31
	6:30 AM	0	0	0	0	0	1	0	0	0	1	1	4	0	0	5	0	0	0	0	0	6	34
	6:45 AM	1	3	0	0	4	1	0	1	0	2	2	3	0	0	5	0	0	0	0	0	11	36
	7:00 AM	1	3	0	0	4	0	1	1	0	2	0	5	1	0	6	0	0	0	0	0	12	34
	7:15 AM	0	0	0	0	0	0	1	2	0	3	0	1	0	0	1	1	0	0	0	1	5	36
	7:30 AM	0	2	0	0	2	1	0	0	0	1	0	4	1	0	5	0	0	0	0	0	8	37
	7:45 AM	0	1	0	0	1	0	0	0	0	0	0	5	2	0	7	1	0	0	0	1	9	36
	8:00 AM	0	1	0	0	1	0	0	2	0	2	2	4	2	0	8	2	0	1	0	3	14	33
	8:15 AM	0	1	0	0	1	1	0	2	0	3	0	0	1	0	1	1	0	0	0	1	6	
	8:30 AM	0	3	0	0	3	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	7	
	8:45 AM	0	4	0	0	4	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	6	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	1	1	0	0	2	0	1	2	0	3	0	2	0	0	2	0	0	0	0	0	7	23
	3:15 PM	0	4	0	0	4	0	0	0	0	0	1	1	0	0	2	0	0	1	0	1	7	24
	3:30 PM	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	23
	3:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	4	0	0	0	0	0	4	27
	4:00 PM	0	1	0	0	1	1	0	2	0	3	0	3	0	0	3	0	0	1	0	1	8	28
	4:15 PM	1	2	0	0	3	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	6	24
	4:30 PM	0	6	0	0	6	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	9	21
	4:45 PM	0	2	0	0	2	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	5	14
	5:00 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	4	12
	5:15 PM	0	0	0	0	0	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	3	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2	
	5:45 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		5	42	0	0	47	6	3	19	0	28	15	44	10	0	69	6	0	3	0	9	153	

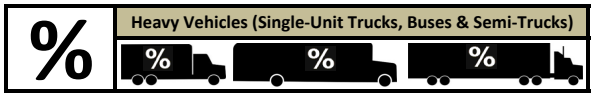
Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period		From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					Total Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume
AM	7:00 AM	1	6	0	0	7	1	2	3	0	6	0	15	4	0	19	2	0	0	0	2	34
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	3:30 PM	1	8	0	0	9	1	0	3	0	4	2	5	2	0	9	0	0	1	0	1	23

Intersection Traffic Volume Report

Count Basics			*Page 10 of 13*
Start Date:	Wednesday, May 25, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 6		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Percentages



CTH G-Meadowbrook Rd and Golf Road

15-Minute Heavy Vehicle Percentages

	15-Minute Time Period Start Time	From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					Total Heavy Vehicle Percent	Hourly Heavy Vehicle Percent
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM	50.0	0.0	0.0	0.0	3.2	100.0	0.0	0.0	0.0	14.3	18.2	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	6.0	5.0
	6:15 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	10.0	0.0	4.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	2.1	5.2
	6:30 AM	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	10.0	20.0	8.2	0.0	0.0	8.5	0.0	0.0	0.0	0.0	0.0	4.4	4.7
	6:45 AM	25.0	4.9	0.0	0.0	6.0	25.0	0.0	33.3	0.0	20.0	16.7	5.3	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	6.8	4.4
	7:00 AM	14.3	5.6	0.0	0.0	6.1	0.0	20.0	11.1	0.0	11.1	0.0	6.2	12.5	0.0	5.9	0.0	0.0	0.0	0.0	0.0	5.9	3.9
	7:15 AM	0.0	0.0	0.0	0.0	0.0	0.0	14.3	13.3	0.0	12.0	0.0	1.6	0.0	0.0	0.9	10.0	0.0	0.0	0.0	4.5	2.2	4.2
	7:30 AM	0.0	2.7	0.0	0.0	2.4	25.0	0.0	0.0	0.0	4.8	0.0	5.3	14.3	0.0	5.1	0.0	0.0	0.0	0.0	0.0	3.6	4.5
	7:45 AM	0.0	1.6	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	6.2	20.0	0.0	6.4	20.0	0.0	0.0	0.0	5.9	4.2	4.4
	8:00 AM	0.0	2.0	0.0	0.0	1.7	0.0	0.0	15.4	0.0	8.7	10.0	6.8	18.2	0.0	8.9	22.2	0.0	10.0	0.0	12.5	7.1	4.1
	8:15 AM	0.0	1.9	0.0	0.0	1.7	20.0	0.0	22.2	0.0	15.0	0.0	0.0	9.1	0.0	1.3	8.3	0.0	0.0	0.0	3.4	3.2	
	8:30 AM	0.0	4.7	0.0	0.0	3.7	0.0	0.0	8.3	0.0	4.8	3.0	3.8	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.2	
	8:45 AM	0.0	7.8	0.0	0.0	6.1	0.0	0.0	7.7	0.0	4.0	0.0	0.0	11.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	2.9	
	9:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	9:15 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	9:30 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	9:45 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Midday Peak Period	10:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	10:15 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	10:30 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	10:45 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	11:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	11:15 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	11:30 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	11:45 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	12:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	12:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	12:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	12:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PM Peak Period	2:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	2:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	2:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	2:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	3:00 PM	16.7	1.5	0.0	0.0	2.7	0.0	9.1	10.5	0.0	7.9	0.0	2.5	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	2.8	2.4
	3:15 PM	0.0	7.1	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	9.1	1.8	0.0	0.0	2.5	0.0	0.0	16.7	0.0	4.0	3.5	2.4
	3:30 PM	0.0	5.8	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	2.1
	3:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	15.4	0.0	4.1	0.0	0.0	0.0	0.0	0.0	1.6	2.5
	4:00 PM	0.0	1.3	0.0	0.0	1.1	7.1	0.0	8.0	0.0	5.1	0.0	3.7	0.0	0.0	2.7	0.0	0.0	9.1	0.0	4.0	2.8	2.7
	4:15 PM	20.0	2.4	0.0	0.0	3.3	0.0	0.0	7.7	0.0	3.1	0.0	2.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	2.2	2.3
	4:30 PM	0.0	7.3	0.0	0.0	6.8	0.0	0.0	0.0	0.0	0.0	12.5	2.1	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	3.5	2.0
	4:45 PM	0.0	3.0	0.0	0.0	2.7	0.0	0.0	8.3	0.0	5.3	0.0	1.2	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	2.0	1.4
	5:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.8	2.6	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	1.6	1.2
	5:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	2.7	6.2	1.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	1.1	
	5:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.7	14.3	0.0	0.0	0.0	5.9	0.8	
	5:45 PM	0.0	5.2	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	
	6:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	6:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	6:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	6:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	7:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	7:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	7:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	7:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	8:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	8:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	8:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	8:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	9:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	9:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	9:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	9:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Totals		4.3	2.8	0.0	0.0	2.7	6.1	1.5	5.5	0.0	4.3	3.9	2.6	4.2	0.0	3.0	3.8	0.0	2.5	0.0	2.0	3.0	

Peak Hour Heavy Vehicle Percentages Summary

	Hourly Time Period Start Time	From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					Hourly Heavy Vehicle Percent
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM	7:00 AM	5.3	2.4	0.0	0.0	2.4	6.7	10.0	6.5	0.0	7.4	0.0	5.0	9.3	0.0	4.5	8.0	0.0	0.0	0.0	2.7	3.9
MD	12:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PM	3:30 PM	4.2	2.3	0.0	0.0	2.3	4.3	0.0	5.2	0.0	2.9	3.3	1.4	3.9	0.0	2.0	0.0	0.0	3.7	0.0	1.1	2.1

Intersection Traffic Volume Report

Count Basics			Page 11 of 13
Start Date:	Wednesday, May 25, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 6		Non-Holiday	No Special Events

15-Minute Pedestrian and Bicyclist Data

Pedestrians and Bicyclists

CTH G-Meadowbrook Rd and Golf Road

15-Minute Pedestrian and Bicyclist Data

	15-Minute Time Period	Crossing North Approach CTH G-Meadowbrook Rd			Crossing East Approach Golf Road			Crossing South Approach CTH G-Meadowbrook Rd			Crossing West Approach Golf Road			15-Min	Hourly
	Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Totals	Sum
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:15 AM	0	0	0	0	0	0	1	0	1	0	0	0	1	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	1	0	1	1	0	1	0	0	0	0	0	0	2	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		1	0	1	1	0	1	1	0	1	0	0	0	3	

Special Pedestrians

Pedestrian Type	None	1 or 2	A Few	Several	Many	Unknown
Pre-school Children	x					
Elementry School Age Children	x					
Visually Impaired (white cane/helper dog)	x					
Elderly/Disabled (except wheelchairs)	x					
Wheelchairs/Electric Scooters	x					
Other (None)	x					

Intersection Traffic Volume Report

Count Basics			Page 12 of 13
Start Date:	Wednesday, May 25, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 6		Non-Holiday	No Special Events

15-Minute Adult & Children Count (Manual Entry)

Adults & Children

CTH G-Meadowbrook Rd and Golf Road

15-Minute Adult & Children Pedestrian Data

	15-Minute	Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			15-Min	Hourly
	Time Period	CTH G-Meadowbrook Rd			Golf Road			CTH G-Meadowbrook Rd			Golf Road				
	Start Time	Adults	Children	Total	Adults	Children	Total	Adults	Children	Total	Adults	Children	Total	Totals	Sum
AM Peak Period	6:00 AM	0		0	0		0	0		0	0		0	0	0
	6:15 AM	0		0	0		0	0		0	0		0	0	0
	6:30 AM	0		0	0		0	0		0	0		0	0	0
	6:45 AM	0		0	0		0	0		0	0		0	0	0
	7:00 AM	0		0	0		0	0		0	0		0	0	0
	7:15 AM	0		0	0		0	0		0	0		0	0	0
	7:30 AM	0		0	0		0	0		0	0		0	0	1
	7:45 AM	0		0	0		0	0		0	0		0	0	1
	8:00 AM	0		0	0		0	0		0	0		0	0	3
	8:15 AM	0		0	0		0	1		1	0		0	1	3
	8:30 AM	0		0	0		0	0		0	0		0	0	2
	8:45 AM	1		1	1		1	0		0	0		0	2	2
	9:00 AM	0		0	0		0	0		0	0		0	0	0
	9:15 AM	0		0	0		0	0		0	0		0	0	0
	9:30 AM	0		0	0		0	0		0	0		0	0	0
	9:45 AM	0		0	0		0	0		0	0		0	0	0
Midday Peak Period	10:00 AM	0		0	0		0	0		0	0		0	0	0
	10:15 AM	0		0	0		0	0		0	0		0	0	0
	10:30 AM	0		0	0		0	0		0	0		0	0	0
	10:45 AM	0		0	0		0	0		0	0		0	0	0
	11:00 AM	0		0	0		0	0		0	0		0	0	0
	11:15 AM	0		0	0		0	0		0	0		0	0	0
	11:30 AM	0		0	0		0	0		0	0		0	0	0
	11:45 AM	0		0	0		0	0		0	0		0	0	0
	12:00 PM	0		0	0		0	0		0	0		0	0	0
	12:15 PM	0		0	0		0	0		0	0		0	0	0
	12:30 PM	0		0	0		0	0		0	0		0	0	0
	12:45 PM	0		0	0		0	0		0	0		0	0	0
	1:00 PM	0		0	0		0	0		0	0		0	0	0
	1:15 PM	0		0	0		0	0		0	0		0	0	0
	1:30 PM	0		0	0		0	0		0	0		0	0	0
	1:45 PM	0		0	0		0	0		0	0		0	0	0
PM Peak Period	2:00 PM	0		0	0		0	0		0	0		0	0	0
	2:15 PM	0		0	0		0	0		0	0		0	0	0
	2:30 PM	0		0	0		0	0		0	0		0	0	0
	2:45 PM	0		0	0		0	0		0	0		0	0	0
	3:00 PM	0		0	0		0	0		0	0		0	0	0
	3:15 PM	0		0	0		0	0		0	0		0	0	0
	3:30 PM	0		0	0		0	0		0	0		0	0	0
	3:45 PM	0		0	0		0	0		0	0		0	0	0
	4:00 PM	0		0	0		0	0		0	0		0	0	0
	4:15 PM	0		0	0		0	0		0	0		0	0	0
	4:30 PM	0		0	0		0	0		0	0		0	0	0
	4:45 PM	0		0	0		0	0		0	0		0	0	0
	5:00 PM	0		0	0		0	0		0	0		0	0	0
	5:15 PM	0		0	0		0	0		0	0		0	0	0
	5:30 PM	0		0	0		0	0		0	0		0	0	0
	5:45 PM	0		0	0		0	0		0	0		0	0	0
	6:00 PM	0		0	0		0	0		0	0		0	0	0
	6:15 PM	0		0	0		0	0		0	0		0	0	0
	6:30 PM	0		0	0		0	0		0	0		0	0	0
	6:45 PM	0		0	0		0	0		0	0		0	0	0
	7:00 PM	0		0	0		0	0		0	0		0	0	0
	7:15 PM	0		0	0		0	0		0	0		0	0	0
	7:30 PM	0		0	0		0	0		0	0		0	0	0
	7:45 PM	0		0	0		0	0		0	0		0	0	0
	8:00 PM	0		0	0		0	0		0	0		0	0	0
	8:15 PM	0		0	0		0	0		0	0		0	0	0
	8:30 PM	0		0	0		0	0		0	0		0	0	0
	8:45 PM	0		0	0		0	0		0	0		0	0	0
	9:00 PM	0		0	0		0	0		0	0		0	0	0
	9:15 PM	0		0	0		0	0		0	0		0	0	
	9:30 PM	0		0	0		0	0		0	0		0	0	
	9:45 PM	0		0	0		0	0		0	0		0	0	
Totals		**1**	**0**	**1**	**1**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**3**	

Intersection Traffic Volume Report

Count Basics			*Page 13 of 13*
Start Date:	Wednesday, May 25, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 6		Non-Holiday	No Special Events

15-Minute Bicycle Turning Movement Count (Manual Entry)

Bicyclists

CTH G-Meadowbrook Rd and Golf Road

15-Minute Bicycle Data

15-Minute Time Period Start Time		From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					15-Min Totals	Hourly Sum
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM					0					0					0					0	0	0
	6:15 AM					0					0					0					0	0	0
	6:30 AM					0					0					0					0	0	0
	6:45 AM					0					0					0					0	0	0
	7:00 AM					0					0					0					0	0	0
	7:15 AM					0					0					0					0	0	0
	7:30 AM					0					0					0					0	0	0
	7:45 AM					0					0					0					0	0	0
	8:00 AM					0					0					0					0	0	0
	8:15 AM					0					0					0					0	0	0
	8:30 AM					0					0					0					0	0	0
	8:45 AM					0					0					0					0	0	0
	9:00 AM					0					0					0					0	0	0
	9:15 AM					0					0					0					0	0	0
	9:30 AM					0					0					0					0	0	0
	9:45 AM					0					0					0					0	0	0
Midday Peak Period	10:00 AM					0					0					0					0	0	0
	10:15 AM					0					0					0					0	0	0
	10:30 AM					0					0					0					0	0	0
	10:45 AM					0					0					0					0	0	0
	11:00 AM					0					0					0					0	0	0
	11:15 AM					0					0					0					0	0	0
	11:30 AM					0					0					0					0	0	0
	11:45 AM					0					0					0					0	0	0
	12:00 PM					0					0					0					0	0	0
	12:15 PM					0					0					0					0	0	0
	12:30 PM					0					0					0					0	0	0
	12:45 PM					0					0					0					0	0	0
	1:00 PM					0					0					0					0	0	0
	1:15 PM					0					0					0					0	0	0
	1:30 PM					0					0					0					0	0	0
	1:45 PM					0					0					0					0	0	0
PM Peak Period	2:00 PM					0					0					0					0	0	0
	2:15 PM					0					0					0					0	0	0
	2:30 PM					0					0					0					0	0	0
	2:45 PM					0					0					0					0	0	0
	3:00 PM					0					0					0					0	0	0
	3:15 PM					0					0					0					0	0	0
	3:30 PM					0					0					0					0	0	0
	3:45 PM					0					0					0					0	0	0
	4:00 PM					0					0					0					0	0	0
	4:15 PM					0					0					0					0	0	0
	4:30 PM					0					0					0					0	0	0
	4:45 PM					0					0					0					0	0	0
	5:00 PM					0					0					0					0	0	0
	5:15 PM					0					0					0					0	0	0
	5:30 PM					0					0					0					0	0	0
	5:45 PM					0					0					0					0	0	0
	6:00 PM					0					0					0					0	0	0
	6:15 PM					0					0					0					0	0	0
	6:30 PM					0					0					0					0	0	0
	6:45 PM					0					0					0					0	0	0
	7:00 PM					0					0					0					0	0	0
	7:15 PM					0					0					0					0	0	0
	7:30 PM					0					0					0					0	0	0
	7:45 PM					0					0					0					0	0	0
	8:00 PM					0					0					0					0	0	0
	8:15 PM					0					0					0					0	0	0
	8:30 PM					0					0					0					0	0	0
	8:45 PM					0					0					0					0	0	0
	9:00 PM					0					0					0					0	0	0
	9:15 PM					0					0					0					0	0	
	9:30 PM					0					0					0					0	0	
	9:45 PM					0					0					0					0	0	
Totals		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Peak Hour Bicycle Turning Movement Volume Summary

Hourly Time Period Start Time		From North (↓) CTH G-Meadowbrook Rd					From East (←) Golf Road					From South (↑) CTH G-Meadowbrook Rd					From West (→) Golf Road					Total Hourly Volume
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Saturation Flow Rate Calculations for Traffic Signalized Intersections (TEOpS 16-15-5.2.2)

Project: Pewaukee Senior Living
Scenario: Existing
User: TJM
Date: 6/1/2022
Population: 1,376,476
Range: 704,500+

Intersection	Direction	Approach Lanes	Posted Speed	Shared Lt/Th?	Shared Th/Rt?	Sat Flow (pcphpl) - Equation			Sat Flow (pcphpl) - Factors		
						Left	Thru	Right	Left	Thru	Right
CTH G at Golf Road	EB	3	50	N	N	1900	1996	1900	1900	1977	1900
	WB	2	45	N	Y	1900	1914	1914	1900	1898	1898
	NB	4	35	N	N	1900	1893	1900	1900	1882	1900
	SB	4	35	N	N	1900	1893	1900	1900	1882	1900

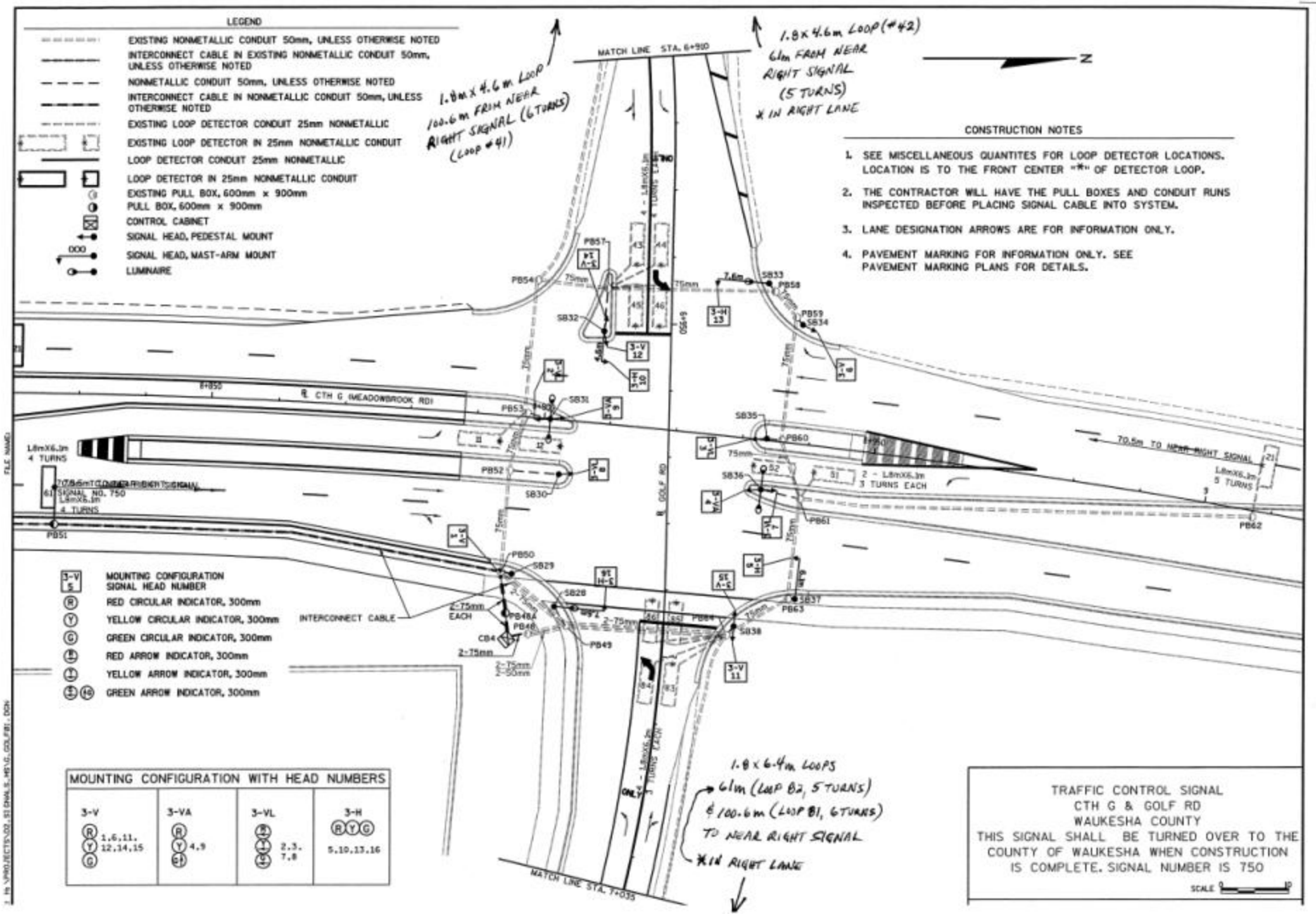
- Per TEOpS 16-15-5.2.2.2, when calculated value <1750 pcphpl, consider field study or HCM6 default values.
HCM6 default values are 1900 with population > 250,000 and 1750 with population ≤ 250,000.

Special Notes:

TADI Worksheet, Updated 8-10-2020 (MPM)

APPENDIX B

Existing Traffic Signal Timings


LEGEND
EXISTING NONMETALLIC CONDUIT 50mm, UNLESS OTHERWISE NOTED
INTERCONNECT CABLE IN EXISTING NONMETALLIC CONDUIT 50mm, UNLESS OTHERWISE NOTED
NONMETALLIC CONDUIT 50mm, UNLESS OTHERWISE NOTED
INTERCONNECT CABLE IN NONMETALLIC CONDUIT 50mm, UNLESS OTHERWISE NOTED
EXISTING LOOP DETECTOR CONDUIT 25mm NONMETALLIC
EXISTING LOOP DETECTOR IN 25mm NONMETALLIC CONDUIT
LOOP DETECTOR CONDUIT 25mm NONMETALLIC
LOOP DETECTOR IN 25mm NONMETALLIC CONDUIT
EXISTING PULL BOX, 600mm x 900mm
PULL BOX, 600mm x 900mm
CONTROL CABINET
SIGNAL HEAD, PEDESTAL MOUNT
SIGNAL HEAD, MAST-ARM MOUNT
LUMINAIRE
1.8m X 4.6m LOOP 100.6m FROM NEAR RIGHT SIGNAL (6 TURNS) (LOOP #41)
MATCH LINE STA. 6+930
1.8 X 4.6m LOOP (#42) 61m FROM NEAR RIGHT SIGNAL (5 TURNS) * IN RIGHT LANE
N
CONSTRUCTION NOTES
1. SEE MISCELLANEOUS QUANTITES FOR LOOP DETECTOR LOCATIONS. LOCATION IS TO THE FRONT CENTER "*" OF DETECTOR LOOP.
2. THE CONTRACTOR WILL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED BEFORE PLACING SIGNAL CABLE INTO SYSTEM.
3. LANE DESIGNATION ARROWS ARE FOR INFORMATION ONLY.
4. PAVEMENT MARKING FOR INFORMATION ONLY. SEE PAVEMENT MARKING PLANS FOR DETAILS.
E CTH G (MEADOWBROOK RD)
E GOLF RD
1.8mX6.1m 4 TURNS
SIGNAL NO. 750
2 - 1.8mX6.1m 3 TURNS EACH
70.5m TO NEAR RIGHT SIGNAL
1.8mX6.1m 5 TURNS
INTERCONNECT CABLE
2-75mm EACH
MATCH LINE STA. 7+035
1.8 X 6.4m LOOPS
61m (LOOP B2, 5 TURNS)
& 100.6m (LOOP B1, 6 TURNS)
TO NEAR RIGHT SIGNAL
* IN RIGHT LANE
MOUNTING CONFIGURATION SIGNAL HEAD NUMBER
RED CIRCULAR INDICATOR, 300mm
YELLOW CIRCULAR INDICATOR, 300mm
GREEN CIRCULAR INDICATOR, 300mm
RED ARROW INDICATOR, 300mm
YELLOW ARROW INDICATOR, 300mm
GREEN ARROW INDICATOR, 300mm
MOUNTING CONFIGURATION WITH HEAD NUMBERS
3-V 1,6,11, 12,14,15
3-VA 4,9
3-VL 2,3, 7,8
3-H 5,10,13,16
TRAFFIC CONTROL SIGNAL
CTH G & GOLF RD
WAUKESHA COUNTY
THIS SIGNAL SHALL BE TURNED OVER TO THE COUNTY OF WAUKESHA WHEN CONSTRUCTION IS COMPLETE. SIGNAL NUMBER IS 750
SCALE

BUILT IN '00

SEPAC ECOM All Data

9/14/2020
3:12:30PM

Intersection Name: **Cth DR & Cth G**

Intersection Alias: **drg**

Access Data

1 :**1200 Baud**
3 :**1200 Baud**

Access Code: **9999**

Channel: 1

Address: **0**

Revision: **2.33**

IP Address:

Phase Initialization Data

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Initial	1-Inact	4-Grn	0-None	1-Inact	1-Inact	4-Grn	0-None	1-Inact	0-None	0-None	0-None	0-None	0-None	0-None	0-None	0-None

PHASE DATA

Vehical Basic Timings							Misc Timings						Pedestrian Timings						
Phase	Min Green	Passage	Max1	Max2	Yellow	All Red	Green Delay	Yellow Delay	Walk Offset Time	Walk Offset Mode	Bike Green	Bike Psg	Walk	Ped Clr	Alt Walk	Alt Ped Clr	Flash Walk	Ext Ped Clr	Actuated Rest in Walk
1	6	1.5	20	25	3.5	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
2	10	4.5	40	50	4.1	2.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
3	0	0.0	0	0	3.5	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
4	8	3.0	30	30	4.8	2.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
5	6	1.5	20	25	3.5	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
6	10	4.5	40	50	4.1	2.0	0.0	0.0	0	0-Advance	0.0	0.0	7	25	0	0	No	0	No
7	0	0.0	0	0	3.5	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
8	8	3.0	30	30	4.8	2.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
9	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0			No	0	No
10	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0			No	0	No
11	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0			No	0	No
12	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0			No	0	No
13	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0			No	0	No
14	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0			No	0	No
15	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0			No	0	No
16	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0			No	0	No

Vehicle Density Timings							General Control				Miscellaneous					Special Sequence		
Ph.	Added Initial	Max Initial	Time B4 Redu	Car B4 Redu	Time To Redu	Min Gap	Non-Act Response	Veh Recall	Ped Recall	Recall Delay	Non Lock	Dual Entry	Last Car Pass	Condit Service	No Simu Gap Out	Omit	Minus Yel	Omit Call
1	0.0	6	20	0	0	1.5	None	None	None	0	Yes	No	No	No	No	0	0	0
2	1.2	22	22	0	18	2.0	None	Min	None	0	No	Yes	No	No	No	0	0	0
3	0.0	0	0	0	0	0.0	None	None	None	0	Yes	No	No	No	No	0	0	0
4	0.0	8	30	0	0	1.5	None	None	None	0	Yes	Yes	No	No	No	0	0	0
5	0.0	6	20	0	0	1.5	None	None	None	0	Yes	No	No	No	No	0	0	0
6	1.2	22	22	0	18	2.0	None	Min	None	0	No	Yes	No	No	No	0	0	0
7	0.0	0	0	0	0	0.0	None	None	None	0	Yes	No	No	No	No	0	0	0
8	0.0	8	30	0	0	1.5	None	None	None	0	Yes	Yes	No	No	No	0	0	0
9	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0
10	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0
11	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0
12	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0
13	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0
14	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0

15	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0
16	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0

Vehical Detector Phase Assignment

	Assign Phase	Mode	Switch Phase	Extend	Delay
Default Data					

Pedestrian Detector

	Assign Phase	Mode	Switch Phase	Extend	Delay
Default Data					

Special Detector Phase Assignment

	Assign Phase	Mode	Switch Phase	Extend	Delay
: **Default Data**					

Unit Data

General Control

Startup Time: 7 sec
Startup State: All Red
Red Revert: 2.0 sec
Auto Ped Clr: No
Stop T Reset: No
Alt Sequence: 0
Special Seq: 0-Standard

Ring	Input Respons	Output Selection
1	Ring 1	Ring 1
2	Ring 2	Ring 2
3	None	None
4	None	Ring 2

I/O Modes:

ABC Input(Entry) Modes: 0
D Input(Entry) Modes: 0
ABC Output(O/STS) Modes: 0
D Output(O/STS) Modes: 0

Remote Flash

Test A = Flash No

Phase	Entry	Exit
2		Yes
6		Yes

Default Data
- No Flash

Overlaps

Overlaps

Phase(s)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P

Start Green

Overlaps

Phase(s)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P

Ring

Phase	Ring	Next Phase
1	1	2
2	1	3
4	1	1
5	2	6
6	2	7
8	2	5

Phase(s)

Concurrent Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1	2	3	4	1	1	3	3								
	5	5	7	7	2	2	4	4								
	6	6	8	8	5	6	7	8								

Alternate Sequences

	Ph. Pair 1	Ph. Pair 2	Ph. Pair 3	Ph. Pair 4
Alt. Seq. 1	**1/2**			
Alt. Seq. 2	**3/4**			
Alt. Seq. 3	**1/2**	**3/4**		
Alt. Seq. 4	**5/6**			
Alt. Seq. 5	**1/2**	**5/6**		
Alt. Seq. 6	**3/4**	**5/6**		
Alt. Seq. 7	**1/2**	**3/4**	**5/6**	
Alt. Seq. 8	**7/8**			
Alt. Seq. 9	**1/2**	**7/8**		
Alt. Seq. 10	**3/4**	**7/8**		
Alt. Seq. 11	**1/2**	**3/4**	**7/8**	
Alt. Seq. 12	**5/6**	**7/8**		
Alt. Seq. 13	**1/2**	**5/6**	**7/8**	
Alt. Seq. 14	**3/4**	**5/6**	**7/8**	
Alt. Seq. 15	**1/2**	**3/4**	**5/6**	**7/8**

Port 1 Data

BIU Addr	Port Status	Basic Det	Message 40

Default Data

Signal Driver Ouput

Channel	Control	Hardware Pins
1	1 - Veh Phase 1	1 - Phase 1 RYG
2	2 - Veh Phase 2	2 - Phase 2 RYG
3	3 - Veh Phase 3	3 - Phase 3 RYG
4	4 - Veh Phase 4	4 - Phase 4 RYG
5	5 - Veh Phase 5	5 - Phase 5 RYG
6	6 - Veh Phase 6	6 - Phase 6 RYG
7	7 - Veh Phase 7	7 - Phase 7 RYG
8	8 - Veh Phase 8	8 - Phase 8 RYG
9	18 - Ped Phase 2	10 - Phase 2 DPW
10	20 - Ped Phase 4	12 - Phase 4 DPW
11	22 - Ped Phase 6	14 - Phase 6 DPW
12	24 - Ped Phase 8	16 - Phase 8 DPW
13	33 - Overlap A	17 - Overlap A RYG
14	34 - Overlap B	18 - Overlap B RYG
15	35 - Overlap C	19 - Overlap C RYG
16	36 - Overlap D	20 - Overlap D RYG
17	17 - Ped Phase 1	9 - Phase 1 DPW
18	19 - Ped Phase 3	11 - Phase 3 DPW
19	21 - Ped Phase 5	13 - Phase 5 DPW
20	23 - Ped Phase 7	15 - Phase 7 DPW
21	37 - Overlap E	21 - Phase 1 ONC
22	38 - Overlap F	22 - Phase 2 ONC
23	39 - Overlap G	23 - Phase 3 ONC
24	40 - Overlap H	24 - Phase 4 ONC

Coordination Data

General Coordination Data

Operation Mode: 0=Free
Coordination Mode: 0=Permissive
Maximun Mode: 2=Max 2
Correction Mode: 2=Short Way

Offset Mode: 0=Beg Grn
Force Mode: 0=Plan
Max Dwell Time: 15
Yield Period: 0

Manual Dial: 1
Manual Split: 1
Manual Offset: 1

Dial/Split	Cycle
1/1	90
2/1	75

Split Times and Phase Modes

Dial 1 / **Split** 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	23	0=Actuated	2	47	1=Coordinate	4	20	0=Actuated	5	17	0=Actuated
6	53	1=Coordinate	8	20	0=Actuated						

Dial 2 / **Split** 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	19	0=Actuated	2	39	1=Coordinate	4	17	0=Actuated	5	14	0=Actuated
6	44	1=Coordinate	8	17	0=Actuated						

Traffic Plan Data

Plan: 1/1/1	Offset Time: 38	Alternat Sequence: 0	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 2/1/1	Offset Time: 38	Alternat Sequence: 0	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		

Local TBC Data

Start of Daylight Saving Month: 3 Week: 2 Cycle Zero Reference Hours: 24 Min: 0

End of Daylight Saving Month: 11 Week: 1

Source Day	Equate Days 1	2	3	4	5	6	7
1	7	0	0	0	0	0	0
2	3	4	5	6	0	0	0

Traffic Data

Event	Day	Time	D/S/O	flash	PHASE FUNCTION 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	0:1	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2	1	9:0	2/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3	1	18:0	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
4	2	0:1	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
5	2	6:0	1/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
6	2	19:0	2/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
7	2	22:0	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

AUX. Events

Event	Program Day	Hour	Min.	Aux Ouputs 1	2	3	Det. Diag. D1	Det. Rpt. D2	Det. Mult100 D3	Dimming	Special Function Outputs 1	2	3	4	5	6	7	8
				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Default Data - No Special Day(s) or Week(s) Programmed

Special Functions

Function

SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8	SF9	SF10	SF11	SF12	SF13	SF14	SF15	SF16
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Phase Function

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Phase Omit

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Ped Omit

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Veh Det Coord ReSvc

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Function Phase Recall

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Phase Min Recall

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Veh Det Ped Recall

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Veh Det Bike Recall

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Vehicle Function

Veh Det Switch Omit	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Veh Det Switch Now	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Veh Det Switch Also	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Overlap Function

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Dimming Data

Default Data - No Dimming Programmed

Lane Defination

Lanes	Name	Green Inbound	Yellow Inbound	Red Inbound	Green Outbound	Yellow Outbound

Default Data - Lane Defination

program_day program_hour program_minute LanePhFun

Preemption Data

General Preemption Data

Flash > Preempt	Preempt 2 = Preempt 3	Preempt 4 = Preempt 5
Preempt 1 = Preempt 2	Preempt 3 = Preempt 4	Preempt 5 = Preempt 6

Preempt	NLock	Link to Pmpt	Preempt Timers Del	Ext	Dur	Max Call	Lock-Out	De Bounce	Gate Ext	Min G | W	Select Ped Clear	Yel	Red	Track Grn	Ped	Yel	Red	Dwell Green	Return Ped Clear	Yel	Red	Sel Ret Mode
1	N	0	0	0	0	0	0	0.0	0	0	0	0.0	0.0	0	0	0.0	0.0	10	0	0.0	0.0	F Aut
2	N	0	0	0	0	0	0	0.0	0	0	0	0.0	0.0	0	0	0.0	0.0	10	0	0.0	0.0	F Aut
3	N	0	0	0	0	0	0	0.0	0	0	0	0.0	0.0	0	0	0.0	0.0	10	0	0.0	0.0	F Aut
4	N	0	0	0	0	0	0	0.0	0	0	0	0.0	0.0	0	0	0.0	0.0	10	0	0.0	0.0	F Aut
5	N	0	0	0	0	0	0	0.0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0	F Aut
6	N	0	0	0	0	0	0	0.0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0	F Aut

Preempt 1			Preempt 2			Preempt 3			Preempt 4			Preempt 5			Preempt 6		
Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls
1	No	Yes	1	No	Yes	1	No	Yes	1	No	Yes	1	No	Yes	1	No	Yes
2	Yes	Yes	2	Yes	Yes	2	No	Yes	2	No	Yes	2	Yes	Yes	2	Yes	Yes
3	No	Yes	3	No	Yes	3	No	Yes	3	No	Yes	3	No	Yes	3	No	Yes
4	No	Yes	4	No	Yes	4	Yes	Yes	4	Yes	Yes	4	No	Yes	4	No	Yes
5	No	Yes	5	No	Yes	5	No	Yes	5	No	Yes	5	No	Yes	5	No	Yes
6	Yes	Yes	6	Yes	Yes	6	No	Yes	6	No	Yes	6	Yes	Yes	6	Yes	Yes
7	No	Yes	7	No	Yes	7	No	Yes	7	No	Yes	7	No	Yes	7	No	Yes
8	No	Yes	8	No	Yes	8	Yes	Yes	8	Yes	Yes	8	No	Yes	8	No	Yes

Priority Timers

Priority	Non-Locking	Delay	Extend	Free Dial	Free Split	Min Green	No Lock out	Lock out A	Lock out B	Max Green	Pre-Green	Recall	Excl-co Phase Svc.	Transit Overlap	
														Signal Type	Blankout

Priority Detector Channels

Priority

Detector

Priority Fixed Phases

Priority

Legend: 0 FALSE 1 TRUE
CO-PHASE
QJ-PHASE

Priority

Priority Bank : Level

Partial Priority	Full Priority	Recovery
Alt Seq	Freq. Override	Method
Alt Seq Enabled	Ped skip	Return
Min Walk	Force full Priority	PedWait
	Frequency	PedOverride
	Freq. Level	

Codes: 0 FALSE X TRUE

Priority :	Priority :	Priority :
Priority Bank :	Priority Bank :	Priority Bank :
Queue Phase Detector Time	Queue Phase Detector Time	Queue Phase Detector Time
Default data	Default data	Default data

Priority :	Priority :	Priority :
Priority Bank :	Priority Bank :	Priority Bank :
Queue Phase Detector Time	Queue Phase Detector Time	Queue Phase Detector Time
Default data	Default data	Default data

Priority :	Priority :
Bank	Bank
Detector PE 1A 2A 3A 4A 5A 6A B	Detector PE 1A 2A 3A 4A 5A 6A B
Default Data	Default Data

Priority :	Priority :
Bank	Bank
Detector PE 1A 2A 3A 4A 5A 6A B	Detector PE 1A 2A 3A 4A 5A 6A B
Default Data	Default Data

Priority :	Priority :
Bank	Bank
Detector PE 1A 2A 3A 4A 5A 6A B	Detector PE 1A 2A 3A 4A 5A 6A B
Default Data	Default Data

Preempt 1

Vehical Phases				Pedestrian Phases				Overlaps				
Ph.	Track	Dwell	Cycle	Ph	Track	Dwell	Cycle	Ovlp	Track	Dwell	Cycle	Trail Grn
2	Red	Green	No									
5	Red	Green	No	Default Data				Default Data				

Preempt 2

Vehical Phases				Pedestrian Phases				Overlaps				
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn
1	Red	Green	No									
6	Red	Green	No	Default Data				Default Data				

Preempt 3

Vehical Phases				Pedestrian Phases				Overlaps				
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn
4	Red	Green	No									
8	Red	Green	No	Default Data				Default Data				

Preempt 4

Vehical Phases				Pedestrian Phases				Overlaps				
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn
4	Red	Green	No									
8	Red	Green	No	Default Data				Default Data				

Preempt 5

Vehical Phases				Pedestrian Phases				Overlaps				
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn

Default Data **Default Data** **Default Data**

Preempt 6

Vehical Phases				Pedestrian Phases				Overlaps				
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn

Default Data **Default Data** **Default Data**

System/Detectors Data

Local Critical Alarms

Revert to Backup: 15 1st Phone:

Local Free: No Cycle Failure: No Coord Failure: No Conflict Flash: No Remote Flash: No 2nd Phone:

Local Fash: No Cycle Fault: No Coord Fault: No Premption: No Voltage Monitor: No

Special Status 1: No Special Status 2: No Special Status 3: No Special Status 4: No Special Status 5: No Special Status 6: No

Traffic Responsive

System Detector	Detector Channel	Name	Veh/ Hr	Average Time(mins)	Occupancy Correction/10	Min Volume %	Queue 1 Detectors	System Detectors	Weight Factor	Queue 2 Detectors	System Detectors	Weight Factor

Default Data **Default Data** **Default Data**

Sample Interval: 0

Queue: 1 Input Selection: 0=Average

Detector Failed Level : 0

Queue: 2 Input Selection: 0=Average

Detector Failed Level : 0

Queue:

Level	Enter	Leave	Dial / Split / Offset
			/ /

Default Data

Vehical Detector Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count

Vehical Detector Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Special Detector Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count

Default Data - Diag 0 Values **Default Data - No Diag 1 Values** **Default Data - No Diag 0 Valu**

Pedestrian Detector Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count

Pedestrian Detector Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Special Detector Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 0 Values **Default Data - No Diag 1 Values** **Default Data - No Diag 1 Values**

Speed Trap Data

Speed Trap:

Measurement:

Detector 1 Detector_2 Distance :

Dial/Split/Offset

//

Default Data

Speed Trap Low Treshold	Speed Trap High Treshold

Default Data

Volume Detector Data

Report Interval 0

Volume Detector Number	Controller Detector Channel

Default Data

APPENDIX C

Year 2022 Existing Traffic Analysis Outputs

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	35	25	45	20	15	45	300	80	25	250	20
Future Volume (vph)	15	35	25	45	20	15	45	300	80	25	250	20
Ideal Flow (vphpl)	1900	1996	1900	1900	1914	1914	1900	1893	1900	1900	1893	1900
Storage Length (ft)	100		100	225		0	235		50	200		50
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	75			75			75			75		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00	0.99		1.00		0.98	1.00		0.98
Frt			0.850		0.935				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1938	1568	1687	1662	0	1719	3425	1538	1770	3526	1583
Flt Permitted	0.870			0.870			0.557			0.562		
Satd. Flow (perm)	1603	1938	1545	1543	1662	0	1007	3425	1504	1046	3526	1548
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		50			45			35			35	
Link Distance (ft)		657			1139			553			943	
Travel Time (s)		9.0			17.3			10.8			18.4	
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			1			1			1			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	62%	100%	100%	62%
Heavy Vehicles (%)	3%	3%	3%	7%	7%	7%	5%	5%	5%	2%	2%	2%
Adj. Flow (vph)	16	36	16	47	21	16	47	313	52	26	260	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	36	16	47	37	0	47	313	52	26	260	13
Enter Blocked Intersection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			42			42	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	

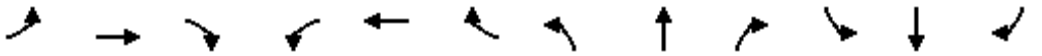
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8			6		6	2		2
Detector Phase	4	4	4	8	8		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		6.0	10.0	10.0	6.0	10.0	10.0
Minimum Split (s)	14.8	14.8	14.8	14.8	14.8		9.5	16.1	16.1	9.5	16.1	16.1
Total Split (s)	30.0	30.0	30.0	30.0	30.0		25.0	50.0	50.0	25.0	50.0	50.0
Total Split (%)	28.6%	28.6%	28.6%	28.6%	28.6%		23.8%	47.6%	47.6%	23.8%	47.6%	47.6%
Maximum Green (s)	23.2	23.2	23.2	23.2	23.2		21.5	43.9	43.9	21.5	43.9	43.9
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8		3.5	4.1	4.1	3.5	4.1	4.1
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		0.0	2.0	2.0	0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8		3.5	6.1	6.1	3.5	6.1	6.1
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		1.5	4.5	4.5	1.5	4.5	4.5
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5		1.5	2.0	2.0	1.5	2.0	2.0
Time Before Reduce (s)	30.0	30.0	30.0	30.0	30.0		20.0	22.0	22.0	20.0	22.0	22.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0	18.0	18.0	0.0	18.0	18.0
Recall Mode	None	None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)	8.4	8.4	8.4	8.4	8.4		22.9	22.2	22.2	22.3	20.5	20.5
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.24		0.65	0.63	0.63	0.63	0.58	0.58
v/c Ratio	0.04	0.08	0.04	0.13	0.09		0.06	0.15	0.06	0.03	0.13	0.01
Control Delay	14.0	13.9	14.1	14.4	14.1		4.6	7.5	8.6	4.6	9.2	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.0	13.9	14.1	14.4	14.1		4.6	7.5	8.6	4.6	9.2	10.8
LOS	B	B	B	B	B		A	A	A	A	A	B
Approach Delay		14.0			14.3			7.3			8.9	
Approach LOS		B			B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 35.5			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.15			
Intersection Signal Delay: 9.0		Intersection LOS: A	
Intersection Capacity Utilization 38.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 100: CTH G & CTH DR/Golf Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	16	36	16	47	37	47	313	52	26	260	13
v/c Ratio	0.04	0.08	0.04	0.13	0.09	0.06	0.15	0.06	0.03	0.13	0.01
Control Delay	14.0	13.9	14.1	14.4	14.1	4.6	7.5	8.6	4.6	9.2	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.0	13.9	14.1	14.4	14.1	4.6	7.5	8.6	4.6	9.2	10.8
Queue Length 50th (ft)	2	4	2	6	4	4	18	6	2	15	1
Queue Length 95th (ft)	15	25	15	31	26	13	56	27	9	47	11
Internal Link Dist (ft)		577			1059		473			863	
Turn Bay Length (ft)	100		100	225		235		50	200		50
Base Capacity (vph)	1082	1309	1043	1042	1122	1169	3395	1491	1204	3495	1534
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.03	0.02	0.05	0.03	0.04	0.09	0.03	0.02	0.07	0.01

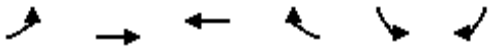
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	35	25	45	20	15	45	300	80	25	250	20
Future Volume (veh/h)	15	35	25	45	20	15	45	300	80	25	250	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1949	1856	1796	1810	1810	1826	1819	1826	1870	1863	1870
Adj Flow Rate, veh/h	16	36	16	47	21	16	47	312	52	26	260	13
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	7	7	7	5	5	5	2	2	2
Cap, veh/h	422	345	275	417	168	128	566	1080	473	524	1019	446
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.06	0.31	0.31	0.04	0.29	0.29
Sat Flow, veh/h	1358	1949	1550	1297	946	721	1739	3456	1512	1781	3541	1549
Grp Volume(v), veh/h	16	36	16	47	0	37	47	312	52	26	260	13
Grp Sat Flow(s),veh/h/ln	1358	1949	1550	1297	0	1667	1739	1728	1512	1781	1770	1549
Q Serve(g_s), s	0.3	0.5	0.3	1.1	0.0	0.6	0.6	2.4	0.9	0.3	2.0	0.2
Cycle Q Clear(g_c), s	1.0	0.5	0.3	1.6	0.0	0.6	0.6	2.4	0.9	0.3	2.0	0.2
Prop In Lane	1.00		1.00	1.00		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	422	345	275	417	0	295	566	1080	473	524	1019	446
V/C Ratio(X)	0.04	0.10	0.06	0.11	0.00	0.13	0.08	0.29	0.11	0.05	0.26	0.03
Avail Cap(c_a), veh/h	1089	1302	1035	1053	0	1113	1533	4367	1911	1558	4474	1957
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.4	12.0	11.9	12.7	0.0	12.0	7.6	9.0	8.5	8.0	9.5	8.9
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.1	0.0	0.2	0.0	0.3	0.2	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.3	0.1	0.4	0.0	0.3	0.3	1.2	0.4	0.2	1.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.5	12.1	12.0	12.8	0.0	12.2	7.6	9.3	8.7	8.1	9.7	8.9
LnGrp LOS	B	B	B	B	A	B	A	A	A	A	A	A
Approach Vol, veh/h		68			84			411			299	
Approach Delay, s/veh		12.2			12.5			9.0			9.6	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	16.1		13.0	4.8	17.0		13.0				
Change Period (Y+Rc), s	3.5	6.1		6.8	3.5	6.1		6.8				
Max Green Setting (Gmax), s	21.5	43.9		23.2	21.5	43.9		23.2				
Max Q Clear Time (g_c+I1), s	2.6	4.0		3.0	2.3	4.4		3.6				
Green Ext Time (p_c), s	0.0	3.0		0.2	0.0	3.9		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		9.8	
HCM 6th LOS		A	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	75	85	0	0	0
Future Volume (vph)	0	75	85	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			100	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	75				75	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1845	1776	0	1863	0
Flt Permitted						
Satd. Flow (perm)	0	1845	1776	0	1863	0
Link Speed (mph)		50	50		25	
Link Distance (ft)		758	657		466	
Travel Time (s)		10.3	9.0		12.7	
Confl. Peds. (#/hr)	1			1	1	1
Confl. Bikes (#/hr)				1		1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	3%	3%	7%	7%	2%	2%
Adj. Flow (vph)	0	78	89	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	78	89	0	0	0
Enter Blocked Intersection	Yes	Yes	Yes	Yes	Yes	Yes
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 15.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	75	85	0	0	0
Future Vol, veh/h	0	75	85	0	0	0
Conflicting Peds, #/hr	1	0	0	1	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	7	7	2	2
Mvmt Flow	0	78	89	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	90	0	-	0	169	91
Stage 1	-	-	-	-	90	-
Stage 2	-	-	-	-	79	-
Critical Hdwy	4.13	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.227	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1499	-	-	-	821	967
Stage 1	-	-	-	-	934	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1498	-	-	-	819	965
Mov Cap-2 Maneuver	-	-	-	-	819	-
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	943	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1498	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	30	35	60	55	25	50	350	60	15	345	25
Future Volume (vph)	25	30	35	60	55	25	50	350	60	15	345	25
Ideal Flow (vphpl)	1900	1996	1900	1900	1914	1914	1900	1893	1900	1900	1893	1900
Storage Length (ft)	100		100	225		0	235		50	200		50
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	75			75			75			75		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00	1.00		1.00		0.98	1.00		0.98
Frt			0.850		0.954				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1976	1599	1752	1765	0	1770	3526	1583	1770	3526	1583
Flt Permitted	0.702			0.736			0.501			0.533		
Satd. Flow (perm)	1319	1976	1576	1356	1765	0	933	3526	1548	992	3526	1548
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		50			45			35			35	
Link Distance (ft)		657			1139			553			943	
Travel Time (s)		9.0			17.3			10.8			18.4	
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			1			1			1			1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	62%	100%	100%	62%
Heavy Vehicles (%)	1%	1%	1%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	26	32	23	63	58	26	53	368	39	16	363	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	32	23	63	84	0	53	368	39	16	363	16
Enter Blocked Intersection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			42			42	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	

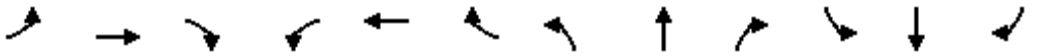
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8			6		6	2		2
Detector Phase	4	4	4	8	8		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		6.0	10.0	10.0	6.0	10.0	10.0
Minimum Split (s)	14.8	14.8	14.8	14.8	14.8		9.5	16.1	16.1	9.5	16.1	16.1
Total Split (s)	30.0	30.0	30.0	30.0	30.0		25.0	50.0	50.0	25.0	50.0	50.0
Total Split (%)	28.6%	28.6%	28.6%	28.6%	28.6%		23.8%	47.6%	47.6%	23.8%	47.6%	47.6%
Maximum Green (s)	23.2	23.2	23.2	23.2	23.2		21.5	43.9	43.9	21.5	43.9	43.9
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8		3.5	4.1	4.1	3.5	4.1	4.1
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		0.0	2.0	2.0	0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8		3.5	6.1	6.1	3.5	6.1	6.1
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		1.5	4.5	4.5	1.5	4.5	4.5
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5		1.5	2.0	2.0	1.5	2.0	2.0
Time Before Reduce (s)	30.0	30.0	30.0	30.0	30.0		20.0	22.0	22.0	20.0	22.0	22.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0	18.0	18.0	0.0	18.0	18.0
Recall Mode	None	None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)	8.6	8.6	8.6	8.6	8.6		20.8	18.6	18.6	20.2	17.0	17.0
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.23		0.56	0.50	0.50	0.54	0.46	0.46
v/c Ratio	0.08	0.07	0.06	0.20	0.20		0.08	0.21	0.05	0.02	0.22	0.02
Control Delay	15.0	14.4	14.7	15.9	15.3		5.0	8.6	8.9	4.6	10.3	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.0	14.4	14.7	15.9	15.3		5.0	8.6	8.9	4.6	10.3	10.7
LOS	B	B	B	B	B		A	A	A	A	B	B
Approach Delay		14.7			15.6			8.2			10.1	
Approach LOS		B			B			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 37.1			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.22			
Intersection Signal Delay: 10.4		Intersection LOS: B	
Intersection Capacity Utilization 39.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 100: CTH G & CTH DR/Golf Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	26	32	23	63	84	53	368	39	16	363	16
v/c Ratio	0.08	0.07	0.06	0.20	0.20	0.08	0.21	0.05	0.02	0.22	0.02
Control Delay	15.0	14.4	14.7	15.9	15.3	5.0	8.6	8.9	4.6	10.3	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.0	14.4	14.7	15.9	15.3	5.0	8.6	8.9	4.6	10.3	10.7
Queue Length 50th (ft)	3	4	3	8	11	5	22	4	1	22	2
Queue Length 95th (ft)	21	24	19	40	48	15	66	23	7	65	13
Internal Link Dist (ft)		577			1059		473			863	
Turn Bay Length (ft)	100		100	225		235		50	200		50
Base Capacity (vph)	855	1281	1021	879	1144	1138	3468	1523	1143	3468	1523
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.02	0.02	0.07	0.07	0.05	0.11	0.03	0.01	0.10	0.01

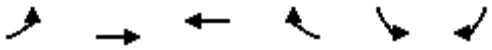
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	30	35	60	55	25	50	350	60	15	345	25
Future Volume (veh/h)	25	30	35	60	55	25	50	350	60	15	345	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1980	1885	1856	1869	1869	1870	1863	1870	1870	1863	1870
Adj Flow Rate, veh/h	26	32	23	63	58	26	53	368	39	16	363	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	3	3	3	2	2	2	2	2	2
Cap, veh/h	410	395	314	448	242	109	517	1137	498	481	982	429
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.07	0.32	0.32	0.02	0.28	0.28
Sat Flow, veh/h	1323	1980	1575	1336	1216	545	1781	3541	1549	1781	3541	1548
Grp Volume(v), veh/h	26	32	23	63	0	84	53	368	39	16	363	16
Grp Sat Flow(s),veh/h/ln	1323	1980	1575	1336	0	1762	1781	1770	1549	1781	1770	1548
Q Serve(g_s), s	0.6	0.5	0.4	1.5	0.0	1.4	0.7	2.8	0.6	0.2	3.0	0.3
Cycle Q Clear(g_c), s	2.1	0.5	0.4	1.9	0.0	1.4	0.7	2.8	0.6	0.2	3.0	0.3
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	410	395	314	448	0	351	517	1137	498	481	982	429
V/C Ratio(X)	0.06	0.08	0.07	0.14	0.00	0.24	0.10	0.32	0.08	0.03	0.37	0.04
Avail Cap(c_a), veh/h	998	1274	1013	1042	0	1134	1457	4311	1886	1499	4311	1885
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	11.7	11.7	12.5	0.0	12.1	8.0	9.3	8.5	8.9	10.5	9.5
Incr Delay (d2), s/veh	0.1	0.1	0.1	0.1	0.0	0.3	0.0	0.3	0.1	0.0	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.3	0.2	0.6	0.0	0.8	0.3	1.4	0.3	0.1	1.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	11.8	11.8	12.7	0.0	12.5	8.1	9.5	8.6	8.9	10.9	9.6
LnGrp LOS	B	B	B	B	A	B	A	A	A	A	B	A
Approach Vol, veh/h		81			147			460			395	
Approach Delay, s/veh		12.2			12.6			9.3			10.8	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	16.1		14.0	4.4	17.7		14.0				
Change Period (Y+Rc), s	3.5	6.1		6.8	3.5	6.1		6.8				
Max Green Setting (Gmax), s	21.5	43.9		23.2	21.5	43.9		23.2				
Max Q Clear Time (g_c+I1), s	2.7	5.0		4.1	2.2	4.8		3.9				
Green Ext Time (p_c), s	0.0	4.3		0.2	0.0	4.6		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		10.5	
HCM 6th LOS		B	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	90	130	0	0	0
Future Volume (vph)	0	90	130	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			100	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	75				75	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1881	1845	0	1863	0
Flt Permitted						
Satd. Flow (perm)	0	1881	1845	0	1863	0
Link Speed (mph)		50	50		30	
Link Distance (ft)		758	657		466	
Travel Time (s)		10.3	9.0		10.6	
Confl. Peds. (#/hr)	1			1	1	1
Confl. Bikes (#/hr)				1		1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	3%	3%	2%	2%
Adj. Flow (vph)	0	95	137	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	95	137	0	0	0
Enter Blocked Intersection	Yes	Yes	Yes	Yes	Yes	Yes
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 17.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	90	130	0	0	0
Future Vol, veh/h	0	90	130	0	0	0
Conflicting Peds, #/hr	1	0	0	1	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	3	3	2	2
Mvmt Flow	0	95	137	0	0	0

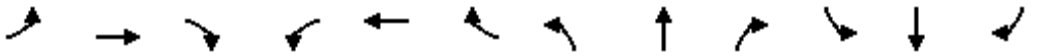
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	138	0	-	0	234	139
Stage 1	-	-	-	-	138	-
Stage 2	-	-	-	-	96	-
Critical Hdwy	4.11	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.209	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1452	-	-	-	754	909
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	928	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1451	-	-	-	752	907
Mov Cap-2 Maneuver	-	-	-	-	752	-
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	927	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1451	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

APPENDIX D

Year 2022 Build Traffic Analysis Outputs



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	35	30	45	20	15	55	300	80	25	250	25
Future Volume (vph)	15	35	30	45	20	15	55	300	80	25	250	25
Ideal Flow (vphpl)	1900	1996	1900	1900	1914	1914	1900	1893	1900	1900	1893	1900
Storage Length (ft)	100		100	225		0	235		50	200		50
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	75			75			75			75		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00		0.99	1.00	0.99		1.00		0.98	1.00		0.98
Frt			0.850		0.935				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1938	1568	1687	1662	0	1719	3425	1538	1770	3526	1583
Flt Permitted	0.870			0.870			0.557			0.562		
Satd. Flow (perm)	1603	1938	1545	1543	1662	0	1007	3425	1504	1046	3526	1548
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		50			45			35			35	
Link Distance (ft)		657			1139			553			943	
Travel Time (s)		9.0			17.3			10.8			18.4	
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			1			1			1			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	62%	100%	100%	62%
Heavy Vehicles (%)	3%	3%	3%	7%	7%	7%	5%	5%	5%	2%	2%	2%
Adj. Flow (vph)	16	36	19	47	21	16	57	313	52	26	260	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	36	19	47	37	0	57	313	52	26	260	16
Enter Blocked Intersection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			42			42	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	

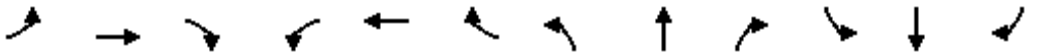
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8			6		6	2		2
Detector Phase	4	4	4	8	8		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		6.0	10.0	10.0	6.0	10.0	10.0
Minimum Split (s)	14.8	14.8	14.8	14.8	14.8		9.5	16.1	16.1	9.5	16.1	16.1
Total Split (s)	30.0	30.0	30.0	30.0	30.0		25.0	50.0	50.0	25.0	50.0	50.0
Total Split (%)	28.6%	28.6%	28.6%	28.6%	28.6%		23.8%	47.6%	47.6%	23.8%	47.6%	47.6%
Maximum Green (s)	23.2	23.2	23.2	23.2	23.2		21.5	43.9	43.9	21.5	43.9	43.9
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8		3.5	4.1	4.1	3.5	4.1	4.1
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		0.0	2.0	2.0	0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8		3.5	6.1	6.1	3.5	6.1	6.1
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		1.5	4.5	4.5	1.5	4.5	4.5
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5		1.5	2.0	2.0	1.5	2.0	2.0
Time Before Reduce (s)	30.0	30.0	30.0	30.0	30.0		20.0	22.0	22.0	20.0	22.0	22.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0	18.0	18.0	0.0	18.0	18.0
Recall Mode	None	None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)	8.5	8.5	8.5	8.5	8.5		22.6	21.9	21.9	22.0	20.3	20.3
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.24		0.64	0.62	0.62	0.63	0.58	0.58
v/c Ratio	0.04	0.08	0.05	0.13	0.09		0.07	0.15	0.06	0.03	0.13	0.02
Control Delay	14.0	13.9	14.1	14.4	14.1		4.6	7.5	8.6	4.6	9.2	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.0	13.9	14.1	14.4	14.1		4.6	7.5	8.6	4.6	9.2	10.7
LOS	B	B	B	B	B		A	A	A	A	A	B
Approach Delay		14.0			14.2			7.2			8.9	
Approach LOS		B			B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 35.1			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.15			
Intersection Signal Delay: 9.0		Intersection LOS: A	
Intersection Capacity Utilization 38.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 100: CTH G & CTH DR/Golf Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	16	36	19	47	37	57	313	52	26	260	16
v/c Ratio	0.04	0.08	0.05	0.13	0.09	0.07	0.15	0.06	0.03	0.13	0.02
Control Delay	14.0	13.9	14.1	14.4	14.1	4.6	7.5	8.6	4.6	9.2	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.0	13.9	14.1	14.4	14.1	4.6	7.5	8.6	4.6	9.2	10.7
Queue Length 50th (ft)	2	4	2	6	4	5	18	6	2	15	2
Queue Length 95th (ft)	15	25	17	31	26	15	56	27	9	47	12
Internal Link Dist (ft)		577			1059		473			863	
Turn Bay Length (ft)	100		100	225		235		50	200		50
Base Capacity (vph)	1102	1332	1062	1060	1142	1175	3395	1491	1210	3495	1534
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.03	0.02	0.04	0.03	0.05	0.09	0.03	0.02	0.07	0.01

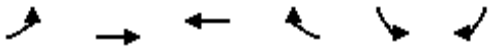
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	35	30	45	20	15	55	300	80	25	250	25
Future Volume (veh/h)	15	35	30	45	20	15	55	300	80	25	250	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1949	1856	1796	1810	1810	1826	1819	1826	1870	1863	1870
Adj Flow Rate, veh/h	16	36	19	47	21	16	57	312	52	26	260	16
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	7	7	7	5	5	5	2	2	2
Cap, veh/h	420	346	275	414	168	128	576	1101	482	528	1006	440
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.07	0.32	0.32	0.04	0.28	0.28
Sat Flow, veh/h	1358	1949	1550	1293	946	721	1739	3456	1512	1781	3541	1549
Grp Volume(v), veh/h	16	36	19	47	0	37	57	312	52	26	260	16
Grp Sat Flow(s),veh/h/ln	1358	1949	1550	1293	0	1667	1739	1728	1512	1781	1770	1549
Q Serve(g_s), s	0.4	0.5	0.4	1.1	0.0	0.7	0.8	2.4	0.9	0.4	2.0	0.3
Cycle Q Clear(g_c), s	1.0	0.5	0.4	1.7	0.0	0.7	0.8	2.4	0.9	0.4	2.0	0.3
Prop In Lane	1.00		1.00	1.00		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	420	346	275	414	0	296	576	1101	482	528	1006	440
V/C Ratio(X)	0.04	0.10	0.07	0.11	0.00	0.13	0.10	0.28	0.11	0.05	0.26	0.04
Avail Cap(c_a), veh/h	1074	1285	1021	1037	0	1099	1511	4310	1886	1547	4415	1931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.6	12.1	12.1	12.8	0.0	12.2	7.6	9.0	8.5	8.2	9.7	9.1
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.1	0.0	0.2	0.0	0.2	0.2	0.0	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.3	0.2	0.4	0.0	0.3	0.3	1.2	0.4	0.2	1.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.6	12.3	12.2	13.0	0.0	12.4	7.6	9.2	8.6	8.2	10.0	9.2
LnGrp LOS	B	B	B	B	A	B	A	A	A	A	A	A
Approach Vol, veh/h		71			84			421			302	
Approach Delay, s/veh		12.3			12.7			8.9			9.8	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	16.1		13.0	4.8	17.3		13.0				
Change Period (Y+Rc), s	3.5	6.1		6.8	3.5	6.1		6.8				
Max Green Setting (Gmax), s	21.5	43.9		23.2	21.5	43.9		23.2				
Max Q Clear Time (g_c+I1), s	2.8	4.0		3.0	2.4	4.4		3.7				
Green Ext Time (p_c), s	0.0	3.0		0.2	0.0	3.9		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		9.9	
HCM 6th LOS		A	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	75	85	15	5	1
Future Volume (vph)	1	75	85	15	5	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			100	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	75				75	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.979		0.977	
Flt Protected		0.999			0.960	
Satd. Flow (prot)	0	1843	1738	0	1747	0
Flt Permitted		0.999			0.960	
Satd. Flow (perm)	0	1843	1738	0	1747	0
Link Speed (mph)		50	50		25	
Link Distance (ft)		758	657		466	
Travel Time (s)		10.3	9.0		12.7	
Confl. Peds. (#/hr)	1			1	1	1
Confl. Bikes (#/hr)				1		1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	3%	3%	7%	7%	2%	2%
Adj. Flow (vph)	1	78	89	16	5	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	79	105	0	6	0
Enter Blocked Intersection	Yes	Yes	Yes	Yes	Yes	Yes
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 16.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	75	85	15	5	1
Future Vol, veh/h	1	75	85	15	5	1
Conflicting Peds, #/hr	1	0	0	1	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	7	7	2	2
Mvmt Flow	1	78	89	16	5	1

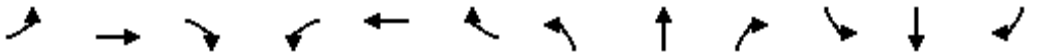
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	106	0	-	0	179	99
Stage 1	-	-	-	-	98	-
Stage 2	-	-	-	-	81	-
Critical Hdwy	4.13	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.227	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1479	-	-	-	811	957
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	942	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1478	-	-	-	809	955
Mov Cap-2 Maneuver	-	-	-	-	809	-
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	941	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1478	-	-	-	830
HCM Lane V/C Ratio	0.001	-	-	-	0.008
HCM Control Delay (s)	7.4	0	-	-	9.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	32	32	29	63	84	58	368	39	16	363	20
v/c Ratio	0.10	0.07	0.08	0.20	0.20	0.09	0.21	0.05	0.02	0.22	0.03
Control Delay	15.1	14.4	14.8	15.9	15.3	5.0	8.6	8.9	4.6	10.3	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.1	14.4	14.8	15.9	15.3	5.0	8.6	8.9	4.6	10.3	10.7
Queue Length 50th (ft)	4	4	4	8	11	5	22	4	1	22	2
Queue Length 95th (ft)	25	24	22	40	48	16	66	23	7	65	15
Internal Link Dist (ft)		577			1059		473			863	
Turn Bay Length (ft)	100		100	225		235		50	200		50
Base Capacity (vph)	855	1281	1021	879	1144	1138	3468	1523	1143	3468	1523
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.02	0.03	0.07	0.07	0.05	0.11	0.03	0.01	0.10	0.01

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	30	45	60	55	25	55	350	60	15	345	30
Future Volume (veh/h)	30	30	45	60	55	25	55	350	60	15	345	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1980	1885	1856	1869	1869	1870	1863	1870	1870	1863	1870
Adj Flow Rate, veh/h	32	32	29	63	58	26	58	368	39	16	363	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	3	3	3	2	2	2	2	2	2
Cap, veh/h	410	397	316	447	244	109	521	1146	501	482	974	426
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.07	0.32	0.32	0.02	0.28	0.28
Sat Flow, veh/h	1323	1980	1575	1329	1216	545	1781	3541	1549	1781	3541	1548
Grp Volume(v), veh/h	32	32	29	63	0	84	58	368	39	16	363	20
Grp Sat Flow(s),veh/h/ln	1323	1980	1575	1329	0	1762	1781	1770	1549	1781	1770	1548
Q Serve(g_s), s	0.8	0.5	0.5	1.5	0.0	1.5	0.8	2.9	0.6	0.2	3.0	0.3
Cycle Q Clear(g_c), s	2.2	0.5	0.5	1.9	0.0	1.5	0.8	2.9	0.6	0.2	3.0	0.3
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	410	397	316	447	0	353	521	1146	501	482	974	426
V/C Ratio(X)	0.08	0.08	0.09	0.14	0.00	0.24	0.11	0.32	0.08	0.03	0.37	0.05
Avail Cap(c_a), veh/h	989	1264	1005	1029	0	1124	1444	4276	1871	1491	4276	1870
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	11.8	11.8	12.6	0.0	12.2	8.0	9.3	8.5	9.0	10.6	9.7
Incr Delay (d2), s/veh	0.1	0.1	0.1	0.1	0.0	0.3	0.0	0.3	0.1	0.0	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	0.3	0.3	0.6	0.0	0.8	0.4	1.4	0.3	0.1	1.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.2	11.9	12.0	12.7	0.0	12.5	8.0	9.6	8.6	9.0	11.0	9.8
LnGrp LOS	B	B	B	B	A	B	A	A	A	A	B	A
Approach Vol, veh/h		93			147			465			399	
Approach Delay, s/veh		12.4			12.6			9.3			10.9	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	16.1		14.1	4.4	17.9		14.1				
Change Period (Y+Rc), s	3.5	6.1		6.8	3.5	6.1		6.8				
Max Green Setting (Gmax), s	21.5	43.9		23.2	21.5	43.9		23.2				
Max Q Clear Time (g_c+I1), s	2.8	5.0		4.2	2.2	4.9		3.9				
Green Ext Time (p_c), s	0.0	4.3		0.2	0.0	4.6		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		10.6	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	90	130	10	15	1
Future Vol, veh/h	1	90	130	10	15	1
Conflicting Peds, #/hr	1	0	0	1	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	3	3	2	2
Mvmt Flow	1	95	137	11	16	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	149	0	-	0	242	145
Stage 1	-	-	-	-	144	-
Stage 2	-	-	-	-	98	-
Critical Hdwy	4.11	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.209	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1439	-	-	-	746	902
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	926	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1438	-	-	-	744	900
Mov Cap-2 Maneuver	-	-	-	-	744	-
Stage 1	-	-	-	-	881	-
Stage 2	-	-	-	-	925	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1438	-	-	-	752
HCM Lane V/C Ratio	0.001	-	-	-	0.022
HCM Control Delay (s)	7.5	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

APPENDIX E

Left-turn Lane Warrant Backup
Right-turn Lane Warrant Backup

OPERATIONAL WARRANTS FOR LEFT-TURN LANES AT INTERSECTIONS ON TWO-LANE HIGHWAYS

Project:
Scenario: 2022 Full Build
Analyst: TJM
Date:

Location	Operating Speed (mph)	Opposing Volume (veh/hr)	Advancing Volume (veh/hr)	Left-Turn Volume (veh/hr)	Calculated Left-Turn Percentage**	Advancing Volume Threshold* (veh/hr)	Is Advancing Volume Threshold Met?	By How Much?
2022 - CTH DR @ Proposed Drive - AM Peak	50	100	75	5	6.7%	557	NO	short 482 veh/hr
2022 - CTH DR @ Proposed Drive - PM Peak	50	140	90	5	5.6%	567	NO	short 477 veh/hr

** Advanced volume threshold based on exponential trendlines fit to the data in WisDOT FDM 11-25 Table 5.1. As a result, thresholds may differ slightly from data provided in Table 5.1.*

*** Calculated left-turn percentage must be between 5 and 40 percent to provide threshold.*

Notes

Operating speed is posted speed limit plus 5-mph.
Opposing volume = Opposing Through and Right
Advancing Volume = Advancing Left, Through, and Right

* For AM/PM Peak volumes, 5 left-turning vehicles were shown (actual is 0) in order for threshold to be shown. Left-turn warrant is NOT needed.

igure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

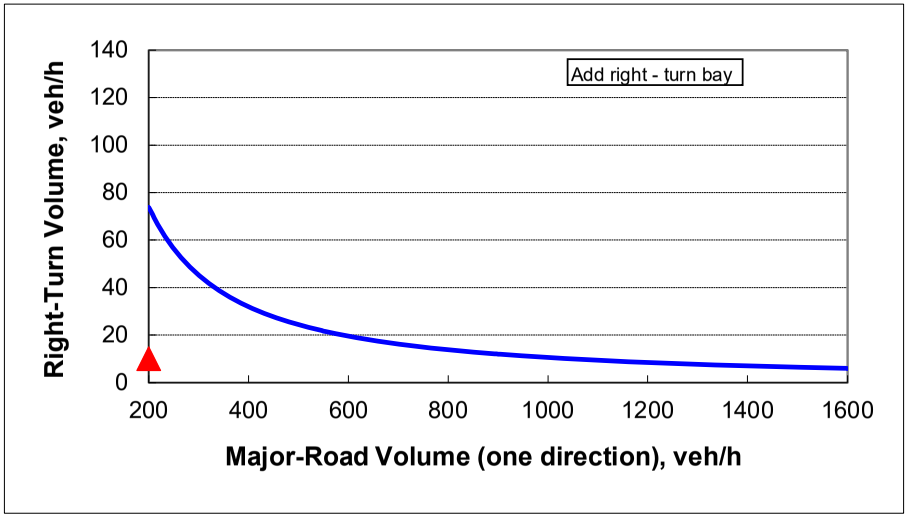
INPUT

Roadway geometry:	2-lane roadw ay

Variable	Value
Major-road speed, mph:	50
Major-road volume (one direction), veh/h:	200
Right-turn volume, veh/h:	10

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	74
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



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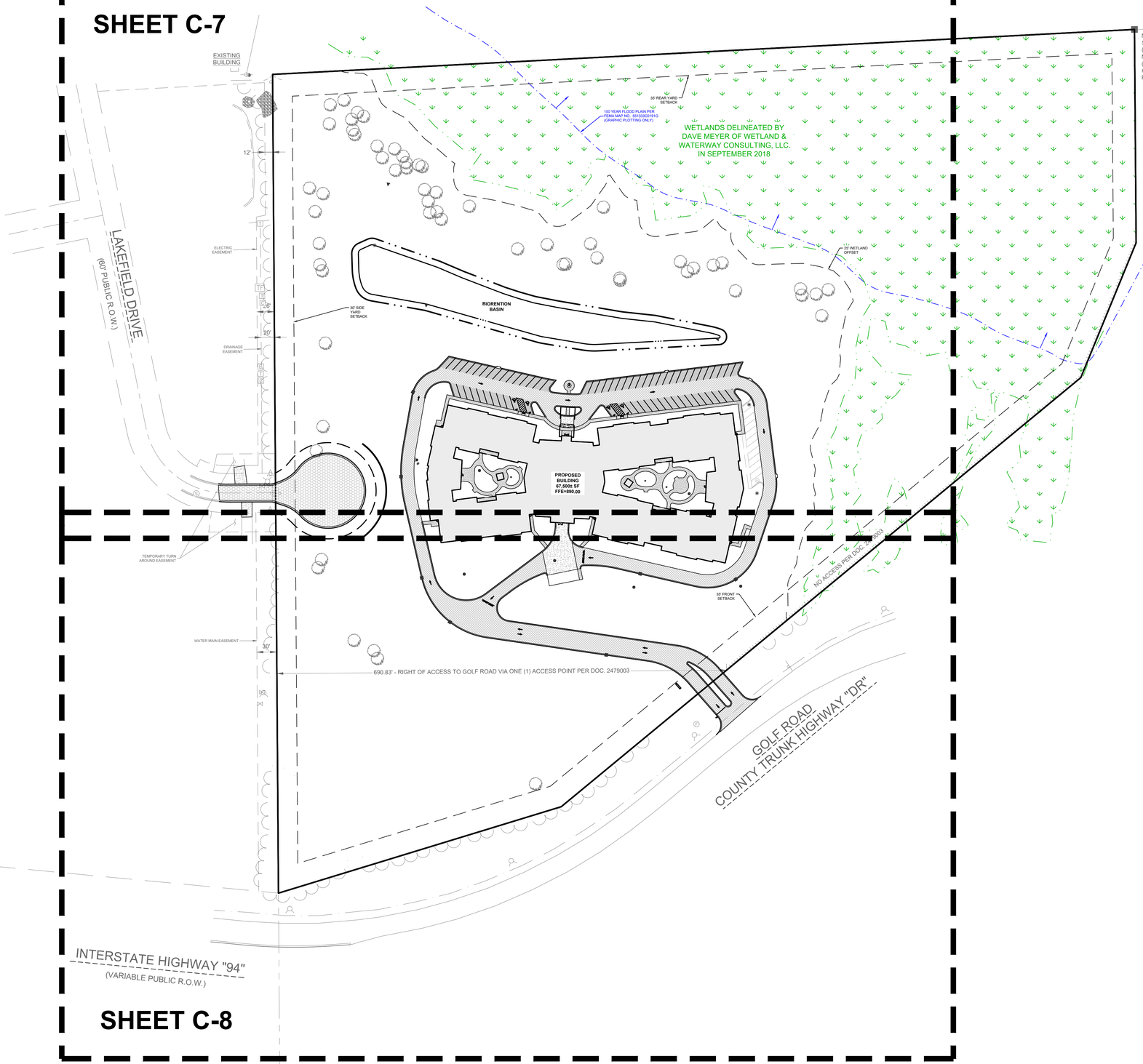
SHEET C-7



SHEET C-8

LEGEND

- **LIGHT DUTY ASPHALT PAVEMENT**
  - 8" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 3" HMA PAVEMENT (2 LIFTS)
    - 2" BINDER COURSE - 3 LT 58-28 S
    - 1" SURFACE COURSE - 5 LT 58-28 S
- **HEAVY DUTY ASPHALT PAVEMENT**
  - 10" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 4" HMA PAVEMENT (2 LIFTS)
    - 2 ½" BINDER COURSE - 3 LT 58-28 S
    - 1 ½" SURFACE COURSE - 5 LT 58-28 S
- **CONCRETE PAVEMENT**
  - 6" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 6" PCC
- **CONCRETE SIDEWALK**
  - 4" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 5" PCC
- **PAVEMENT IN THE PUBLIC RIGHT OF WAY**
  - CONTRACTOR TO MATCH LATEST CITY SPEC

(A) 4" WHITE STRIPE
(B) 4" DIAGONAL AT 45° SPACED 2' O.C.
(C) BOLLARD MOUNTED ADA SIGN (SEE DETAIL)
(D) 18" CURB & GUTTER (SEE DETAIL)
(E) 18" REVERSE CURB & GUTTER (SEE DETAIL)
(F) ADA COMPLIANT RAMP W/ TRUNCATED DOMES (SEE DETAIL). TAPER CURB HEAD AND DEPRESS WALK/CURB
(G) ADA STALL INSIGNIA
(H) CONCRETE WHEEL STOP (SEE DETAIL)
(16) PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)

SITE DATA

SITE AREA:	28.37 AC
TOTAL DISTURBED AREA:	14.98 AC
PROPOSED CAR PARKING SPACES:	68 SPACES (4 ADA SPOTS)
PROPOSED PAVEMENT AREA:	1.86 AC
PROPOSED TOTAL IMPERVIOUS:	3.40 AC = 12%
PROPOSED GREEN SPACE:	24.97 AC = 88%
FLOOR AREA RATIO:	1.55 AC = 6%

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 80' 160'

DRAFTED: DMS
DESIGNED: ACT
REVIEWED:

PLAN | DESIGN | DELIVER
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(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

SITE DIMENSIONAL & PAVING OVERVIEW

REVISIONS

1	UPDATED PC SUMBITTAL	04/12/23			

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 80'

SHEET
C-6
C-18

SITE DIMENSIONAL & PAVING OVERVIEW

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Z:\PROJECTS\2018\1338.10-WI\CAD\SHEETS\1338.10 SITE DIMENSIONAL & PAVING PLAN.DWG

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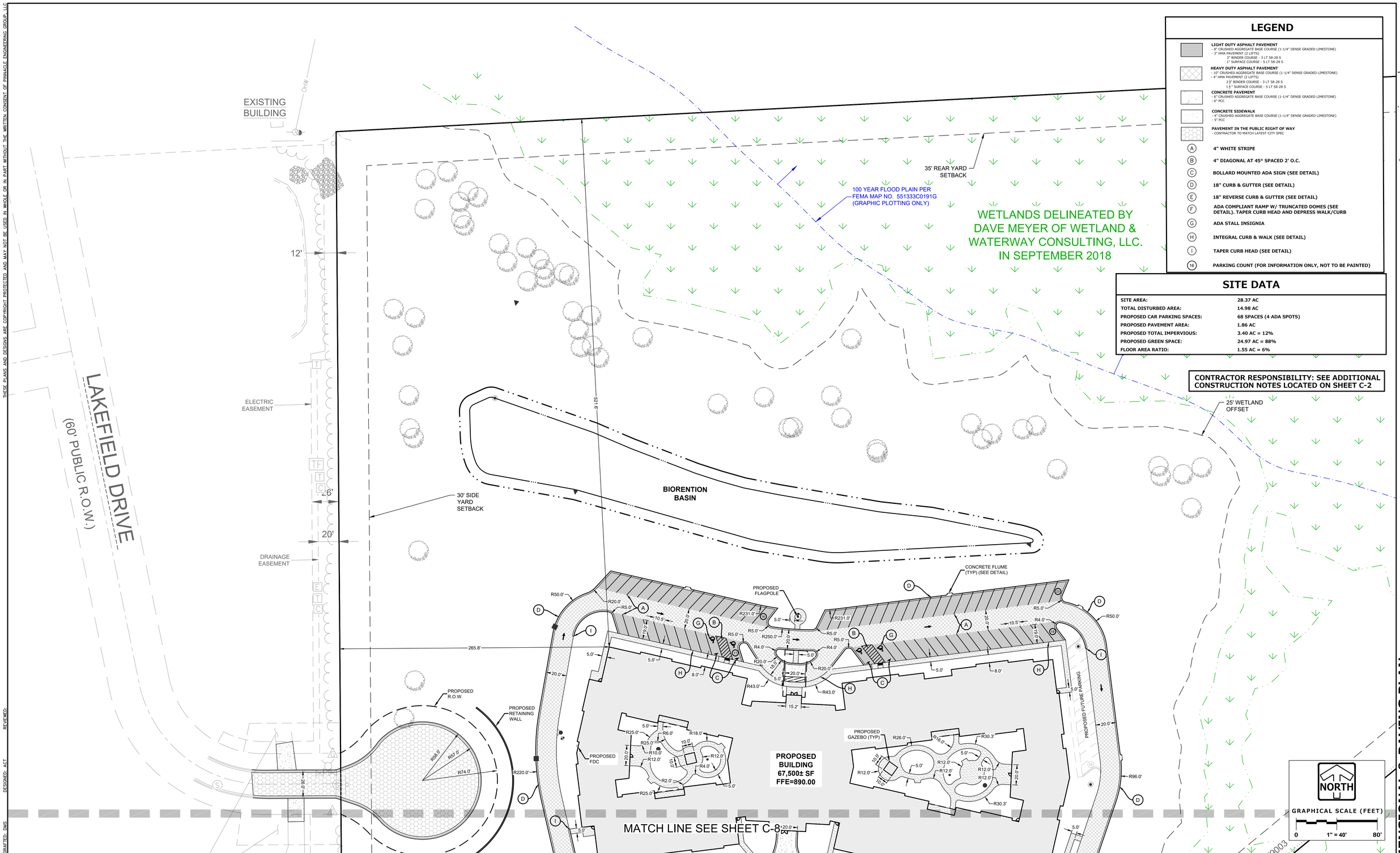

LEGEND

- **LIGHT DUTY ASPHALT PAVEMENT**
  - 6" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 3" HMA PAVEMENT (2 LIFTS)
    - 2" BINDER COURSE - 3 LT 58-28 S
    - 1" SURFACE COURSE - 5 LT 58-28 S
- **HEAVY DUTY ASPHALT PAVEMENT**
  - 10" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 4" HMA PAVEMENT (2 LIFTS)
    - 2 ½" BINDER COURSE - 3 LT 58-28 S
    - 1 ½" SURFACE COURSE - 5 LT 58-28 S
- **CONCRETE PAVEMENT**
  - 6" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 6" PCC
- **CONCRETE SIDEWALK**
  - 4" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 5" PCC
- **PAVEMENT IN THE PUBLIC RIGHT OF WAY**
  - CONTRACTOR TO MATCH LATEST CITY SPEC
- (A) **4" WHITE STRIPE**
- (B) **4" DIAGONAL AT 45° SPACED 2' O.C.**
- (C) **BOLLARD MOUNTED ADA SIGN (SEE DETAIL)**
- (D) **18" CURB & GUTTER (SEE DETAIL)**
- (E) **18" REVERSE CURB & GUTTER (SEE DETAIL)**
- (F) **ADA COMPLIANT RAMP W/ TRUNCATED DOMES (SEE DETAIL). TAPER CURB HEAD AND DEPRESS WALK/CURB**
- (G) **ADA STALL INSIGNIA**
- (H) **INTEGRAL CURB & WALK (SEE DETAIL)**
- (I) **TAPER CURB HEAD (SEE DETAIL)**
- (16) **PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)**

SITE DATA

SITE AREA:	**28.37 AC**
TOTAL DISTURBED AREA:	**14.98 AC**
PROPOSED CAR PARKING SPACES:	**68 SPACES (4 ADA SPOTS)**
PROPOSED PAVEMENT AREA:	**1.86 AC**
PROPOSED TOTAL IMPERVIOUS:	**3.40 AC = 12%**
PROPOSED GREEN SPACE:	**24.97 AC = 88%**
FLOOR AREA RATIO:	**1.55 AC = 6%**

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

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SITE DIMENSIONAL & PAVING PLAN

REVIEWED:
DESIGNED: ACT
DRAFTED: DMS

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THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

SITE DIMENSIONAL & PAVING PLAN

REVISIONS

1	UPDATED PC SUMBITTAL	04/12/23			

PEG JOB No. 1338.10 | PEG PM MTS | START DATE 07-27-22 | SCALE 1" = 40'

SHEET
C-7
C-18

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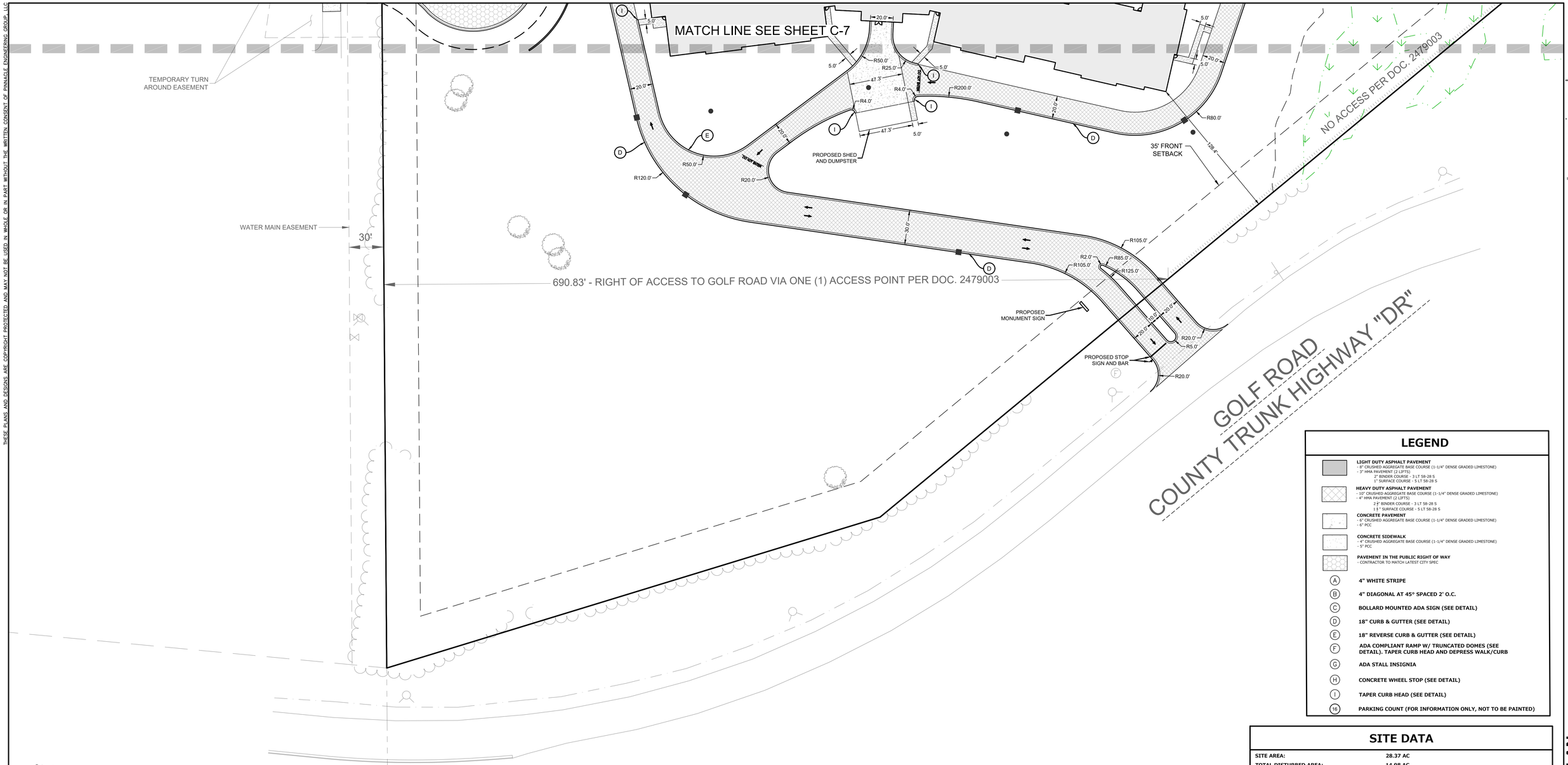

LEGEND

- **LIGHT DUTY ASPHALT PAVEMENT**
  - 8" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 3" HMA PAVEMENT (2 LIFTS)
    - 2" BINDER COURSE - 3 LT 58-28 S
    - 1" SURFACE COURSE - S LT 58-28 S
- **HEAVY DUTY ASPHALT PAVEMENT**
  - 10" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 4" HMA PAVEMENT (2 LIFTS)
    - 2 ½" BINDER COURSE - 3 LT 58-28 S
    - 1 ½" SURFACE COURSE - S LT 58-28 S
- **CONCRETE PAVEMENT**
  - 6" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 6" PCC
- **CONCRETE SIDEWALK**
  - 4" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE)
  - 5" PCC
- **PAVEMENT IN THE PUBLIC RIGHT OF WAY**
  - CONTRACTOR TO MATCH LATEST CITY SPEC

- (A) **4" WHITE STRIPE**
- (B) **4" DIAGONAL AT 45° SPACED 2' O.C.**
- (C) **BOLLARD MOUNTED ADA SIGN (SEE DETAIL)**
- (D) **18" CURB & GUTTER (SEE DETAIL)**
- (E) **18" REVERSE CURB & GUTTER (SEE DETAIL)**
- (F) **ADA COMPLIANT RAMP W/ TRUNCATED DOMES (SEE DETAIL). TAPER CURB HEAD AND DEPRESS WALK/CURB**
- (G) **ADA STALL INSIGNIA**
- (H) **CONCRETE WHEEL STOP (SEE DETAIL)**
- (I) **TAPER CURB HEAD (SEE DETAIL)**
- (16) **PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)**

SITE DATA

SITE AREA:	**28.37 AC**
TOTAL DISTURBED AREA:	**14.98 AC**
PROPOSED CAR PARKING SPACES:	**68 SPACES (4 ADA SPOTS)**
PROPOSED PAVEMENT AREA:	**1.86 AC**
PROPOSED TOTAL IMPERVIOUS:	**3.40 AC = 12%**
PROPOSED GREEN SPACE:	**24.97 AC = 88%**
FLOOR AREA RATIO:	**1.55 AC = 6%**

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

NORTH

GRAPHICAL SCALE (FEET)

0 — 1" = 40' — 80'

REVIEWED:
DESIGNED: ACT
DRAFTED: DMS

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PINNACLE ENGINEERING GROUP
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CHICAGO I MILWAUKEE : NATIONWIDE

THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

SITE DIMENSIONAL & PAVING PLAN

REVISIONS

1	UPDATED PC SUMBITTAL	04/12/23			

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 40'

SHEET
C-8
C-18

SITE DIMENSIONAL & PAVING PLAN

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Z:\PROJECTS\2018\1338.10-WI\CAD\SHEETS\1338.10 SITE DIMENSIONAL & PAVING PLAN.DWG

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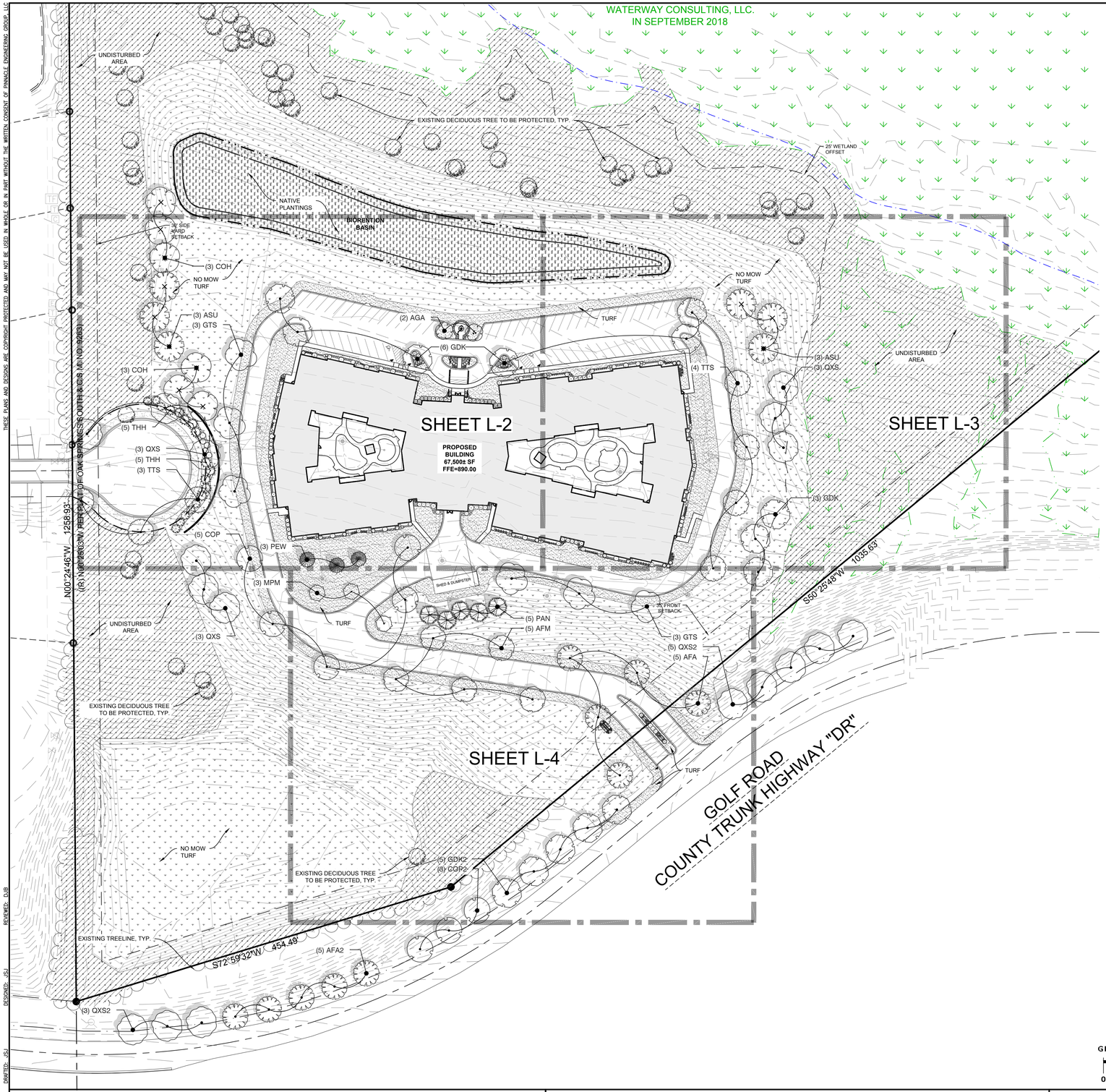
WATERWAY CONSULTING, LLC.
IN SEPTEMBER 2018



PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
AFA	5	Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple	2" Cal.	45` T x 35` W
ASU	6	Acer saccharum / Sugar Maple	2" Cal.	60` T x 45` W
AFM	5	Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple	2" Cal.	55` T x 45` W
COH	6	Carya ovata / Shagbark Hickory	2" Cal.	80' T x 40' W
COP	5	Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry	2" Cal.	50` T x 40` W
GTS	6	Gleditsia triacanthos inermis `Shademaster` / Shademaster Locust	2" Cal.	60` T x 50` W
GDK	9	Gymnocladus dioica / Kentucky Coffee Tree	2" Cal.	60` T x 45` W
QXS	9	Quercus x schuetti / Swamp Bur Oak	2" Cal.	70` T x 65` W
TTS	7	Tilia tomentosa `Sterling` / Sterling Silver Linden	2" Cal.	60` T x 35` W

EVERGREEN TREES	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
PAN	5	Picea abies / Norway Spruce	5` Ht.	60` T x 28` W
PEW	3	Pinus strobus / Eastern White Pine	5` Ht.	65` T x 30` W
THH	10	Thuja plicata 'Hogan' / Hogan Western Red Cedar	5` Ht.	25` T x 12` W

ORNAMENTAL TREES	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
AGA	2	Amelanchier x grandiflora `Autumn Brilliance` / Autumn Brilliance Serviceberry	7` Ht.	20` T x 20` W
MPM	3	Malus x `Prairie Maid` / Prairie Maid Crabapple	1.5" Cal.	20` T x 25` W

STREET TREES	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
AFA2	5	Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple	2.5" Cal.	45` T x 35` W
COP2	3	Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry	2.5" Cal.	50` T x 40` W
GDK2	5	Gymnocladus dioica / Kentucky Coffee Tree	2.5" Cal.	60` T x 45` W
QXS2	8	Quercus x schuetti / Swamp Bur Oak	2.5" Cal.	70` T x 65` W

SHRUBS	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
ACB	10	Aronia arbutifolia `Brilliantissima` / Brilliant Red Chokeberry	3 gal.	7` T x 6` W
CPP	5	Cephalanthus occidentalis `Ping Pong` / Ping Pong Buttonbush	3 gal.	8` T x 8` W
CAF	34	Cornus stolonifera `Arctic Fire` / Arctic Fire Dogwood	2 gal.	3` T x 3` W
HIS	12	Hydrangea arborescens 'NCHA1' / Invincibelle Spirit Hydrangea	2 gal.	4`T x 3'W
HVS	12	Hydrangea p `Vanilla Strawberry` / Vanilla Strawberry Hydrangea	3 gal.	6` T x 5` W
HRS	13	Hydrangea quercifolia 'Ruby Slippers' / Ruby Slippers Hydrangea	2 gal.	4` T x 5' W
ISS	12	Itea virginica 'SMNIVDFC' / Scentlandia Sweetspire	3 gal.	3`T x 3`W
RPP	4	Rosa rugosa `Purple Pavement` / Purple Pavement Rugosa Rose	2 gal.	5` T x 5` W
RCC	6	Rosa x `Coral Cove` / Coral Cove Rose	2 gal.	3` T x 3` W
SBL	10	Sambucus nigra `Black Lace` / Black Lace Elderberry	3 gal.	6` T x 6` W
SMC	24	Spiraea japonica `Magic Carpet` / Magic Carpet Spirea	2 gal.	2` T x 3` W
SMP	4	Syringa meyeri `Palibin` / Dwarf Korean Lilac	3 gal.	5` T x 5` W
SVP	10	Syringa vulgaris / Common Purple Lilac	3` Ht.	8` T x 10` W
SBP	12	Syringa x 'SMNJRPI' / Bloomerang Dwarf Pink Lilac	3 gal.	3`T x 3`W
SB5	11	Syringa x 'SMSJBP7' TM / Bloomerang Dark Purple Lilac	2 gal.	4`T x 5'W
WWR	9	Weigela florida `Wine & Roses` / Wine & Roses Weigela	3 gal.	5` T x 5` W

EVERGREEN SHRUBS	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
JSP	2	Juniperus chinensis `J.N. Select Blue` / Star Power Juniper	4` Ht.	16` T x 8` W
JO2	7	Juniperus chinensis `Old Gold` / Old Gold Juniper	3 gal.	3` T x 5` W
JCS	11	Juniperus chinensis `Sea Green` / Sea Green Juniper	3 gal.	5` T x 5` W
JSB	8	Juniperus sabina `Buffalo` / Buffalo Juniper	3 gal.	1` T x 7` W
JGO	5	Juniperus virginiana `Grey Owl` / Eastern Redcedar Juniper	3 gal.	3` T x 5` W
PMS	3	Pinus mugo `Slowmound` / Slowmound Mugo Pine	3 gal.	3` T x 3` W
TMT	10	Taxus x media `Tauntonii` / Tauton Yew	3 gal.	4` T x 5` W
TTE	11	Thuja occidentalis `BailJohn` / Technito Arborvitae	4` Ht.	12` T x 5 `W
TDG	5	Thuja occidentalis `Nigra` / Dark Green Arborvitae	4` Ht.	20' T x 8' W
TFC	6	Thuja occidentalis 'Congabe' / Fire Chief Arborvitae	2 gal.	2`T x 3`W

ORNAMENTAL GRASSES	QTY	BOTANICAL / COMMON NAME	SIZE	REMARKS
AGD	17	Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem	1 gal.	36" T x 30" W
CKF	20	Calamagrostis x a `Karl Foerster` / Karl Foerster Reed Grass	1 gal.	36" T x 24" W
CFO	34	Calamagrostis x a `Overdam` / Overdam Reed Grass	1 gal.	24" T x 24" W
CBZ	20	Carex flacca 'Blue Zinger' / Blue Zinger Sedge	1 gal.	14" T x 24" W
HAG	6	Hakonechloa macra 'Aureola' / Golden Variegated Forest Grass	1 gal.	18" T x 24" W
HPB	31	Hystrix patula / Bottlebrush Grass	1 gal.	30" T x 18" W
MSO	27	Miscanthus sinensis `Oktoberfest` / Oktoberfest Miscanthus	1 gal.	48" T x 36" W
PNW	41	Panicum virgatum `Northwind` / Northwind Switch Grass	1 gal.	42" T x 28" W
PBB	10	Pennisetum alopecuroides 'Burgundy Bunny' / Burgundy Bunny Dwarf Fountain Grass	1 gal.	12" T x 15" W
SLB	28	Schizachyrium scoparium `Blue Heaven` / Blue Heaven Little Bluestem Grass	1 gal.	30" T x 28" W
STD	12	Sporobolus heterolepis `Tara` / Prairie Dropseed	1 gal.	15" T x 20" W

PERENNIALS	QTY	BOTANICAL / COMMON NAME	SIZE	SPACING	REMARKS
AHA	16	Amsonia c `Halfway to Arkansas` / Halfway to Arkansas Blue-star	4.5" cont.	28" o.c.	30" T x 30" W
AGB	16	Aruncus dioicus / Goatsbeard	4.5" cont.	40" o.c.	40" T x 40" W
AVR	7	Astilbe chinensis `Vision in Red` / Vision in Red Astilbe	4.5" cont.	18" o.c.	15" T x 18" W
ADD	6	Astilbe x `Deutschland` / Deutschland False Spiraea	4.5" Cont.	20" o.c.	20" T x 20" W
CMW	24	Calamintha nepeta 'Montrose White' / Montrose White Calamint	4.5" cont.	20" o.c.	18" T x 18" W
CVZ	26	Coreopsis verticillata `Zagreb` / Zagreb Coreopsis	4.5" cont.	16" o.c.	20" T x 16" W
EMS	9	Echinacea purpurea `Magnus Superior` / Magnus Superior Coneflower	4.5" Cont.	18" o.c.	28" T x 16" W
GMT	18	Geum x `Mai Tai` / Mai Tai Grecian Rose	4.5" Cont.	14" o.c.	16" T x 12" W
HRT	46	Helenium a `Ruby Tuesday` / Ruby Tuesday Helen`s Flower	4.5" Cont.	15" o.c.	24" T x 18" W
HPP	35	Heuchera m `Palace Purple` / Palace Purple Coral Bells	4.5" Cont.	18" o.c.	18" T x 18" W
HGS	10	Hosta x `Gold Standard` / Gold Standard Hosta	4.5" cont.	40" o.c.	20" T x 50" W
LGF	30	Leucanthemum x superbum 'Goldfinch' / Goldfinch Shasta Daisy	4.5" cont.	22" o.c.	18" T x 22" W
PLS	26	Perovskia atriplicifolia 'Little Spire' / Little Spire Russian Sage	4.5" cont.	22" o.c.	24" T x 24" W
SAJ	4	Sedum `Autumn Joy` / Autumn Joy Sedum	4.5" Cont.	24" o.c.	12" T x 24" W

GROUND COVERS	QTY	BOTANICAL / COMMON NAME	REMARKS
	40,769 sf	Native Plantings / Agrecol Rainwater Renewal Seed Mix	
	61,933 sf	Turf Hydroseed / Reinders - Cadet 70/30 Fescue/Blue Mix	
	306,839 sf	Turf Hydroseed Low Grow / Reinders No Mow/Low Grow Mix	

NATIVE	QTY	BOTANICAL / COMMON NAME	REMARKS
	313,306 sf	EXISTING NATURAL AREAS / UNDISTRUBED AREAS	NATURAL AREAS TO REMAIN AS IS

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 60' 120'

REVIEWED: DJB
DESIGNED: JSJ
DRAFTED: JSJ

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LANDSCAPE OVERVIEW

REVISIONS

1	UPDATED PC SUMBITTAL	04/12/23			

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 60'

SHEET
L-1
L-6

LANDSCAPE OVERVIEW

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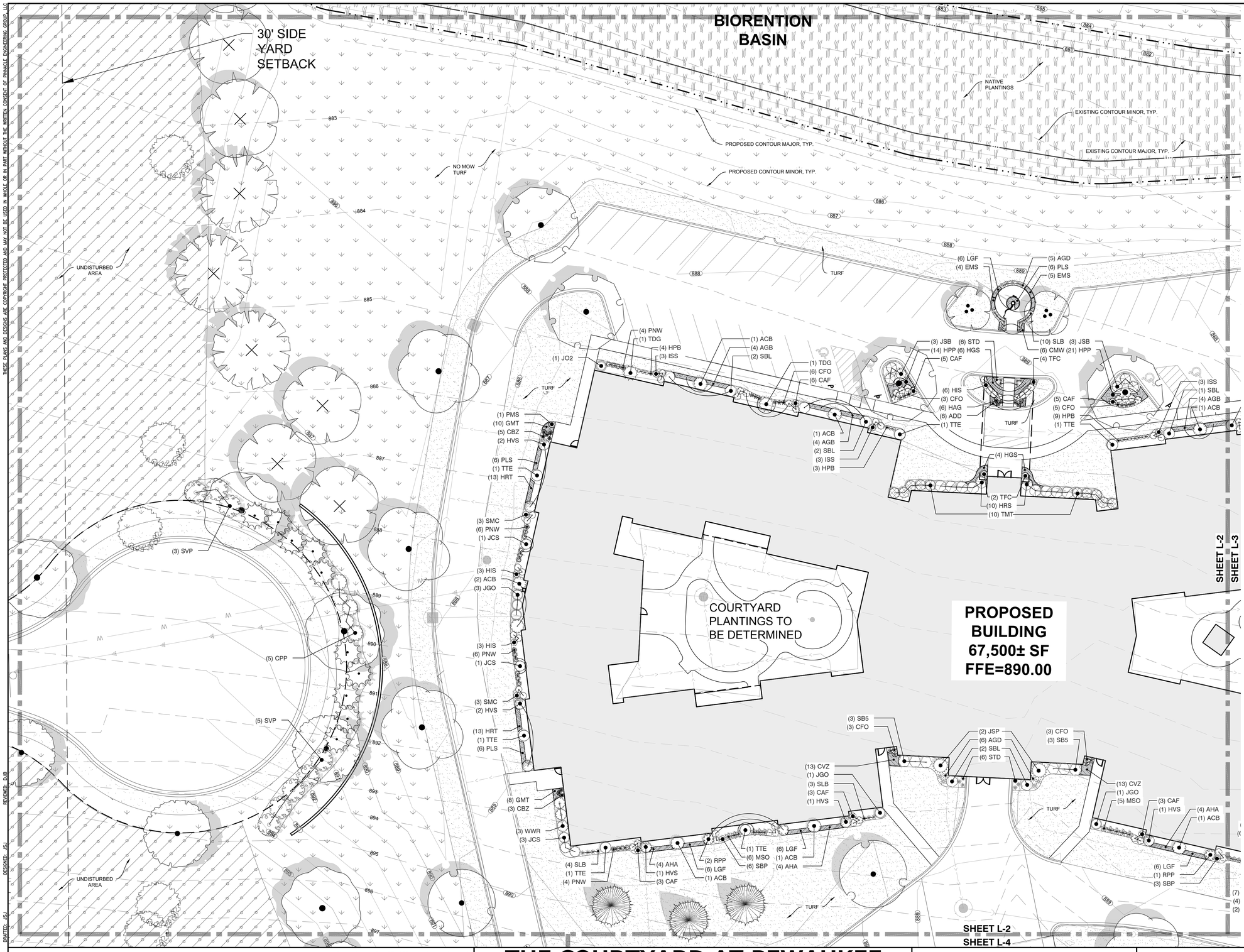

PLANT KEY

DECIDUOUS TREES	BOTANICAL / COMMON NAME
AFA	Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple
ASU	Acer saccharum / Sugar Maple
AFM	Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple
COH	Carya ovata / Shagbark Hickory
COP	Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
GTS	Gleditsia triacanthos inermis `Shademaster` / Shademaster Locust
GDK	Gymnocladus dioica / Kentucky Coffee Tree
QXS	Quercus x schuetti / Swamp Bur Oak
TTS	Tilia tomentosa `Sterling` / Sterling Silver Linden

EVERGREEN TREES	BOTANICAL / COMMON NAME
PAN	Picea abies / Norway Spruce
PEW	Pinus strobus / Eastern White Pine
THH	Thuja plicata 'Hogan' / Hogan Western Red Cedar

ORNAMENTAL TREES	BOTANICAL / COMMON NAME
AGA	Amelanchier x grandiflora `Autumn Brilliance` / Autumn Brilliance Serviceberry
MPM	Malus x `Prairie Maid` / Prairie Maid Crabapple

STREET TREES	BOTANICAL / COMMON NAME
AFA2	Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple
COP2	Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
GDK2	Gymnocladus dioica / Kentucky Coffee Tree
QXS2	Quercus x schuetti / Swamp Bur Oak

SHRUBS	BOTANICAL / COMMON NAME
ACB	Aronia arbutifolia `Brilliantissima` / Brilliant Red Chokeberry
CPP	Cephalanthus occidentalis `Ping Pong` / Ping Pong Buttonbush
CAF	Cornus stolonifera `Arctic Fire` / Arctic Fire Dogwood
HIS	Hydrangea arborescens 'NCHA1' / Invincibelle Spirit Hydrangea
HVS	Hydrangea p `Vanilla Strawberry` / Vanilla Strawberry Hydrangea
HRS	Hydrangea quercifolia 'Ruby Slippers' / Ruby Slippers Hydrangea
ISS	Itea virginica 'SMNIVDFC' / Scentlandia Sweetspire
RPP	Rosa rugosa `Purple Pavement` / Purple Pavement Rugosa Rose
RCC	Rosa x `Coral Cove` / Coral Cove Rose
SBL	Sambucus nigra `Black Lace` / Black Lace Elderberry
SMC	Spiraea japonica `Magic Carpet` / Magic Carpet Spirea
SMP	Syringa meyeri `Palibin` / Dwarf Korean Lilac
SVP	Syringa vulgaris / Common Purple Lilac
SBP	Syringa x 'SMNJRPI' / Bloomerang Dwarf Pink Lilac
SB5	Syringa x 'SMSJBP7' TM / Bloomerang Dark Purple Lilac
WWR	Weigela florida `Wine & Roses` / Wine & Roses Weigela

EVERGREEN SHRUBS	BOTANICAL / COMMON NAME
JSP	Juniperus chinensis `J.N. Select Blue` / Star Power Juniper
JO2	Juniperus chinensis `Old Gold` / Old Gold Juniper
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JSB	Juniperus sabina `Buffalo` / Buffalo Juniper
JGO	Juniperus virginiana `Grey Owl` / Eastern Redcedar Juniper
PMS	Pinus mugo `Slowmound` / Slowmound Mugo Pine
TMT	Taxus x media `Tauntonii` / Tauton Yew
TTE	Thuja occidentalis `BailJohn` / Technito Arborvitae
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PLS	Perovskia atriplicifolia 'Little Spire' / Little Spire Russian Sage
SAJ	Sedum `Autumn Joy` / Autumn Joy Sedum

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NATIVE	BOTANICAL / COMMON NAME
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NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

REVIEWED: DJB
DESIGNED: JSJ
DRAFTED: JSJ

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LANDSCAPE ENLARGEMENT

REVISIONS

1	UPDATED PC SUMBITTAL	04/12/23			

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE 1" = 20'

SHEET L-2 L-6

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LANDSCAPE ENLARGEMENT

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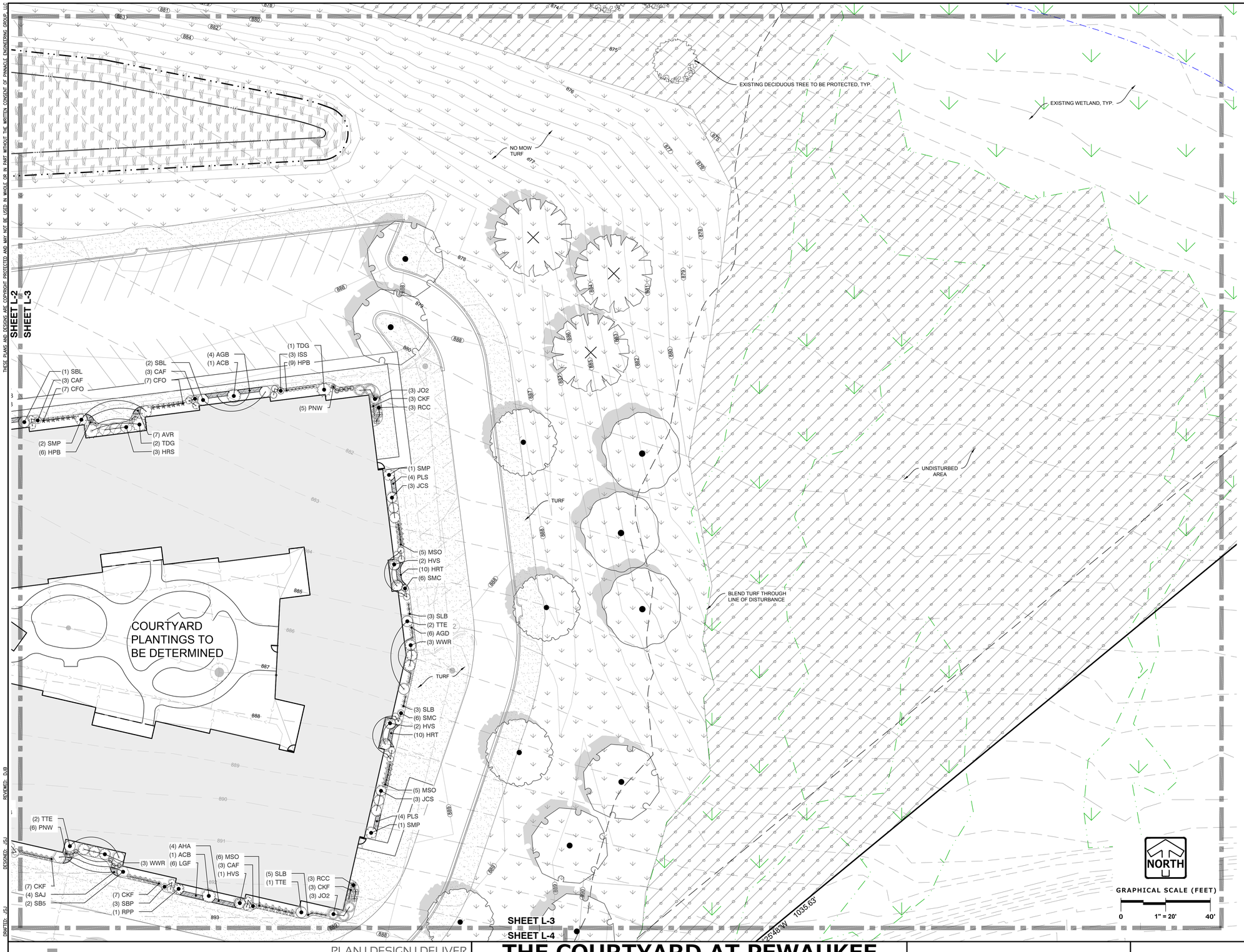

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JSB	Juniperus sabina `Buffalo` / Buffalo Juniper
JGO	Juniperus virginiana `Grey Owl` / Eastern Redcedar Juniper
PMS	Pinus mugo `Slowmound` / Slowmound Mugo Pine
TMT	Taxus x media `Tauntonii` / Tauton Yew
TTE	Thuja occidentalis `BailJohn` / Technito Arborvitae
TDG	Thuja occidentalis `Nigra` / Dark Green Arborvitae
TFC	Thuja occidentalis 'Congabe' / Fire Chief Arborvitae

ORNAMENTAL GRASSES	BOTANICAL / COMMON NAME
AGD	Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem
CKF	Calamagrostis x a `Karl Foerster` / Karl Foerster Reed Grass
CFO	Calamagrostis x a `Overdam` / Overdam Reed Grass
CBZ	Carex flacca 'Blue Zinger' / Blue Zinger Sedge
HAG	Hakonechloa macra 'Aureola' / Golden Variegated Forest Grass
HPB	Hystrix patula / Bottlebrush Grass
MSO	Miscanthus sinensis `Oktoberfest` / Oktoberfest Miscanthus
PNW	Panicum virgatum `Northwind` / Northwind Switch Grass
PBB	Pennisetum alopecuroides 'B B' / Burgundy Bunny Dwarf Fountain Grass
SLB	Schizachyrium scoparium `Blue Heaven` / Blue Heaven Little Bluestem Grass
STD	Sporobolus heterolepis `Tara` / Prairie Dropseed

PERENNIALS	BOTANICAL / COMMON NAME
AHA	Amsonia c `Halfway to Arkansas` / Halfway to Arkansas Blue-star
AGB	Aruncus dioicus / Goatsbeard
AVR	Astilbe chinensis `Vision in Red` / Vision in Red Astilbe
ADD	Astilbe x `Deutschland` / Deutschland False Spiraea
CMW	Calamintha nepeta 'Montrose White' / Montrose White Calamint
CVZ	Coreopsis verticillata `Zagreb` / Zagreb Coreopsis
EMS	Echinacea purpurea `Magnus Superior` / Magnus Superior Coneflower
GMT	Geum x `Mai Tai` / Mai Tai Grecian Rose
HRT	Helenium a `Ruby Tuesday` / Ruby Tuesday Helen`s Flower
HPP	Heuchera m `Palace Purple` / Palace Purple Coral Bells
HGS	Hosta x `Gold Standard` / Gold Standard Hosta
LGF	Leucanthemum x superbum 'Goldfinch' / Goldfinch Shasta Daisy
PLS	Perovskia atriplicifolia 'Little Spire' / Little Spire Russian Sage
SAJ	Sedum `Autumn Joy` / Autumn Joy Sedum

GROUND COVERS	BOTANICAL / COMMON NAME
	Native Plantings / Agrecol Rainwater Renewal Seed Mix
	Turf Hydroseed / Reinders - Cadet 70/30 Fescue/Blue Mix
	Turf Hydroseed Low Grow / Reinders No Mow/Low Grow Mix

NATIVE	BOTANICAL / COMMON NAME
	EXISTING NATURAL AREAS / UNDISTRUBED AREAS

RVWD: DJB
DESIGNED: JSJ
DRAFTED: JSJ

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PLANT KEY

DECIDUOUS TREES	BOTANICAL / COMMON NAME
AFA	Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple
ASU	Acer saccharum / Sugar Maple
AFM	Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple
COH	Carya ovata / Shagbark Hickory
COP	Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
GTS	Gleditsia triacanthos inermis `Shademaster` / Shademaster Locust
GDK	Gymnocladus dioica / Kentucky Coffee Tree
QXS	Quercus x schuetti / Swamp Bur Oak
TTS	Tilia tomentosa `Sterling` / Sterling Silver Linden

EVERGREEN TREES	BOTANICAL / COMMON NAME
PAN	Picea abies / Norway Spruce
PEW	Pinus strobus / Eastern White Pine
THH	Thuja plicata 'Hogan' / Hogan Western Red Cedar

ORNAMENTAL TREES	BOTANICAL / COMMON NAME
AGA	Amelanchier x grandiflora `Autumn Brilliance` / Autumn Brilliance Serviceberry
MPM	Malus x `Prairie Maid` / Prairie Maid Crabapple

STREET TREES	BOTANICAL / COMMON NAME
AFA2	Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple
COP2	Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
GDK2	Gymnocladus dioica / Kentucky Coffee Tree
QXS2	Quercus x schuetti / Swamp Bur Oak

SHRUBS	BOTANICAL / COMMON NAME
ACB	Aronia arbutifolia `Brilliantissima` / Brilliant Red Chokeberry
CPP	Cephalanthus occidentalis `Ping Pong` / Ping Pong Buttonbush
CAF	Cornus stolonifera `Arctic Fire` / Arctic Fire Dogwood
HIS	Hydrangea arborescens 'NCHA1' / Invincibelle Spirit Hydrangea
HVS	Hydrangea p `Vanilla Strawberry` / Vanilla Strawberry Hydrangea
HRS	Hydrangea quercifolia 'Ruby Slippers' / Ruby Slippers Hydrangea
ISS	Itea virginica 'SMNIVDFC' / Scentlandia Sweetspire
RPP	Rosa rugosa `Purple Pavement` / Purple Pavement Rugosa Rose
RCC	Rosa x `Coral Cove` / Coral Cove Rose
SBL	Sambucus nigra `Black Lace` / Black Lace Elderberry
SMC	Spiraea japonica `Magic Carpet` / Magic Carpet Spirea
SMP	Syringa meyeri `Palibin` / Dwarf Korean Lilac
SVP	Syringa vulgaris / Common Purple Lilac
SBP	Syringa x 'SMNJRPI' / Bloomerang Dwarf Pink Lilac
SB5	Syringa x 'SMSJBP7' TM / Bloomerang Dark Purple Lilac
WWR	Weigela florida `Wine & Roses` / Wine & Roses Weigela

EVERGREEN SHRUBS	BOTANICAL / COMMON NAME
JSP	Juniperus chinensis `J.N. Select Blue` / Star Power Juniper
JO2	Juniperus chinensis `Old Gold` / Old Gold Juniper
JCS	Juniperus chinensis `Sea Green` / Sea Green Juniper
JSB	Juniperus sabina `Buffalo` / Buffalo Juniper
JGO	Juniperus virginiana `Grey Owl` / Eastern Redcedar Juniper
PMS	Pinus mugo `Slowmound` / Slowmound Mugo Pine
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GENERAL PLANTING NOTES

1. THE LAYOUT OF ALL PLANTING BEDS AND INDIVIDUAL TREES AND SHRUBS SHALL BE STAKED BY THE CONTRACTOR IN ADVANCE OF INSTALLATION. FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS SCALED FROM THE PLANS. AN APPROVED REPRESENTATIVE WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAKE MINOR ADJUSTMENTS AS NECESSARY. BED LAYOUT SHALL ALSO INCLUDE PERENNIAL GROUPINGS BY SPECIES.
2. THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE LANDSCAPE PLANS. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
3. NO PLANT MATERIAL OR PLANT SIZE SUBSTITUTIONS WILL BE ACCEPTED WITHOUT APPROVAL BY THE LANDSCAPE ARCHITECT. ANY CHANGES SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO INSTALLATION.
4. ALL BNB STOCK SHALL BE NURSERY GROWN IN A CLAY LOAM SOIL FOR A MINIMUM OF THREE GROWING SEASONS WITHIN 200 MILES OF PROJECT LOCATION, IN A ZONE COMPATIBLE WITH USDA HARDINESS ZONE 5A. SEED SHALL BE PROVIDED FROM A NURSERY (WITHIN 200 MILES) WITH A SIMILAR PLANT HARDINESS ZONE AS PROJECT LOCATION. EXISTING SOIL SHALL BE AMENDED PER SOIL ANALYSIS REPORT TO ENSURE A PROPER GROWING MEDIUM IS ACHIEVED.
5. ALL PLANT MATERIAL SHALL COMPLY WITH STANDARDS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK - Z60.1 ANSI. LANDSCAPE ARCHITECT OR OWNERS AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND POTENTIALLY REJECT ANY PLANT MATERIAL DEEMED TO NOT MEET THE REQUIRED STANDARDS.
6. ALL STOCK SHALL BE FREE OF DISEASES AND HARMFUL INSECTS, DAMAGE, DISORDERS AND DEFORMITIES.
7. TREES SHALL HAVE SINGLE, STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. MUTLI-STEM TREES SHALL HAVE 3-4 STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. HEIGHT-TO-CALIPER RATIOS SHALL BE CONSISTENT WITH THE LATEST EDITION OF ANSI Z60.1.
8. ROOT SYSTEMS SHALL BE LARGE ENOUGH TO ALLOW FOR FULL RECOVERY OF THE TREE, AND SHALL CONFORM TO STANDARDS AS THEY APPEAR IN THE MOST CURRENT REVISION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD OF NURSERY STOCK ANSI Z60.1.
9. BNB TREES SHALL BE DUG WITH A BALL OF SOIL, NOT SOFT BALLED OR POTTED AND SHALL BE FIRM IN THEIR ROOTBALL. ROOT BALL SHALL BE WRAPPED (WITH BIODEGRADABLE MATERIAL). THE TREE ROOT FLARE, OR COLLAR, SHALL BE AT OR WITHIN THE TOP THREE INCHES OF GRADE.
10. ALL SPRING TREES MUST BE FRESHLY DUG IN THE MOST RECENT SPRING.
11. ALL AUTUMN TREES MUST BE FRESHLY DUG IN THE MOST RECENT AUTUMN.
12. TREES SHALL BE ALIVE, HEALTHY AND APPROPRIATELY MOIST, AT TIME OF DELIVERY. TREES SHALL BE SUBJECT TO INSPECTION FOR CONFORMITY TO SPECIFICATION REQUIREMENTS AND APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE. THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY TREES THAT DO NOT MEET THE SPECIFICATIONS OR THAT HAVE BEEN DAMAGED DURING SHIPMENT. THE LANDSCAPE INSTALLER MUST RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT FOR ANY SUBSTITUTIONS OR ALTERATIONS.
13. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH PLANTING DETAILS.
14. ALL PLANTING BEDS SHALL HAVE A MINIMUM 10" DEPTH OF PREPARED SOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 10" OF SOIL. REFER TO SOIL PLACEMENT NOTES.
15. WHILE PLANTING TREES AND SHRUBS, BACKFILL ⅔ OF PLANTING HOLE AND WATER TREE THOROUGHLY BEFORE INSTALLING THE REMAINDER OF SOIL MIXTURE. AFTER ALL SOIL HAS BEEN PLACED INTO THE PLANTING HOLE WATER THOROUGHLY AGAIN.
16. THE CONTRACTOR MUST LABEL ALL TREES WITH THE COMMON AND BOTANICAL NAMES PRIOR TO FINAL INSPECTION.
17. ALL PLANTING BEDS SHALL BE MULCHED WITH 3" DEEP SHREDDED HARDWOOD MULCH, AND ALL TREES PLANTED IN TURF AREAS SHALL RECEIVE A 3" DEEP SHREDDED HARDWOOD MULCHED RING AS SHOWN IN PLANTING DETAILS.
18. ALL PLANTING BEDS AND TREE RINGS SHALL HAVE A 4" DEEP TRENCHED BED EDGE CREATED BY EITHER A FLAT LANDSCAPE SPADE OR MECHANICAL EDGER. BED EDGES ARE TO BE CUT CLEAN AND SMOOTH AS SHOWN ON LANDSCAPE PLANS WITH A CLEAN DEFINITION BETWEEN TURF AND PLANTING AREAS.
19. ALL TURF SEED AREAS SHALL RECEIVE A MINIMUM OF 6" DEPTH OF TOPSOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 6" OF SOIL AS INDICATED IN THE SOIL PLACEMENT NOTES. REQUIRED AMENDMENTS SHALL BE DETERMINED BASED ON A SOIL ANALYSIS TO BE PERFORMED. ALL TOPSOIL AMENDMENT SHALL BE AGED WEED FREE MANURE OR CLASS 1 ORGANIC MATTER.
20. FOR LAWN SEEDING, APPLY A STARTER FERTILIZER AND SEED UNIFORMLY AT THE RATE RECOMMENDED BY MANUFACTURER, AND PROVIDE A MULCH COVERING THAT IS SUITABLE TO PROMOTE SEED GERMINATION AND TURF ESTABLISHMENT. CONTRACTOR TO PROVIDE FERTILIZER, SEED, AND MULCH SPECIFICATIONS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. EROSION CONTROL MEASURES ARE TO BE INSTALLED IN THOSE AREAS REQUIRING STABILIZATION (SWALES, SLOPES EXCEEDING 1:3, AND THOSE LOCATIONS INDICATED IN CIVIL DRAWINGS).
21. THE CONTRACTOR TO ENSURE A SMOOTH, UNIFORM QUALITY TURF IS ACHIEVED WITH NO BARE SPOTS LARGER THAN 6" X 6". ANY BARE SPOTS LARGER THAN 6" X6" AT THE END OF ESTABLISHMENT PERIOD SHALL BE RESEEDED AT THE CONTRACTORS EXPENSE TO OBTAIN A DENSE, UNIFORM LAWN.
22. ALL FINISH GRADING AND LAWN AREAS TO BE INSTALLED BY LANDSCAPE CONTRACTOR.
23. ALL DISTURBED AREAS WITHIN THE PROJECT SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
24. ALL DISTURBED AREAS OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OWNER.
25. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, INCLUDING ANY IRRIGATION LINES, PRIOR TO DIGGING. CONSULT DIGGERS HOTLINE.
26. TREES SHALL BE INSTALLED NO CLOSER THAN:
    - -10 FEET FROM ANY FIRE HYDRANT
    - - 7 FEET FROM STORM SEWER, SANITARY SEWER LATERALS, AND WATER SERVICE
27. THE CONTRACTOR SHALL ENSURE THAT SOIL CONDITIONS AND COMPACTION ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AROUND THE CONSTRUCTION SITE. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN ALL AREAS
28. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, AND LICENSES NECESSARY FOR THE INSTALLATION OF THIS PLAN.
29. THE CONTRACTOR IS TO REVIEW ALL SITE ENGINEERING DOCUMENTS PRIOR TO INSTALLATION. ANY CONFLICTS MUST BE REPORTED TO THE LANDSCAPE ARCHITECT. THESE LANDSCAPE DRAWINGS ARE FOR THE INSTALLATION OF PLANT MATERIALS ONLY UNLESS OTHERWISE STATED.
30. THE CONTRACTOR SHALL PROVIDE WATERING AND MAINTENANCE SERVICES FOR A PERIOD OF 60 DAYS TO ENSURE VEGETATIVE ESTABLISHMENT. UPON COMPLETION OF THE PROJECT, CONTRACTOR SHALL SUPPLY THE OWNER IN WRITING WITH ONGOING WATERING AND MAINTENANCE INSTRUCTIONS.
31. PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM TIME OF OWNER ACCEPTANCE. ONLY ONE REPLACEMENT PER PLANT WILL BE REQUIRED DURING THE WARRANTY PERIOD EXCEPT IN THE EVENT OF FAILURE TO COMPLY WITH THE SPECIFIED REQUIREMENTS.
32. THE CONTRACTOR IS RESPONSIBLE TO CONDUCT A FINAL WALK THROUGH WITH THE LANDSCAPE ARCHITECT AND OR OWNERS REPRESENTATIVE TO ANSWER QUESTIONS, PROVIDE INSTRUCTIONS, AND ENSURE THAT PROJECT REQUIREMENTS HAVE BEEN MET.

SOIL PLACEMENT NOTES

1. LOOSEN SUBGRADE TO A MINIMUM DEPTH INDICATED IN PLANTING NOTES USING A CULTI-MULCHER OR SIMILAR EQUIPMENT, AND REMOVE STONES MEASURING OVER 1-1/2 INCHES IN ANY DIMENSION, STICKS, RUBBISH AND OTHER EXTRANEOUS MATTER. AREAS ADJACENT TO WALKS AND PAVEMENT SHALL BE FREE OF EXCESS STONE AND PAVING MATERIALS SO AS TO PROVIDE AN UNINTERRUPTED CROSS SECTION OF SOIL. INTERNAL PARKING ISLANDS SHALL BE LOOSENED TO A DEPTH OF 30".
2. THOROUGHLY BLEND PLANTING SOIL MIX FOR PLANTING BED AREAS. (1 PART EXISTING SOIL, 1 PART TOPSOIL, 1 PART ORGANIC SOIL AMENDMENT, 2.9 POUNDS PER CUBIC YARD OF 4-4-4 ANALYSIS SLOW-RELEASE FERTILIZER)
3. TREE AND SHRUB HOLES SHALL BE FILLED WITH A PREPARED PLANTING MIXTURE OF 1 PART TOPSOIL, 2 PARTS PLANTING SOIL MIX.
4. SPREAD SOIL AND SOIL AMENDMENTS TO DEPTH INDICATED ON DRAWINGS, BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. (FINISH GRADE OF PLANTING BEDS SHALL BE 3" BELOW ALL ADJACENT SURFACES. FINISH GRADE OF TURF SEEDING AREAS SHALL BE 1" BELOW ALL ADJACENT HARD SURFACES, WALKS, AND CURBS.)
5. PLACE APPROXIMATELY 1/2 OF TOTAL AMOUNT OF SOIL REQUIRED. WORK INTO TOP OF LOOSENED SUBGRADE TO CREATE A TRANSITION LAYER, THEN PLACE REMAINDER OF THE SOIL. SOIL TRANSITION LAYER SHALL BE TILLED TO A MINIMUM DEPTH OF 6" BELOW THE DEPTH OF NEWLY PLACED SOIL. PARKING LOT ISLANDS SHALL BE CROWNED TO A HEIGHT OF 6" TO PROVIDE PROPER DRAINAGE UNLESS OTHERWISE NOTED.
6. DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
7. FINISH GRADING: GRADE SOIL TO A SMOOTH, UNIFORM SURFACE PLANE WITH A LOOSE, UNIFORMLY FINE TEXTURE.
8. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES.
9. RESTORE PLANTING BEDS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.

NATIVE SEEDING PLANTINGS

ESTABLISHMENT OF A VIABLE VEGETATION COMMUNITY WITHIN THE BIO INFILTRATION BASINS WILL BE COMPLETED BY HAND-BROADCASTING OF PRE-DESIGNED SEED MIXES AND PLANTING OF PERENNIALS TO CREATE A DYNAMIC PLANTING.

PRIOR TO SEEDING PLANTING:

A. ALL WEEDS AND EXISTING VEGETATION SHALL BE REMOVED. EXISTING VEGETATION SHALL BE TREATED WITH GLYPHOSATE OR SIMILAR HERBICIDE BY A LICENSED PROFESSIONAL. TREATMENT SHALL OCCUR A MINIMUM OF 10 DAYS PRIOR TO SEEDING/PLANTING. VEGETATION STILL ALIVE AFTER INITIAL HERBICIDE TREATMENT SHALL BE TREATED A SECOND TIME PRIOR TO TILLING INTO THE SOIL.TREATED VEGETATION SHALL BE TILLED INTO THE SOIL NO EARLIER THAN 1 DAY PRIOR TO SEEDING.

B. PREPARATION OF SOIL PRIOR TO SEEDING
   1. REFER TO CIVIL PLANS FOR SOIL MIXTURE.
   2. ALL FOREIGN MATERIALS LARGER THAN 1-INCH SHALL BE REMOVED FROM THE SOIL PRIOR TO SEEDING OR PLANTING.
   3. AREA SHOULD BE FREE FROM UNSIGHTLY VARIATIONS, RIDGES, AND DEPRESSIONS.
   4. AVOID DRIVING OVER THE SPECIFIED AREA WITH MACHINERY.

SPECIFICATIONS FOR HAND BROADCASTING:

SEEDING SHALL BE CONDUCTED IN LATE FALL (SEPTEMBER 1- SOIL FREEZE) SO THAT SEEDS MAY LIE DORMANT DURING THE WINTER, ALLOWING FOR STRATIFICATION, OR SPRING (MARCH 1-JUNE 1) TO ALLOW A COMPLETE GROWING SEASON TO BECOME ESTABLISHED.

A. COVER CROP
   1. ANNUAL RYE SHALL BE SPREAD AT A DENSITY OF 20 POUNDS PER ACRE DURING THE PLANTING OR SEEDING OF THE NATIVE PLANT SPECIES TO STABILIZE THE SOIL AND REDUCE THE GROWTH OF UNWANTED VEGETATION. THIS ANNUAL GRASS GROWS RAPIDLY WITHOUT COMPETING WITH THE WILDFLOWERS AND GRASSES THAT ARE PLANTED IN THE TARGET AREAS.
   2. WINTER WHEAT OR PERENNIAL RYE SHALL NOT BE USED AS A COVER CROP. THESE GRASSES MAY OUT COMPETE PRAIRIE SEEDLINGS, LEADING TO A REDUCTION IN THE SUCCESS OF THE PLANTINGS.

B. SEED MIX:
   1. MIX ALL NATIVE SEED WITH VERMICULITE ACCORDING TO AGRECOL RECOMMENDATIONS AND INSTALLATION GUIDELINES.
   2. BROADCAST HALF THE SEED OVER THE ENTIRE SITE OR TARGET AREA.
   3. BROADCAST THE OTHER HALF OF SEED PERPENDICULAR TO THE DIRECTION THAT THE FIRST HALF OF THE SEED WAS BROADCAST.
   4. COVER SEED WITH ¼ -INCH TO ½ -INCH OF SOIL (USE ANY EXCESS SOIL FROM THE SITE) WITH RAKE OR DRAG.
   5. ROLL SITE TO ENSURE FIRM SEED-TO-GROUND CONTACT.
   6. KEEP SEED CONSTANTLY WET THROUGH GERMINATION PERIOD. GENERALLY 3 WEEKS.

ALL SEEDING SHALL BE COVERED WITH 1-INCH OF CLEAN, NON-INVASIVE STRAW (NO MARSH HAY, OR REED CANARY GRASS) WITHOUT SEEDS, WITHIN SEVEN DAYS. WHEAT, RYE, OATS, OR BARLEY ARE ACCEPTABLE FORMS OF STRAW. THOSE AREAS OF SLOPES STEEPER THAN 8:1 (EIGHT FEET HORIZONTAL TO ONE FOOT VERTICAL) SHALL BE PLANTED NO LATER THAN OCTOBER 1 AND STAKED WITH AN EROSION CONTROL BLANKET TO PREVENT EROSION.

NATIVE PLANTINGS:

WEED SUPPRESSION MEASURES:

1st YEAR - PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS. THIS SHOULD OCCUR APPROXIMATELY EVERY MONTH OF THE GROWING SEASON AFTER NATIVE PLANTINGS HAVE BEEN ROUGH GRADED.

2nd YEAR - IN MAY/JUNE MOW NATIVE PLANTINGS AT 6" HEIGHT TO SUPPRESS THE WEEDS. PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS. HAVE PROFESSIONAL ASSESS PLANTINGS. REPEAT MOWING NATIVE PLANTINGS AND SPOT-SPRAY IN EARLY JULY.

3rd YEAR - IN MAY/JUNE MOW NATIVE PLANTINGS AT 8" HEIGHT TO SUPPRESS THE WEEDS. PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS.

4th YEAR - IN MAY PERFORM A PRESCRIBED BURN. IN JUNE HAVE A QUALIFIED PROFESSIONAL ASSESS PLANTINGS. IF A PRESCRIBED BURN CAN NOT BE UTILIZED, NATIVE PLANTINGS SHALL BE CUT TO THE GROUND AND ALL CUT MATERIAL SHALL BE REMOVED AND DISPOSED OF OFF SITE.

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DESIGNED: JSJ
DRAFTED: JSJ

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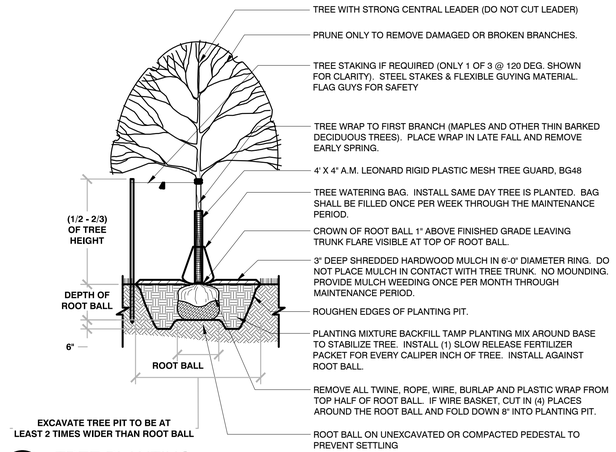
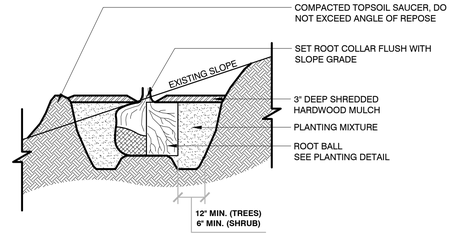
www.pinnacle-engr.com



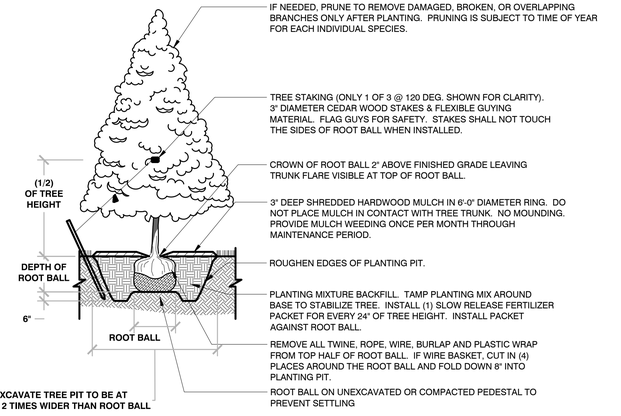
1 TREE PLANTING

1/4" = 1'-0" 329343-01



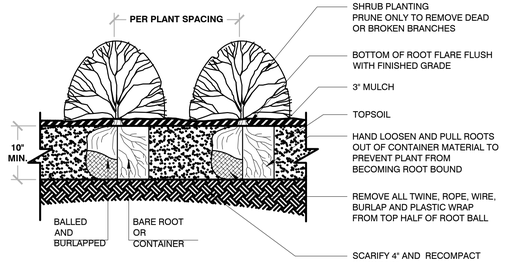
2 TREE PLANTING ON SLOPE

3/8" = 1'-0" 329343-02



3 EVERGREEN TREE PLANTING

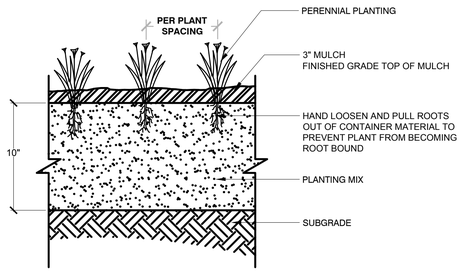
1/4" = 1'-0" 329343-03



BAREROOT PLANTING NOTES:
1. SOAK ROOTS IN WATER FOR AT LEAST ONE HOUR BUT NOT MORE THAN 24 HOURS PRIOR TO PLANTING.
2. SCARIFY SIDES AND BOTTOMS OF HOLE.
3. PROCEED WITH CORRECTIVE PRUNING OF THE TOP AND BOTTOM ROOTS.
4. TRANSFER PLANT DIRECTLY FROM WATER TO HOLE. SET PLANT SO THE ROOT FLARE IS APPROXIMATELY AT THE FINISHED SOIL ELEVATION. SPREAD ROOTS OUT EVENLY. PLUMB AND IMMEDIATELY BACKFILL WITH PLANTING SOIL MIX.
5. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
6. BACKFILL VOIDS AND WATER SECOND TIME.
7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

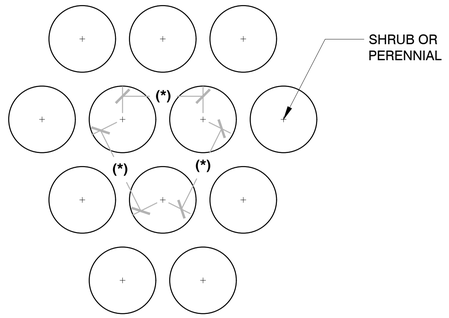
4 SHRUB PLANTING

1/2" = 1'-0" 329333-02



5 PERENNIAL PLANTING

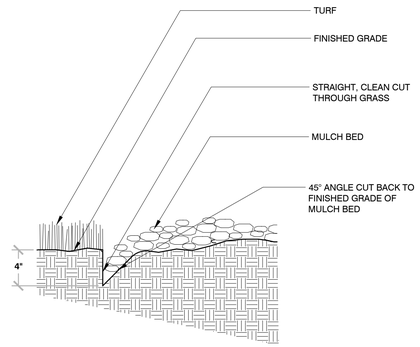
1" = 1'-0" 3293-01



(*) = SPECIFIED PLANT SPACING PER PLANTING LIST

6 PLANT SPACING

3/4" = 1'-0" 3293-02



7 TRENCHED BED EDGE

3/4" = 1'-0" 3293-03

DRAWN: JSJ
DESIGNED: JSJ
REVIEWED: DJB

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE - NATIONWIDE

THE COURTYARD AT PEWAUKEE

GOLF RD & MEADOWBROOK LN

LANDSCAPE DETAILS

REVISIONS

1	UPDATED PC SUMBITTAL	04/12/23			

PEG JOB No. 1338.10
PEG PM MTS
START DATE 07-27-22
SCALE VARIES

SHEET
L-6
L-6

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LANDSCAPE DETAILS

Z:\PROJECTS\2018\1338.10-WI\CAD\SHEETS\1338.10 LANDSCAPE PLAN.DWG

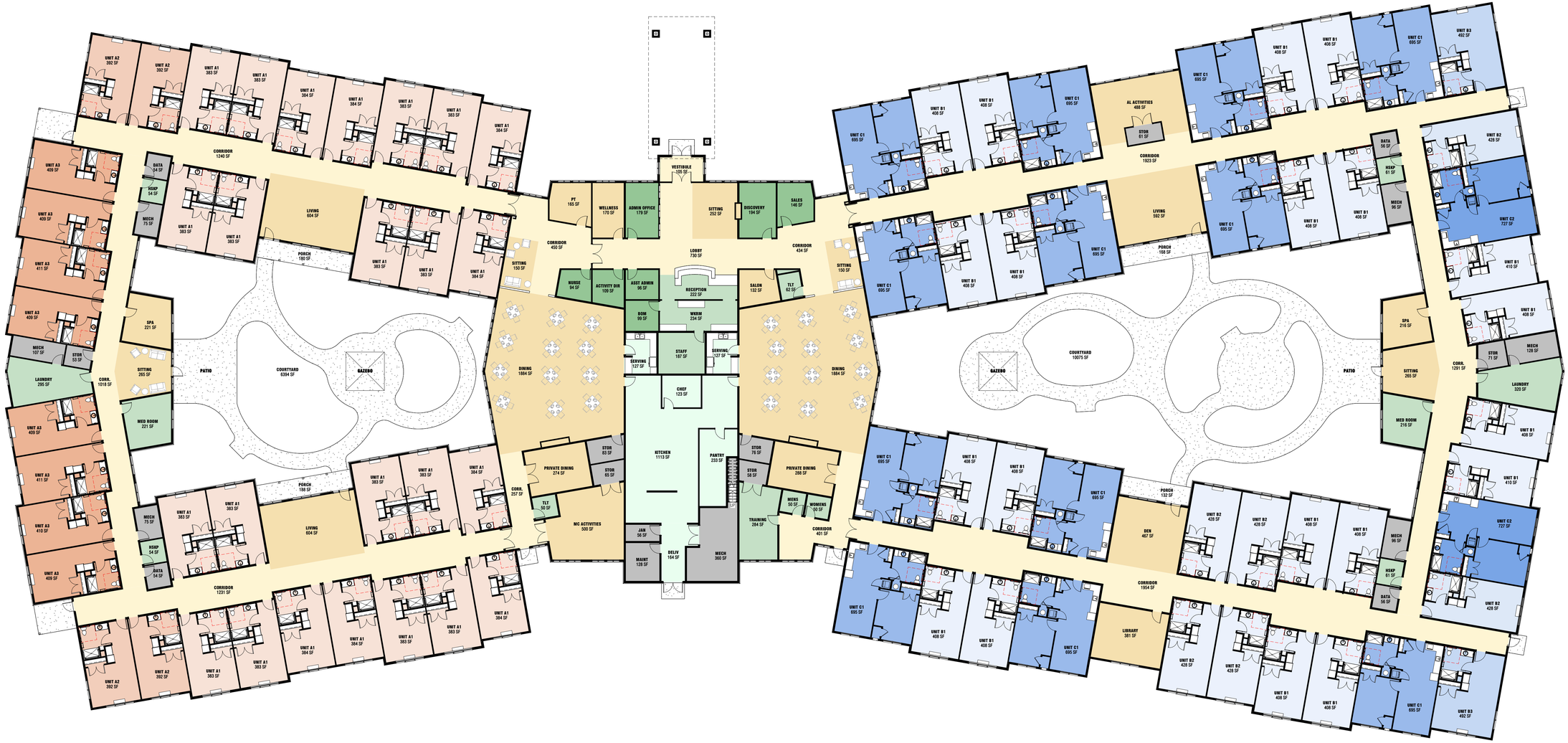
BUILDING INFORMATION

OVERALL BUILDING
FIRST FLOOR S.F. = 66,964 s.f.
CANOPY & PORCHES S.F. = 1,804 s.f.
MAINTENANCE BUILDING S.F. = 789 s.f.
TOTAL S.F. = 69,557 s.f.

TOTAL UNITS = 78
MEMORY CARE UNITS: 36
(24) UNIT A1 - MC STUDIO @ 383 s.f.
(4) UNIT A2 - MC STUDIO @ 392 s.f.
(8) UNIT A3 - MC STUDIO @ 410 s.f.
ASSISTED LIVING UNITS: 42
(20) UNIT B1 - AL STUDIO @ 408 s.f.
(6) UNIT B2 - AL STUDIO @ 428 s.f.
(2) UNIT B3 - AL STUDIO @ 492 s.f.
(12) UNIT C1 - AL ONE BED @ 695 s.f.
(2) UNIT C2 - AL ONE BED @ 727 s.f.

S.F. / UNIT = 892 s.f.

CONGREGATE AREA REQUIRED = (78 residents x 90 s.f.) = 7,020 s.f.
CONGREGATE AREA PROVIDED = 9,951 s.f.



OVERALL PRESENTATION FLOOR PLAN

SCALE: 1/16" = 1'-0"

REVISED CONCEPT 04-11-2023

Ganther Construction Architecture, Inc.
4825 County Road A
Oshkosh, Wisconsin 54901
tel. 920.426.4774 fax
920.426.4788 www.ganther.com

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PROPOSED PROJECT FOR:

THE COURTYARD AT PEWAUKEE

PEWAUKEE, WI

REVISIONS

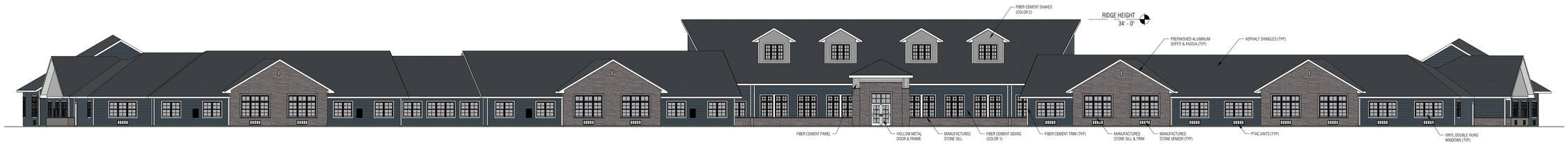
#	DATE

Project Number	21-1016
Date	03/06/2023
Drawn By	JR
Checked By	AI

OVERALL PRESENTATION FLOOR PLAN

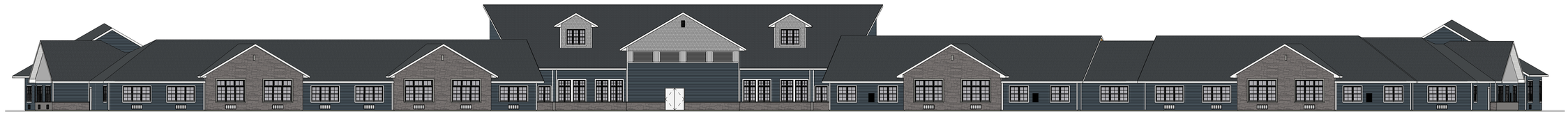
A1

Autodesk Docs://The Courtyard at Pewaukee/21-1016_The Courtyard at Pewaukee_R22.rvt
4/12/2023 9:28:02 AM



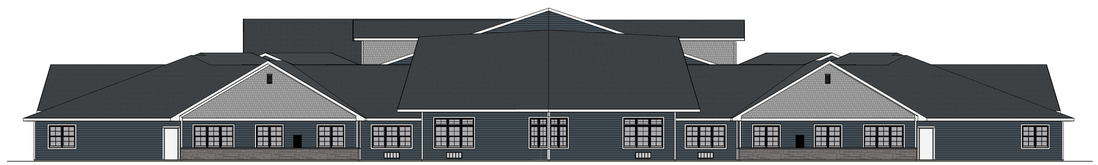
1 / A2 EXTERIOR NORTH

SCALE: 1/16" = 1'-0"



2 / A2 EXTERIOR SOUTH

SCALE: 1/16" = 1'-0"

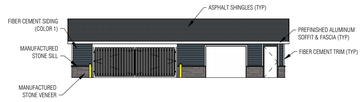


3 / A2 EXTERIOR EAST

SCALE: 1/16" = 1'-0"

4 / A2 EXTERIOR WEST

SCALE: 1/16" = 1'-0"



5 / A2 GARAGE - NORTH

SCALE: 1/16" = 1'-0"

6 / A2 GARAGE - SOUTH

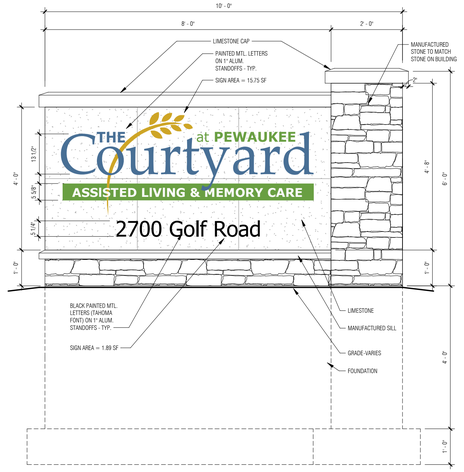
SCALE: 1/16" = 1'-0"

7 / A2 GARAGE - WEST

SCALE: 1/16" = 1'-0"

8 / A2 GARAGE - EAST

SCALE: 1/16" = 1'-0"



9 / A2 MONUMENT SIGN

SCALE: 1/2" = 1'-0"

REVISED CONCEPT 04-11-2023

Ganther Construction Architecture, Inc.
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Oshkosh, Wisconsin 54901
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PROPOSED PROJECT FOR:

THE COURTYARD AT PEWAUKEE

PEWAUKEE, WI

REVISIONS

#	DATE	

Project Number	21-1016
Date	03/06/2023
Drawn By	JR
Checked By	AI

PRESENTATION EXTERIOR ELEVATIONS

A2

Autodesk Docs://The Courtyard at Pewaukee/21-1016_The Courtyard at Pewaukee_R22.rvt
4/12/2023 9:28:12 AM

BEFORE

AFTER

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 6.

DATE: April 20, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding the Site & Building Plans for Common Transportation Located at W233 N2095 Ridgeview Parkway for the Purpose of Adding Loading Docks to the Building and Reconfiguring the North Parking Area to Accommodate Overnight Parking of Semi Trailers (PWC 0953986003)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Common Transportation staff report 4.20.23

Common Transportation revised narrative

Common Transportation revised site & building plans

Common Transportation staff comment responses

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of April 20, 2023

Date: April 12, 2023

Project Name: Common Transportation Site & Building Plan Review

Project Address/Tax Key No.: W233N2095 Ridgeview Parkway/PWC 0953986003

Applicant: CBRE

Property Owner: MOHR WAUKESHA LLC

Current Zoning: M4-Industrial Park

2050 Land Use Map Designation: Manufacturing/Fabrication/Warehousing

Use of Surrounding Properties: M-4 to the west and south, B-6 and UC to the north, and Ridgeview Apartments to the east.

Project Description/Analysis

The applicant has submitted a Site & Building Review Application for the property located at W233N2095 Ridgeview Parkway.

The applicant is proposing both site and building changes to the existing site. In terms of site changes, the applicant is proposing to modify a portion of the northern car parking lot to accommodate overnight semi-trailer and box truck parking. This will include the removal of three rows of car parking and a landscape island. The applicant is also proposing to extend landscape islands to delineate and screen this truck parking area.

Two other landscape islands will also be removed on the west side of the property to allow for trucks to access the proposed loading docks on the west side of the building. The applicant is proposing to add seven new loading docks to the building. A new retaining wall is shown on the site plan extending from the building to further screen this area of the site.

The applicant is also proposing a new overhead door on the north side of the building. According to the applicant, the overhead door will be painted to match the building. Additionally, spandrel glazing above the new door will be selected to complement the building.

The only lighting change consists of a wall pack above a service door on the west side of the building.

Staff had several discussions with the applicant regarding the importance of screening as the proposed truck parking abuts Ridgeview Parkway. In response to staff comments, the applicant has provided screening around the truck parking area consisting of a u-shaped area with 69 Evergreen trees of two different species. The proposed planting height is 8-feet.

Staff finds that the proposed screening, along with the existing landscape and berm, will assist in limiting the visibility of trucks along Ridgeview Parkway as well as from the front of the building. Furthermore, this also limits the quantity of trucks that may be parked onsite, adjacent to Ridgeview Parkway. As such, truck parking may not be expanded without City approval of another Site & Building Plan Review Application.

The M-4 District does not necessarily prohibit overnight truck parking adjacent to a right-of-way but does state that "all parking and loading areas shall be adequately screened as determined by the Plan Commission." Therefore, the Plan Commission must consider and determine if the existing and proposed landscaping is sufficient to screen the proposed tractor trailer and truck parking.

It can also be noted that Section 17.0210(f)(2) of the Zoning Code states, "The landscaping of a site and even the fencing and building structures on the site should be so arranged as to attractively screen from the general view of the traveling public those areas on the site not enclosed within a building which are not inherently attractive, such as auto parking areas, truck and construction equipment parking areas, large paved areas, trash receptacles, building related mechanical equipment, above-ground utility facilities, and raw material storage."

Recommendation

Staff recommends approval of the Site & Building Plan Review Application for the property located at W233N2095 Ridgeview Parkway.

April 10, 2023

Common Transportation
W233 N2095 Ridgeview Parkway
Pewaukee, WI

RE: Common Transportation Plan Commission Site and Building Plan Review Application

Dear Chairmen and Board Members,

On behalf of Mohr Capital and their proposed tenant, Common Transportation, please consider this the formal request for Site and Building Plan Review for the property located at W233 N209 Ridgeview Parkway. Supporting drawings including landscape screening details are attached.

US Cellular, the long-time tenant of the building, recently vacated the space. Mohr Capital is currently in the process of removing most of the existing office areas and converting the building back to a flex-industrial building. A proposed new tenant, Common Transportation, is proposing to add seven new dock doors at the rear of the building. These dock doors will replace existing aluminum framed windows that were originally planned to also accommodate overhead doors or will utilize existing knock-outs planned during the initial construction of the building.

Since the building no longer houses the US Cellular call center, the parking requirements will be greatly reduced. Additionally, to support the new warehousing function, Common Transportation would like to remove four existing parking islands to allow for greater truck maneuverability.

Common Transportation is also proposing to park five tractor trailers and five 24' box trucks in the north parking area. Views to this area from Ridgeview Parkway are protected with a large berm and landscaped trees at the east side of the property. At the west side, the view is currently blocked by an existing wooded area at the edge of the property. Additionally, Common Transportation is proposing to add additional arborvitaes near the asphalt area to further screen the parking area from view. Please refer to the included plans for the full location and details of this new vegetation. With the new arborvitaes, the impact of parking the proposed trucks in the north lot would have minimal negative impact on the adjacent neighborhood. The proposed truck traffic Common Transportation is similar to the current traffic patterns of the surrounding buildings.

The Plan of Operation as provided by Common Transportation is as follows:

> *Common Transportation is a local and regional Third-Party Logistics (3PL) transportation provider. Focusing and specializing on "final mile" residential home delivery of household consumer products which have been purchased through on-line sources. Case goods, appliances, furniture, and cabinetry make up ninety percent (90%) of their service lines. Common Transportation does not service the typical e-commerce vendors such as Amazon or other high volume e-commerce companies.*

in. studio architecture | 833 E. Michigan St. | Suite 540 | Milwaukee, WI 53202 | ph. 414.278.6804 | fx.414.276.9501

Covering a two-hundred-mile radius of Milwaukee, Common Transportation employs a total of twenty (20) people including ten (10) delivery drivers and ten (10) internal office personnel. Hours of operation are Monday through Friday 8:00 AM to 4:00 PM.

Products are delivered to the facility via common carrier, received into the warehouse, inventoried, sorted, unpackaged, repackaged/pad wrapped, loaded onto delivery trucks and delivered to the end user's residence. All of these operations are internal within the facility. All debris is properly disposed of within commercial waste management contractors' containers.

Thank you for your consideration of this matter.

Respectfully,

Tom Mallmann
in. studio architecture

GENERAL NOTES:

A. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED IN STRICT COMPLIANCE WITH ALL LOCAL CODES, ORDINANCES AND REGULATIONS OF THE GOVERNMENT AUTHORITIES HAVING JURISDICTION.

B. CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED TO PERFORM WORK IN ACCORDANCE WITH REQUIREMENTS AND PROCEDURES OF ANY AND ALL AUTHORITIES HAVING JURISDICTION.

C. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND COORDINATES. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS.

D. CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS AND NOTIFY THE ARCHITECT OF ANY CONCERNS PRIOR TO STARTING WORK.

E. DO NOT SCALE THE DRAWINGS. IF A CONTRADICTION OCCURS WITHIN THE CONTRACT DOCUMENTS OR INFORMATION IS UNCLEAR, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT FOR CLARIFICATION.

F. CONTRACTOR SHALL COORDINATE WITH THE WORK OF OTHERS NOT INCLUDED IN THE THIS CONTRACT AS DIRECTED BY THE OWNER.

G. ALL PLAN DIMENSIONS ARE TO FACE OF MASONRY VENEER OR FACE OF WALL FINISH, U.N.O.

H. ALL VERTICAL DIMENSIONS TO BE ABOVE FINISH FLOOR (A.F.F.) U.N.O.

I. THE WORD ALIGN AS USED IN THESE DOCUMENTS SHALL MEAN TO ACCURATELY LOCATE FINISH FACES IN THE SAME PLANE.

J. ALL DOORS USED IN CONJUNCTION WITH EXITS SHALL BE ARRANGED TO READILY OPEN WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE FROM THE SIDE OF EGRESS.

K. DESIGN/BUILD ELECTRICAL CONTRACTOR IS REQUIRED TO SUBMIT ELECTRICAL PLANS DETAILING THEIR WORK TO THE ARCHITECT AND OWNER FOR THEIR REVIEW PRIOR TO STARTING WORK. THESE DRAWINGS SHOULD INCLUDE ALL ELECTRICAL FIXTURES, SWITCHES AND RELATED COMPONENTS, PANELS, AND OTHER ASSOCIATED ACCESSORIES, ETC WHICH MAY NOT BE EXPLICITLY IDENTIFIED IN THIS CONSTRUCTION DOCUMENT SET.

L. DESIGN/BUILD MECHANICAL CONTRACTOR IS REQUIRED TO SUBMIT MECHANICAL PLANS DETAILING THEIR WORK TO THE ARCHITECT AND OWNER FOR THEIR REVIEW PRIOR TO STARTING WORK. THESE DRAWINGS SHOULD INCLUDE THERMOSTAT LOCATIONS, HVAC DUCTING DETAILING THE SIZE, SHAPE AND FINISH OF ALL DUCT WORK AND DIFFUSERS AS WELL AS VAV BOXES OR OTHER EXPOSED AND CONCEALED EQUIPMENT REQUIRED FOR THE PROJECT NOT EXPLICITLY IDENTIFIED IN THIS CONSTRUCTION DOCUMENT SET.

M. PRIOR TO ORDERING/INSTALLATION, G.C. IS REQUIRED TO SUBMIT, AT MINIMUM, THE FOLLOWING SUB CONTRACTOR SHOP DRAWINGS AND/OR SUBMITTALS TO THE ARCHITECT (SOME MAY NOT APPLY TO ALL PROJECTS):
- DOORS, FRAMES, AND HARDWARE
- GLASS & GLAZING SYSTEMS
- ALL INTERIOR AND EXTERIOR FINISHES; SUCH AS FLOORING, BASE, PAINT, WALL COVERINGS, CEILINGS, SPECIALTY FINISHES, EXTERIOR CLADDING MATERIALS, ETC.
- MILLWORK
- ACCESSORIES/SPECIALTY EQUIPMENT
- LIGHTING AND DEVICES (SPEC'S, COLORS, ETC.)
- PLUMBING FIXTURES

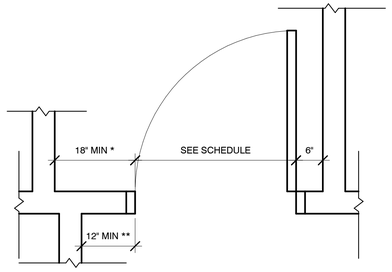
N. ALL INTERIOR PLAN DIMENSIONS ARE TO FACE OF INTERIOR FINISH OR CENTER OF WALL, U.N.O.

O. ALL FIRE AND LIFE SAFETY DEVICES TO MEET CURRENT CODE.

P. CONTRACTOR TO PROVIDE ALL WORK AND MATERIALS NOTED ON DRAWINGS, UNLESS NOTED OTHERWISE.

Q. ALL WORK TO BE PERFORMED DURING REGULAR BUSINESS HOURS, LOUD AND ODOROUS WORK TO BE PERFORMED OUTSIDE OF BUSINESS HOURS.

R. "TYPICAL" (OR TYP.) AS USED IN THESE DOCS SHALL MEAN THAT THE CONDITION IS THE SAME OR REPRESENTATIVE FOR ALL SIMILAR CONDITIONS U.N.O.



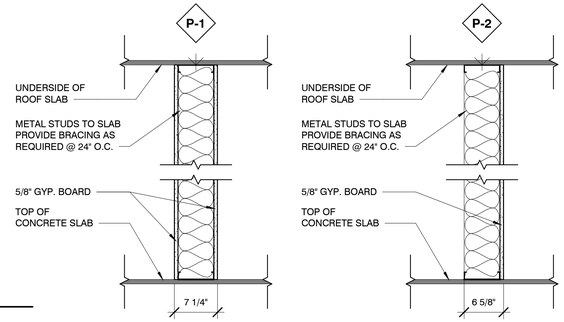
* TYPICAL FRONT APPROACH CLEARANCES, 24" IF LATCH APPROACH, 42" IF HINGE APPROACH

** 12" MIN. IF BOTH CLOSER AND LATCH ARE PROVIDED; 6" MIN. IF BOTH CLOSER AND LATCH ARE NOT PROVIDED

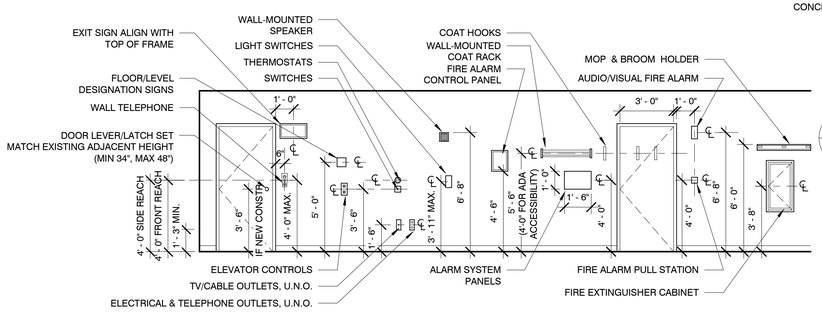
SEE ANSI A117.1.1-2009 (FIG.404.2.3.2) FOR FURTHER INFORMATION

3 TYP. DOOR OFFSET
A1.0

3/4" = 1'-0"



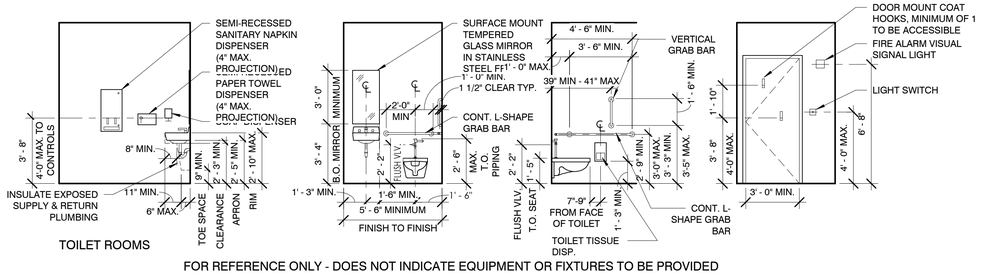
WALL TYPES
1" = 1'-0"



FOR REFERENCE ONLY - DOES NOT INDICATE EQUIPMENT OR FIXTURES TO BE PROVIDED

2 TYPICAL MOUNTING HEIGHTS
A1.0

1/4" = 1'-0"



TOILET ROOMS

FOR REFERENCE ONLY - DOES NOT INDICATE EQUIPMENT OR FIXTURES TO BE PROVIDED

5 BARRIER-FREE MOUNTING HEIGHTS
A1.0

1/4" = 1'-0"

Tenant Improvement For:
COMMON TRANSPORTATION
W233N2095 RIDGEVIEW PKWY.
PEWAUKEE, WI 53188

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CE-2	SITE PLAN
CE-3	GRADING AND EROSION CONTROL PLAN

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A3.1	CONSTRUCTION PLAN, LIFE & SAFETY PLAN, POWER & DATA, & FINISH PLAN
A3.2	REFLECTED CEILING PLAN
A4.1	DOOR SCHEDULE, TYPES, HARDWARE, & DETAILS
A4.2	BUILDING SECTIONS & DETAILS
A5.1	BUILDING ELEVATIONS
A5.2	BUILDING ELEVATIONS

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S001	STRUCTURAL GENERAL NOTES
S100	FOUNDATION PLAN
S300	SECTIONS & DETAILS

INTERIOR PARTITION

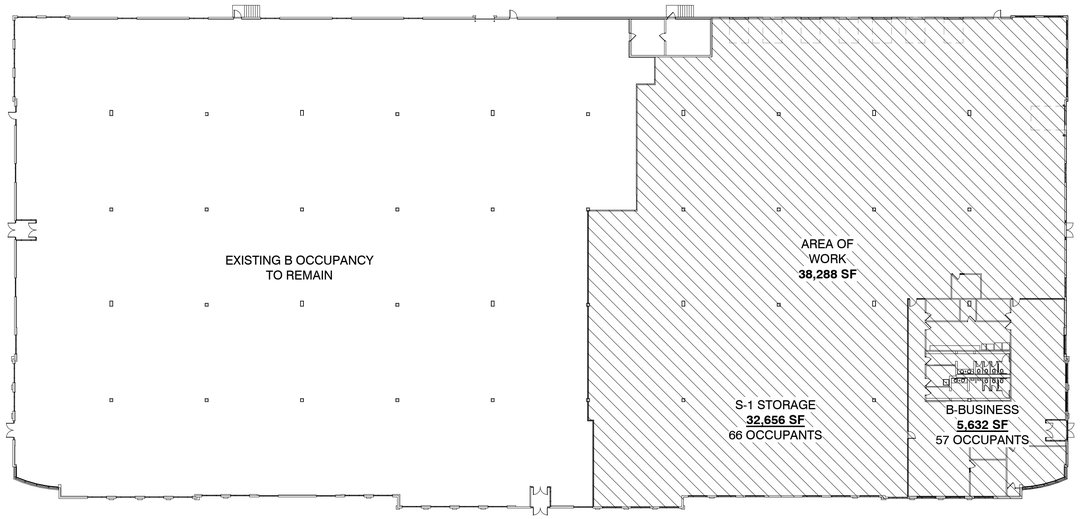
P-1: METAL STUD WALL W/ GYP. BOARD ON BOTH SIDES EXTENDING TO UNDERSIDE OF ROOF SLAB ABOVE, U.N.O.
- 5/8" GYP. BOARD
- 6" METAL STUD FRAMING @ 16" O.C. W/ BATT INSULATION
- 5/8" GYP. BOARD

P-2: METAL STUD WALL W/ GYP. BOARD ON (1) SIDE EXTENDING TO UNDERSIDE OF ROOF SLAB ABOVE, U.N.O.
- 6" METAL STUD FRAMING @ 16" O.C. W/ BATT INSULATION
- 5/8" GYP. BOARD (TENANT SIDE)

PROJECT INFORMATION:

FULL BUILDING SF:	**89,435 SF**
OCCUPANCY:	**S-I (STORAGE) / B (BUSINESS)**
CONSTRUCTION TYPE:	**II-B**
SQUARE FOOTAGE:	**38,288 SF**
OCCUPANT LOAD:	**123 OCCUPANTS** **24.6" EXIT WIDTH REQUIRED, 170" PROVIDED**
NUMBER OF FLOOR LEVELS:	**1**
FULLY SPRINKLERED*	**YES**

NOTE: **UNLIMITED AREA BUILDING**.
BUILDING QUALIFIES AS UNLIMITED AREA BUILDING PER IBC 2015, SECTION 507. BUILDING IS EQUIPPED THROUGHOUT OUT WITH AN AUTOMATIC FIRE SPRINKLER SYSTEM (NFPA 13). BUILDING IS SURROUNDED ON ALL SIDES BY AN INCREASED OPEN SPACE OF 60' OR MORE. BUILDING IS ONE-STORY ABOVE GRADE WITH NO BASEMENT. THE BUILDING IS CLASSIFIED AS B-BUSINESS AND S-1 STORAGE, MODERATE HAZARD.



1 OVERALL PLAN
A1.0

1" = 30'-0"

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PEWAUKEE, WI 53188

REVISIONS

NO.	REV. DATE	DESCRIPTION
1	4-10-23	PLAN COMMISION COMMENT RESPONSE

PROJECT INFO

Original Issue Date
04/04/23

Project No.
23.009

Drawn By
JD

SHEET TITLE
TITLE SHEET, SHEET INDEX, PROJECT INFO, DETAILS, & LOCATION MAP

A1.0

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GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PROJECT TEAM	ISSUE	DESCRIPTION	DATE
PROJECT MANAGER: initials	–		x-xx-xx
PROJECT ENGINEER: initials			
DESIGNER: initials			
CAD TECHNICIAN: LDH			
		ADDED PARKING SUMMARY	4/07/2016

Site Engineering Services

2920 Oakwood Road
Hartland, WI 53029
262-367-1460 office
marty.worden@sit.net email

Martin D. Worden, PE
Civil Engineer/Consultant

OVERALL SITE PLAN

for

Ridgeview Parkway Truck Docks

W233N2095 Ridgeview Parkway
Pewaukee, Waukesha County, Wisconsin 53072

SCALE: 1":30'

PROJECT NO. 22020

DATE: 4/10/2023

SHEET NUMBER

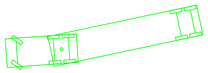
CE–1

TURN DIAGRAM STATISTICS

DESIGN VEHICLE:
Interstate Semitrailer (WB-20 [WB-65])
MIN. TURN RADIUS: 45'
TRAILER LENGTH: 53'
TOTAL VEHICLE LENGTH: 73'

TURN DIAGRAM LEGEND

- TRUCK FRONT WHEEL PATH
- TRUCK OVERHANG
- TRAILER REAR WHEEL PATH
- TRAILER OVERHANG

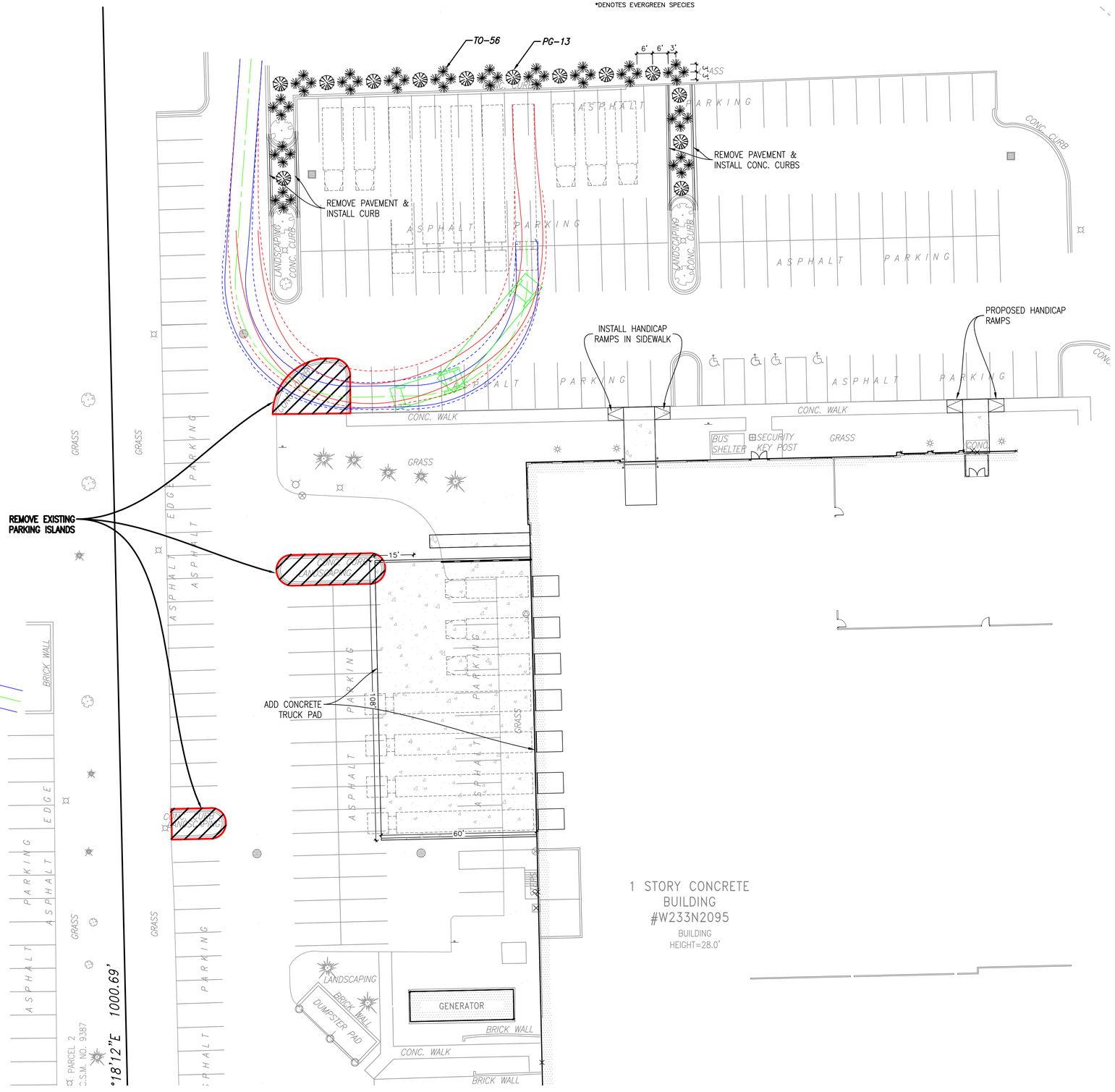


(WB-20 [WB-65]) VEHICLE

LANDSCAPE SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	QTY.	INSTALLATION SIZE (HEIGHT – CALIPER)
TO	Thuja occidentialis	American Arborvitae*	56	8' – 1 ½"
PG	Picea glauca var. dens	Black Hills Spruce*	13	8' – 1 ½"

*DENOTES EVERGREEN SPECIES



GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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DATE	DESCRIPTION	ISSUE
x-xx-xx		
4/07/2016	ADDED PARKING SUMMARY	

PROJECT TEAM
PROJECT MANAGER: initials
PROJECT ENGINEER: initials
DESIGNER: initials
CAD TECHNICIAN: LDH

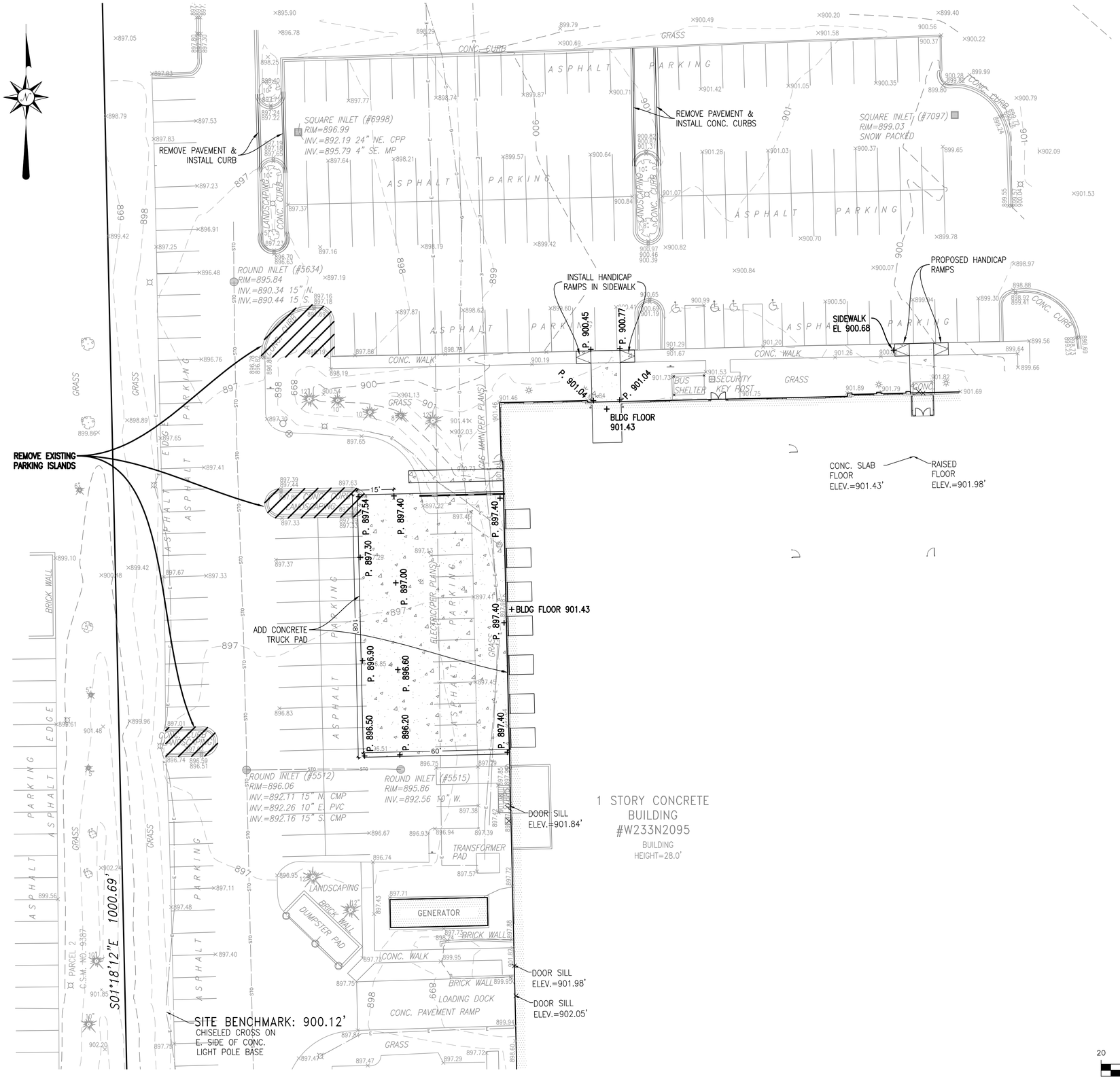
Site Engineering Services
2920 Oakwood Road
Hartland, WI 53029
262-367-4960 office
marty.worden@tit.net email
Martin D. Worden, PE
Civil Engineer/Consultant

SITE PLAN
for
Ridgeview Parkway Truck Docks

W233N2095 Ridgeview Parkway
Pewaukee, Waukesha County, Wisconsin 53072

SCALE: 1": 20'
PROJECT NO. 22020
DATE: 4/10/2023

SHEET NUMBER
CE–2



LEGEND

- +P. 61.50 PAVEMENT GRADE
- +G. 61.50 GUTTER GRADE
- +T.C. 61.50 TOP OF CURB GRADE
- +TW. 61.50 TOP OF WALK GRADE
- RIM 61.50 PROPOSED CATCH BASIN/ELEV
- 62 PROPOSED CONTOURS
- 62 EXISTING CONTOURS
- SILT FENCE
- INLET GRATE SCREEN
- TRACKING PAD

THE INFORMATION SHOWN ON THIS DRAWING CONCERNING TYPE AND LOCATION OF UNDER-GROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDER-GROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO."

TOPOGRAPHIC SURVEY PROVIDED BY:
CHAPUT LAND SURVEYS
234 WEST FLORIDA STREET
MILWAUKEE, WI 53204

DATED 2/09/2023 BY: DONALD C. CHAPUT, PLS

DATE	DESCRIPTION	ISSUE
-		-

PROJECT TEAM
PROJECT MANAGER: intials
PROJECT ENGINEER: intials
DESIGNER: intials
CAD TECHNICIAN: LDH

Site Engineering Services
2920 Oakwood Road
Hartland, WI 53029
262-367-4960 office
marty.worden@siteengineering services.com email
Martin D. Worden, PE
Civil Engineer/Consultant

GRADING & EROSION CONTROL PLAN
for
Ridgeview Parkway Truck Docks

W233N2095 Ridgeview Parkway
Pewaukee, Waukesha County, Wisconsin 53072

SCALE: 1": 20'
PROJECT NO. 22020
DATE: 4/10/2023

SHEET NUMBER
CE-3

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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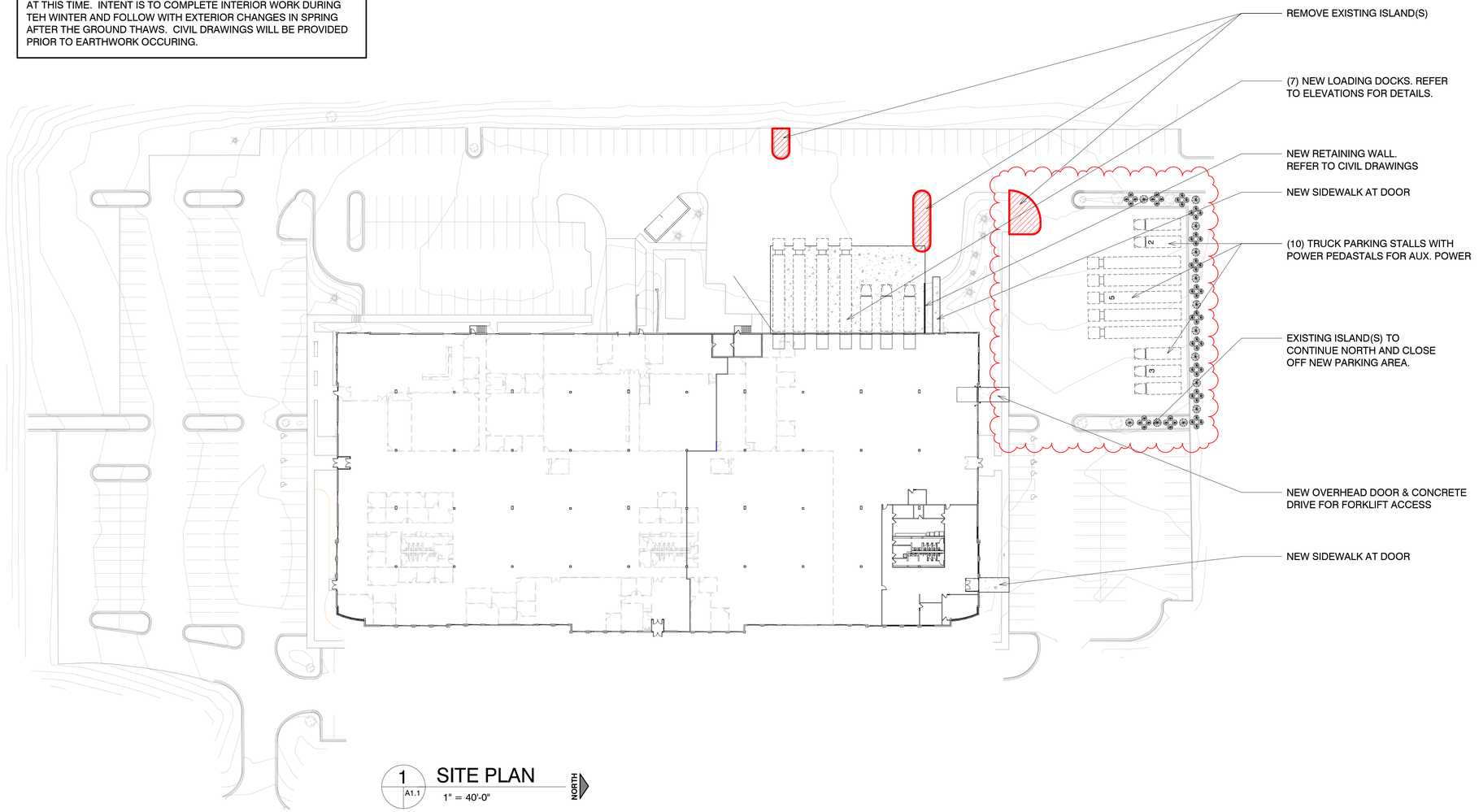
CIVIL ENGINEERING NOTE:
CIVIL ENGINEERING TO BE PROVIDED BY GC. SURVEY IS ONGOING AT THIS TIME. INTENT IS TO COMPLETE INTERIOR WORK DURING TEH WINTER AND FOLLOW WITH EXTERIOR CHANGES IN SPRING AFTER THE GROUND THAWS. CIVIL DRAWINGS WILL BE PROVIDED PRIOR TO EARTHWORK OCCURING.



1 A1.1 SITE PLAN
1" = 40'-0"

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REVISIONS

NO.	REV. DATE	DESCRIPTION
1	4-10-23	PLAN COMMISSION COMMENT RESPONSE

PROJECT INFO
Original Issue Date
04/04/23
Project No.
23.009
Drawn By
TM

SHEET TITLE
SITE PLAN

A1.1

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DEMOLITION PLAN GENERAL NOTES:

A. CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING BUILDING AMENITIES NOT SLATED FOR DEMOLITION OR REMODELING.

B. PATCH AND REPAIR EXISTING WALLS TO REMAIN TO PROVIDE A SUITABLE SURFACE FOR NEW FINISHES.

C. REMOVE EXISTING FLOOR FINISHES SLATED FOR DEMOLITION TO SUB FLOOR AND PREPARE FOR NEW FINISHES.

D. SALVAGE EXISTING DOORS AND HARDWARE FOR REUSE, RETURN EXCESS DOORS AND HARDWARE TO OWNER.

E. SALVAGE EXISTING CASEWORK FOR REUSE, RETURN EXCESS CASEWORK TO OWNER.

F. SALVAGE EXISTING PLUMBING FIXTURES FOR REUSE, RETURN EXCESS FIXTURES TO OWNER.

G. SALVAGE EXISTING PAPER TOWEL, SOAP DISPENSERS AND TOILET ROOM ACCESSORIES FOR REUSE, RETURN EXCESS TO OWNER.

H. SALVAGE EXISTING LIFE SAFETY EQUIPMENT, FIRE EXTINGUISHERS, EXIT SIGNS, ETC. FOR REUSE, RETURN EXCESS EQUIPMENT TO OWNER.

I. SALVAGE EXISTING HVAC GRILLES AND LOUVERS FOR REUSE, RETURN EXCESS TO OWNER.

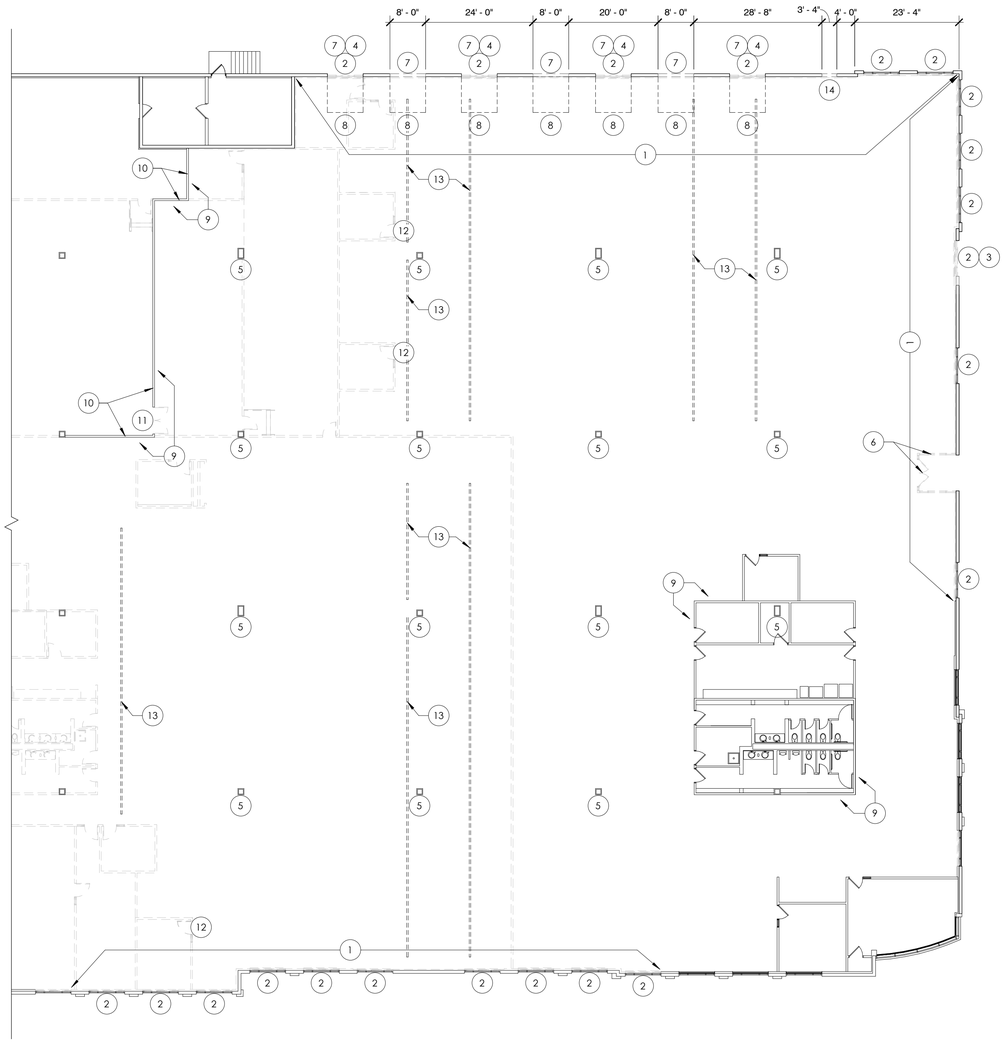
J. SALVAGE EXISTING OUTLETS AND SWITCHES AND LIGHT FIXTURES FOR REUSE, PULL ALL ABANDONED WIRE FROM CONDUIT, RETURN EXCESS MATERIAL TO OWNER.

K. SALVAGE AND REUSE EXISTING APPLIANCES AND EQUIPMENT.

L. REMOVE ELECTRICAL EQUIPMENT IN WALLS TO BE DEMOLISHED. MAINTAIN CIRCUIT CONTINUITY AT ELECTRICAL FIXTURES/RECEPTACLES TO REMAIN

KEYED DEMOLITION PLAN NOTES

TAG #	DESCRIPTION
1	WAREHOUSE SPACE ONLY: REMOVE WALL FURRING.
2	REMOVE IN-WALL ELECTRICAL HEATING UNIT(S) & ASSOCIATED HANGERS.
3	REMOVE EXISTING CONCRETE WALL TO ACCOMMODATE NEW OVERHEAD SECTIONAL DOOR. SEE A4.2 FOR DETAILS.
4	REMOVE STOREFRONT WINDOW
5	REMOVE COLUMN FURRING.
6	SALVAGE EXISTING ENTRY VESTIBULE UNIT FOR RELOCATION & REUSE.
7	REMOVE KNOCK-OUT PORTION OF PRECAST WALL PANELS FOR NEW DOCK DOOR & LEVELERS.
8	REMOVE FLOOR AS NEEDED FOR NEW DOCK PIT WALLS. VERIFY SIZE REQUIREMENTS PER SELECTED DOCK LEVELER SPEC.
9	ALTER RAISED FLOOR SYSTEM @ EDGE OF EXISTING WALL(S). INTENT IS FOR OFFICE FLOORING TO REMAIN.
10	SAVE EXISTING WALL.
11	REMOVE DOOR.
12	SALVAGE DOOR FOR REUSE IN NEW OFFICE WALL.
13	SALVAGE LINEAR PENDANT FOR POTENTIAL REUSE.
14	CUT OPENING IN PRECAST WALL PANEL FOR NEW DOOR. SEE A4.2 FOR DETAILS.



1 A3.0 DEMOLITION PLAN
1/16" = 1'-0"

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REVISIONS

NO	REV. DATE	DESCRIPTION

PROJECT INFO
Original Issue Date
04/04/23
Project No.
23.009
Drawn By
JD

SHEET TITLE
DEMOLITION PLAN

A3.0

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FLOOR PLAN GENERAL NOTES:

A. (X) INDICATES WALL TYPE. SEE WALL SCHEDULE FOR WALL ASSEMBLY INFORMATION. NOTE: SEE SECTIONS AND ELEVATIONS FOR CHANGES IN MATERIALS/WALL TYPES/ACCENT-ELEMENTS THAT MAY NOT BE INDICATED @PLAN CUT.

B. SEE A1.0 FOR TYPICAL DIMENSIONS OF DOOR OPENING FROM ADJACENT WALL.

C. PROVIDE FIRE TREATED BLOCKING AT MILLWORK AND WALL HUNG ELEMENTS IN RATED WALLS.

D. INDICATES NEW MILLWORK. SEE INTERIOR ELEVATIONS AND DETAILS.

E. FE INDICATES FIRE EXTINGUISHER LOCATION.

F. PROVIDE ROOF PATCHING AT ALL REQUIRED MECHANICAL PENETRATIONS PER ROOF MANUFACTURER'S RECOMMENDATIONS TO MAINTAIN WARRANTY

G. MODIFY EXISTING NFPA 13 AUTOMATIC SPRINKLER SYSTEM AS REQUIRED PER NEW FLOOR PLAN.

H. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED IN STRICT COMPLIANCE WITH ALL LOCAL CODES, ORDINANCES AND REGULATIONS OF THE GOVERNMENT AUTHORITIES HAVING JURISDICTION.

I. CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED TO PERFORM WORK IN ACCORDANCE WITH REQUIREMENTS AND PROCEDURES OF ANY AND ALL AUTHORITIES HAVING JURISDICTION.

J. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND COORDINATES. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS.

K. CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS AND NOTIFY THE ARCHITECT OF ANY CONCERNS PRIOR TO STARTING WORK.

L. DO NOT SCALE THE DRAWINGS. IF A CONTRADICTION OCCURS WITHIN THE CONTRACT DOCUMENTS OR INFORMATION IS UNCLEAR, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT FOR CLARIFICATION.

M. CONTRACTOR SHALL COORDINATE WITH THE WORK OF OTHERS NOT INCLUDED IN THE CONTRACT AS DIRECTED BY THE OWNER.

N. ALL INTERIOR PLAN DIMENSIONS ARE TO FACE OF INTERIOR FINISH OR CENTER OF WALL, U.N.O.

O. ALL VERTICAL DIMENSIONS TO BE ABOVE FINISH FLOOR (A.F.F.) U.N.O.

P. THE WORD ALIGN AS USED IN THESE DOCUMENTS SHALL MEAN TO ACCURATELY LOCATE FINISH FACES IN THE SAME PLANE.

Q. ALL DOORS USED IN CONJUNCTION WITH EXITS SHALL BE ARRANGED TO READILY OPEN WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE FROM THE SIDE OF EGRESS.

R. ALL EXTERIOR DIMENSIONS ARE FROM EXTERIOR FINISH FACE TO EXTERIOR FINISH FACE U.N.O.

S. A THERMAL BREAK IN THE CONCRETE FLOOR SLAB IS REQUIRED AT ALL EXTERIOR DOOR LOCATIONS: SEE DOOR DETAILS FOR MORE INFORMATION

T. ALL WALLS TO EXTEND TO UNDERSIDE OF FLOOR/ROOF DECK U.N.O.

U. "TYPICAL" (OR TYP.) AS USED IN THESE DOCS SHALL MEAN THAT THE CONDITION IS THE SAME OR REPRESENTATIVE FOR ALL SIMILAR CONDITIONS U.N.O

V. ALL PARTITION PENETRATIONS SHALL BE FIELD VERIFIED & BRACED & SEALED AS REQUIRED

W. CONTRACTOR SHALL COORDINATE MILLWORK INSTALLATION & PROVIDE BLOCKING AS REQUIRED FOR THE SUPPORT OF SUCH MILLWORK TYP.

X. PROVIDE PROPER PREPARATION TO ALL SURFACES TO RECEIVE NEW FINISHES

Y. GC RESPONSIBLE FOR VERIFYING NEW WALLS DO NOT INTERFERE WITH ANY EXISTING ABOVE CEILING MEP UNITS/DEVICES AND MAINTENANCE ACCESS TO THEM. IF A CONFLICT ARISES, IMMEDIATELY CONTACT THE ARCHITECT AND BUILDING MANAGEMENT/ENGINEERING BEFORE FRAMING WALLS.

Z. WHERE FLOOR DRAINS ARE REQUIRED (SEE PLUMBING) PITCH CONCRETE SLAB TO DRAINS 1/8" PER FOOT, TYP, UNLESS NOTED OTHERWISE.

FINISH FLOOR PLAN GENERAL NOTES:

A. THIS DRAWING INDICATES THE GENERAL LOCATION OF FIXTURES, ARCHITECTURAL DETAILS AND FINISHES. REFER TO ENGINEERING DRAWINGS FOR ADDITIONAL INFORMATION AND SPECIFICATIONS.

B. SEE FINISH SCHEDULE, REFLECTED CEILING PLAN, STRUCTURAL DRAWINGS, AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

C. FLOORING TRANSITIONS TO OCCUR AT CENTERLINE OF DOOR OPENING, U.N.O.

D. SEE SCHEDULE FOR BASE TYPES.

E. VERIFY ELECTRICAL DEVICE AND COVER PLATE COLORS WITH ARCHITECT PRIOR TO INSTALLATION.

F. PAINT ALL BOLLARDS SAFETY YELLOW. PAINT ALL BUILDING COLUMNS IN WAREHOUSE AREA TO 10'-0" AFF SAFETY YELLOW.

ROOM FINISH SCHEDULE

ROOM #	ROOM NAME	FLOOR FINISH	BASE FINISH	WALL FINISH NORTH	WALL FINISH EAST	WALL FINISH SOUTH	WALL FINISH WEST	CEILING FINISH	COMMENTS
100	VESTIBULE	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	
101	OPEN OFFICE	EXST.	WB-1	EXST.	EXST.	PNT-1	PNT-1	EXST.	ON NEW WALLS ONLY
102	CONFERENCE	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	
103	OFFICE	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	
104	MENS	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	
105	JAN.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	
106	WOMENS	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	
107	BREAKROOM	LVT-1	VB-1	EXST.	EXST.	EXST.	EXST.	EXST.	
108	STOR	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	
109	STOR	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	
110	ELEC.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	
111	MANAGER	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	
112	WAREHOUSE	EXST. CONCRETE	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	
113	ELEC.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	
114	ELEC.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	EXST.	

KEY SCHEDULE - FINISHES

CODE	MATERIAL TYPE	MANUFACTURER	PRODUCT	COLOR	SIZE / FINISH	INSTALL PATTERN	CONTACT	NOTES
LVT-1	LUXURY VINYL TILE	INTERFACE	TEXTURED STONES - LEVEL SET	MEDIUM CONCRETE - A00309	SIZE: 50 CM X 50 CM	STRAIGHT LAY	N/A	BREAK ROOM AREA ONLY
PNT-1	PAINT	PER GC	PER GC	MATCH EXISTING	N/A	N/A	N/A	OFFICE SIDE OF P-1 WALLS ONLY
WB-1	VINYL BASE	JOHNSONITE	VINYL WALL BASE	40 BLACK B	4" HIGH BASE	N/A	N/A	IN OFFICE AREA NEW WALLS ONLY

POWER & DATA LEGEND

- EXISTING DUPLEX OUTLET
- NEW DUPLEX OUTLET
- DEDICATED 20 AMP DUPLEX OUTLET
- EXISTING QUADPLEX OUTLET
- NEW QUADPLEX OUTLET
- EXISTING PHONE/ DATA OUTLET
- NEW MUD RING, PULL STRING, & CONDUIT FOR LOW VOLTAGE
- NEW FLOOR CORE POWER/DATA
- FURNITURE FEED
- CR — CARD READER
- DOOR BELL

THIS DRAWING INDICATES THE GENERAL LOCATION OF FIXTURES, ARCHITECTURAL DETAILS, AND FINISHES. DESIGN/BUILD ELECTRICIAN SHALL REVIEW LIGHTING SPECIFICATIONS AND PROVIDE ANY AND ALL REQUIRED ASSOCIATED ACCESSORIES, WIRING, JUNCTION BOXES, ETC., WHICH MAY NOT BE EXPLICITLY IDENTIFIED IN THE DRAWINGS.

ELECTRICAL/DATA PLAN GENERAL NOTES:

A. ***CONTRACTOR TO VERIFY ELECTRICAL NEEDS WITH FURNITURE PROVIDER AND OWNER AS REQUIRED FOR NEW FURNITURE LAYOUT. THIS INCLUDES PROVIDING POWER AS REQUIRED AT PERIMETER OF SPACE FOR CUBICLE LAYOUT.***

B. ALL ELECTRICAL DEVICES AND COVER PLATES TO BE WHITE.

C. KEEP EXISTING OUTLETS WHERE POSSIBLE. **EXISTING OUTLETS NOT LOCATED ON PLANS.** REPLACE ALL EXISTING ELECTRICAL DEVICES AND COVER PLATES WITH WHITE DEVICES AND COVER PLATES. THIS INCLUDES EXISTING THERMOSTATS/THERMOSTAT COVERS IN AREA OF WORK ONLY.

D. PROVIDE NEW THERMOSTATS AS REQUIRED.

E. ALL SWITCHING TO BE CODE COMPLIANT, PROVIDE 3-WAY SWITCHING AT OPEN AREAS.

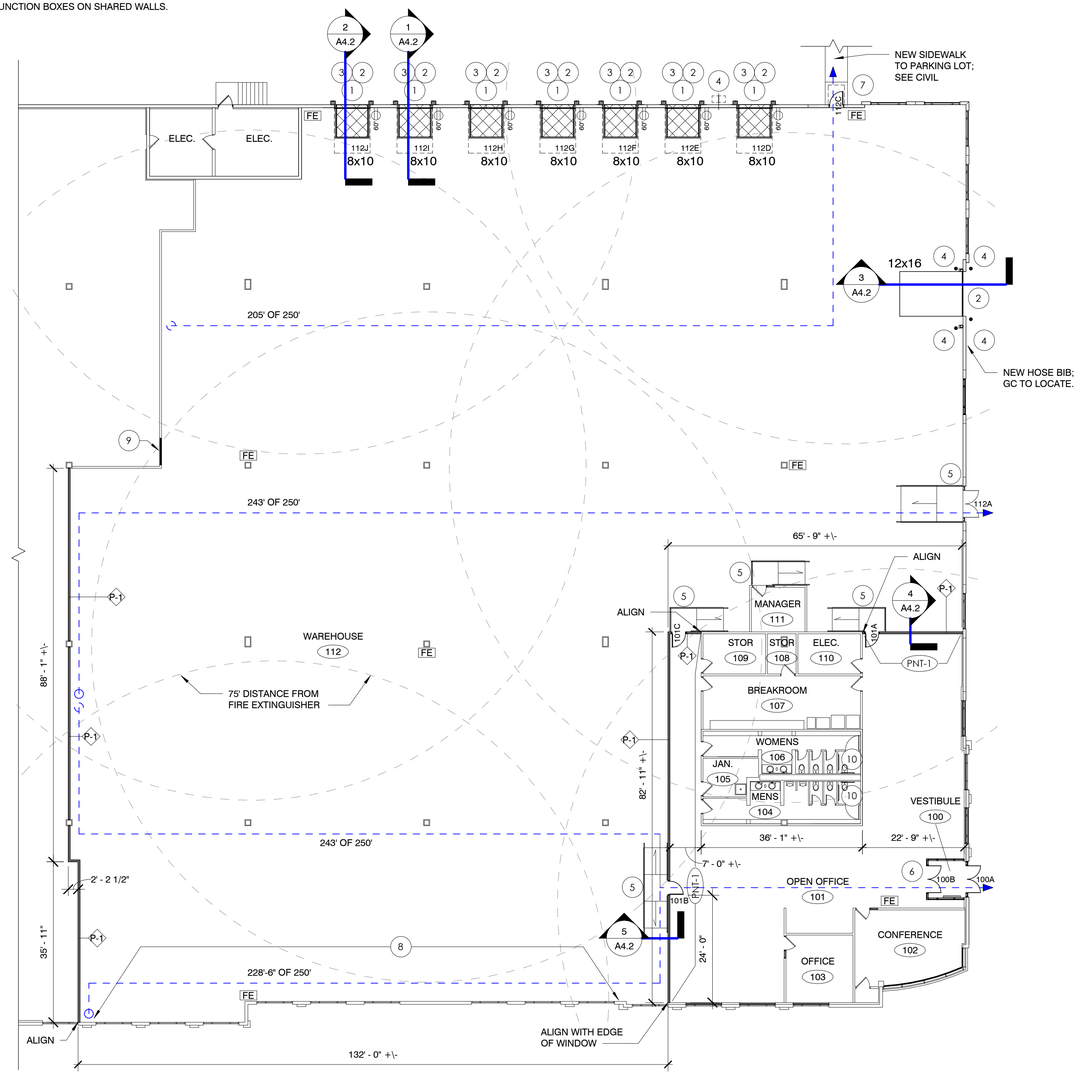
F. CONTRACTOR TO VERIFY LAYOUT OF ELECTRICAL DEVICES WITH ARCHITECT PRIOR TO INSTALLATION. SEE PLAN FOR PROPOSED POWER/DATA LOCATIONS.

G. SPECIFIC LOW VOLTAGE CABELING AND TERMINATIONS BY LOW VOLTAGE CONTRACTOR.

H. NO BACK TO BACK JUNCTION BOXES ON SHARED WALLS.

KEYED FLOOR PLAN NOTES

TAG #	DESCRIPTION
1	NEW DOCK LEVELER. REFER TO SECTION AND STRUCTURAL DRAWINGS FOR ADDITIONAL DETAILS.
2	NEW OVERHEAD SECTIONAL DOOR. REFER TO SECTION FOR ADDITIONAL DETAILS.
3	NEW DOCK SHELTER. REFER TO ELEVATIONS FOR ADDITIONAL DETAILS.
4	NEW CONCRETE FILLED BOLLARDS AT RECONFIGURED GAS METER LOCATION. REFER TO ELEVATIONS AND STRUCTURAL DRAWINGS FOR ADDITIONAL DETAILS.
5	MODULAR RAMP SYSTEM: PROVIDE 5'-6" SQ. FLAT PLATFORM W/ 6'-0" LONG (1:12 SLOPE) RAMP. PROVIDE HANDRAILS AND EXTEND TO 12" PAST SLOPED SURFACES (TYP.)
6	GC TO INSTALL SALVAGED ALUMINUM & GLASS VESTIBULE SYSTEM INCLUDING BASE HEATING ELEMENT.
7	NEW CONCRETE STOOP WITH 8" CONCRETE FROST WALLS TO 48" BELOW FINISH GRADE.
8	EXISTING ELECTRICAL OUTLETS & CIRCUITRY TO REMAIN.
9	INFILL FRAME & ALIGN NEW WALL @ REMOVED DOUBLE DOOR.
10	PROVIDE NEW VERTICAL GRAB BAR. REFER TO TYPICAL MOUNTING HEIGHTS ON A1.0 FOR LOCATION.



1 A3.1 CONSTRUCTION PLAN

1/16" = 1'-0"

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REVISIONS

NO.	REV. DATE	DESCRIPTION

PROJECT INFO

Original Issue Date: 04/04/23
Project No.: 23 009
Drawn By: JD

SHEET TITLE
CONSTRUCTION PLAN, LIFE & SAFETY PLAN, POWER & DATA, & FINISH PLAN

A3.1

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REFLECTED CEILING PLAN GENERAL NOTES:

A. THIS DRAWING INDICATES THE GENERAL LOCATION OF FIXTURES, ARCHITECTURAL DETAILS AND FINISHES. DESIGN/BUILD ELECTRICIAN SHALL REVIEW LIGHTING SPECIFICATIONS AND PROVIDE ANY AND ALL REQUIRED ASSOCIATED ACCESSORIES, WIRING, JUNCTION BOXES, ETC. WHICH MAY NOT BE EXPLICITLY IDENTIFIED IN THESE DRAWINGS.

B. SEE FINISH SCHEDULE, FINISH PLANS, AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

C. PROVIDE ACT HOLD DOWN CLIPS WITHIN 20'-0" OF ENTRY DOORS

D. ALL CEILING TILE TO BE CENTERED IN BOTH DIRECTIONS IN EACH ROOM OR SPACE U.N.O.

E. VERIFY MOUNTING HEIGHTS OF DECORATIVE FIXTURES WITH ARCHITECT PRIOR TO INSTALLATION.

F. ALL DOWN LIGHTS AND WALL WASHERS TO BE CENTERED IN CEILING TILE OR SOFFIT, U.N.O.

G. DESIGN/BUILD MECHANICAL CONTRACTOR SHALL REVIEW FOR DUCT AND EQUIPMENT LAYOUT AND PROVIDE ANY AND ALL REQUIRED ASSOCIATED ACCESSORIES, DUCTS, EQUIPMENT, ETC. WHICH MAY NOT BE EXPLICITLY IDENTIFIED IN THESE DRAWINGS.

H. COORDINATE LOCATION OF ELECTRICAL FIXTURES, MECHANICAL GRILLES AND DIFFUSERS, SPRINKLER HEADS, AND OTHER CEILING MOUNTED ITEMS, NOTIFY ARCHITECT OF CONFLICTS PRIOR TO FINAL INSTALLATION.

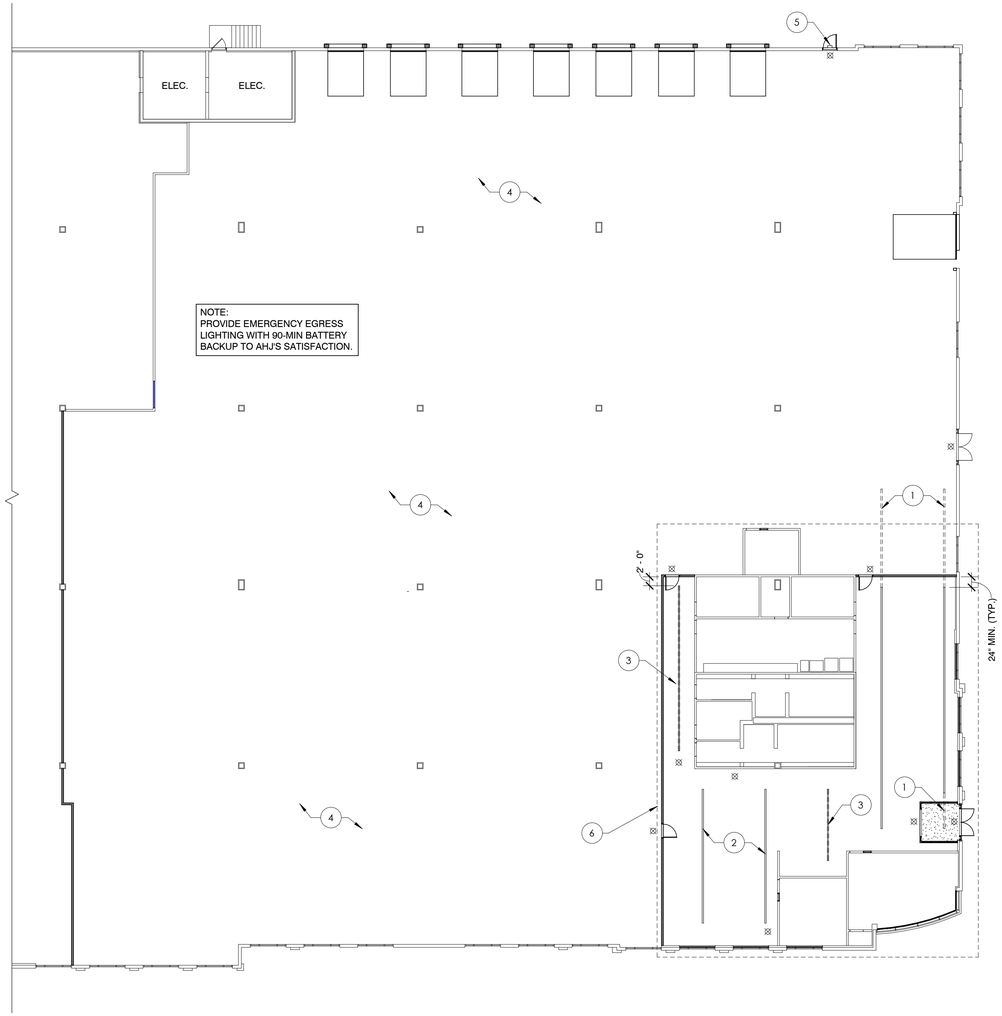
I. EXIT AND EXIT ACCESS DOORS SHALL BE MARKED BY EXIT SIGNS. EXIT SIGNS SHALL COMPLY WITH IBC 1013.1. PROVIDE ABILITY TO PROVIDE 90 MINUTE OF CONTINUOUS ILLUMINATION IN CASE OF POWER LOSS. EMERGENCY LIGHTING TO BE DESIGNED/PROVIDED BY DESIGN/BUILD ELECTRICIAN.

PAINTED GYP. BD. CEILING

EXIT LIGHT WITH 90 MIN. BATTERY BACKUP

KEYED REFLECTED CEILING PLAN NOTES

TAG #	DESCRIPTION
1	ALTER OVERALL LENGTH OF EXISTING LINEAR PENDANT TO ALIGN WITH NEW LAYOUT.
2	EXISTING LINEAR PENDANT TO REMAIN.
3	GC TO INSTALL SALVAGED LINEAR PENDANT ALONG EXISTING ACT GRID LINE. VERIFY EXISTING CONDITIONS.
4	NEW HIGH BAY LED FIXTURES. LAYOUT BY ELECTRICAL CONTRACTOR.
5	NEW EXTERIOR WALL PACK FIXTURE CENTERED ABOVE NEW DOOR.
6	ALL EXISTING LIGHTING IN OFFICE AREA TO REMAIN.



1 A3.2 REFLECTED CEILING PLAN

1/16" = 1'-0"

NORTH

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Tenant Improvement For:
COMMON TRANSPORTATION
W233N2095 RIDGEVIEW PKWY.
PEWAUKEE, WI 53188

REVISIONS

NO.	REV. DATE	DESCRIPTION

PROJECT INFO
Original Issue Date 04/04/23
Project No. 23.009
Drawn By JD

SHEET TITLE
REFLECTED CEILING PLAN

A3.2

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DOOR SCHEDULE											
		Door						Frame			
Door #	Type	Width	Height	Thickness	Material	Finish	Hardware	Type	Material	Finish	Comments
100A	EXST.	6' - 0"	8' - 0"	1 3/4"	ALUM.	ANOD.	EXST.	EXST. ALUM.	ALUM.	ANOD.	
100B	EXST.	6' - 0"	8' - 0"	1 3/4"	ALUM.	ANOD.	EXST.	EXST. ALUM.	ALUM.	ANOD.	RELOCATED
101A	D-1	3' - 0"	7' - 0"	1 3/4"	WD	EXST.	HW-01	SALV.	HM	PNT.	SALVAGED
101B	D-1	3' - 0"	7' - 0"	1 3/4"	WD	EXST.	HW-01	SALV.	HM	PNT.	SALVAGED
101C	D-1	3' - 0"	7' - 0"	1 3/4"	W	EXST.	HW-01	SALV.	HM	PNT.	SALVAGED
112A	EXST.	6' - 0"	6' - 11 1/2"	1 3/4"	ALUM.	ANOD.	EXST.	EXST. ALUM.	ALUM.	ANOD.	
112C	D-2	3' - 0"	7' - 0"	1 3/4"	HM	PNT.	HW-02	HM	HM	PNT.	
112D	OH-1	8' - 0"	10' - 0"	2"	MTL.	PREFIN.	BY DOOR MANUF.	-	-	-	
112E	OH-1	8' - 0"	10' - 0"	2"	MTL.	PREFIN.	BY DOOR MANUF.	-	-	-	
112F	OH-1	8' - 0"	10' - 0"	2"	MTL.	PREFIN.	BY DOOR MANUF.	-	-	-	
112G	OH-1	8' - 0"	10' - 0"	2"	MTL.	PREFIN.	BY DOOR MANUF.	-	-	-	
112H	OH-1	8' - 0"	10' - 0"	2"	MTL.	PREFIN.	BY DOOR MANUF.	-	-	-	
112I	OH-1	8' - 0"	10' - 0"	2"	MTL.	PREFIN.	BY DOOR MANUF.	-	-	-	
112J	OH-1	8' - 0"	10' - 0"	2"	MTL.	PREFIN.	BY DOOR MANUF.	-	-	-	
112YY	OH-2	10' - 0"	14' - 0"	2"	MTL.	PREFIN.	BY DOOR MANUF.	-	-	-	

DOOR HARDWARE

HW-01 PASSAGE

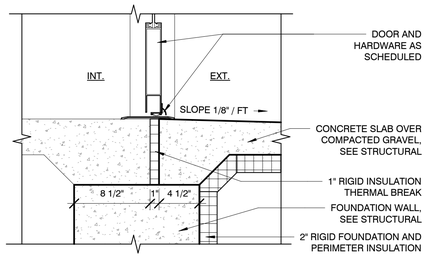
(3) 4.5x4.5 BB1279 HINGES	HAGER
ND10S PASSAGE LATCH	SCHLAGE
4040XP EDA x 18 x 61 CLOSER	689 LNC
405 WALL STOP	ROCKWOOD

HW-02 ENTRANCE

CONTINUOUS HINGES	628 HAGER 780-112-HD
ND10S ENTRANCE LATCH	SCHLAGE
4040XP CLOSER	689 LNC
WITH HOLD OPEN FUNCTION	
100S OVERHEAD STOP	630 GLY
160 SET SEAL	AL NGP
200N SWEEP	AL NGP
425 THRESHOLD	AL NGP
16 RAIN DRIP	AL NGP

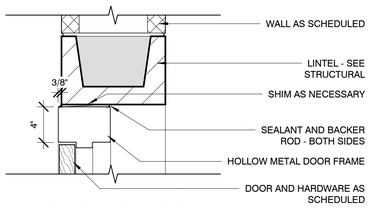
GENERAL DOOR AND HARDWARE NOTES:

1. VERIFY LEVER STYLE WITH OWNER PRIOR TO APPROVAL.
2. ITEMS OF HARDWARE NOT DEFINITELY SPECIFIED HEREIN, BUT NECESSARY FOR COMPLETION OF THE WORK SHALL BE PROVIDED. SUCH ITEMS SHALL BE OF TYPE AND QUALITY SUITABLE TO THE SERVICE REQUIRED AND COMPARABLE TO THE ADJACENT HARDWARE. WHERE SIZE AND SHAPE OF MEMBERS IS SUCH AS TO PREVENT THE USE OF TYPES SPECIFIED, HARDWARE SHALL BE FURNISHED OF SUITABLE TYPES HAVING AS NEARLY AS PRACTICABLE THE SAME OPERATION AND QUALITY AS THE TYPE SPECIFIED. SIZES SHALL BE ADEQUATE FOR THE SERVICE REQUIRED. INCLUDE SUCH NUANCES AS STRIKE TYPE, STRIKE LIP, RAISED BARREL HINGES, MOUNTING BRACKETS, FASTENERS, SHIMS, AND COORDINATION BETWEEN CONFLICTING PRODUCTS.
3. ALL DOORS SHALL BE PROVIDED WITH A STOP.
4. PROVIDE CYLINDERS FOR ALL NEW HARDWARE.
5. CONFIRM ALL KEYING WITH OWNER PRIOR TO ORDERING CYLINDERS.
6. ITEMS OF HARDWARE NOT DEFINITELY SPECIFIED HEREIN, BUT NECESSARY FOR COMPLETION OF THE WORK SHALL BE PROVIDED.
7. HARDWARE SUPPLIER TO COORDINATE ELECTRICAL HARDWARE WITH ELECTRICAL CONTRACTOR. VERIFY ALL VOLTAGES AND TRANSFORMER REQUIREMENTS.
8. FIRE RATED OPENINGS SHALL BE PROVIDED AS POSITIVE LATCHING AND SELF-CLOSING REGARDLESS OF WHAT IS SPECIFIED IN THE SETS.
9. ALL HARDWARE SHALL BE ADA COMPLIANT PER APPLICABLE CODES.



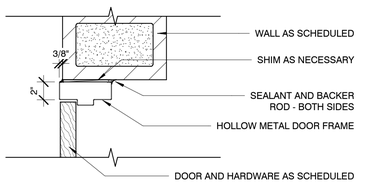
5 A4.1 THRESHOLD DETAIL

1 1/2" = 1'-0"



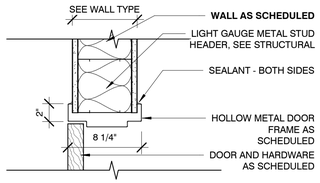
4 A4.1 HEAD - DOOR

1 1/2" = 1'-0"



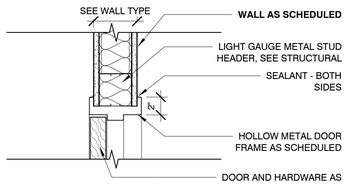
3 A4.1 JAMB - DOOR

1 1/2" = 1'-0"



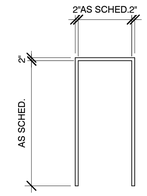
2 A4.1 DOOR HEAD - JAMB SIM

1 1/2" = 1'-0"



1 A4.1 DOOR HEAD - JAMB SIM

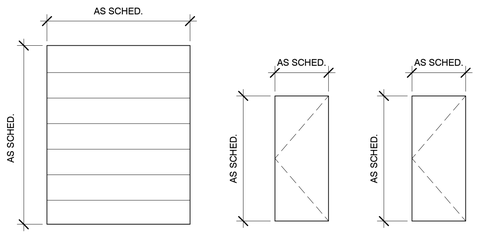
1 1/2" = 1'-0"



F-1
HOLLOW METAL FRAME

FRAME TYPES

1/4" = 1'-0"



OH-1
OVERHEAD GARAGE DOOR

D-1
FLUSH SOLID CORE WOOD VENEER DOOR

D-2
FLUSH HM EXTERIOR DOOR

DOOR TYPES

1/4" = 1'-0"

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Tenant Improvement For:

COMMON TRANSPORTATION

W233N2095 RIDGEVIEW PKWY.
PEWAUKEE, WI 53188

REVISIONS

NO.	REV. DATE	DESCRIPTION

PROJECT INFO

Original Issue Date
04/04/23

Project No.
23.009

Drawn By
JD

SHEET TITLE

DOOR SCHEDULE, TYPES, HARDWARE, & DETAILS

A4.1

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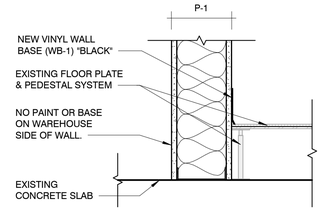
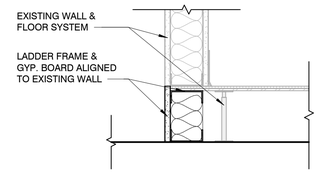


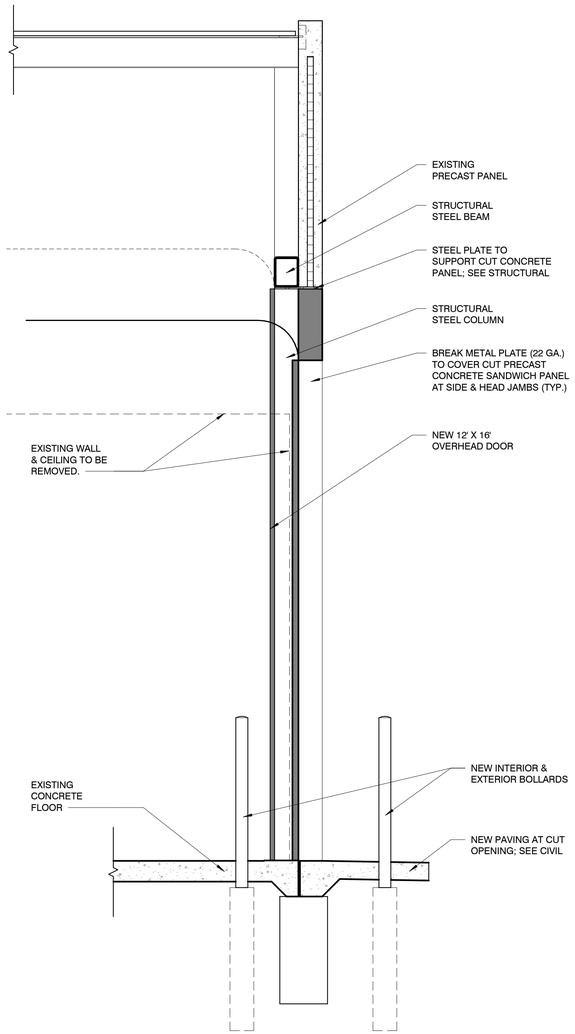
5 A3.1 A4.2 **P-1 WALL - BASE DETAIL**

1 1/2" = 1'-0"



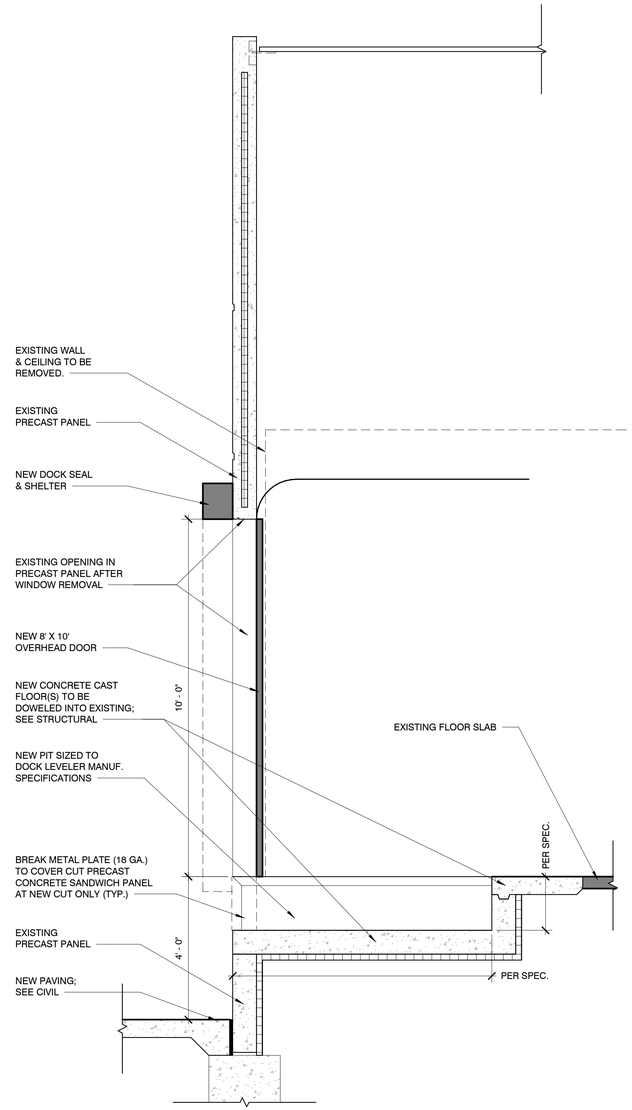
4 A3.1 A4.2 **EXISTING WALL - BASE DETAIL**

1 1/2" = 1'-0"



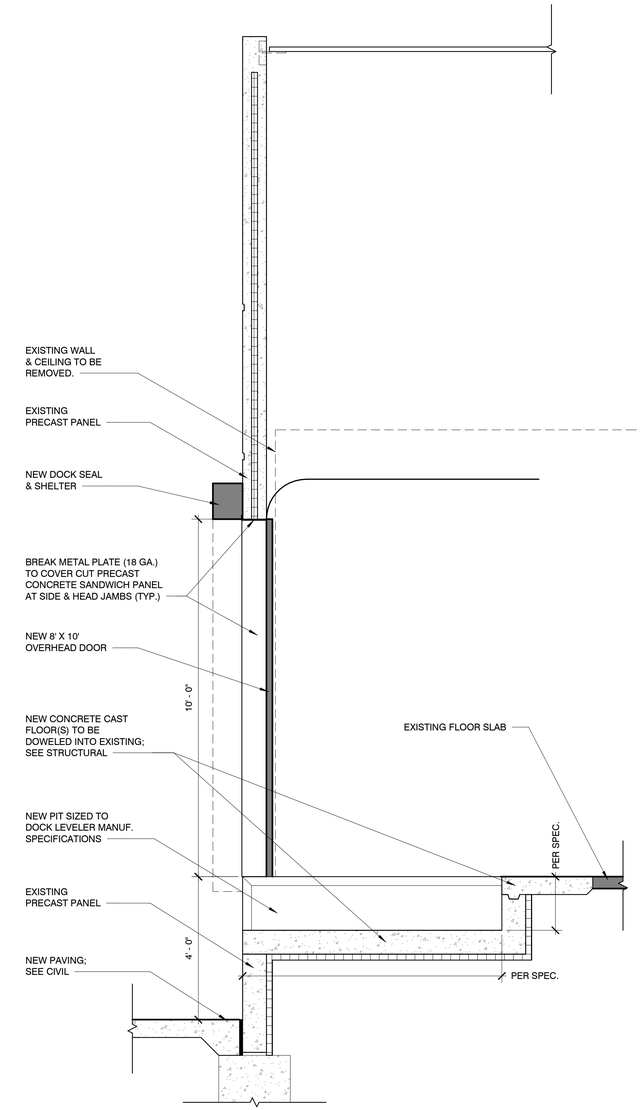
3 A3.1 A4.2 **OVERHEAD DOOR @ GRADE**

1/2" = 1'-0"



2 A3.1 A4.2 **TYP. DOCK BAY - EXISTING OPENING**

1/2" = 1'-0"



1 A3.1 A4.2 **TYP. DOCK BAY - NEW OPENING**

1/2" = 1'-0"

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REVISIONS

NO.	REV. DATE	DESCRIPTION

PROJECT INFO

Original Issue Date 04/04/23
Project No. 23.009
Drawn By JD

SHEET TITLE
BUILDING SECTIONS & DETAILS

A4.2

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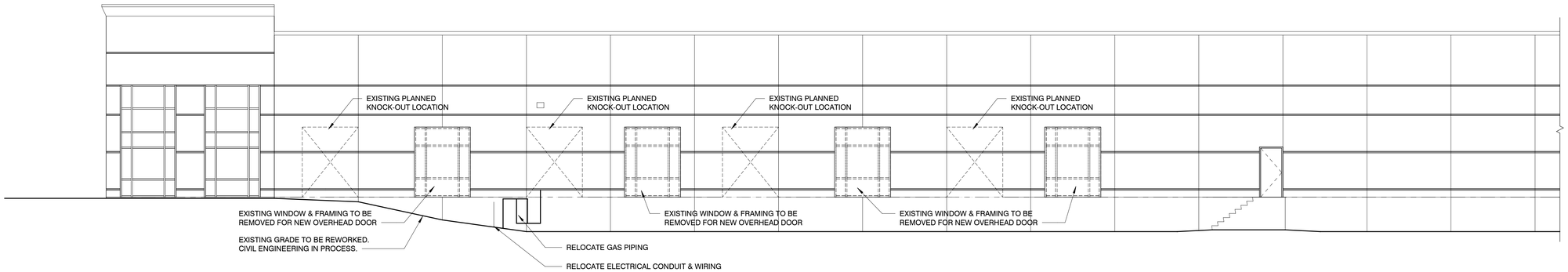
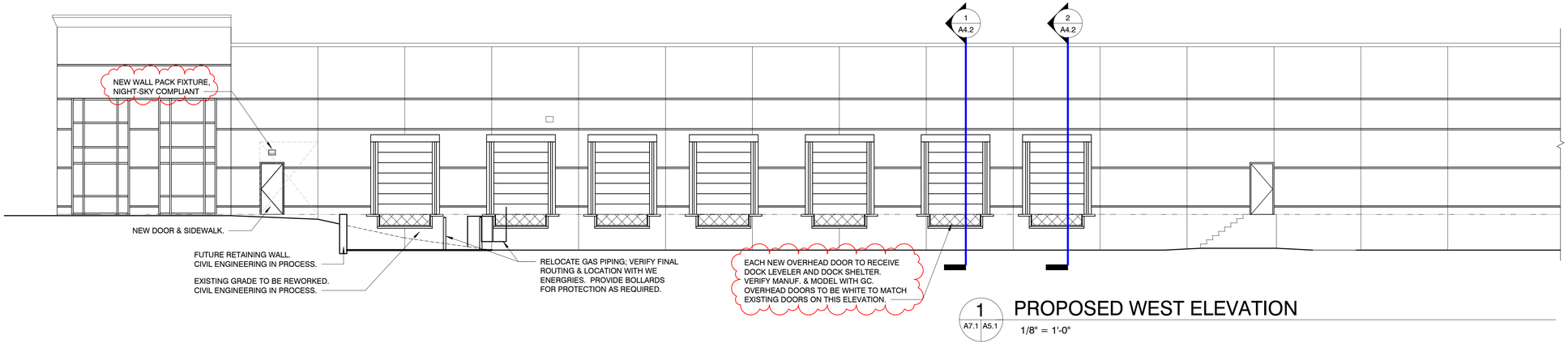
MATERIAL KEY - ELEVATIONS	
TAG #	DESCRIPTION



2 A5.1 EXISTING WEST ELEVATION

1/8" = 1'-0"



1 A7.1 A5.1 PROPOSED WEST ELEVATION

1/8" = 1'-0"

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Tenant Improvement For:

COMMON TRANSPORTATION

W233N2095 RIDGEVIEW PKWY.
PEWAUKEE, WI 53188

REVISIONS

NO.	REV. DATE	DESCRIPTION
1	4-10-23	PLAN COMMISSION COMMENT RESPONSE

PROJECT INFO

Original Issue Date
04/04/23

Project No.
23.009

Drawn By
TM/JD

SHEET TITLE
BUILDING ELEVATIONS

A5.1

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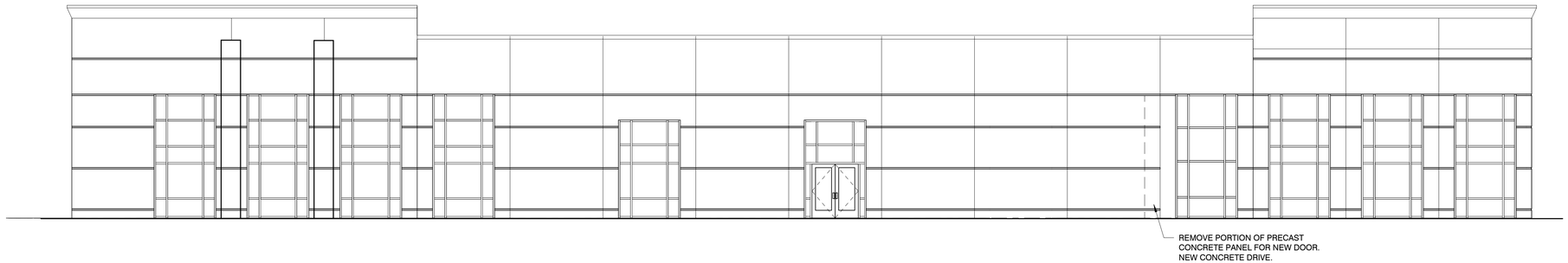
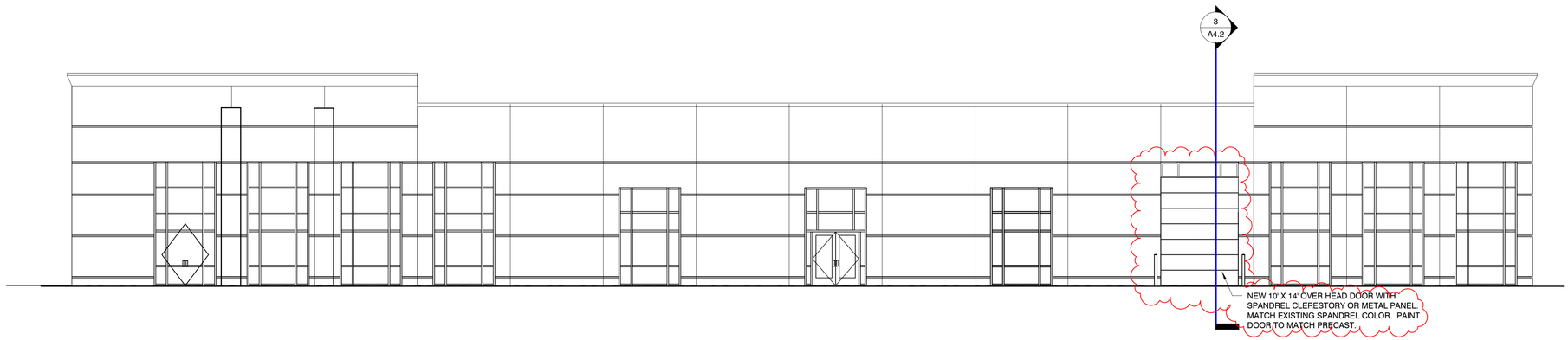


2 A5.2 EXISTING NORTH ELEVATION

1/8" = 1'-0"



1 A7.1 A5.2 PROPOSED NORTH ELEVATION

1/8" = 1'-0"

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REVISIONS

NO.	REV. DATE	DESCRIPTION
1	4-10-23	PLAN COMMISION COMMENT RESPONSE

PROJECT INFO

Original Issue Date
04/04/23

Project No.
23.009

Drawn By
TM/JD

SHEET TITLE
BUILDING ELEVATIONS

A5.2

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April 10, 2023

Common Transportation
W233 N2095 Ridgeview Parkway
Pewaukee, WI

RE: Responses to staff Comments and Recommendations

Comments and Recommendations:

Below are comments and recommendations for the proposed development application for property located at W233N2095 Ridgeview Parkway, Tax Key No. 0953986003. in. studio comments are in blue.

1. The project narrative should be revised to state the request is for Site & Building Plan Review, not a Conditional Use.
   in. studio: Project narrative has been updated.

2. Staff recommends providing an overall site plan for reference. It may assist the Plan Commission to visualize the entire site in addition to the project area.
   in. studio: An overall site aerial photo has been added to the set for additional visualization. This photo also shows the location and level of the existing landscape screening.

3. Please confirm if any new parking lot lighting is proposed. If so, a Lighting Plan must be provided that includes light types, peak heights (not to exceed 20 feet), a photometric plan, and fixture catalog pages/cut sheets. Currently it appears that only a wall pack fixture is included on the rear of the building.
   in. studio: Only the new wall pack is being added for egress purposes. Wall pack fixture will be night-sky compliant to limit additional light from shining on to neighboring proprieties.

4. Is the first row of passenger car parking adjacent to the building on the north side remaining? If so, will that interfere with the truck/trailer parking?
   in. studio: The first row of passenger car parking has been removed in proximity of the truck parking location. Updated site drawings attached.

5. Are the existing drives and access to the site wide enough to accommodate the semi-trailers or will those be modified?
   in. studio: The existing west and south drives are sufficient for truck use. A portion of an additional landscaped area is proposed to be removed to allow for better truck maneuverability near the truck parking location. Refer to the updated drawings.

6. Staff recommends illustrating truck turning movements within the site.
   in. studio: Truck turning movements have been added to the updated site drawings.

7. What is the color/style of the overhead door proposed on the north elevation? Will this be painted to match the building? Will trucks be backing up to the building and loading and unloading at this location?
   in. studio: The door will be painted to match the building. Spandrel glazing above the new door will be selected to complement the building as well. The size has also been decreased to a 10' wide x 14' tall door to limit the visibility from Ridgeview Parkway and neighboring properties. Trucks will not be backing up to load/unload at this door. The door will be infrequently used for the

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loading/unloading of oversized, odd-shaped, bulky items into non-commercial vehicles at grade that cannot fit through the traditional dock doors.

8. Note that the M-4 District states that "All parking and loading areas shall be adequately screened as determined by the Plan Commission." As such, the Plan Commission must consider if the existing and proposed landscaping is sufficient to screen the proposed tractor trailer and truck parking.
9. Considering the above standard, it is recommended that the landscape screening be extended along the entire row of parking (in both directions from the current location). Furthermore, it is recommended to consider additional landscaping along the east side of the parking lot.
10. It is understood that the intent to create a full landscape screening wall, but staff recommends providing more than one species of plantings.
    in. studio: Proposed landscaping and parking locations have been updated to provide screening on all sides of the truck parking area and provide additional screening of the new overhead door. This screening will also limit visibility of both from the front of the building. Additional species of plantings have also been added to the screening.

11. Will truck parking be expanded in the future beyond what is shown on the site plan?
    in. studio: Truck parking will not be expanded in the future.

12. Staff understands that there is existing berming and additional landscaping proposed, but upon continued review of the plans and site, staff still has concerns with the proposed modifications. Note that ultimately it is up to the Plan Commission, but staff is concerned with the visibility of the truck parking, loading, and unloading on the north side of the building adjacent to public right-of-way. Staff would prefer to keep the truck parking, loading, and these type of activities to the rear of the building, similar to what was originally approved and similar to the site designs of the properties to the west. The overhead door on the north side of the building is also a downgrade architecturally.
    in. studio: All of staff's concerns have been addressed to minimize the impact and visibility of locating the proposed truck parking on the north side of the building. While not officially in the rear of the building, pushing the truck parking area as far west as possible and additional landscaping will screen the truck parking area from traffic approaching from both directions on Ridgeview Parkway. Additionally, the new curbs for the new landscaping areas will delineate automobile traffic areas from the truck traffic at the rear of the building.

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 7.

DATE: April 20, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding the Site and Building Plans for Fox River Congregational Church Located at N34 W23575 Capitol Drive For the Purpose of Constructing a Building Addition to the Existing Church (PWC 0907999001)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Fox River Church staff report 4.20.23
Fox River Church narrative
Fox River Church stormwater memo
Fox River Church discharge tool
Fox River Church revised site & building plans set 1
Fox River Church revised site & building plans set 2
Fox River Church revised site & building plans set 3

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of April 20, 2023

Date: April 12, 2023

Project Name: Site & Building Plan Review

Project Address/Tax Key No.: N34 W23575 Capitol Dr./PWC 0907999001

Applicant: Fox River Congregational Church

Property Owner: FOX RIVER COMMUNITY CHURCH INC

Current Zoning: I-1 Urban Institutional & LC Lowland Conservancy

2050 Land Use Map Designation: Government/Institutional & Floodplains, Lowland & Upland Conservancy and Other Natural Areas

Use of Surrounding Properties: Capitol Drive to the north and residential to the west, south, and east.

Project Description/Analysis:

The applicant, Fox River Congregational Church, has filed a Site and Building Plan Review for an addition to the southwest of the existing church located at N34W23575 Capitol Drive.

The proposed two-story addition is 4,000 square feet. The addition will be used for educational activities, support group programs, meeting space and fellowship activities which are all permitted uses within the I-1 District.

The proposed addition will create 8,500 square feet of total land disturbance and a total of 5,254 square feet of new impervious surfaces such as the building, walkways, and new parking areas. The total lot coverage of existing and proposed improvements is 15%.

The proposed exterior of the building addition is split face CMU which matches the existing building. The end of the addition also has an angled roof which is complimentary to the north end of the existing building which is angled with a cross above.

Two retaining walls are being proposed on the west and east corners. The retaining wall on the north/east side of the building is a block retaining wall, which is more decorative than the retaining wall on the south/west side of the building, which is a concrete wall. Guardrails are located on top of both walls.

The Landscape Plan consists primarily of shrubs placed around the building addition, new walkways, and the front retaining wall. There are two ornamental trees proposed on either side of the addition entrance. No trees are proposed around the existing, unchanged portions of the site.

The proposed lighting plan consists of 10 light poles around the existing parking area. No lighting is being proposed on the building. The light levels are at 0-foot candles prior to reaching property lines. The lights are shown to not exceed a 20-foot peak height from grade, which is in compliance with City standards.

Related to parking, two ADA stalls have been placed near the entrance of the building addition. Staff finds that the existing parking provides sufficient parking for both the existing building as well as the addition.

Recommendation:

Staff recommends approval of the Site & Building Plan Review Application for Fox River Church located at N34 W23575 Capitol Drive.

Fox River Congregational Church

Building For Our Mission

OPERATIONAL INFORMATION

The Common Council of the City of Pewaukee granted rezoning of our property for institutional use as a church on September 2, 2002. Our worship center was opened on October 16, 2005. The master plan for rezoning included accommodations for an educational addition to the worship center. The initial site development was done to accommodate the future building addition.

The addition will be used for educational activities for children, teens, and adults, support group programs, community meeting spaces, and fellowship activities for the church and community. Our building addition will provide us with a full lower level walk out access. The fellowship hall will not be occupied while church worship is taking place in the sanctuary.

Milwaukee Regional Office
W238 N1610 Busse Road, Suite 100
Waukesha, WI 53188
262.513.0666

Stormwater Memorandum

JSD Project:	Fox River Congregational Church
JSD Project #:	23-13003
Date:	February 20, 2023

Fox River Congregation Church, located at N34 W23575 Capitol Drive in the City of Pewaukee, is proposing to construct a 4,000 square foot addition to their existing church. The addition will be constructed on manicured lawn southeast of the church. The existing topography drops approximately 15 feet from north to south in this area. Stormwater runoff from this area drains overland to a grass swale located to the southwest which ultimately directs runoff into an existing pond approximately 300 feet to the south. Existing storm sewer is also present along the eastern edge of the project site. This storm sewer also discharges into the existing pond to the south.

Redevelopment will involve construction of the proposed 4,000 square-foot building addition, concrete walks, and two retaining walls to be located at the west and east corners of the addition. After redevelopment, stormwater runoff will continue to drain overland around the proposed addition and to the south, consistent with existing drainage conditions. A section of existing 12" storm sewer will need to be relocated to avoid the new building foundation, but the storm sewer will continue to discharge into the existing pond.

The proposed development will disturb approximately 8,500 square feet (0.20 acres) and create an additional 4,800 square feet (0.11 acres) of new impervious surface. Chapter 19.03.a. of the City of Pewaukee code of ordinance states the stormwater ordinance applies to "*any construction site that has one or more acres of land disturbing construction activity".* Since the proposed disturbed area is less than one acre, it is the understanding of JSD that the proposed project will not require stormwater management. Furthermore, as a redevelopment the site would be exempt from peak discharge and infiltration requirements and from total suspended solids requirements since there is no increase in parking areas or roads. For these reasons, JSD is seeking acknowledgment from the City of Pewaukee that the proposed project does not require stormwater management as defined in Chapter 19 of the City code. You may contact me at (262) 513-0666 or jared.simon@jsdinc.com if you have questions, comments, or require any additional information.

Sincerely,
JSD Professional Services, Inc.

Jared Simon, P.E.
Project Engineer

Soil Loss & Sediment Discharge Calculation Tool

for use on Construction Sites in the State of Wisconsin

WDNR Version 2.0 (06-29-2017)

WISCONSIN DEPT. OF NATURAL RESOURCES

YEAR 1

Developer: Perspective Design, Inc.

Project: Fox River Congregational Church

Date: 04/07/23

County: Waukesha

Version 1.0

Activity (1)	Begin Date (2)	End Date (3)	Period % R (4)	Annual R Factor (5)	Sub Soil Texture (6)	Soil Erodibility K Factor (7)	Slope (%) (8)	Slope Length (ft) (9)	LS Factor (10)	Land Cover C Factor (11)	Soil loss A (tons/acre) (12)	SDF (13)	Sediment Control Practice (14)	Sediment Discharge (t/ac) (15)
Bare Ground	05/01/23	05/15/23	5.0%	130	Loam	0.37	12.5%	125	2.17	1.00	5.2	0.816	Silt Fence	2.6
Bare Ground	05/15/23	08/01/23	49.0%	130	Loam	0.37	2.1%	35	0.15	1.00	3.6	0.968	Silt Fence	2.1
Seed with Mulch or Er	08/01/23	10/01/23	28.0%	130	Loam	0.37	2.1%	35	0.15	0.10	0.2	0.968		0.2
End	10/01/23	-----	-----	-----	-------	-----	2.1%	35	0.15	------	-----	0.000		0.0
		-----	-----	-----	-------	-----	2.1%	0	-----	-----	-----	0.000		0.0
		-----	-----	-----	-------	-----	0.0%	0	-----	-----	-----	0.000		0.0
										TOTAL	**9.0**		**TOTAL**	**4.8**
													% Reduction Required	**NONE**

Notes:

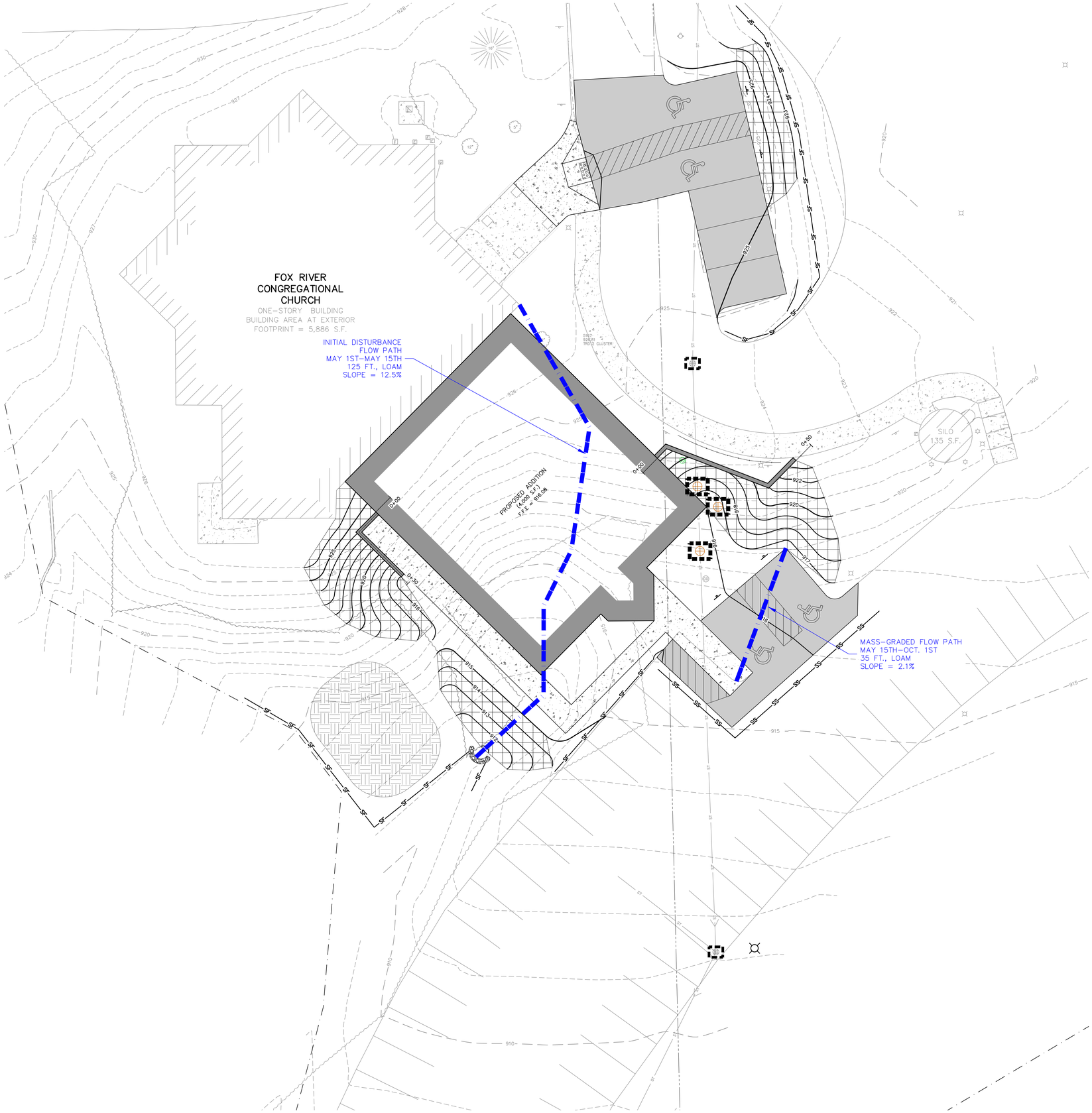
See Help Page for further descriptions of variables and items in drop-down boxes.
The last land disturbing activity on each sheet must be 'End'. This is either 12 months from the start of construction or final stabilization.
For periods of construction that exceed 12 months, please demonstrate that 5 tons/acre/year is not exceeded in any given 12 month period.

NOTE: THIS TOOL ONLY ADDRESSED SOIL EROSION DUE TO SHEET FLOW. MEASURES TO CONTROL CHANNEL EROSION MAY ALSO BE REQUIRED TO MEET SEDIMENT DISCHARGE REQUIREMENTS.

Recommended Permanent Seeding Dates:

4/1-5/15	and	8/7-8/29	Turf, introduced grasses and legumes
Thaw-6/30			Native Grasses, forbs, and legumes

Designed By:	JJS
Date	4/7/2023



north

DIGGERS HOTLINE
Toll Free (800) 242-8511

JSD

CREATE THE VISION TELL THE STORY

jsdinc.com

MILWAUKEE REGIONAL OFFICE
W238 N1610 BUSSE ROAD, SUITE 100
WAUKESHA, WISCONSIN 53188
P. 262.513.0666

CLIENT:
FOX RIVER CONGREGATIONAL CHURCH

CLIENT ADDRESS:
N34 W23575 CAPITOL DRIVE
PEWAUKEE, WI 53072

PROJECT:
FOX RIVER CONGREGATIONAL CHURCH

PROJECT LOCATION:
N34 W23575 CAPITOL DRIVE
PEWAUKEE, WI 53072

PLAN MODIFICATIONS:

#	Date:	Description:
1	03/01/23	CITY SUBMITTAL
2	04/10/23	CITY SUBMITTAL
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Designed By: JJS
Reviewed By: TJS
Approved By: JLJ

SHEET TITLE:
UNIVERSAL SOIL LOSS EQUATION EXHIBIT

SHEET NUMBER:
USLE

JSD PROJECT NO: 23-13003

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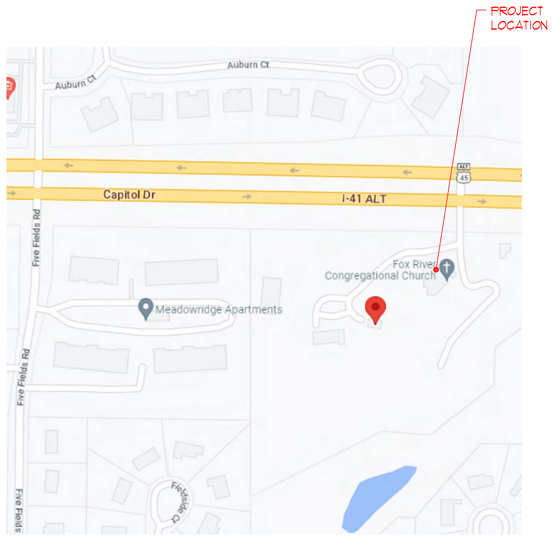
File: R:\2023\23130003\DWG\23130003 SHEET3 Grading.dwg Layout: USLE User: jslimon Plotted: Apr 07, 2023 - 11:02am Xref's:

PLOT DATE: 4/7/2023 6:15:7 PM

Fox River Congregational Church

N34W23575 Capitol Drive
City Of Pewaukee, WI 53072
(Waukesha County)

VICINITY MAP



PLAN NORTH

ABBREVIATION KEY

AB	ANCHOR BOLT	EW	EACH WAY	OPT	OPTIONAL
AC	AIR CONDITIONING	FD	FLOOR DRAIN	PERF	PERFORATED
ACT	ACOUSTIC CEILING TILE	FF	FINISH FLOOR	PL	PLATE
ACWD	ALUMINUM CLAD WOOD DOOR	FIN	FINISH	PLAM	PLASTIC LAMINATE
ADJ	ADJUSTABLE	FIXT	FIXTURE	PLYWD	PLYWOOD
AFF	ABOVE FINISH FLOOR	FLR	FLOOR	PREFIN	PREFINISHED
ALUM	ALUMINUM	FDN	FOUNDATION	PSF	POUNDS PER SQ FT
ALT	ALTERNATE	FO	FACE OF	PSI	POUNDS PER SQ IN
APPROX	APPROXIMATE	FS	FLOOR SEAL	PT	PAINT
ARCH	ARCHITECTURAL	FTG	FOOTING	PVC	POLYVINYLCHLORIDE
@	AT	FURN	FURNACE	QT	QUARRY TILE
BD	BOARD	GA	GAUGE	R	RADIUS
BI	BUILT-IN	GALV	GALVANIZED	RD	ROOF DRAIN
BLDG	BUILDING	GFI	GROUND FAULT INTERRUPT	RHS	ROD & SHELF
BOT	BOTTOM	GLU-LAM	GLUE LAMINATED BEAM	REC	RECESSED
BO	BOTTOM OF	GT	GROUT	REG	REGULAR
BRG	BEARING	GWB	GYPSUM WALL BOARD	REINF	REINFORCE
BRG PL	BEARING PLATE	H	HARDWARE	RO	ROUGH OPENING
CPT	CARPET	HC	HOLLOW CORE	SHV	STAIN & VARNISH
CAST	CASING	HD	HEAD	SC	SOLID CORE
CI	CAST IRON	HDR	HEADER	SECT	SECTION
CJ	CONSTRUCTION JOINTS	HT	HEIGHT	SHLV	SHELVES
℄	CENTER LINE	HM	HOLLOW METAL	SIM	SIMILAR
CLG	CEILING	HORZ	HORIZONTAL	SPEC	SPECIFICATION
CLO	CLOSET	HR	HOUR	STL	STEEL
CMU	CONCRETE MASONRY UNIT	HTG	HEATING	STN	STAIN
CO	CASED OPENING	HVAC	HEAT, VENT, AIR COND	STOR	STORAGE
COL	COLUMN	IHM	INSULATED HOLLOW METAL	STRUCT	STRUCTURAL
CONC	CONCRETE	INSUL	INSULATION	SV	SHEET VINYL
CONST	CONSTRUCTION	INT	INTERIOR	SW	STRIP WOOD
CONT	CONTINUOUS	JNT	JOINT	TBD	TO BE DETERMINED
CT	CERAMIC TILE	JST	JOIST	T&B	TOP & BOTTOM
CTB	CERAMIC TILE BASE	LAM	LAMINATE	T/	TOP OF
DEMO	DEMOLITION	LAV	LAVATORY	TEL	TELEPHONE
DIA ⌀	DIAMETER	MATL	MATERIAL	T&G	TONGUE & GROOVE
DIM	DIMENSION	MAX	MAXIMUM	TJI	TRUSS JOIST
DIV	DIVISION	MECH	MECHANICAL	TOP	TOP OF PLATE
DN	DOWN	MED	MEDIUM	TYP	TYPICAL
DWGS	DRAWINGS	MIN	MINIMUM	UC	UNDER COUNTER
DS	DOWNSPOUT	MISC	MISCELLANEOUS	UON	UNLESS OTHERWISE NOTED
DW	DISHWASHER	ML	MICROLAM	VB	COVED VINYL BASE
EA	EACH	MO	MASONRY OPENING	VCT	VINYL COMPOSITION TILE
EP	EPOXY FLOORING	MTL	METAL	VERT	VERTICAL
EXIST	EXISTING	MW	MICROWAVE	VIF	VERIFY IN FIELD
EIFS	EXTERIOR INSULATION FINISH SYSTEM	NIC	NOT IN CONTRACT	VWC	VINYL WALL BASE
EXP	EXPANSION or EXPOSED	NO	NUMBER	W/	WITH
ELECT	ELECTRICAL	NOM	NOMINAL	WB	WOOD BASE
ELEV	ELEVATION	NTS	NOT TO SCALE	WIC	WALK-IN CLOSET
EQUIP	EQUIPMENT	OA	OVER ALL	WD	WOOD
EQUIV	EQUIVALENT	OC	ON CENTER	WDO	WINDOW
ETR	EXISTING TO REMAIN	OHD	OVERHEAD DOOR	W/O	WITHOUT
EXT	EXTERIOR	OPP	OPPOSITE	WP	WATERPROOF
				WWF	WELDED WIRE FABRIC

PARTICIPANTS

OWNER:

Fox River Congregational Church
N34W23575 Capitol Drive
City of Pewaukee, WI 53072
Tele: (262) 695-9695
Fax: N/A
Contact: Rev. Dr. Lonnie Richardson
E-mail: lonnier53@gmail.com

TENANT:

Fox River Congregational Church
N34W23575 Capitol Drive
City of Pewaukee, WI 53072
Tele: (262) 695-9695
Fax: N/A
Contact: Rev. Dr. Lonnie Richardson
E-mail: lonnier53@gmail.com

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Cell: (262) 490-7607

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833 East Michigan Street - Suite 1000
Milwaukee, WI 53202
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Email: mmagill@catalystbuilds.com
Cell: (262) 749-8265

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E-mail: bconine@pdi-arch.com

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Fax: (414) 278-6061
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CIVIL ENGINEER:

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N22 W22931 Nancy Court - Suite #3
Waukesha, WI 53186
Tele: (262) 513-0666
Fax: (262) 513-1232
Contact: Justin L. Johnson
E-Mail: justinjohnson@jsdinc.com

ELECTRICAL ENG./DESIGN BUILD:

(DESIGN ENGINEER) OR (DESIGN / BUILD)
SUBCONTRACTOR TO BE DETERMINED BY
GENERAL CONTRACTOR.

PLUMBING ENG./DESIGN BUILD:

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SUBCONTRACTOR TO BE DETERMINED BY
GENERAL CONTRACTOR.

MECHANICAL ENG./DESIGN BUILD:

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SUBCONTRACTOR TO BE DETERMINED BY
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FIRE PROTECTION DESIGN BUILD:

(DESIGN ENGINEER) OR (DESIGN / BUILD)
SUBCONTRACTOR TO BE DETERMINED BY
GENERAL CONTRACTOR.

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C1.1 PAVEMENT ID & UTILITY PLAN
C2.0 GRADING & EROSION CONTROL PLAN
C3.0 NOTES & DETAILS
C3.1 NOTES & DETAILS
Mor1 PHOTOMETRIC SITE PLAN
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STRUCTURAL:

MECHANICAL:

TO BE PREPARED & SUBMITTED BY DESIGN / BUILD ENGINEER UNDER SEPARATE COVER

ELECTRICAL:

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FIRE PROTECTION:

TO BE PREPARED & SUBMITTED BY DESIGN / BUILD ENGINEER UNDER SEPARATE COVER

MISC:

TO BE PREPARED & SUBMITTED BY DESIGN / BUILD ENGINEER UNDER SEPARATE COVER

CODE REFERENCE

BUILDING CODE:
WI COMMERCIAL BUILDING CODE ADOPTION OF THE INTERNATIONAL CODES SUBJECT TO THE MODIFICATION SPECIFIED BY WI DEPARTMENT OF SAFETY & PROFESSIONAL SERVICES, CHAPTER 361-366

- INTERNATIONAL BUILDING CODE - 2015
- INTERNATIONAL ENERGY CONSERVATION CODE - 2015
- COMCHECK: N/A
- INTERNATIONAL MECHANICAL CODE - 2015
- INTERNATIONAL FUEL GAS CODE - 2015
- INTERNATIONAL EXISTING BUILDING CODE - 2015

ACCESSIBILITY CODES:

- INTERNATIONAL BUILDING CODE- 2015, CHAPTER 11
- ICC A117.1 - 2009
- D.O.J. - 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

MECHANICAL CODE:

- REFER TO WI COMMERCIAL BUILDING CODE

ELECTRICAL CODE:

- INTERNATIONAL BUILDING CODE - 2015, CHAPTER 27
- WI SAFETY & PROFESSIONAL SERVICES, CHAPTER 316
  REFERENCE NATIONAL ELECTRIC CODE.
- NFPA 70 - NATIONAL ELECTRIC CODE (NEC) - 2017
  SUBJECT TO THE CHANGES,
  ADDITIONS OR OMISSIONS SPECIFIED
  IN SUB CH. III, OF SPS CHAPTER 316

PLUMBING CODE:

- INTERNATIONAL BUILDING CODE - 2015, CHAPTER 29
- WI SAFETY & PROFESSIONAL SERVICES, CHAPTER 381-387

FIRE PREVENTION:

- WI SAFETY & PROFESSIONAL SERVICES, CHAPTER 314
  REFERENCE NFPA
- NFPA 1, FIRE CODE - 2012 AND/OR LOCAL FIRE ORDINANCE IF APPLICABLE
  SUBJECT TO THE MODIFICATIONS
  AS SPECIFIED IN SPS CHAPTER 314
- INTERNATIONAL FIRE CODE - 2015 (AS REFERENCED BY THE IBC - 2015)

CIVIL ENGINEER:
CIVIL ENGINEER IS RESPONSIBLE FOR ALL FEDERAL, STATE AND LOCAL CODES RELATED TO STORM WATER MANAGEMENT, EROSION CONTROL, SOIL DISTURBANCE, AND NATURAL RESOURCE PROTECTION.

EMERGENCY EGRESS LIGHTING:
-THESE DOCUMENTS DENOTE AN EGRESS PLAN SHOWING THE PATH WHERE EXIT LIGHTS & EMERGENCY EGRESS LIGHTING MAY BE REQUIRED.
- FOR NEW BUILDINGS, ADDITIONS OR ALTERATIONS THAT CREATE NEW EGRESS PATHS, THE ELECTRICAL DESIGNER SHALL PROVIDE, AT THE PROJECT SITE DURING CONSTRUCTION, EMERGENCY LIGHTING CUT-SHEETS, CALCULATIONS, PHOTOMETERICS OR OTHER MEANS TO SHOW COMPLIANCE WITH APPLICABLE CODES.

LIGHTING & ENERGY CONSERVATION:
ELECTRICAL DESIGNER SHALL PREPARE A LIGHTING PLAN AND PROVIDE, AT THE PROJECT SITE DURING CONSTRUCTION, LIGHTING PLANS AS WELL AS FIXTURE CUT-SHEETS AND ENERGY CALCULATIONS TO SHOW COMPLIANCE WITH THE ENERGY CODE.

ACCESSIBILITY NOTES:
THIS PROJECT INCLUDES AN ALTERATION TO AN AREA OF PRIMARY FUNCTION. THE ACCESSIBLE ROUTE, INCLUDING TOILET AND DRINKING FACILITIES, LEADING TO THE AREA OF PRIMARY FUNCTION IS COMPLIANT WITH THE ACCESSIBILITY CODE TO THE EXTENT REQUIRED BY THE EXISTING BUILDING CODE.

BUILDING DATA

PROJECT DESCRIPTION: BUILDING ADDITION
TYPE OF WORK: LEVEL 3
BUILDING CODE CLASS: 1ST FLOOR AND GROUND FLOOR
AREA OF WORK:
USE & OCCUPANCY:
- FLOOR USE: A-3 (ASSEMBLY - GROUP 3.)
- ACCESSORY OCCUPANCY: S-1 (MODERATE HAZARD STORAGE)
- (B) BUSINESS

GENERAL BUILDING DATA:

	ALLOWED:	ACTUAL:
APPROX HEIGHT:	75'-0"	30'-0"
GROSS AREA:	37,500 SQ. FT.	10,236.46 SQ. FT.
TOTAL		14,267.33 SQ. FT. (ALL AREAS + ALL LEVELS)
FIRST FLOOR EXISTING		6,030.00 SQ. FT. (5,876.00 + 334 PLUS CANOPY)
FIRST FLOOR ADDITION		4,203.46 SQ. FT.
GROUND FLOOR ADDITION		4,203.46 SQ. FT.
NUMBER OF STORIES:	3	(2) - 1ST FLOOR & GROUND LEVEL
NUMBER OF FLOORS:	3	(2) - 1ST FLOOR & GROUND LEVEL
TYPE OF CONSTRUCTION:	N/A	3-B EXTERIOR MASONRY - UNPROTECTED
FIRE RESISTANCE RATED CONST.:	NONE	
EXTERIOR WALL OPENINGS:	N/A	
FIRE PROTECTION SYSTEMS:		
AUTOMATIC SPRINKLER		REQUIRED & NEW
COVERAGE		COMPLETE
TYPE		NFPA 13
MONITORING		REQUIRED-CENTRAL STATION
FIRE ALARM & DETECTION		REQUIRED & NEW
COVERAGE		COMPLETE
TYPE		AUTOMATIC
OCCUPANT NOTIFICATION:		REQUIRED - COMPLETE
STANDARD		NFPA 72
SMOKE ALARM & DETECTION		REQUIRED - / DETECTION / ALARM / & NEW
COVERAGE		COMPLETE
OCCUPANT NOTIFICATION:		REQUIRED - COMPLETE
STANDARD		NFPA 72

TYPE OF EGRESS IN AREA OF WORK:
REFER TO SHEET L5.1.3 FOR OCCUPANT LOAD INFORMATION BY ROOM / AREA/ SPACE.

PLEASE NOTE THE INTENT OF THIS ADDITION DOES NOT INCREASE THE OCCUPANT LOAD. THE OWNERS' INTENT IS TO INCREASE THE SIZE OF THE BUILDING TO ALLOW THE CONGREGATION TO HAVE GATHERING AND EDUCATION AREAS FOR THE PARISHIONERS AFTER THE SERVICE HAS ENDED IN THE SANCTUARY.

THE OWNER SHALL POST SALL SIGNAGE THAT STATES THE FOLLOWING.
"THIS ENTIRE BUILDING (ALL LEVELS) HAS A MAXIMUM OCCUPANCY OF NOT MORE THAN (50 OCCUPANTS)"
UNLESS OTHERWISE RESTRICTED BY THE PLAN COMMISSION DUE TO THE PARKING COUNT OF 81.

THIS FOLLOWING IS BASED ON THE CODE REQUIRED OCCUPANCY CALCULATIONS ON IS SHOWN ON SHEET L5.1.3.

1ST FLOOR LEVEL - (193 OCCUPANTS):		
EGRESS WIDTH:	108"	180"
STAIRWAYS:		45"
GROUND FLOOR LEVEL (58 OCCUPANTS):		
EGRESS WIDTH:	116"	72"
STAIRWAYS:		N/A

	MAX. ALLOWED:	ACTUAL:
EXIT TRAVEL DISTANCE:	200'	LESS THAN 200'
COMMON PATH OF TRAVEL:	75'	LESS THAN 75'

PLUMBING SYSTEMS:	REQUIRED	ACTUAL
MALE		
WATERCLOSETS:	1	2 (1 + 1)
URINAL	0	2 (1 + 1)
LAVATORIES	1	2 (1 + 1)
FEMALE		
WATERCLOSETS	2	4 (2 + 2)
LAVATORIES	1	(2) (1 +)
DRINKING FOUNTAINS:	1	1
OTHER - SERVICE SINK/ PREP SINKS:	1	1

NOTE PER SPS 61.2507(12) WHERE DRINKING FOUNTAINS ARE REQUIRED, OTHER REASONABLE ALTERNATIVES ARE ACCEPTABLE, AS APPROVED BY THE DEPARTMENT.
THE OWNER SHALL PROVIDE BOTTLED WATER FREE OF CHARGE TO ALL.

NOT FOR CONSTRUCTION

DO NOT SCALE THESE DRAWINGS

- PRELIMINARY -
FOR ESTIMATING AND REVIEW ONLY

FULL SIZE PRINT = 30" x 42" SHEET

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REV. #	REV. DATE	DESCRIPTION	REV. BY:
-	03/01/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC
-	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

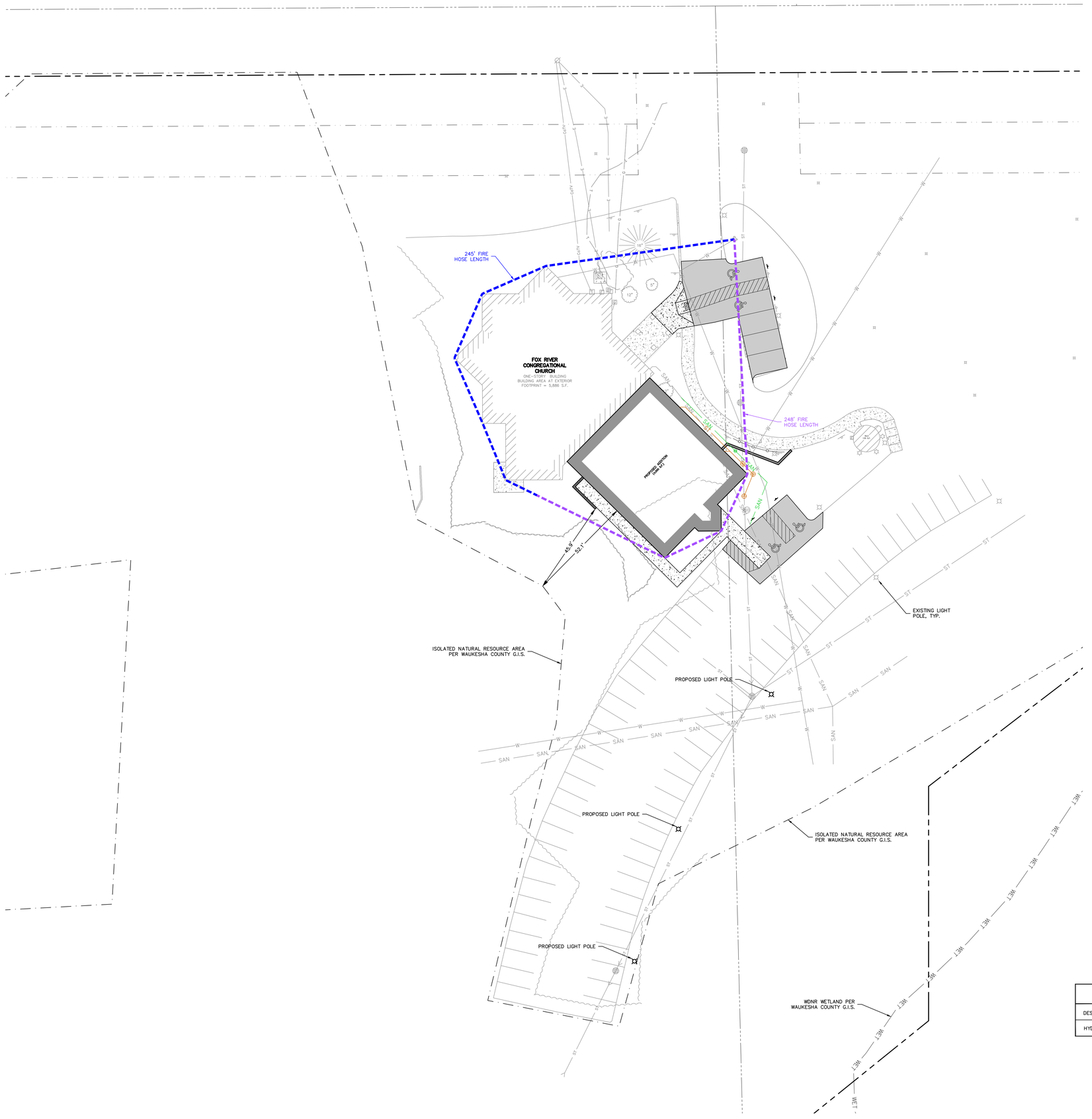
Project:
Fox River Congregational Church
N34W23575 Capitol Drive
City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11525 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:
TITLE SHEET

Date: 04/10/23
Scale: A.N.
Drawn: WHC
Job: 23-001
Sheet: **T1**

FILE NAME: P:_PROJECTS\FOX RIVER CONGREGATION\T000_FOXRIVER.DWG



SHEET INDEX

C1.0	OVERALL SITE PLAN
C1.1	PAVEMENT ID & UTILITY PLAN
C2.0	GRADING & EROSION CONTROL PLAN
C3.0	NOTES & DETAILS
C3.1	NOTES & DETAILS

SITE INFORMATION BLOCK

SITE ADDRESS	N34 W23575 CAPITOL DRIVE
PROPERTY ACREAGE (TAX KEY: PWC 0907999001)	12.871 ACRES
NUMBER OF SURFACE PARKING STALLS	87
STANDARD	81
ADA ACCESSIBLE	6
EXISTING VS. PROPOSED SITE COVERAGE	
EXISTING IMPERVIOUS SURFACE AREA	77,925 SF
EXISTING PERVIOUS SURFACE AREA	482,757 SF
EXISTING IMPERVIOUS SURFACE AREA RATIO	0.14
PROPOSED IMPERVIOUS SURFACE AREA	83,179 SF
PROPOSED PERVIOUS SURFACE AREA	477,503 SF
PROPOSED IMPERVIOUS SURFACE AREA RATIO	0.15

LEGEND

- BUILDING OUTLINE
- EDGE OF PAVEMENT
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- RETAINING WALL
- SAWCUT EXISTING PAVEMENT
- SANITARY SEWER
- WATERMAIN
- STORM SEWER
- 8'x4'x4" INSULATION

BENCHMARKS

DESCRIPTION	ELEVATION
HYD NE BURY TAG BOLT	926.29

north

SCALE IN FEET

20' 0 20'

DIGGERS HOTLINE
Toll Free (800) 242-8511

JSD

CREATE THE VISION TELL THE STORY

jsdinc.com

MILWAUKEE REGIONAL OFFICE
W238 N1610 BUSSE ROAD, SUITE 100
WAUKESHA, WISCONSIN 53188
P. 262.513.0666

CLIENT:
FOX RIVER CONGREGATIONAL CHURCH

CLIENT ADDRESS:
N34 W23575 CAPITOL DRIVE PEWAUKEE, WI 53072

PROJECT:
FOX RIVER CONGREGATIONAL CHURCH

PROJECT LOCATION:
N34 W23575 CAPITOL DRIVE PEWAUKEE, WI 53072

PLAN MODIFICATIONS:

#	Date:	Description:
1	03/01/23	CITY SUBMITTAL
2	04/10/23	CITY SUBMITTAL
3		
4		
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11		
12		
13		
14		
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Designed By: JJB
Reviewed By: TJB
Approved By: JKJ

SHEET TITLE:
OVERALL SITE PLAN

SHEET NUMBER:
C1.0

JSD PROJECT NO: 23-13003

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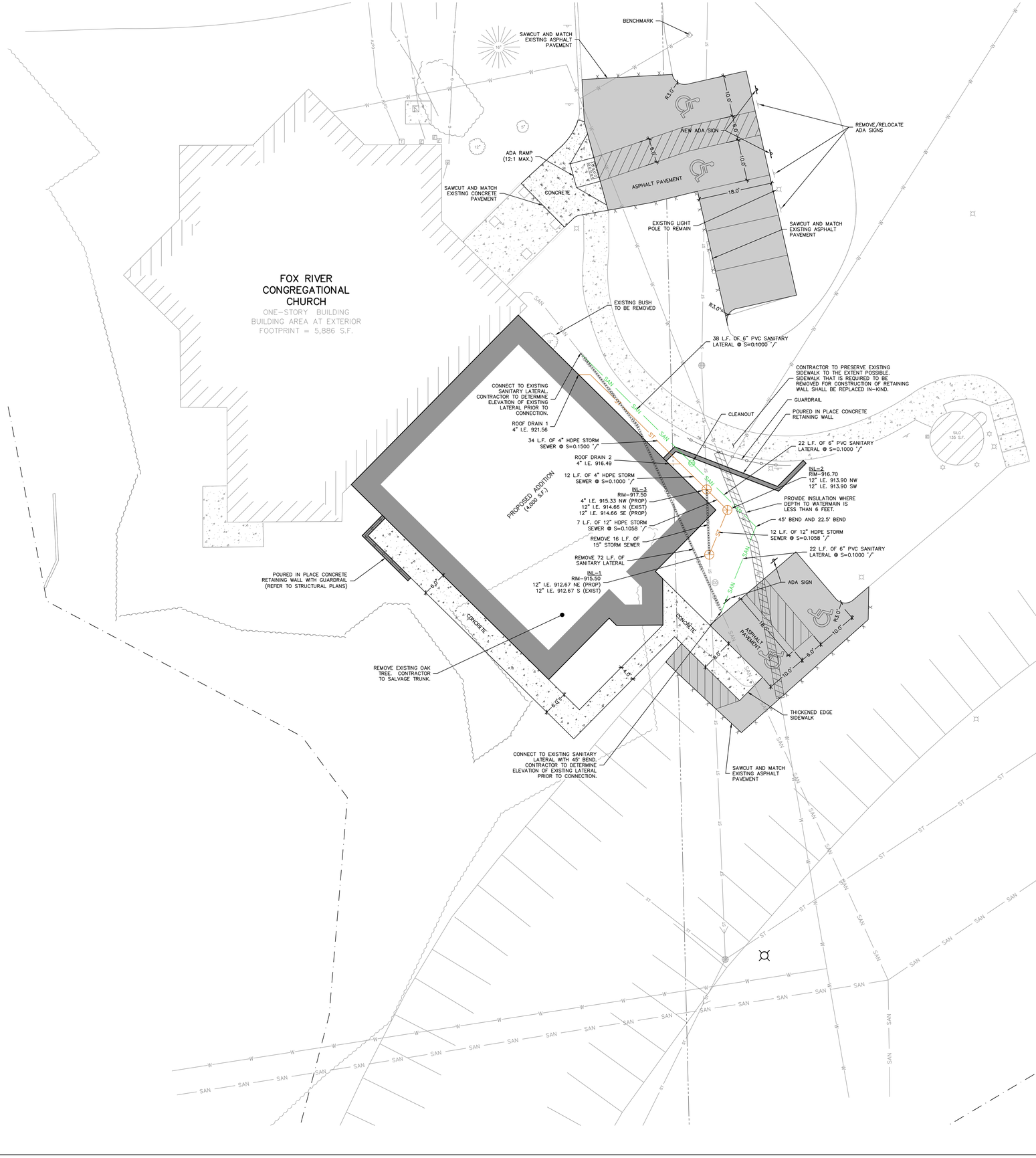

LEGEND

- BUILDING OUTLINE
- EDGE OF PAVEMENT
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- RETAINING WALL
- SAWCUT EXISTING PAVEMENT
- SANITARY SEWER
- WATERMAIN
- STORM SEWER
- 8"x4"x4" INSULATION

BENCHMARKS

DESCRIPTION	ELEVATION
HYD NE BURY TAG BOLT	926.29

north

SCALE IN FEET

10' 0 10'

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CLIENT:
FOX RIVER CONGREGATIONAL CHURCH

CLIENT ADDRESS:
N34 W23575 CAPITOL DRIVE
PEWAUKEE, WI 53072

PROJECT:
FOX RIVER CONGREGATIONAL CHURCH

PROJECT LOCATION:
N34 W23575 CAPITOL DRIVE
PEWAUKEE, WI 53072

PLAN MODIFICATIONS:

#	Date:	Description:
1	03/01/23	CITY SUBMITTAL
2	04/10/23	CITY SUBMITTAL
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Designed By: JJS
Reviewed By: TJB
Approved By: JLJ

SHEET TITLE:
PAVEMENT ID & UTILITY PLAN

SHEET NUMBER:
C1.1

JSD PROJECT NO: 23-13003

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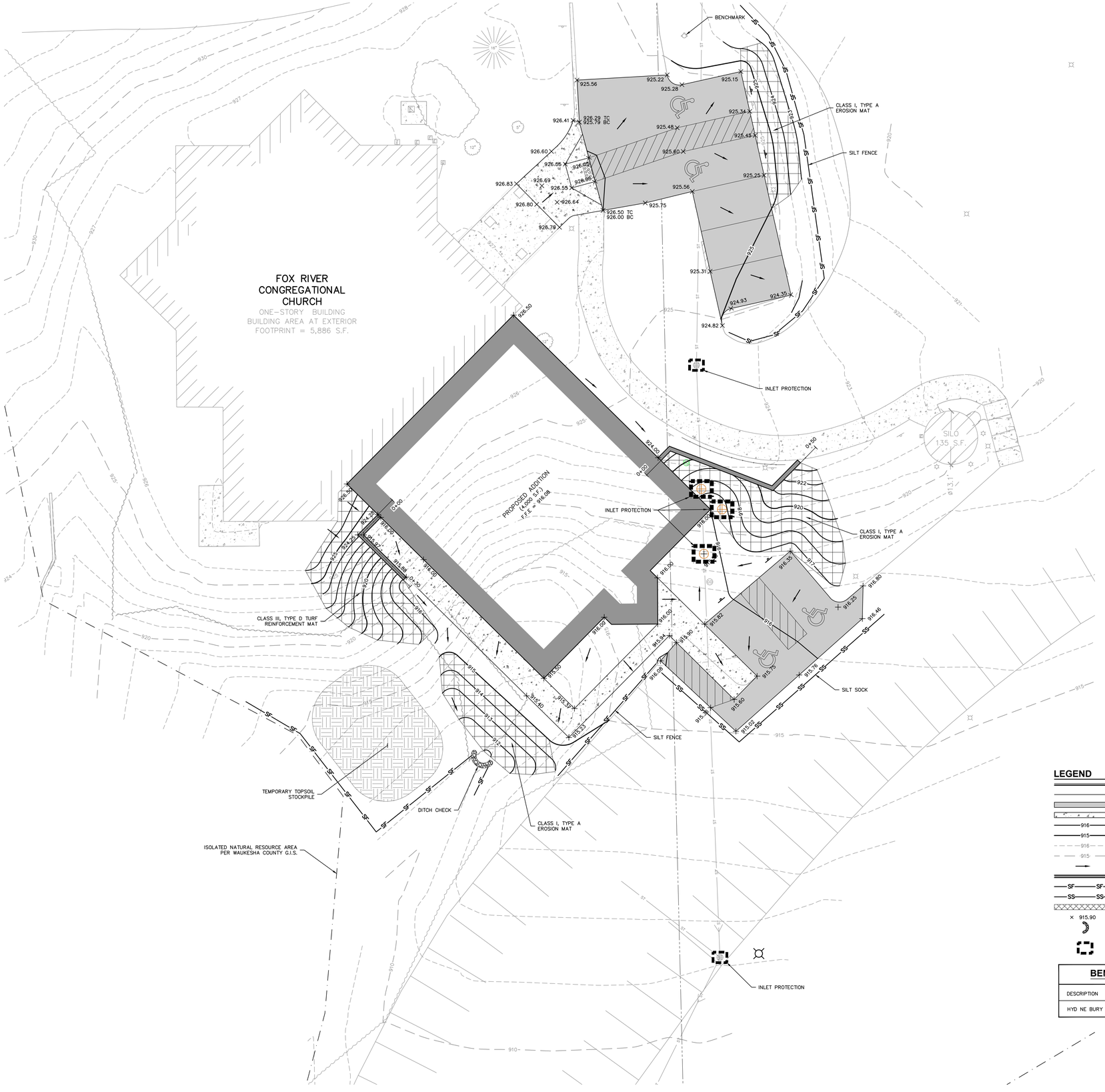

LEGEND

- BUILDING OUTLINE
- EDGE OF PAVEMENT
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- 916 — PROPOSED 1 FOOT CONTOUR
- 915 — PROPOSED 5 FOOT CONTOUR
- 916 — EXISTING 1 FOOT CONTOUR
- 915 — EXISTING 5 FOOT CONTOUR
- DRAINAGE DIRECTION
- RETAINING WALL
- SF — SILT FENCE
- SS — SILT SOCK
- EROSION MATTING
- × 915.90 — SPOT ELEVATION
- DITCH CHECK
- INLET PROTECTION

BENCHMARKS

DESCRIPTION	ELEVATION
HYD NE BURY TAG BOLT	926.29

north

SCALE IN FEET

10' 0 10'

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CLIENT:
FOX RIVER CONGREGATIONAL CHURCH

CLIENT ADDRESS:
N34 W23575 CAPITOL DRIVE
PEWAUKEE, WI 53072

PROJECT:
FOX RIVER CONGREGATIONAL CHURCH

PROJECT LOCATION:
N34 W23575 CAPITOL DRIVE
PEWAUKEE, WI 53072

PLAN MODIFICATIONS:

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1	03/01/23	CITY SUBMITTAL
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Designed By: JJS
Reviewed By: TJB
Approved By: JLJ

SHEET TITLE:
GRADING & EROSION CONTROL PLAN

SHEET NUMBER:
C2.0

JSD PROJECT NO: 23-13003

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GENERAL NOTES

1. REFER TO THE EXISTING CONDITIONS SURVEY FOR EXISTING CONDITIONS NOTES AND LEGENDS.
2. ALL WORK IN THE ROW AND/OR PUBLIC EASEMENTS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN AND MUNICIPAL REQUIREMENTS.
3. EXISTING GRADE SPOT ELEVATIONS SHOWN FOR INFORMATIONAL PURPOSES. DURING CONSTRUCTION MATCH EXISTING GRADES AT CONSTRUCTION LIMITS.
4. NO SITE GRADING OUTSIDE OR DOWNSLOPE OF PROPOSED SILT FENCE LOCATION. NO LAND DISTURBANCE BEYOND PROPERTY LINES.
5. JSD SHALL BE HELD HARMLESS AND DOES NOT WARRANT ANY DEVIATIONS BY THE OWNER/CONTRACTOR FROM THE APPROVED CONSTRUCTION PLANS THAT MAY RESULT IN DISCIPLINARY ACTIONS BY ANY OR ALL REGULATORY AGENCIES.

DEMOLITION NOTES

1. THIS PLAN INDICATES ITEMS ON THE PROPERTY INTENDED FOR DEMOLITION BASED ON THE CURRENT SITE DESIGN THAT HAVE BEEN IDENTIFIED BY A REASONABLE OBSERVATION OF THE EXISTING CONDITIONS THROUGH FIELD SURVEY RECONNAISSANCE, "DIGGER'S HOTLINE" LOCATION, AND GENERAL "STANDARD OF CARE". THERE MAY BE ADDITIONAL ITEMS THAT CAN NOT BE IDENTIFIED BY A REASONABLE ABOVE GROUND OBSERVATION, OF WHICH THE ENGINEER WOULD HAVE NO KNOWLEDGE OR MAY BE A PART OF ANOTHER DESIGN DISCIPLINE. IT IS THE CONTRACTOR'S/BIDDER'S RESPONSIBILITY TO REVIEW THE PLANS, INSPECT THE SITE AND PROVIDE THEIR OWN DUE DILIGENCE TO INCLUDE IN THEIR BID WHAT ADDITIONAL ITEMS, IN THEIR OPINION, MAY BE NECESSARY FOR DEMOLITION. ANY ADDITIONAL ITEMS IDENTIFIED BY THE CONTRACTOR/BIDDER SHALL BE IDENTIFIED IN THE BID AND REPORTED TO THE ENGINEER OF RECORD. JSD TAKES NO RESPONSIBILITY FOR ITEMS ON THE PROPERTY THAT COULD NOT BE LOCATED BY A REASONABLE OBSERVATION OF THE PROPERTY OR OF WHICH THEY WOULD HAVE NO KNOWLEDGE.
2. ALL TREES WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED UNLESS SPECIFICALLY CALLED OUT FOR PROTECTION. ALL TREES TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY AND STUMPS SHALL BE GROUND TO PROPOSED SUBGRADE.
3. ABANDONED/REMOVED ITEMS SHALL BE DISPOSED OF OFF SITE UNLESS OTHERWISE NOTED.
4. CONTRACTOR TO REPLACE ALL SIDEWALK AND CURB AND GUTTER ABUTTING THE PROPERTIES, WHICH IS DAMAGED BY THE CONSTRUCTION, OR ANY SIDEWALK AND CURB AND GUTTER THAT THE CITY ENGINEER DETERMINES NEEDS TO BE REPLACED BECAUSE IT IS NOT AT A DESIRABLE GRADE REGARDLESS OF WHETHER THE CONDITION EXISTED PRIOR TO BEGINNING CONSTRUCTION.
5. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR:
   5.1. EXAMINING ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.
   5.2. VERIFYING UTILITY ELEVATIONS AND NOTIFYING ENGINEER OF ANY DISCREPANCIES. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCIES ARE RESOLVED.
   5.3. NOTIFYING ALL UTILITIES PRIOR TO THE REMOVAL OF ANY UNDERGROUND UTILITIES.
   5.4. NOTIFYING THE DESIGN ENGINEER AND LOCAL CONTROLLING MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION INSPECTION.
6. ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
7. CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING THE CONSTRUCTION OF THESE IMPROVEMENTS.
8. CONTRACTOR TO COORDINATE PRIVATE UTILITY REMOVAL / ABANDONMENT AND NECESSARY RELOCATION WITH RESPECTIVE UTILITY COMPANY. COORDINATION REQUIRED PRIOR TO CONSTRUCTION.
9. ALL DEMOLITION SHALL BE IN ACCORDANCE WITH THE APPROVED MUNICIPALITY RECYCLING PLAN.
10. ANY CONTAMINATED SOILS SHALL BE REMOVED IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS TO AN APPROVED LANDFILL.
11. ALL EXISTING UTILITIES TO BE FIELD LOCATED AND FLAGGED BY CONTRACTOR.
12. ALL PERIMETER EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF DEMOLITION ACTIVITIES. CONTRACTOR SHALL KEEP ALL STREETS AND PAVEMENT FREE AND CLEAR OF ALL CONSTRUCTION RELATED DIRT, DUST AND DEBRIS.
13. BUILDING REMOVALS SHALL BE BY A QUALIFIED CONTRACTOR. CONTRACTOR TO FOLLOW ALL DEMOLITION REGULATIONS, DISCONNECT ALL UTILITIES, OBTAIN ALL APPLICABLE PERMITS AND DISPOSE OF ALL BUILDING MATERIALS IN APPROPRIATE LANDFILLS. DEMOLISHED MATERIALS SHALL NOT BE BURIED ON SITE. IF ENCOUNTERED, ANY CONTAMINATED SOILS SHALL BE REMOVED TO A LANDFILL IN ACCORDANCE WITH APPROPRIATE STATE AND FEDERAL REGULATIONS.
14. CONTRACTOR TO REMOVE EXISTING UTILITY PIPE OR PROVIDE PIPE BACK-FILLING AFTER REMOVAL OF EXISTING UTILITIES WITHIN BUILDING FOOTPRINT USING "LOW DENSITY CONCRETE/FLOWABLE FILL".

CONSTRUCTION SEQUENCING

1. INSTALL PERIMETER SILT FENCE AND INLET PROTECTION (APR. 2023)
2. STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE. (APR. 2023)
3. CONDUCT ROUGH GRADING EFFORTS AND INSTALL EROSION MATTING AND CHECK DAMS WITHIN DRAINAGE DITCHES AS NEEDED. (APR.–MAY 2023)
4. INSTALL UTILITY PIPING AND STRUCTURES, IMMEDIATELY INSTALL INLET PROTECTION. (MAY 2023)
5. CONSTRUCT FOOTINGS AND FOUNDATIONS. (JUN. 2023)
6. CONSTRUCT BUILDING ADDITION. (JUN. 2023–AUG. 2023)
7. CONDUCT FINAL GRADING, PLACEMENT OF PAVEMENTS, SIDEWALKS, ETC. (JUL. 2023)
8. PLACE TOPSOIL AND IMMEDIATELY STABILIZE DISTURBED AREAS WITH EROSION CONTROL MEASURES AS INDICATED ON PLANS. (AUG. 2023)
9. DO NOT REMOVE THE EROSION CONTROL MEASURES WITHOUT THE APPROVAL OF THE CITY OF PEWAUKEE AND THE WISCONSIN DNR.

CHANGES TO THE CONSTRUCTION SITE SEQUENCING AND EROSION CONTROL PLAN MUST BE APPROVED BY THE CITY OF PEWAUKEE AND THE WISCONSIN DNR PRIOR TO IMPLEMENTATION.

PAVING NOTES

1. GENERAL
   1.1. ALL PAVING SHALL CONFORM TO "STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION", LATEST EDITION, APPLICABLE CITY OF PEWAUKEE ORDINANCES AND THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER OF RECORD.
   1.2. SURFACE PREPARATION – NOTIFY ENGINEER/OWNER OF UNSATISFACTORY CONDITIONS. DO NOT BEGIN PAVING WORK UNTIL DEFICIENT SUBBASE AREAS HAVE BEEN CORRECTED AND ARE READY TO RECEIVE PAVING.
2. ASPHALTIC CONCRETE PAVING SPECIFICATIONS
   2.1. CODES AND STANDARDS – THE PLACING, CONSTRUCTION AND COMPOSITION OF THE ASPHALTIC BASE COURSE AND ASPHALTIC CONCRETE SURFACE COURSE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 450, 455, 460 AND 465 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION. HEREAFTER, THIS PUBLICATION WILL BE REFERRED TO AS STATE HIGHWAY SPECIFICATIONS.
   2.2. WEATHER LIMITATIONS – APPLY TACK COATS WHEN AMBIENT TEMPERATURE IS ABOVE 50° F (10° C) AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35° F (1° C) FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION. DO NOT APPLY WHEN BASE IS WET OR CONTAINS EXCESS OF MOISTURE. CONSTRUCT ASPHALTIC CONCRETE SURFACE COURSE WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40° F (4° C) AND WHEN BASE IS DRY AND WHEN WEATHER IS NOT RAINY. BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30° F (–1° C).
   2.3. GRADE CONTROL – ESTABLISH AND MAINTAIN REQUIRED LINES AND ELEVATIONS FOR EACH COURSE DURING CONSTRUCTION.
   2.4. CRUSHED AGGREGATE BASE COURSE – THE TOP LAYER OF BASE COURSE SHALL CONFORM TO SECTIONS 301 AND 305, STATE HIGHWAY SPECIFICATIONS.
   2.5. BINDER COURSE AGGREGATE – THE AGGREGATE FOR THE BINDER COURSE SHALL CONFORM TO SECTIONS 460 AND 315, STATE HIGHWAY SPECIFICATIONS.
   2.6. SURFACE COURSE AGGREGATE – THE AGGREGATE FOR THE SURFACE COURSE SHALL CONFORM TO SECTIONS 460 AND 465, STATE HIGHWAY SPECIFICATIONS.
   2.7. ASPHALTIC MATERIALS – THE ASPHALTIC MATERIALS SHALL CONFORM TO SECTION 455 AND 460, STATE HIGHWAY SPECIFICATIONS.
   2.8. PAVEMENT REPLACEMENT WITHIN ALL PUBLIC ROADS SHALL COMPLY WITH THE CITY OF PEWAUKEE TECHNICAL STANDARDS.
3. CONCRETE PAVING SPECIFICATIONS
   3.1. CONCRETE PAVING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 415 AND 416 OF THE STATE HIGHWAY SPECIFICATIONS.
   3.2. CONCRETE PAVEMENT SHALL BE REINFORCED WITH NOVOMESH 950 (OR EQUAL) FIBER REINFORCEMENT AT A RATE OF 5 LBS/CUBIC YARD.
   3.3. CURING COMPOUNDS SHALL CONFORM TO SECTION 415 OF THE STATE HIGHWAY SPECIFICATIONS.
   3.4. CONTRACTOR SHALL PROVIDE CONTROL JOINTS AND CONSTRUCTION JOINTS OF ONE-QUARTER CONCRETE THICKNESS AT AN EQUAL RATIO OF LENGTH TO WIDTH WHEREVER POSSIBLE WITH A MAXIMUM LENGTH BETWEEN JOINTS OF 8' ON CENTER.
   3.5. CONTRACTOR SHALL PROVIDE EXPANSION JOINTS IN SIDEWALKS AT A MAXIMUM 24' ON CENTER.
   3.6. EXTERIOR CONCRETE SURFACES SHALL BE BROOM FINISHED.
   3.7. ALL CONCRETE SURFACES TO BE SEALED WITH TYPE TK–26UV CONCRETE SEALANT.
4. PAVEMENT MARKING SPECIFICATIONS
   4.1. USE 4" WIDE, HIGH VISIBILITY YELLOW LATEX PAINT FOR STALL LINES.

GRADING AND SEEDING NOTES

1. ALL PROPOSED GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL VERIFY ALL GRADES, MAKE SURE ALL AREAS DRAIN PROPERLY AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR COMPUTATIONS OF ALL GRADING QUANTITIES. WHILE JSD PROFESSIONAL SERVICES, INC. ATTEMPTS TO PROVIDE A COST EFFECTIVE APPROACH TO BALANCE EARTHWORK, GRADING DESIGN IS BASED ON MANY FACTORS, INCLUDING SAFETY, AESTHETICS, AND COMMON ENGINEERING STANDARDS OF CARE. THEREFORE, NO GUARANTEE CAN BE MADE FOR A BALANCED SITE.
3. ANY WORK WITHIN RIGHT-OF-WAY SHALL BE PROPERLY PERMITTED AND COORDINATED WITH THE APPROPRIATE OFFICIALS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. ALL GRADING WITHIN RIGHT-OF-WAY IS SUBJECT TO APPROVAL BY SAID OFFICIALS.
4. CONTRACTOR SHALL PROVIDE NOTICE TO THE MUNICIPALITY IN ADVANCE OF ANY SOIL DISTURBING ACTIVITIES, IN ACCORDANCE WITH MUNICIPAL REQUIREMENTS.
5. ALL DISTURBED AREAS SHALL BE SODDED AND/OR SEEDED AND MULCHED IMMEDIATELY FOLLOWING GRADING ACTIVITIES. SOD/SEED MIX TO BE IN ACCORDANCE WITH LANDSCAPE PLAN.
6. CONTRACTOR SHALL WATER ALL NEWLY SODDED/SEEDED AREAS DURING THE SUMMER MONTHS WHENEVER THERE IS A 7 DAY LAPSE WITH NO SIGNIFICANT RAINFALL.
7. CONTRACTOR TO DEEP TILL ALL COMPACTED PERVIOUS SURFACES PRIOR TO SODDING AND/OR SEEDING AND MULCHING.
8. ALL SLOPES 20% OR GREATER SHALL BE TEMPORARY SEEDED, MULCHED, OR OTHER MEANS OF COVER PLACED ON THEM WITHIN 2 WEEKS OF DISTURBANCE.
9. ALL EXPOSED SOIL AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 14 DAYS AND REQUIRE VEGETATIVE COVER FOR LESS THAN 1 YEAR, REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1059 AND CITY OF PEWAUKEE ORDINANCE.

EROSION CONTROL NOTES

1. CONTRACTOR IS RESPONSIBLE TO NOTIFY ENGINEER OF RECORD AND OFFICIALS OF ANY CHANGES TO THE EROSION CONTROL PLAN. ENGINEER OF RECORD AND APPROPRIATE CITY OF PEWAUKEE OFFICIALS MUST APPROVE ANY CHANGES PRIOR TO DEVIATION FROM THE APPROVED PLANS.
2. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED BY THE CONTRACTOR IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) TECHNICAL STANDARDS (REFERRED TO AS BMP'S) AND CITY OF PEWAUKEE ORDINANCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF THESE STANDARDS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL EROSION CONTROL MEASURES WHICH MAY BE NECESSARY TO MEET UNFORESEEN FIELD CONDITIONS.
3. INSTALL PERIMETER EROSION CONTROL MEASURES (SUCH AS SILT FENCE AND EXISTING INLET PROTECTION) PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE COVER, AS SHOWN ON PLAN. MODIFICATIONS TO THE APPROVED EROSION CONTROL DESIGN IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS IS ALLOWED IF MODIFICATIONS CONFORM TO BMP'S. ALL DESIGN MODIFICATIONS MUST BE APPROVED BY THE CITY OF PEWAUKEE PRIOR TO DEVIATION OF THE APPROVED PLAN.
4. ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED BY STATE INSPECTORS, LOCAL INSPECTORS, COUNTY INSPECTORS AND/OR ENGINEER OF RECORD SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
5. INSPECTIONS AND MAINTENANCE OF ALL EROSION CONTROL MEASURES SHALL BE ROUTINE (ONCE PER WEEK MINIMUM) TO ENSURE PROPER FUNCTION OF EROSION CONTROLS AT ALL TIMES. EROSION CONTROL MEASURES ARE TO BE IN WORKING ORDER AT THE END OF EACH WORK DAY.
6. ALL EROSION AND SEDIMENT CONTROL ITEMS SHALL BE INSPECTED WITHIN 24 HOURS OF ALL RAIN EVENTS EXCEEDING 0.5 INCHES. ANY DAMAGED EROSION CONTROL MEASURES SHALL BE REPAIRED OR REPLACED IMMEDIATELY UPON INSPECTION.
7. PAVED SURFACES ADJACENT TO CONSTRUCTION SITE VEHICLE ACCESS SHALL BE SWEPT AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST AFTER THE END OF EACH WORK DAY AND AS REQUESTED BY THE CITY OF PEWAUKEE.
8. INLET PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER TO PREVENT SEDIMENT DEPOSITION WITHIN STORM SEWER SYSTEMS.
9. INSTALL EROSION CONTROLS ON THE DOWNSTREAM SIDE OF STOCKPILES. IF STOCKPILE REMAINS UNDISTURBED FOR MORE THAN SEVEN (7) DAYS, TEMPORARY SEEDING AND STABILIZATION IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES IS REQUIRED. IF DISTURBANCE OCCURS BETWEEN OCTOBER 15TH AND MAY 15TH, THE MULCHING SHALL BE PERFORMED BY HYDRO-MULCHING WITH A "TACKIFIER."
10. DITCH CHECKS AND APPLICABLE EROSION NETTING/MATTING SHALL BE INSTALLED IMMEDIATELY AFTER COMPLETION OF GRADING EFFORTS WITHIN DITCHES/SWALES TO PREVENT SOIL TRANSPORTATION.
11. EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.):
    A. PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
    B. BACKFILL, COMPACT, AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
    C. DEWATERING SHALL BE COMPLIANT WITH THE CITY OF PEWAUKEE TECHNICAL STANDARDS.
12. ALL SLOPES 4:1 OR GREATER SHALL BE STABILIZED WITH CLASS I, TYPE A EROSION MATTING OR APPLICATION OF A WISCONSIN DEPARTMENT OF TRANSPORTATION (WisDOT) APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED WITHIN 7 DAYS OF REACHING FINAL GRADE AND/OR AS SOON AS CONDITIONS ALLOW. SLOPES 2:1 OR GREATER SHALL BE STABILIZED WITH CLASS III, TYPE D TURF REINFORCEMENT MATTING. EROSION NETTING USED ONSITE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AND WDNR TECHNICAL STANDARDS 1052 AND 1053.
13. CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO CONTROL DUST ARISING FROM CONSTRUCTION OPERATIONS. REFER TO WDNR TECHNICAL STANDARD 1068.
14. EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL ALL LAND DISTURBING CONSTRUCTION ACTIVITY AT THE SITE HAS BEEN COMPLETED AND THAT A UNIFORM PERENNIAL VEGETATIVE COVER HAS BEEN ESTABLISHED WITH A DENSITY OF AT LEAST 70% FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES OR THAT EMPLOY EQUIVALENT PERMANENT STABILIZATION MEASURES.
15. CONTRACTOR/OWNER SHALL FILE A NOTICE OF TERMINATION UPON COMPLETION OF THE PROJECT IN ACCORDANCE WITH WDNR REQUIREMENTS AND/OR PROPERTY SALE IN ACCORDANCE WITH WDNR REQUIREMENTS.
16. STABILIZATION PRACTICES:
    16.1. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. NO MORE THAN SEVEN (7) DAYS SHALL PASS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED UNLESS:
    16.2. THE INITIATION STABILIZATION MEASURES BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY HAS CEASED IS PRECLUDED BY SNOW COVER. IN THAT EVENT, STABILIZATION SHALL BE INITIATED AS SOON AS PRACTICABLE.
    16.3. CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN FOURTEEN (14) DAYS FROM WHEN ACTIVITY CEASED, (I.E. THE TOTAL TIME PERIOD THAT THE CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN FOURTEEN (14) DAYS. IN THAT EVENT, STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED.
    16.4. STABILIZATION MEASURES SHALL BE DETERMINED BASED ON SITE CONDITIONS AT THE TIME OF CONSTRUCTION ACTIVITY HAS CEASED, INCLUDING BUT NOT LIMITED TO WEATHER CONDITIONS AND LENGTH OF TIME MEASURE MUST BE EFFECTIVE. THE FOLLOWING ARE ACCEPTABLE STABILIZATION MEASURES:
    - PERMANENT SEEDING; IN ACCORDANCE WITH APPROVED CONSTRUCTION SPECIFICATION
    - TEMPORARY SEEDING; MAY CONSIST OF SPRING OATS(100LBS/ACRE) AND/OR WHEAT OR CEREAL RYE (150LB/ACRE)
    - HYDRO-MULCHING WITH A TACKIFIER
    - GEOTEXTILE EROSION MATTING
    - SODDING

UTILITY NOTES

1. ALL EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATIONS OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR/OWNER SHALL CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.
2. EXISTING SANITARY AND WATER SERVICES SHOWN BASED ON RECORD DRAWINGS PREPARED BY MSI GENERAL CORPORATION AND DATED JUNE 21, 2005. LOCATIONS, SIZES, AND ELEVATIONS OF UTILITIES HAVE NOT BEEN VERIFIED BY JSD.
3. PRIOR TO CONSTRUCTION, THE PRIME CONTRACTOR IS RESPONSIBLE FOR:
   - EXAMINING ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.
   - OBTAINING ALL PERMITS INCLUDING PERMIT COSTS, TAP FEES, METER DEPOSITS, BONDS, AND ALL OTHER FEES REQUIRED FOR PROPOSED WORK TO OBTAIN OCCUPANCY.
   - VERIFYING ALL ELEVATIONS, LOCATIONS AND SIZES OF SANITARY, WATER AND STORM LATERALS AND CHECK ALL UTILITY CROSSINGS FOR CONFLICTS. NOTIFY ENGINEER OF ANY DISCREPANCY. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS RESOLVED.
   - NOTIFYING ALL UTILITIES PRIOR TO INSTALLATION OF ANY UNDERGROUND IMPROVEMENTS.
   - NOTIFYING THE DESIGN ENGINEER AND MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION OBSERVATION.
   - COORDINATING ALL CONSTRUCTION WITH OTHER CONTRACTORS INVOLVED WITH CONSTRUCTION OF THE PROPOSED DEVELOPMENT AND FOR REPORTING ANY ERRORS OR DISCREPANCIES BETWEEN THESE PLANS AND PLANS PREPARED BY OTHERS.
4. ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN – AND ALL STATE AND LOCAL CODES AND SPECIFICATIONS. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE WHICH SPECIFICATIONS AND CODES APPLY, AND TO COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE LOCAL AND STATE AUTHORITIES.
5. SPECIFICATIONS SHALL COMPLY WITH THE CITY OF PEWAUKEE TECHNICAL STANDARDS.
6. LENGTHS OF ALL UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLAN. LENGTHS SHALL BE VERIFIED IN THE FIELD DURING CONSTRUCTION.
7. CONTRACTOR SHALL INSTALL A PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVER NIGHT AS REQUIRED IN CONSTRUCTION SITES WHERE THE POTENTIAL FOR PEDESTRIAN INJURY EXISTS.
8. CONTRACTOR SHALL ADJUST AND/OR RECONSTRUCT ALL UTILITY COVERS (SUCH AS MANHOLE COVERS, VALVE BOX COVERS, ETC.) TO MATCH THE FINISHED GRADES OF THE AREAS EFFECTED BY THE CONSTRUCTION.
9. THE PRIME CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CONSTRUCTION WITH OTHER CONTRACTORS INVOLVED WITH CONSTRUCTION OF THE PROPOSED DEVELOPMENT AND FOR REPORTING ANY ERRORS OR DISCREPANCIES BETWEEN THESE PLANS AND PLANS PREPARED BY OTHERS.
10. ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
11. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ENGINEER WITH AS-BUILT CONDITIONS OF THE DESIGNATED IMPROVEMENTS IN ORDER THAT THE APPROPRIATE DRAWINGS CAN BE PREPARED, IF REQUIRED. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE ENGINEER AS WORK PROGRESSES.
12. STORM SEWER SPECIFICATIONS –

    PIPE – HIGH DENSITY DUAL-WALL POLYETHYLENE CORRUGATED PIPE SHALL BE AS MANUFACTURED BY ADS OR EQUAL WITH WATER TIGHT JOINTS, AND SHALL MEET THE REQUIREMENTS OF AASHTO DESIGNATION M-294 TYPE "S".

    INLETS – INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FILE. NO. 28 OF THE "STANDARD SPECIFICATIONS", OR APPROVED EQUAL WITH A 1'–8" X 2'–6" MAXIMUM OPENING. COVERS SHALL BE NEENAH R–2501, TYPE G OR EQUAL.

    BACKFILL AND BEDDING – STORM SEWER SHALL BE CONSTRUCTED WITH GRAVEL BACKFILL AND CLASS "B" BEDDING IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS".

    FIELD TILE CONNECTION – ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE INCLUDED IN THE UNIT PRICE(S) FOR STORM SEWER. TILE LINES CROSSED BY THE TRENCH SHALL BE REPLACED WITH THE SAME MATERIAL AS THE STORM SEWER.
13. WATER MAIN SPECIFICATIONS –

    PIPE – POLYVINYL CHLORIDE (PVC) PIPE SHALL MEET THE REQUIREMENTS OF AWWA STANDARD C–900, CLASS 150, DR–18, WITH CAST IRON O.D. AND INTEGRAL ELASTOMERIC BELL AND SPIGOT JOINTS. NON–METALLIC WATER MAINS SHALL BE INSTALLED WITH BLUE INSULATION TRACER WIRE AND CONFORM WITH CITY OF PEWAUKEE TECHNICAL STANDARDS.

    VALVES AND VALVE BOXES – GATE VALVES SHALL BE AWWA GATE VALVES MEETING THE REQUIREMENTS OF AWWA C–509. GATE VALVES AND VALVE BOXES SHALL CONFORM TO THE CITY OF PEWAUKEE TECHNICAL STANDARDS.

    BEDDING AND COVER MATERIAL – PIPE BEDDING AND COVER MATERIAL SHALL BE 3/8–INCH STONE CHIPS IN ACCORDANCE WITH TABLE 32 OF THE "STANDARD SPECIFICATIONS".

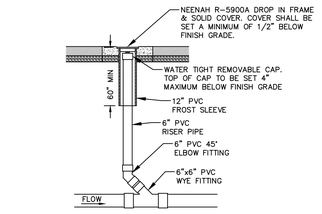
    BACKFILL – BACKFILL MATERIAL AND INSTALLATION FOR WATER MAIN AND SERVICE SHALL BE IN ACCORDANCE WITH CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS". GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. SLURRY BACKFILL IS REQUIRED WITHIN ALL EXISTING PUBLIC ROADS. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS."
14. SANITARY SEWER SPECIFICATIONS –

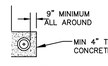
    PIPE – SANITARY SEWER PIPE MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) MEETING REQUIREMENTS OF ASTM D 3034, SDR–35, WITH INTEGRAL BELL TYPE FLEXIBLE ELASTOMERIC JOINTS, MEETING THE REQUIREMENTS OF ASTM D–3212.

    BEDDING AND COVER MATERIAL – PIPE BEDDING AND COVER MATERIAL SHALL BE 3/8–INCH STONE CHIPS IN ACCORDANCE WITH TABLE 32 OF THE "STANDARD SPECIFICATIONS". WITH THE FOLLOWING MODIFICATION: "COVER MATERIAL SHALL BE THE SAME AS USED FOR BEDDING AND SHALL CONFORM TO SECTION 8.43.2 (A). BEDDING AND COVER MATERIAL SHALL BE PLACED IN A MINIMUM OF THREE SEPARATE LIFTS, OR AS REQUIRED TO INSURE ADEQUATE COMPACTING OF THESE MATERIALS, WITH ONE LIFT OF BEDDING MATERIAL ENDING AT OR NEAR THE SPRINGLINE OF THE PIPE. THE CONTRACTOR SHALL TAKE CARE TO COMPLETELY WORK BEDDING MATERIAL UNDER THE HAUNCH OF THE PIPE TO PROVIDE ADEQUATE SIDE SUPPORT."

    BACKFILL – BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS." GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. SLURRY BACKFILL IS REQUIRED WITHIN ALL EXISTING PUBLIC ROADS. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS."

    TRACER WIRE SHALL CONFORM TO THE CITY OF PEWAUKEE TECHNICAL STANDARDS.
14. WATER MAIN AND SANITARY SEWER SHALL BE INSULATED WHEREVER THE DEPTH OF COVER IS LESS THAN 6 FEET. INSULATION AND INSTALLATION OF INSULATION SHALL BE CONFORMING WITH CHAPTER 4.17.0 "INSULATION" OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN 6TH EDITION UPDATED WITH ITS LATEST ADDENDUM (TYP.).
15. WATER MAIN SHALL BE INSULATED WHENEVER THE SEPARATION BETWEEN THE WATER MAIN AND STORM SEWER/CULVERTS IS LESS THAN 3 FEET. IF INSULATION IS REQUIRED THE WATER MAIN SHALL BE INSULATED WITH 4–INCHES OF INSULATION ON THE TOP AND SIDES CREATING A BOX AROUND THE





PLAN VIEW

Comm Table 82.35		
Dia of Lateral	Min Dia of Cleanout Riser	Min Dia of Riser Cap
1.5	1.5	1.5
2	1.5	1.5
3	3	2.5
4	4	3.5
5	5	4
6	6	5
8+	6	6

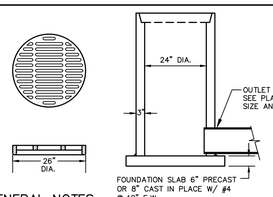
Neenah Grates R-5900A 12-inch Pipe

NOTE:
CLEANOUT PIPING AND FITTINGS SHALL MATCH SANITARY SEWER LATERAL MATERIAL

SANITARY SEWER CLEANOUT

REV. 12-6-2018

N.T.S.



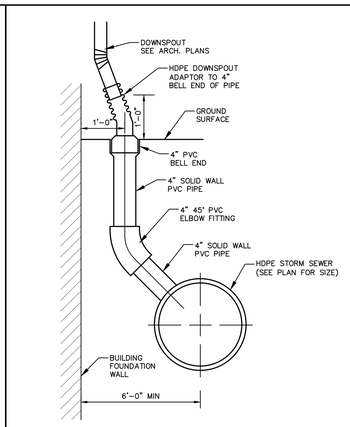
GENERAL NOTES:

1. GRATE SHALL BE NEENAH R-2501, TYPE G OR APPROVED EQUAL FITTING THE BELL END OF THE PRECAST STRUCTURE.
2. GRATES SHALL BE AASHTO H20 LOAD RATED
3. GRATE SHALL SET FLUSH WITH TOP OF CATCH BASIN BELL
4. PRECAST REINFORCED CONCRETE CATCH BASIN IS MANUFACTURED TO MEET ASTM C-478 AND AASHTO M199 SPECIFICATIONS
5. STANDARD CATCH BASIN BOTTOM SECTION HEIGHTS: 2'-6", 3'-6" AND 4'-6"
6. STANDARD CATCH BASIN BARREL HEIGHTS: 0'-6", 1'-0", 2'-0", 3'-0" AND 4'-0"
7. STOCK 24" DIA. CATCH BASIN HAS NO BASE, BUT MAY BE ORDERED WITH A 6" THICK INTEGRAL BASE OR AS SPECIFIED
8. CATCH BASIN JOINT MATERIAL: CONSEAL CS-102 AND/OR CS-202 AS MANUFACTURED BY CONCRETE SEALANTS INC., WHICH MEETS OR EXCEEDS REQUIREMENTS OF FEDERAL SPECIFICATION SS-S-210 (210A), AASHTO M-198B AND ASTM C-990
9. PIPE TO CATCH BASIN CONNECTORS: KOR-N-SEAL AS MANUFACTURED BY NPC INC., WHICH MEETS OR EXCEEDS REQUIREMENTS OF ASTM C-923

24" DIA. STORM INLET

REV. 12-7-2018

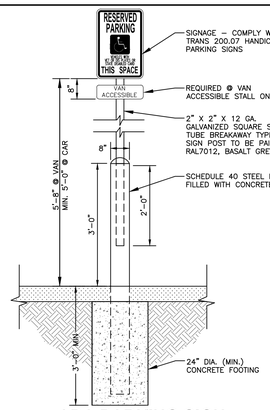
N.T.S.



DOWNSPOUT

REV. 7-7-2018

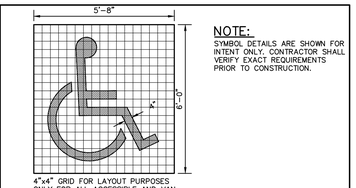
N.T.S.



ADA PARKING SIGN W/ BOLLARD

REV. 7-01-2019

N.T.S.

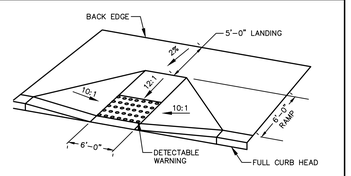


NOTE:
SYMBOL DETAILS ARE SHOWN FOR INTENT ONLY. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS PRIOR TO CONSTRUCTION.

ADA PARKING STALL MARKING

REV. 11-20-2018

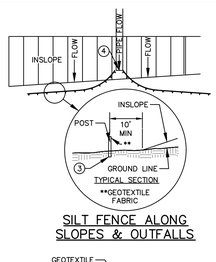
N.T.S.



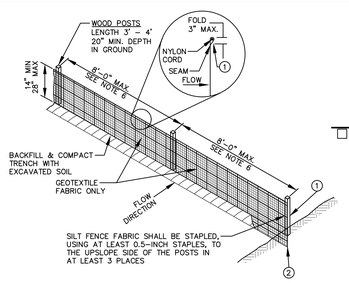
ADA ACCESSIBLE RAMP - FLUSH

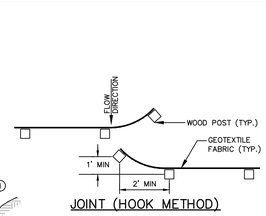
REV. 11-20-2018

N.T.S.

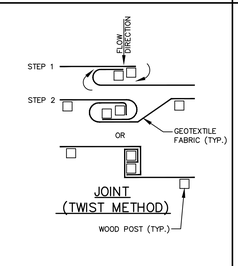


SILT FENCE ALONG SLOPES & OUTFALLS





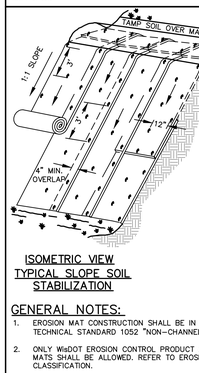
JOINT (HOOK METHOD)



JOINT (TWIST METHOD)

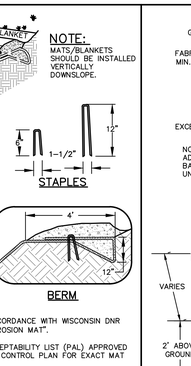
GENERAL NOTES:

1. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8-INCHES OF FABRIC IN A 4-INCH WIDE AND 6-INCH DEEP TRENCH OR 6-INCH DEEP V-TRENCH ON THE UPSLOPE SIDE OF THE FENCE. TRENCHES SHALL NOT BE EXCAVATED WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.
2. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1.125-INCHES x 1.125-INCHES OF DRIED OAK OR HICKORY.
4. SILT FENCE TO EXTEND ABOVE THE TOP OF PIPE.
5. SILT FENCE CONSTRUCTION AND GEOTEXTILE FABRIC SHALL CONFORM TO WDNR TECHNICAL STANDARD 1056.
6. POST SPACING SHALL BE SELECTED BASED ON GEOTEXTILE FABRIC (8-FEET FOR WOVEN & 3-FEET FOR NON-WOVEN)



NOTE:
ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS.

TRENCH DETAIL

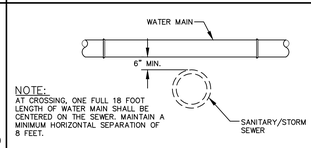


SILT FENCE TIE BACK
(WHEN ADDITIONAL SUPPORT REQUIRED)

SILT FENCE

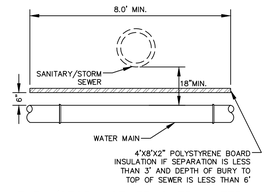
REV. 7-01-2019

N.T.S.



NOTE:
AT CROSSING, ONE FULL 18 FOOT LENGTH OF WATER MAIN SHALL BE CENTERED ON THE SEWER, MAINTAIN A MINIMUM HORIZONTAL SEPARATION OF 8 FEET.

WATER MAIN OVER SANITARY/STORM SEWER

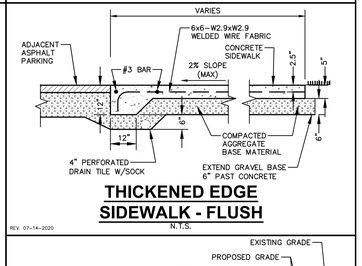


SANITARY/STORM SEWER OVER WATER MAIN

SEWER - WATER MAIN SEPARATION

REV. 7-01-2019

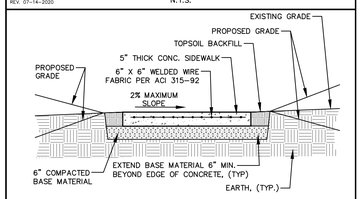
N.T.S.



THICKENED EDGE SIDEWALK - FLUSH

REV. 07-14-2020

N.T.S.



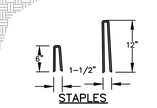
CONCRETE SIDEWALK

REV. 7-01-2019

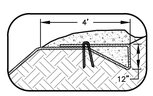
N.T.S.

ISOMETRIC VIEW
TYPICAL SLOPE SOIL STABILIZATION

NOTE:
MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE.



STAPLES



BERM

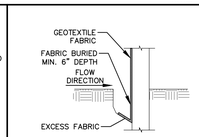
GENERAL NOTES:

1. EROSION MAT CONSTRUCTION SHALL BE IN ACCORDANCE WITH WISCONSIN DNR TECHNICAL STANDARD 1052 "NON-CHANNEL EROSION MATT".
2. ONLY WisDOT EROSION CONTROL PRODUCT ACCEPTABILITY LIST (PAL) APPROVED MATS SHALL BE ALLOWED. REFER TO EROSION CONTROL PLAN FOR EXACT MAT CLASSIFICATION.
3. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
4. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
5. ONLY WisDOT EROSION CONTROL PRODUCT ACCEPTABILITY LIST (PAL) APPROVED MATS SHALL BE ALLOWED. REFER TO EROSION CONTROL PLAN FOR EXACT MAT CLASSIFICATION.

EROSION MATTING

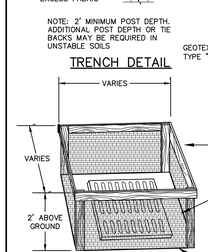
REV. 11-19-2018

N.T.S.

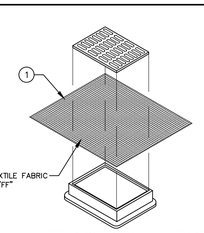


NOTE: 2' MINIMUM POST DEPTH. ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

TRENCH DETAIL



INLET PROTECTION - TYPE "A"



INLET PROTECTION - TYPE "B" WITHOUT CURB BOX

GENERAL NOTES:

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

1. FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER OF FACILITATE MAINTENANCE OR REMOVAL.
2. FOR INLET PROTECTION, TYPE "C" (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
3. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT A WOOD 2X4

INSTALLATION NOTES:

TYPE "B"

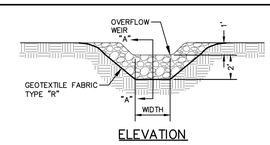
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHODS TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

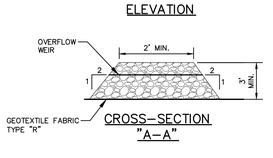
INLET PROTECTION

REV. 11-19-2018

N.T.S.



ELEVATION



CROSS-SECTION "A-A"

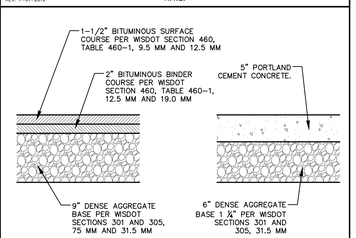
GENERAL NOTES:

1. STONE DITCH CHECKS SHALL BE CONSTRUCTED OF A WELL-GRADED ANGULAR STONE, A D50 OF 3 INCH DIAMETER OR GREATER, SOMETIMES REFERRED TO AS BREAKER RUN OR SHOT ROCK.
2. EXTEND DITCH CHECK ACROSS CHANNEL OPENING TO MEET SWALE/DITCH SIDE SLOPES. WHERE CHANNEL IS LESS THAN 3 FEET DEEP, REDUCE WEIR HEIGHT TO 1 FOOT AND INCREASE THE TOP OF DITCH CHECK FROM 2 FEET TO 4 FEET.

STONE DITCH CHECK

REV. 7-31-2018

N.T.S.



STANDARD ASPHALT PAVEMENT SECTION

CONCRETE SIDEWALK SECTION

GENERAL NOTES:

1. PAVEMENT RECOMMENDATIONS ARE BASED ON SIMILAR SITES WITH SIMILAR EXPECTED TRAFFIC LOADINGS. IF THIS DETAIL CONFLICTS WITH A GEOTECHNICAL INVESTIGATION REPORT PREPARED SPECIFICALLY FOR THIS SITE, THE RECOMMENDATIONS OF THE GEOTECH REPORT SHALL SUPERCEDE.
2. WSDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, INCLUDING SUPPLEMENTAL SPECIFICATIONS, COMPACTION REQUIREMENTS:
   - BITUMINOUS CONCRETE: REFER TO SECTION 460-3.
   - BASE COURSE: REFER TO SECTION 301.3.4.2, STANDARD COMPACTION.

PAVEMENT SECTIONS

REV. 7-01-2019

N.T.S.

JSD
CREATE THE VISION TELL THE STORY
jsdinc.com
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W238 N1610 BUSSE ROAD, SUITE 100
WAUKESHA, WISCONSIN 53188
P. 262.513.0666

CLIENT:
FOX RIVER CONGREGATIONAL CHURCH

CLIENT ADDRESS:
N34 W23575 CAPITOL DRIVE PEWAUKEE, WI 53072

PROJECT:
FOX RIVER CONGREGATIONAL CHURCH

PROJECT LOCATION:
N34 W23575 CAPITOL DRIVE PEWAUKEE, WI 53072

PLAN MODIFICATIONS:

#	Date:	Description:
1	03/01/23	CITY SUBMITTAL
2	04/10/23	CITY SUBMITTAL
3		
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Designed By: JJS
Reviewed By: TJB
Approved By: JLJ

SHEET TITLE:
NOTES & DETAILS

SHEET NUMBER:
C3.1

JSD PROJECT NO: 23-13003

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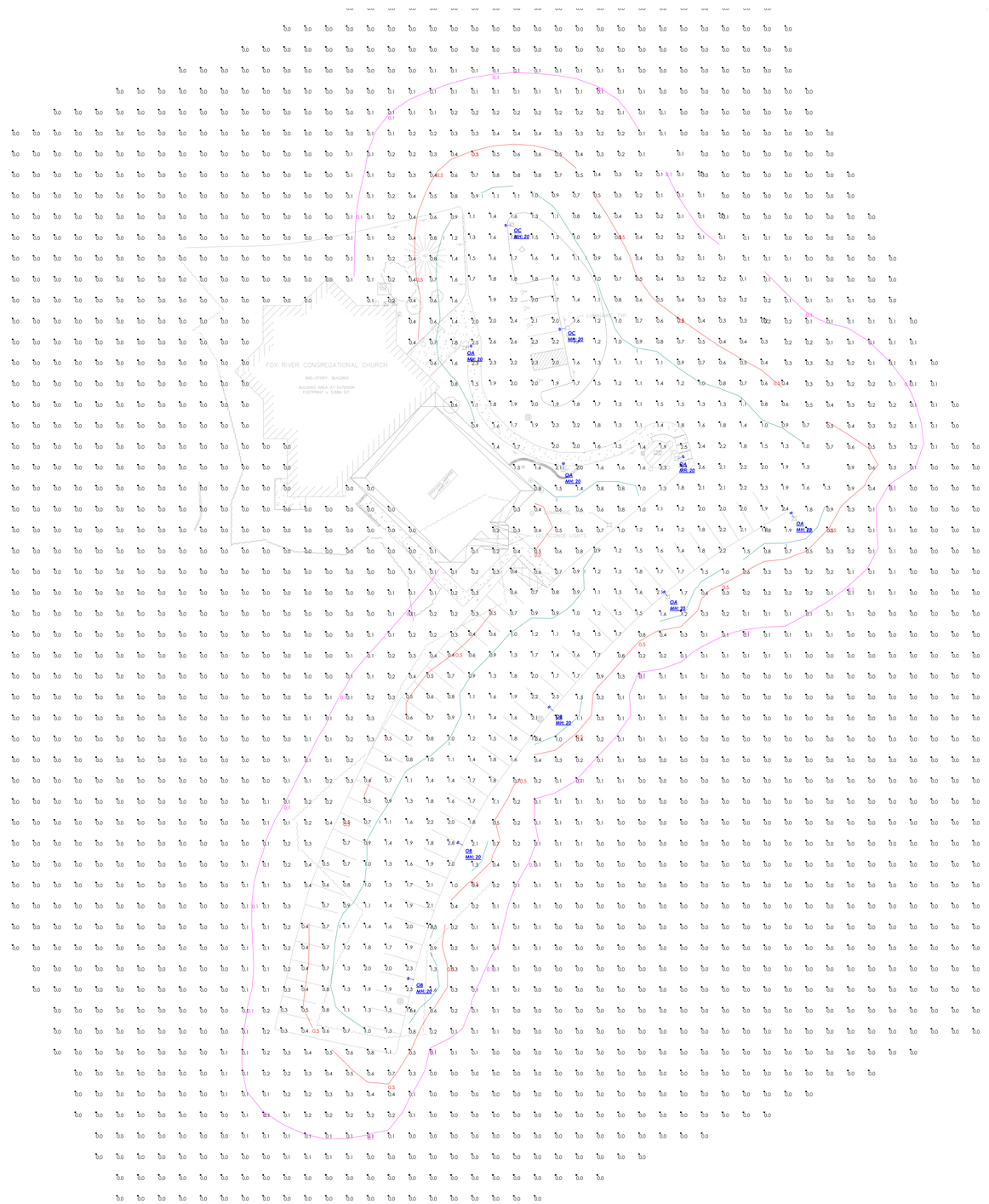


Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PARKING	Illuminance	Fc	1.22	2.8	0.1	12.20	28.00
SITE	Illuminance	Fc	0.09	2.7	0.0	N.A.	N.A.

Luminaire Schedule							
Symbol	Qty	Label	Manufacturer	Description	Arrangement	Lum. Lumens	Lum. Watts	LLF
	5	OA	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-P-PA1B-740-U-T4W	Single	7106	52.8	0.900
	3	OB	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-P-PA1C-740-U-T4W	Single	9164	72.1	0.900
	2	OC	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-P-PA1B-740-U-5WQ	Single	7349	52.8	0.900

1. Standard Reflectance of 80/50/20 unless noted otherwise
2. Not a Construction Document, for Design purposes only
3. Standard indoor calc points @ 30" A.F.F. unless noted otherwise
4. Standard outdoor calc points @ Grade unless noted otherwise
5. Egress calc points @ 0" A.F.F.
6. Mlazgar Associates assumes no responsibility for installed light levels due to field conditions, etc.

MLAZGAR ASSOCIATES
16350 W. GLENDALE DR.
NEW BERLIN, WI 53151
(p) 414-943-1915
(f) 952-943-8088
www.mlazgar.com

MLAZGAR ASSOCIATES

#	Date	Comments

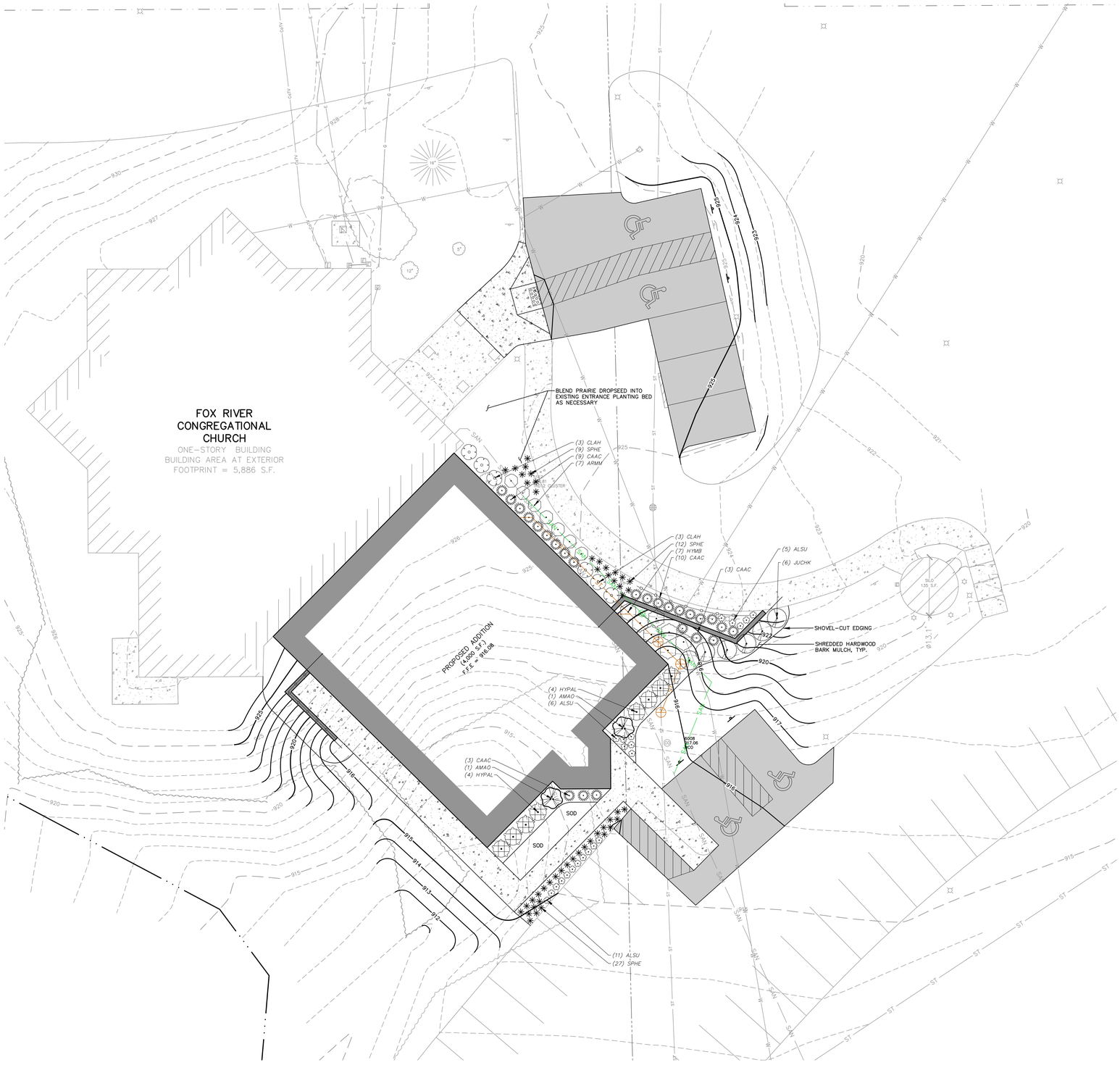
Revisions

RLMA Project #: 140340
Drawn By: EP
Date: 04/10/2023

Scale: 1" = 25' 0"

PHOTOMETRIC SITE PLAN

FOX RIVER CHURCH
PEWAUKEE, WISCONSIN



PLANT SCHEDULE

ORNAMENTAL TREES	CODE	BOTANICAL / COMMON NAME	CONT	SIZE	QTY
	AMAO	*Amelanchier alnifolia 'Obelisk'* *Standing Ovation™ Serviceberry*	B & B	1.5" Cal (Multi-Stem)	2
DECIDUOUS SHRUBS	**CODE**	**BOTANICAL / COMMON NAME**	**CONT**	**SIZE**	**QTY**
	ARMM	*Aronia melanocarpa 'UCONNAM165'* *Low Scape Mound® Black Chokeberry*	#3	Min. 12"-24"	7
	CLAH	*Clethra alnifolia 'Hummingbird'* *Hummingbird Summersweet*	#5	Min. 24"-36"	6
	HYMB	*Hydrangea macrophylla 'Bailmer'* *Endless Summer® The Original Hydrangea*	#5	Min. 24"-36"	7
	HYPAL	*Hydrangea paniculata 'Little Quick Fire'* *Little Quick Fire Hydrangea*	#3	Min. 12"-24"	8
EVERGREEN SHRUBS	**CODE**	**BOTANICAL / COMMON NAME**	**CONT**	**SIZE**	**QTY**
	JUCHK	*Juniperus chinensis 'Pfitzerana Kallays Compacta'* *Kally Pfitzer Compact Juniper*	#5	Min. 24" wide	6
PERENNIALS & GRASSES	**CODE**	**BOTANICAL / COMMON NAME**	**CONT**	**SIZE**	**QTY**
	ALSU	*Allium x 'Summer Beauty'* *Summer Beauty Allium*	#1	Min. 8"-18"	22
	CAAC	*Calamagrostis x acutiflora 'Karl Foerster'* *Karl Foerster Feather Reed Grass*	#1	Min. 8"-18"	22
	SPHE	*Sporobolus heterolepis 'Tara'* *Prairie Dropseed*	#1	Min. 8"-18"	48

GENERAL NOTES

1. REFER TO THE EXISTING CONDITIONS SURVEY FOR EXISTING CONDITIONS NOTES AND LEGEND.
2. ALL WORK IN THE ROW SHALL BE IN ACCORDANCE WITH THE MUNICIPAL STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
3. JSD SHALL BE HELD HARMLESS AND DOES NOT WARRANT ANY DEVIATIONS BY THE OWNER/CONTRACTOR FROM THE APPROVED CONSTRUCTION PLANS THAT MAY RESULT IN DISCIPLINARY ACTIONS BY ANY OR ALL REGULATORY AGENCIES.
4. DRAWING FOR REVIEW – NOT FOR CONSTRUCTION UNLESS OTHERWISE NOTED IN THE TITLE BLOCK.
5. THE LANDSCAPE CONTRACTOR SHALL COORDINATE ALL FINE GRADING AND TOPSOILING WITH GENERAL CONTRACTOR
6. REFER TO "LANDSCAPE DETAILS AND NOTES" SHEET FOR ADDITIONAL DETAILS, NOTES AND SPECIFICATION INFORMATION INCLUDING MATERIALS, GUARANTEE AND EXECUTION RELATED TO LANDSCAPE PLAN
7. CONTRACTOR SHALL REVIEW SITE CONDITIONS FOR UTILITY CONFLICTS, DRAINAGE ISSUES, SUBSURFACE ROCK, AND PLANT PLACEMENT CONFLICTS PRIOR TO PLANT INSTALLATION. REPORT ANY CONDITIONS THAT MAY HAVE ADVERSE IMPACT ON PLANTING OPERATIONS TO LANDSCAPE ARCHITECT
8. DO NOT COMMENCE PLANTING OPERATIONS UNTIL ALL ADJACENT SITE IMPROVEMENTS, IRRIGATION INSTALLATION (IF APPLICABLE), AND FINISH GRADING ARE COMPLETE

CONTRACTOR NOTES

1. ALL DISTURBED AREAS TO RECEIVE SEED, FERTILIZER, AND MULCH UNLESS OTHERWISE SPECIFIED. (SEE SHEET L2.0 SEEDING NOTES)
2. ALL PLANTING AREAS TO RECEIVE SHREDDED HARDWOOD BARK MULCH UNLESS OTHERWISE SPECIFIED. (SEE SHEET L2.0 MATERIAL NOTES)

LEGEND

- BUILDING OUTLINE
- EDGE OF PAVEMENT
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- RETAINING WALL
- SAN — SANITARY SEWER
- W — WATERMAIN
- ST — STORM SEWER
- SHOVEL-CUT EDGING

north

SCALE IN FEET

10' 0 10'

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MILWAUKEE REGIONAL OFFICE
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CLIENT:
FOX RIVER CONGREGATIONAL CHURCH

CLIENT ADDRESS:
N34 W23575 CAPITOL DRIVE
PEWAUKEE, WI 53072

PROJECT:
FOX RIVER CONGREGATIONAL CHURCH

PROJECT LOCATION:
N34 W23575 CAPITOL DRIVE
PEWAUKEE, WI 53072

PLAN MODIFICATIONS:

#	Date:	Description:
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Designed By:	MA
Reviewed By:	MA
Approved By:	KB

SHEET TITLE:
LANDSCAPE PLAN

SHEET NUMBER:
L1.0

JSD PROJECT NO: 23-13003

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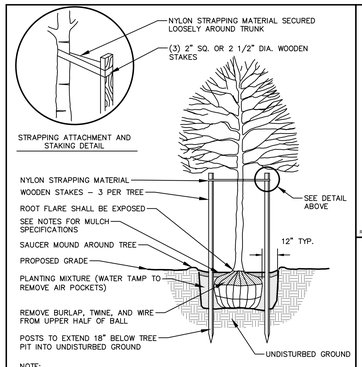
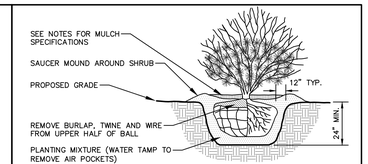


NOTE:
1. DIG HOLE NO DEEPER THAN BASE OF ROOT BALL TO FLARE. ROOT BALL TO BE SET ON UNDISTURBED SOIL UNLESS COMPACTED AGGREGATE STONE REMAINS FROM SITE EXCAVATOR. REMOVE REMAINING AGGREGATE STONE UNTIL SOIL LAYER IS REACHED.
2. REMOVE NYLON STRAPPING WITHIN 9–18 MONTHS FOLLOWING INSTALLATION

DECIDUOUS TREE PLANTING DETAIL

N.T.S.

REV. 01-04-2019

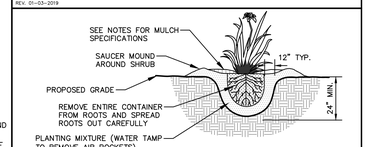


NOTE:
1. ROOT FLARE TO BE EXPOSED.

SHRUB PLANTING DETAIL

N.T.S.

REV. 01-03-2019



NOTE:
1. ROOT FLARE TO BE EXPOSED

PERENNIAL/ORNAMENTAL GRASS PLANTING DETAIL

N.T.S.

REV. 01-03-2019

CONTRACTOR AND OWNER RESPONSIBILITY NOTES

1. **GUARANTEE: THE CONTRACTOR SHALL GUARANTEE ALL PLANTS THROUGH ONE (1) YEAR AFTER ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PLANTS SHALL BE ALIVE AND IN HEALTHY AND FLOURISHING CONDITION AT THE END OF THE GUARANTEE PERIOD. THE CONTRACTOR SHALL REPLACE (AT NO COST TO OWNER) ANY PLANTS THAT ARE DEAD OR NOT IN A VIGOROUS THRIVING CONDITION. REPLACEMENT PLANTS SHALL BE OF THE SAME KIND AND SIZE AS ORIGINALLY SPECIFIED UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE. RESTORE BEDS AS NECESSARY FOLLOWING PLANT REPLACEMENT, INCLUDING BUT NOT LIMITED TO BEDDING, EDGING, MULCH, ETC. REPLACE PLANTS DAMAGED AT TIME OF PLANTING. REPAIR AREAS DISTURBED IN ANY WAY DURING PLANT REPLACEMENT AT NO COST TO OWNER. CONTRACTOR SHALL PROVIDE A ONE (1)–YEAR STRAIGHTENING GUARANTEE FOR ALL TREES.**
2. **CONTRACTOR IS RESPONSIBLE FOR STAKING THE PLANT MATERIALS FOR REVIEW BY OWNER'S REPRESENTATIVE PRIOR TO DIGGING AND PLACEMENT AND SHALL COORDINATE ALL FINE GRADING AND RESTORATION WITH THE GRADING CONTRACTOR.**
3. **MAINTENANCE: (CONTRACTOR) FOR ALL PLANTINGS, SEEDED AND/OR SODDED LAWN AREAS: THE CONTRACTOR SHALL MAINTAIN ALL PLANTINGS AND LAWN AREAS FOR A MINIMUM TIME PERIOD OF 60 DAYS, UNTIL FINAL ACCEPTANCE BY OWNER'S REPRESENTATIVE. THE CONTRACTOR IS RESPONSIBLE FOR ADEQUATELY WATERING PLANTS AND LAWN/TURFGRASS DURING THIS 60 DAY ESTABLISHMENT PERIOD. CONTRACTOR IS RESPONSIBLE FOR THE ESTABLISHMENT OF HEALTHY VIGOROUS PLANT MATERIALS AND LAWN/TURFGRASS GROWTH. CONTRACTOR IS ALSO RESPONSIBLE FOR ANY PRUNING OF PLANT MATERIALS, AND SHAPING AND/OR REPLACEMENT OR SUPPLEMENT OF DEFICIENT SHREDDED HARDWOOD BARK MULCH DURING THIS PERIOD. LONG TERM PLANT MATERIALS AND LAWN/TURFGRASS MAINTENANCE AND ANY PROGRAM FOR SUCH IS THE RESPONSIBILITY OF THE OWNER. ALL PLANTINGS AND LAWN/TURFGRASS AREAS SHALL BE MAINTAINED IN A MANICURED CONDITION UNTIL THE TIME WHEN THE OWNER'S ACCEPTANCE IS GIVEN.**
4. **MAINTENANCE: (OWNER) THE OWNER IS RESPONSIBLE FOR THE CONTINUED MAINTENANCE, REPAIR AND REPLACEMENT OF ALL LANDSCAPING MATERIALS AND WEED BARRIER FABRIC AS NECESSARY FOLLOWING THE ONE (1) YEAR CONTRACTOR GUARANTEE PERIOD.**

GENERAL NOTES

1. GENERAL: ALL WORK IN THE R-O-W AND PUBLIC EASEMENTS SHALL BE IN ACCORDANCE WITH LOCAL MUNICIPAL REQUIREMENTS. JSD SHALL BE HELD HARMLESS AND DOES NOT WARRANT ANY DEVIATIONS BY THE OWNER/CONTRACTOR FROM THE APPROVED CONSTRUCTION PLANS THAT MAY RESULT IN DISCIPLINARY ACTIONS BY ANY OR ALL REGULATORY AGENCIES. LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO UTILITIES. CONTRACTOR MUST CALL 1-800-242-8511 FOR UTILITY LOCATIONS AT LEAST THREE DAYS PRIOR TO DIGGING. HAND DIG AND INSTALL ALL PLANTS THAT ARE NEAR EXISTING UTILITIES. PROTECT PREVIOUSLY INSTALLED WORK OF OTHER TRADES. CONTRACTOR IS RESPONSIBLE FOR STAKING THE PLANT MATERIALS FOR REVIEW BY OWNER PRIOR TO DIGGING AND PLACEMENT AND SHALL COORDINATE ALL FINE GRADING AND RESTORATION WITH THE GRADING CONTRACTOR.
2. DELIVERY AND HANDLING: DO NOT DELIVER MORE PLANT MATERIALS THAN CAN BE PLANTED IN ONE DAY, UNLESS ADEQUATE, APPROPRIATE AND SECURE STORAGE IS PROVIDED AND APPROVED BY OWNER'S REPRESENTATIVE. AT ALL TIMES, PROTECT ALL PLANT MATERIALS FROM WIND AND DIRECT SUN. DELIVER PLANTS WITH LEGIBLE IDENTIFICATION LABELS. PROTECT PLANTS DURING DELIVERY AND DO NOT PRUNE PRIOR TO DELIVERY. ALL TREES AND SHRUBS SHALL BE PLANTED ON THE DAY OF DELIVERY; IF THIS IS NOT POSSIBLE, PROTECT THE PLANT MATERIALS NOT PLANTED BY STORING THEM IN A SHADED, SECURE AREA, PROTECTING THE ROOT MASS WITH WET SOIL, MULCH, HAY OR OTHER SUITABLE MEDIUM. CONTRACTOR TO KEEP ALL PLANT MATERIALS ADEQUATELY WATERED TO PREVENT ROOT DESICCATION. DO NOT REMOVE CONTAINER GROWN STOCK FROM CONTAINERS BEFORE TIME OF PLANTING. DO NOT PICK UP CONTAINER OR BALLED PLANTS BY STEM OR ROOTS. ALL PLANTS SHALL BE LIFTED AND HANDLED FROM THE BOTTOM OF THE CONTAINER OR BALL. PERFORM ACTUAL PLANTING ONLY WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE IN ACCORDANCE WITH LOCALLY ACCEPTED BEST HORTICULTURAL PRACTICES.
3. MATERIALS – PLANTS: ALL PLANTS SHALL CONFORM TO THE LATEST VERSION OF THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1. PLANTS SHALL BE TRUE TO SPECIES AND VARIETY SPECIFIED AND NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR AT LEAST 2 YEARS. PLANTS SHALL BE FRESHLY DUG (DURING THE MOST RECENT FAVORABLE HARVEST SEASON). PLANTS SHALL BE SO TRAINED IN DEVELOPMENT AND APPEARANCE AS TO BE UNQUESTIONABLY SUPERIOR IN FORM, COMPACTNESS, AND SYMMETRY. PLANTS SHALL BE SOUND, HEALTHY, VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF, AND FREE OF DISEASE AND INSECTS (ADULT EGGS, PUPAE OR LARVAE). THEY SHALL HAVE HEALTHY, WELL-DEVELOPED ROOT SYSTEMS AND SHALL BE FREE FROM PHYSICAL DAMAGE OR OTHER CONDITIONS THAT WOULD PREVENT THRIVING GROWTH OR PREMATURE MORTALITY. PLANTS SHALL BE OF THE HIGHEST QUALITY, POSSESS TYPICAL GROWTH HABITS AND FORM FOR THEIR SPECIES AND BE FREE OF INJURY. PARKWAY TREES AND PARKING LOT TREES SHALL HAVE A MINIMUM BRANCHING HEIGHT OF SIX (6) FEET ABOVE THE GROUND TO ALLOW ADEQUATE VISUAL AND PHYSICAL CLEARANCE.
4. PRUNING: THE CONTRACTOR SHALL PRUNE ALL TREES AND REPAIR ANY INJURIES THAT OCCURRED DURING THE PLANTING PROCESS. DOUBLE LEADERS, DEAD BRANCHES, AND LIMBS DAMAGED OR BROKEN DURING THE PLANTING PROCESS, SHALL BE PRUNED. THIS SHALL BE THE ONLY PRUNING ALLOWED AT PLANTING. PRUNING SHALL CONFORM TO THE LATEST VERSION OF THE AMERICAN STANDARD FOR TREE CARE OPERATIONS, ANSI A300. PRUNE TREES IN ACCORDANCE WITH NAA GUIDELINES. DO NOT TOP TREES. PRUNE SHRUBS ACCORDING TO STANDARD HORTICULTURAL PRACTICES. ON CUTS OVER 3/4" IN DIAMETER AND BRUISES OR SCARS ON BARK, TRACE THE INJURED CAMBIUM LAYER BACK TO LIVING TISSUE AND REMOVE. SMOOTH AND SHAPE WOUNDS SO AS NOT TO RETAIN WATER. TREAT THE AREA WITH AN APPROVED INCONSPICUOUS LATEX BASED ANTISEPTIC TREE PAINT, IF PRUNING OCCURS "IN SEASON". DO NOT PRUNE ANY OAK TREES DURING THE MONTHS FROM APRIL TO OCTOBER.
5. CLEANUP: THE WORK AREA SHALL BE KEPT SAFE AND NEAT AT ALL TIMES. DISPOSED OF EXCESS SOIL. REMOVE ALL CUTTINGS AND WASTE MATERIALS. SOIL AND BRANCHES. BIND AND WRAP THESE MATERIALS, ANY REJECTED PLANTS, AND ANY OTHER DEBRIS RESULTING FROM ALL PLANTING TASKS AND PROMPTLY CLEAN UP AND REMOVE FROM THE PROJECT SITE. UNDER NO CIRCUMSTANCES SHALL THE ACCUMULATION OF SOIL, BRANCHES OR OTHER DEBRIS BE ALLOWED UPON A PUBLIC PROPERTY IN SUCH A MANNER AS TO RESULT IN A PUBLIC SAFETY HAZARD OR DAMAGE. LIKEWISE, UNDER NO CIRCUMSTANCES SHALL ANY DEBRIS OR INCIDENTAL MATERIALS BE ALLOWED UPON ADJACENT PRIVATE PROPERTY.
6. ANY SUBSTITUTIONS IN PLANT TYPE, LOCATION, OR SIZE SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
7. CONTRACTOR TO VERIFY PLANT MATERIAL QUANTITIES AND SQUARE FOOTAGES. QUANTITIES SHOWN ON PLAN TAKE PRECEDENCE OVER THOSE ON SCHEDULE.

SEEDING, SODDING, & POND VEGETATION NOTES

1. MATERIALS – TURFGRASS SEED: DISTURBED LAWN AREAS LABELED ON PLAN AS SUCH, SHALL RECEIVE 6" OF TOPSOIL AND EARTH CARPET'S "MADISON PARKS" GRASS SEED, OR EQUIVALENT AS APPROVED BY THE OWNER'S REPRESENTATIVE, INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. IN ADDITION TO TURFGRASS SEED, ANNUAL RYE SHALL BE APPLIED TO ALL DISTURBED AREAS AT A RATE OF 1 1/2 LBS PER 1000 SQUARE FEET. FERTILIZE AND MULCH PER MANUFACTURER'S RECOMMENDATIONS. MULCH SHALL BE CERTIFIED NOXIOUS WEED SEED-FREE
2. MATERIALS – SOD: DISTURBED LAWN AREAS LABELED ON PLAN AS SUCH, SHALL RECEIVE 6" OF TOPSOIL AND A PREMIUM GRADE TURFGRASS SOD. ONLY IMPROVED TYPES OF SOD (ELITE) ARE ACCEPTABLE. TURFGRASS SHALL BE MACHINE CUT AT A UNIFORM THICKNESS OF .60 INCH, PLUS OR MINUS .25 INCH, AT TIME OF CUTTING. MEASUREMENT FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND THATCH. LARGE ROLL TURFGRASS SOD SHALL BE CUT TO THE SUPPLIER'S STANDARD WIDTH (36-48 INCHES) AND LENGTH. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE. STANDARD SIZE SECTIONS OF TURGRASS SOD SHALL BE STRONG ENOUGH SO THAT THEY CAN BE PICKED UP AND HANDLED WITHOUT DAMAGE. TURFGRASS SOD SHALL NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT IS EXCESSIVELY DRY OR WET, AS THIS MAY ADVERSELY AFFECT ITS SURVIVAL. POST-PLANT IRRIGATION WILL BE NECESSARY TO ENSURE SOD STAYS ALIVE AND ROOTS INTO SOIL. THE CONTRACTOR IS RESPONSIBLE FOR WATERING SOD UNTIL TIME OF ACCEPTANCE BY THE OWNER. TURFGRASS SOD SHALL BE HARVESTED, DELIVERED, AND INSTALLED/TRANSPLANTED WITHIN A PERIOD OF 24 HOURS. TURFGRASS SOD SHALL BE RELATIVELY FREE OF THATCH, UP TO 0.5 INCH ALLOWABLE (UNCOMPRESSED). TURFGRASS SOD SHALL BE REASONABLY FREE (10 WEEDS/100 SQ. FT.) OF DISEASES, NEMATODES AND SOIL-BORNE INSECTS. ALL TURFGRASS SOD SHALL BE FREE OF GRASSY AND BROAD LEAF WEEDS AND WEED SEED. THE SOD SUPPLIER SHALL MAKE RECOMMENDATIONS TO THE CONTRACTOR REGARDING WATERING SCHEDULE. THE WATERING SCHEDULE SHOULD BEGIN IMMEDIATELY AFTER SOD IS INSTALLED.

LANDSCAPE MATERIAL NOTES

1. MATERIALS – PLANTING MIXTURE: ALL HOLES EXCAVATED FOR TREES, SHRUBS, PERENNIALS AND ORNAMENTAL GRASSES SHALL BE BACKFILLED WITH TWO (2) PARTS TOPSOIL, ONE (1) PART SAND AND ONE (1) PART COMPOST. SOIL MIXTURE SHALL BE WELL BLENDED PRIOR TO INSTALLATION.
2. MATERIALS – TOPSOIL: TOPSOIL TO BE CLEAN, FRIABLE LOAM FROM A LOCAL SOURCE, FREE FROM STONES OR DEBRIS OVER 3/4" IN DIAMETER, AND FREE FROM TOXINS OR OTHER DELETERIOUS MATERIALS. TOPSOIL SHALL HAVE A pH VALUE BETWEEN 6 AND 7. TOPSOIL AND PLANTING SOIL SHALL BE TESTED TO ENSURE CONFORMANCE WITH THESE SPECIFICATIONS AND SHALL BE AMENDED TO MEET THESE SPECIFICATIONS. PROVIDE TEST RESULTS TO OWNER'S REPRESENTATIVE PRIOR TO PLACEMENT. DO NOT PLACE FROZEN OR MUDDY TOPSOIL. APPLY SOIL AMENDMENTS TO ALL LANDSCAPE AREAS PER SOIL TEST.
3. MATERIALS – SHREDDED HARDWOOD BARK MULCH: ALL PLANTING AREAS LABELED ON PLAN SHALL RECEIVE CERTIFIED WEED FREE SHREDDED HARDWOOD BARK MULCH INSTALLED TO A MINIMUM AND CONSISTENT DEPTH OF 3-INCHES. SHREDDED HARDWOOD BARK MULCH SIZE & COLOR TO BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. FERTILIZER SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, COUNTY AND STATE REQUIREMENTS. SHREDDED HARDWOOD BARK MULCH AREAS SHALL NOT RECEIVE WOVEN WEED BARRIER FABRIC.

JSD
CREATE THE VISION TELL THE STORY
jsdinc.com
MILWAUKEE REGIONAL OFFICE
W238 N1610 BUSSE ROAD, SUITE 100
WAUKESHA, WISCONSIN 53188
P. 262.513.0666

CLIENT:
FOX RIVER CONGREGATIONAL CHURCH

CLIENT ADDRESS:
N34 W23575 CAPITOL DRIVE PEWAUKEE, WI 53072

PROJECT:
FOX RIVER CONGREGATIONAL CHURCH

PROJECT LOCATION:
N34 W23575 CAPITOL DRIVE PEWAUKEE, WI 53072

PLAN MODIFICATIONS:

#	Date:	Description:
1	03/01/23	CITY SUBMITTAL
2	04/10/23	CITY SUBMITTAL
3		
4		
5		
6		
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9		
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11		
12		
13		
14		
15		

Designed By:	MA
Reviewed By:	MA
Approved By:	KB

SHEET TITLE:
LANDSCAPE DETAILS & NOTES

SHEET NUMBER:
L2.0

JSD PROJECT NO: 23-13003

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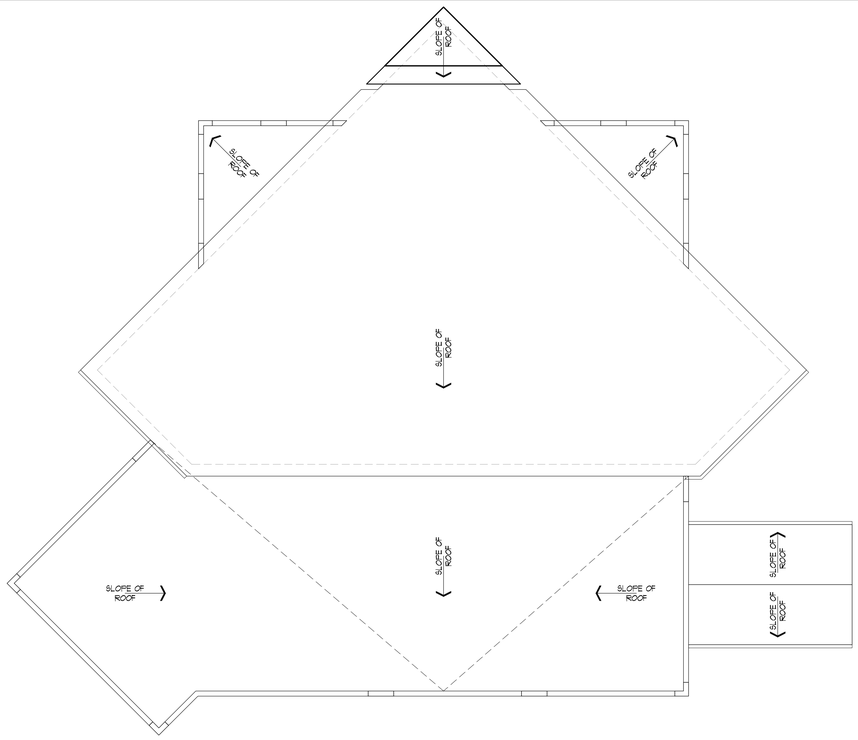
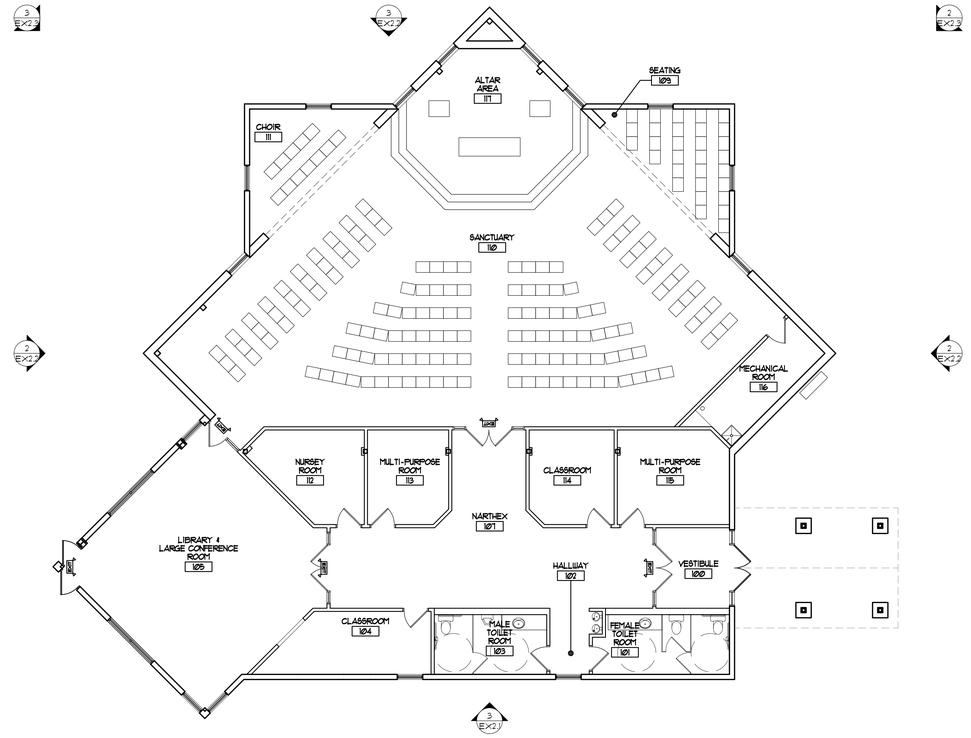
File: R:\2023\23130003\DWG\23130003 Landscape.dwg Layout: L2.0 User: jjimson Plotted: Apr 07, 2023 - 1:53pm Xref's:

PLOT DATE: 4/7/2023 6:27:48 PM



EXISTING ROOF PLAN 3
SCALE: NTS



EXISTING 1ST FLR FLOOR PLAN 2
SCALE: NTS

NOT USED 4
SCALE: N/A

NOT USED 1
SCALE: N/A

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REV. #	REV. DATE	DESCRIPTION	REV. BY:
-	03/01/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC
-	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

Project:

Fox River Congregational Church

N34W23575 Capitol Drive
City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11525 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:

EXISTING 1ST FLR FLOOR & ROOF PLAN

THIS BOX IS 1/2" x 1/2"

Date: 04/10/23
Scale: A.N.
Drawn: WHC
Job: 23-001
Sheet: **EX1.1**

FULL SIZE PRINT = 30" x 42" SHEET

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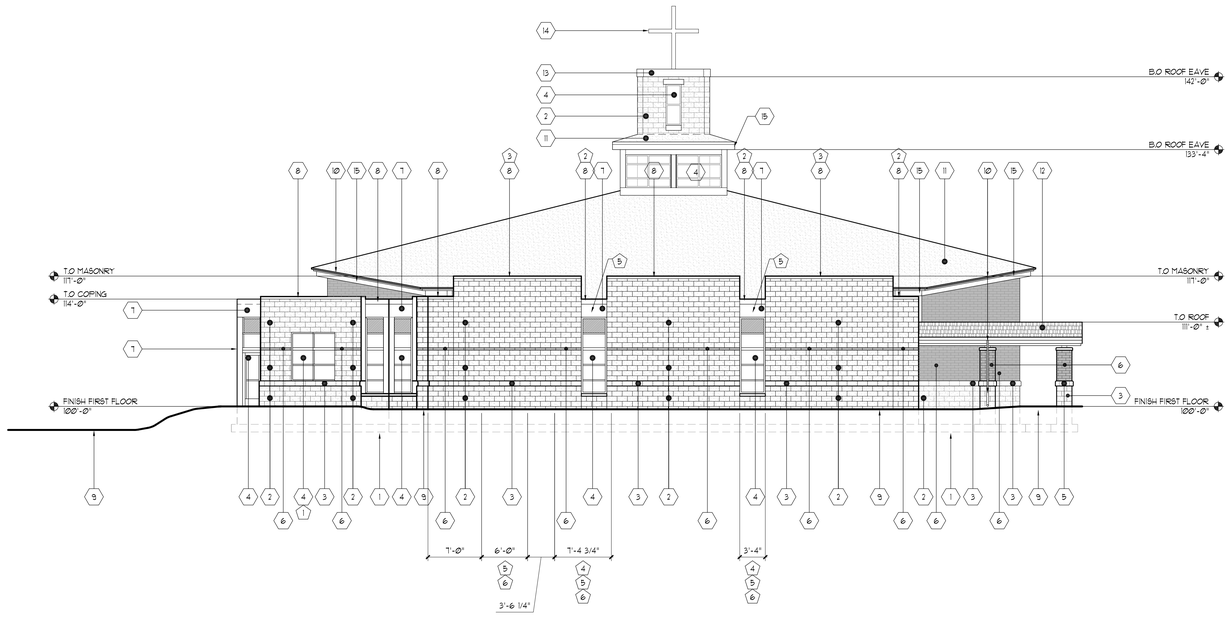
FILE NAME: P:_ PROJECTS\FOX RIVER CONGREGATION\EX01_FOXRIVER.DWG

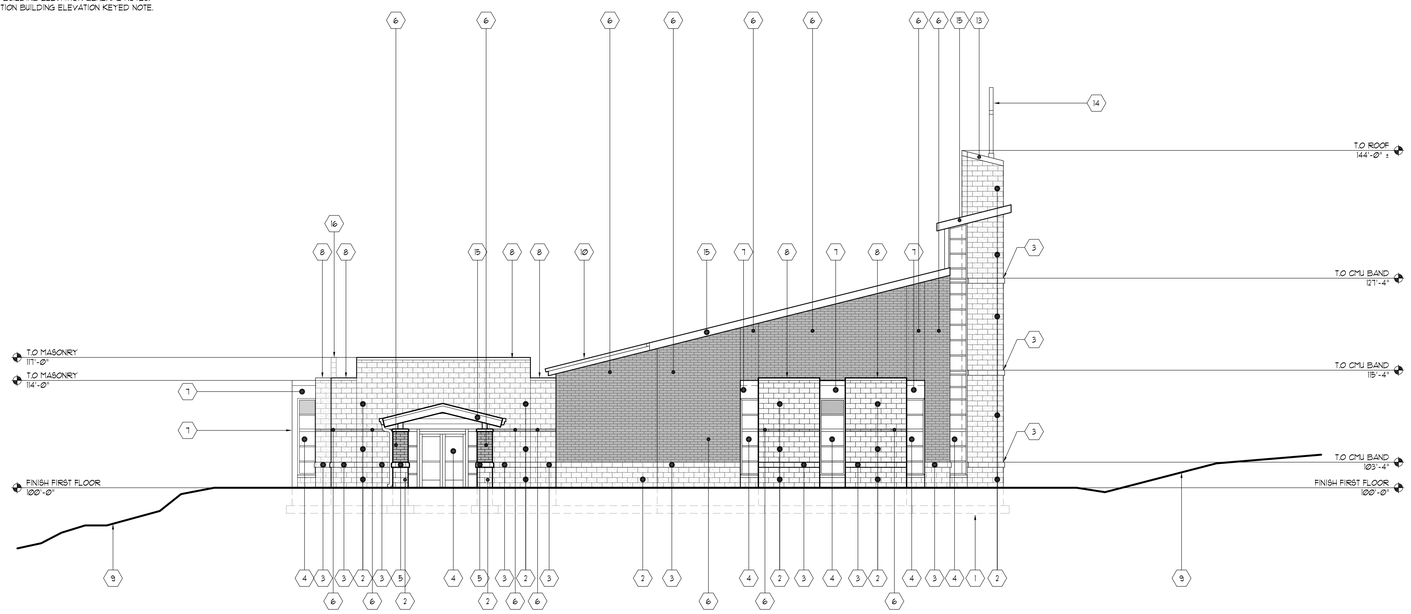
PLOT DATE: 4/7/2023 @2841 PM

GENERAL NOTE
1. REFER TO DETAIL 1 ON SHEET EX2.1 FOR EXISTING BUILDING ELEVATION GENERAL NOTES.
2. REFER TO DETAIL 1 ON SHEET EX2.1 FOR EXISTING BUILDING ELEVATION KEYED NOTES.
3. REFER TO DETAIL 1 ON SHEET EX2.1 FOR DEMOLITION BUILDING ELEVATION GENERAL NOTES.
4. REFER TO DETAIL 1 ON SHEET EX2.1 FOR THE DEMOLITION BUILDING ELEVATION KEYED NOTE.



EXISTING SOUTH BUILDING ELEVATION 3
SCALE: 1/8" =1'-0"

GENERAL NOTE
1. REFER TO DETAIL 1 ON SHEET EX2.1 FOR EXISTING BUILDING ELEVATION GENERAL NOTES.
2. REFER TO DETAIL 1 ON SHEET EX2.1 FOR EXISTING BUILDING ELEVATION KEYED NOTES.
3. REFER TO DETAIL 1 ON SHEET EX2.1 FOR DEMOLITION BUILDING ELEVATION GENERAL NOTES.
4. REFER TO DETAIL 1 ON SHEET EX2.1 FOR THE DEMOLITION BUILDING ELEVATION KEYED NOTE.



EXISTING EAST BUILDING ELEVATION 2
SCALE: 1/8" =1'-0"

EXISTING BUILDING ELEVATION GENERAL NOTES:

1. EXISTING PLAN INFORMATION FOR REFERENCE ONLY. ALL CONDITIONS MUST BE VERIFIED IN FIELD BEFORE BIDDING / CONSTRUCTION BEGINS. CONTACT ARCHITECT WITH ANY AND ALL DISCREPANCIES PRIOR TO CONTINUING WITH WORK.
2. ALL APPROPRIATE SUB-CONTRACTORS SHALL EXAMINE ALL EXISTING EXTERIOR MATERIALS PRIOR TO BID SUBMISSION, AS THESE MATERIALS SHALL BE MATCHED IN THE NEW CONSTRUCTION ASPECTS OF THE PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO ALL MATERIAL TYPES, UNIT SIZES, COLORS, & TEXTURES.
3. DO NOT SCALE THESE DRAWINGS.
4. REVIEW ALL DRAWINGS INCLUDING DRAWING DIMENSIONS PRIOR TO BIDDING, FABRICATING OR CONSTRUCTING ANY WORK. ALL SUBCONTRACTORS TO RECEIVE COMPLETE SETS OF DRAWINGS FOR PROJECT.

EXISTING BUILDING ELEVATION KEYED NOTES:

1. EXISTING FOOTING & FOUNDATION LINE(S) - TYPICAL & SHOWN FOR GENERAL REFERENCE.
2. EXISTING COLOR INTEGRAL SPLIT FACE CMU.
   SIZE 8" TALL x 16" WIDE x 12" DEEP
   COLOR LIGHT SAND
   THIS IS THE TYPICAL "FIELD" OF THIS WALL FACE.
3. EXISTING COLOR INTEGRAL SMOOTH FACE CMU WITH CHAMFERED TOP EDGE & 1" FACE PROJECTION.
   SIZE 8" TALL x 16" WIDE x 12" DEEP
   COLOR LIGHT GREY CONCRETE
   THIS IS THE TYPICAL "LOW WATER MARK" BAND OF THIS WALL FACE.
4. EXISTING PRE-FINISHED THERMAL BROKEN STOREFRONT GLAZING AND/OR ENTRY SYSTEM.
   FRAME COLOR UNA-CLAD COLONIAL RED
   GLAZING CLEAR
   TOP GLAZING PANEL IS TYPICALLY SPANDRAL GLAZING.
5. EXISTING COLOR INTEGRAL SPLIT FACE CMU WITH CHAMFERED TOP EDGE & 1" FACE PROJECTION.
   SIZE 8" TALL x 16" WIDE x 12" DEEP
   COLOR LIGHT GREY CONCRETE
   THIS IS THE TYPICAL "FIELD" OF THIS WALL FACE.
6. EXISTING COLOR INTEGRAL RAKED FACE CMU / CONCRETE BRICK.
   SIZE 4" TALL x 16" WIDE x 12" DEEP
   COLOR DARK SAND
   RAKE VERTICAL
   THIS IS THE TYPICAL AS THE:
   - "ACCENT BAND" IN THE CMU FIELD,
   - FIELD OF THE SANCTUARY WALLS, &
   - UPPER PORTION OF CANOPY COLUMNS.
7. EXISTING PRE-FINISHED BREAK METAL WALL FINISH.
   COLOR UNA-CLAD COLONIAL RED
   THIS IS THE TYPICAL ABOVE THE HEAD OF THE FRAMING FOR THE STOREFRONT GLAZING SYSTEM & OUTSIDE CORNERS OF THE BUILDING WHERE GLAZING FRAMING HOLD THE CORNERS.
8. EXISTING PRE-FINISHED BREAK METAL ROOF COPING.
   COLOR UNA-CLAD COLONIAL RED
   THIS IS THE TYPICAL ABOVE THE TOP OF THE PARAPET WALLS & WRAPS DOWN THE EXPOSED END WALL CONDITIONS.
9. EXISTING LINE OF FINISHED GRADE, THIS IS APPROXIMATE AND BASED ON PREVIOUS PLANS.
10. EXISTING PRE-FINISHED ALUMINUM GUTTER / DOWNSPOUT / THRU-WALL SCUPPER SYSTEM.
    COLOR UNA-CLAD COLONIAL RED
11. EXISTING EPDM ROOF SYSTEM WITH MOPPED GRANULAR SHINGLE MATERIAL.
    COLOR DEEP GREEN
12. EXISTING DIMENSIONAL ROOF SHINGLE.
    COLOR DEEP GREEN
13. EXISTING PRE-FINISHED BREAK METAL ROOF COPING
    COLOR MATCH TO LIGHT GREY OF SPLIT FACE CMU WITH CHAMFERED TOP EDGE.
14. EXISTING 6" TUBE STEEL CROSS WITH LIGHTENING PROTECTION.
    COLOR POWDER COATED ANTIQUE BRONZE
15. EXISTING PRE-FINISHED ALUMINUM BREAK METAL FASCIA.
    COLOR UNA-CLAD COLONIAL RED
16. EXISTING BUILDING STRUCTURE BEYOND.

GENERAL DEMOLITION NOTES:

1. GENERAL CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY. ALL STATE AND LOCAL PRACTICES & REGULATIONS INCLUDING BUT NOT LIMITED TO OSHA REGULATIONS, FOR DEMOLITION SHALL BE FOLLOWED FOR SAFETY & ALL OTHER MEASURES ASSOCIATED WITH DEMOLITION. IF ANY HAZARDOUS MATERIALS ARE FOUND AFTER THE INITIAL SURVEY OF EXISTING CONDITIONS OCCUR, IMMEDIATELY CONTACT THE GENERAL CONTRACTOR & STOP WORK FOR ASSESSMENT.
2. ITEMS TAGGED FOR DEMO SHOULD BE CONSIDERED FOR REFERENCE ONLY. ALL CONDITIONS SHOULD BE VERIFIED IN FIELD BEFORE WORK BEGINS.
3. ALL DEMOLITION SHOULD BE EXECUTED TO THE MINIMUM EXTENTS REQUIRED TO ACCOMMODATE THE NEW CONSTRUCTION. CARE SHOULD BE TAKEN DURING DEMOLITION TO LEAVE EXISTING STRUCTURE UNDISTURBED AND STILL ACCOMMODATE NEW CONSTRUCTION.
4. ENGAGE A PROFESSIONAL ENGINEER TO SURVEY CONDITION OF BUILDING TO DETERMINE WHETHER REMOVING AN ELEMENT MIGHT RESULT IN STRUCTURAL DEFICIENCY OR UNPLANNED COLLAPSE OF ANY PORTION OF STRUCTURE OR ADJACENT STRUCTURES DURING SELECTIVE DEMOLITION OPERATIONS.
5. NEATLY CUT OPENINGS AND HOLES PLUMB, SQUARE, AND TRUE TO DIMENSIONS REQUIRED. USE CUTTING METHODS LEAST LIKELY TO DAMAGE CONSTRUCTION TO REMAIN OR ADJOINING CONSTRUCTION.
6. INTERIOR WALLS AFFECTED / DAMAGED BY DEMO WORK SHOULD BE REPAIRED BY GC
7. USE REPAIR MATERIALS IDENTICAL TO EXISTING MATERIALS. IF IDENTICAL MATERIALS ARE UNAVAILABLE OR CANNOT BE USED FOR EXPOSED SURFACES, USE MATERIALS THAT VISUALLY MATCH EXISTING ADJACENT SURFACES TO THE FULLEST EXTENT POSSIBLE.
8. MAINTAIN EXISTING UTILITIES IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS.
9. ALL HVAC EQUIPMENT & RELATED COMPONENTS (INCLUDING BUT NOT LIMITED TO DUCT WORK) SHALL BE VERIFIED BY HVAC CONTRACTOR & GENERAL CONTRACTOR PRIOR TO ANY REMOVAL OF SUCH ITEMS.
10. ALL ELECTRICAL EQUIPMENT & RELATED COMPONENTS (INCLUDING BUT NOT LIMITED TO PANELS, FIXTURES, OUTLETS, SWITCHES, ETC.) SHALL BE VERIFIED BY ELECTRICAL CONTRACTOR & GENERAL CONTRACTOR PRIOR TO ANY REMOVAL OF SUCH ITEMS.
11. PROTECT CONSTRUCTION INDICATED TO REMAIN AGAINST DAMAGE AND SOILING DURING SELECTIVE DEMOLITION. WHEN PERMITTED BY ARCHITECT, ITEMS MAY BE REMOVED TO A SUITABLE, PROTECTED STORAGE LOCATION DURING SELECTIVE DEMOLITION AND CLEANED AND REINSTALLED IN THEIR ORIGINAL LOCATIONS AFTER SELECTIVE DEMOLITION OPERATIONS ARE COMPLETE.
12. OWNER WILL OCCUPY PORTIONS OF BUILDING IMMEDIATELY ADJACENT TO SELECTIVE DEMOLITION AREA. CONDUCT SELECTIVE DEMOLITION SO OWNER'S OPERATIONS WILL NOT BE DISRUPTED. PROVIDE NO LESS THAN 72 HOURS' NOTICE TO OWNER OF ACTIVITIES THAT WILL AFFECT OWNER'S OPERATIONS.
13. THE ENTIRE BUILDING WILL REMAIN OCCUPIED & OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. ACCOMMODATIONS MUST BE MADE TO ENSURE CONTINUED OPERATION, CUSTOMER ACCESS, TENANT ACCESS, HEATING, COOLING, FIRE PROTECTION, & SECURITY. ACCOMMODATIONS SHALL ALSO BE MADE TO PROTECT THE TENANT'S CUSTOMERS & TENANT'S PROPERTY (MERCHANDISE AS REQ'D). THIS INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING: DUST & FUME PROTECTION, NOISE PROTECTION.
14. IF PROVIDED, SEE SECTIONS AND ELEVATIONS FOR ADDITIONAL DEMOLITION INFO - TYPICAL
15. DO NOT SCALE THESE DRAWINGS.

DEMOLITION BUILDING ELEVATION KEYED NOTES:

1. REMOVE PRE-FINISHED THERMAL BROKEN STOREFRONT GLAZING SYSTEM. THIS IS ONE (1) UNIT, THAT IS HELD IN ROOM #214. DUE TO THE ANGULAR SHAPE OF THE BUILDING, THIS WINDOW SHOWS TWICE IN DIFFERING BUILDING ELEVATIONS.
2. REMOVE EXISTING COMPOSITION OF ROOF AND PARAPET WALL COPING AS NEEDED AND ALL RELATED CONSTRUCTION AS NEEDED TO ACCOMMODATE NEW CONSTRUCTION.
3. REMOVE EXISTING PARAPET WALL COPING AS NEEDED AND ALL RELATED CONSTRUCTION AS NEEDED TO ACCOMMODATE NEW CONSTRUCTION.
4. REMOVE EXISTING WINDOW SYSTEM AND ALL RELATED CONSTRUCTION.
5. REMOVE EXISTING EXTERIOR WALL AND ALL RELATED CONSTRUCTION. REFER TO STRUCTURAL DRAWINGS FOR NEW LINTEL INFORMATION. REFER TO DEMOLITION FLOOR PLAN FOR ADDITIONAL INFORMATION.
6. REMOVE EXISTING CMU WALL AND ALL RELATED CONSTRUCTION AS NEEDED TO ACCOMMODATE NEW THROUGH FLOOR AND WALL OPENING. REFER TO DEMOLITION FLOOR PLAN FOR ADDITIONAL INFORMATION.

EXISTING BUILDING ELEVATION NOTES 1
SCALE: N/A

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-	03/01/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC
-	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

Project:

Fox River Congregational Church

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City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11325 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:

EXISTING BUILDING ELEVATIONS

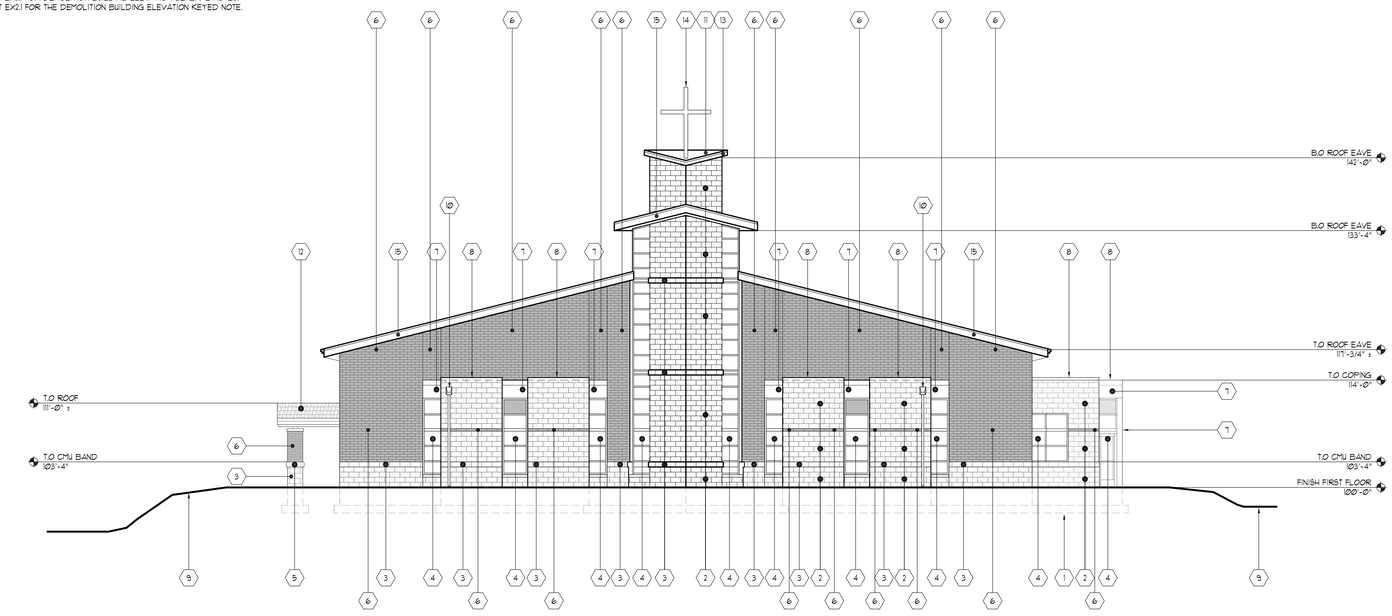
THIS BOX IS 2" x 2"

Date: 04/10/23
Scale: A.N.
Drawn: WHC
Job: 23-001
Sheet: EX2.1

FILE NAME: P:_PROJECTS\FOX RIVER CONGREGATION\EX201_FOXRIVER.DWG

PLOT DATE: 4/7/2023 @2:23 PM

GENERAL NOTE
1. REFER TO DETAIL 1 ON SHEET EX2.1 FOR EXISTING BUILDING ELEVATION GENERAL NOTES.
2. REFER TO DETAIL 1 ON SHEET EX2.1 FOR EXISTING BUILDING ELEVATION KEYED NOTES.
3. REFER TO DETAIL 1 ON SHEET EX2.1 FOR DEMOLITION BUILDING ELEVATION GENERAL NOTES.
4. REFER TO DETAIL 1 ON SHEET EX2.1 FOR THE DEMOLITION BUILDING ELEVATION KEYED NOTE.



EXISTING NORTH BUILDING ELEVATION 3
SCALE: 1/8" =1'-0"

GENERAL NOTE
1. REFER TO DETAIL 1 ON SHEET EX2.1 FOR EXISTING BUILDING ELEVATION GENERAL NOTES.
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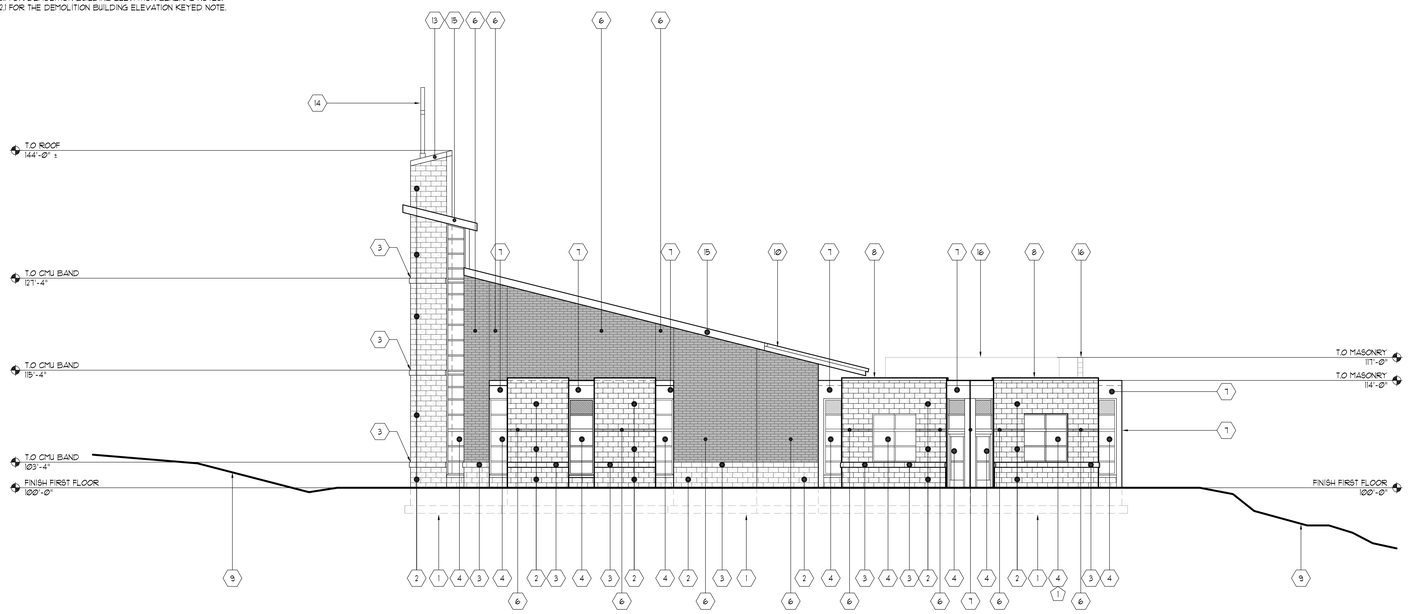
3. REFER TO DETAIL 1 ON SHEET EX2.1 FOR DEMOLITION BUILDING ELEVATION GENERAL NOTES.
4. REFER TO DETAIL 1 ON SHEET EX2.1 FOR THE DEMOLITION BUILDING ELEVATION KEYED NOTE.



EXISTING WEST BUILDING ELEVATION 2
SCALE: 1/8" =1'-0"

NOT USED 1
SCALE: N/A

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11525 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:

EXISTING BUILDING ELEVATIONS

THIS BOX IS 1/2" x 1/2"

Date: 04/10/23
Scale: A.N.
Drawn: WHC
Job: 23-001
Sheet:

EX2.2

FULL SIZE PRINT = 30" x 42" SHEET

FILE NAME: P:_PROJECTS\FOX RIVER CONGREGATION\EX202_FOXRIVER.DWG

PLOT DATE: 4/7/2023 8:30:31 PM

GENERAL NOTE
1. REFER TO DETAIL 1 ON SHEET EX2.1 FOR EXISTING BUILDING ELEVATION GENERAL NOTES.
2. REFER TO DETAIL 1 ON SHEET EX2.1 FOR EXISTING BUILDING ELEVATION KEYED NOTES.
3. REFER TO DETAIL 1 ON SHEET EX2.1 FOR DEMOLITION BUILDING ELEVATION GENERAL NOTES.
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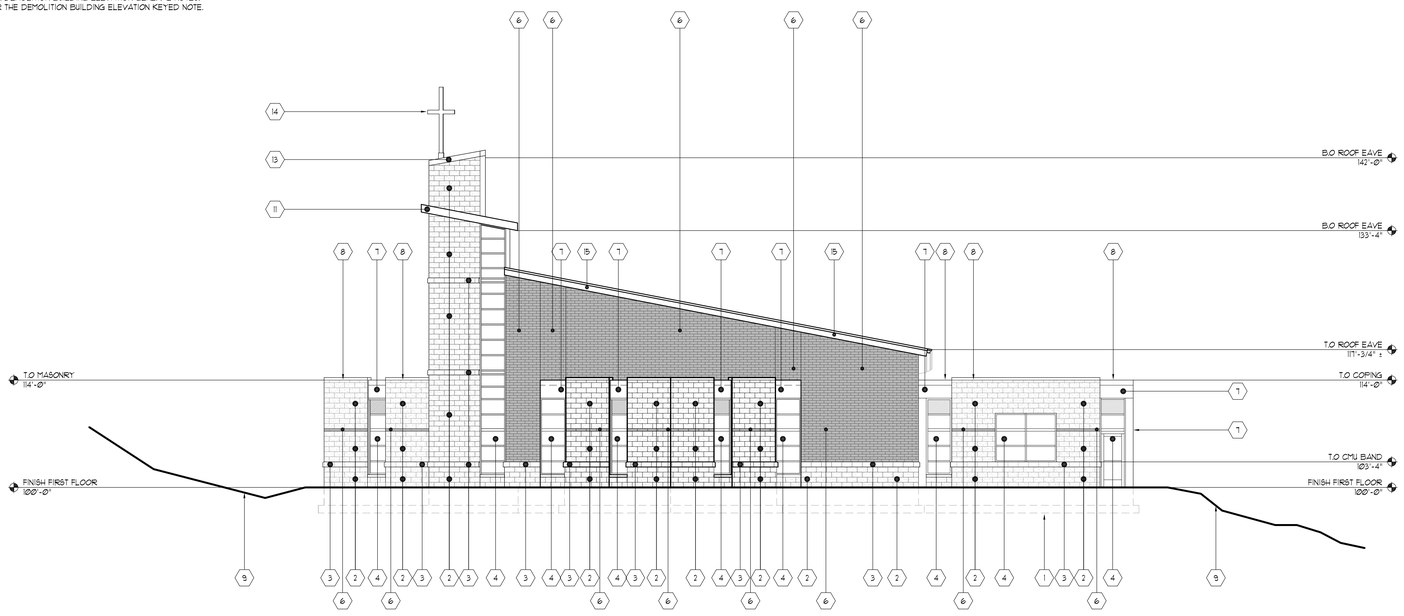
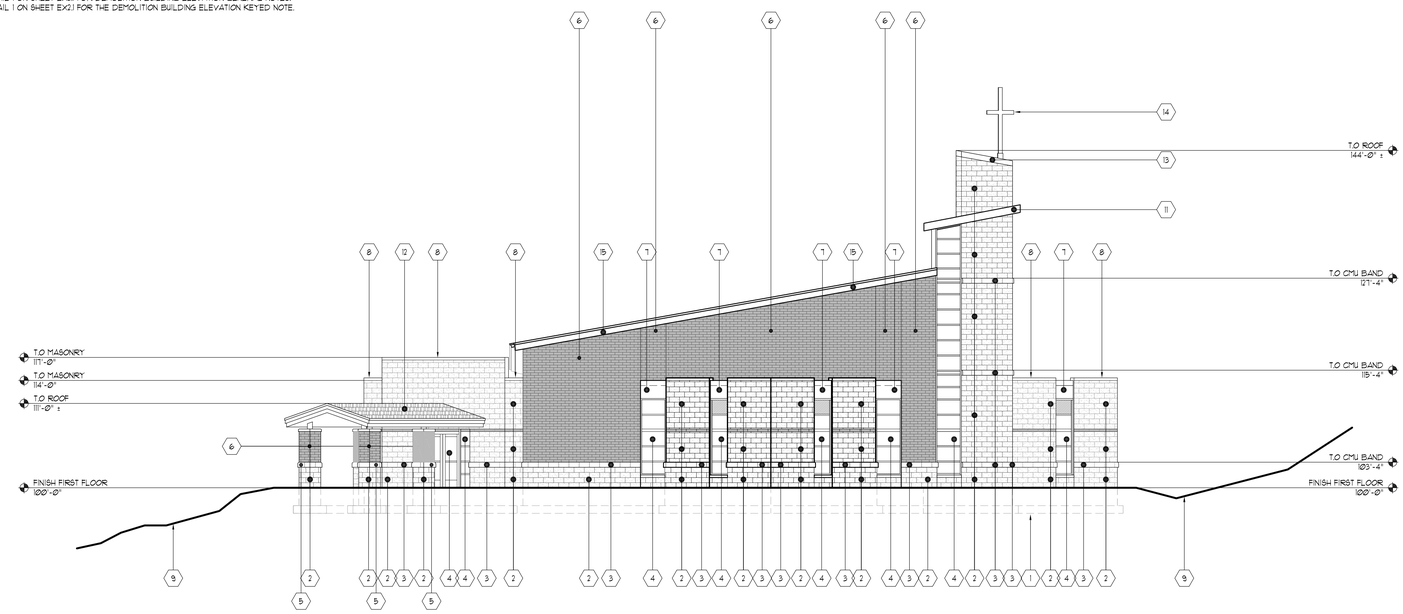


EXISTING NORTHWEST BUILDING ELEVATION 3
SCALE: 1/8" =1'-0"

GENERAL NOTE
1. REFER TO DETAIL 1 ON SHEET EX2.1 FOR EXISTING BUILDING ELEVATION GENERAL NOTES.
2. REFER TO DETAIL 1 ON SHEET EX2.1 FOR EXISTING BUILDING ELEVATION KEYED NOTES.
3. REFER TO DETAIL 1 ON SHEET EX2.1 FOR DEMOLITION BUILDING ELEVATION GENERAL NOTES.
4. REFER TO DETAIL 1 ON SHEET EX2.1 FOR THE DEMOLITION BUILDING ELEVATION KEYED NOTE.



EXISTING NORTHEAST BUILDING ELEVATION 2
SCALE: 1/8" =1'-0"

NOT USED 1
SCALE: N/A

NOT FOR CONSTRUCTION

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Drawing Title:

EXISTING BUILDING ELEVATIONS

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Date: 04/10/23
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EX2.3

FULL SIZE PRINT = 30" x 42" SHEET

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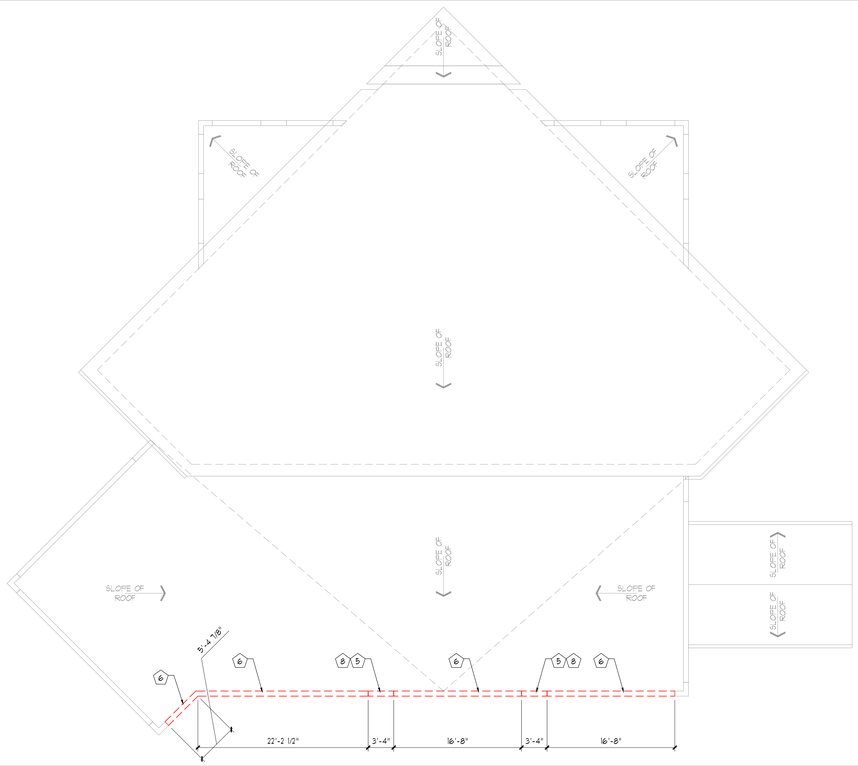
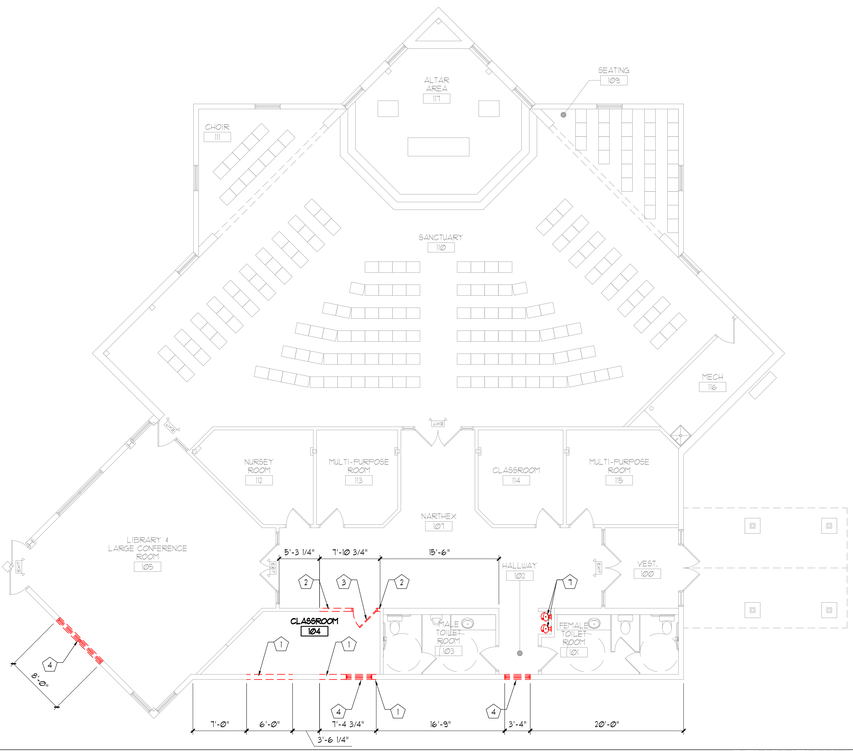


PLAN NORTH

DEMOLITION ROOF PLAN 3
SCALE: 1/8" =1'-0"



PLAN NORTH

DEMOLITION 1ST FLR FLOOR PLAN 2
SCALE: 1/8" =1'-0"

NOT USED 4
SCALE: N/A

GENERAL DEMOLITION NOTES:

1. GENERAL CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY. ALL STATE AND LOCAL PRACTICES & REGULATIONS, INCLUDING BUT NOT LIMITED TO OSHA REGULATIONS, FOR DEMOLITION SHALL BE FOLLOWED FOR SAFETY & ALL OTHER MEASURES ASSOCIATED WITH DEMOLITION. IF ANY HAZARDOUS MATERIALS ARE FOUND AFTER THE INITIAL SURVEY OF EXISTING CONDITIONS OCCUR, IMMEDIATELY CONTACT THE GENERAL CONTRACTOR & STOP WORK FOR ASSESSMENT.
2. ITEMS TAGGED FOR DEMO SHOULD BE CONSIDERED FOR REFERENCE ONLY. ALL CONDITIONS SHOULD BE VERIFIED IN FIELD BEFORE WORK BEGINS.
3. ALL DEMOLITION SHOULD BE EXECUTED TO THE MINIMUM EXTENTS REQUIRED TO ACCOMMODATE THE NEW CONSTRUCTION. CARE SHOULD BE TAKEN DURING DEMOLITION TO LEAVE EXISTING STRUCTURE UNDISTURBED AND STILL ACCOMMODATE NEW CONSTRUCTION.
4. ENGAGE A PROFESSIONAL ENGINEER TO SURVEY CONDITION OF BUILDING TO DETERMINE WHETHER REMOVING AN ELEMENT MIGHT RESULT IN STRUCTURAL DEFICIENCY, OR UNPLANNED COLLAPSE OF ANY PORTION OF STRUCTURE OR ADJACENT STRUCTURES DURING SELECTIVE DEMOLITION OPERATIONS.
5. NEATLY CUT OPENINGS AND HOLES PLUMB, SQUARE, AND TRUE TO DIMENSIONS REQUIRED. USE CUTTING METHODS LEAST LIKELY TO DAMAGE CONSTRUCTION TO REMAIN OR ADJOINING CONSTRUCTION.
6. INTERIOR WALLS AFFECTED / DAMAGED BY DEMO WORK SHOULD BE REPAIRED BY GC .
7. USE REPAIR MATERIALS IDENTICAL TO EXISTING MATERIALS. IF IDENTICAL MATERIALS ARE UNAVAILABLE OR CANNOT BE USED FOR EXPOSED SURFACES, USE MATERIALS THAT VISUALLY MATCH EXISTING ADJACENT SURFACES TO THE FULLEST EXTENT POSSIBLE.
8. MAINTAIN EXISTING UTILITIES IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS.
9. ALL HVAC EQUIPMENT & RELATED COMPONENTS (INCLUDING BUT NOT LIMITED TO DUCT WORK) SHALL BE VERIFIED BY HVAC CONTRACTOR & GENERAL CONTRACTOR PRIOR TO ANY REMOVAL OF SUCH ITEMS.
10. ALL ELECTRICAL EQUIPMENT & RELATED COMPONENTS (INCLUDING BUT NOT LIMITED TO PANELS, FIXTURES, OUTLETS, SWITCHES, ETC.) SHALL BE VERIFIED BY ELECTRICAL CONTRACTOR & GENERAL CONTRACTOR PRIOR TO ANY REMOVAL OF SUCH ITEMS.
11. PROTECT CONSTRUCTION INDICATED TO REMAIN AGAINST DAMAGE AND SOILING DURING SELECTIVE DEMOLITION. WHEN PERMITTED BY ARCHITECT, ITEMS MAY BE REMOVED TO A SUITABLE, PROTECTED STORAGE LOCATION DURING SELECTIVE DEMOLITION AND CLEANED AND REINSTALLED IN THEIR ORIGINAL LOCATIONS AFTER SELECTIVE DEMOLITION OPERATIONS ARE COMPLETE.
12. OWNER WILL OCCUPY PORTIONS OF BUILDING IMMEDIATELY ADJACENT TO SELECTIVE DEMOLITION AREA. CONDUCT SELECTIVE DEMOLITION SO OWNERS OPERATIONS WILL NOT BE DISRUPTED. PROVIDE NO LESS THAN 72 HOURS' NOTICE TO OWNER OF ACTIVITIES THAT WILL AFFECT OWNERS OPERATIONS.
13. HE ENTIRE BUILDING WILL REMAIN OCCUPIED & OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. ACCOMMODATIONS MUST BE MADE TO ENSURE CONTINUED OPERATION, CUSTOMER ACCESS, TENANT ACCESS, HEATING, COOLING, FIRE PROTECTION, & SECURITY. ACCOMMODATIONS SHALL ALSO BE MADE TO PROTECT THE TENANTS, CUSTOMERS & TENANT'S PROPERTY/MERCHANDISE AS REQUIRED. THIS INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING: DUST & FIRE PROTECTION, AND NOISE PROTECTION.
14. IF PROVIDED, SEE SECTIONS AND ELEVATIONS FOR ADDITIONAL DEMOLITION INFORMATION.
15. DO NOT SCALE THESE DRAWINGS.

FLOOR PLAN & ROOF PLAN DEMOLITION KEYED NOTES:

1. REMOVE EXISTING CMU WALL AND ALL RELATED CONSTRUCTION. REFER TO STRUCTURAL DRAWINGS FOR NEW LINTEL INFORMATION.
2. REMOVE EXISTING STUD WALL AND ALL RELATED CONSTRUCTION.
3. REMOVE EXISTING DOOR AND ALL RELATED CONSTRUCTION.
4. REMOVE EXISTING WINDOW AND ALL RELATED CONSTRUCTION.
5. REMOVE EXISTING COMPOSITION OF ROOF AND PARAPET WALL COPING AS NEEDED AND ALL RELATED CONSTRUCTION AS NEEDED TO ACCOMMODATE NEW CONSTRUCTION.
6. REMOVE EXISTING PARAPET WALL COPING AS NEEDED AND ALL RELATED CONSTRUCTION AS NEEDED TO ACCOMMODATE NEW CONSTRUCTION.
7. REMOVE EXISTING DRINKING FOUNTAINS AND APPROPRIATELY TERMINATE ALL CONNECTIONS "BEHIND THE WALL SHEATHING AS NEEDED.
8. REMOVE EXISTING EXTERIOR WALL AND ALL RELATED CONSTRUCTION. REFER TO STRUCTURAL DRAWINGS FOR NEW LINTEL INFORMATION. REFER TO DEMOLITION FLOOR PLAN FOR ADDITIONAL INFORMATION.

DEMOLITION GENERAL & KEYED NOTES 1
SCALE: N/A

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Project:

Fox River Congregational Church

N34W23575 Capitol Drive
City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11525 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:

DEMOLITION 1ST FLR. FLOOR AND ROOF PLANS

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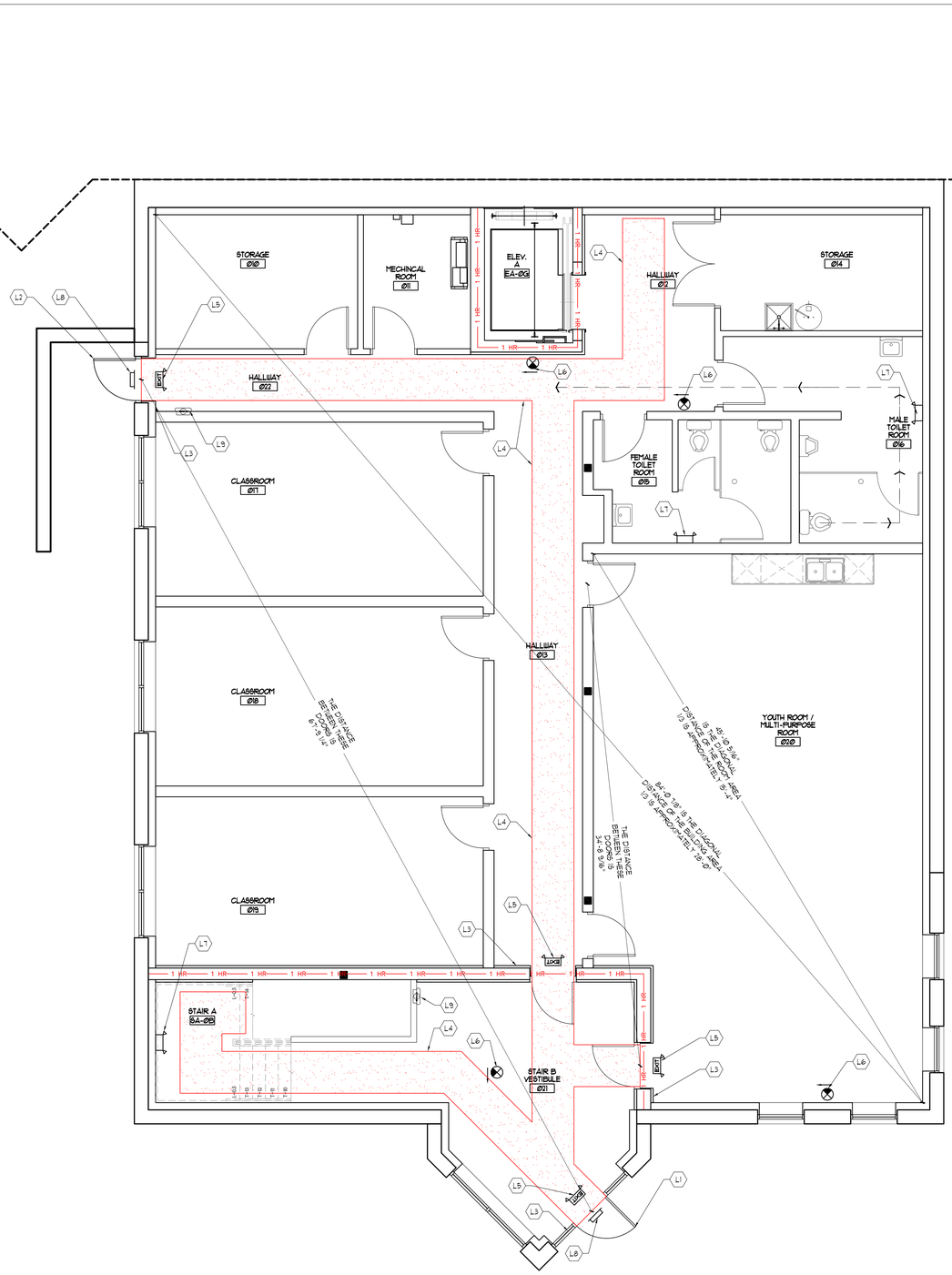

GENERAL NOTE
1. SEE DETAIL 1 ON SHEET LS1.2 FOR EGRESS NOTES.

PLAN NORTH

GROUND LEVEL EGRESS PLAN 1
SCALE: 1/4" =1'-0"

NOT USED 2
SCALE: N/A

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Drawing Title:

GROUND LEVEL EGRESS PLAN

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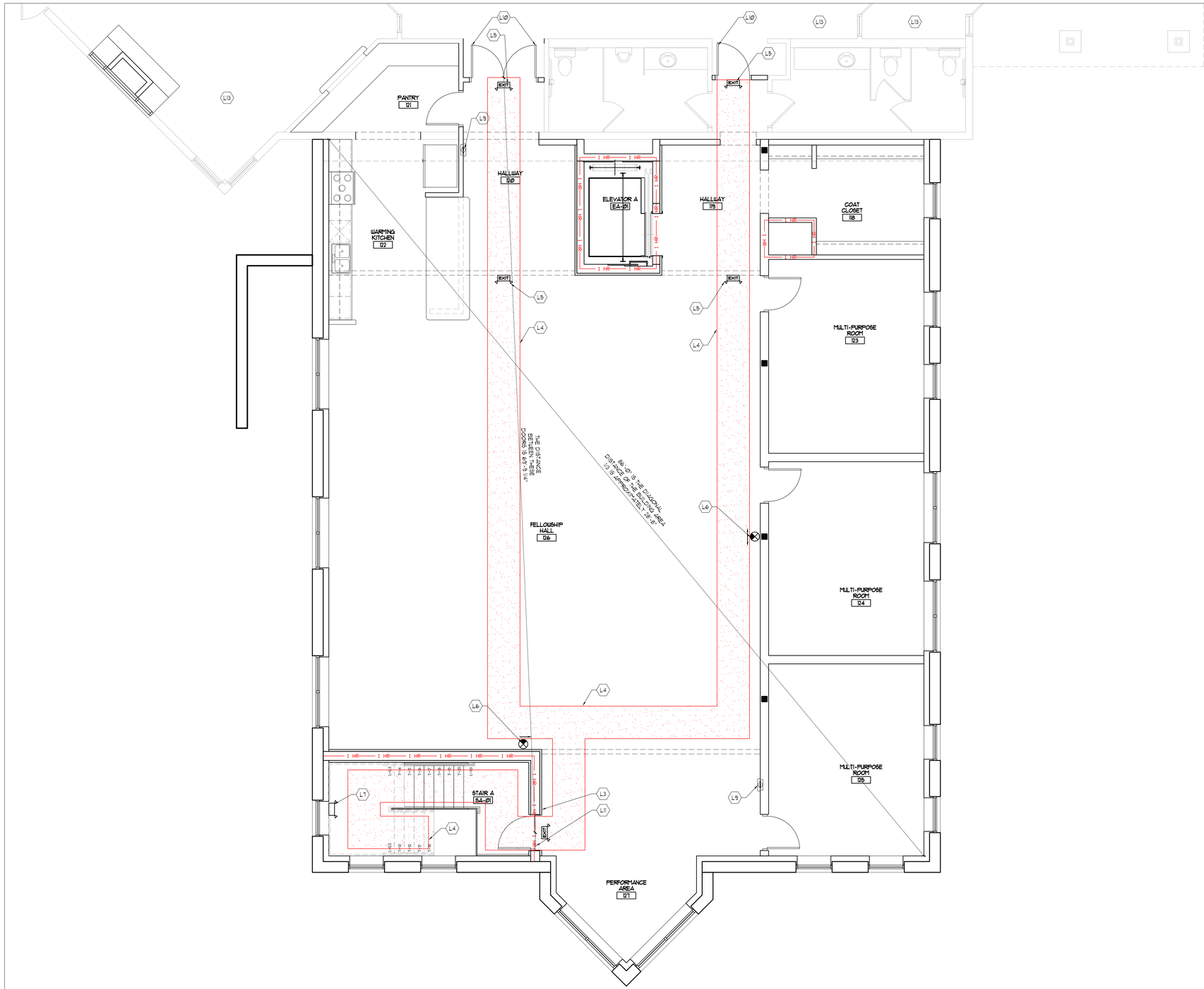

GENERAL NOTE
1. SEE DETAIL 1 ON SHEET LS1.2 FOR EGRESS NOTES.

PLAN NORTH

1ST FLR EGRESS PLAN 2
SCALE: 1/4" =1'-0"

CHAPTER 10 MEANS OF EGRESS SECTION 1002
DEFINITIONS:

AISLE:
AN UNENCLOSED EXIT ACCESS COMPONENT THAT DEFINES AND PROVIDES A PATH OF EGRESS TRAVEL.

AISLE ACCESSWAY:
THAT PORTION OF AN EXIT ACCESS THAT LEADS TO AN AISLE

EXIT:
THAT PORTION OF A MEANS OF EGRESS SYSTEM WHICH IS SEPARATED FROM OTHER INTERIOR SPACES OF A BUILDING OR STRUCTURE BY FIRE-RESISTANCE-RATED CONSTRUCTION AND OPENING PROTECTIVES AS REQUIRED TO PROVIDE A PROTECTED PATH OF EGRESS TRAVEL BETWEEN THE EXIT ACCESS AND THE EXIT DISCHARGE. EXITS INCLUDE EXTERIOR EXIT DOORS AT THE LEVEL OF EXIT DISCHARGE, VERTICAL EXIT ENCLOSURES, EXIT PASSAGEWAYS, EXTERIOR EXIT STAIRWAYS, EXTERIOR EXIT RAMPS AND HORIZONTAL EXITS.

EXIT ACCESS:
THAT PORTION OF A MEANS OF EGRESS SYSTEM THAT LEADS FROM ANY OCCUPIED PORTION OF A BUILDING OR STRUCTURE TO AN EXIT.
"Exit access is the first part of a means of egress and is the path between an occupied portion of the building and the exit. Typically, this consists of level walking surfaces such as corridors, and changes in level, such as exit access stairs and ramps. Any doorways along this path would be considered exit access doorways."

MEANS OF EGRESS:
A CONTINUOUS AND UNOBSTRUCTED PATH OF VERTICAL AND HORIZONTAL EGRESS TRAVEL FROM ANY OCCUPIED PORTION OF A BUILDING OR STRUCTURE TO A PUBLIC WAY. A MEANS OF EGRESS CONSISTS OF THREE SEPARATE AND DISTINCT PARTS: THE EXIT ACCESS, THE EXIT AND THE EXIT DISCHARGE.

SECTION 1006

MEANS OF EGRESS ILLUMINATION

1006.3 ILLUMINATION EMERGENCY POWER.

THE POWER SUPPLY FOR MEANS OF EGRESS ILLUMINATION SHALL NORMALLY BE PROVIDED BY THE PREMISES' ELECTRICAL SUPPLY.
IN THE EVENT OF POWER SUPPLY FAILURE, AN EMERGENCY ELECTRICAL SYSTEM SHALL AUTOMATICALLY ILLUMINATE ALL OF THE FOLLOWING AREAS:

1. AISLES AND UNENCLOSED EGRESS STAIRWAYS IN ROOMS AND SPACES THAT REQUIRE TWO OR MORE MEANS OF EGRESS.
2. CORRIDORS, EXIT ENCLOSURES AND EXIT PASSAGES REQUIRED TO HAVE TWO OR MORE EXITS.
3. EXTERIOR EGRESS COMPONENTS AT OTHER THAN THEIR LEVELS OF EXIT DISCHARGE UNTIL EXIT DISCHARGE IS ACCOMPLISHED FOR BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS.
4. INTERIOR EXIT DISCHARGE ELEMENTS, AS PERMITTED IN SECTION 1027.1, IN BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS.
5. EXTERIOR LANDINGS AS REQUIRED BY SECTION 1008.1.6 FOR EXIT DISCHARGE DOORWAYS IN BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS.

THE EMERGENCY POWER SYSTEM SHALL PROVIDE POWER FOR A DURATION OF NOT LESS THAN 90 MINUTES AND SHALL CONSIST OF STORAGE BATTERIES, UNIT EQUIPMENT, THE INSTALLATION OF THE EMERGENCY POWER SYSTEM SHALL BE IN ACCORDANCE WITH CHAPTER 27.

1006.4 PERFORMANCE OF SYSTEM.

EMERGENCY LIGHTING FACILITIES SHALL BE ARRANGED TO PROVIDE INITIAL ILLUMINATION THAT IS AT LEAST AN AVERAGE OF 1 FOOT-CANDLE (11 LUX) AND A MINIMUM AT ANY POINT OF 0.1 FOOT-CANDLE (1 LUX) MEASURED ALONG THE PATH OF EGRESS AT FLOOR LEVEL. ILLUMINATION LEVELS SHALL BE PERMITTED TO DECLINE TO 0.6 FOOT-CANDLE (6 LUX) AVERAGE AND A MINIMUM AT ANY POINT OF 0.06 FOOT-CANDLE (0.6 LUX) AT THE END OF THE EMERGENCY LIGHTING TIME DURATION. A MAXIMUM-TO-MINIMUM ILLUMINATION UNIFORMITY RATIO OF 40 TO 1 SHALL NOT BE EXCEEDED.

= EXIT ACCESS (36" MIN)
3'-0"

GENERAL LIFE SAFETY REFERENCE NOTES:
1. REFER TO EXISTING FLOOR PLAN FOR DIAGONAL DISTANCE OF ROOM AND MINIMUM DOOR SEPARATION DISTANCES.
2. COMMON PATH OF EGRESS TRAVEL DISTANCE = (CPET) PER (TABLE 1006.2.1):
   B = 75' MAX
3. EXIT TRAVEL DISTANCE PER (TABLE 1017.2):
   A = 200' MAX.

LIFE SAFETY KEYED NOTES:

L1 PRIMARY ADA COMPLIANT ENTRY. (EXIT DOOR 4 EXIT DISCHARGE)

L2 SECONDARY ADA COMPLIANT EXIT.

L3 PER IBC 1013, A TACTILE SIGN STATING "EXIT" AND COMPLYING WITH ICC A117.1 SHALL BE PROVIDED ADJACENT TO EACH DOOR TO EXIT PASSAGE AND THE EXIT DISCHARGE.

L4 (36" WIDE MIN. CLEAR) EXIT ACCESS ROUTE. PROVIDE EXIT SIGNAGE PER IBC 1013 AND EMERGENCY EGRESS ILLUMINATIONS (BY ELECTRICAL DESIGN/BUILDER) PER IBC 1008 ALONG THIS ROUTE.

L5 INTERIOR OR CEILING WALL MOUNTED EMERGENCY EXIT LIGHT W/ FLOOD LAMPS (90 MIN. MINIMUM BATTERY BACKUP). TYPICALLY OVER EXIT EGRESS ROUTE AT ALL OF EXIT DOORS AT THE INTERIOR SIDE. ADDITIONAL FIXTURES MAY BE REQUIRED.
SEE ELECTRICAL PLANS FOR ALL DETAILS.

L6 INTERIOR OR CEILING WALL MOUNTED DIRECTIONAL EMERGENCY EXIT LIGHT (90 MIN. MINIMUM BATTERY BACKUP) TYPICALLY ALONG THE EGRESS ROUTE. ADDITIONAL FIXTURES MAY BE REQUIRED.
SEE ELECTRICAL PLANS FOR ALL DETAILS.

L7 INTERIOR OR CEILING WALL MOUNTED EMERGENCY LIGHT W/ FLOOD LAMPS (90 MIN. MINIMUM BATTERY BACKUP) ADDITIONAL FIXTURES MAY BE REQUIRED.
SEE ELECTRICAL PLANS FOR ALL DETAILS.

L8 EXTERIOR EGRESS LIGHT - 100 WATT (90 MIN. MINIMUM BATTERY BACKUP @ EXIT DOORS ONLY) VERIFY STYLE W/ OWNER. ADDITIONAL FIXTURES MAY BE REQUIRED.
SEE ELECTRICAL PLANS FOR ALL DETAILS.

L9 LOCATION OF SURFACE MOUNTED OR SEMI-RECESSED FIRE EXTINGUISHER. PROVIDE ARROW INDICATOR SIGN FOR INCREASED VISIBILITY.

L10 DOORS THAT LEAD TO PRIMARY ADA COMPLIANT ENTRY. (EXIT DOOR 4 EXIT DISCHARGE)

L11 SECONDARY EXIT.

L13 THE PATH OF EGRESS IN THIS AREA IS UN-CHANGED AND REMAINS "AS IS".

EGRESS PLAN NOTES 1
SCALE: N/A

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1ST FLR EGRESS PLAN

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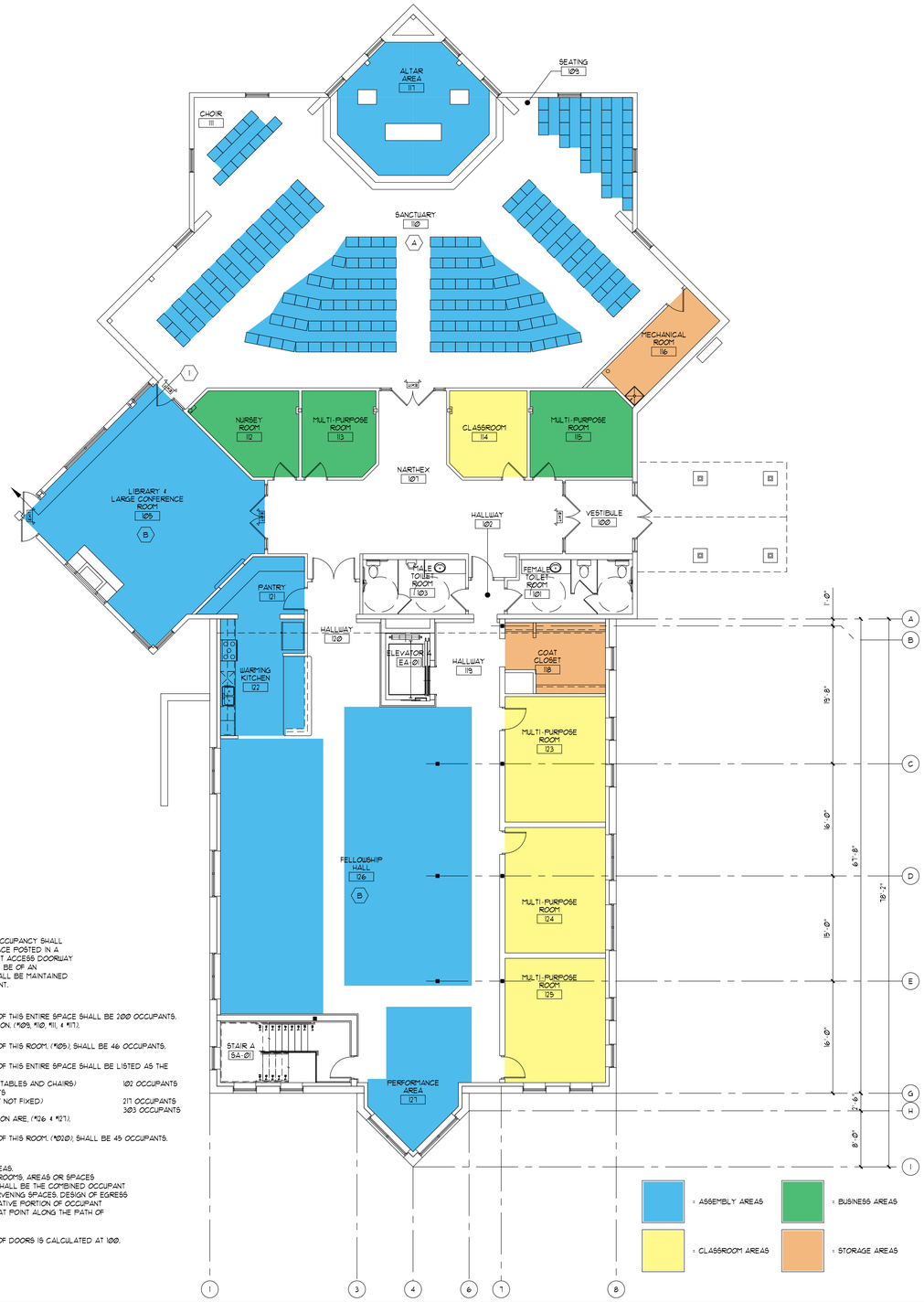


PER 2015 IBC CHAPTER 10
1004.3 POSTING OF OCCUPANT LOAD.
EVERY ROOM OR SPACE THAT IS AN ASSEMBLY OCCUPANCY SHALL HAVE THE OCCUPANT LOAD OF THE ROOM OR SPACE POSTED IN A CONSPICUOUS PLACE, NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY FROM THE ROOM OR SPACE. POSTED SIGNS SHALL BE OF AN APPROVED LEGIBLE PERMANENT DESIGN AND SHALL BE MAINTAINED BY THE OWNER OR THE OWNER'S AUTHORIZED AGENT.

POSTED MAXIMUM OCCUPANCY LEGEND

(A) THE POSTED MAXIMUM OCCUPANCY OF THIS ENTIRE SPACE SHALL BE 200 OCCUPANTS. ROOMS INCLUDED IN THIS CALCULATION: (*109, *110, *111, & *117).

(B) THE POSTED MAXIMUM OCCUPANCY OF THIS ROOM, (*105), SHALL BE 46 OCCUPANTS.

(C) THE POSTED MAXIMUM OCCUPANCY OF THIS ENTIRE SPACE SHALL BE LISTED AS THE FOLLOWING SPECIFIES USES.
- ASSEMBLY - UNCONCENTRATED (TABLES AND CHAIRS) 101 OCCUPANTS
- ASSEMBLY - WITHOUT FIXED SEATS CONCENTRATED (CHAIRS ONLY NOT FIXED) 217 OCCUPANTS
- ASSEMBLY - STANDING SPACE 303 OCCUPANTS

ROOMS INCLUDED IN THIS CALCULATION ARE, (*126 & *127).

(D) THE POSTED MAXIMUM OCCUPANCY OF THIS ROOM, (*010), SHALL BE 49 OCCUPANTS.

PER 2015 IBC CHAPTER 10
1004.1.1 INTERVENING SPACES OR ACCESSORY AREAS.
WHERE OCCUPANTS EGRESS FROM ONE OR MORE ROOMS, AREAS OR SPACES THROUGH OTHERS, THE DESIGN OCCUPANT LOAD SHALL BE THE COMBINED OCCUPANT LOAD OF INTERCONNECTED ACCESSORY OR INTERVENING SPACES. DESIGN OF EGRESS PATH CAPACITY SHALL BE BASED ON THE CUMULATIVE PORTION OF OCCUPANT LOADS OF ALL ROOMS, AREAS OR SPACES TO THAT POINT ALONG THE PATH OF EGRESS TRAVEL.

(1) OCCUPANT LOAD ON THESE SERIES OF DOORS IS CALCULATED AT 100.

GROUND LEVEL OCCUPANCY PLAN 3
SCALE: 1/8" = 1'-0"

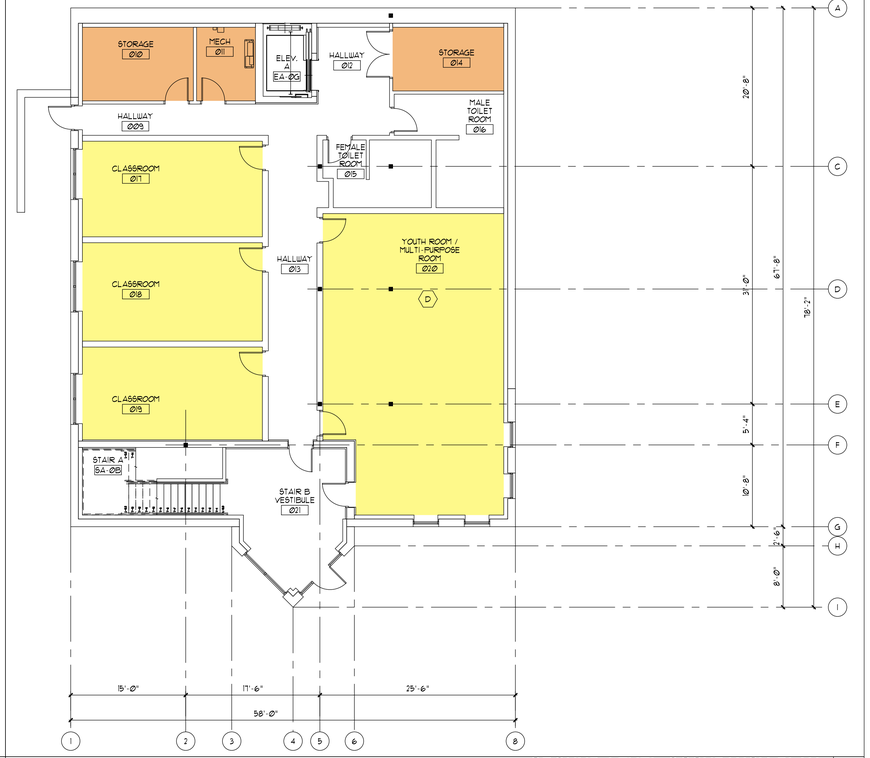
OCCUPANT LOAD - 1st Floor Level

ROOM #	ROOM NAME	FUNCTION OF SPACE (IBC TABLE 1004.1.2)	FLOOR AREA (SQ FT)	OCCUPANT LOAD FACTOR (IBC TABLE 1004.1.2)	OCCUPANT LOAD BY CALCULATION	OCCUPANT LOAD BY ACTUAL NUMBER	OCCUPANT LOAD OF ROOM OR SPACE
100	VESTIBULE	N/A					
101	FEMALE TOILET	N/A					
102	HALLWAY	N/A					
103	MALE TOILET	N/A					
105	LIBRARY & CONFERENCE	ASSEMBLY	688	15 NET	45.87	46	46.00
107	NARTHEX	N/A					
109	SEATING	ASSEMBLY	135	7 NET	19.29	20	20.00
110	SANCTUARY	ASSEMBLY	764	7 NET	109.14	110	110.00
111	CHOIR	ASSEMBLY	44	7 NET	6.29	7	7.00
112	NURSEY ROOM	BUSINESS	147	100 GROSS	1.47	2	2.00
113	MULTI-PURPOSE ROOM	BUSINESS	128	100 GROSS	1.28	2	2.00
114	CLASSROOM	CLASSROOM	134	20 GROSS	6.70	7	7.00
115	MULTI-PURPOSE ROOM	BUSINESS	176	100 GROSS	1.76	2	2.00
116	MECHANICAL ROOM	MECHANICAL ROOM	115	300 GROSS	0.38	1	1.00
117	ALTAR AREA	ASSEMBLY	299	30 NET	9.97	10	10.00
118	HALLWAY	N/A					
119	COAT CLOSET	STORAGE	130	300 GROSS	0.43	1	1.00
120	HALLWAY	N/A					
121	PANTRY	KITCHEN	96	200 GROSS	0.48	1	1.00
122	WARMING KITCHEN	KITCHEN	198	200 GROSS	0.99	1	1.00
123	MULTI-PURPOSE ROOM	CLASSROOM	256	20 GROSS	12.80	13	13.00
124	MULTI-PURPOSE ROOM	CLASSROOM	256	20 GROSS	12.80	13	13.00
125	MULTI-PURPOSE ROOM	CLASSROOM	254	20 GROSS	12.70	13	13.00
126	FELLOWSHIP HALL	ASSEMBLY	1299	5 NET	259.80	87	259.80
127	PERFROMANCE AREA	ASSEMBLY	219	5 NET	43.80	15	43.80
					THE TOTAL OCCUPANT LOAD FOR THIS LEVEL =		**553 OCCUPANTS**

OCCUPANT LOAD - Ground Floor Level

ROOM #	ROOM NAME	FUNCTION OF SPACE (IBC TABLE 1004.1.2)	FLOOR AREA (SQ FT)	OCCUPANT LOAD FACTOR (IBC TABLE 1004.1.2)	OCCUPANT LOAD BY CALCULATION	OCCUPANT LOAD BY ACTUAL NUMBER	OCCUPANT LOAD OF ROOM OR SPACE
010	STORAGE	STORAGE	139	300 GROSS	0.46	5	5.00
011	MECH	MECHANICAL ROOM	73	300 GROSS	0.24	1	1.00
012	HALLWAY	N/A					
013	HALLWAY	N/A					
014	STORAGE	STORAGE	120	300 GROSS	0.40	1	1.00
015	FEMALE TOILET ROOM	N/A					
016	MALE TOILET ROOM	N/A					
017	CLASSROOM	CLASSROOM	292	20 GROSS	14.60	15	15.00
018	CLASSROOM	CLASSROOM	301	20 GROSS	15.05	16	16.00
019	CLASSROOM	CLASSROOM	283	20 GROSS	14.15	15	15.00
020	MULTI-PURPOSE ROOM	CLASSROOM	886	20 GROSS	44.30	45	45.00
021	STAIR B VESTIBULE	N/A					
					THE TOTAL OCCUPANT LOAD FOR THIS LEVEL =		**98 OCCUPANTS**

OCCUPANCY LOAD CALCULATIONS
SCALE: N/A 2



GROUND LEVEL OCCUPANCY PLAN 1
SCALE: 1/8" = 1'-0"

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OCCUPANCY LOAD PLAN

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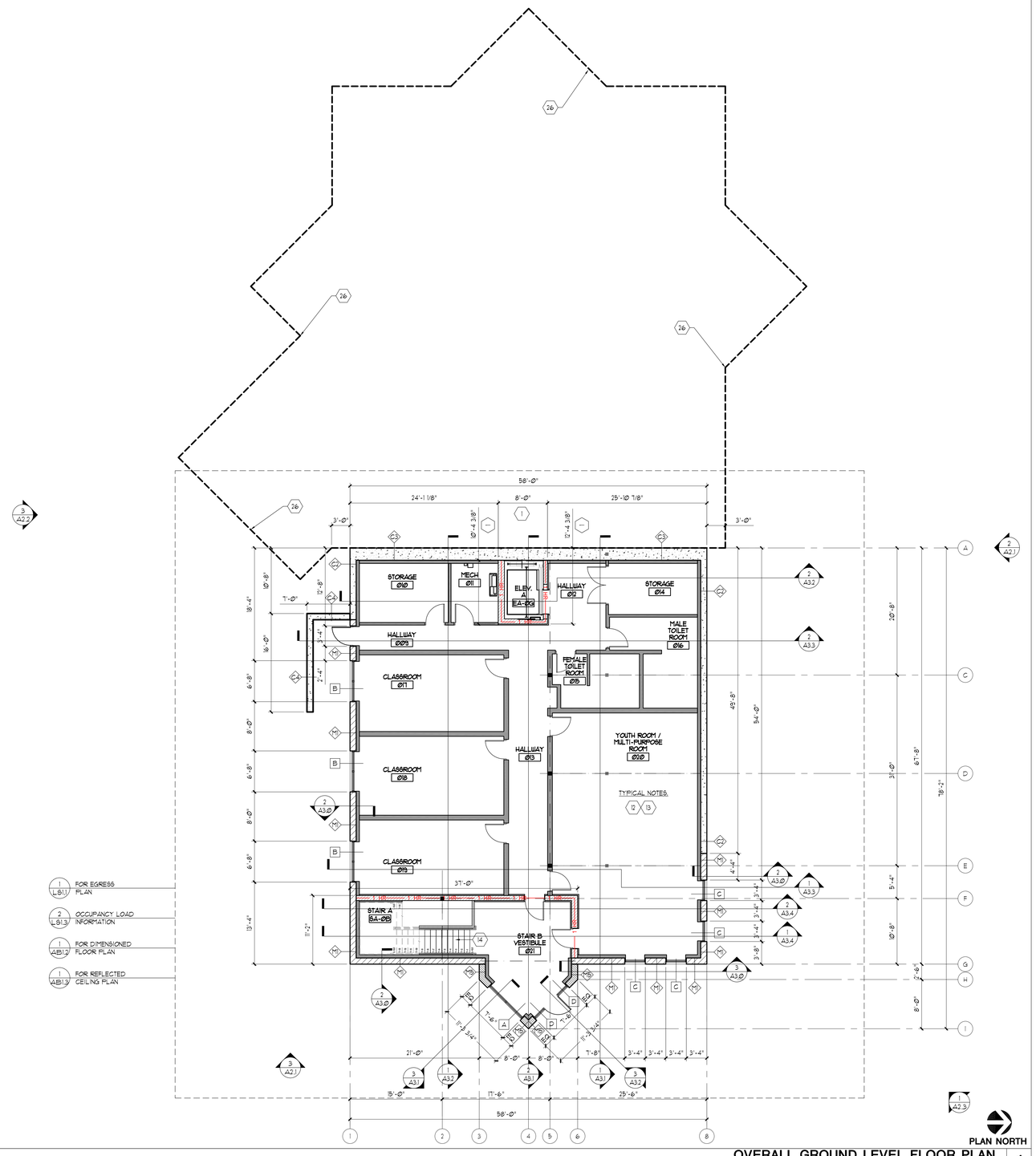
GENERAL NOTES:
1. SEE DETAIL 1 ON SHEET A0.1 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A0.1 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A0.1 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A0.1 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS (1-4) ON SHEET A0.2 FOR WALL TYPE INFORMATION.
6. SEE DETAIL 1 ON SHEET A1.2 FOR KEYED FLOOR PLAN NOTES.



1 FOR EGRESS PLAN — L.Ø1.1
2 OCCUPANCY LOAD INFORMATION — L.Ø1.3
1 FOR DIMENSIONED FLOOR PLAN — AB1.2
1 FOR REFLECTED CEILING PLAN — AB1.3

OVERALL GROUND LEVEL FLOOR PLAN — SCALE: 1/8" =1'-0" — 1

NOT USED — SCALE: N/A — 2

NOT USED — SCALE: N/A — 3

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–	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

REV. #	REV. DATE	DESCRIPTION	REV. BY:

Project:

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N34W23575 Capitol Drive
City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11525 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:

OVERALL GROUND LEVEL FLOOR PLAN

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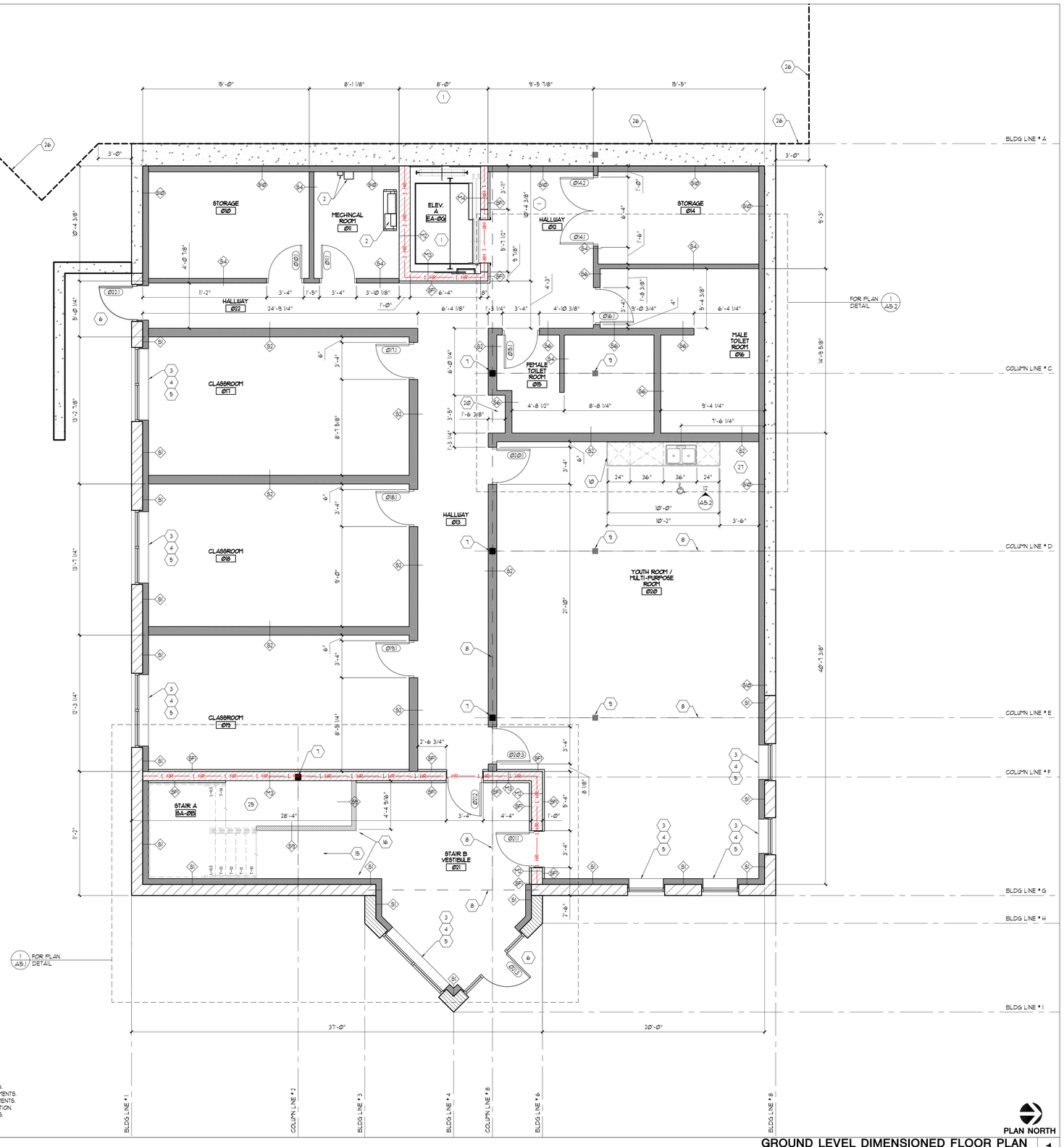
Sheet:

AB1.1

FILE NAME: P:\...PROJECTS\FOX RIVER CONGREGATION\AB101_FOXRIVERLDWG

PLOT DATE: 4/7/2023 12:456 PM



GENERAL NOTES
1. SEE DETAIL 1 ON SHEET A01 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A01 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A01 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A01 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS 1/A-4.1 ON SHEET A03 FOR WALL TYPE INFORMATION.
6. SEE DETAIL 1 ON SHEET A12 FOR KEYED FLOOR PLAN NOTES.

NOT USED
SCALE: N/A

2

GROUND LEVEL DIMENSIONED FLOOR PLAN
SCALE: 1/4" =1'-0"

1

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Drawing Title:

GROUND LEVEL DIMENSIONED FLOOR PLAN

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Date: 04/10/23
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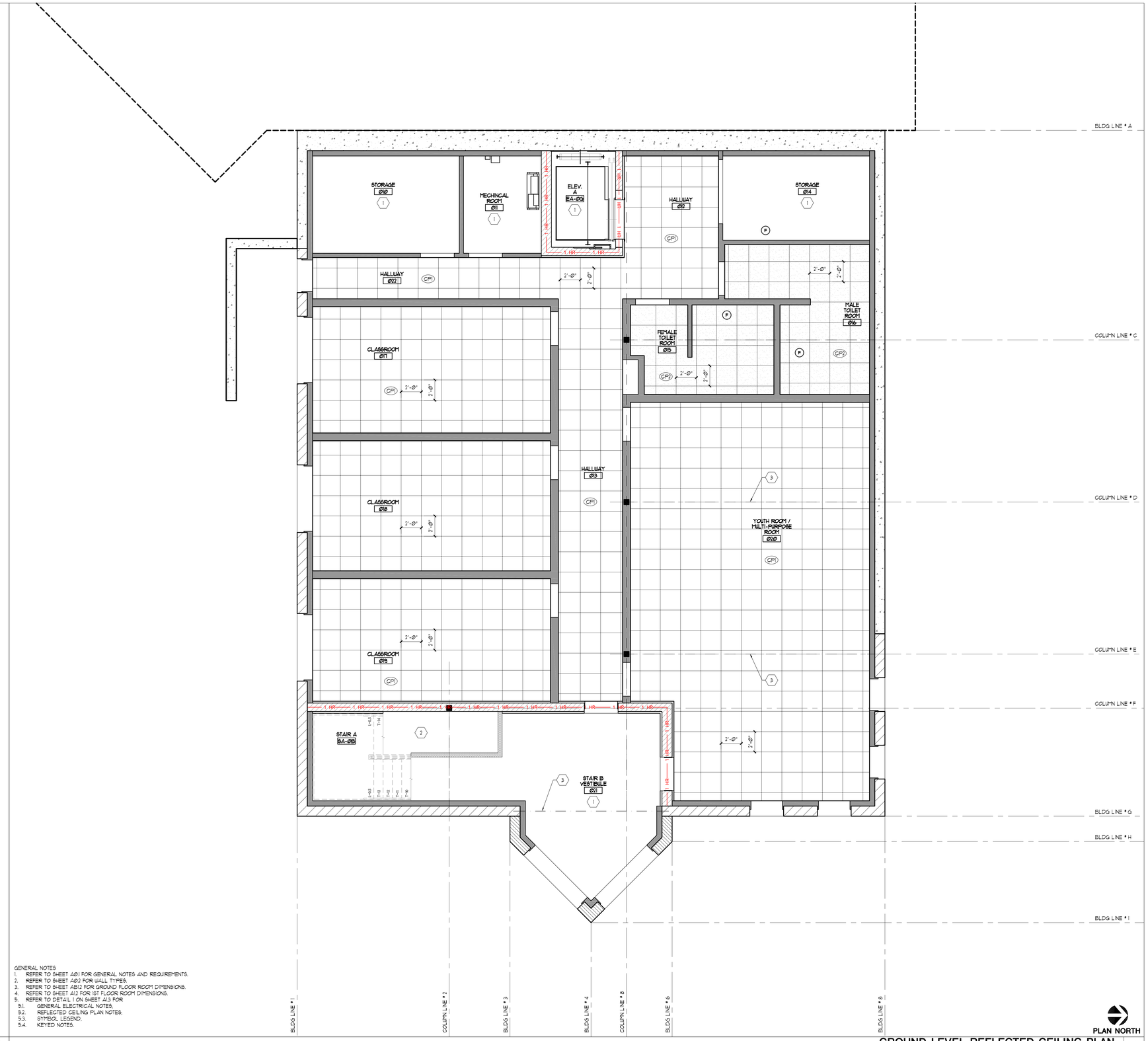
Job: 23-001
Sheet: **AB1.2**

FILE NAME: P:_PROJECTS\FOX RIVER CONGREGATION\AB\02_FOXRIVER.DWG

PLOT DATE: 4/7/2023 12:23:28 PM



GENERAL NOTES

1. REFER TO SHEET A01 FOR GENERAL NOTES AND REQUIREMENTS.
2. REFER TO SHEET A02 FOR WALL TYPES.
3. REFER TO SHEET AB12 FOR GROUND FLOOR ROOM DIMENSIONS.
4. REFER TO SHEET A12 FOR 1ST FLOOR ROOM DIMENSIONS.
5. REFER TO DETAIL 1 ON SHEET A13 FOR
   - 5.1. GENERAL ELECTRICAL NOTES.
   - 5.2. REFLECTED CEILING PLAN NOTES.
   - 5.3. SYMBOL LEGEND.
   - 5.4. KEYED NOTES.

NOT USED
SCALE: N/A
2

GROUND LEVEL REFLECTED CEILING PLAN
SCALE: 1/4" =1'-0"
1

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Drawing Title:

GROUND LEVEL REFLECTED CEILING PLAN

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Date: 04/10/23
Scale: A.N.
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Job: 23-001
Sheet: **AB1.3**

FILE NAME: P:_PROJECTS\FOX RIVER CONGREGATION\AB\03_FOXRIVER.DWG

PLOT DATE: 4/7/2023 11:43:58 AM

SHOP DRAWINGS / MATERIAL SUBMITTAL FOR REVIEW

ALL SUBMITTALS DENOTE THE FOLLOWING OF THE FIRST PAGE:

A. DATE OF ARCHITECTURAL AND STRUCTURAL DRAWINGS IN WHICH THE SUBMITTAL REFERS.

B. DATE OF REFERENCE MATERIAL IN WHICH THE SUBMITTAL REFERS.

C. DATE OF FIELD VISIT.

D. ALL SUBMITTALS SHALL ONLY SHOW THE PRODUCTS / MATERIALS THAT ARE PLANNED FOR THIS PROJECT.

E. EACH MATERIAL / DETAIL / DRAWING THAT ARE BEING SUBMITTED SHALL DENOTE THE ARCHITECTURAL DETAIL / STRUCTURAL DETAIL FROM WHICH IT REFERS.

F. EXAMPLE: YOUR DETAIL (A) REFERS TO ARCHITECTURAL DETAIL "X" ON SHEET "Y" AND/OR REFERS TO STRUCTURAL DETAIL "X" ON SHEET "Y"

G. DENOTE AS ARCH REF: x/Ax.x

H. DENOTED AS STRUC REF: x/Sx.x

I. ANY AND ALL CHANGES TO YOUR ORIGINAL SUBMISSION SHALL BE CLOUDED IN RED, AND HAVE A REVISION DELTA. EACH REVISION SHALL BE CONSECUTIVELY NUMBERED.

J. ALL SUBMISSIONS MUST FIRST MEET THE APPROVAL OF THE GENERAL CONTRACTOR AND BEAR THEIR APPROVAL STAMP.

K. DOOR SUBMISSIONS SHALL USE THE SAME NUMBERING SYSTEM AS THESE DRAWINGS OR WILL NOT BE REVIEWED.

L. WINDOW SUBMISSIONS SHALL USE THE SAME NUMBERING SYSTEM AS THESE DRAWINGS OR WILL NOT BE REVIEWED.

M. FINISH MATERIAL SUBMISSIONS SHALL USE THE SAME NUMBERING SYSTEM AS THESE DRAWINGS.

N. SUBMISSIONS THAT DO NOT SHOW THE ABOVE REQUESTED INFORMATION WILL BE RETURNED WITHOUT A REVIEW.

O. STEEL SUPPLIER / DETAILER TO PROVIDE AN ISOMETRIC DRAWING OF ERECTED STEEL FRAME THAT CLEARLY IDENTIFIES EACH STEEL COMPONENT ASSOCIATED WITH THE SUBMISSION.

P. STEEL SUPPLIER TO MARK EACH FACE OF ANY COLUMN DETAILING WITH THE FOLLOWING:
- P.1. N + NORTH FACE
- P.2. S + SOUTH FACE
- P.3. E + EAST FACE
- P.4. W + WEST FACE.

Q. STEEL SUPPLIER TO DENOTE THE FINISHED FLOOR ELEVATION OF EACH FLOOR AS WELL AS EACH TOP OF BEAM AND/OR JOIST THAT IS RELATIVE TO THE RESPECTIVE COLUMN DEPT.

R. G.C. SHALL ALLOW FOR NOT LESS THAN (10 + 10 + 20) BUSINESS DAY'S FOR RETURN OF ARCHITECTURAL AND STRUCTURAL REVIEW. IF A CONCURRENT REVIEW IS REQUESTED IT WILL NOT BE CONSOLIDATED.

S. G.C. SHALL PROVIDE THEIR COMMENTS IN BLUE INK ONLY.

T. STRUCTURAL ENGINEER SHALL PROVIDE THEIR COMMENTS IN RED INK ONLY.

U. ARCHITECTURAL SHALL PRIMARILY PROVIDE THEIR COMMENTS IN GREEN INK, AS WELL AS IN ANY OTHER CODED AND COLOR CODED REMARKS.

V. OWNER SHALL PROVIDE THEIR COMMENTS IN BLACK INK ONLY.

IN THE EVENT THAT AN INSTALLING CONTRACTOR OR MATERIAL SUPPLIER WOULD LIKE TO REQUEST A MATERIAL ALTERNATE OR MATERIAL SUBSTITUTION, THEY SHALL FOLLOW THE INSTRUCTION ALREADY GIVEN BY THE GENERAL CONTRACTOR, AS WELL AS THE FOLLOWING:

1. SUBMIT THE RESPECTIVE REQUEST TO THE GENERAL CONTRACTOR FOR THEIR + OWNERS VETTING AND COMMENTS:
   a. ON YOUR COMPANY LETTER HEAD:
2. PROJECT NAME.
3. PROJECT NUMBER.
4. NAME OF RELEASE OF DRAWINGS IN WHICH THIS SUBMITTAL REFERS.
5. DATE OF DRAWINGS IN WHICH THIS SUBMITTAL REFERS.
6. THE SPECIFIC SHEET NUMBERS, DETAIL NUMBERS AND DRAWING ITEMS OR SPECIFICATION ITEMS THAT ARE SPECIFICALLY INVOLVED IN YOUR REQUEST.
7. PROVIDE ALL OF THE FULL CONTACT INFORMATION FOR BOTH THE INSTALLING CONTRACTOR + MATERIAL SUPPLIER, INVOLVED IN THE REQUEST.
   - 7.1. IDENTIFY THE ORIGINAL MATERIAL.
   - 7.2. IDENTIFY THE ALTERNATE MATERIAL.
   - 7.3. IN A DETAILED NARRATIVE DESCRIBE ALL OF THE REASONS THIS ALTERNATE SHOULD BE ACCEPTED OVER THE ORIGINAL CITE LANGUAGE FROM THE MANUFACTURER WRITTEN PUBLICATIONS, AS WELL AS YOUR OUN CORPORATE POSITION.
8. INCLUDED WARRANTY COMPARISONS
9. PRICE IMPLICATIONS TO PROJECT
10. SCHEDULE IMPLICATIONS TO PROJECT
    - 10.1. PROVIDE THE MANUFACTURES WRITTEN SPECIFICATION, PUBLISHED SALES INFORMATION AND ALL RELEVANT MATERIAL INFORMATION FOR BOTH THE ORIGINAL AND PROPOSED MATERIALS.
    - 10.2. ON BOTH MATERIALS - HIGHLIGHT IN GREEN WHERE THESE MATERIALS ARE OF EQUAL COMPARISON.
    - 10.3. ON THE ORIGINAL MATERIAL - HIGHLIGHT IN YELLOW WHERE THE ORIGINAL IS A LESSER PRODUCT THEN WHAT YOU ARE PROPOSING.
    - 10.4. ON THE PROPOSED MATERIAL - HIGHLIGHT IN PINK WHERE THE PROPOSED IS A LESSER PRODUCT THEN THE ORIGINAL.
11. ONLY AFTER THIS SUBMISSION HAS MET THE APPROVAL OF THE GENERAL CONTRACTOR (VIA THEIR REVIEW STAMP) AND THE OUNERS APPROVAL (VIA THEIR ORIGINAL SIGNATURE), IS IT TO BE FORWARDED TO THE CORRESPONDING DESIGN REVIEWER.
12. IF THE ABOVE IS NOT SUBMITTED AS A PART OF THE REQUEST, IT SHALL BE RETURNED WITHOUT COMMENT AND RETURNED WITHOUT REVIEW.

SHOP DRAWING NOTES SCALE: N/A | 4

SECTION 803

WALL AND CEILING FINISHES

803.1 GENERAL. INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE CLASSIFIED FOR FIRE PERFORMANCE AND SMOKE DEVELOPMENT IN ACCORDANCE WITH SECTION 803.1.1 OR 803.1.2, EXCEPT AS SHOWN IN SECTIONS 803.2 THROUGH 803.13. MATERIALS TESTED IN ACCORDANCE WITH SECTION 803.1.2 SHALL NOT BE REQUIRED TO BE TESTED IN ACCORDANCE WITH SECTION 803.1.1.

803.1.1 INTERIOR WALL AND CEILING FINISH MATERIALS. INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM E84 OR UL 723. SUCH INTERIOR FINISH MATERIALS SHALL BE GROUPED IN THE FOLLOWING CLASSES IN ACCORDANCE WITH THEIR FLAME SPREAD AND SMOKE-DEVELOPED INDEXES.

CLASS A: + FLAME SPREAD INDEX 0-25 + SMOKE-DEVELOPED INDEX 0-450.

CLASS B: + FLAME SPREAD INDEX 26-75 + SMOKE-DEVELOPED INDEX 0-450.

CLASS C: + FLAME SPREAD INDEX 76-200 + SMOKE-DEVELOPED INDEX 0-450.

EXCEPTION: MATERIALS TESTED IN ACCORDANCE WITH SECTION 803.1.2.

803.1.2 ROOM CORNER TEST FOR INTERIOR WALL OR CEILING FINISH MATERIALS. INTERIOR WALL OR CEILING FINISH MATERIALS SHALL BE PERMITTED TO BE TESTED IN ACCORDANCE WITH NFPA 286. INTERIOR WALL OR CEILING FINISH MATERIALS TESTED IN ACCORDANCE WITH NFPA 286 SHALL COMPLY WITH SECTION 803.1.2.1.

803.1.2.1 ACCEPTANCE CRITERIA FOR NFPA 286. THE INTERIOR FINISH SHALL COMPLY WITH THE FOLLOWING:

1. DURING THE 40 KW EXPOSURE, FLAMES SHALL NOT SPREAD TO THE CEILING.
2. THE FLAME SHALL NOT SPREAD TO THE OUTER EXTREMITY OF THE SAMPLE ON ANY WALL OR CEILING.
3. FLASHOVER, AS DEFINED IN NFPA 286, SHALL NOT OCCUR.
4. THE PEAK HEAT RELEASE RATE THROUGHOUT THE TEST SHALL NOT EXCEED 800 KW.
5. THE TOTAL SMOKE RELEASED THROUGHOUT THE TEST SHALL NOT EXCEED 1000 M2.

803.1.3 ROOM CORNER TEST FOR TEXTILE WALL COVERINGS AND EXPANDED VINYL WALL COVERINGS. TEXTILE WALL COVERINGS AND EXPANDED VINYL WALL COVERINGS SHALL MEET THE CRITERIA OF SECTION 803.1.3 WHEN TESTED IN THE MANNER INTENDED FOR USE IN ACCORDANCE WITH THE METHOD 1 PROTOCOL OF NFPA 265 USING THE PRODUCT-MOUNTING SYSTEM, INCLUDING ADHESIVE.

803.1.3.1 ACCEPTANCE CRITERIA FOR NFPA 265. THE INTERIOR FINISH SHALL COMPLY WITH THE FOLLOWING:

1. DURING THE 40 KW EXPOSURE, FLAMES SHALL NOT SPREAD TO THE CEILING.
2. THE FLAME SHALL NOT SPREAD TO THE OUTER EXTREMITIES OF THE SAMPLES ON THE 8-FOOT BY 12-FOOT (1219 BY 3658 MM) WALLS.
3. FLASH-OVER, AS DEFINED IN NFPA 265, SHALL NOT OCCUR.
4. THE TOTAL SMOKE RELEASED THROUGHOUT THE TEST SHALL NOT EXCEED 1000 M2.

803.1.3 ROOM CORNER TEST FOR TEXTILE WALL COVERINGS AND EXPANDED VINYL WALL COVERINGS. TEXTILE WALL COVERINGS AND EXPANDED VINYL WALL COVERINGS SHALL MEET THE CRITERIA OF SECTION 803.1.3 WHEN TESTED IN THE MANNER INTENDED FOR USE IN ACCORDANCE WITH THE METHOD B PROTOCOL OF NFPA 265 USING THE PRODUCT-MOUNTING SYSTEM, INCLUDING ADHESIVE.

803.1.4 ACCEPTANCE CRITERIA FOR TEXTILE AND EXPANDED VINYL WALL OR CEILING COVERINGS TESTED TO ASTM E84 OR UL 723. TEXTILE WALL AND CEILING COVERINGS AND EXPANDED VINYL WALL AND CEILING COVERINGS SHALL HAVE A CLASS A FLAME SPREAD INDEX IN ACCORDANCE WITH ASTM E84 OR UL 723 AND BE PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.3.1.2. TEST SPECIMEN PREPARATION AND MOUNTING SHALL BE IN ACCORDANCE WITH ASTM E2404.

803.2 THICKNESS EXEMPTION. MATERIALS HAVING A THICKNESS LESS THAN 0.036 INCH (0.9 MM) APPLIED DIRECTLY TO THE SURFACE OF WALLS OR CEILINGS SHALL NOT BE REQUIRED TO BE TESTED.

803.3 HEAVY TIMBER EXEMPTION. EXPOSED PORTIONS OF BUILDING ELEMENTS COMPLYING WITH THE REQUIREMENTS FOR BUILDINGS OF TYPE IV CONSTRUCTION IN SECTION 602.4 SHALL NOT BE SUBJECT TO INTERIOR FINISH REQUIREMENTS.

803.4 FOAM PLASTICS. FOAM PLASTICS SHALL NOT BE USED AS INTERIOR FINISH EXCEPT AS PROVIDED IN SECTION 2603.9. THIS SECTION SHALL APPLY BOTH TO EXPOSED FOAM PLASTICS AND TO FOAM PLASTICS USED IN CONJUNCTION WITH A TEXTILE OR VINYL FACING OR COVER.

803.5 TEXTILE WALL COVERINGS. WHERE USED AS INTERIOR WALL FINISH MATERIALS, TEXTILE WALL COVERINGS, INCLUDING MATERIALS HAVING WOVEN OR NON-WOVEN, NAPPED, TUFTED, LOOPED OR SIMILAR SURFACE AND CARPET AND SIMILAR TEXTILE MATERIALS, SHALL BE TESTED IN THE MANNER INTENDED FOR USE, USING THE PRODUCT MOUNTING SYSTEM, INCLUDING ADHESIVE, AND SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 803.1.2, 803.1.3 OR 803.1.4.

803.6 TEXTILE CEILING COVERINGS. WHERE USED AS INTERIOR CEILING FINISH MATERIALS, TEXTILE CEILING COVERINGS, INCLUDING MATERIALS HAVING WOVEN OR NON-WOVEN, NAPPED, TUFTED, LOOPED OR SIMILAR SURFACE AND CARPET AND SIMILAR TEXTILE MATERIALS, SHALL BE TESTED IN THE MANNER INTENDED FOR USE, USING THE PRODUCT MOUNTING SYSTEM, INCLUDING ADHESIVE, AND SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 803.1.2, 803.1.3 OR 803.1.4.

803.7 EXPANDED VINYL WALL COVERINGS. WHERE USED AS INTERIOR WALL FINISH MATERIALS, EXPANDED VINYL WALL COVERINGS SHALL BE TESTED IN THE MANNER INTENDED FOR USE, USING THE PRODUCT MOUNTING SYSTEM, INCLUDING ADHESIVE, AND SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 803.1.2, 803.1.3 OR 803.1.4.

803.8 EXPANDED VINYL CEILING COVERINGS. WHERE USED AS INTERIOR CEILING FINISH MATERIALS, EXPANDED VINYL CEILING COVERINGS SHALL BE TESTED IN THE MANNER INTENDED FOR USE, USING THE PRODUCT MOUNTING SYSTEM, INCLUDING ADHESIVE, AND SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 803.1.2 OR 803.1.4.

803.9 HIGH-DENSITY POLYETHYLENE (HDPE) AND POLYPROPYLENE (PP). WHERE HIGH-DENSITY POLYETHYLENE OR POLYPROPYLENE IS USED AS AN INTERIOR FINISH, IT SHALL COMPLY WITH SECTION 803.1.2.

803.10 SITE-FABRICATED STRETCH SYSTEMS. WHERE USED AS INTERIOR WALL OR INTERIOR CEILING FINISH MATERIALS, SITE-FABRICATED STRETCH SYSTEMS CONTAINING ALL THREE COMPONENTS DESCRIBED IN THE DEFINITION IN CHAPTER 2 SHALL BE TESTED IN THE MANNER INTENDED FOR USE, AND SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 803.1.1 OR 803.1.2. IF THE MATERIALS ARE TESTED IN ACCORDANCE WITH ASTM E84 OR UL 723, SPECIMEN PREPARATION AND MOUNTING SHALL BE IN ACCORDANCE WITH ASTM E2573.

803.11 INTERIOR FINISH REQUIREMENTS BASED ON GROUP. INTERIOR WALL AND CEILING FINISH SHALL HAVE A FLAME SPREAD INDEX NOT GREATER THAN THAT SPECIFIED IN TABLE 803.11 FOR THE GROUP AND LOCATION DESIGNATED. INTERIOR WALL AND CEILING FINISH MATERIALS TESTED IN ACCORDANCE WITH NFPA 286 AND MEETING THE ACCEPTANCE CRITERIA OF SECTION 803.1.2.1 SHALL BE PERMITTED TO BE USED WHERE A CLASS A CLASSIFICATION IN ACCORDANCE WITH ASTM E84 OR UL 723 IS REQUIRED.

803.12 STABILITY. INTERIOR FINISH MATERIALS REGULATED BY THIS CHAPTER SHALL BE APPLIED OR OTHERWISE FASTENED IN SUCH A MANNER THAT SUCH MATERIALS WILL NOT READILY BECOME DETACHED WHERE SUBJECTED TO ROOM TEMPERATURES OF 200°F (93°C) FOR NOT LESS THAN 30 MINUTES.

803.13 APPLICATION OF INTERIOR FINISH MATERIALS TO FIRE-RESISTANCE-RATED OR NONCOMBUSTIBLE BUILDING ELEMENTS. WHERE INTERIOR FINISH MATERIALS ARE APPLIED ON WALLS, CEILINGS OR STRUCTURAL ELEMENTS REQUIRED TO HAVE A FIRE-RESISTANCE RATING OR TO BE OF NONCOMBUSTIBLE CONSTRUCTION, THESE FINISH MATERIALS SHALL COMPLY WITH THE PROVISIONS OF THIS SECTION.

803.13.1 DIRECT ATTACHMENT AND FURRED CONSTRUCTION. WHERE WALLS AND CEILINGS ARE REQUIRED BY ANY PROVISION IN THIS CODE TO BE OF FIRE-RESISTANCE-RATED OR NONCOMBUSTIBLE CONSTRUCTION, THE INTERIOR FINISH MATERIAL SHALL BE APPLIED DIRECTLY AGAINST SUCH CONSTRUCTION OR TO FURRING STRIPS NOT EXCEEDING 1-3/4 INCHES (44 MM) APPLIED DIRECTLY AGAINST SUCH SURFACES.

803.13.1.1 FURRED CONSTRUCTION. IF THE INTERIOR FINISH MATERIAL IS APPLIED TO FURRING STRIPS, THE INTERVENING SPACES BETWEEN SUCH FURRING STRIPS SHALL COMPLY WITH ONE OF THE FOLLOWING:

1. BE FILLED WITH MATERIAL THAT IS NONSANIC OR NON-COMBUSTIBLE1
2. BE FILLED WITH MATERIAL THAT MEETS THE REQUIREMENTS OF A CLASS A MATERIAL IN ACCORDANCE WITH SECTION 803.1.1 OR 803.1.2.1 OR
3. BE FIRE-BLOCKED AT A MAXIMUM OF 8 FEET (2438MM) IN EVERY DIRECTION IN ACCORDANCE WITH SECTION 718.

TABLE 803.11
INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY (K)

GROUP	SPRINKLERED (1)			NON-SPRINKLERED		
	INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS (A, B)	CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS	ROOMS AND ENCLOSED SPACES (C)	INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS (A, B)	CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS	ROOMS AND ENCLOSED SPACES (C)
A-1 + A-2	B	B	C	A	A (d)	B (e)
A-3 (f), A-4, A-5	B	B	C	A	A (d)	C
B, E, M, R-1	B	C	C	A	B	C
R-4	B	C	C	A	B	B
F	C	C	C	B	C	C
H	B	B	C (g)	A	A	B
I-1	B	C	C	A	B	B
I-2	B	B	B (h, i)	A	A	B
I-3	A	A (i)	C	A	A	B
I-4	B	B	B (h, i)	A	A	B
R-2	C	C	C	B	B	C
R-3	C	C	C	C	C	C
S	C	C	C	B	B	C
U	NO RESTRICTIONS			NO RESTRICTIONS		

FOR SI: 1 INCH = 25.4 MM, 1 SQUARE FOOT = Ø.0929M2

A. CLASS C INTERIOR FINISH MATERIALS SHALL BE PERMITTED FOR WAINSCOTTING OR PANELING OF NOT MORE THAN 1000 SQUARE FEET OF APPLIED SURFACE AREA IN THE GRADE LOBBY WHERE APPLIED DIRECTLY TO A NONCOMBUSTIBLE BASE OR OVER FURRING STRIPS APPLIED TO A NONCOMBUSTIBLE BASE AND FIREBLOCKED AS REQUIRED BY SECTION 803.13.1.

B. IN OTHER THAN GROUP I-3 OCCUPANCIES IN BUILDINGS LESS THAN THREE STORIES ABOVE GRADE PLANE, CLASS B INTERIOR FINISH FOR NONSPRINKLERED BUILDINGS AND CLASS C INTERIOR FINISH FOR SPRINKLERED BUILDINGS SHALL BE PERMITTED IN INTERIOR EXIT STAIRWAYS AND RAMPS.

C. REQUIREMENTS FOR ROOMS AND ENCLOSED SPACES SHALL BE BASED UPON SPACES ENCLOSED BY PARTITIONS. WHERE A FIRE-RESISTANCE RATING IS REQUIRED FOR STRUCTURAL ELEMENTS, THE ENCLOSING PARTITIONS SHALL EXTEND FROM THE FLOOR TO THE CEILING. PARTITIONS THAT DO NOT COMPLY WITH THIS SHALL BE CONSIDERED ENCLOSING SPACES AND THE ROOMS OR SPACES ON BOTH SIDES SHALL BE CONSIDERED ONE. IN DETERMINING THE APPLICABLE REQUIREMENTS FOR ROOMS AND ENCLOSED SPACES, THE SPECIFIC OCCUPANCY THEREOF SHALL BE THE GOVERNING FACTOR REGARDLESS OF THE GROUP CLASSIFICATION OF THE BUILDING OR STRUCTURE.

D. LOBBY AREAS IN GROUP A-1, A-2 AND A-3 OCCUPANCIES SHALL NOT BE LESS THAN CLASS B MATERIALS.

E. CLASS C INTERIOR FINISH MATERIALS SHALL BE PERMITTED IN PLACES OF ASSEMBLY WITH AN OCCUPANT LOAD OF 300 PERSONS OR LESS.

F. FOR PLACES OF RELIGIOUS WORSHIP, WOOD USED FOR ORNAMENTAL PURPOSES, TRUSSES, PANELING OR CHANCEL FURNISHING SHALL BE PERMITTED.

G. CLASS B MATERIAL IS REQUIRED WHERE THE BUILDING EXCEEDS TWO STORIES.

H. CLASS C INTERIOR FINISH MATERIALS SHALL BE PERMITTED IN ADMINISTRATIVE SPACES.

I. CLASS C INTERIOR FINISH MATERIALS SHALL BE PERMITTED IN ROOMS WITH A CAPACITY OF FOUR PERSONS OR LESS.

J. CLASS B MATERIALS SHALL BE PERMITTED AS WAINSCOTTING EXTENDING NOT MORE THAN 48 INCHES ABOVE THE FINISHED FLOOR IN CORRIDORS AND EXIT ACCESS STAIRWAYS AND RAMPS.

K. FINISH MATERIALS AS PROVIDED FOR IN OTHER SECTIONS OF THIS CODE.

L. APPLIES WHEN PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.3.1.2.

INTERIOR WALL AND CEILING FINISH REQUIREMENTS SCALE: N/A | 3

GENERAL PROJECT NOTES:

1. CONSTRUCTION IS TO BE IN COMPLIANCE W/ ALL GOVERNING CODES, ORDINANCES, + STANDARDS. THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING + SUPERVISING ALL SAFETY PRECAUTIONS + PROGRAMS IN CONNECTION W/ THE PERFORMANCE OF THIS CONTRACT. REFER TO OSHA 3623.1980 SAFEGUARDS DURING CONSTRUCTION FOR SPECIFIC CODE RELATED SAFETY REQUIREMENTS.
2. ARCHITECT SHALL NOT BE RESPONSIBLE FOR ANY COST, SCHEDULE, OR CONSTRUCTION ISSUES ARISING DUE TO GENERAL CONTRACTORS/ OUNERS FAILURE TO DISTRIBUTE ALL DOCUMENTS TO EACH SUBCONTRACTOR OR MATERIAL SUPPLIER. SUBCONTRACTORS + MATERIAL SUPPLIERS SHOULD ENDEAVOR TO REVIEW A COMPLETE SET OF DOCUMENTS BEFORE BIDDING, FABRICATING, OR INSTALLING WORK.
3. ALL CONTRACTORS SHALL BECOME FAMILIAR WITH SITE PRIOR TO BIDDING. GENERAL CONTRACTOR, SUBCONTRACTORS, AND MATERIAL SUPPLIERS MUST NOTIFY ARCHITECT OF ANY ERRORS, OMISSIONS, OR DEFECTS IN THE CONSTRUCTION DOCUMENTS PRIOR TO BIDDING, FABRICATING, OR INSTALLING WORK.
4. ALL MEANS + METHODS OF CONSTRUCTION TO BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
5. MECH, ELEC, PLUMB + FIRE PROTECTION ARE TO BE DESIGN BUILT, COMPLYING W/ ALL GOVERNING CODES, ORDINANCES + STANDARDS, WHICH WILL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR, THE ARCHITECT ASSUMES NO LIABILITY.
6. ALL MECH, ELEC, PLUMB + FIRE PROTECTION SYSTEMS/ EQUIP. SHALL BE MAINTAINED ACCORDING TO MANUFACTURER'S STANDARDS. BLDG. OUNER ASSUME FULL RESPONSIBILITY FOR MAINTENANCE/ OPERATION AFTER OCCUPANCY.
7. THE INSTALLATION AND EXECUTION OF ALL PRODUCTS + MATERIALS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S STANDARDS, INSTRUCTIONS AND SPECIFICATIONS.
8. ALL SUBCONTRACTORS SHALL BE RESPONSIBLE FOR LIMITING THE ACCUMULATION OF WASTE MATERIALS AND RUBBISH. WASTE MATERIALS SHALL BE REMOVED FROM PREMISES DAILY.
9. DIMENSIONS ARE TO BE FIELD VERIFIED + ADJUSTED ACCORDINGLY. THE ARCHITECT SHALL BE NOTIFIED OF ANY VARIANCES BEFORE CONTRACTOR BEGINS OR PROCEEDS WITH WORK.
10. HAZARDOUS MATERIAL (INCLUDING ASBESTOS) ASSESSMENT AND ABATEMENT WILL BE COORDINATED BY GC
11. PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED IN OCCUPANCIES AND LOCATIONS AS REQUIRED BY THE INTERNATIONAL FIRE CODE CH. 906. INSTALLATION LOCATIONS SHALL HAVE A MAXIMUM TRAVEL DISTANCE OF 75' TO ANY EXTINGUISHER. EXTINGUISHERS SHALL BE LOCATED IN CONSPICUOUS LOCATIONS WHERE THEY WILL BE READILY ACCESSIBLE AND IMMEDIATELY AVAILABLE FOR USE. TYPICALLY ALONG PATHS OF TRAVEL. EXTINGUISHERS SHALL NOT BE OBSTRUCTED FROM VIEW. IF VISUAL OBSTRUCTION CAN NOT BE AVOIDED AN OTHER MEANS SHALL BE PROVIDED TO INDICATE THE EXTINGUISHER LOCATIONS. EXTINGUISHERS NOT EXCEEDING 40# SHALL BE INSTALLED SO THAT ITS TOP IS NOT MORE THAN 5'-0" ABOVE THE FLOOR. EXTINGUISHERS EXCEEDING 40# SHALL BE INSTALLED SO THAT ITS TOP IS NOT MORE THAN 3'-6" ABOVE THE FLOOR. THE CLEARANCE BETWEEN THE FLOOR + BOTTOM OF HAND HELD UNITS SHALL NOT BE LESS THAN 4". VERIFY EXTINGUISHER LOCATIONS W/ LOCAL FIRE DEPT. + OUNER PRIOR TO INSTALLATION.
12. ALL CONCRETE FLATWORK MUST BE WET CURED PER ACI REQUIREMENTS AND/OR CURED USING A CURING COMPOUND. REFER TO STRUCTURAL DRAWINGS FOR CURING COMPOUND SPECIFICATIONS (SURFACE APPLIED CHEMICAL DATA TO ARCHITECT FOR APPROVAL BEFORE PLACING CONCRETE). CONTRACTOR IS RESPONSIBLE FOR APPLYING CURING COMPOUNDS PER THE MANUFACTURER'S REQUIREMENTS.
13. LEAD PAINT ASSESSMENT, TESTING, AND ABATEMENT WILL BE COORDINATED BY GC.
14. DO NOT SCALE THESE DRAWINGS.
15. REVIEW ALL DRAWINGS INCLUDING DRAWING DIMENSIONS PRIOR TO BIDDING, FABRICATING OR CONSTRUCTING ANY WORK. ALL SUBCONTRACTORS TO RECEIVE COMPLETE SETS OF DRAWINGS FOR PROJECT.
16. THE ENTIRE BUILDING WILL REMAIN OCCUPIED + OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. ACCOMMODATIONS MUST BE MADE TO ENSURE CONTINUED OPERATION, CUSTOMER ACCESS, TENANT ACCESS, HEATING, COOLING, FIRE PROTECTION, + SECURITY. ACCOMMODATIONS SHALL ALSO BE MADE TO PROTECT THE TENANTS, CUSTOMERS + TENANT'S PROPERTY/ MERCHANDISE AS REQUIRED. THIS INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING: DUST + FUME PROTECTION, NOISE PROTECTION, + FALLING DEBRIS PROTECTION.
17. STRUCTURAL GRIDS SHOUN ON ARCHITECTURAL DRAWINGS ARE FOR REFERENCE ONLY. IF DISCREPANCIES EXIST BETWEEN STRUCTURAL AND ARCHITECTURAL GRIDS, NOTIFY ARCHITECT. GRIDS SHOUN ON STRUCTURAL PLANS SHALL CONTROL.

GENERAL FLOOR PLAN NOTES:

1. VERIFY ALL FINISHES WITH OUNER PRIOR TO INSTALLATION.
2. GC / SUPPLIERS TO SUBMIT DIGITAL COPY OF ALL SUBMITTALS TO ARCHITECT. PROVIDE PAPER COPIES WHEN REQUIRED BY AHJ OR GC, U.O.N.
3. ACCOMMODATE EXISTING OUTLETS, FIXTURES, AND MECHANICAL SYSTEMS TO REMAIN. ADJUST LAYOUT AS NECESSARY W/ OUNER + ARCHITECT APPROVAL.
4. CARE SHOULD BE TAKEN TO LEAVE EXISTING ITEMS UNDISTURBED AND STILL ACCOMMODATE NEW WORK. EXISTING AREAS TO BE PROTECTED DURING CONSTRUCTION.
5. VERIFY RECESSED EQUIPMENT WITH OUNER PRIOR TO FRAMING WALLS. ADJUST WALL THICKNESS ACCORDINGLY.
6. COORDINATE WITH PLUMBING CONTRACTOR FOR ALL UNDER-SLAB PIPING PRIOR TO SLAB POUR.
7. CARPENTER TO PROVIDE ALL WALL BLOCKING AS NECESSARY FOR OUNER'S EQUIPMENT - VERIFY LOCATION WITH EQUIPMENT SUPPLIER.
8. PER IBC 1018.2 AND 1029.1.2 IN ASSEMBLY AREAS OR SPACES USED FOR ASSEMBLY PURPOSES WHERE SEATING IS LOCATED AT A TABLE OR COUNTER AND IS ADJACENT TO AN AISLE OR AISLE ACCESSWAY, THE MEASUREMENT OF REQUIRED CLEAR WIDTH OF THE AISLE OR AISLE ACCESSWAY SHALL BE MADE TO A LINE 15 INCHES AWAY FROM AND PARALLEL TO THE EDGE OF THE TABLE OR COUNTER. THE 15 INCH DISTANCE SHALL BE MEASURED PERPENDICULAR TO THE SIDE OF THE TABLE OR COUNTER. IN THE CASE OF THE OTHER SIDE BOUNDARIES FOR AISLE OR AISLE ACCESSWAYS, THE CLEAR WIDTH SHALL BE MEASURED TO WALLS, EDGES OF SEATING AND TREAD EDGES, EXCEPT THAT HANDRAIL PROJECTIONS ARE PERMITTED. EXCEPTION: WHERE TABLES OR COUNTERS ARE SERVED BY FIXED SEATS, THE WIDTH OF THE AISLE ACCESSWAY SHALL BE MEASURED FROM THE BACK OF THE SEAT.
   - 8.1. AISLE SERVING ARRANGEMENTS OF SEATING AT TABLES OR COUNTERS SHALL HAVE SUFFICIENT CLEAR WIDTH TO CONFORM TO THE CAPACITY REQUIREMENTS DETERMINED BY OCCUPANT LOAD PER 1029.8 BUT SHALL NOT HAVE LESS THAN THE APPROPRIATE MINIMUM CLEAR WIDTH SPECIFIED IN SECTION 1029.9.1. (42" WITH SEATING OR SIMILAR ON BOTH SIDES AND 36" WITH SEATING ON ONE SIDE)
   - 8.2. PER IBC 1029.11, AISLE ACCESSWAYS SHALL PROVIDE A MINIMUM OF 12 INCHES OF WIDTH PLUS 0.5 INCH OF WIDTH FOR EACH ADDITIONAL 1 FOOT, OR FRACTION THEREOF, BEYOND 12 FEET OF AISLE ACCESSWAY LENGTH MEASURED FROM THE CENTER OF THE SEAT FARTHEST FROM AN AISLE. EXCEPTION: PORTIONS OF AN AISLE ACCESSWAY HAVING A LENGTH NOT EXCEEDING 6 FEET AND USED BY A TOTAL OF NOT MORE THAN FOUR PERSONS.
   - 8.3. THE LENGTH OF TRAVEL ALONG THE AISLE ACCESSWAY SHALL NOT EXCEED 30 FEET FROM ANY SEAT TO THE POINT WHERE A PERSON HAS A CHOICE OF TWO OR MORE PATHS OF EGRESS TRAVEL TO SEPARATE EXITS.
9. PER IBC 1013.4, A TACTILE SIGN STATING "EXIT" AND COMPLYING WITH ICC A117.1 SHALL BE PROVIDED ADJACENT TO EACH DOOR TO AN AREA OF REFUGE, AN EXTERIOR AREA FOR ASSISTED RESCUE, AN EXIT STAIRWAY, AN EXIT RAMP, AN EXIT PASSAGE AND THE EXIT DISCHARGE.
10. OUNER TO PROVIDE BOTTLED WATER DISPENSER WITH ADJACENT CUP DISPENSER.

GENERAL PROJECT AND FLOOR PLAN NOTES SCALE: N/A | 2

WALL NOTES:

1. REFER TO AND FOLLOW MANUFACTURERS SPECIFICATIONS FOR SPECIFIC INSTALLATION DETAILS.
2. REFER TO AND FOLLOW MANUFACTURERS SPECIFICATIONS AND UNDERWRITERS LABORATORIES DIRECTORY FOR SPECIFIC INSTALLATION DETAILS.
3. GYP. BD. TO BE INSTALLED FLOOR TO DECK OR TOP OF STUD WALL, UNLESS OTHERWISE NOTED. DO NOT APPLY GYP. BD. TO SLIP TRACK, UNLESS OTHERWISE NOTED.
4. CONTROL JOINTS SHALL BE PROVIDED IN GYPSUM BOARD WALLS AND CEILINGS AS REQUIRED TO CONTROL CRACKING. THE FRAMING THAT SUPPORTS THE GYPSUM CONTROL JOINT MUST BE DISCONTINUOUS BEHIND THE JOINT. AT A MINIMUM, CONTROL JOINTS SHALL BE PROVIDED WHERE GYPSUM BOARD TRAVERSES A CONSTRUCTION JOINT IN THE SUPPORTING STRUCTURE, AT 30'-0" OC MAX IN WALL PLANES, AND 30' O.C. MAX IN CEILING PLANES OR WHERE THE CEILING AREA IS GREATER THAN 1000SF. CONTROL JOINTS IN RATED ASSEMBLIES MUST EQUAL THE RATING OF THE ASSEMBLY
5. ALL STEEL STUDS SHALL BE ENGINEERED BY THE MATERIA

PLOT DATE: 4/7/2023 11:49:19 AM

ITEM NOTES:

1. N/A = NOT APPLICABLE
2. (I.N.A.) = INFORMATION NOT AVAILABLE
3. N.R. = INFORMATION NOT REQUIRED
4. ALL WALL FRAMING AND ITS ASSOCIATED SHEATHING SHALL EXTEND TO THE BOTTOM OF THE DECK ABOVE, UNLESS NOTED OTHERWISE.
5. USE APPROPRIATE GYPSUM WALL BOARD FOR THE PARTICULAR ASSEMBLY AND SPECIFIC TO IT'S USE, FUNCTION AND PLACEMENT.
   - 5.1. USE MOISTURE RESISTANCE GYP. B.D. MOISTURE RESISTANT GYP. BD. ON ALL WET WALLS AS WELL AS WHERE IT IS APPROPRIATE.
   - 5.2. INSTALL CEMENT BOARD @ ALL TILE FINISHES.
6. USE LONG LEG SLIP TRACK AT THE HEAD ON ALL STEEL STUD WALL FRAMING THAT EXTENDS TO THE ROOF STRUCTURE.
7. WHEN WALLS EXTEND TO B/O DECK, AND BOTH SIDES ARE NOT EXPOSED, GYPSUM SHEATHING MAY BE STOPPED 1'-0" ABOVE ADJACENT CEILING CONCEALED SIDE, UNLESS REQUIRING WALL CONTAINS PLASTICS REQUIRING THERMAL PROTECTION PER IBC 26Ø3.4. BATT INSULATION ABOVE THIS POINT SHALL BE STRAPPED AS REQUIRED.
8. IF PROVIDED, REFER TO SECTIONS AND SECTION DETAILS FOR ADDITIONAL REQUIREMENTS AND INFORMATION.
9. BRACING SHALL BE PROVIDED BY STUD SUPPLIER AS REQUIRED FOR WALL STABILITY, AND SHALL BE CONCEALED UNLESS OTHERWISE DENOTED.
10. SPRAY IN PLACE FOAM INSULATION REFERS TO PERMAX 2.0X BY HENRY CLOSED CELL POLYURETHANE FOAM (R-6.5) PER INCH.
11. IN THE CASE WHERE SPRAY IN PLACE FOAM INSULATION IS USED AS EXTERIOR ENVELOPE INSULATION FOR CAVITY INSULATION OF A STUD WALL, THE VAPOR BARRIER MAY BE OMITTED ONLY IF THE MANUFACTURERS GUIDELINES AND INSTRUCTIONS SPECIFICALLY STATE THAT A VAPOR BARRIER MAY BE ELIMINATED. SUBCONTRACTOR MUST PROVIDE WRITTEN DOCUMENTATION FROM THE MANUFACTURER TO THE GC, OUTLINING IN "YELLOW HI-LIGHTER", THAT THE INSULATION ITSELF WILL ACT AS IT'S OWN VAPOR AND INTERIOR PROTECTION IS REQUIRED.
12. INTERIOR / STEEL STUD CAVITY ROCK WOOL SOUND BATT MAY ONLY BE ELIMINATED AS DIRECTED BY THE OWNER.
13. INTERIOR / STEEL STUD SIZING ON NON-LOAD BEARING, NON RATED PARTITION WALL CONSTRUCTION MAY CHANGE PER OWNER DIRECTIVE ONLY. C.G. SHALL PROVIDE COST BENEFIT AND COORDINATE WITH ALL APPLICABLE TRADES AS NEEDED.
14. ALL POURED IN PLACE FOUNDATION WALLS / STEM WALL SHALL HAVE AN OWNER APPROVED WATER PROOFING APPLICATION, THIS CAN BE VIA ADMIXTURE, SPRAY APPLIED WATERPROOFING, OR SELF-SEALING SHEET PRODUCT. OPTIONS SHALL BE PRESENTED TO OWNER FOR THEIR FINAL SELECTION.
14. ALL MASONRY BUILDING WALLS SHALL HAVE AN OWNER APPROVED WATER SEALANT APPLICATION, OPTIONS SHALL BE PRESENTED TO OWNER FOR THEIR FINAL SELECTION. INSTRUCTIONS SHALL BE GIVEN BY THE MASON TO THE OWNER REGARDING THE TIMELINE OF WHEN NEW WATER SEALANT SHOULD BE APPLIED TO THE BUILDING AFTER THE PROJECT IS COMPLETE.

WALL TYPE NOTES 4
SCALE: N/A

WALL TAG	STEEL STUD WALL TYPES	DESCRIPTION OF CONSTRUCTION	RATED WALL	STC RATING	INSULATION R-VALUE CONTINUOUS (c.i.) / CAVITY	IBC REF UL NOTE	NOTES
S1	1'-4" TYP; 6 1/4" ACT.	5/8" GYP. WALL BD. TO 6 MIL STRING REINFORCED VAPOR BARRIER 3-5/8" STEEL STUDS WITH CAVITY FILLED (3") SPRAYED IN PLACE INSULATION TO (2") CLEAR OFFSET FROM INSIDE FACE OF MASONRY WITH (2") SPRAYED IN PLACE CONTINUOUS INSULATION TO (TYPICALLY) THE EXTERIOR MASONRY WALL CONSTRUCTION.	N/A	N/A	R-13.0 R-19.5	N/A N/A	REFER ITEM NOTES LISTED BELOW
S2	1'-4" TYP; 9 1/4" ACT.	5/8" GYP. WALL BD. ON 8" STEEL STUDS WITH ROCKWOOL SOUND BATT INSULATION TO 5/8" GYP. WALL BD. SEE OWNER FOR ALL FINISH INFORMATION.	N/A	45	N/A N/A	N/A N/A	
S3	1'-4" TYP; 4 7/8" ACT.; 5" NOM.	5/8" GYP. WALL BD. ON 3-5/8" STEEL STUDS WITH ROCKWOOL SOUND BATT INSULATION TO 5/8" GYP. WALL BD. SEE OWNER FOR ALL FINISH INFORMATION.	N/A	45	N/A N/A	N/A N/A	
S4	1'-4" TYP; 4 7/8" ACT.; 5" NOM.	5/8" GYP. WALL BD. ON 3-5/8" STEEL STUDS TO 5/8" GYP. WALL BD. SEE OWNER FOR ALL FINISH INFORMATION.	N/A	N/A	N/A N/A	N/A N/A	
S5	1'-4" TYP; 6 1/4" ACT.	5/8" GYP. WALL BD. TO 3-5/8" STEEL STUDS TO (2") CLEAR OFFSET FROM INSIDE FACE OF THE EXISTING MASONRY WALL CONSTRUCTION.	N/A	45	N/A N/A	N/A N/A	
S6	1'-4" TYP; 7 1/4" ACT.; 7 1/4" NOM.	5/8" GYP. WALL BD. ON 6" STEEL STUDS WITH ROCKWOOL SOUND BATT INSULATION TO 5/8" GYP. WALL BD. SEE OWNER FOR ALL FINISH INFORMATION.	N/A	N/A	N/A N/A	N/A N/A	
S7	1'-4" TYP; 4 7/8" ACT.; 5" NOM. PARTIAL HEIGHT WALL. TOP OF STEEL STUD WALL + 30-1/2"	5/8" GYP. WALL BD. ON 3-5/8" STEEL STUDS TO 5/8" GYP. WALL BD. SEE OWNER FOR ALL FINISH INFORMATION. NOTE THE TOP OF STEEL STUD ALLOWS FOR WOOD BLOCKING + COUNTER TOP THICKNESS, ADJUST AS NEEDED TO PROVIDE A FINISH TOP OF 34" AFF.	N/A	N/A	N/A N/A	N/A N/A	
S8	1'-4" TYP; 4 7/8" ACT.; 5" NOM. PARTIAL HEIGHT WALL. TOP OF STEEL STUD WALL + 9'-0"	5/8" GYP. WALL BD. ON 3-5/8" STEEL STUDS TO 5/8" GYP. WALL BD. SEE OWNER FOR ALL FINISH INFORMATION.	N/A	N/A	N/A N/A	N/A N/A	
S9	1'-4" TYP; 4 1/4" ACT.; 5" NOM. PARTIAL HEIGHT WALL FOLLOUS THE BOTTOM OF THE STAIR CONSTRUCTION TO CLOSE OF THE STAIR.	5/8" GYP. WALL BD. ON 3-5/8" STEEL STUDS TO 5/8" GYP. WALL BD. SEE OWNER FOR ALL FINISH INFORMATION.	N/A	N/A	N/A N/A	N/A N/A	
S10	EXPOSED SIDE; 1'-4" TYP; 6 1/4" ACT.	5/8" GYP. WALL BD. TO 6 MIL STRING REINFORCED VAPOR BARRIER 3-5/8" STEEL STUDS WITH CAVITY FILLED (3") SPRAYED IN PLACE INSULATION TO (2") CLEAR OFFSET FROM INSIDE FACE OF FOUNDATION WALL WITH (2") SPRAYED IN PLACE CONTINUOUS INSULATION TO (TYPICALLY) THE POURED IN PLACE WALL CONSTRUCTION.	N/A	N/A	R-13.0 R-19.5	N/A N/A	
SF	EXPOSED SIDE; 1'-4" TYP; 2 1/8" ACT.	5/8" GYP. WALL BD. ON 1-1/2" METAL ZEE-CHANNEL AT 16" O.C. TO ADJACENT WALL CONSTRUCTION, SEE FLOOR PLAN.	N/A	N/A	N/A N/A	N/A N/A	

STEEL STUD WALL TYPES 3
SCALE: N/A

WALL TAG	CONCRETE MASONRY UNIT (CMU) WALL TYPES	DESCRIPTION OF CONSTRUCTION	REQ'D WALL RATING	STC RATING	INSULATION R-VALUE CONTINUOUS (c.i.) / CAVITY	IBC REF UL NOTE	ITEMS NOTES
M1	11 5/8" ACT.; 12" NOM.	12" SPLIT FACE COLOR MATCHED CMU WALL. (8" TALL x 16" WIDE x 12" DEEP) SEE STRUCTURAL PLANS FOR DETAILS.	N/A	48-53	N/A N/A	N/A N/A	SEE DETAIL 3 ON THIS SHEET. SEE DETAIL 3 1 4 ON SHEET A@1
M2	11 5/8" ACT.; 12" NOM.	12" CMU WALL. (8" TALL x 16" WIDE x 12" DEEP) SEE STRUCTURAL PLANS FOR DETAILS.	1-HOUR	48-53	N/A N/A	N/A N/A	
M3	9 5/8" ACT.; 10" NOM.	10" CMU WALL. (8" TALL x 16" WIDE x 10" DEEP) SEE STRUCTURAL PLANS FOR DETAILS.	1-HOUR	48-53	N/A N/A	N/A N/A	
M4	7 5/8" ACT.; 8" NOM.	8" CMU WALL. (8" TALL x 16" WIDE x 8" DEEP) SEE STRUCTURAL PLANS FOR DETAILS.	1-HOUR	48-53	N/A N/A	N/A N/A	
M5	11 5/8" ACT.; 12" NOM.	12" COLOR INTEGRAL RAKED FACE CMU / CONCRETE BRICK. (4" TALL x 16" WIDE x 12" DEEP) SEE STRUCTURAL PLANS FOR DETAILS.	N/A	48-53	N/A N/A	N/A N/A	

CONCRETE MASONRY UNIT WALL TYPES 2
SCALE: N/A

WALL TAG	POURED IN PLACE CONCRETE WALL TYPES	DESCRIPTION OF CONSTRUCTION	REQ'D WALL RATING	STC RATING	INSULATION R-VALUE CONTINUOUS (c.i.) / CAVITY	IBC REF UL NOTE	ITEMS NOTES
C1	EXTERIOR SIDE; SEE PLAN ACT.; INTERIOR SIDE	POURED CONCRETE FOUNDATION WALL TO 2" RIGID INSULATION. SEE STRUCTURAL PLANS FOR DETAILS.	N/A	N/A	I@2 N/A	IBC TABLE 72Ø1 ITEM 4 (4-13)	SEE DETAIL 3 ON THIS SHEET. SEE DETAIL 3 1 4 ON SHEET A@1
C2	EXTERIOR SIDE; SEE PLAN ACT.; INTERIOR SIDE	2" RIGID INSULATION TO CONTINUOUS BLUESKIN UP 1ØØ BASIC TO. (FROM TOP OF WALL TO THE OUTSIDE TOP CORNER EDGE OF THE TOP OF THE FOOTING. TOP EDGE TO BE SEALED WITH ROOFING TERMINATION BAR. RIGID INSULATION TO PROTECT ALL MEMBRANE SURFACES) TO POURED CONCRETE FOUNDATION WALL TO 2" RIGID INSULATION. SEE STRUCTURAL PLANS FOR DETAILS.	N/A	N/A	I@2 N/A	IBC TABLE 72Ø1 ITEM 4 (4-13)	
C3	SEE PLAN ACT.	POURED CONCRETE FOUNDATION WALL TO 2" RIGID INSULATION. SEE STRUCTURAL PLANS FOR DETAILS. INSULATION IS NOT REQUIRED AS A PART OF THE ELEVATOR SHAFT WALL CONSTRUCTION.	N/A	N/A	N/A N/A	IBC TABLE 72Ø1 ITEM 4 (4-13)	
C4	SEE PLAN ACT.; EXPOSED SIDE	CONTINUOUS BLUESKIN UP 1ØØ BASIC TO. (FROM TOP OF WALL TO THE OUTSIDE TOP CORNER EDGE OF THE TOP OF THE FOOTING. TOP EDGE TO BE SEALED WITH ROOFING TERMINATION BAR. RIGID INSULATION TO PROTECT ALL MEMBRANE SURFACES) TO POURED CONCRETE FOUNDATION WALL. CONCRETE FINISH LEVEL (FB) UNLESS OTHERWISE DIRECTED BY OWNER. ALL EXPOSED OUTSIDE CORNERS SHALL HAVE A 3/4" CHAMFER. SEE STRUCTURAL PLANS FOR DETAILS.	N/A	N/A	N/A N/A	IBC TABLE 72Ø1 ITEM 4 (4-13)	
C5	EXTERIOR SIDE; SEE PLAN ACT.; INTERIOR SIDE	2" RIGID INSULATION TO POURED CONCRETE FOUNDATION WALL TO 2" RIGID INSULATION. SEE STRUCTURAL PLANS FOR DETAILS.	N/A	N/A	I@2 N/A	IBC TABLE 72Ø1 ITEM 4 (4-13)	

POURED IN-PLACE CONRETE WALL TYPES 1
SCALE: N/A

NOT FOR CONSTRUCTION

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-	03/01/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC
-	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

Project:

Fox River Congregational Church

N34W23575 Capitol Drive
City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11525 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1750 Fax (414) 302-1781

Drawing Title:

WALL TYPES

THIS BOX IS 3" x 3"

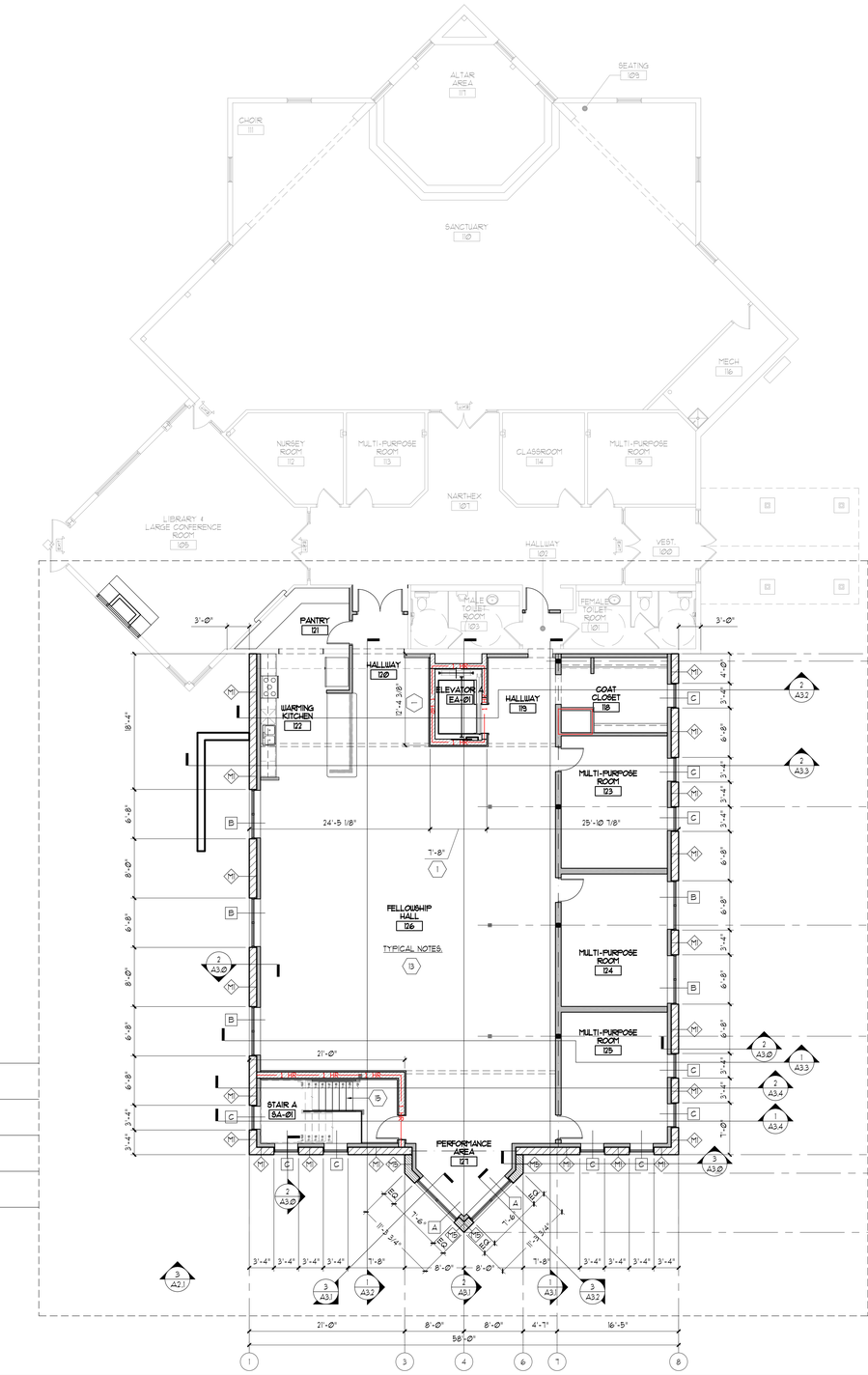
Date:	04/10/23
Scale:	A.N.
Drawn:	WHC
Job:	23-001
Sheet:	A0.2

FILE NAME: P:_PROJECTS\FOX RIVER CONGREGATION\A02_FOXRIVER.DWG

PLOT DATE: 4/7/2023 1:14:18 PM

GENERAL NOTES

1. SEE DETAIL 1 ON SHEET A0.1 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A0.1 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A0.1 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A0.1 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS (1-4) ON SHEET A0.2 FOR WALL TYPE INFORMATION.
6. SEE DETAIL 1 ON SHEET A1.2 FOR KEYED FLOOR PLAN NOTES.



2 FOR EGRESS PLAN L-S1.2
3 OCCUPANCY LOAD INFORMATION L-S1.3
2 FOR DIMENSIONED FLOOR PLAN A1.2
2 FOR REFLECTED CEILING PLAN A1.3
2 FOR ROOF PLAN A1.5

OVERALL 1ST FLR FLOOR PLAN
SCALE: 1/8" =1'-0" | 1

NOT USED
SCALE: N/A | 2

NOT USED
SCALE: N/A | 3

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Drawing Title:
OVERALL 1ST FLR FLOOR PLAN

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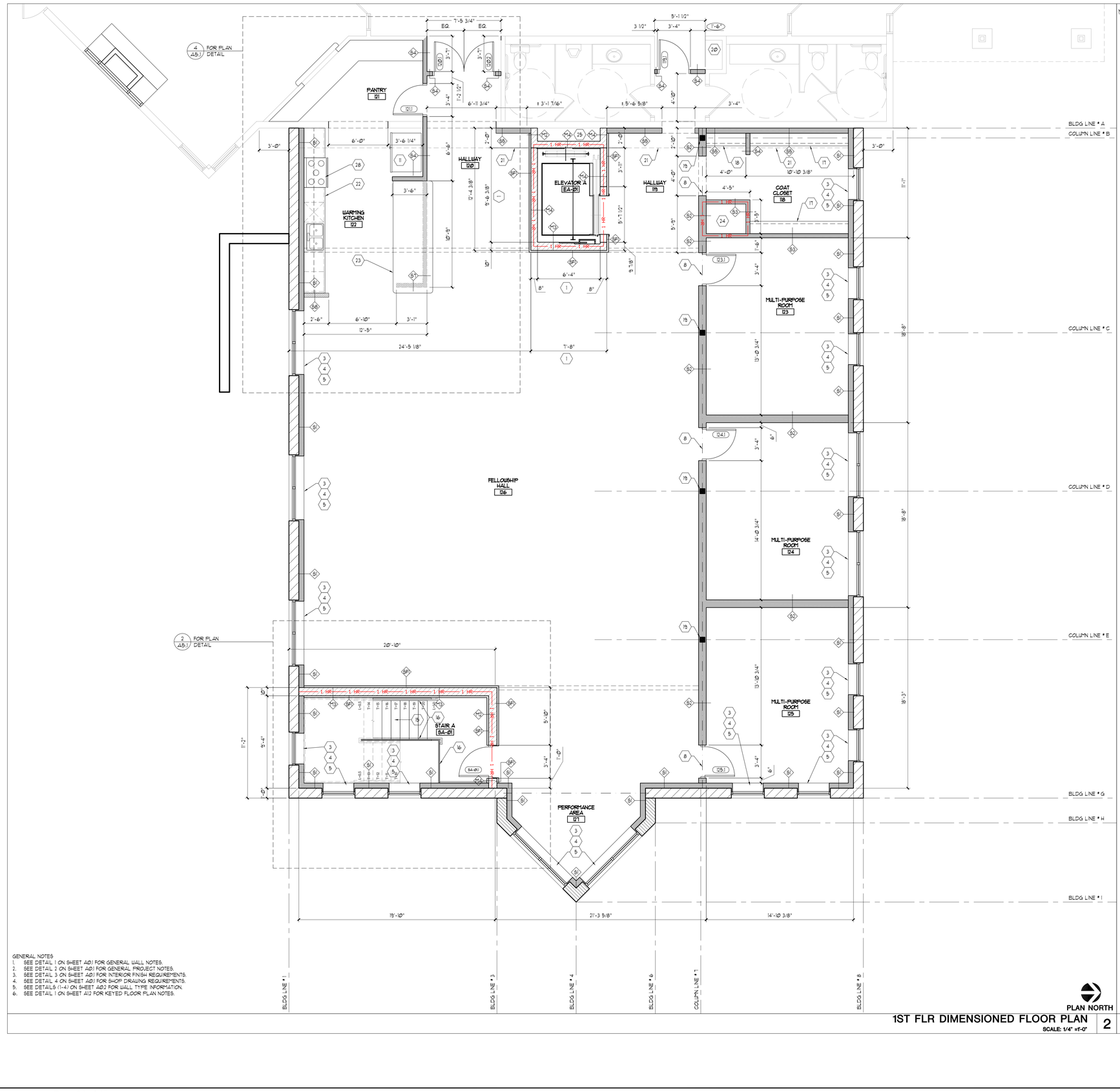
Sheet: **A1.1**

FILE NAME: P:_PROJECTS\FOX RIVER CONGREGATION\A101_FOXRIVERDWG



GENERAL NOTES
1. SEE DETAIL 1 ON SHEET A01 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A01 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A01 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A01 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS (1-4) ON SHEET A03 FOR WALL TYPE INFORMATION.
6. SEE DETAIL 1 ON SHEET A12 FOR KEYED FLOOR PLAN NOTES.

1ST FLR DIMENSIONED FLOOR PLAN 2
SCALE: 1/4" =1'-0"

NEW FLOOR PLAN KEYED NOTES:

1. NEW ELEVATOR AS SELECTED BY THE OWNER.
ELEVATOR SHAFT MUST BE BUILT USING DIMENSIONS AND DETAILS FROM OWNER APPROVED SHOP DRAWINGS. THIS INCLUDES BUT IS NOT LIMITED TO THE INTERIOR HOIST WAY DIMENSIONS, ALL PIT DETAILS, SUMP CROCK REQUIREMENTS, HOIST WAY BEAM, ELEVATION DOOR OPENINGS AT BOTH STOPS, TOTAL SHAFT HEIGHT, G.C. TO CONFIRM ALL DETAILS WITH ALL INVOLVED SUB-CONTRACTORS PRIOR TO THE START OF WORK.
DIMENSIONED SHOWN ON ARCHITECTURAL PLANS ARE FOR GENERAL REFERENCE ONLY.
2. NEW ELEVATOR MACHINE ROOM EQUIPMENT AS DESIGNED AND LOCATED BY ELEVATOR SUPPLIER & INSTALLER.
3. PROVIDE 3/4" PLYWOOD SHEATHING AS SUBSTRATE FOR GYP. BD.
PLYWOOD SHALL EXTEND FROM INSIDE FACE OF STEEL STUD FRAMING TO WITHIN 1/4" OF THE NEW STOREFRONT GLAZING SYSTEM. SET 1/4" FOAM SILL BETWEEN MASONRY WALL AND PLYWOOD. PLYWOOD SHALL ATTACH TO WOOD BUCK SYSTEM THAT LINES ALL 4 SIDES OF THE STEEL STUD FRAMED OPENING. THIS IS TYPICAL AT ALL WINDOWS.
4. DRYWALL RETURN AT INTERIOR SIDES OF WINDOW (HEAD AND JAMB SIDES).
PROVIDE 1/4" BACKER ROD AND THE APPROPRIATE SEALANT BETWEEN THE GYP. BD. & ALUMINUM. THIS IS TYPICAL AT ALL WINDOWS.
5. 1/2" THICK SOLID SURFACE, SIMILAR TO CORIAN, INTERIOR WINDOW SILL FULLY ADHERED TO PLYWOOD BACKER. ALL OPTIONS AND SELECTIONS BY OWNER. ALL DETAILS BY MILLWORK CONTRACTOR. THIS IS TYPICAL AT ALL WINDOWS.
6. INSULATED POURED IN PLACE CONCRETE FOOTING AND STOOP FOUNDATION AT EXTERIOR DOOR.
SEE STRUCTURAL PLANS FOR ALL DETAILS.
SEE CIVIL PLANS FOR SIDEWALK DETAILS, NOT SHOWN HERE.
7. GROUND FLOOR LEVEL STEEL COLUMN. SEE STRUCTURAL PLANS FOR ALL DETAILS.
8. STEEL BEAM, ABOVE. SEE STRUCTURAL PLANS FOR ALL DETAILS.
9. 1ST FLR FLOOR LEVEL STEEL COLUMN, (ABOVE) SHOWN FOR GENERAL REFERENCE.
SEE STRUCTURAL PLANS FOR ALL DETAILS.
10. ADA COMPLIANT BASE CABINETS WITH COUNTER TOP AND SINK & FAUCET.
ALL DESIGN AND DETAILS BY MILLWORK SUPPLIER.
ALLOW FOR AN ADA FRONT APPROACH AT THE SINK, NO CABINET BELOW SINK.
EXTEND FLOOR AND WALL FINISH TO EXPOSED WALL. PROVIDE PIPE PROTECTION AS REQUIRED.
TOP SINK RIM AND/OR TOP OF COUNTERTOP SHALL BE 34" AFF. (MAX.)
G.C. AND PLUMBER TO ADJUST CENTER OF SINK AND ADJUST CABINET SET AS NEEDED TO ACCOMMODATE SIDE BY SIDE REFRIGERATOR / FREEZER WITH DOORS OPEN AT 90°.
ALL SELECTIONS BY OWNER.
SEE OWNER FOR ALL EQUIPMENT DETAILS.
11. PROVIDE ALL CONNECTIONS FOR COMMERCIAL REACH-IN REFRIGERATOR.
SEE OWNER FOR ALL INFORMATION.
12. STEEL REINFORCED CONCRETE SLAB ON GRADE FLOOR SYSTEM.
THIS IS TYPICAL OF ALL FLOOR AREAS ON THIS LEVEL.
SEE STRUCTURAL PLANS FOR ALL DETAILS.
13. 10" PRECAST CONCRETE FLOOR PLANK WITH 2" CONCRETE TOPPING.
• (ABOVE) WHEN ON THE GROUND FLOOR LEVEL.
• (BELOW) WHEN ON THE 1ST FLOOR LEVEL.
THIS IS THE TYPICAL CEILING TO FLOOR ASSEMBLY FROM THE GROUND FLR LEVEL TO THE 1ST FLR LEVEL RESPECTIVELY. SEE STRUCTURAL PLANS FOR ALL DETAILS.
14. STAIR A - (GROUND FLR UP TO MID-RISE LANDING)
NEW CONCRETE FILLED STEEL PAN STAIR WITH DUAL HEIGHT (1-1/2") DIAMETER HAND RAILS ON BOTH SIDES.
TOTAL RUN IS 11'-11" OVER A 7'-0" RISE.
(13) TREADS AT 11" EACH OVER (14) RISERS AT 6" EACH.
STAIR HAND RAIL & GUARD RAIL DESIGN IS DELEGATED TO THE STEEL SUPPLIER.
THIS FLOOR PLAN IS DRAWN WITH 1-1/2 WIDE CHANNEL STEEL AS THE STAIR STRINGER ON BOTH SIDE OF THE STAIR AS WELL AS THE LANDINGS AT THE 1ST FLOOR LEVEL AND THE MID-LANDING.
15. STAIR A - (1ST FLR DOWN TO MID-RISE LANDING)
NEW CONCRETE FILLED STEEL PAN STAIR WITH DUAL HEIGHT (1-1/2") DIAMETER HAND RAILS ON BOTH SIDES.
TOTAL RUN IS 6'-5" OVER A 4'-0" RISE.
(7) TREADS AT 11" EACH OVER (8) RISERS AT 6" EACH.
STAIR HAND RAIL & GUARD RAIL DESIGN IS DELEGATED TO THE STEEL SUPPLIER.
THIS FLOOR PLAN IS DRAWN WITH 1-1/2 WIDE CHANNEL STEEL AS THE STAIR STRINGER ON BOTH SIDE OF THE STAIR AS WELL AS THE LANDINGS AT THE 1ST FLOOR LEVEL AND THE MID-LANDING.
16. NEW DUAL HEIGHT (1-1/2") DIAMETER HAND RAILS ON BOTH SIDES AND RETURN BACK TO WALL.
UPPER HAND RAIL SHALL BE SET AT 36" AFF.
LOWER HAND RAIL SHALL BE SET AT 24" AFF.
GUARD RAIL BE SET AT 42" AFF.
PANEL DESIGN IS DELEGATED TO THE STEEL SUPPLIER.
THE OUTSIDE HAND RAILS SHALL TYPICALLY EXTEND 12" FROM THE BOTTOM OF THE STAIR RUN AND 12" FROM THE TOP OF THE STAIR RUN.
THE INSIDE HAND RAILS SHALL TYPICALLY BE CONTINUOUS FROM THE TOP OF THE STAIR TO THE BOTTOM OF THE STAIR AS IS FOLLOUS THE CENTER STAIR WALL ONCE AT THE TOP IT SHALL ONLY NEED TO EXTEND 12" OF THAT STAIR RUN AND ONCE AT THE VERY BOTTOM EXTEND 23" BEYOND THE BOTTOM OF THE STAIR RUN. HAND RAILS SHALL TURN 90° AND TERMINATE INTO THE WALL AT THE APPROPRIATE POINTS. HAND RAIL & GUARD RAIL DESIGN IS DELEGATED TO THE STEEL SUPPLIER. REFER TO ENLARGED STAIR PLANS FOR ADDITIONAL INFORMATION, TYPICAL.
17. STANDARD HEIGHT MOUNT OF CLOSET ROD AND SHELF. PROVIDE IN-WALL BLOCKING & ROD STANDARDS AS NEEDED. ALL SELECTIONS BY OWNER.
18. ADA COMPLIANT MOUNT OF CLOSET ROD AND SHELF. PROVIDE IN-WALL BLOCKING & ROD STANDARDS AS NEEDED. ALL SELECTIONS BY OWNER.
19. STEEL COLUMN. SEE STRUCTURAL PLANS FOR ALL DETAILS.
20. NEW 5-GALLON BOTTLED WATER DISPENSER WITH CUP DISPENSER. PROVIDE POWER AS NEEDED. SEE OWNER FOR ALL DETAILS.
21. LINE OF WALL BELOW SHOWN FOR GENERAL REFERENCE.
22. ADA COMPLIANT BASE CABINETS WITH COUNTER TOP AND SINK & FAUCET.
ALL DESIGN AND DETAILS BY MILLWORK SUPPLIER.
ALLOW FOR AN ADA FRONT APPROACH AT THE SINK, NO CABINET BELOW SINK.
EXTEND FLOOR AND WALL FINISH TO EXPOSED WALL.
PROVIDE PIPE PROTECTION AS REQUIRED.
TOP SINK RIM AND/OR TOP OF COUNTERTOP SHALL BE 34" AFF. (MAX.)
ALL SELECTIONS BY OWNER.
SEE OWNER FOR ALL EQUIPMENT DETAILS AND SUPPLY APPROPRIATE CONNECTIONS.
23. ADA COMPLIANT COUNTER TOP.
TOP OF COUNTERTOP SHALL BE 34" AFF. (MAX.)
PROVIDE SUPPORT AS NEEDED.
ALL DESIGN AND DETAILS BY MILLWORK SUPPLIER.
24. HVAC DUCT WORK FROM ROOF THROUGH PRECAST CONCRETE FLOOR PLANK. ALL DIMENSION CHARACTERISTICS OF PUNCTURE THROUGH PRECAST PLANK MUST BE GIVEN BY HVAC DESIGN TO G.C. & CONCRETE FLOOR PLANK ENGINEER PRIOR TO THE START OF THE CONCRETE FLOOR PLANK SHOP DRAWINGS.
25. ENCLOSED NON-COMBUSTIBLE SPACE.
26. APPROXIMATE LOCATION OUTSIDE FACE OF THE OF EXISTING FOUNDATION WALL SHOWN FOR GENERAL REFERENCE.
27. PROVIDE ALL CONNECTIONS FOR ADA COMPLIANT SIDE BY SIDE REFRIGERATOR / FREEZER. SEE OWNER FOR ALL INFORMATION.
28. PROVIDE ALL CONNECTIONS FOR ADA COMPLIANT RANGE WITH OVEN & RESIDENTIAL STYLE HOOD. SEE OWNER FOR ALL INFORMATION.

KEYED FLOOR PLAN NOTES 1
SCALE: N/A

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FOR ESTIMATING AND REVIEW ONLY

REV. #	REV. DATE	DESCRIPTION	REV. BY:
-	03/01/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC
-	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

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Fox River Congregational

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Tel (414) 302-1750 Fax (414) 302-1781

Drawing Title:
1ST FLR DIMENSIONED FLOOR PLAN

THIS BOX IS 3" x 3"

Date: 04/10/23
Scale: A.N.
Drawn: WHC
Job: 23-001
Sheet: A1.2

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FULL SIZE PRINT = 30" x 42" SHEET

PLOT DATE: 4/7/2023 12:31 PM

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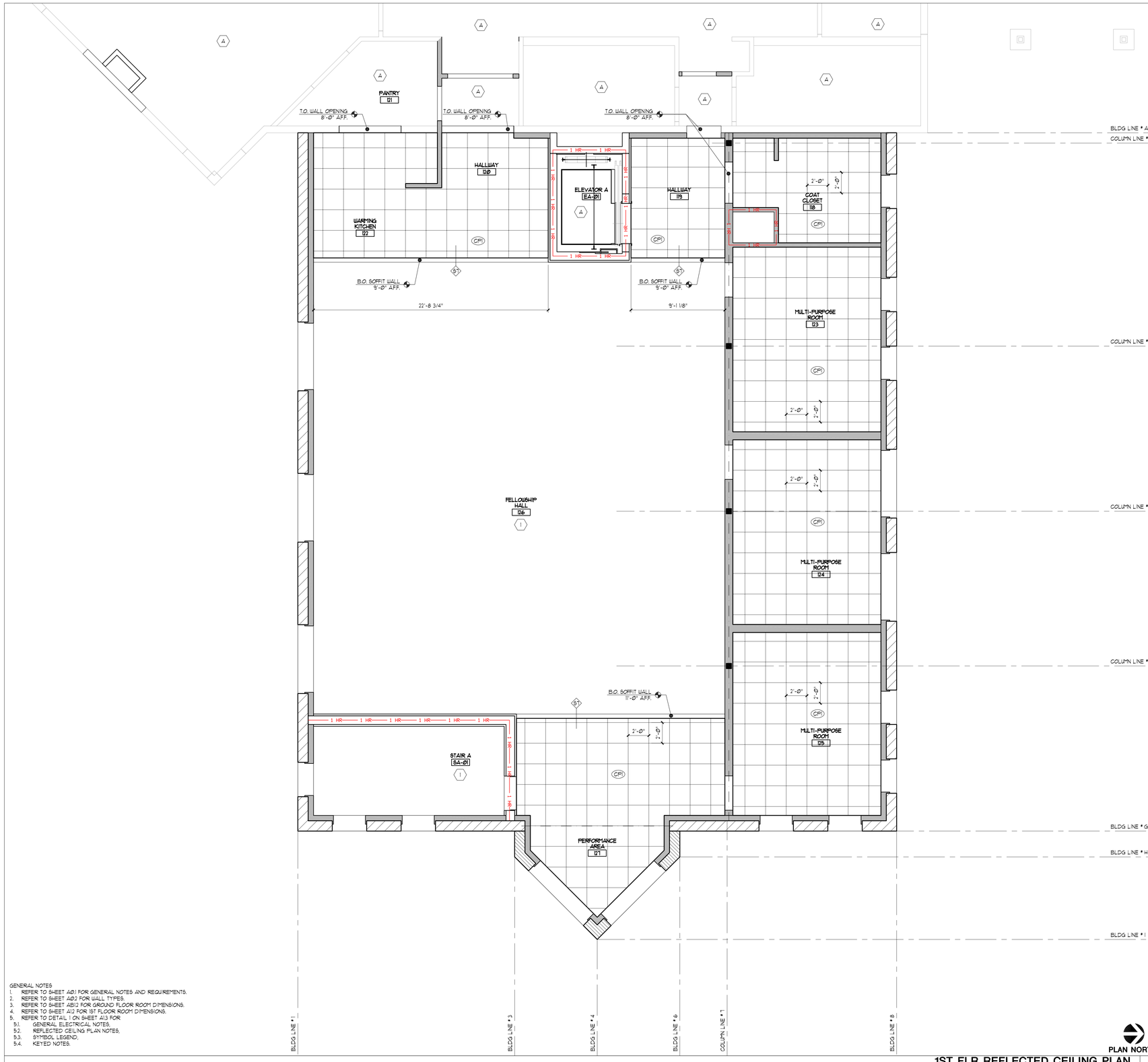
PLOT DATE: 4/7/2023 11:28 PM



GENERAL NOTES
1. REFER TO SHEET A01 FOR GENERAL NOTES AND REQUIREMENTS.
2. REFER TO SHEET A03 FOR WALL TYPES.
3. REFER TO SHEET A012 FOR GROUND FLOOR ROOM DIMENSIONS.
4. REFER TO SHEET A12 FOR 1ST FLOOR ROOM DIMENSIONS.
5. REFER TO DETAIL 1 ON SHEET A13 FOR
   5.1. GENERAL ELECTRICAL NOTES,
   5.2. REFLECTED CEILING PLAN NOTES,
   5.3. SYMBOL LEGEND,
   5.4. KEYED NOTES.

PLAN NORTH

1ST FLR REFLECTED CEILING PLAN
SCALE: 1/4" =1'-0" | 2

GENERAL ELECTRICAL NOTES:

1. ALL ELECTRICAL WORK TO BE IN COMPLIANCE WITH ALL GOVERNING CODES, ORDINANCES AND STANDARDS. ELECTRICAL DEVICES SHOWN ARE A MINIMUM TO BE REQUIRED BY THE OWNER. ADDITIONAL DEVICES MAY BE REQUIRED BY GOVERNING CODES. ELECTRICAL CONTRACTOR TO PROVIDE ADDITIONAL ELECTRICAL SYSTEMS AS REQUIRED BY GOVERNING CODES.
2. REFLECTED CEILING PLAN IS SPECIFICALLY SHOWN WITHOUT A LIGHTING LAYOUT.ELECTRICAL ENGINEER/DESIGN BUILDER IS RESPONSIBLE TO FIELD VERIFY ALL EXISTING CONDITIONS. ELECTRICAL ENGINEER/DESIGNER TO PROVIDE FOR ALL REQUIRED DEVICES, DAYLIGHT CONTROLS, AND ACTUAL ENERGY CONSUMPTION OF THE DESIGN IN ORDER TO COMPLY WITH ALL GOVERNING CODES. LIGHTING DESIGNER IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PLAN APPROVALS AND ON SITE INSPECTIONS.
3. ELECTRICAL ENGINEER/DESIGN BUILDER TO PROVIDE CUT SHEETS OF RECOMMENDED MANUFACTURER & PLAN OF RECOMMENDED LOCATION OF LIGHT FIXTURES TO OWNER & ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
4. ELECTRICAL ENGINEER/DESIGN BUILDER TO PROVIDE DESIGN AND INSTALLATION FOR ANY REQUIRED EMERGENCY LIGHTING, EMERGENCY STAND BY POWER, SMOKE DETECTION AND FIRE ALARM SYSTEM PER ALL GOVERNING CODES, ORDINANCES AND STANDARDS. VERIFY W/ IBC FOR EMERGENCY LIGHTING REQUIREMENTS. CODE SECTION 1008.3.5.
5. ELECTRICAL CONTRACTOR TO COORDINATE SWITCHING SCHEDULE WITH TENANT TO ACCOMMODATE TENANT/OWNER REQUIREMENTS.
6. VERIFY WITH GENERAL CONTRACTOR SCOPE OF WORK FOR ADDITIONAL ELECTRICAL REQUIREMENTS (WALL HEATERS, EXHAUST FANS, EQUIPMENT CONNECTION, ETC.)
7. ELECTRICAL ENGINEER/DESIGN BUILDER SHALL WORK WITH MECHANICAL CONTRACTOR FOR ELECTRICAL REQUIREMENTS.
8. ELECTRICAL ENGINEER/DESIGN BUILDER SHALL WORK WITH OWNER'S SECURITY SYSTEM PROVIDER FOR ELECTRICAL REQUIREMENTS.
9. ELECTRICAL ENGINEER/DESIGN BUILDER TO COORDINATE PHONE, DATA, CA TV, SWITCH & RECEPTACLE LOCATION WITH TENANT/OWNER PRIOR TO INSTALLATION.
10. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL CONDUIT WITH PULL STRING TO TENANT SPACE FOR DATA/ TELEPHONE. (VERIFY WITH OWNER AND TENANT)
11. DUPLEX RECEPTACLES, TELEPHONE/ DATA RECEPTACLES TO BE INSTALLED PER TENANTS LEASE AGREEMENT WITH OWNER. CONTRACTOR TO COORDINATE LOCATIONS WITH NEW TENANT. ELECTRICAL OUTLETS TO BE INSTALLED 10'-0" O.C. AT ALL PERIMETER AND DEMISING WALLS BY LANDLORD.
12. DO NOT SCALE THESE DRAWINGS.
13. REVIEW ALL DRAWINGS INCLUDING DRAWING DIMENSIONS PRIOR TO BIDDING, FABRICATING OR CONSTRUCTING ANY WORK. ALL SUBCONTRACTORS TO RECEIVE COMPLETE SETS OF DRAWINGS FOR PROJECT.

REFLECTED CEILING PLAN NOTES:

1. PROVIDE REQUIRED VENTILATION/EXHAUST FANS AS REQUIRED BY CODE (TOILET ROOMS, JANITOR CLOSET)
2. REFER TO MECHANICAL, ELECTRICAL, AND FIRE PROTECTION DOCUMENTS FOR FIXTURE TYPES & LOCATIONS (DESIGNED BY D/B SUBCONTRACTOR). GENERAL CONTRACTOR SHALL HOLD A COORDINATION MEETING BETWEEN THESE SUBS W/ OWNER'S REPRESENTATIVE.
3. FIRE PROTECTION D/B SHALL SPRINKLER ALL COMBUSTIBLE CONCEALED SPACES AS REQUIRED BY NFPA.
4. REFER TO HVAC PLANS FOR VARIOUS HVAC DUCT TYPES & LOCATIONS. LOUVER/GRILLS AND DIFFUSERS/ LOCATIONS TO BE COORDINATED WITH HVAC CONTRACTOR. CUT SHEETS TO BE PROVIDED PRIOR TO INSTALLATION FOR OWNER APPROVAL.
5. SEE ELEVATION FOR ADDITIONAL EXTERIOR FIXTURE LOCATIONS.
6. PROVIDE A PER UNIT PRICE FOR ADDITIONAL FIXTURES AND RECEPTACLES THAT WILL BE ADDED DURING CONSTRUCTION.
7. PROVIDE J-BOX FOR EXTERIOR SIGN LOCATIONS, VERIFY LOCATION W/ OWNER.
8. PROVIDE TIMECLOCK FOR ALL EXTERIOR LIGHTING ON PHOTOCELLS.

GENERAL NOTES:

1. REFER TO SHEET EX1 FOR EXISTING CONDITIONS AND NOTES.
2. REFER TO SHEET DM1 FOR DEMOLITION CONDITIONS AND NOTES.
3. REFER TO SHEET A01 FOR GENERAL NOTES AND REQUIREMENTS.
4. REFER TO SHEET A02 FOR WALL TYPES.
5. REFER TO SHEET A012 FOR GROUND FLOOR ROOM DIMENSIONS.
6. REFER TO SHEET A12 FOR 1ST FLOOR ROOM DIMENSIONS.

NEW REFLECTED CEILING PLAN SYMBOL LEGEND:

2x2 LAYIN GRID WITH 1" T", 2x2x5/8 ACOUSTICAL CEILING TILE
x GRAPHIC SYMBOL OF CEILING TYPE (X)

(CP1) CEILING
(THIS IS LISTED AS A GENERAL FINISH, AS ALL FINISH SELECTIONS ARE BY OWNER.
PANEL TYPE
MANUFACTURE NAME USG
MODEL NAME MARS HEALTH CARE PANELS 75/35
MODEL NUMBER 86384
EDGE FLB
COLOR DESCRIPTION FLAT WHITE (050)
SIZE 2' x 2' x 3/4"
GRID TYPE
MANUFACTURE NAME USG
MODEL NUMBER DONN BRAND CENTRICTEE DXT/DXLT
COLOR DESCRIPTION WHITE
SIZE TBD
REMARKS:
INSTALL PER MANUFACTURES WRITTEN GUIDELINES.
USE MATCHING SYSTEM TRIM AND ACCESSORIES
HEIGHT
1ST FLOOR LEVEL = 9'-6" AFF. (TYPICAL), UNLESS OTHERWISE NOTED
AREA / ROOM 121 = 11'-6" AFF.
GROUND FLOOR LEVEL = 8'-0" AFF. (TYPICAL), UNLESS OTHERWISE NOTED

(CP2) CEILING
(THIS IS LISTED AS A GENERAL FINISH, AS ALL FINISH SELECTIONS ARE BY OWNER.
PANEL TYPE
MANUFACTURE NAME USG OR TENANT APPROVED EQUAL
MODEL NAME SHEET ROCK FIRECODE LAY IN GYPSUM CEILING PANEL
MODEL NUMBER 3260
COLOR DESCRIPTION WHITE -VINYL COATED FACE
SIZE 2' x 1' x 1/2"
GRID TYPE
MANUFACTURE NAME USG
MODEL NUMBER DONN BRAND DX/DXL
COLOR DESCRIPTION WHITE
SIZE 15/16"
REMARKS:
INSTALL PER MANUFACTURES WRITTEN GUIDELINES.
USE MATCHING SYSTEM TRIM AND ACCESSORIES
HEIGHT
1ST FLOOR LEVEL = N/A
GROUND FLOOR LEVEL = 8'-0" AFF. (TYPICAL), UNLESS OTHERWISE NOTED

EXTERIOR EGRESS LIGHT - 100 WATT (90 MIN. MINIMUM BATTERY BACKUP @ EXIT DOORS ONLY) VERIFY STYLE W/ OWNER
DIRECTIONAL EMERGENCY EXIT LIGHT (90 MIN. MINIMUM BATTERY BACKUP)
EMERGENCY EXIT LIGHT W/ FLOOD LAMPS (90 MIN. MINIMUM BATTERY BACKUP)
EMERGENCY LIGHT W/ FLOOD LAMPS (90 MIN. MINIMUM BATTERY BACKUP)
(F) CEILING MOUNTED DIRECT EXHAUST FAN (CONTINUOUS)

NEW REFLECTED CEILING PLAN KEYED NOTES:

(A) NO ARCHITECTURAL SCOPE OF WORK IN THIS ROOM / SPACE / AREA, UNLESS OTHERWISE DENOTED.
(1) NO CEILING IN THIS ROOM / SPACE / AREA UNLESS OTHERWISE DENOTED. THIS SHALL REMAIN EXPOSED TO ROOF STRUCTURE OR FLOOR CEILING STRUCTURE ABOVE. SEE OWNER FOR ALL FINISH REQUIREMENTS.
(2) NON-COMBUSTIBLE ENCLOSED SPACE.
(3) STEEL BEAM, REFER TO STRUCTURAL PLANS FOR INFORMATION.

REFLECTED CEILING PLAN NOTES
SCALE: N/A | 1

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-	03/01/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC
-	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

REV. #	REV. DATE	DESCRIPTION	REV. BY:

Project:

Fox River Congregational Church

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City of Pewaukee, WI 53072

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11323 W. North Avenue
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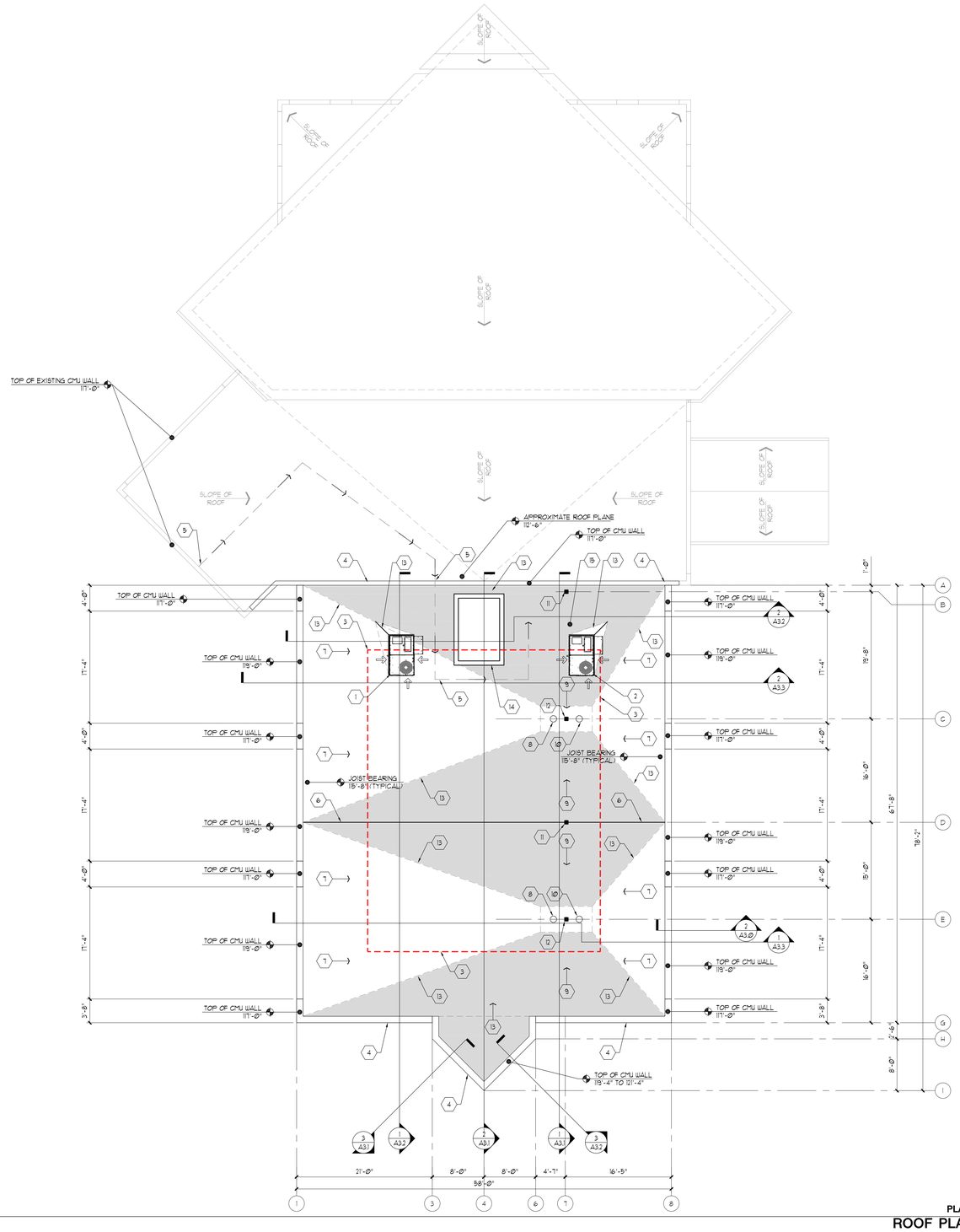
Drawing Title:
1ST FLR REFLECTED CEILING PLAN

THIS BOX IS 3" x 3"

Date: 04/10/23
Scale: A.N.
Drawn: WHC
Job: 23-001
Sheet: A1.3

FILE NAME: P:\...PROJECTS\FOX RIVER CONGREGATION\A103_FOXRIVER.DWG

PLOT DATE: 4/7/2023 12:19:41 PM



ROOF PLAN
SCALE: 1/8" =1'-0" | 2

GENERAL ROOF PLAN NOTES:

1. SEE STRUCTURAL ROOF FRAMING PLAN AND DETAILS FOR ADDITIONAL ROOF NOTES. STRUCTURE SHALL BE DESIGNED TO WITHSTAND RAIN LOADS UP TO THE HEIGHT REQUIRED FOR EFFECTIVE SECONDARY DRAINAGE, AS WELL AS TO RESIST INCREASED PONDING LOADS DUE TO ROOF DEFLECTION. PLUMBING DESIGNER TO COORDINATE RAIN LOADS WITH STRUCTURAL FOR VERIFICATION OF CAPACITY.
2. COORDINATE ALL ROOF EQUIPMENT SIZES AND PENETRATIONS W/ HVAC, ELECTRICAL, AND PLUMBING DESIGN/BUILDER. INSTALL EQUIPMENT FLUES AND VENTS AFTER INSTALLATION OF EQUIPMENT. ROOFING CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED ROOF PENETRATIONS, FLASHING, AND MATERIALS.
3. CUT IN ALL VENTS, STACKS, E.T.C. AS REQUIRED FOR PLUMBING EQUIPMENT.
4. LOCATE ALL ROOF PENETRATIONS AND EQUIPMENT TO PROVIDE THE BEST POSSIBLE SCREENING FROM STREET FRONTS.
5. TAPER INSULATION CRICKETS AT HIGH SIDE OF ROOF TOP EQUIPMENT TO MAINTAIN WATER FLOW TO ROOF DRAINS. MIN. CRICKET PITCH 1/4" PER 12". VERIFY ROOF TOP EQUIPMENT QUANTITY & LOCATION WITH MECHANICAL CONTRACTOR.
6. ALL MTL. FLASHING/COPING TO BE INSTALLED PER SMACNA STANDARDS
7. R.D. (ROOF DRAIN) & D.S. (DOUN SPOUT) W/ DEBRIS SCREENS TO STORM DRAINAGE SYSTEM OR GRADE- REFER TO CIVIL FOR FURTHER DETAILS
8. OUNERS ROOFING CONTRACTOR SHALL PROVIDE ROOFING MEMBRANE TO ALLOW GC TO KEEP NEW CONSTRUCTION WEATHER TIGHT.
9. ROOF ACCESS IS REQ. PER IBC AND IMC SECTION 306.5 ROOF STRUCTURE HEIGHT EXCEEDS 16'-0" & CONTAINS APPLIANCES REQUIRING ACCESS.
10. ROOF ACCESS PANEL IS NOT REQUIRED PER IBC 1009.13, BUILDING IS LESS THAN 4 STORIES AND ROOF IS UNOCCUPIED & PER IFGC AND IMC SECTION 306.5, ROOF STRUCTURE HEIGHT DOES NOT EXCEED 16'-0" WHICH CONTAINS APPLIANCES REQUIRING ACCESS.
11. PROVIDE GUARD RAIL AS REQ. BY 1015.6. GUARDS SHALL BE PROVIDED WHERE APPLIANCES, EQUIPMENT, FANS, OR OTHER COMPONENTS THAT REQUIRE SERVICE ARE LOCATED WITHIN 10'-0" OF A ROOF EDGE. . CONTACT ARCHITECT IF PROPOSED LOCATION OF RTU'S WILL NEED RAILING FOR A DETAIL OF RAILING CONNECTION TO ROOF STRUCTURE.
12. SLOPE GUTTER TO DOUN SPOUT - 1/16" PER FOOT MIN.
13. DO NOT SCALE THESE DRAWINGS.
14. REVIEW ALL DRAWINGS INCLUDING DRAWING DIMENSIONS PRIOR TO BIDDING, FABRICATING OR CONSTRUCTING ANY WORK. ALL SUBCONTRACTORS TO RECEIVE COMPLETE SETS OF DRAWINGS FOR PROJECT.
15. SLOPE LINES REPRESENT APPROXIMATE RIDGE AND VALLEYS OF ROOF SLOPE. EVEN WHEN STRUCTURE IS SLOPED, REDUCED OR ADDITIONAL TAPERED INSULATION MAY BE REQUIRED TO PROVIDE PROPER DRAINAGE AND PREVENT PONDING. CONFIRM INSULATION INSTALLED SUCH THAT MINIMUM R-VALUES ARE PROVIDED AS SPECIFIED FOR THE ROOF SURFACE OVER THE TOTAL AVERAGE OF THE ROOF. ALTHOUGH THESE MAY BE REDUCED NEAR THE DRAIN LOCATIONS, SLOPE OF INSULATION SHALL NOT BE LESS THAN THE TYPICAL ROOF SLOPE U.O.N OR ALLOWED BY THE MEMBRANE SUPPLIER.
16. ROOFING SUB-CONTRACTOR SHALL SUBMIT INSULATION SHOP DRAWING THAT CONFIRMS SLOPES OF ROOF THAT HAVE A STRUCTURAL SLOPE, CONFIRMS SLOPES OF BUILT-UP INSULATION THAT HAVE A FLAT ROOF, AND CONFIRMS AREAS THAT WILL REQUIRE ADDITION INSULATION CRICKETS, FOR THE PURPOSES OF DRAINAGE FROM ROOF CURBS AND WALL TO WALL CONSTRUCTION THAT REPRESENT POSSIBLE PONDING OF WATER.

HVAC NOTES:

1. ROOF TOP EQUIPMENT TO BE PLACED ON CURBS HIGHER THAN SECONDARY ROOF DRAIN TO PREVENT WATER DAMAGE TO EQUIPMENT AND LEAKING INTO BUILDING
2. PROVIDE VAV BOXES WITH SEPARATE THERMOSTATS FOR EACH OFFICE/CONFERENCE ROOM/CLOSING ROOM/OPEN OFFICE/WORK ROOMS
3. UNLESS OTHERWISE NOTED ON STRUCTURAL PLANS, MECHANICAL EQUIPMENT NOT SHOUN ON THESE DRAWINGS IS ASSUMED NOT TO HAVE BEEN DESIGNED TO BE ACCOMMODATED BY THE ROOF STRUCTURE. ANY ADDITIONAL MECHANICAL ITEMS ON (OR HUNG FROM) THE ROOF, SHALL BE COMMUNICATED TO THE ARCHITECT AND STRUCTURAL ENGINEER WITH THEIR OPERATING WEIGHTS AND LOCATIONS.

ROOF PLAN KEYED NOTES:

1. NEW ROOF TOP HVAC UNIT, (RTU-01).
   THIS UNIT IS TO CONDITION THE FIRST FLOOR.
   RTU WEIGHT + CURB WEIGHT + ± 1600 LBS.
   SERVICE PANELS HAVE BEE LOCATED TO FACE OPPOSITE OF THE PERIMETER WALL FOR SAFETY.
   - RTU SHALL BE SCREENED BY ENVISOR VERTICAL ROOF SCREEN BY CITYSCAPES ARCHITECTURAL INNOVATIONS, WITH ALL SELECTIONS BY OUNER. G.C. & HVAC DESIGNED TO COORDINATE ALL DETAILS.

   SEE HVAC DESIGN BUILD SUBCONTRACTOR FOR ALL DETAILS.
2. NEW ROOF TOP HVAC UNIT, (RTU-02).
   THIS UNIT IS TO CONDITION THE GROUND FLOOR.
   RTU WEIGHT + CURB WEIGHT + ± 1600 LBS.
   SERVICE PANELS HAVE BEE LOCATED TO FACE OPPOSITE OF THE PERIMETER WALL FOR SAFETY.
   - RTU SHALL BE SCREENED BY ENVISOR VERTICAL ROOF SCREEN BY CITYSCAPES ARCHITECTURAL INNOVATIONS, WITH ALL SELECTIONS BY OUNER. G.C. & HVAC DESIGNED TO COORDINATE ALL DETAILS.

   SEE HVAC DESIGN BUILD SUBCONTRACTOR FOR ALL DETAILS.
3. THIS LINE REPRESENTS THE 10'-0" SAFETY DISTANCE FROM THE INSIDE EDGE OF THE PARAPET WALL.
4. NEW AND/OR REPLACE METAL COPING TO MATCH EXISTING.
5. ACCESS ROOF TOP UNIT FOR REPAIR AND MAINTENANCE SHALL START WITH A PORTABLE LADDER SECURED AGAINST THE WALL WHERE THE TOP OF THE WALL IS LESS THAN 16'-0" FROM GRADE. ONCE ON THE EXISTING ROOF THE SERVICE TECHNICIAN SHALL PROCEED TO THE BUILDING ADDITION WHERE A PERMANENT WALL MOUNTED LADDER (REFERENCE IMC 306.5 & 3/A3.1) SHALL ALLOU ACCESS FROM THE EXISTING FINISHED ROOF PLANE OVER THE EXISTING PARAPET WALL ONTO THE NEW FINISHED ROOF PLANE. WALL LADDER SHALL BE SIMILAR TO O'KEEFFE'S INC 503 ACCESS LADDER.
6. HIGH POINT / RIDGE LINE OF ROOF.
7. SLOPE OF STEEL BAR JOISTS / ROOF STRUCTURE FROM HIGH POINT TOWARDS LOW POINT.
8. ROOF DRAIN. SEE PLUMBER AND ROOFING CONTRACTOR FOR ALL DETAILS. PLUMBER SHALL SUBMIT DRAINAGE CALCULATIONS FOR GENERAL CONTRACTORS RECORDS.
9. SLOPE OF STEEL BEAM FROM HIGH POINT TOWARDS LOW POINT.
10. OVERFLOU ROOF DRAIN. SEE PLUMBER AND ROOFING CONTRACTOR FOR ALL DETAILS. PLUMBER SHALL SUBMIT DRAINAGE CALCULATIONS FOR GENERAL CONTRACTORS RECORDS. PLUMBER SHALL REVIEU OUTLET STRUCTURE, LOCATION, AND ELEVATION WITH G.C. & OUNER FOR OUNERS FINAL APPROVAL
11. LOCATION OF HIGH ELEVATION STEEL COLUMN, (114'-8").
12. LOCATION OF LOU ELEVATION STEEL COLUMN, (114'-0").
13. PROVIDE ADDITIONAL BUILT-UP PITCHED INSULATION AS NEEDED TO PROVIDE DRAINAGE SLOPE AWAY FROM WALL STRUCTURES AND TOWARDS ROOD DRAINAGE.
14. ROOF MEMBRANE AND INSULATION SYSTEM SHALL ALSO WRAP ELEVATOR WALLS AND ROOF. PROVIDE ADDITIONAL INSULATION AT ELEVATOR SHAFT ROOF AS NEEDED TO SLOPE WATER TO ROOF DRAIN.
15. PROVIDE STRUCTURALLY SECURED "CLIP-IN" SAFETY POST FOR MAINTENANCE PERSONAL WEARING A FALL ARREST HARNESS TO ATTACH THEIR LANYARD. THIS SHALL BE SIMILAR TO FALLTECH POST ANCHOR (CB ANCHOR + MODEL "8601CSLE).

ROOF PLAN NOTES
SCALE: N/A | 1

NOT USED
SCALE: N/A | 3

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FULL SIZE PRINT = 30" x 42" SHEET

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-	03/01/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC
-	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

Project:

Fox River Congregational Church

N344W23575 Capitol Drive
City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11525 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:

ROOF PLAN

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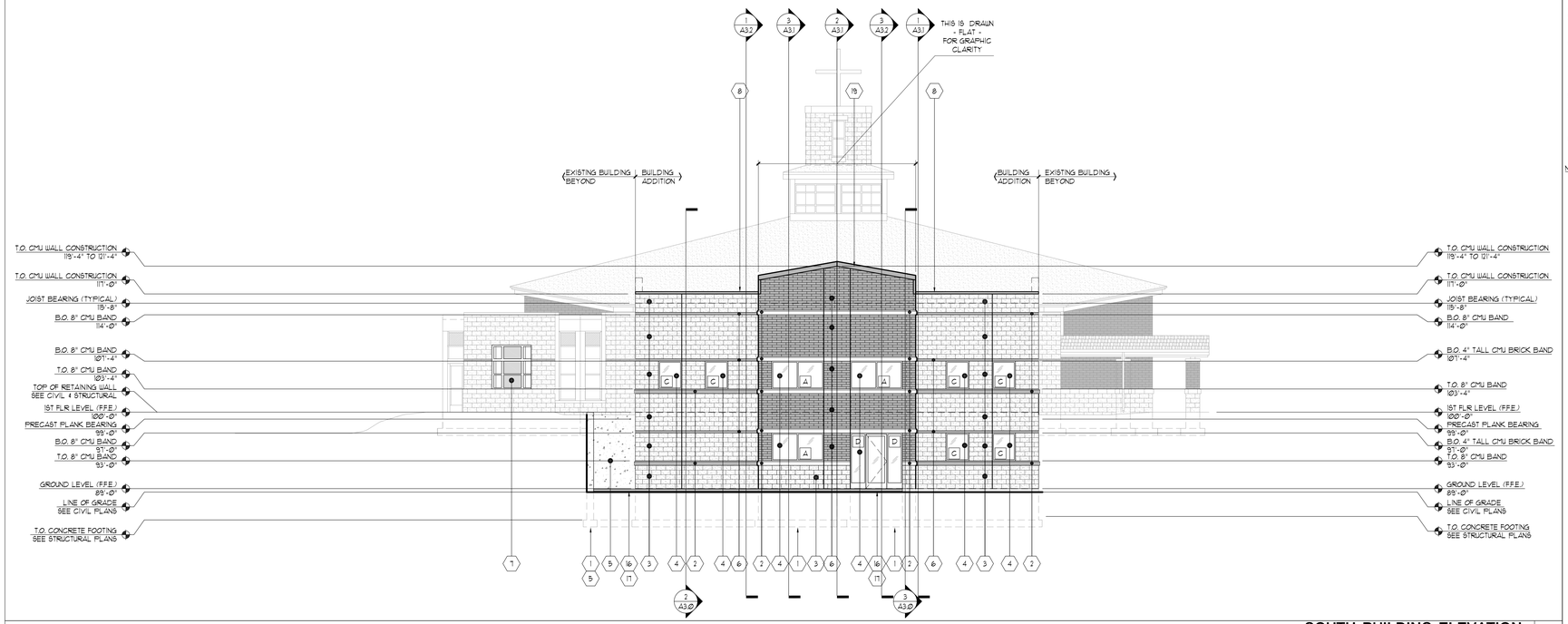
Date: 04/10/23
Scale: A.N.
Drawn: WHC
Job: 23-001
Sheet: A1.5

FILE NAME: P:\...PROJECTS\FOX RIVER CONGREGATION\A105_FOXRIVER.DWG

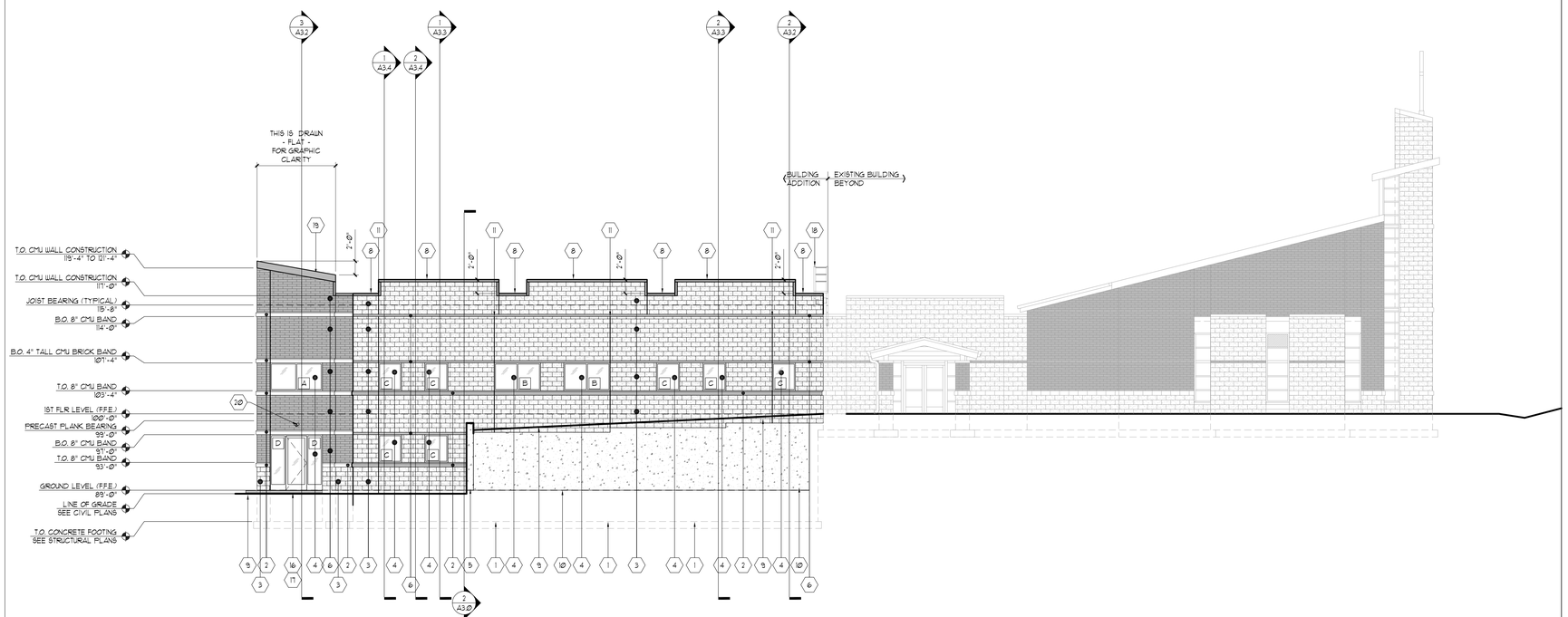
PLOT DATE: 4/7/2023 12:45:26 PM

GENERAL NOTE
1. REFER TO SHEETS EX2.1, EX2.2 & EX2.3 FOR EXISTING ELEVATIONS AND BUILDING MATERIALS.
2. REFER TO SHEET A2.1 DETAIL 1 FOR BUILDING ELEVATION GENERAL NOTES.
3. REFER TO SHEET A2.1 DETAIL 1 FOR BUILDING ELEVATION KEYED NOTES.



SOUTH BUILDING ELEVATION 3
SCALE: 1/8" =1'-0"

GENERAL NOTE
1. REFER TO SHEETS EX2.1, EX2.2 & EX2.3 FOR EXISTING ELEVATIONS AND BUILDING MATERIALS.
2. REFER TO SHEET A2.1 DETAIL 1 FOR BUILDING ELEVATION GENERAL NOTES.
3. REFER TO SHEET A2.1 DETAIL 1 FOR BUILDING ELEVATION KEYED NOTES.



EAST BUILDING ELEVATION 2
SCALE: 1/8" =1'-0"

NEW BUILDING ELEVATION GENERAL NOTES:

1. IN ANY, ALL BUILDING SIGNAGE TO BE PROVIDED AND INSTALLED BY OWNER/TENANT. GC TO PROVIDE FIRE-TREATED PLYWOOD AT SIGNAGE LOCATION.
2. CONTROL JOINT LOCATIONS MAY NOT BE ALL INCLUSIVE. IF MASON ENCOUNTERS A SITUATION WHERE A CJ SHOULD BE OMITTED OR ADDED - CONTACT ARCHITECT AND GC BEFORE MAKING ALTERATIONS.
3. ALL COLUMN FOUNDATIONS TO BE HELD ONE COURSE BELOW GRADE. REFER TO FOUNDATION PLANS / STRUCTURAL PLANS FOR ALL ADDITIONAL INFORMATION.
4. DO NOT SCALE THESE DRAWINGS.
5. REVIEW ALL DRAWINGS INCLUDING DRAWING DIMENSIONS PRIOR TO BIDDING, FABRICATING OR CONSTRUCTING ANY WORK. ALL SUBCONTRACTORS TO RECEIVE COMPLETE SETS OF DRAWINGS FOR PROJECT.
6. PLEASE NOTE THE GENERAL DESIGN SCHEME IS TO MATCH ALL OF THE NEW EXTERIOR MATERIALS TO THE EXISTING EXTERIOR MATERIALS, SO THE RESULT WILL LOOK LIKE THE FINISHED PROJECT (EXISTING & NEW) WERE ALL BUILD AT THE SAME TIME.
7. ALL / ANY HORIZONTAL JOINTS, MORTAR JOINTS, CMU BANDS, WATER MARKS, AND ACCENT BANDS SHALL ALIGN WITH EACH OTHER AS THEY MOVE FROM THE EXISTING BUILDING CONSTRUCTION TO THE NEW BUILDING CONSTRUCTION.
8. ALL / ANY MORTAR SHALL BE COLORED MATCHED TO THE SAME MORTAR AS FOUND AS THE EXISTING EXTERIOR BUILDING WALLS IN THE SAME FIELDS / BANDS / ACCENT BANDS. ADJUST AS NEEDED.
9. ALL BUILDING SEALANTS SHALL BE COLORED MATCHED TO THE SAME SEALANTS AS FOUND AS THE EXISTING EXTERIOR BUILDING WALLS IN THE SAME JUNCTIONS, WINDOW TO WALL, CONTROL JOINTS, ETC. ADJUST AS NEEDED.
10. CONTROL JOINTS IN THE MASONRY WALLS ARE SPECIFICALLY NOTE SHOWN ON THESE ELEVATIONS AND SHALL BE DICTATED AS A PART OF THE STRUCTURAL DESIGN. FOLLOW INTERNATIONAL MASONRY INSTITUTE GUIDELINES AS NEEDED.

NEW BUILDING ELEVATION KEYED NOTES:

1. NEW FOOTING & FOUNDATION LINE(S) - TYPICAL & SHOWN FOR GENERAL REFERENCE. REFER TO STRUCTURAL & CIVIL PLANS FOR ALL ADDITIONAL DETAILS.
2. NEW COLOR INTEGRAL SMOOTH FACE CMU WITH CHAMFERED TOP EDGE & 1" FACE PROJECTION.
   SIZE 8" TALL x 16" WIDE x 12" DEEP
   COLOR LIGHT GREY CONCRETE
   THIS IS THE TYPICAL "LOW & HIGH WATER MARK" BAND OF THIS WALL FACE AND SHALL MATCH THE EXISTING CMU BAND.
3. NEW COLOR INTEGRAL SPLIT FACE CMU.
   SIZE 8" TALL x 16" WIDE x 12" DEEP
   COLOR LIGHT BAND
   THIS IS THE TYPICAL "FIELD" OF THIS WALL FACE & SHALL MATCH THE EXISTING CMU.
4. NEW PRE-FINISHED THERMAL BROKEN STOREFRONT GLAZING SYSTEM AND/OR ENTRY SYSTEM.
   FRAME COLOR UNA-CLAD COLONIAL RED
   GLAZING CLEAR
   THIS SHALL MATCH THE EXISTING STOREFRONT SYSTEM.
5. NEW POURED IN PLACE CONCRETE RETAINING WALL WITH CONCRETE FOOTING AND FOUNDATION. REFER TO STRUCTURAL & CIVIL PLANS FOR ALL ADDITIONAL DETAILS. PLEASE NOTE THE TOP OF THE WALL SHALL HAVE A GUARD RAIL, WHICH IS NOT SHOWN AND SHALL BE DETERMINED AS A PART OF THE FINISHED GRADING PLAN.
6. NEW COLOR INTEGRAL RAKED FACE CMU / CONCRETE BRICK.
   SIZE 4" TALL x 16" WIDE x 12" DEEP
   COLOR DARK BAND
   RAKE VERTICAL
   THIS IS THE TYPICAL AS THE "ACCENT BAND" IN THE CMU FIELD.
   THIS SHALL MATCH THE EXISTING CMU.
7. NEW PRE-FINISHED THERMAL BROKEN STOREFRONT GLAZING SYSTEM.
   FRAME COLOR UNA-CLAD COLONIAL RED
   GLAZING CLEAR AT SIDE LITES & SPANDRAL GLAZING AT THE CENTER PANELS.
   THIS IS A REPLACEMENT TO AN EXISTING AND REMOVED WINDOW UNIT, IN ROOM 109.
   THIS SHALL MATCH THE EXISTING STOREFRONT SYSTEM.
8. NEW PRE-FINISHED BREAK METAL ROOF COPING.
   COLOR UNA-CLAD COLONIAL RED
   THIS IS THE TYPICAL ABOVE THE TOP OF THE PARAPET WALLS.
   NOTE
   THIS WILL TYPICALLY WRAP THE JAMB SIDE OF THE PARAPET WALLS AS WELL.
9. NEW LINE OF FINISHED GRADE, THIS IS APPROXIMATE. PLEASE REFER TO CIVIL PLANS FOR ALL ADDITIONAL INFORMATION.
10. NEW FLOOR LINE, SHOWN FOR GENERAL REFERENCE.
11. CONTROL JOINT.
12. POURED IN PLACE CONCRETE RETAINING WALL IS SHOWN AS AN OUTLINE ONLY.
13. BUILDING ELEVATION IS SHOWN WITHOUT BEING SCREENED BY THE GROUND OR THE RETAINING WALL FOR MATERIAL CONSISTENCY.
14. DO NOT USED CHAMFERED EDGE CMU AT HINGE SIDE OF DOOR AT THIS PORTION THE WALL.
15. POURED IN PLACE CONCRETE FOUNDATION WALL IS SHOWN FOR GENERAL REFERENCE.
16. POURED IN PLACE CONCRETE SIDEWALK IS SHOWN FOR GENERAL REFERENCE. SEE CIVIL PLANS FOR DETAILS.
17. INSULATED POURED IN PLACE CONCRETE FOOTING AND STOOP FOUNDATION AT EXTERIOR DOOR. SEE STRUCTURAL PLANS FOR ALL DETAILS. SEE CIVIL PLANS FOR SIDEWALK DETAILS, NOT SHOWN HERE.
18. NEW WALL LADDER SHALL BE SIMILAR TO O'KEEFFE'S INC 503 ACCESS LADDER.
19. NEW METAL COPING SIMILAR TO METAL-ERA, CREATIVE DESIGN LEAK-TITE COPING. FOLLOW MANUFACTURER'S WRITTEN GUIDELINES FOR ALL DETAILS AND REQUIREMENTS. COLOR MATCH TO EXISTING. MATCH HEIGHT OF ANGLED ROOF THAT IS ON MID-HEIGHT ON THE TOWER ELEMENT. THIS IS ± TWICE AS TALL AS THE TYPICAL COPING. ALL DETAILING BY ROOFING SUB-CONTRACTOR.
20. NEW EXTERIOR WALL MOUNTED EMERGENCY EGRESS LIGHT FIXTURE (TYP.) AT EXIT DOOR. MUST HAVE A 90 MINUTE BATTERY BACK-UP.

BUILDING ELEVATION NOTES 1
SCALE: N/A

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-	03/01/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC
-	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

Project:

Fox River Congregational Church
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Drawing Title:
BUILDING ELEVATIONS

THIS BOX IS 1½" x ½"

Date: 04/10/23
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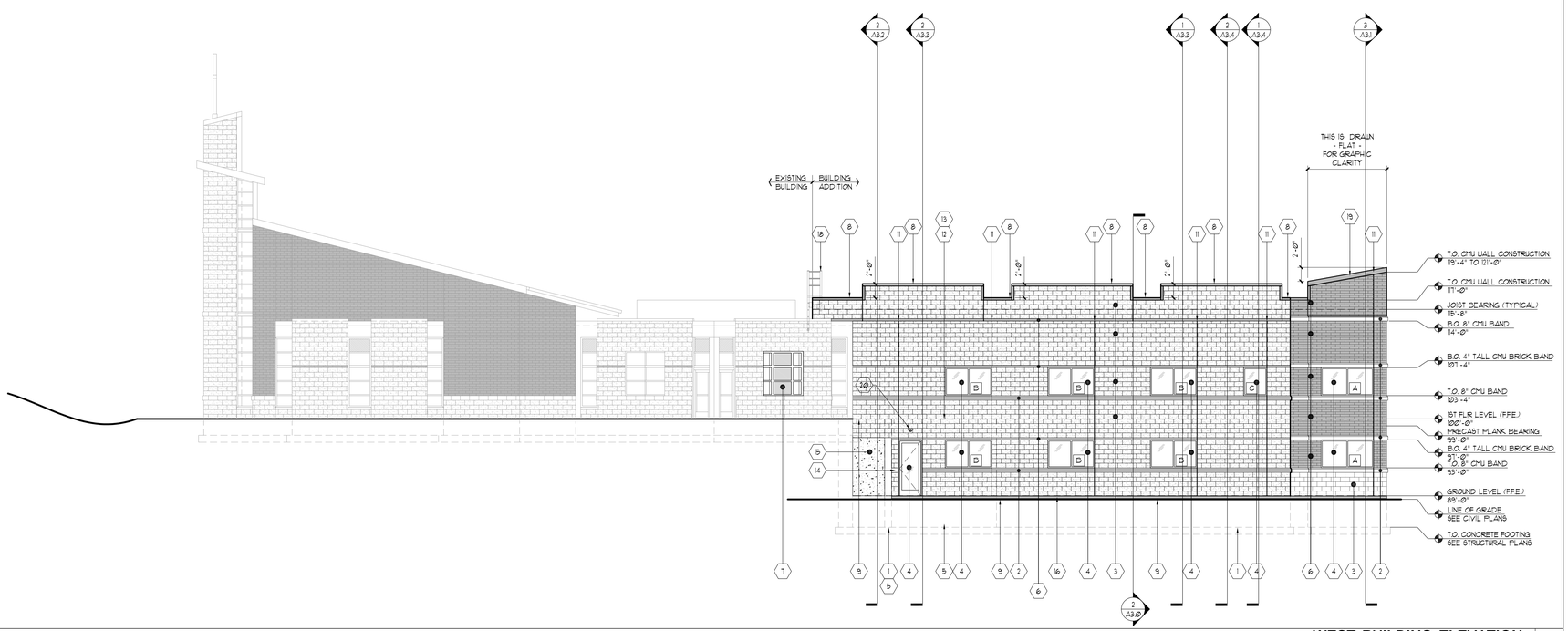
Drawn: WHC
Job: 23-001
Sheet: **A2.1**

FILE NAME: P:_PROJECTS\FOX RIVER CONGREGATION\A301_FOXRIVER.DWG

PLOT DATE: 4/7/2023 12:48:06 PM

GENERAL NOTE
1. REFER TO SHEETS EX2.1, EX2.2 & EX2.3 FOR EXISTING ELEVATIONS AND BUILDING MATERIALS.
2. REFER TO SHEET A2.1 DETAIL 1 FOR BUILDING ELEVATION GENERAL NOTES.
3. REFER TO SHEET A2.1 DETAIL 1 FOR BUILDING ELEVATION KEYED NOTES.



WEST BUILDING ELEVATION 3
SCALE: 1/8" =1'-0"

NOT USED 2
SCALE: 1/8" =1'-0"

NOT USED 1
SCALE: N/A

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Project:

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Drawing Title:

BUILDING ELEVATIONS

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Scale: A.N.
Drawn: WHC
Job: 23-001
Sheet: **A2.2**

FILE NAME: P:_PROJECTS\FOX RIVER CONGREGATION\A202_FOXRIVER.DWG

1 BUILDING RENDERING
SCALE: N/A

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Sheet: A2.3
Job: 23-001
Drawn: WHC
Scale: A.N.
Date: 04/10/23
Drawing Title: BUILDING RENDERING

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City of Pewaukee, WI 53072

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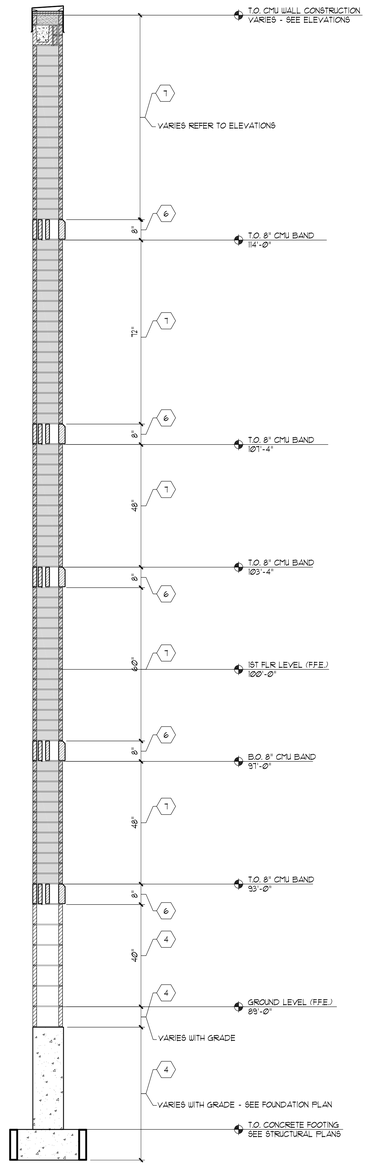
REV. #	REV. DATE	DESCRIPTION	REV. BY:

PLOT DATE: 4/7/2023 12:21:44 PM

GENERAL NOTE
1. SEE DETAIL 1 ON SHEET A01 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A01 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A01 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A01 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS 1-1-4 ON SHEET A02 FOR WALL TYPE INFORMATION.
6. REFER TO DETAIL 1 ON SHEET A3.0 FOR SECTION KEYED NOTES.

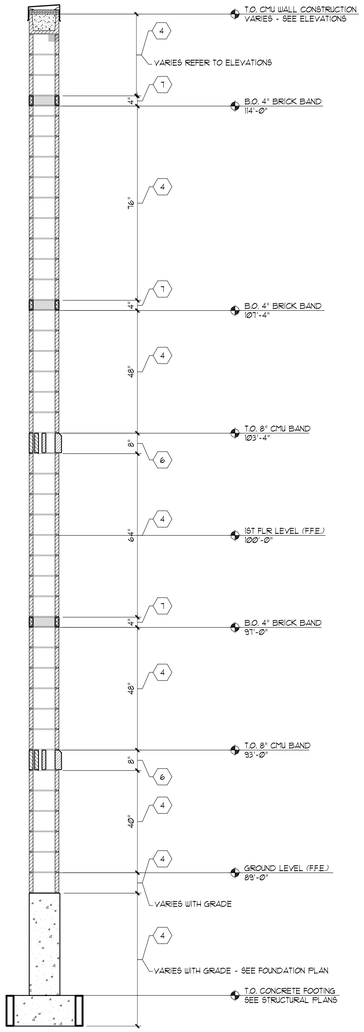


REFERENCE NOTE
THIS SECTION IS FOR GENERAL REFERENCE AND IS SHOWN TO ILLUSTRATE THE DIFFERING MASONRY UNITS USED IN THE MASONRY PORTION OF THE WALL CONSTRUCTION ONLY. PLEASE REFER TO SHEET A3.1 THROUGH A3.4 FOR SPECIFIC DETAILS.

NOT USED SCALE: N/A — 4

GENERAL WALL SECTION AT "BRICK" FIELD SCALE: 1/2" = 1'-0" — 3

GENERAL NOTE
1. SEE DETAIL 1 ON SHEET A01 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A01 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A01 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A01 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS 1-1-4 ON SHEET A02 FOR WALL TYPE INFORMATION.
6. REFER TO DETAIL 1 ON SHEET A3.0 FOR SECTION KEYED NOTES.



REFERENCE NOTE
THIS SECTION IS FOR GENERAL REFERENCE AND IS SHOWN TO ILLUSTRATE THE DIFFERING MASONRY UNITS USED IN THE MASONRY PORTION OF THE WALL CONSTRUCTION ONLY. PLEASE REFER TO SHEET A3.1 THROUGH A3.4 FOR SPECIFIC DETAILS.

GENERAL WALL SECTION AT "CMU" FIELD SCALE: 1/2" = 1'-0" — 2

BUILDING & WALL SECTION GENERAL NOTES:
1. CONTROL JOINT LOCATIONS MAY NOT BE ALL INCLUSIVE. IF MASON ENCOUNTERS A SITUATION WHERE A CJ SHOULD BE OMITTED OR ADDED- CONTACT ARCHITECT AND GC BEFORE MAKING ALTERATIONS.
2. ALL COLUMN FOUNDATIONS TO BE HELD ONE COURSE BELOW GRADE. REFER TO FOUNDATION PLANS / STRUCTURAL PLANS FOR ALL ADDITIONAL INFORMATION.
3. DO NOT SCALE THESE DRAWINGS.
4. REVIEW ALL DRAWINGS INCLUDING DRAWING DIMENSIONS PRIOR TO BIDDING, FABRICATING OR CONSTRUCTING ANY WORK. ALL SUBCONTRACTORS TO RECEIVE COMPLETE SETS OF DRAWINGS FOR PROJECT.
5. PLEASE NOTE THE GENERAL DESIGN SCHEME IS TO MATCH ALL OF THE NEW EXTERIOR MATERIALS TO THE EXISTING EXTERIOR MATERIALS, SO THE RESULT WILL LOOK LIKE THE FINISHED PROJECT (EXISTING + NEW) WERE ALL BUILT AT THE SAME TIME.
6. ALL / ANY HORIZONTAL JOINTS, MORTAR JOINTS, CMU BANDS, WATER MARKS, AND ACCENT BANDS SHALL ALIGN WITH EACH OTHER AS THEY MOVE FROM THE EXISTING BUILDING CONSTRUCTION TO THE NEW BUILDING CONSTRUCTION.
7. ALL / ANY MORTAR SHALL BE COLORED MATCHED TO THE SAME MORTAR AS FOUND AS THE EXISTING EXTERIOR BUILDING WALLS IN THE SAME FIELDS / BANDS / ACCENT BANDS. ADJUST AS NEEDED.
8. ALL BUILDING SEALANTS SHALL BE COLORED MATCHED TO THE SAME SEALANTS AS FOUND AS THE EXISTING EXTERIOR BUILDING WALLS IN THE SAME JUNCTIONS, WINDOW TO WALL, CONTROL JOINTS, ETC. ADJUST AS NEEDED.
9. CONTROL JOINTS IN THE MASONRY WALLS ARE SPECIFICALLY NOTE SHOWN ON THESE ELEVATIONS AND SHALL BE DICTATED AS A PART OF THE STRUCTURAL DESIGN, FOLLOW INTERNATIONAL MASONRY INSTITUTE GUIDELINES AS NEEDED.
Ø. SUB-SURFACE GRAPHICS ARE SPECIALLY NOT SHOWN FOR DRAWING CLARITY.
II. ITEMS THAT HAVE A (-) ARE NOT NEW AS THEY ARE (EXISTING AND/OR SIMILAR) AND ARE DENOTED FOR GENERAL INFORMATION.

BUILDING & WALL SECTION KEYED NOTES:

1. NEW STEEL REINFORCE CONCRETE FOOTING & FOUNDATION. FOOTING SHALL HAVE FORM-A-DRAIN PLUS INTEGRATED DRAINAGE SYSTEM AT EACH SIDE OF THE FOOTING. SEE PLUMBER FOR ADDITIONAL INFORMATION. REFER TO WALL TYPES FOR ADDITIONAL INFORMATION. REFER TO STRUCTURAL & CIVIL PLANS FOR ALL ADDITIONAL DETAILS.
2. NEW CMU TO BE FILLED SOLID WITH GROUT. ALL LOCATIONS OF SOLID FILLED CMU SHALL BE PER STRUCTURAL PLANS. REFER TO STRUCTURAL FOR ALL ADDITIONAL DETAILS.
3. NEW BLOCK FLASH WITH DRAINAGE MAT TYPICAL AT ALL SOLID FILLED CMU WALL CONSTRUCTION IS PRESENT AT THE COURSE BELOW.
4. NEW CMU WALL. REFER TO WALL TYPES FOR ADDITIONAL INFORMATION. REFER TO STRUCTURAL FOR ADDITIONAL DETAILS & INFORMATION.
5. NEW CMU BOND BEAM. REFER TO WALL TYPES FOR ADDITIONAL INFORMATION. ALL LOCATIONS OF BOND BEAMS SHALL BE PER STRUCTURAL PLANS. REFER TO STRUCTURAL FOR ADDITIONAL DETAILS & INFORMATION.
6. NEW 8" TALL CMU BAND WITH 4" CMU BACK UP. 1" AIR GAP. 4 8" CMU WITH CHAMFERED TOP EDGE TO MATCH THE EXISTING PROFILE. REFER TO WALL TYPES FOR ADDITIONAL INFORMATION. REFER TO STRUCTURAL FOR ADDITIONAL DETAILS & INFORMATION.
7. NEW COLOR INTEGRAL RAKED FACE CMU / CONCRETE BRICK.
   SIZE 4" TALL x 16" WIDE x 12" DEEP
   COLOR DARK BAND
   RAKE VERTICAL
   THIS IS THE TYPICAL AS THE "ACCENT BAND" IN THE CMU FIELD.
   THIS SHALL MATCH THE EXISTING CMU.
   REFER TO WALL TYPES FOR ADDITIONAL INFORMATION.
   REFER TO STRUCTURAL FOR ADDITIONAL DETAILS & INFORMATION.
8. NEW 4 APPROPRIATE CELLVENT AT 32" O.C. THIS IS TYPICAL AT THE TOP OF A SINGLE WITHE EXTERIOR CMU WALL TO ALLOW FOR VAPOR CONVECTION.
9. NEW METAL COPING SIMILAR TO METAL-ERA CREATIVE DESIGN LEAK-TITE COPING. FOLLOW MANUFACTURER'S WRITTEN GUIDELINES FOR ALL DETAILS AND REQUIREMENTS. COLOR MATCH TO EXISTING. MATCH HEIGHT OF EXISTING, UNLESS OTHERWISE RECOMMENDED BY ROOFING SUB-CONTRACTOR.
10. NEW STEEL REINFORCED CONCRETE SLAB ON GRADE. REFER TO STRUCTURAL PLANS FOR ADDITIONAL INFORMATION INCLUDING BUT NOT LIMITED TO REINFORCEMENT, FREELY DRAINING SUB-BASE & VAPOR BARRIER REQUIREMENTS. REFER TO FOUNDATION PLAN NOTES FOR CONTROL JOINT REQUIREMENTS.
11. LINE OF NEW CEILING. SEE REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION.
12. NEW STEEL BEAM. REFER TO STRUCTURAL FOR ADDITIONAL DETAILS & INFORMATION.
13. NEW 10" PRECAST CONCRETE FLOOR PLANK WITH 2" NON-STRUCTURAL CONCRETE TOPPING. SEE STRUCTURAL & PRECAST SHOP DRAWINGS FOR ADDITIONAL DETAILS & INFORMATION.
14. NEW STEEL COLUMN. REFER TO STRUCTURAL FOR ADDITIONAL DETAILS & INFORMATION.
15. NEW STEEL ROOF JOIST. REFER TO STRUCTURAL FOR ADDITIONAL DETAILS & INFORMATION.
16. STEEL ROOF BEAM. REFER TO STRUCTURAL FOR ADDITIONAL DETAILS & INFORMATION.
17. FULLY ADHERED 60 MIL GREY TPO OVER 2 LAYERS OF (3.5") (POLYISOCYANURATE) RIGID INSUL. (7 INCHES FOR A MIN. R-40 LTTR) ON STEEL ROOF DECK ON SLOPED STEEL BAR JOIST ROOF STRUCTURE, TYP.
   - ADDITIONAL RIGID INSULATION ABOVE DECK WILL BE REQUIRED TO CREATE DRAINAGE. SEE ROOF SUBCONTRACTOR'S PLANS FOR ALL DETAILS, THE MINIMUM SLOPE IS 1/4" PER FOOT.
   - ROOF MEMBRANE SHALL WARP OVER THE TOP OF THE PARAPET WALL AND THEN DOWN THE THE FRONT FACE.
18. STEEL ANGLE TO SUPPORT ROOF DECK. REFER TO STRUCTURAL FOR ADDITIONAL DETAILS & INFORMATION.
19. A NEW LINTEL WITH NEW CMU WALL CONSTRUCTION WILL NEED TO BE INSTALLED WHERE THE EXISTING WINDOW OPENINGS WERE REMOVED. THE INTENT IS TO ADD NEW CMU AS NEEDED TO BLEND THE NEW WALL CONSTRUCTION IN THE THE EXISTING AND CARRY THE NEW CMU WALL UP TO MATCH THE EXISTING TOP OF WALL AT THE PARAPET. REFER TO THE 1ST FLOOR DEMOLITION PLANS FOR THESE (2) LOCATIONS. THE BOTTOM OF THE NEW WALL CONSTRUCTION SHALL BE 9'-8" AFF. REFER TO STRUCTURAL FOR ADDITIONAL DETAILS & INFORMATION.
20. NEW POURED IN PLACE REINFORCED CONCRETE FLOOR SYSTEM TO BRIDGE THE GAP FROM THE EXISTING BUILDING INTO THE NEW ADDITION. REFER TO STRUCTURAL FOR ADDITIONAL DETAILS & INFORMATION.
21. NEW 1/2" WIDE TEAR-ABLE FOAM EXPANSION MATERIAL WITH APPROPRIATE BACKER ROD AND SEALANT. THIS IS TYPICAL AT FLOOR TO WALL & STEEL COLUMN INTERCEPTS.
22. NEW ELEVATOR AS SELECTED BY THE OWNER. ELEVATOR SHAFT MUST BE BUILT USING DIMENSIONS AND DETAILS FROM OWNER APPROVED SHOP DRAWINGS. THIS INCLUDES BUT IS NOT LIMITED TO THE INTERIOR HOIST WAY DIMENSIONS, ALL PIT DETAILS, SUMP CROCK REQUIREMENTS, HOIST WAY BEAM, ELEVATION DOOR OPENINGS AT BOTH STOPS, TOTAL SHAFT HEIGHT. G.C. TO CONFIRM ALL DETAILS WITH ALL INVOLVED SUB-CONTRACTORS PRIOR TO THE START OF WORK.
   DIMENSIONED SHOWN ON ARCHITECTURAL PLANS ARE FOR GENERAL REFERENCE ONLY.
23. NEW STEEL REINFORCE CONCRETE COLUMN PAD. REFER TO STRUCTURAL ALL ADDITIONAL DETAILS.
24. NEW CONTINUOUS BOND BEAM TO WRAP AROUND THE ELEVATOR SHAFT. REFER TO STRUCTURAL ALL ADDITIONAL DETAILS.
25. END OF PRECAST PLANK TO FILLED SOLID WITH NON-SHRINK GROUT. SEE STRUCTURAL & PRECAST SHOP DRAWINGS FOR ADDITIONAL DETAILS & INFORMATION.
26. NEW PRE-FINISHED EXTERIOR THERMALLY BROKEN ALUMINUM STORE FRONT SYSTEM. ALL FRAMES ARE NOMINALLY SHOWN AT 2" WIDE 4'OR TALL - U.O.N.
27. PROVIDE 3/4" PLYWOOD SHEATHING AS SUBSTRATE FOR GYP. BD. PLYWOOD SHALL EXTEND FROM INSIDE FACE OF STEEL STUD FRAMING TO WITHIN 1/4" OF THE NEW STOREFRONT GLAZING SYSTEM. SET 1/4" FOAM SILL BETWEEN MASONRY WALL AND PLYWOOD. PLYWOOD SHALL ATTACH TO WOOD BUCK SYSTEM THAT LINES ALL 4 SIDES OF THE STEEL STUD FRAMED OPENING. THIS IS TYPICAL AT ALL WINDOWS.
28. DRYWALL RETURN AT INTERIOR SIDES OF WINDOW (HEAD AND JAMB SIDES). PROVIDE 1/4" BACKER ROD AND THE APPROPRIATE SEALANT BETWEEN THE GYP. BD. & ALUMINUM. THIS IS TYPICAL AT ALL WINDOWS.
29. 1/2" THICK SOLID SURFACE, SIMILAR TO CORIAN, INTERIOR WINDOW SILL FULLY ADHERED TO PLYWOOD BACKER. ALL OPTIONS AND SELECTIONS BY OWNER. ALL DETAILS BY MILLWORK CONTRACTOR. THIS IS TYPICAL AT ALL WINDOWS.
30. NEW COMPOSITE STEEL PLATE & STEEL ANGLE WITH ROCK WOOL CAVITY IN-FILL AT TOP OF WALL TO COMPLETE SHAFT CONSTRUCTION. THIS IS SHOWN WITH THE STEEL ANGLE ATTACHED TO THE BOTTOM OF THE DECK STRUCTURE AND PLATE ATTACHED TO THE WALL. THESE SHALL NOT BE CONNECTED TO EACH OTHER TO ALLOW FOR A SLIP JOINT. THE CAVITY SHALL BE COMPLETELY FILLED WITH ROCK WOOL PRIOR THE CLOSURE OF THE CAVITY.
31. NEW 2" RIGID INSULATION AT ALL INTERIOR FACES OF CONCRETE CONSTRUCTION TO PROVIDE FROST PROTECTION AT POURED IN PLACE INSULATION CONCRETE STOOP FOOTING & FOUNDATION SYSTEM.
32. NEW BROOM FINISHED POURED IN PLACE EXTERIOR CONCRETE SIDEWALK. REFER TO CIVIL PLANS FOR ADDITIONAL REQUIREMENTS WHICH MAY INCLUDE DRAINAGE, SLOPE AND CROSS SLOPE. REFER TO STRUCTURAL FOR REINFORCEMENT AND THICKNESS.
33. NEW 2" OF CUT TO FIT RIGID INSULATION (R-Ø) TO FILL GAP BETWEEN CMU AND PRECAST PLANK.
34. NEW PRECAST PLANK IS HELD OFF OF BACK FACE OF EXTERIOR WALL TO ALLOW FOR CONTINUOUS 2" RIGID INSULATION TO PASS-THRU FLOOR SYSTEM.
35. NEW POURED IN PLACE CONCRETE RETAINING WALL WITH CONCRETE FOOTING AND FOUNDATION. REFER TO STRUCTURAL & CIVIL PLANS FOR ALL ADDITIONAL DETAILS. PLEASE NOTE THE TOP OF THE WALL SHALL HAVE A 42" TALL GUARD RAIL. GUARD RAIL DESIGN IS DELEGATED TO THE STEEL SUPPLIER.
36. NEW 1" OF CUT TO FIT RIGID INSULATION (R-Ø) TO FILL GAP CLOSE-OFF WITH APPROPRIATE BACKER ROD AND SEALANT. THIS IS TYPICAL INTERIOR TO EXTERIOR SLAB ON GRADE CONCRETE.
37. STAIR A - (GROUND FLR UP TO MID-RISE LANDING)
    NEW CONCRETE FILLED STEEL PAN STAIR WITH DUAL HEIGHT (1-1/2") DIAMETER HAND RAILS ON BOTH SIDES.
    TOTAL RUN IS 11'-11" OVER A 7'-Ø" RISE.
    (13) TREADS AT 11" EACH OVER (14) RISERS AT 6" EACH.
    STAIR, HAND RAIL & GUARD RAIL DESIGN IS DELEGATED TO THE STEEL SUPPLIER.
    THIS FLOOR PLAN IS DRAWN WITH 1-1/2 WIDE CHANNEL STEEL AS THE STAIR STRINGER ON BOTH SIDE OF THE STAIR AS WELL AS THE LANDINGS AT THE 1ST FLOOR LEVEL AND THE MID-LANDING.
38. STAIR A - (1ST FLR DOWN TO MID-RISE LANDING)
    NEW CONCRETE FILLED STEEL PAN STAIR WITH DUAL HEIGHT (1-1/2") DIAMETER HAND RAILS ON BOTH SIDES.
    TOTAL RUN IS 6'-5" OVER A 4'-Ø" RISE.
    (7) TREADS AT 11" EACH OVER (8) RISERS AT 6" EACH.
    STAIR, HAND RAIL & GUARD RAIL DESIGN IS DELEGATED TO THE STEEL SUPPLIER.
    THIS FLOOR PLAN IS DRAWN WITH 1-1/2 WIDE CHANNEL STEEL AS THE STAIR STRINGER ON BOTH SIDE OF THE STAIR AS WELL AS THE LANDINGS AT THE 1ST FLOOR LEVEL AND THE MID-LANDING.
39. NEW DUAL HEIGHT (1-1/2") DIAMETER HAND RAILS ON BOTH SIDES AND RETURN BACK TO WALL.
    UPPER HAND RAIL SHALL BE SET AT 36" AFF.
    LOWER HAND RAIL SHALL BE SET AT 24" AFF.
    GUARD RAIL BE SET AT 42" AFF.
    PANEL DESIGN IS DELEGATED TO THE STEEL SUPPLIER.
    THE OUTSIDE HAND RAILS SHALL TYPICALLY EXTEND 12" FROM THE BOTTOM OF THE STAIR RUN AND 12" FROM THE TOP OF THE STAIR RUN.
    THE INSIDE HAND RAILS SHALL TYPICALLY BE CONTINUOUS FROM THE TOP OF THE STAIR TO THE BOTTOM OF THE STAIR AS IS FOLLOWS THE CENTER STAIR WALL ONCE AT THE TOP IT SHALL ONLY NEED TO EXTEND 12" OF THAT STAIR RUN AND ONCE AT THE VERY BOTTOM EXTEND 23" BEYOND THE BOTTOM OF THE STAIR RUN. HAND RAILS SHALL TURN 90° AND TERMINATE INTO THE WALL AT THE APPROPRIATE POINTS. HAND RAIL & GUARD RAIL DESIGN IS DELEGATED TO THE STEEL SUPPLIER. REFER TO ENLARGED STAIR PLANS FOR ADDITIONAL INFORMATION, TYPICAL. GRAPHIC IS NOT SHOWN FOR DRAWING CLARITY.
40. COATED CONTINUOUS STEEL PLATE, BENT AS NEEDED, TO ATTACH TO PRECAST PLANK, ACT AS FOUR STOP, 4" KICK PLATE, AND CONNECTIVE MEMBER FOR 42" TALL GUARD RAIL.
41. ENCLOSED NON-COMBUSTIBLE SPACE.
42. HEAD OF WINDOW SHALL BE SET IN, STAINLESS STEEL BRAKE-METAL HEAD FLASHING, HEM EXPOSED EDGES, GAUGE AND PROFILE PER SUPPLIER. END DAM & REAR DAMS OF FLASHING SHALL BE PROFILED AND EXTEND PER APPROPRIATE RECOMMENDATION TO PREFINISHED THERMALLY BROKEN EXTRUDED ALUMINUM HEAD RECEPTOR. STAINLESS FINISH SELECTED BY OWNER, GAUGE AND PROFILE PER SUPPLIER, PROVIDE SHIMS, BACKER ROD, AND SEALANT PER MFG. INSTALLATION INSTRUCTIONS INSIDE AND OUT, TYPICAL AT HEAD, SILL, AND JAMBS. (PROVIDE PER INDUSTRY STANDARDS.)
43. NEW WALL LADDER SHALL BE SIMILAR TO O'KEEFFE'S INC 503 ACCESS LADDER.
44. NEW PRE-FINISHED EXTERIOR THERMALLY BROKEN ALUMINUM AND GLASS STOREFRONT ENTRY DOOR SYSTEM. ALL FRAMES ARE NOMINALLY SHOWN AT 2" WIDE 4'OR TALL - U.O.N.
45. APPROXIMATE TOP OF FINISHED ROOF ASSEMBLY AT INSIDE FACE OF NORTH AND SOUTH PERIMETER WALLS, SHOWN FOR GENERAL REFERENCE.
46. NEW STEEL BEAM WITH STUD HEAD AT THE TOP OF THE BEAM AND GALVANIZED STEEL PLATE AT THE BOTTOM. REFER TO STRUCTURAL PLANS FOR ALL INFORMATION.
47. CONTINUOUS PERM-A-BARRIER INSTALLED AS HIGH AS POSSIBLE TO THE INSIDE FACE OF THE WEB OF THE STEEL BEAM. IF POSSIBLE THE TOP OF THE PERM-A-BARRIER TO BE FINISHED WITH A TERMINATION BAR. CONTINUOUS PERM-A-BARRIER TO LAP OVER THE STAINLESS STEEL FLASHING THAT IS INSTALLED ABOVE THE STEEL PLATE. PROVIDE NEW CUTTON WEEPS AT 32" O.C. MIN.
48. SILL OF WINDOW SHALL BE SET IN, PREFINISHED THERMALLY BROKEN EXTRUDED ALUMINUM SILL FLASHING SET IN 3 BEADS CONTINUOUS SEALANT AS NEEDED TO PRE-FINISHED BRAKE-METAL SILL FLASHING DRIP FLASHING AND SHIMS. HEM EXPOSED EDGES, GAUGE AND PROFILE PER SUPPLIER. END DAM & REAR DAMS OF FLASHING SHALL BE PROFILED AND EXTEND PER APPROPRIATE RECOMMENDATIONS. PROVIDE UNBLOCKED WEEPS AS REQUIRED PER STOREFRONT MFG. INSTALLATION INSTRUCTIONS. PROVIDE SHIMS, BACKER ROD, AND SEALANT PER MFG. INSTALLATION INSTRUCTIONS INSIDE AND OUT. TYPICAL AT HEAD, SILL, AND JAMBS. (PROVIDE PER INDUSTRY STANDARDS.)
49. ADA COMPLIANT THRESHOLD SHALL BE SET IN 3 BEADS CONTINUOUS SEALANT AND AS RECOMMENDED BY MANUFACTURER'S WRITTEN GUIDELINES. PROVIDE SHIMS, BACKER ROD, AND SEALANT PER MFG. INSTALLATION INSTRUCTIONS INSIDE AND OUT. TYPICAL AT HEAD, SILL, AND JAMBS. (PROVIDE PER INDUSTRY STANDARDS.)
50. NEW 8" TALL CMU BAND.
51. NEW METAL COPING SIMILAR TO METAL-ERA, CREATIVE DESIGN LEAK-TITE COPING. FOLLOW MANUFACTURER'S WRITTEN GUIDELINES FOR ALL DETAILS AND REQUIREMENTS. COLOR MATCH TO EXISTING. MATCH HEIGHT OF ANGLED ROOF THAT IS ON MID-HEIGHT ON THE TOWER ELEMENT, THIS IS 1 TWICE AS TALL AS THE TYPICAL COPING. ALL DETAILING BY ROOFING SUB-CONTRACTOR.

BUILDING AND WALL SECTION NOTES SCALE: N/A — 1

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–	03/01/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC
–	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

Project:

Fox River Congregational Church
N34W23575 Capitol Drive
City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11325 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:
BUILDING & WALL SECTION NOTES

THIS BOX IS 2" x 2"

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Sheet: **A3.0**

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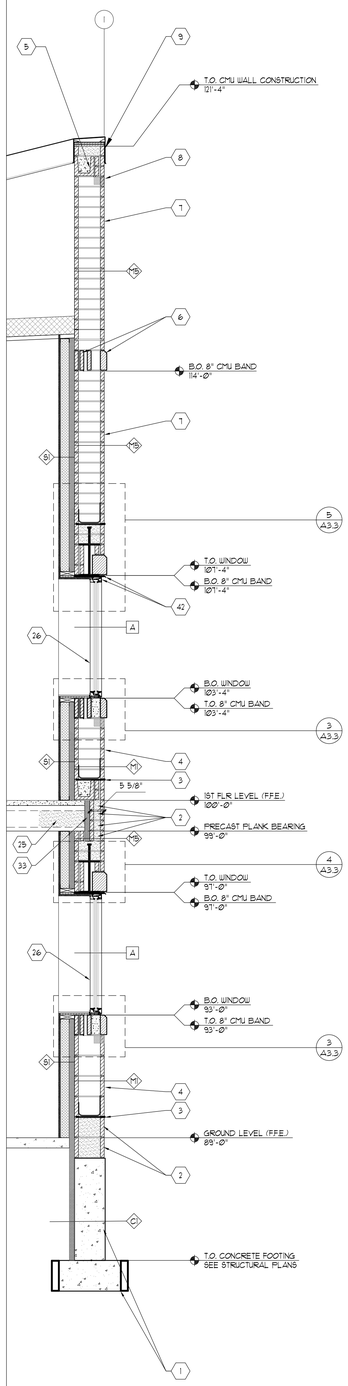
FILE NAME: P:_PROJECTS\FOX RIVER CONGREGATION\A300_FOXRIVER.DWG

PLOT DATE: 4/7/2023 12:22:16 PM

GENERAL NOTE
1. SEE DETAIL 1 ON SHEET A0.1 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A0.1 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A0.1 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A0.1 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS 1/1-4.1 ON SHEET A0.3 FOR WALL TYPE INFORMATION.
6. REFER TO DETAIL 1 ON SHEET A3.0 FOR SECTION KEYED NOTES.



WALL SECTION
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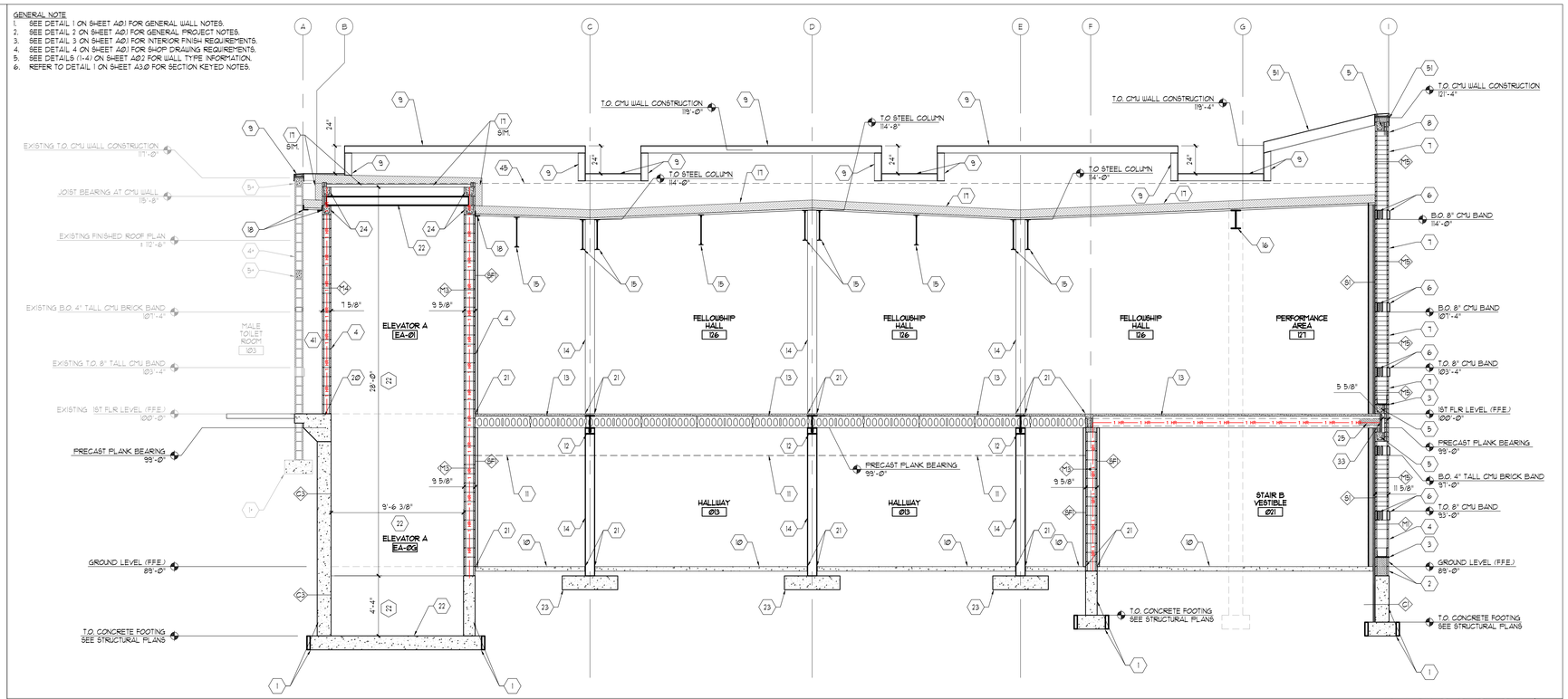

BULDING SECTION
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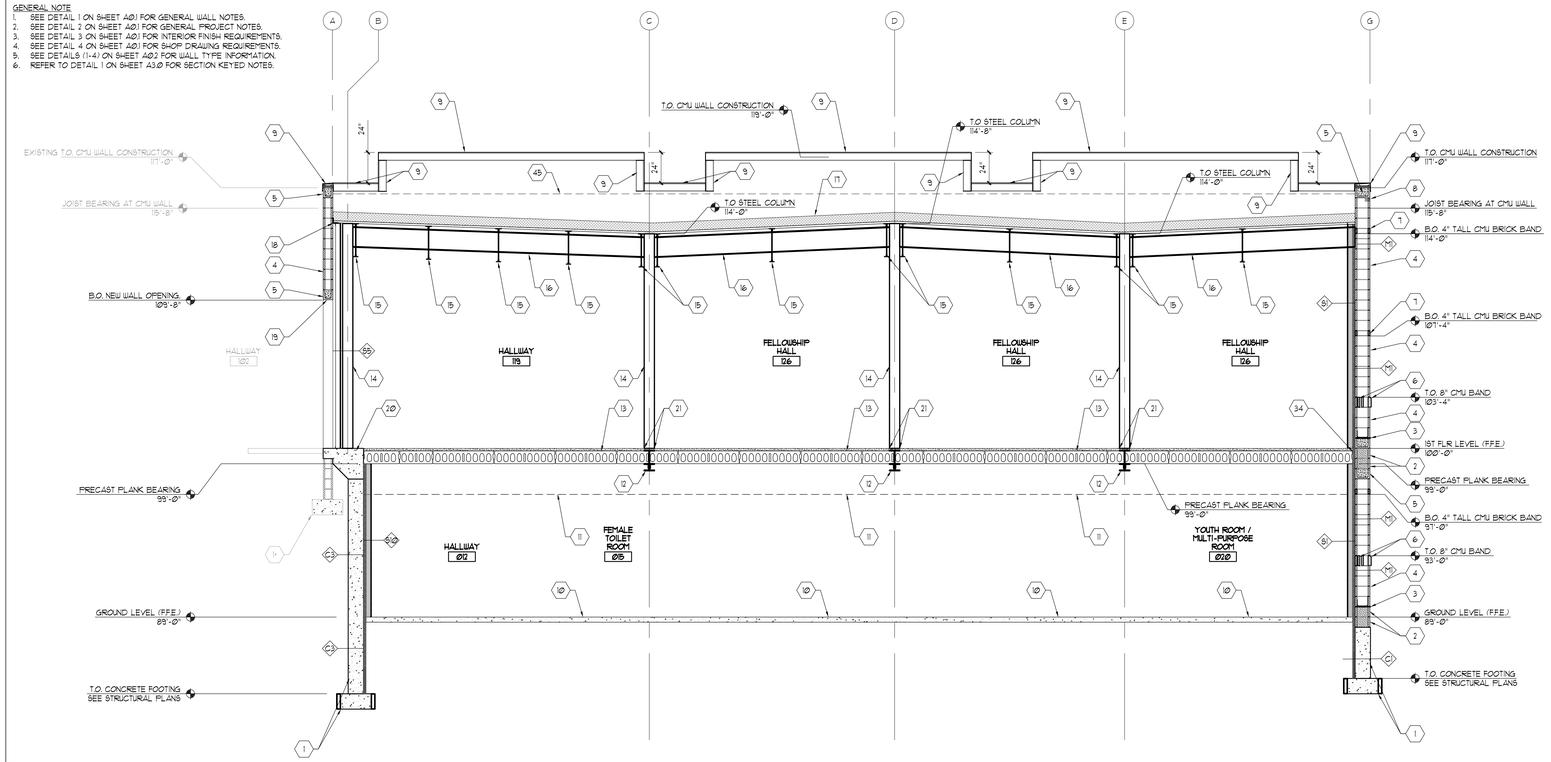

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Project:

Fox River Congregational Church

N34W23575 Capitol Drive
City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11525 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:

BUILDING SECTIONS

THIS BOX IS 1/2" x 1/2"

Date: 04/10/23
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A3.1

FILE NAME: P:_ PROJECTS\FOX RIVER CONGREGATION\A3.01_FOXRIVER.DWG

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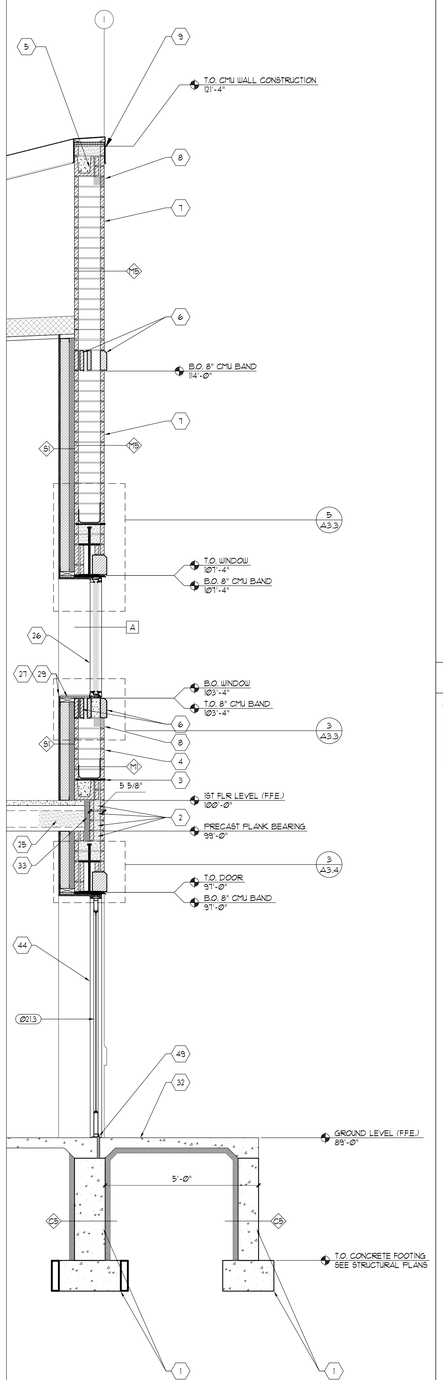
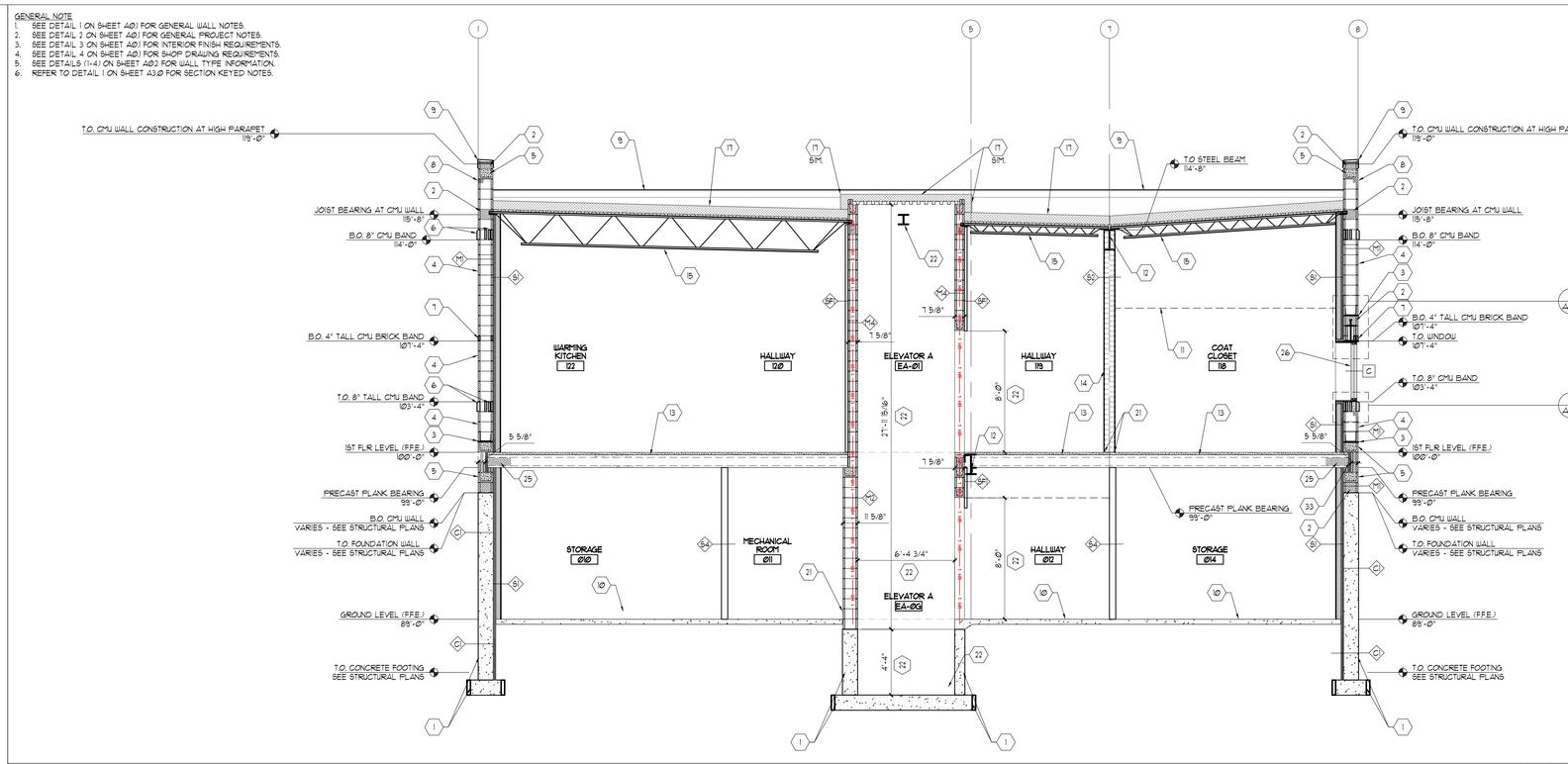
GENERAL NOTE
1. SEE DETAIL 1 ON SHEET A0.1 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A0.1 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A0.1 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A0.1 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS (1-4) ON SHEET A0.3 FOR WALL TYPE INFORMATION.
6. REFER TO DETAIL 1 ON SHEET A3.0 FOR SECTION KEYED NOTES.



WALL SECTION
SCALE: 1/2" = 1'-0" | 3

GENERAL NOTE
1. SEE DETAIL 1 ON SHEET A0.1 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A0.1 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A0.1 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A0.1 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS (1-4) ON SHEET A0.3 FOR WALL TYPE INFORMATION.
6. REFER TO DETAIL 1 ON SHEET A3.0 FOR SECTION KEYED NOTES.



BULDING SECTION
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GENERAL NOTE
1. SEE DETAIL 1 ON SHEET A0.1 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A0.1 FOR GENERAL PROJECT NOTES.
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4. SEE DETAIL 4 ON SHEET A0.1 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS (1-4) ON SHEET A0.3 FOR WALL TYPE INFORMATION.
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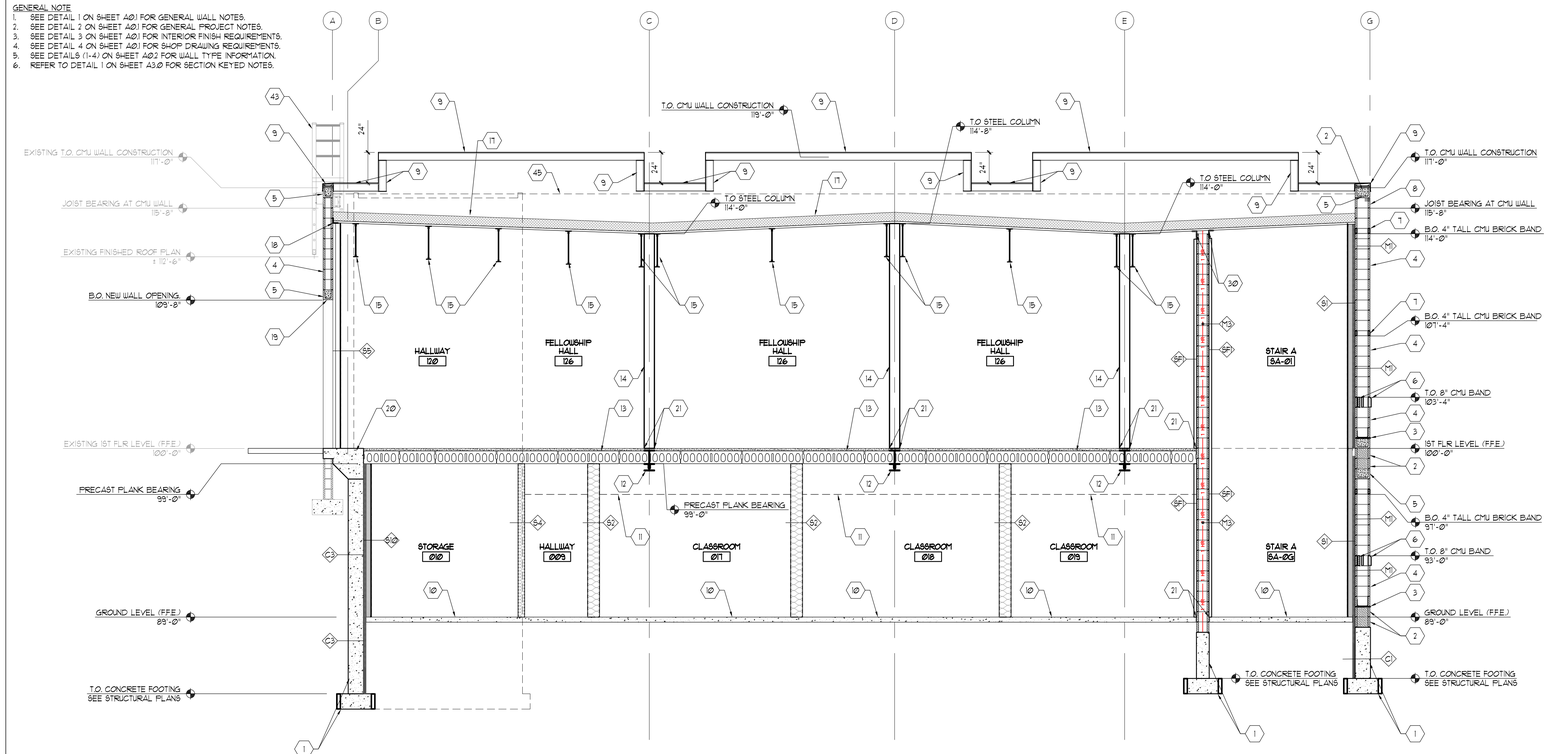

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Project:

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City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11525 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:
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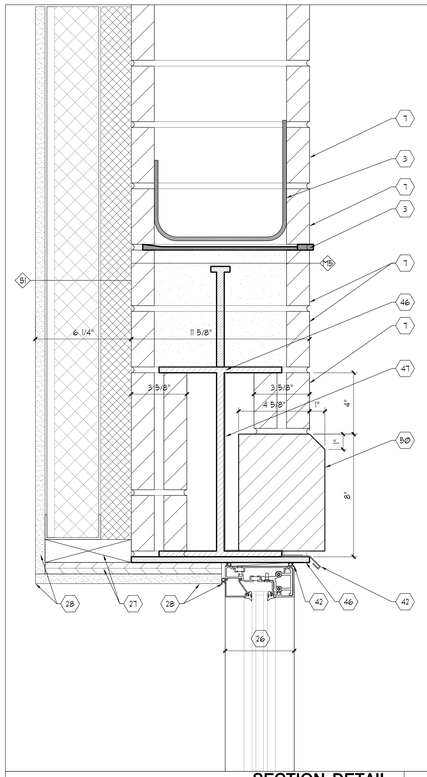
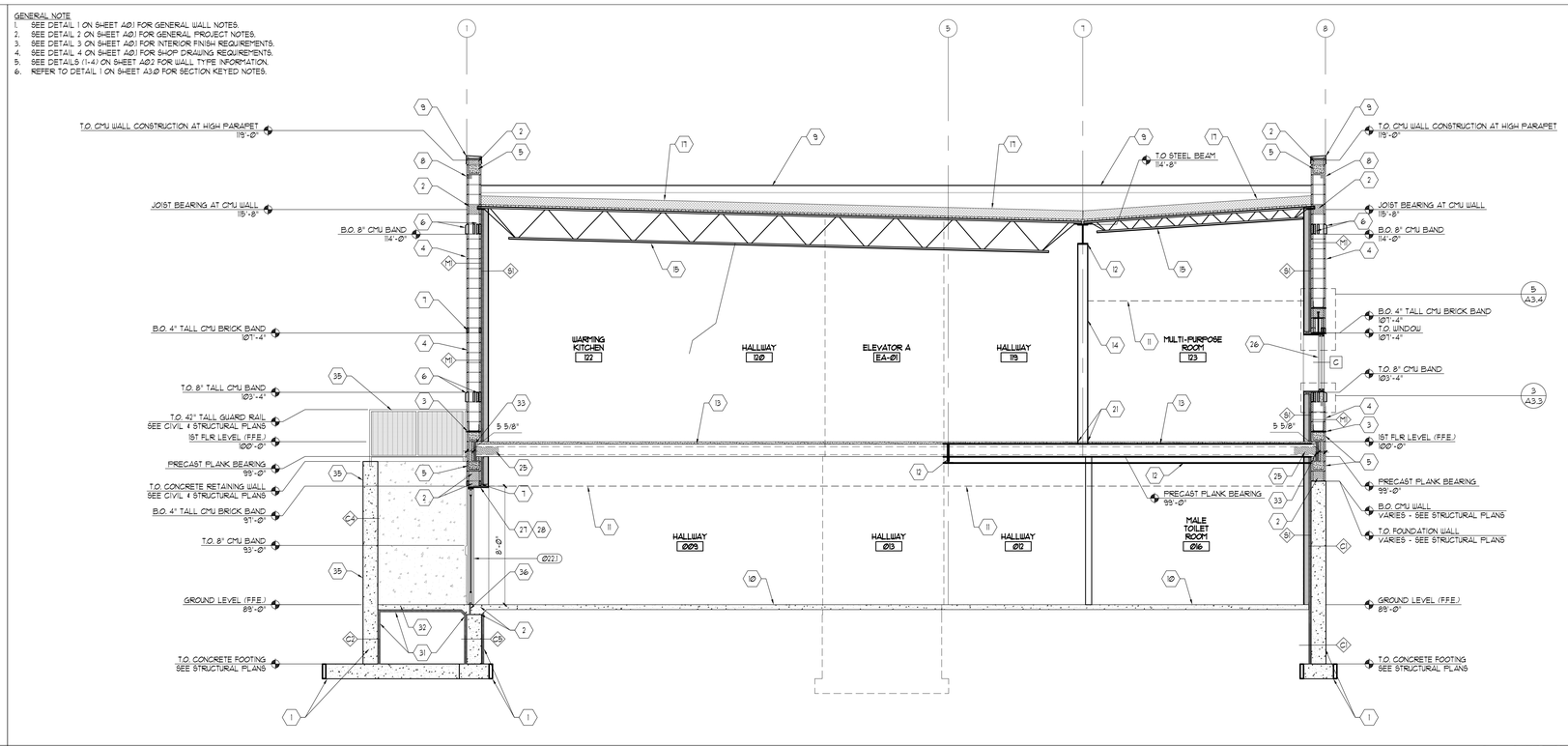


SECTION DETAIL 5
SCALE: 3" = 1'-0"

GENERAL NOTE
1. SEE DETAIL 1 ON SHEET A01 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A01 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A01 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A01 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS 1-1-41 ON SHEET A03 FOR WALL TYPE INFORMATION.
6. REFER TO DETAIL 1 ON SHEET A3.0 FOR SECTION KEYED NOTES.



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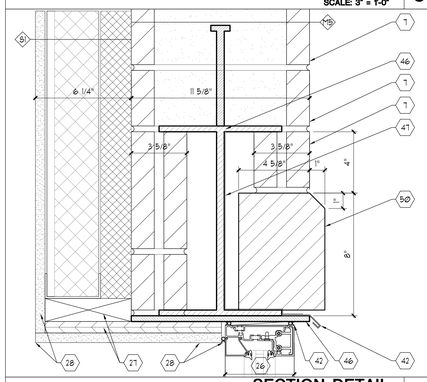
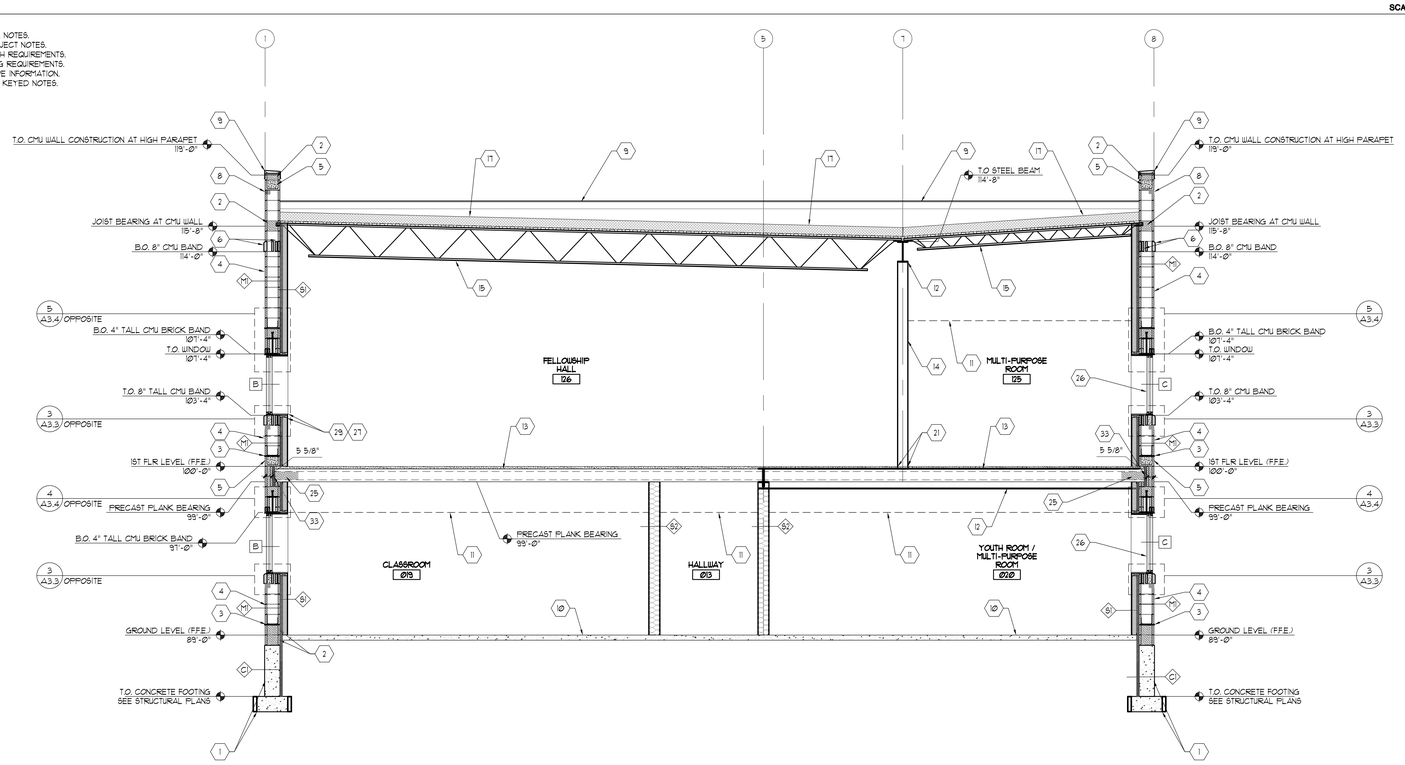


SECTION DETAIL 4
SCALE: 3" = 1'-0"

GENERAL NOTE
1. SEE DETAIL 1 ON SHEET A01 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A01 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A01 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A01 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS 1-1-41 ON SHEET A03 FOR WALL TYPE INFORMATION.
6. REFER TO DETAIL 1 ON SHEET A3.0 FOR SECTION KEYED NOTES.



BULDING SECTION 1
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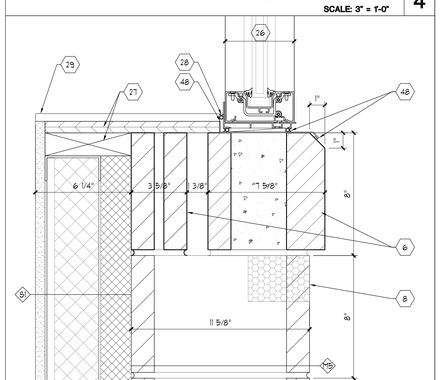

SECTION DETAIL 3
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Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:

BUILDING SECTIONS

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Date:	04/10/23
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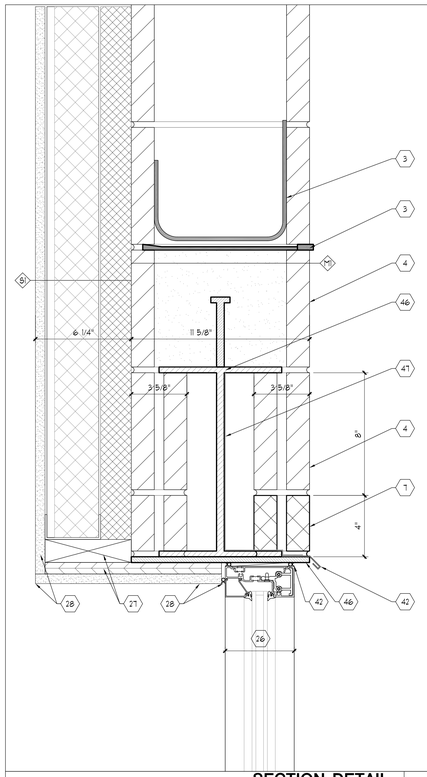
Drawn:	WHC
Job:	23-001
Sheet:	A3.3

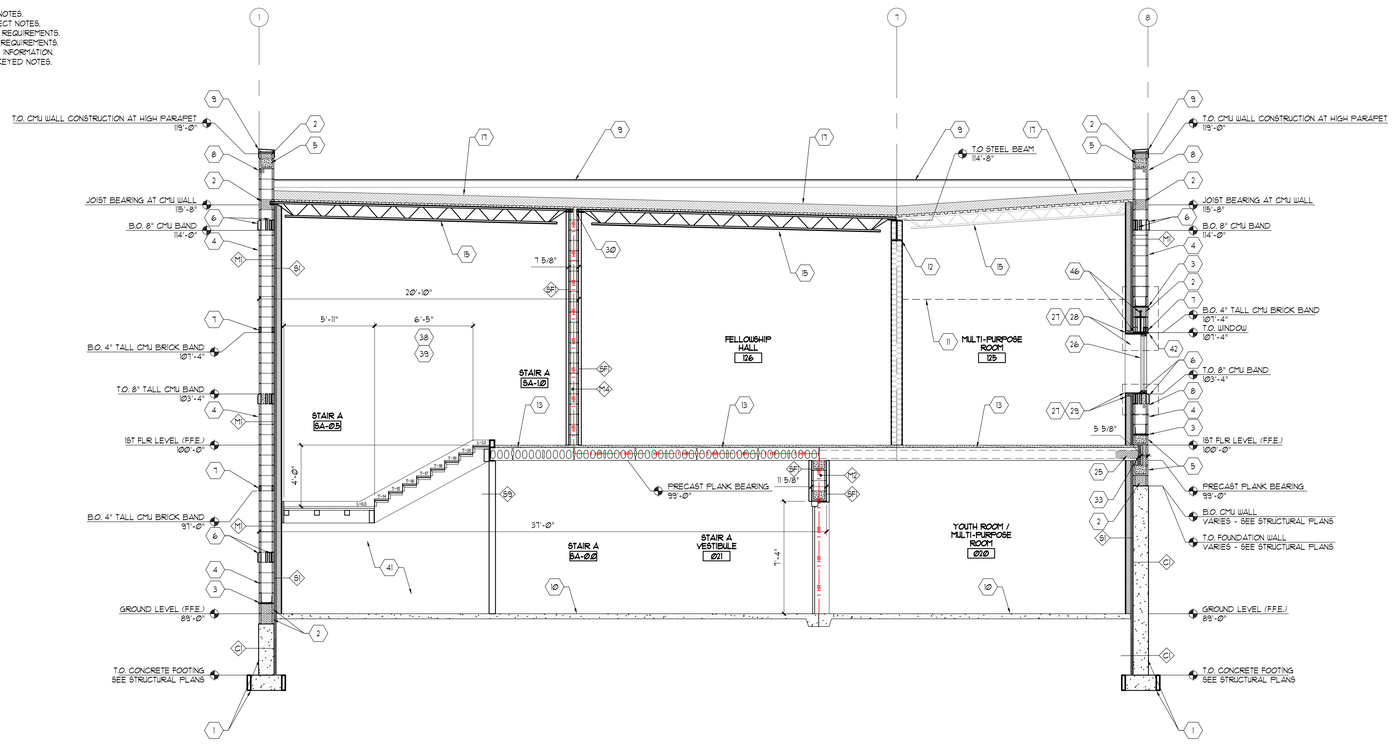
FILE NAME: P:_ PROJECTS\FOX RIVER CONGREGATION\A303_FOXRIVER.DWG

PLOT DATE: 4/7/2023 122354 PM

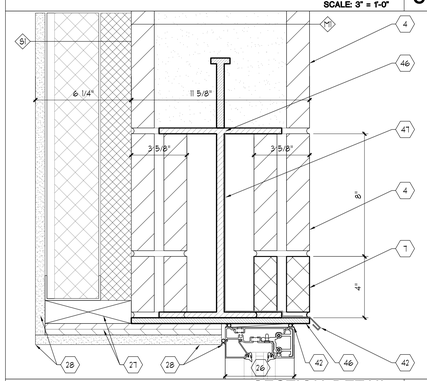


SECTION DETAIL 5
SCALE: 3" = 1'-0"

GENERAL NOTE
1. SEE DETAIL 1 ON SHEET A01 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A01 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A01 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A01 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS 1-1-A1 ON SHEET A03 FOR WALL TYPE INFORMATION.
6. REFER TO DETAIL 1 ON SHEET A3.0 FOR SECTION KEYED NOTES.

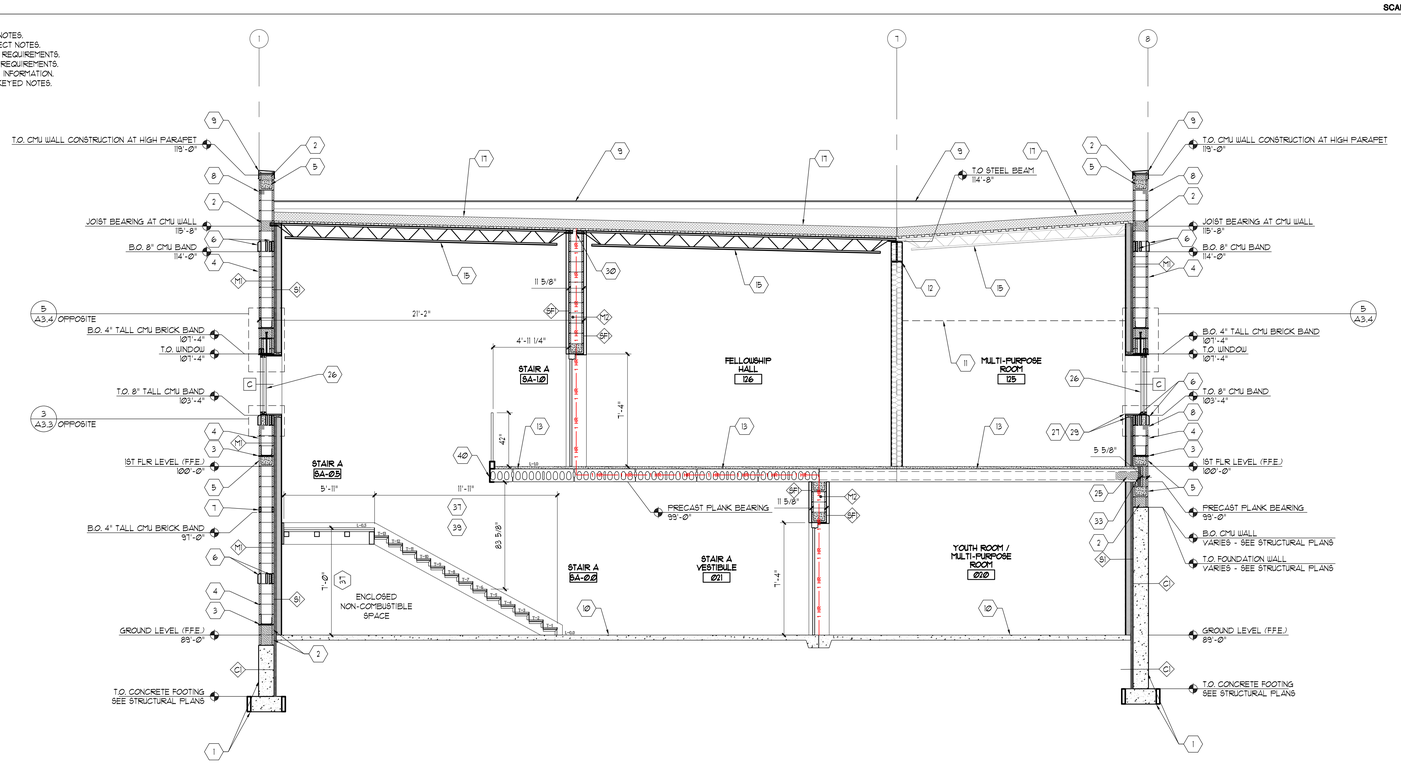


BULDING SECTION 2
SCALE: 1/4" = 1'-0"

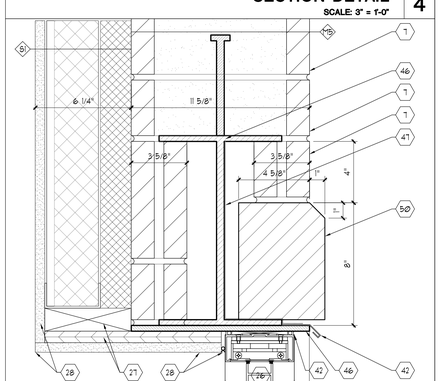


SECTION DETAIL 4
SCALE: 3" = 1'-0"

GENERAL NOTE
1. SEE DETAIL 1 ON SHEET A01 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A01 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A01 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A01 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS 1-1-A1 ON SHEET A03 FOR WALL TYPE INFORMATION.
6. REFER TO DETAIL 1 ON SHEET A3.0 FOR SECTION KEYED NOTES.



BULDING SECTION 1
SCALE: 1/4" = 1'-0"



SECTION DETAIL 3
SCALE: 3" = 1'-0"

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REV. #	REV. DATE	DESCRIPTION	REV. BY:
-	03/01/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC
-	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

Project:

Fox River Congregational Church

N34W23575 Capitol Drive
City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11525 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:

BUILDING SECTIONS

THIS BOX IS 2" x 2"

Date: 04/10/23
Scale: A.N.
Drawn: WHC
Job: 23-001
Sheet: A3.4

FILE NAME: P:_ PROJECTS\FOX RIVER CONGREGATION\A304_FOXRIVER.DWG

PLOT DATE: 4/7/2023 12:24:28 PM

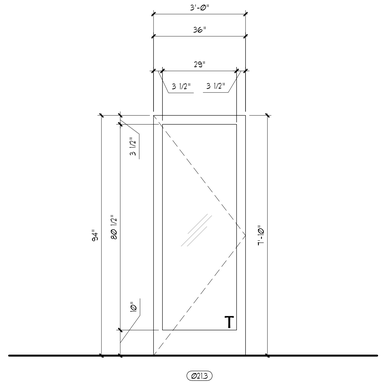
DOOR HARDWARE INFORMATION 5
SCALE: 1/2" =1'-0"

DOOR & FRAME INFORMATION 4
SCALE: 1/2" =1'-0"

RATED DOOR & FRAME INFORMATION 3
SCALE: 1/2" =1'-0"

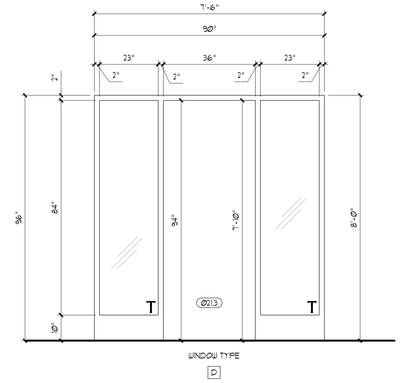
STOREFRONT ENTRY DOOR SYSTEM 2
SCALE: 1/2" =1'-0"

ALL FRAMES ARE NOMINALLY SHOWN AT 2" WIDE +/OR TALL - U.O.N.
EXTERIOR THERMALLY BROKEN ALUMINUM STORE FRONT SYSTEM
SHOWN AS KAWNEER TRIFAB 451 UT FRAMING SYSTEM +
DOUBLE PANE - LOW E WITH TEMPERED SAFETY GLAZING AS DENOTED WITH A (T)
FRAME COLOR: SELECTION BY OWNER
GLASS COLOR & TYPE: CLEAR (SOLAR BAN 60)
MINIMUM U-FACTOR = Ø.36
MINIMUM SHGC = Ø.4Ø
GLAZING CONTRACTOR TO PROVIDE RECOMMENDED KAWNEER GLAZING SYSTEM. IF DIFFERENT ALONG WITH PERFORMANCE AND COST COMPARISONS, OR CONFIRMATION OF SELECTED SYSTEM AS THEIR RECOMMENDED SYSTEM, ALONG WITH THEIR OWN THERMAL PERFORMANCE CALCULATIONS AS A PART OF THEIR BID. THIS ALSO INCLUDES THE ASSOCIATED STORE FRONT VESTIBULE SYSTEMS AND DOOR SYSTEMS.
ALL OPENINGS MUST BE FIELD MEASURED / VERIFIED BY SUB-CONTRACTOR PRIOR TO THE SUBMISSION OF ANY SHOP DRAWINGS.

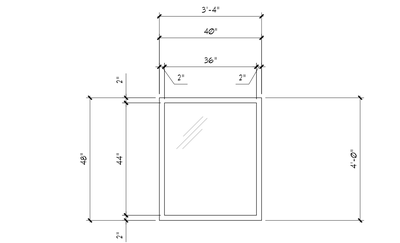


STOREFRONT WINDOW SYSTEM 1
SCALE: 1/2" =1'-0"

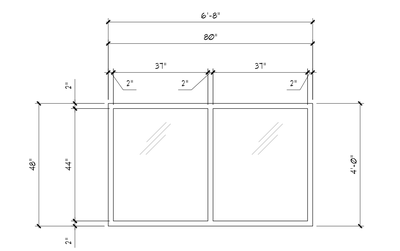
ALL FRAMES ARE NOMINALLY SHOWN AT 2" WIDE +/OR TALL - U.O.N.
EXTERIOR THERMALLY BROKEN ALUMINUM STORE FRONT SYSTEM
SHOWN AS KAWNEER TRIFAB 451 UT FRAMING SYSTEM +
DOUBLE PANE - LOW E WITH TEMPERED SAFETY GLAZING AS DENOTED WITH A (T)
FRAME COLOR: SELECTION BY OWNER
GLASS COLOR & TYPE: CLEAR (SOLAR BAN 60)
MINIMUM U-FACTOR = Ø.36
MINIMUM SHGC = Ø.4Ø
GLAZING CONTRACTOR TO PROVIDE RECOMMENDED KAWNEER GLAZING SYSTEM. IF DIFFERENT ALONG WITH PERFORMANCE AND COST COMPARISONS, OR CONFIRMATION OF SELECTED SYSTEM AS THEIR RECOMMENDED SYSTEM, ALONG WITH THEIR OWN THERMAL PERFORMANCE CALCULATIONS AS A PART OF THEIR BID. THIS ALSO INCLUDES THE ASSOCIATED STORE FRONT VESTIBULE SYSTEMS AND DOOR SYSTEMS.
ALL OPENINGS MUST BE FIELD MEASURED / VERIFIED BY SUB-CONTRACTOR PRIOR TO THE SUBMISSION OF ANY SHOP DRAWINGS.



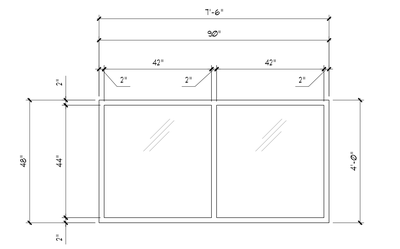
WINDOW TYPE
D



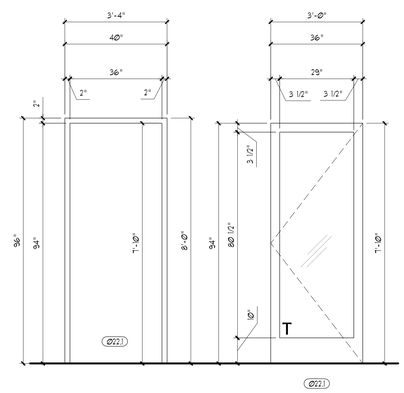
WINDOW TYPE
C



WINDOW TYPE
B



WINDOW TYPE
A



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–	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

REV. #	REV. DATE	DESCRIPTION	REV. BY:

Project:

Fox River Congregational Church

N34W23575 Capitol Drive
City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11525 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:

DOOR & WINDOW INFORMATION

THIS BOX IS 2" x 2"

Date: 04/10/23
Scale: A.N.
Drawn: WHC
Job: 23-001
Sheet:

A4.1

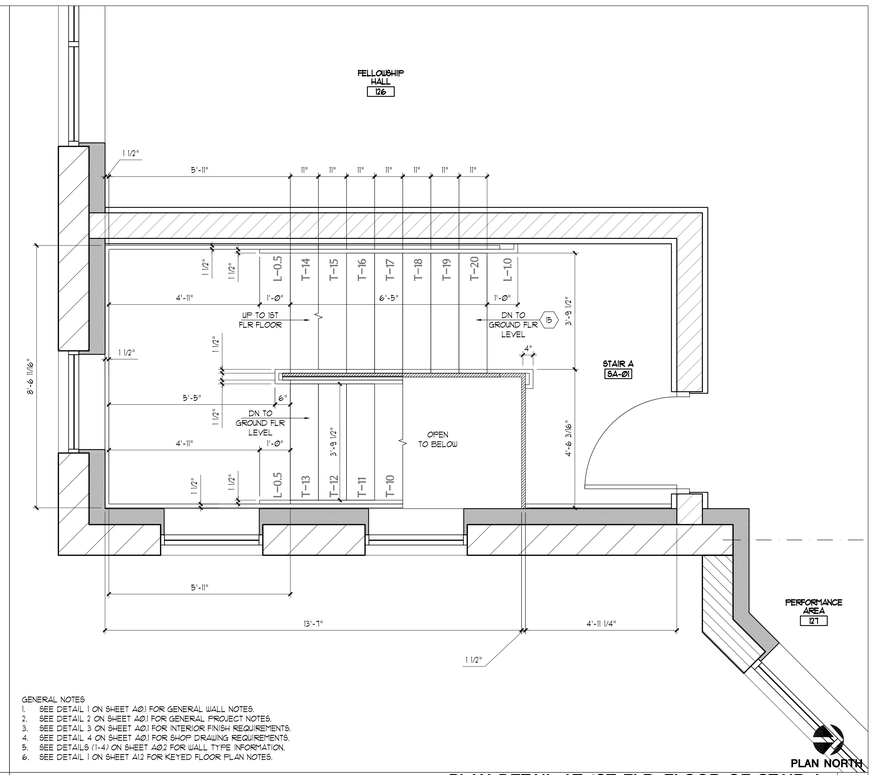
FILE NAME: P:_ PROJECTS\FOX RIVER CONGREGATION\A401_FOXRIVER.DWG

PLOT DATE: 4/7/2023 1:16:0 PM

NOT USED 5
SCALE: N/A

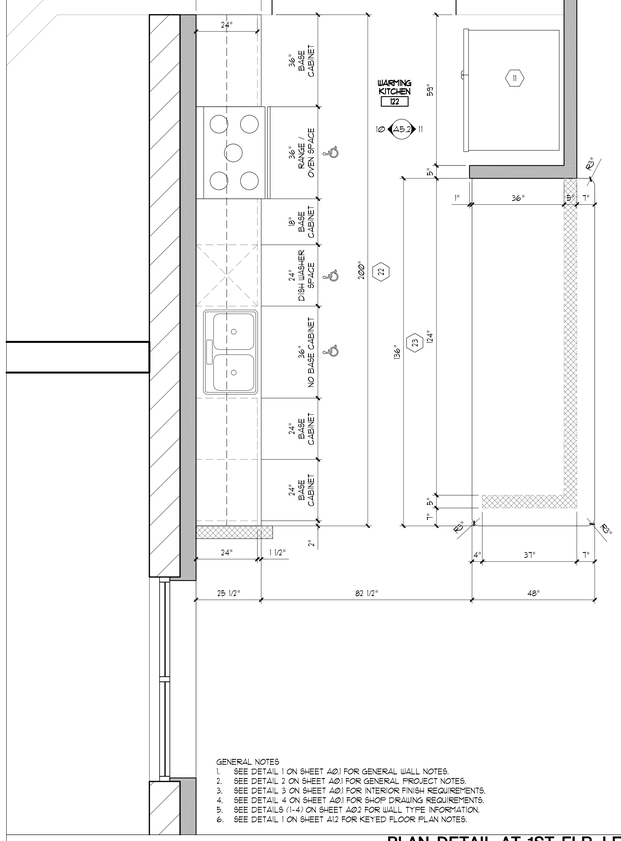
NOT USED 3
SCALE: N/A

PLAN DETAIL AT 1ST FLR. FLOOR OF STAIR A 2
SCALE: 1/2" =1'-0"



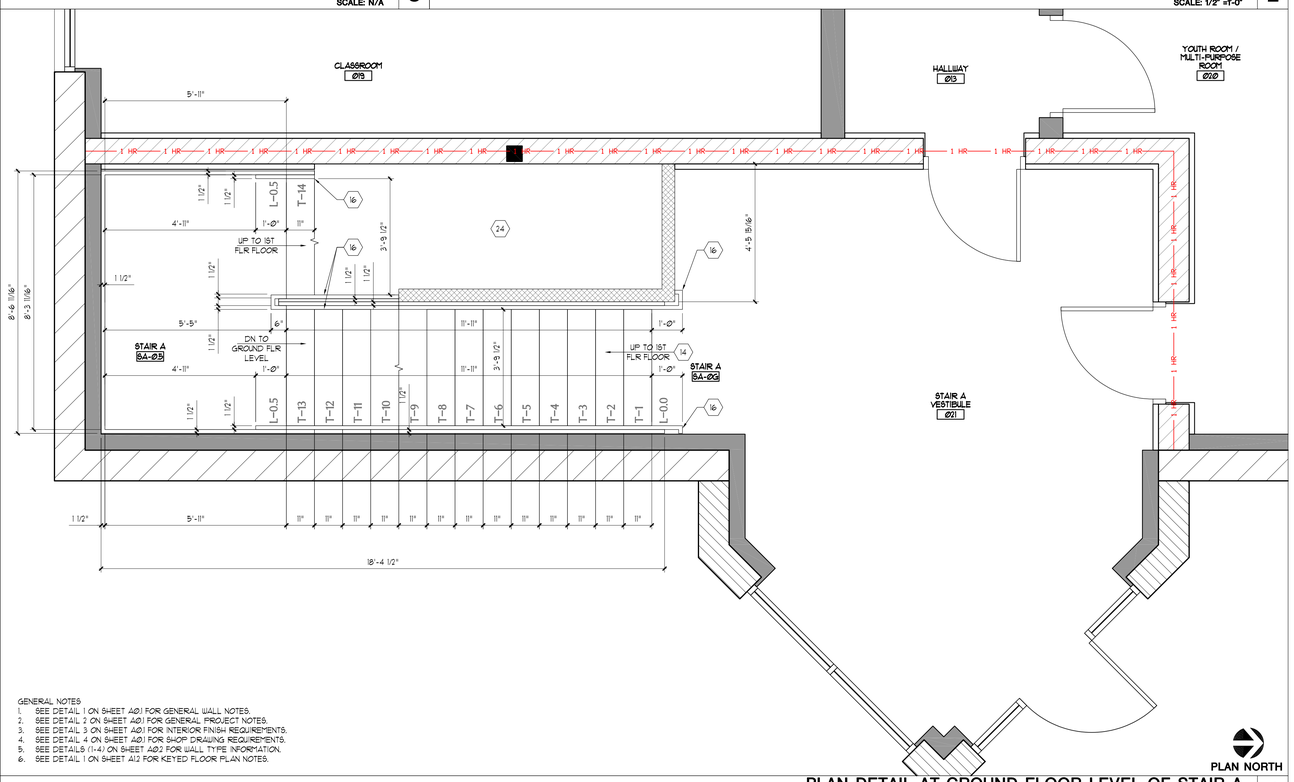
GENERAL NOTES
1. SEE DETAIL 1 ON SHEET A01 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A01 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A01 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A01 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS (1-4) ON SHEET A02 FOR WALL TYPE INFORMATION.
6. SEE DETAIL 1 ON SHEET A12 FOR KEYED FLOOR PLAN NOTES.

PLAN DETAIL AT 1ST FLR. LEVEL WARMING KITCHEN 4
SCALE: 1/2" =1'-0"



GENERAL NOTES
1. SEE DETAIL 1 ON SHEET A01 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A01 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A01 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A01 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS (1-4) ON SHEET A02 FOR WALL TYPE INFORMATION.
6. SEE DETAIL 1 ON SHEET A12 FOR KEYED FLOOR PLAN NOTES.

PLAN DETAIL AT GROUND FLOOR LEVEL OF STAIR A 1
SCALE: 1/2" =1'-0"



GENERAL NOTES
1. SEE DETAIL 1 ON SHEET A01 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A01 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A01 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A01 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS (1-4) ON SHEET A02 FOR WALL TYPE INFORMATION.
6. SEE DETAIL 1 ON SHEET A12 FOR KEYED FLOOR PLAN NOTES.

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-	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

Project:

Fox River Congregational Church
N34W23575 Capitol Drive
City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11325 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:
DETAILS

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Date: 04/10/23
Scale: A.N.
Drawn: WHC
Job: 23-001
Sheet:
A5.1

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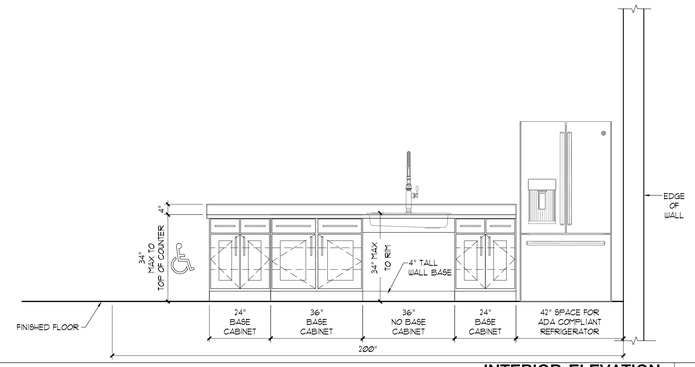
FILE NAME: P:_PROJECTS\FOX RIVER CONGREGATION\A50_FOXRIVER.DWG

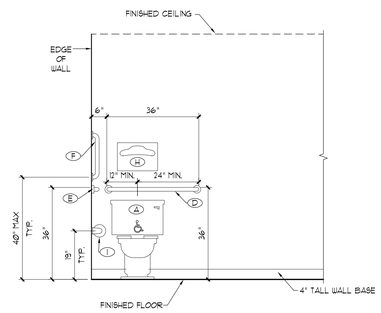
PLOT DATE: 4/7/2023 1:13:10 PM

GENERAL NOTE
1. ALL SELECTIONS BY OWNER.



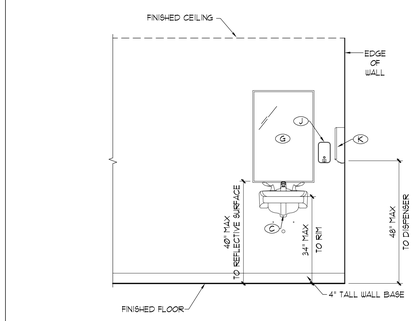
INTERIOR ELEVATION 12
SCALE: 1/2"=1'-0"

GENERAL NOTE
1. REFER TO DETAIL 2 ON THIS SHEET FOR KEYED NOTES.



INTERIOR ELEVATION 8
SCALE: 1/2"=1'-0"

GENERAL NOTE
1. REFER TO DETAIL 2 ON THIS SHEET FOR KEYED NOTES.



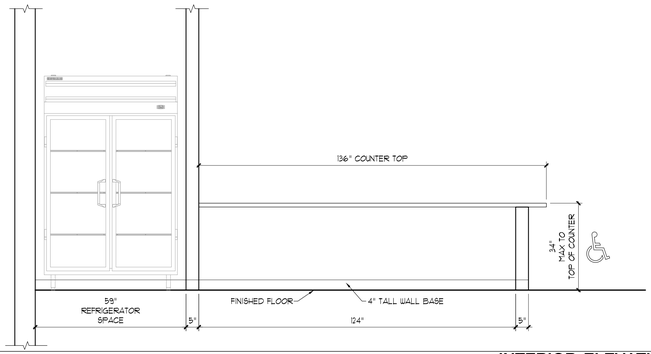
INTERIOR ELEVATION 4
SCALE: 1/2"=1'-0"

GENERAL KEY EQUIPMENT & FIXTURE NOTES:
1. EQUIPMENT & FIXTURES GRAPHICS ARE SHOWN AS GENERAL REFERENCE AND MAY NOT REPRESENT THE EXACT MODEL.
2. ALL EQUIPMENT / FIXTURES AND ACCESSORIES MUST BE APPROVED BY OWNER.
3. ITEMS WITH AN (+) ARE FUTURE ACCESSORIES, PROVIDE IN-WALL BLOCKING AS NEEDED.
3. ANY AND ALL ACCESSORY SUBSTITUTIONS SHALL BE APPROVED BY OWNER, PRIOR TO SHOP DRAWING REVIEW.
4. ALL FIXTURES TO BE DESIGNED BY PLUMBER AND APPROVED BY OWNER. REFER TO PLUMBERS INFORMATION.
5. G.C. TO REVIEW LOCATIONS OF ALL ITEMS WITH THE OWNER/PLUMBING CONTRACTOR & FURNISH AND INSTALL ANY NECESSARY BLOCKING.
6. G.C. TO SEAL ALL GROUT IN TOILET ROOMS
7. REFER TO ANSI A117.1 GUIDELINES FOR STANDARD MOUNTING HEIGHTS.

KEYED NOTES:

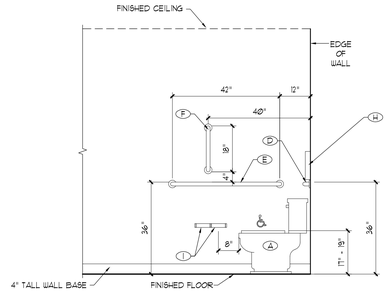
(A)	ADA COMPLIANT FLOOR MOUNTED TOILET WITH ADA COMPLIANT SEAT	
(B)	FEMININE NAPKIN DISPOSAL	MODEL: BOBRICK B-270 (7-1/2" x 10" x 3-13/16")
(C)	ADA COMPLIANT HAND WASHING STATION, WHICH SHALL HAVE THE FOLLOWING: WALL MOUNTED SINK WITH IN-WALL STEEL MOUNTING BRACKETS, UNDER SINK PLUMBING PIPE PROTECTION, SOAP DISPENSER, PAPER HAND TOWEL DISPENSER, ALL SHALL BE MOUNTED PER ADA GUIDELINES. WALL MOUNTED SINK WITH ADA COMPLIANT LEVER HANDLE ADA COMPLIANT PROTECTIVE WRAP OVER EXPOSED PLUMBING (BELOW) SIMILAR TO JUREN PLASTIC LAVATORY (VANDAL GUARD / SHIELD (MODEL 16900-VG) AMERICAN STANDARD LUCERNE MODEL 0355.012 WITH 4" CENTERS MOUNTED ON WATTS DRAINAGE PRODUCTS (CA-411-WC) FLOOR MOUNTED CONCEALED ARM LAVATORY CARRIER WITH HEAVY GAUGE STEEL UPRIGHTS WITH INTEGRAL WELDED FEET, ADJUSTABLE EPOXY SCREWS AND BASIN LOCKING DEVICE, UPPER ROD AND PLATED HARDWARE.	
(D)	1 1/2" DIA, 36" GRAB BAR, TYP.	MODEL: BOBRICK B-6806.99 x 36
(E)	1 1/2" DIA, 42" GRAB BAR, TYP.	MODEL: BOBRICK B-6806.99 x 42
(F)	1 1/2" DIA, 18" VERTICAL GRAB BAR, TYP.	MODEL: BOBRICK B-6806.99 x 18
(G)	MIRROR - 24"x36"	MODEL: BOBRICK B-165
(H)	SEAT COVER DISPENSER	MODEL: B-221 STAINLESS STEEL (SATIN FINISH)
(I)	TOILET PAPER DISPENSER	MODEL: BOBRICK B-273
(J)	SOAP DISPENSER	MODEL: BOBRICK B-2111 SOAP DISPENSER (SURFACE)
(K)	PAPER TOWEL DISPENSER	MODEL: BOBRICK B-262 (SURFACE)
(L)	ADA COMPLIANT TOILET ROOM SIGNAGE 3" LETTER HEIGHT WITH ACCESSIBILITY SYMBOL NOTE: 703.4.2 LOCATION. WHERE A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE NACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18 INCHES (455 MM) MINIMUM BY 18 INCHES (455 MM) MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.	
(M)	TOILET PARTITIONS, FLOOR MOUNTED HEAD BRACED. ALL SELECTIONS BY OWNER.	
(N)	ADA COMPLIANT WALL MOUNTED URINAL ALL SELECTIONS BY OWNER. SEE PLUMBER FOR ALL DETAILS.	
(O)	FLOOR DRAIN. SEE PLUMBER FOR ALL DETAILS.	
(P)	NEW 5-GALLON BOTTLED WATER DISPENSER WITH CUP DISPENSER. PROVIDE POWER AS NEEDED. SEE OWNER FOR ALL DETAILS.	
(Q)	NEW MOP SINK WITH WALL MOUNTED MIXER VALVE. SEE PLUMBER FOR ALL DETAILS.	
(R)	NEW HOT WATER HEATER. SEE PLUMBER FOR ALL DETAILS.	

TOILET ROOM LEGEND 2
SCALE: N/A



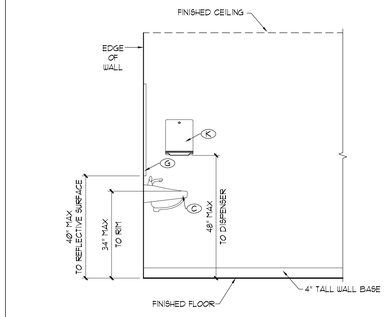
INTERIOR ELEVATION 11
SCALE: 1/2"=1'-0"

GENERAL NOTE
1. REFER TO DETAIL 2 ON THIS SHEET FOR KEYED NOTES.



INTERIOR ELEVATION 7
SCALE: 1/2"=1'-0"

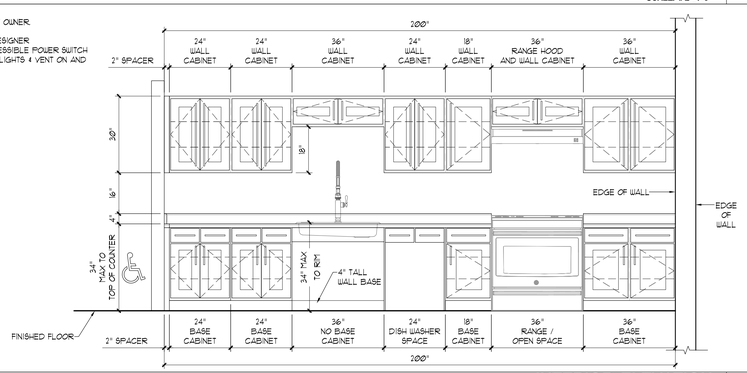
GENERAL NOTE
1. REFER TO DETAIL 2 ON THIS SHEET FOR KEYED NOTES.



INTERIOR ELEVATION 3
SCALE: 1/2"=1'-0"

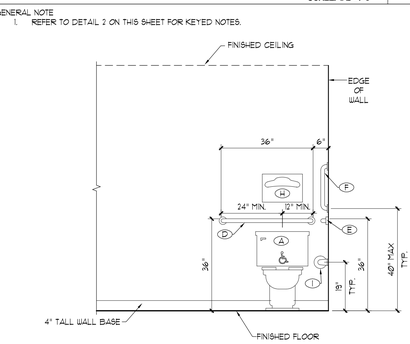
GENERAL NOTE
1. ALL SELECTIONS BY OWNER.

NOTE TO ELECTRICAL DESIGNER
1. PROVIDE ADA ACCESSIBLE POWER SWITCH TO TURN THE HOOD LIGHTS & VENT ON AND OFF.



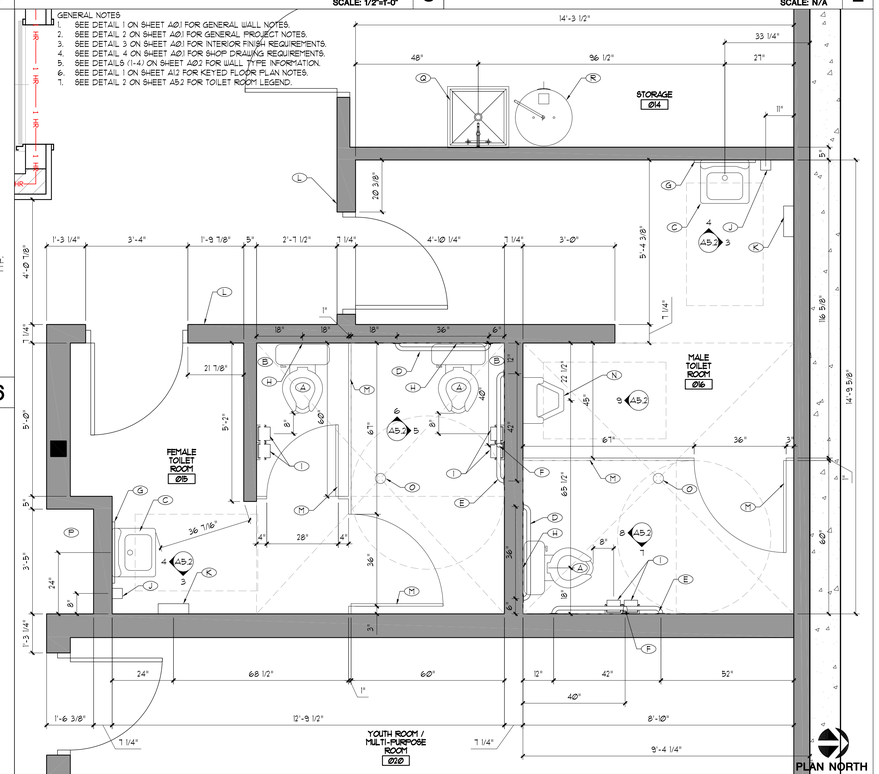
INTERIOR ELEVATION 10
SCALE: 1/2"=1'-0"

GENERAL NOTE
1. REFER TO DETAIL 2 ON THIS SHEET FOR KEYED NOTES.



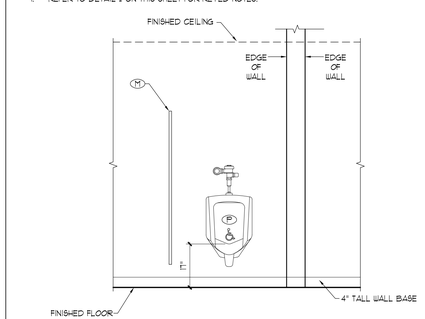
INTERIOR ELEVATION 6
SCALE: 1/2"=1'-0"

GENERAL NOTES
1. SEE DETAIL 1 ON SHEET A01 FOR GENERAL WALL NOTES.
2. SEE DETAIL 2 ON SHEET A01 FOR GENERAL PROJECT NOTES.
3. SEE DETAIL 3 ON SHEET A01 FOR INTERIOR FINISH REQUIREMENTS.
4. SEE DETAIL 4 ON SHEET A01 FOR SHOP DRAWING REQUIREMENTS.
5. SEE DETAILS (1-4) ON SHEET A02 FOR WALL TYPE INFORMATION.
6. SEE DETAIL 1 ON SHEET A12 FOR KEYED FLOOR PLAN NOTES.
7. SEE DETAIL 2 ON SHEET A52 FOR TOILET ROOM LEGEND.



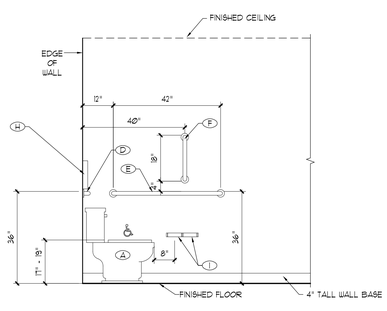
PLAN DETAIL AT GROUND FLOOR LEVEL TOILET ROOM 1
SCALE: 1/2" =1'-0"

GENERAL NOTE
1. REFER TO DETAIL 2 ON THIS SHEET FOR KEYED NOTES.



INTERIOR ELEVATION 9
SCALE: 1/2"=1'-0"

GENERAL NOTE
1. REFER TO DETAIL 2 ON THIS SHEET FOR KEYED NOTES.



INTERIOR ELEVATION 5
SCALE: 1/2"=1'-0"

NOT USED 13
SCALE: N/A

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- PRELIMINARY -
FOR ESTIMATING AND REVIEW ONLY

REV. #	REV. DATE	DESCRIPTION	REV. BY:
-	03/01/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC
-	04/10/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC

Project:

Fox River Congregational Church

N34W23575 Capitol Drive
City of Pewaukee, WI 53072

PERSPECTIVE DESIGN, INC.
11325 W. North Avenue
Wauwatosa, WI 53226
Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:
DETAILS

THIS BOX IS 2" x 2"

Date: 04/10/23
Scale: A.N.
Drawn: WHC
Job: 23-001
Sheet: A5.2

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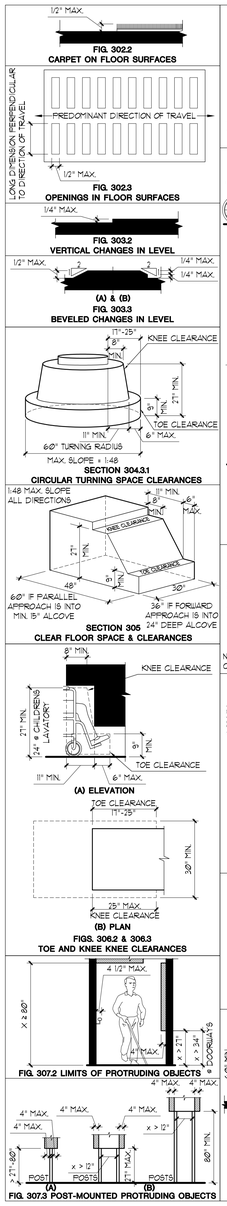
FULL SIZE PRINT = 30" x 42" SHEET

FILE NAME: P:_PROJECTS\FOX RIVER CONGREGATION\A502_FOXRIVER.DWG



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–	03/01/23	PEWAUKEE PLAN COMMISSION SUBMISSION	WHC
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Tel (414) 302-1780 Fax (414) 302-1781

Drawing Title:

ACCESSIBILITY GUIDELINES

Date: 04/10/23
Scale: A.N.
Drawn: WHC
Job: 23-001
Sheet:

AG1.1

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CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 8.

DATE: April 20, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding a Conceptual Review for Bubbles Foam Farm for a Multi-Use Development on Vacant Land Located at W240 N2687 Pewaukee Road (PWC 0924995)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Bubbles Foam Farm staff report 4.20.23

Bubbles Foam Farm narrative

Bubbles Foam Farm revised site plan 4.13.23

Bubbles Foam Farm pictures

Bubbles Foam Farms concept renderings 1

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of April 20, 2023

Date: April 12, 2023

Project Name: Bubbles Foam Farm Conceptual Review

Project Address/Tax Key No.: W240N2687 Watertown Rd/PWC 0924995

Applicant: MSI General

Property Owner: ENVENTURE GROUP LLC

Current Zoning: B-6 Mixed Use Business District

2050 Land Use Map Designation: Retail/Service Commercial and Floodplains, Lowland & Upland Conservancy

Use of Surrounding Properties: Single-family residential and multi-family residential to the West, River Park Drive and multi-family residential to the south, HWY 164 to the east, and Watertown Plank Rd./ HWY M to the north.

Project Description/Analysis

The applicant submitted a Conceptual Review Application for a mixed-use development located at W240N2687 Watertown Road.

The 5.4-acre property is currently vacant and zoned B-6 Mixed Use Business District. The property is located on the southwest corner of Watertown Plank Road and Pewaukee Road (Hwy 164). The proposed mixed-use development anticipates four separate buildings. This includes the applicant's proposed building and use, a Bubble's Foam Farm carwash. Other anticipated uses include a drive-through restaurant, gas station and convenience store, and a multi-tenant retail/office building.

The proposed car wash is 4,247 square feet with 16 vacuum stations and 7 parking stalls. The carwash is located at the southern portion of the property. The gas station and 9,197 square foot convenience store are located on the northeast side of the property. The restaurant building is approximately 2,375 square feet and the retail/office building is about 4,000 square feet. These buildings are both located on the western portion of the property. Note that, other than the carwash use, the proposed buildings and uses are conceptual at this time and may change if and when the development progresses.

Access to the carwash will be primarily from River Park Drive. This will prevent cars from queuing and backing onto either Watertown Plank Road or HWY 164. The entrance from Watertown Plank Road will primarily serve the retail/office space, restaurant with drive-thru, and gas station and convenience store.

The B-6 District may accommodate the proposed uses; however, the majority, if not all, will require approval of a Conditional Use Permit. Additionally, the development would require a Site & Building Plan Review Application.

The applicant has also been made aware that there will be zoning complications and it may not be feasible to subdivide the property if that is the intent. It is anticipated that setbacks would not be met from internal property lines and lot size minimums may be difficult to meet as well as continued compliance with the minimum 40% greenspace standard.

Recommendation

No action required.

It is recommended that sufficient feedback be provided to allow the applicant to determine whether to proceed or not with the required applications and plans.

Project Narrative – Bubbles Foam Farm Pewaukee

The intent of this development is to provide a site which includes 4 tenants. The car wash, Bubbles Foam Farm, is our anchor tenant. Hours of operation to be determined. Other potential tenants to be determined. Current proposed tenants are gas station, retail, and restaurant with drive-thru. We are flexible and sensitive to the city's requirements for our proposed tenant uses and will collaborate to create the best solution for everyone. The overall project value is to be determined. The Bubbles Foam Farm building is roughly $2.5 million. The intent is to also be sensitive to the neighbors and create sound and visual barriers.

1 ARCHITECTURAL SITE PLAN 1" = 30'-0"

MSI GENERAL CORPORATION
P.O. BOX. 7
OCONOMOWOC, WI 53066
PHONE: 262-367-3661
FAX: 262-367-7390

WWW.MSIGENERAL.COM

SINGLE SOURCE RESPONSIBILITY ™

ISSUE DATES:	
Proposal:	xx/xx/xxxx
Contract:	xx/xx/xxxx
State Submittal / Permit:	xx/xx/xxxx
Record Drawings:	xx/xx/xxxx

REVISIONS:	
1	--

PROJECT ADDRESS:

PROJECT NAME

STREET ADDRESS

CITY/ STATE / ZIP

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect:	Engineer:	Reviewed By:
--	--	--

Sheet Title:
ARCHITECTURAL SITE PLAN

Sheet Number:
C-101

Project Number: --

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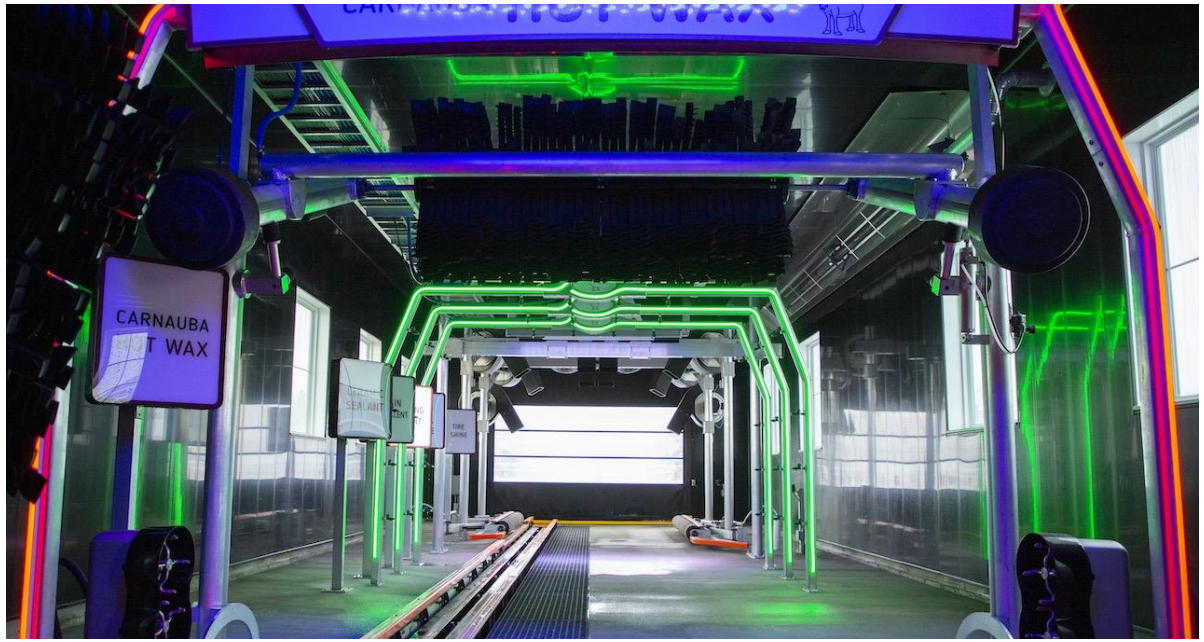
Bubble's
FOAM FARM
- CAR WASH -

Bubble's
FOAM FARM
- CAR WASH -

CREDIT CARD/MEMBERS
CAR WASH -
CREDIT CARD/MEMBERS

Bubble's
FOAM FARM
- CAR WASH -


CARNAUBA
T WAX

FOAM
FARM
WELCOME
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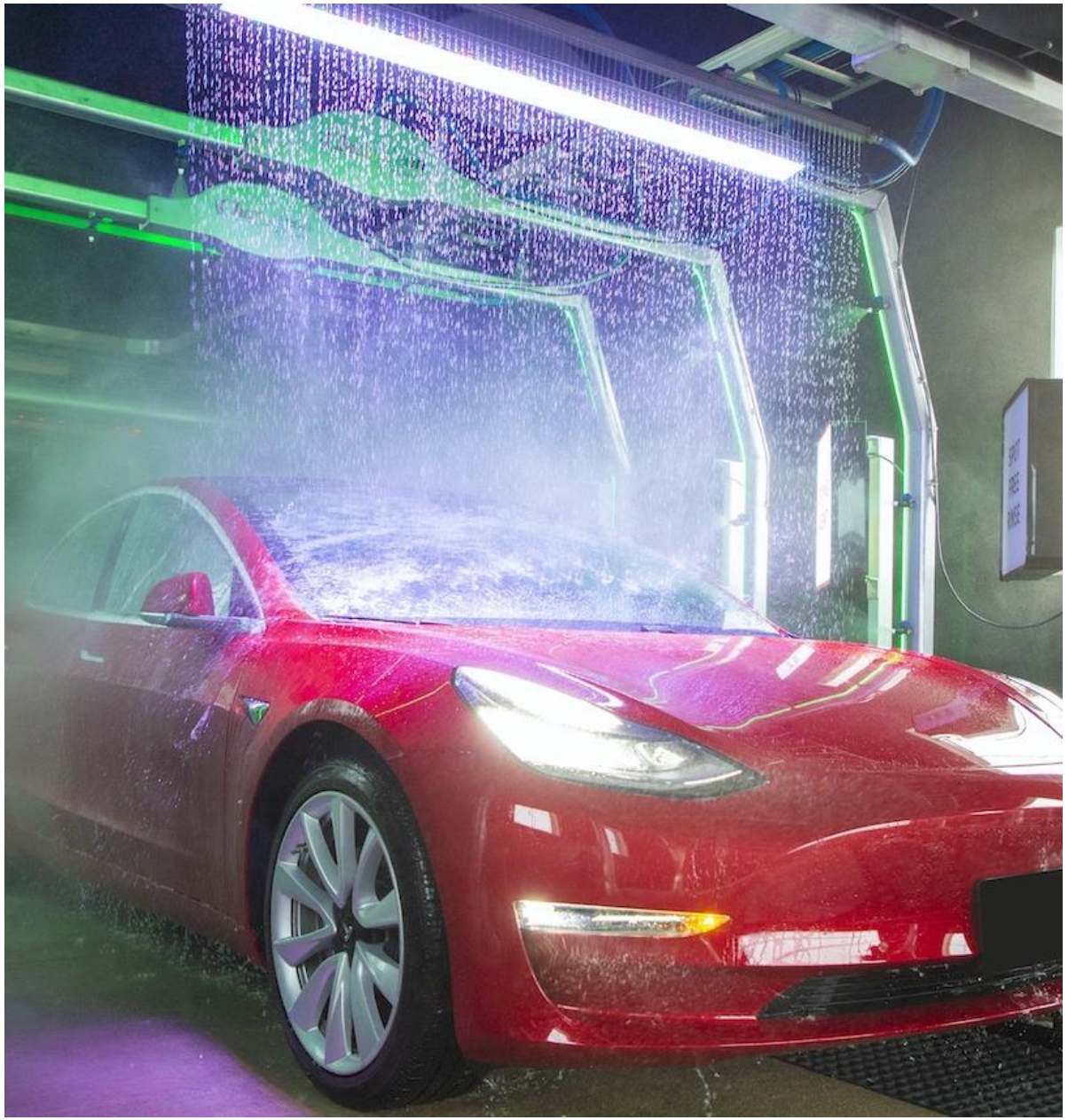
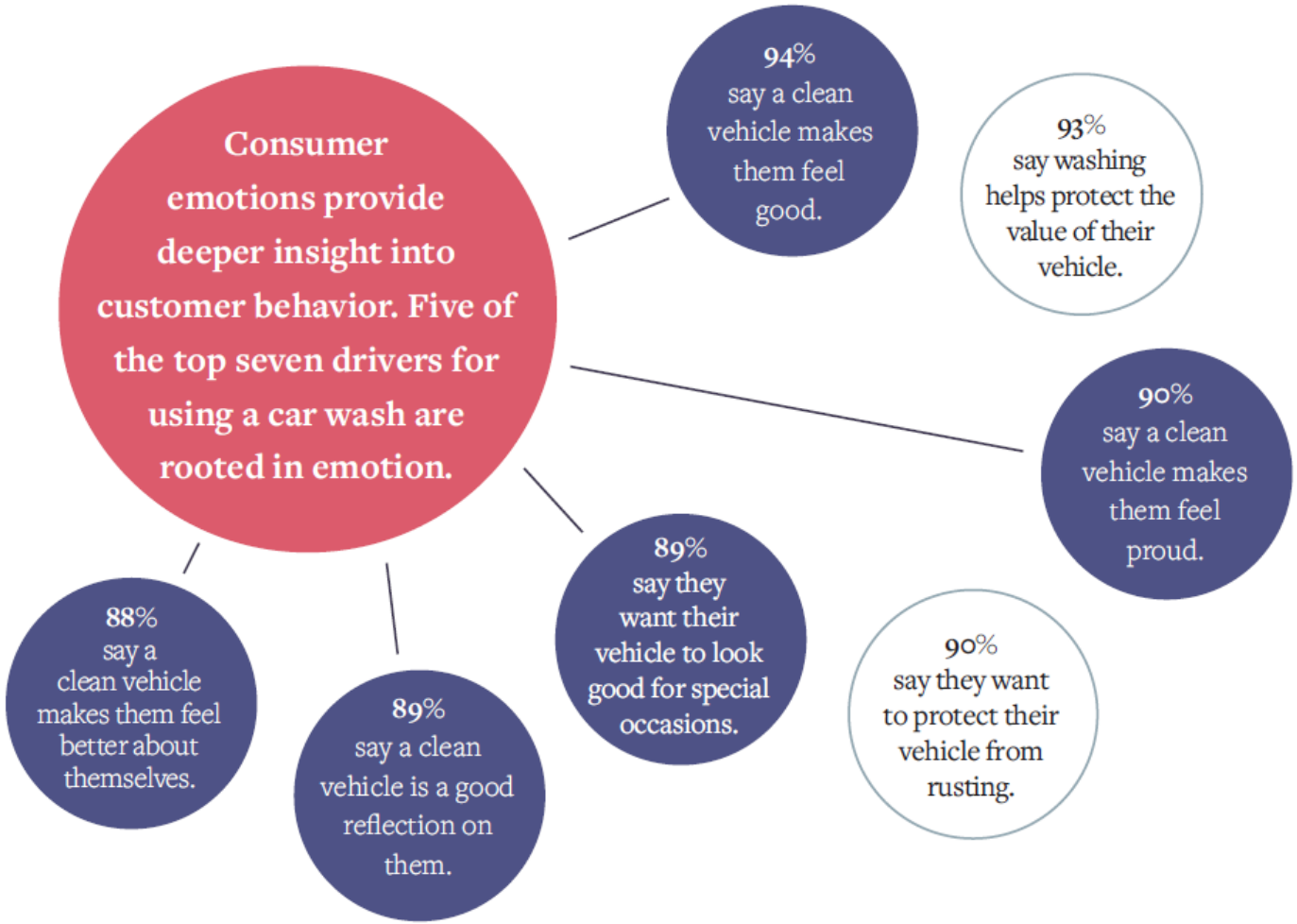


About Car Washes

- An amenity that modern American's require: 78% of American's prefer car washes instead of home washing
- Increase potential time spent at neighboring stores
- Many successful development areas have high-end car washes
- Add value to a neighborhood via service that is in demand



About Bubble's and our difference:

The City Perspective

- Locally Owned
- Employee Focused
- Meaningful Design
- Sustainable Water Use

The Customer Perspective

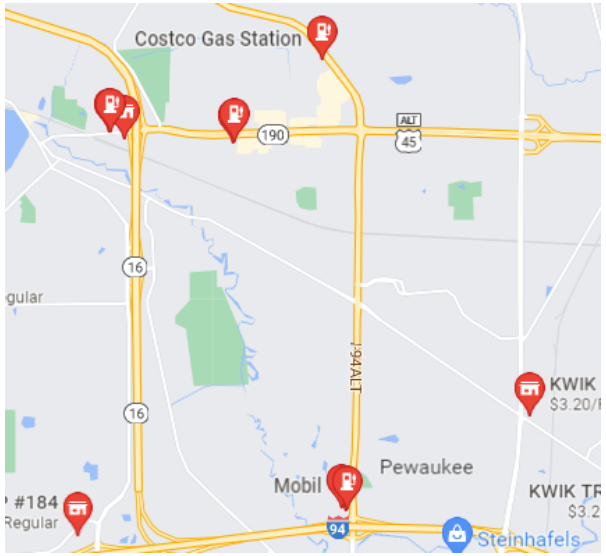
- Customer Focused
- Un-matched Value
- Branded Experience

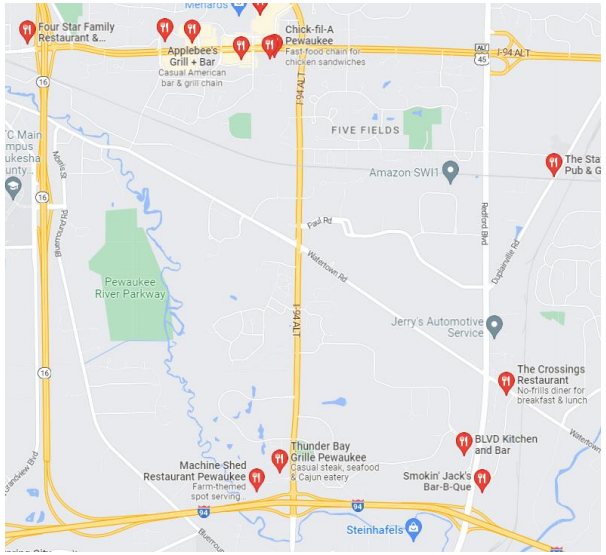
The Wylie Group

- The development partner of Bubble's Foam Farm
- Best sites and best neighbors for us as well as the community
- Owned by Christopher Mullett, Lake Country native

Why Here:

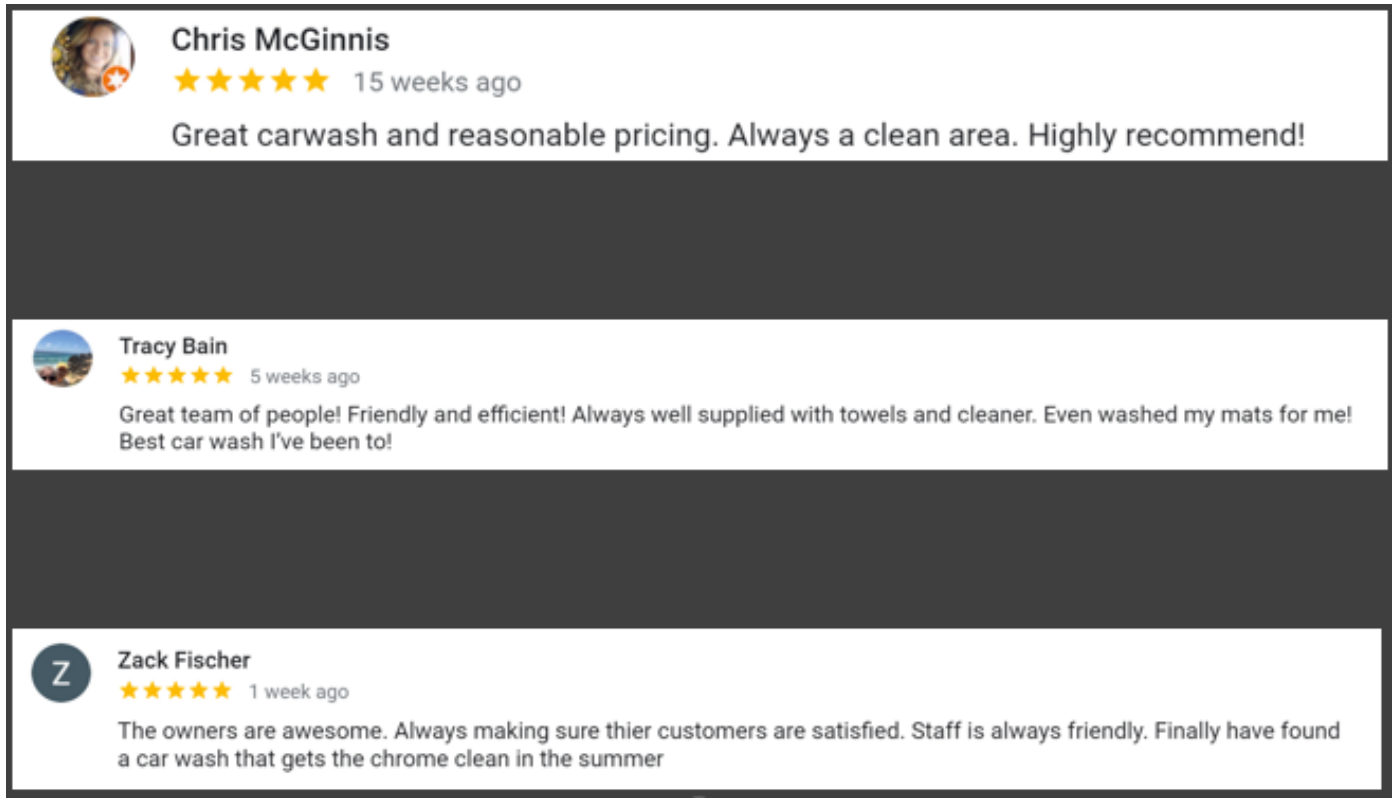
- Minimal competition
- Underserved market
- Target market
- Strategic Plan
- Opportunity to create





Google Reviews:

- 4.4★ w/181 reviews
- In good company
  - Chick Fil A – 4.5
  - Five Guys – 4.5
  - Stone Creek – 4.7
  - AutoZone – 4.8
  - Ace – 4.6



MSI
GENERAL
DESIGNBUILD

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 9.

DATE: April 20, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding a Request by Lake Pewaukee Sanitary District to Construct Two Generator Buildings Located at W265 N2989 Peterson Drive and W276 N2697 Rocky Point Road (PWC 0930004 & PWC 0934045)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

LPSD revised plans

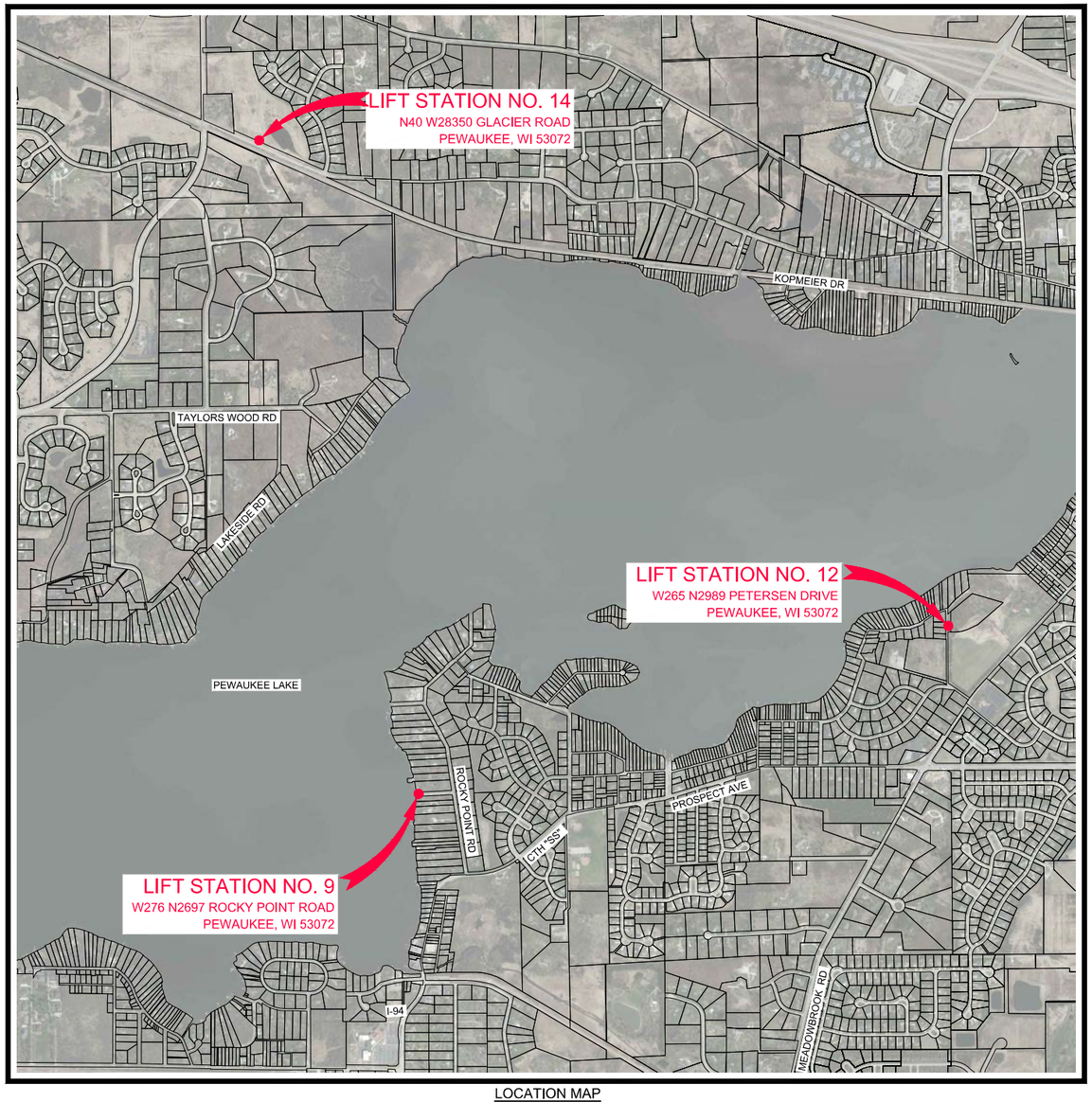
LPSD Peterson Dr. easement

LPSD Rocky Point Rd. easement

LPSD staff report 4.20.23

LIFT STATIONS NO. 9, 12, AND 14 GENERATOR BUILDINGS

LAKE PEWAUKEE SANITARY DISTRICT
WAUKESHA COUNTY, WISCONSIN



LOCATION MAP

TOWN	RANGE	SECTION (s)
7N	18E	01SE,13NE
7N	19E	17NE

N W E S

0 500 1000 2000

SCALE: 1" = 1000'

ORIGINAL PLAN SET
IS IN COLOR

SHEET INDEX

SHEET NO.	DESCRIPTION
GENERAL DRAWINGS	
G01	COVER SHEET
G02	ABBREVIATIONS
G03	LEGEND SYMBOLS AND MATERIALS
LIFT STATION NO. 9	
C901	SITE PLAN
A901	GENERATOR BUILDING ELEVATIONS AND DETAILS
A902	BUILDING AND EROSION CONTROL DETAILS
E901	GENERATOR FLOOR PLAN, SCHEDULES, AND DETAILS
E902	ONE-LINE DIAGRAMS AND SCHEDULES
LIFT STATION NO. 12	
C1201	SITE PLAN
A1201	GENERATOR BUILDING ELVATIONS AND DETAILS
A1202	BUILDING AND EROSION CONTROL DETAILS
E1201	GENERATOR FLOOR PLAN, SCHEDULES, AND DETAILS
E1202	ONE-LINE DIAGRAMS AND SCHEDULES
LIFT STATION NO. 14	
C1401	SITE PLAN
A1401	GENERATOR BUILDING ELEVATIONS AND DETAILS
A1402	BUILDING AND EROSION CONTROL DETAILS
E1401	GENERATOR FLOOR PLAN, SCHEDULES, AND DETAILS
E1402	ONE-LINE DIAGRAMS AND SCHEDULES

WISCONSIN DAVID W. ARNOTT 34304 DOUSMAN, WI PROFESSIONAL ENGINEER
2/02/2023

WISCONSIN DONALD J. HEIKKILA 34950-8 LENA, WI PROFESSIONAL ENGINEER
2/2/2023

CHECKED BY: DWA

Ruekert • Mielke
Waukesha • Kenosha • Madison
Global Water Center • Fox Valley
www.ruekertmielke.com

PROJECT NUMBER: 8193-10016

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RN22348
Mar 21, 2023 7:47am
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Z:\ACCOUNTS\SHEETS\
XREFS: G-SYM/RM-DGO/BRANCH OFFICES.dwg
Layout1

ABBREVIATIONS

LISTED ALPHEBETICALLY BY ABBREVIATION

AB	AIR HOSE BIBB
A/E	ARCHITECT/ENGINEER
ABAN	ABANDON
ABC	AGGREGATE BASE COURSE
ABND	ABANDONED
AC	ACRES
AC	AIR CONDITIONING
AC	ALTERNATING CURRENT
ACCU	AIR COOLED CONDENSING UNIT
ACU	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AD	AUTOMATIC DAMPER
ADD	ADDITION
ADDM	ADDENDUM
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AGGR	AGGREGATE
AHD	AHEAD
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
ALP	AIR-LOW PRESSURE
ALT	ALTERNATE
AMP	AMPERE
AMT	AMOUNT
AP	ACCESS PANEL
APP	APPROACH
APT	ANGLE POINT
APT	APARTMENT
AR	AIR RELEASE
ARCH	ARCHITECTURAL
ASPH	ASPHALT
ASSY	ASSEMBLY
ASU	AIR SUPPLY UNIT
AT	AIR TIGHT
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AV	AIR VENT
AVE	AVENUE
AWG	AMERICAN WIRE GAGE
B&B	BALLED & BURLAP
B/B	BACK TO BACK
BA	BANK
BAL	BALANCE
BBH	BASE BOARD HEATER
BC	BACK OF CURB
BEG	BEGIN
BFF	BELOW FINISH FLOOR
BFV	BUTTERFLY VALVE
BIT	BITUMINOUS
BK	BACK
BL	BASE LINE
BLDG	BUILDING
BLK	BLOCK
BLKHD	BULKHEAD
BLNV	BALANCING VALVE
BLT	BOLT
BLVD	BOULEVARD
BM	BENCH MARK
BND	BEND
BOT	BOTTOM
BPW	BELT PRESS WASH WATER
BR	BRUSH
BRG	BEARING
BRK	BREAK
BS	BACKSIGHT
BSMT	BASEMENT
BTU	BRITISH THERMAL UNIT
BV	BALL VALVE
BX	BOX
C	CUT
C&G	CURB AND GUTTER
C/C	CENTER TO CENTER
C/F	CUT AND/OR FILL
CA	COMBUSTION AIR
CAB	CABINET
CAP	CAPACITY
CB	CATCH BASIN
CB	CIRCUIT BREAKER
CBX	CABLE TV BOX
CCP	CONCRETE CULVERT PIPE
CF	CUBIC FEET
CFM	CUBIC FEET PER MINUTE
CFP	CORNER FENCE POST
CHAN	CHANNEL
CHK	CHECK
CHKV	CHECK VALVE
CI	CAST IRON
CI	CUBIC INCH
CIP	CAST IN PLACE
CIP	CAST IRON PIPE
CJ	CONSTRUCTION JOINT
CKT	CIRCUIT
CL	CENTER LINE
CLG	CEILING
CLJ	CONTROL JOINT
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CMPA	CORRUGATED METAL PIPE ARCH
CMPE	CORRUGATED METAL PIPE ELLIPTICAL
CMU	CONCRETE MASONRY UNIT
CND	CONDUIT
CO	CLEANOUT
CO	COMPANY
CO	COUNTY
COL	COLUMN
COMB	COMBINATION
COMP	COMPACTED
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACT / CONTRACTOR
COR	CORNER
CORP	CORPORATION
CORR	CORRUGATED
CPLG	COUPLING
CPP	CORRUGATED PLASTIC PIPE
CPT	CARPET
CR	CONTROL RELAY
CR	CORROSION RESISTANT
CR	CREEK
CS	CURB STOP
CSM	CERTIFIED SURVEY MAP
CT	COURT
CT	CURRENT TRANSFORMER
CTE	CONNECT TO EXISTING
CTH	COUNTY TRUNK HIGHWAY
CTR	CENTER
CU	CUBIC
CULV	CULVERT
CV	CONTROL VALVE
CW	COLD WATER PIPE
CY	CUBIC YARD
D	DEGREE OF CURVE
DC	DIRECT CURRENT
DCP	DIVERSION CONTROL PANEL
DCT	DECANT
DEG	DEGREE
DEMO	DEMOLITION
DEPT	DEPARTMENT
DESC	DESCRIPTION
DET	DETENTION
DF	DRINKING FOUNTAIN
DFU	DRAINAGE FIXTURE UNITS
DH	DOUBLE HUNG
DIA	DIAMETER
DIFF	DIFFUSER
DIP	DUCTILE IRON PIPE
DIST	DISTANCE
DIT	DITCH
DMPR	DAMPER
DN	DOWN
DO	DISSOLVED OXYGEN
DOT	DEPT OF TRANSPORTATION
DR	DRIVE
DRNTIL	DRAIN TILE
DRWY	DRIVEWAY
DS	DOWNSPOUT
DTL	DETAIL
DWG	DRAWING
E	EAST
E/S	EAST SIDE
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EBX	ELECTRICAL BOX
EC	ELECTRICAL CONTRACTOR
ECC RDCR	ECCENTRIC REDUCER
EF	EACH FACE
EF	EXHAUST FAN
EHD	ELECTRICAL HAND DRYER
EL	ELEVATION
ELEC	ELECTRIC / ELECTRICAL
EMH	ELECTRICAL MANHOLE
EMT	ELECTRICAL METALIC TUBING
ENCL	ENCLOSED
ENE	EAST NORTHEAST
ENGR	ENGINEER
EQUIP	EQUIPMENT
ES	EMERGENCY SHOWER
ESE	EAST SOUTHEAST
ESMT	EASEMENT
ET AL	AND OTHERS
ETC	ET CETERA
EUH	ELECTRIC UNIT HEATER
EW	EACH WAY
EW	EMERGENCY EYE WASH
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EWLH	ELECTRIC WALL HEATER
EXH DT	EXHAUST DUCT
EXP JT	EXPANSION JOINT
EXST	EXISTING
EXT	EXTERIOR / EXTERNAL
F	FILL
F/F	FACE TO FACE
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FACT	FACTORY
FB	FILTER BACKWASH WASTEWATER
FC	FACE OF CURB
FCA	FLANGED COUPLING ADAPTER
FCO	FLUSH CLEANOUT
FD	FIRE DAMPER
FD	FLOOR DRAIN
FDN	FOUNDATION
FEXT	FIRE EXTINGUISHER
FFE	FINISH FLOOR ELEVATION
FG	FLUSHING GATE
FIN	FINISH
FIN FL	FINISH FLOOR
FIN GR	FINISH GRADE
FLA	FULL LOAD AMPS
FLDENT	FIELD ENTRANCE
FLG	FLANGE
FLN	FLOW LIN
FLR	FLOOR
FLR1	FIRST FLOOR
FLSW	FLOW SWITCH
FLT	FLOAT SWITCH
FLUOR	FLUORESCENT
FM	FLOW METER
FM	FORCE MAIN
FN	FENCE
FNT	FRONT
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FRM	FRAME
FRP	FIBER REINFORCED POLYESTER
FS	FLOOR SINK
FS	FORESIGHT
FT	FOOT / FEET
FTG	FOOTING
FURN	FURNITURE
FUT	FUTURE
FV	FLAP VALVE
FVNR	FULL VOLTAGE NON-REVERSING
FVR	FULL VOLTAGE REVERSING
FXTR	FIXTURE
G	GAS PIPING
GA	GAGE / GAUGE
GAL	GALLON
GALV	GALVANIZED
GAR	GARAGE
GASV	GAS VALVE
GCP	GRIT CONTROL PANEL
GD	GRIT DRAIN
GR	GRIT RETURN
GS	GRIT SUPPLY
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GLV	GLOBE VALVE
GND	GROUND
GOVT	GOVERNMENT
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GPS	GALLONS PER SECOND
GR	GRADE
GRDRL	GUARD RAIL
GRS	GALVANIZED RIGID STEEL
GRV	GRAVEL
GTV	GATE VALVE
GUH	GAS UNIT HEATER
GV	GAS VALVE
GW	GUY WIRE
GYP BD	GYPSUM BOARD
HB	HOSE BIB
HD	HEAVY DUTY
HD	HUB DRAIN
HDG	HOT DIPPED GALVANIZED
HDPE	HIGH DENSITY POLYETHYLENE
HDWL	HEAD WALL
HGT	HEIGHT
HI	HEIGHT OF INSTRUMENT
HID	HIGH INTENSITY DISCHARGE
HM	HOLLOW METAL
HO	HIGH OUTPUT
HO	HUB OUTLET
HOA	HAND-OFF-AUTO
HORZ	HORIZONTAL
HP	HIGH PRESSURE
HP	HORSEPOWER
HR	HAND RAIL
HR	HOUR
HS	HOUSE
HVAC	HEATING, VENTILATING, AIR CONDITIONING
HW	HOT WATER PIPE
HWL	HIGH WATER LEVEL
HWY	HIGHWAY
HYD	HYDRANT
HYDSTMR	HYDRANT STEAMER
HZ	HERTZ
ID	IDENTIFICATION
ID	INSIDE DIAMETER
ID MH	INSIDE DROP MANHOLE
IN	INCHES
INC	INCORPORATED
INCL	INCLUSIVE
INL	INLET
INS	INSTRUMENT
INTR	INTERIOR
INV	INVERT
INV EL	INVERT ELEVATION
IP	IRON PIPE
ISH	INTERSTATE HIGHWAY
JB	JUNCTION BOX
JS	JANITOR SINK
JST	JOIST
JT	JOINT
K	KIP
KV	KILOVOLT
KVA	KILOVOLT AMPERE
KW	KILOWATT
KWH	KILOWATT HOUR
L	LENGTH OF CURVE
LA	LANE
LAT	LATERAL
LAV	LAVATORY
LB(S)	POUND (POUNDS)
LC	LIGHTING CONTRACTOR
LC	LONG CHORD
LF	LINEAL FOOT (FEET)
LHE	LIMITED HIGHWAY EASEMENT
LIN	LINEAL
LITE	LIGHT
LL	LIVE LOAD
LNDSCP	LANDSCAPE AREA
LOC	LOCATION
LONG	LOGITUDINAL
LP	LIGHT POLE
LP	LIGHTING PANEL
LPT	LOW POINT
LR	LONG RADIUS
LS	LUMP SUM
LT	LEFT
LT	LEVEL TRANSDUCER
LTA	LOW TEMPERATURE ALARM
LT WT	LIGHTWEIGHT
LTG	LIGHTING
LVR	LOUVER
LWL	LOW WATER LEVEL
MAINT	MAINTENANCE
MATL	MATERIAL
MAU	MAKEUP AIR UNIT
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MCC	MOTOR CONTROL CENTER
MCP	MAIN CONTROL PANEL
MDO	MOTORIZED DAMPER OPERATOR
MECH	MECHANICAL
MED	MEDIUM
MET	METAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MGD	MILLION GALLONS PER DAY
MGV	MOTORIZED GATE VALVE
MH	MANHOLE
MI	MILE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
ML	MIXED LIQUOR
MLO	MAIN LUGS ONLY
MO	MASONRY OPENING
MO	MID-ORDINATE
MOCP	MAXIMUM OVERCURRENT PROTECTION
MON	MONUMENT
MPH	MILES PER HOUR
MPV	MOTORIZED PLUG VALVE
MSB	MOP SINK BASIN
MSC	MANUFACTURER SUPPLIED CABLE MOUNTED
MTD	
MTS	MANUAL TRANSFER SWITCH
MULT	MULTIPLE
N	NORTH
N/S	NORTH SIDE
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NE	NORTHEAST
NEC	NATIONAL ELECTRICAL CODE
NEG	NEGATIVE
NEUT	NEUTRAL
NFA	NET FREE AREA
NIC	NOT IN CONTRACT
NNE	NORTH NORTHEAST
NNW	NORTH NORTHWEST
NO	NORMALLY OPEN
NO	NUMBER
NOM	NOMINAL
NPT	NATION PIPE THREAD
NP	NON-POTABLE WATER PIPING
NTS	NOT TO SCALE
NW	NORTHWEST
OA	OUTSIDE AIR
OC	ON CENTER
OD	OUTSIDE DIAMETER
OD MH	OUTSIDE DROP MANHOLE
OL	OUTLET
OL	OVERLOAD
OPNG	OPENING
OPP	OPPOSITE
ORF	ORIFICE
ORIG	ORIGINAL
OS	OCCUPANCY SENSOR
OSB	ORIENTED STRAND BOARD
OT	OVER TEMPERATURE
OVHD	OVERHEAD
OZ	OUNCE(S)
PAVT	PAVEMENT
PB	PULL BOX
PC	PHOTO CONTROLLED
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE
PCP	PUMP CONTROL PANEL
PDP	POWER DISTRIBUTION PANEL
PE	PHOTO ELEMENT
PE	PLAIN END
PE	POLYETHYLENE
PED	PEDESTAL
PERM	PERMANENT
PF	POWER FACTOR
PG	PRESSURE GAGE
PH	PHASE
PI	POINT OF INTERSECTION
PIVC	POINT OF INTERSECTION FOR VERTICAL CURVE
PK	PK NAIL
PKG	PARKING
PKWY	PARKWAY
PL	PLACE
PL	PROPERTY LINE
PLBG	PLUMBING
PLC	PROGRAMMABLE LOGIC CONTROLLER
PLNTR	PLANTER
PNL	PANEL
PO	POLYMER SOLUTION
POC	POINT ON CURVE
POLY	POLYETHYLENE
POT	POINT OF TANGENCY
PP	POWER PANEL
PP	POWER POLE
PPM	PARTS PER MILLION
PRC	POINT OF REVERSE CURVE
PRC	PHOSPHORUS REMOVAL CHEMICAL
PREFAB	PREFABRICATED
PRELIM	PRELIMINARY
PRES	PRESSURE
PRLV	PRESSURE RELIEF VALVE
PROJ	PROJECT
PROP	PROPERTY
PROPD	PROPOSED
PRV	POWER ROOF VENTILATOR
PRV	PRESSURE REDUCING VALVE
PRVC	POIT OF REVERSE VERTICAL CURVE
PS	PRESSURE SWITCH
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	POINT
PT	PRESSURE TRANSDUCER
PTN	PARTITION
PV	PLUG VALVE
PVC	POINT OF VERTICAL CURVE
PVC	POLYVINYL CHLORINE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
QCD	QUITE CLAIM DEED
QT	QUARRY TILE
QTY	QUANTITY
R	RISER
R	RIVER
R/R	REMOVE AND REPLACE
RA	RETURN AIR
RAD	RADIUS
RAS	RETURN ACTIVATED SLUDGE
PBM	REFERENCE BENCH MARK
RC	RAIN CONDUCTOR
RC	REINFORCED CONCRETE
RCCP	REINFORCED CONCRETE CULVERT PIPE
RCP	REINFORCED CONCRETE PIPE
RCPA	REINFORCED CONCRETE PIPE ARCH
RD	ROAD
RD	ROOF DRAIN
RDC	REDUCER
RDWY	ROADWAY
REBAR	REINFORCEMENT BAR
RECD	RECEIVED
REF	REFERENCE
REINF	REINFORCE
RELOC	RELOCATE
REQD	REQUIRED
RES	RESIDENTIAL
RET	RETENTION
RETWL	RETAINING WALL
RFG	ROOFING
RHT	REFLECTOR HEIGHT
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RPPBP	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTOR
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
RR	RAILROAD
RRX	RAILROAD SPIKE
RT	RIGHT
RTU	REMOTE TERMINAL UNIT
RTU	ROOF TOP UNIT
RV	RELIEF VALVE
RW	RAW WASTEWATER
S	SOUTH
S/S	SOUTH SIDE
SA	SUPPLY AIR
SAN	SANITARY
SAN SWR	SANITARY SEWER
SCADA	SUPERVISORY CONTROL AND DATA ACQUISTION
SCFH	STANDARD CUBIS FEET PER HOUR
SD	SMOKE DETECTOR
SD	SITE DRAIN
SE	SOUTHEAST
SE	SECONDARY EFFLUENT
SECT	SECTION
SF	SQUARE FOOT
SF	SUPPLY FAN
SFU	SUPPLY FIXTURE UNIT
SH	SHOWER
SHLDR	SHOULDER
SHT	SHEET
SI	SECONDARY INFLUENT
SI	SQUARE INCH
SIM	SIMILAR
SL	SLUDGE
SLD	SLUDGE LEACHATE DRAIN
SPEC	SPECIFICATION
SPK	SPIKE
SPKR	SPEAKER
SQ	SQUARE
SS	STAINLESS STEEL
SS	SOIL STACK
SSE	SOUTH SOUTHEAST
SSK	SERVICE SINK
SSRV	SOLID STATE REDUCED VOLTAGE
SSW	SOUTH SOUTHWEST
ST	STREET
STA	STATION
STAG	STAGGERED
STD	STANDARD
STF	STRAIGHT THROUGH FAN
STH	STATE TRUNK HIGHWAY
STK	STAKE
STL JST	STEEL JOIST
STM	STEAM
STN	STONE
STO	STORM
STO SWR	STORM SEWER
SUBD	SUBDIVISION
SUSP CLG	SUSPENDED CEILING
SV	SOLENOID VALVE
SW	SOUTHWEST
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
SWL	SWALE
SWR	SEWER
SY	SQUARE YARD
T	TREAD
T&B	TOP & BOTTOM
TA	THROW AWAY
TAN	TANGENT
TAS	THICKENED ACTIVATED SLUDGE
TB	TEST BORING
TBC	TOP BACK CURB
TBM	TEMPORARY BENCH MARK
TBX	TELEPHONE BOX
TCP	TEMPERATURE CONTROL PANEL
TCS	TIME CONTROL SWITCH
TD	TRENCH DRAIN
TEL	TELEPHONE
TEMP	TEMPERATURE
TEMP	TEMPORARY
THRU	THROUGH
TL	TRANSIT LINE /TRAVERSE LINE
TP	TELEPHONE
TP	TURNING POINT
TR	TIMING RELAY
TR	TRAIL
TR	TREE
TS	TRAFFIC SIGNAL
TSP	TWISTED SHIELDED PAIR
TSTAT	TERMOSTAT
TV	TELEVISION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
TYP	TYPICAL
UR	URINAL
UBX	UTILITY BOX
UG	UNDERGROUND
UH	UNIT HEATER
UHF	ULTRA HIGH FREQUENCY
ULT	ULTIMATE
UNEX	UNEXCAVATED
UP	UTILITY POLE
UPS	UNINTERRUPTIBLE POWER SUPPLY
USGS	UNITED STATES GEOLOGICAL SURVEY
USH	UNITED STATES HIGHWAY
UTIL	UTILITY
UV	ULTRAVIOLET LIGHT
UV	VENT PIPE BELOW GRADE/SLAB
V	VALVE
V	VENT PIPE ABOVE GRADE/SLAB
V	VOLT
VA	VOLT AMPERE
VBX	VALVE BOX
VC	VERTIVAL CURVE
VCP	VITRIFIED CLAY PIPE
VCT	VINYL COMPOSTION TILE
VD	VOLUME DAMPER
VEH	VEHICLE
VEL	VELOCITY
VENT	VENTILATOR
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VHF	VERY HIGH FREQUENCY
VS	VENT STACK
VTR	VENT THROUGH ROOF
W1	POTABLE WATER
W2	SERVICE WATER (NPW)
W3	FLUSHING WATER
W	WASTE
W	WATT
W	WEST
W/	WITH
W/O	WITHOUT
W/S	WEST SIDE
WAS	WASTE ACTIVATED SLUDGE
WC	WATER CLOSET
WCO	WALL CLEANOUT
WD	WIRING DIAGRAM
WH	WATER HEATER
WH	WATER HYDRANT
WK	SIDEWALK
WL	WATER LEVEL
WM	WATER MAIN
WNW	WEST NORTHWEST
WP	WEATHER PROOF
WS	WATER SERVICE
WS	WASTE STACK
WSW	WEST SOUTHWEST
WT	WEIGHT
WTR	WATER
WV	WATER VALVE
WW	WASTEWATER
WW	WING WALL
WWF	WELDED WIRE FABRIC
WWFT	WASTEWATER TREATMENT FACILITY
X SECT	CROSS SECTION
XFMR	TRANSFORMER
XING	CROSSING
YCO	YARD CLEANOUT
YD	YARD
YH	YARD HYDRANT
Z	GRADE SHOT

REVISIONS							
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TOWN:					RANGE:		SECTION(s):

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LIFT STATION NO. 9, 12, AND 14

ABBREVIATIONS

LAKE PEWAUKEE SANITARY DISTRICT
WAUKESHA COUNTY, WISCONSIN

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COMMON SYMBOLS

- NORTH ARROW (TRUE NORTH / PLAN NORTH)
- SHEET # — 5A01
  - SHEET NUMBER (01, 02, 03,...10, 11 ETC)
  - DISIPLINE (ARCHITECTURAL, PLUMBING, ETC)
  - BUILDING NUMBER (OMIT FOR GENERAL ITEMS)
- DETAIL NOTATION — X / 1A01
  - DETAIL "LETTER"
  - SHEET # WHERE LOCATED
- SECTION NOTATION — 1 / 1A23
  - SECTION "NUMBER"
  - SHEET # WHERE LOCATED
- LEVEL / ELEVATION INDICATOR — NOTATION EL 000.00
  - CONTROL POINT / DATUM
- MATCH NOTATION — 2S12
  - SHEET # REFERENCE
- REVISION NUMBER — 1

SITE STRUCTURES

WORK IN CONTRACT		EXISTING
	UTILITY POLE	
	GUY WIRE	
	LIGHT POLE	
	TRAFFIC SIGNAL	
FP	FLAG POLE	FP
MB	MAIL BOX	MB
P	POST	P
	SIGN	
X	FENCE	X
	GUARD RAIL	

LANDSCAPING

WORK IN CONTRACT		EXISTING
	DECIDUOUS TREE	
	TREE TO BE REMOVED	
	CONIFEROUS TREE	
	DECIDUOUS BUSH	
	CONIFEROUS BUSH	
	EDGE OF TREES/BRUSH	
	STUMP	

SURVEY / LAND CONTROL

WORK IN CONTRACT		EXISTING
CP #	SURVEY CONTROL POINT	
IP	IRON PIPE	IP
	MONUMENT	
	BENCH MARK	
	TEST BORING	TB #
	SITE LIMITS	

GRADING

WORK IN CONTRACT		EXISTING
	DITCH	
	TOP OF BANK	
	BOTTOM OF BANK	
100	GRADE CONTOUR & EL	100
100.00	FINISHED ELEVATION POINT	000.00

UTILITIES / SEWERS

WORK IN CONTRACT		EXISTING
8S	SANITARY SEWER NOMINAL PIPE SIZE	8S
	SANITARY SEWER MANHOLE	
CO	CLEAN OUT	CO
12ST	STORM SEWER NOMINAL PIPE SIZE	12ST
4D	DRAIN NOMINAL PIPE SIZE	
	CULVERT	
	STORM MANHOLE	
	STORM INLET	
2RW	PLANT RECYCLE WATER NOMINAL PIPE SIZE	
8W	WATER MAIN NOMINAL PIPE SIZE	8W
	WATER LATERAL	
	WATER VALVE	
	HYDRANT	
	YARD HYDRANT	
	WATER VALVE MANHOLE	W
	CORPORATION STOP	
	REDUCER	
	OFFSET	
	PLUG	
	PLUG W/AIR RELEASE	
	CROSS	
	TEE	
	BEND	
G	UNDERGROUND GAS MAIN	G
G	GAS MANHOLE	G
	GAS VALVE	
E	UNDERGROUND ELECTRIC	E
E	ELECTRIC BOX	E
E	ELECTRIC MANHOLE	E
	PULL BOX	
T	UNDERGROUND TELEPHONE	T
T	TELEPHONE BOX	T
T	TELEPHONE MANHOLE	T
C	TV CABLE	C
C	CABLE BOX	C

PAVEMENT / TRANSPORT

WORK IN CONTRACT

- CONSTRUCT CONCRETE WALK/STOOP
- ASPHALTIC SURFACE
- MATCH ELEVATION — XXXXXXXXX
- PAVEMENT EDGE
- GRAVEL SHOULDER EDGE

EROSION CONTROL

WORK IN CONTRACT

- RIP-RAP
- PROVIDE EROSION MAT TURF REINFORCEMENT
- CONSTRUCT SILT FENCE
- SEDIMENT BARRIER

ENVIRONMENTAL

- SECONDARY ENVIRONMENTAL CORRIDOR BOUNDARY
- ENVIRONMENTAL WETLAND BOUNDARY

ARCHITECTURAL

- ROOM NAME / 1-101 — ROOM NAME & NUMBER
- 1- 100A — DOOR NUMBER (BUILDING NUMBER, ROOM NUMBER, DOOR IDENTIFIER)
- 1- 100A — WINDOW NUMBER (BUILDING NUMBER, ROOM NUMBER, WINDOW IDENTIFIER)
- 1- 100A — MISCELLANEOUS OPENING (BUILDING NUMBER, ROOM NUMBER, OPENING IDENTIFIER)
- 1- 100A — SIGN NUMBER (BUILDING NUMBER, ROOM NUMBER, SIGN IDENTIFIER)
- NO / REF — VIEW NOTATION
- 1 — WALL TYPE

PROCESS PIPING

- 10" — NOMINAL PIPE SIZE (INCHES)
- FLANGED COUPLING OR RESTRAINED FLANGE ADAPTER
- BUTTERFLY VALVE
- PLUG VALVE
- GATE VALVE
- CHECK VALVE
- METER
- FLEXIBLE CONNECTOR
- M — MOTOR OPERATED VALVE
- P — PRESSURE GAGE
- F — FLOW SWITCH
- PS — PRESSURE SWITCH
- PT — PRESSURE TRANSMITTER
- ADV — AUTOMATIC DRAIN VALVE
- CHLORINE EJECTOR
- CHEMICAL INJECTOR
- SAMPLING FAUCET
- BALL VALVE
- CHECK VALVE (SMALL DIAMETER PIPE)

PLUMBING

- COLD WATER PIPING
- HOT WATER PIPING
- HWR — HOT WATER RETURN PIPING
- TW — TEMPERATE WATER PIPING
- NP — NON-POTTABLE WATER PIPING
- SANITARY SEWER (WASTE PIPING)
- VENT PIPING (ABOVE GRADE)
- VENT PIPING (BELOW GRADE)
- D — DRAIN
- TEE (BRANCH UP/ SIDE)
- TEE (BRANCH DOWN)
- RISER UP
- RISER DOWN
- FLOOR DRAIN
- FLOOR CLEANOUT
- UNION
- CAP
- FLOW DIRECTION
- REDUCER
- HOSE BIBB / WALL HYDRANT
- FLOOR DRAIN
- SITE OR HUB DRAIN
- BALL VALVE
- CHECK VALVE
- GLOBE VALVE
- BUTTERFLY VALVE
- GATE VALVE
- STRAINER
- P — PRESSURE GAGE
- SV — SOLENOID VALVE
- XX — FIXTURE UNITS - DRAINAGE OR SUPPLY
- NATURAL GAS

HVAC

- SUPPLY AIR, DUCT SECTION (DOWN OR AWAY)
- SUPPLY AIR, DUCT SECTION (UP OR TOWARD)
- RETURN AIR, DUCT SECTION (DOWN OR AWAY)
- RETURN AIR, DUCT SECTION (UP OR TOWARD)
- 24/12 — DUCT SIZE (1ST FIGURE=WIDTH 2ND FIGURE= DEPTH)
- THERMAL INSULATED DUCT
- FLEXIBLE DUCT CONNECTION
- VD — MANUAL VOLUME DAMPER
- M — MOTORIZED DAMPER
- BDD — BACK DRAFT DAMPER
- TURNING VANES
- SUPPLY GRILLE
- EXHAUST/ RETURN/ TRANSFER GRILLE
- INDICATES ROUND
- AIR FLOW DIRECTION
- H — HUMIDISTAT

ELECTRICAL

- SURFACE OR STEM MOUNT FLUORESCENT FIXTURE
- WALL MOUNT FLUORESCENT FIXTURE
- WALL MOUNT LIGHT FIXTURE
- RECESSED MOUNT LIGHT FIXTURE
- S — SWITCH WITH OUTLET
- S — SINGLE POLE SWITCH
- 2 — 2 POLE SWITCH
- 3 — 3-WAY SWITCH
- SWITCHED CIRCUIT
- DUPLEX GROUNDED RECEPTACLE, 18" A.F.F. (UNLESS OTHERWISE NOTED)
- DUPLEX GROUNDED RECEPTACLE, 46" A.F.F. (UNLESS OTHERWISE NOTED)
- MOTOR (SEE SCHEDULE)
- J — JUNCTION BOX
- C — COOLING THERMOSTAT
- T — THERMOSTAT
- PUSHBUTTON STATION IN NEMA 4X ENCLOSURE
- DISCONNECT SWITCH
- COMBINATION MOTOR STARTER, SURFACE WALL MOUNT
- P — PHOTOCONTROL (FOR SWITCHING OF SITE & PERIMETER LIGHTING)
- S — SPEED CONTROL SWITCH
- MDO — MOTORIZED DAMPER OPERATOR
- R — PILOT LIGHT, LETTER INDICATES COLOR
- WIRING TO BE PERFORMED IN THE FIELD BY CONTRACTOR
- PUSHBUTTON
- LIMIT SWITCH
- FLOAT SWITCH
- PRESSURE SWITCH
- RELAY CONTACT - NORMALLY CLOSED
- RELAY CONTACT - NORMALLY OPEN
- TIME DELAYED CONTACT
- XOO — SELECTOR SWITCH
- THERMOSTAT
- XXXX — CONTROL DEVICE - REFER TO SCHEDULES
- TRANSFORMER
- THERMAL OVERLOAD
- CR — CONTROL RELAY
- TR — TIME DELAY RELAY
- FUSE & FUSEBLOCK
- GROUND
- CIRCUIT BREAKER
- TERMINAL BLOCK

REVISIONS							
7	6	5	4	3	2	1	

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LIFT STATION NO. 9, 12, AND 14
LEGEND SYMBOLS AND MATERIALS
LAKE PEWAUKEE SANITARY DISTRICT
WAUKESHA COUNTY, WISCONSIN

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Z:\CP-LIFT STATION 9 SITE PLAN Layout

DAVID L BARRY AND KEVIN C BARRY
W278N2699 ROCKY POINT RD
TAX KEY: PWC 0934046

APPROXIMATE LOCATION OF 100-YEAR FLOODPLAIN
PER WAUKESHA COUNTY WEBSITE MAPPING

REMOVE AND REPLACE RIP RAP DITCH, EXCAVATE 2' BELOW EXISTING GRADE, RESHAPE DITCH, INSTALL GEO TEXTILE FABRIC, AND REPLACE RIP RAP. USE MATERIAL REMOVED AS A GENTLE BERM. RESTORE WITH SEED AND EROSION MAT.

DEMOLISH EXISTING CONTROL PANEL

PROVIDE NATURAL GAS METER

PROVIDE REINFORCED MODULAR BLOCK RETAINING WALL. TOP OF WALL ELEVATION 869.50 (A/A902)

PROVIDE ELECTRIC METER

TREES & BRUSH

BERM

REMOVE AND REPLACE
FIVE (5) FLOAT SWITCHES

TREES & BRUSH

EXISTING LIFT STATION
WET WELL. REWIRE PUMPS FROM
230V TO 480V.

PULL BOX FOR PUMP
FEEDERS AND CONTROLS
WITH EXPLOSION PROOF
SEAL FITTINGS

FIELD VERIFY CONDUIT ROUTING.

MILWAUKEE AVENUE

ASPH

BOLLARD (TYP OF 3) (A/C901)

PROVIDE GENERATOR BUILDING

SITE LIMITS

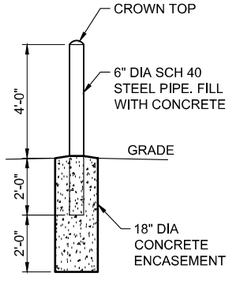
SHAWN A WARD AND STEPHANIE K WARD
W278N2697 ROCKY POINT RD
TAX KEY: PWC 0934045

LIFT STATION 9
SITE PLAN

0 2.5 5 10 FT

NOTE:

1. PROVIDE EROSION MAT IN DISTURBED AREA FOR RESTORATION.



A C901 **BOLLARD** 055000BOL 1 (32) NO SCALE

REVISIONS		
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LIFT STATION NO. 9, 12, AND 14

SITE PLAN
FOR LIFT STATION NO. 9
LAKE PEWAUKEE SANITARY DISTRICT
WAUKESHA COUNTY, WISCONSIN

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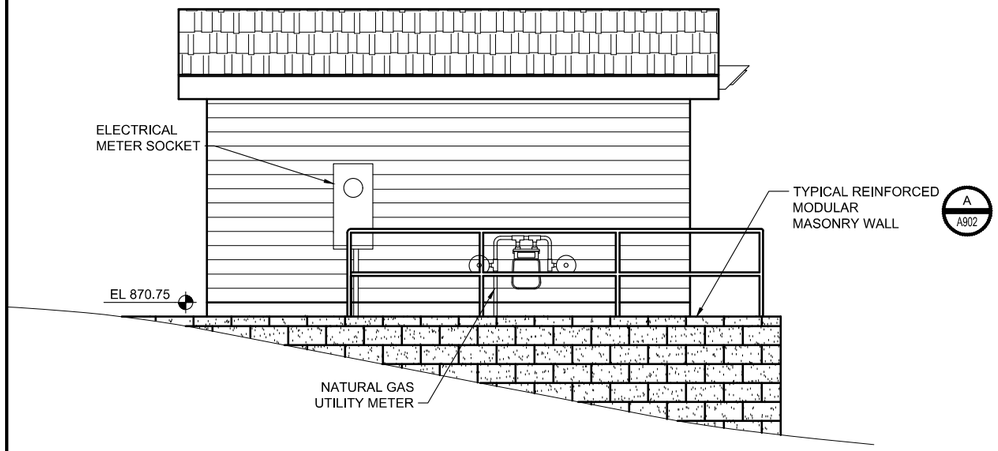
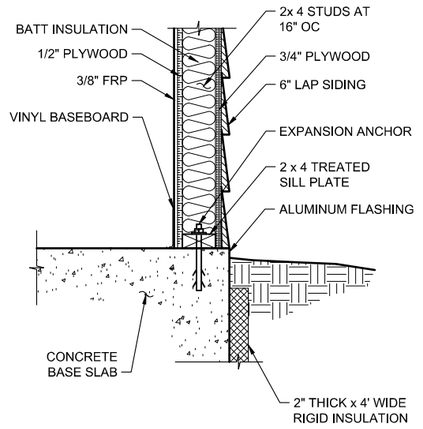
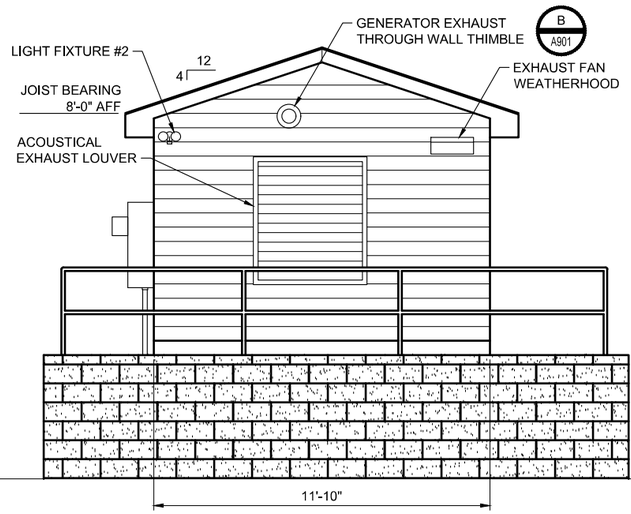


NORTH ELEVATION



A A901 **WALL DETAIL** NO SCALE

TYP WALL DETAIL (LAP SIDING) 8



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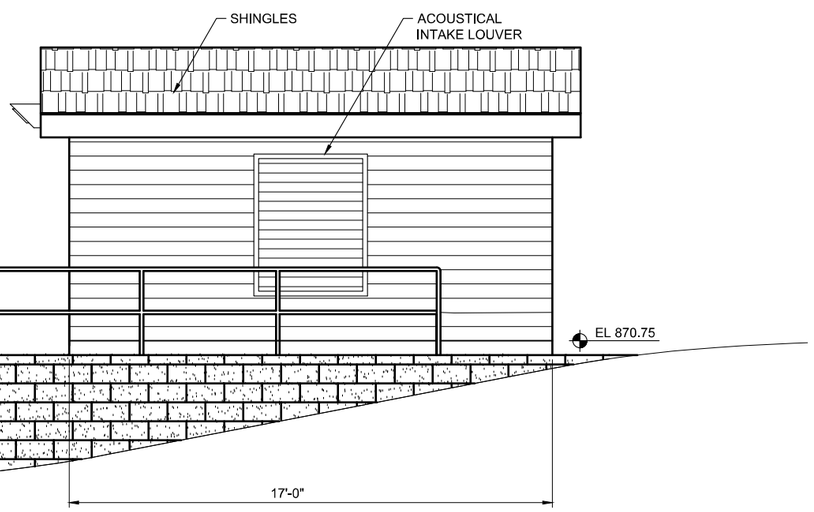

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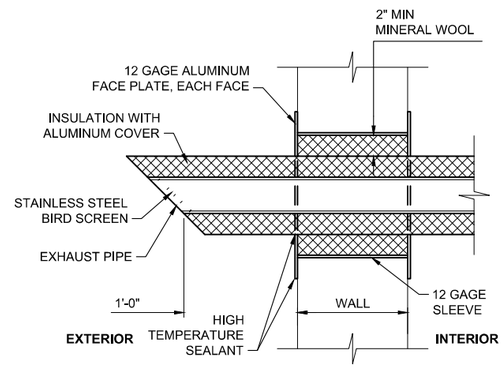

B A901 **ENGINE EXHAUST WALL SLEEVE** NO SCALE

ENGINE EXH WALL SLEEVE 8

GENERATOR BUILDING ELEVATIONS

AEL-ALL 32

0 1 2 3 4 FT

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Z-APL-LIFT STATION NO-9 A901

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LIFT STATION NO. 9, 12, AND 14

GENERATOR BUILDING ELEVATIONS AND DETAILS
FOR LIFT STATION NO. 9

LAKE PEWAUKEE SANITARY DISTRICT
WAUKESHA COUNTY, WISCONSIN

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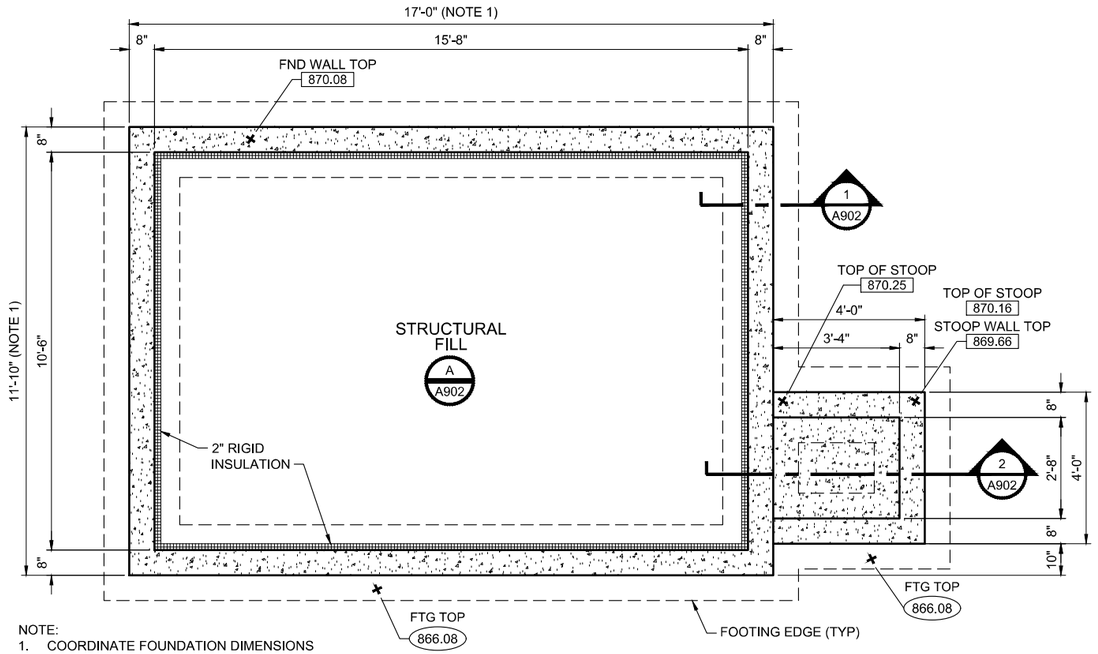
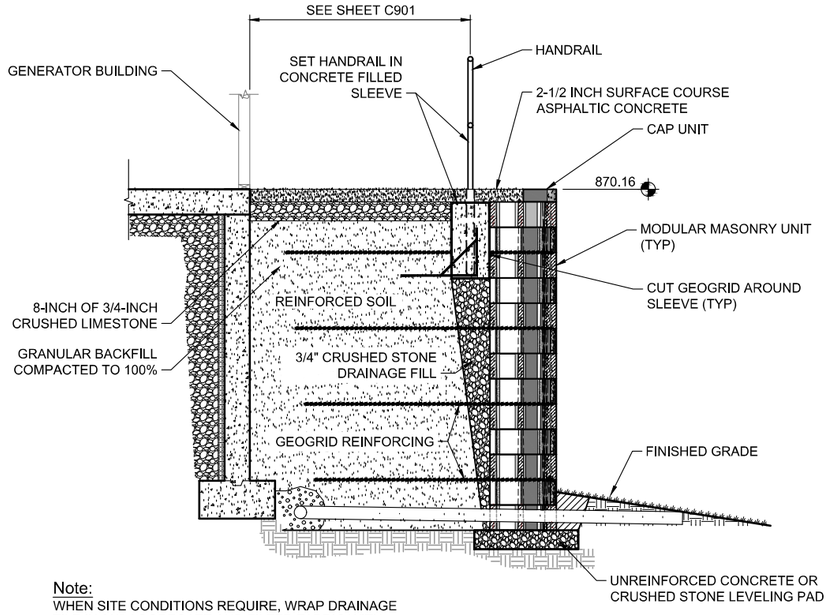


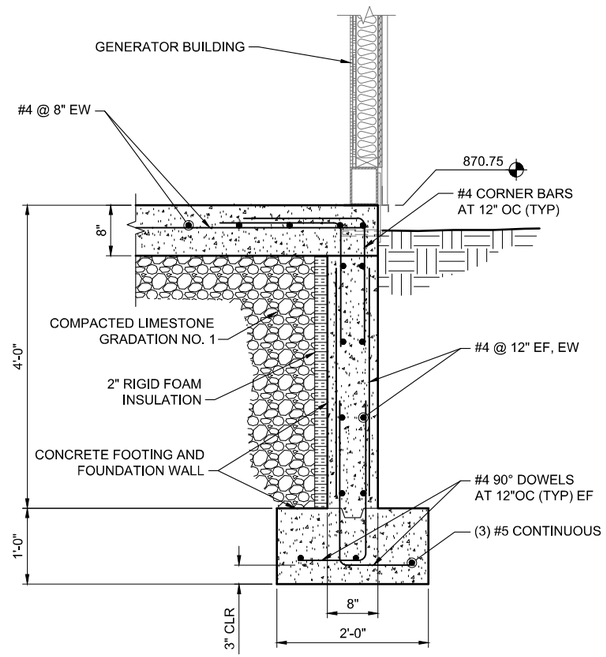
NOTE:
1. COORDINATE FOUNDATION DIMENSIONS WITH PREFABRICATED ENCLOSURE SUPPLIER PRIOR TO CONSTRUCTION.

FOUNDATION PLAN
SPL–FOUNDATION 24 0 1 2 3 FT

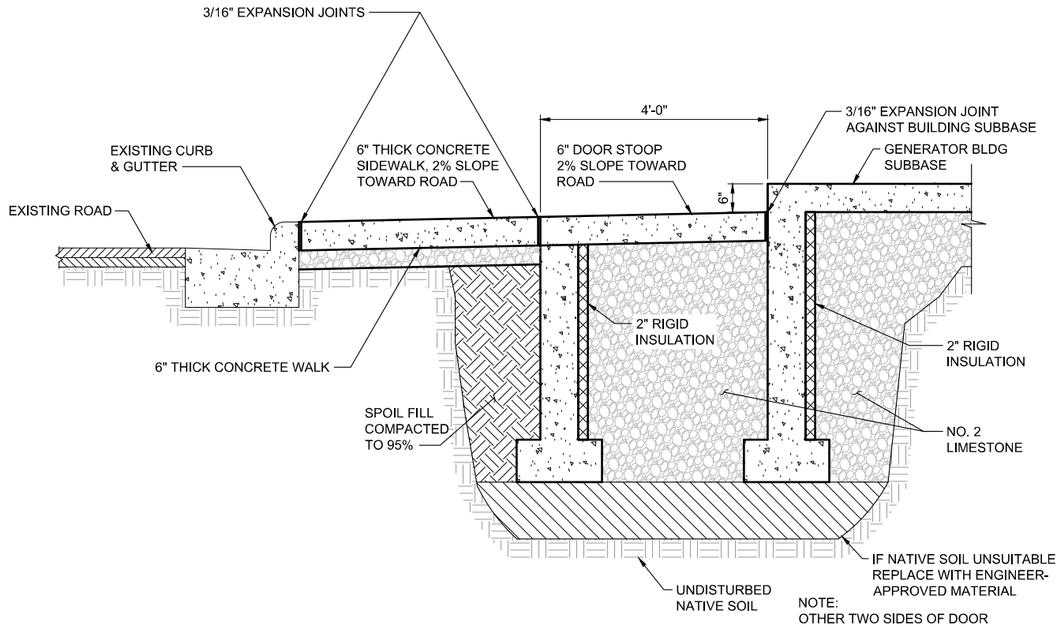


Note:
WHEN SITE CONDITIONS REQUIRE, WRAP DRAINAGE TILE IN 3/4" AGGREGATE AND FILTER FABRIC WITH DRAINAGE COMPOSITE OR AGGREGATE BACK DRAIN SYSTEM, AS DIRECTED BY GEOTECHNICAL ENGINEER.

A902 TYPICAL REINFORCED MODULAR MASONRY WALL SECTION NO SCALE



1 A902 FOUNDATION WALL AND FOOTING REINFORCEMENT
SSX–WALL01 0 1/2 1 FT



NOTE:
OTHER TWO SIDES OF DOOR STOOP FOUNDATION AND FOOTING NOT SHOWN FOR CLARITY.

2 A902 SECTION SX-1 16 NO SCALE

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LIFT STATION NO. 9, 12, AND 14
BUILDING AND EROSION CONTROL DETAILS
FOR LIFT STATION NO. 9
LAKE PEWAUKEE SANITARY DISTRICT
WAUKESHA COUNTY, WISCONSIN

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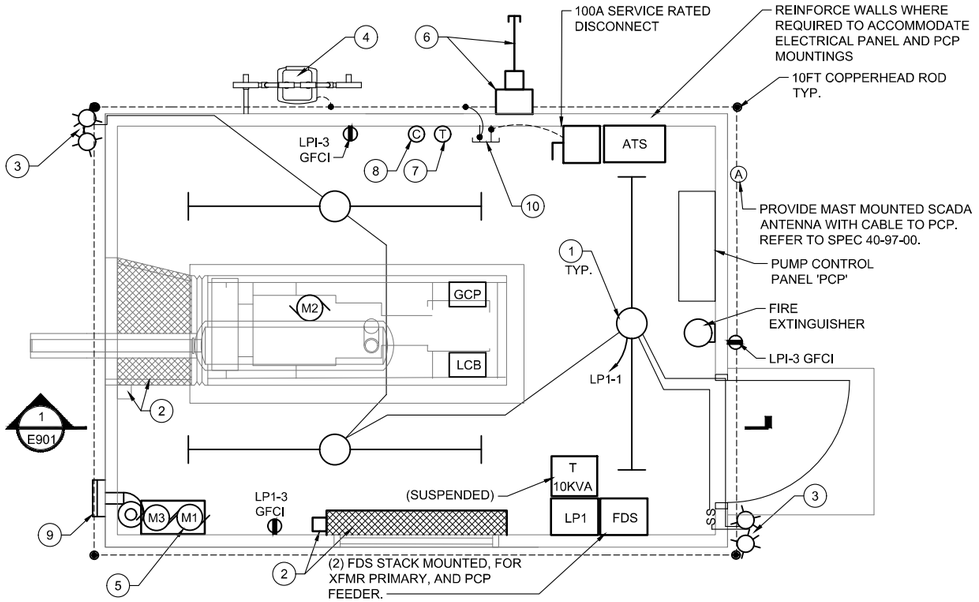
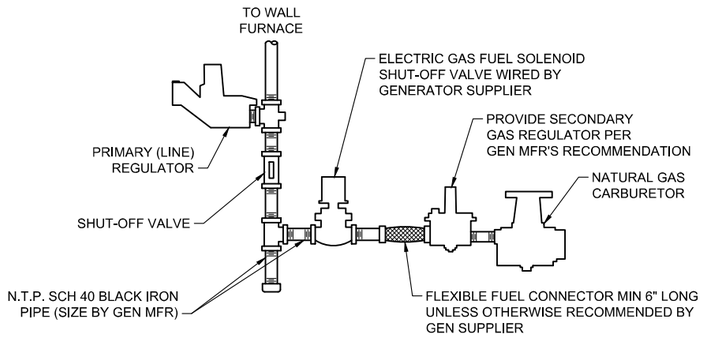


GENERATOR BUILDING FLOOR PLAN

EPLFL01_01 24

0 1 2 3 FT

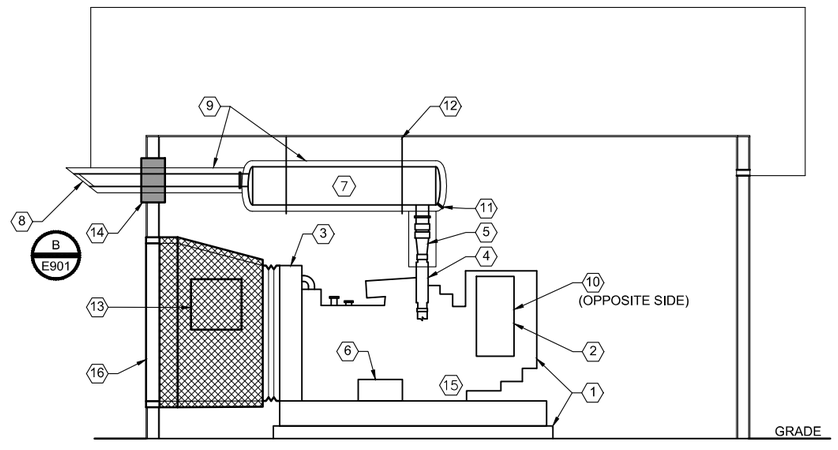


B E901

NATURAL GAS FUEL SYSTEM

231123GAS_01 1

NO SCALE



1 E901

SECTION

ESX0001_LS 10 24

NO SCALE

ABBREVIATIONS

ATS	AUTOMATIC TRANSFER SWITCH	LCB	LINE CIRCUIT BREAKER
FDS	FUSED DISCONNECT SWITCH	LP	LIGHTING PANEL
GCP	GENERATOR CONTROL PANEL	MCB	MAIN CIRCUIT BREAKER
LA	LIGHTNING ARRESTOR		

GENERATOR BLDG FLOOR PLAN SCHEDULE

133423SCH 1

NO.	DESCRIPTION
1	8' ENCLOSED & GASKETED LED FIXTURE, HUBBELL LXEM835MLRFAEU. CEILING MOUNT USING 1-1/2" SPACERS. (TYP. OF 2)
2	LOUVER & DAMPER WITH MOTOR OPERATOR, FRAC. HP, 115V, 1Ø, WIRE OPERATOR "POWER TO CLOSE, SPRING TO OPEN". INTERLOCK CIRCUIT LP1-5 TO OPEN WITH RUN OF GENERATOR (TYP. OF 2). LOUVER AND DAMPER SUPPLIED BY OWNER.
3	EAST SIDE LIGHT: PATRIOT LIGHTING DUAL HEAD MOTION SENSOR SECURITY FLOOD LIGHT. DUALUX OW9227W, OR EQUAL. LP1-1. TOP OF FIXTURE AT 6'-8" AFF. CONTROL OF LIGHT TO BE BY INTEGRAL MOTION SENSOR AND BY OVERRIDE SWITCH INSIDE BUILDING. WEST SIDE LIGHT: SAME AS EAST SIDE EXCEPT WITHOUT MOTION SENSOR. LIGHT TO BE CONTROLLED BY SWITCH INSIDE BUILDING.
4	NATURAL GAS UTILITY METER. POSITION WITH REGULATOR 4' FROM DOOR AND 10' FROM NORTH WALL INTAKE LOUVER.
5	NATURAL GAS DIRECT VENT WALL FURNACE, LP1-4.
6	UTILITY-APPROVED METER WITH CONDUIT STUBBED OUT PER UTILITY REQUIREMENTS. PROVIDE WATERTIGHT CAP
7	WALL FURNACE THERMOSTAT, PROVIDE ENGRAVED NAMEPLATE "HEATER"
8	EXHAUST FAN COOLING THERMOSTAT WITH ENGRAVED NAMEPLATE "EXHAUST FAN"
9	EXHAUST FAN AND EXHAUST LOUVER. SEE VENTILATION WIRING DIAGRAM.
10	PROVIDE 12" GROUND BUS BAR.

ENGINE/GENERATOR MATERIAL LIST

263213LEG 1

NO.	DESCRIPTION
1	40 KW, 277 / 480V, 3Ø, 4W, NATURAL GAS, STANDBY GENERATOR
2	UNIT-MOUNTED GENERATOR CONTROL PANEL "GCP"
3	UNIT-MOUNTED RADIATOR WITH SURGE/EXPANSION TANK
4	4" SEAMLESS, STAINLESS STEEL, FLEXIBLE EXHAUST CONNECTION
5	4" EXHAUST PIPE
6	12 Vdc STARTING BATTERIES
7	EXHAUST SILENCER, CRITICAL GRADE, WITH 4" 90° INLET AND 4" OUTLET, COMPLETE WITH COMPANION FLANGES. MOUNT SILENCER SO THAT IT IS NOT SUPPORTED BY ENGINE/GENERATOR SET
8	4" BLACK STEEL EXHAUST PIPE WITH STAINLESS STEEL BIRD SCREEN WELDED ON 45° OUTLET
9	INSULATION WITH ALUMINUM COVER. 2" THICK OVER EXHAUST PIPING, 4" THICK OVER EXHAUST SILENCER
10	UNIT-MOUNTED 60/3 LINE CIRCUIT BREAKER (WEST SIDE)
11	CONDENSATION TRAP WITH DRAIN VALVE (INSTALLED PER SILENCER MANUFACTURER'S RECOMMENDATIONS)
12	ISOLATION-TYPE PIPE HANGERS TO SUPPORT EXHAUST SILENCER AND PIPING
13	20 GAGE MIN. HOT-DIPPED GALVANIZED SHEET METAL DUCT WITH FLEXIBLE SECTION AND MIN. 12"x 12" CAM-ATTACHED ACCESS DOOR.
14	ENGINE EXHAUST WALL SLEEVE (SEE DETAIL)
15	NATURAL GAS CONNECTION, SEE NATURAL GAS FUEL SYSTEM DETAIL.
16	DAMPER DUCTWORK. INSULATE DUCTWORK BETWEEN INSIDE FACE OF BUILDING WALL AND FACE OF DUCTWORK.

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LIFT STATION NO. 9, 12, AND 14
GENERATOR FLOOR PLAN, SCHEDULES, AND DETAILS FOR LIFT STATION NO. 9
LAKE PEWAUKEE SANITARY DISTRICT
WAUKESHA COUNTY, WISCONSIN

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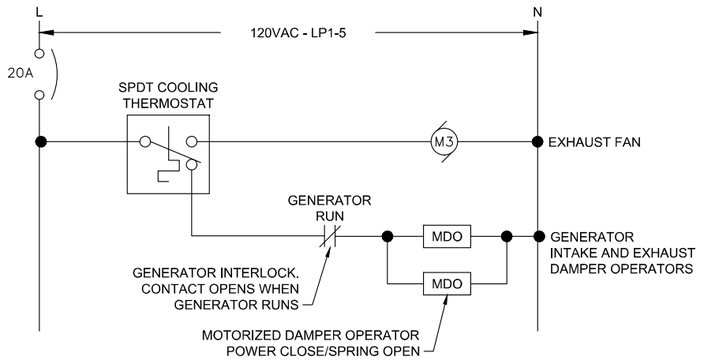
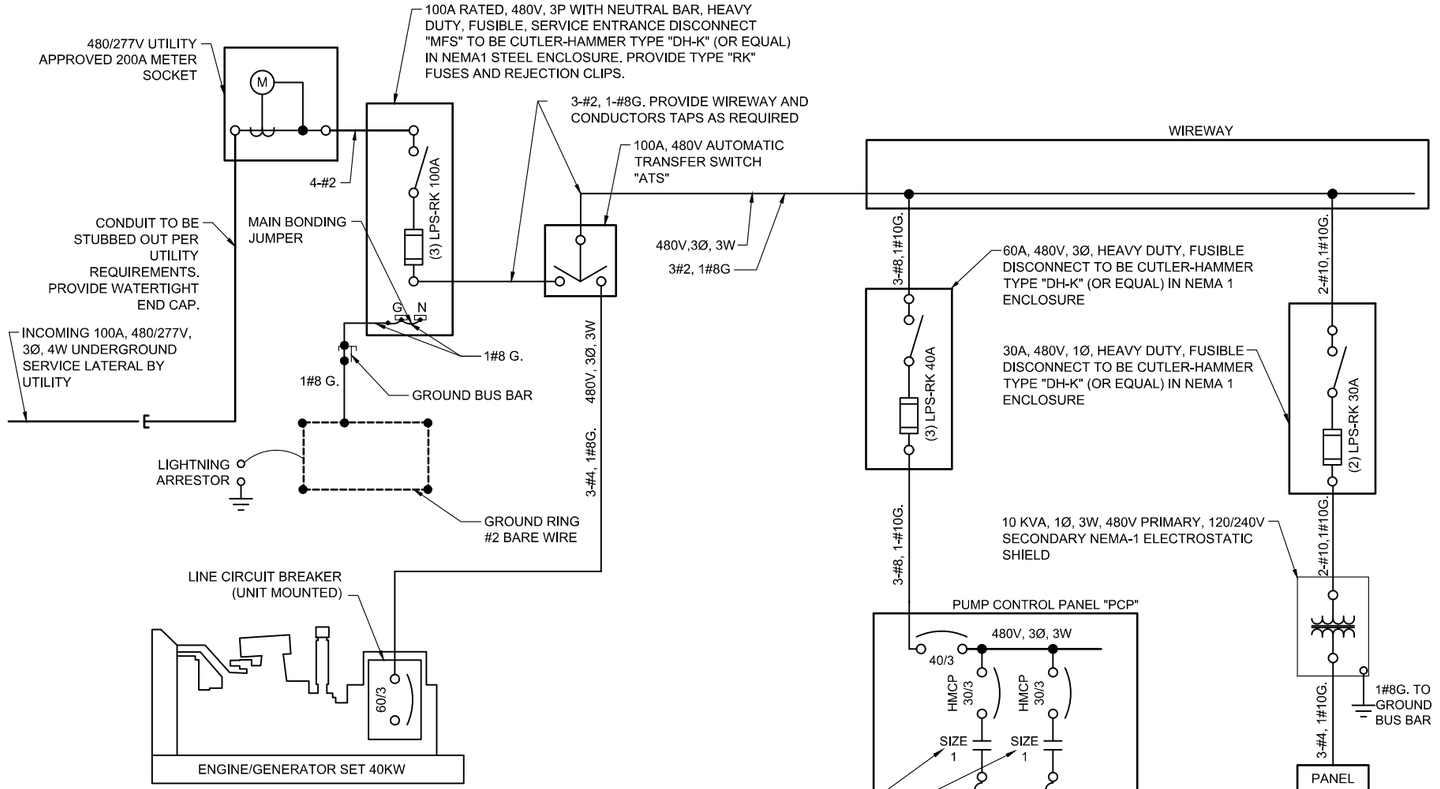


GENERATOR BUILDING VENTILATION WIRING

NO SCALE

16150VEN3_LS-01 1



ONE-LINE DIAGRAM

NO SCALE

ADI-MCC_LS-10 1

CONTROL DEVICE SCHEDULE

ECH-CONTROL DEVICE_LS-01 1

TAG	WIRE TO	CABLE TYPE	COMMENTS
ATS	PCP	4-#14	POWER FAIL STATUS
ATS	GCP	PER MFR	GENERATOR CONTROL / BATTERY CHARGER
FLT1	PCP	2-#14	WET WELL HIGH LEVEL ALARM FLOAT
FLT2	PCP	2-#14	WET WELL LAG PUMP START FLOAT
FLT3	PCP	2-#14	WET WELL LEAD PUMP START FLOAT
FLT4	PCP	2-#14	WET WELL PUMPS STOP FLOAT
FLT5	PCP	2-#14	WET WELL LOW LEVEL ALARM FLOAT
GCP	PCP	4-#14	GENERATOR "RUN" & "FAIL" STATUS

NOTES:
1. FURNISH AND INSTALL ALL WIRING FROM CONTROL DEVICES TO CONTROL PANELS IN CONDUIT.
2. MATCH EXISTING WET WELL FLOAT ELEVATIONS.

PANEL "LP1"

ECH-PANEL-LP1_LS-01 1

LOCATION: GENERATOR BUILDING

DESCRIPTION: 120/240V, 1Ø, 3W, CUTLER-HAMMER NEMA 1 (OR EQUAL)

CKT (SPACE NO)	LOAD SERVED	LOAD	BRK (AMP/ POLE)	BRK (AMP/ POLE)	LOAD	LOAD SERVED	CKT (SPACE NO)
1	LIGHTING	.25	20/ 1	20/ 1	1.5	ENGINE JACKET HEATER "EJH - (M2)	2
3	GFCI RECEPTACLES	.9	20/ 1	20/ 1	.5	WALL GAS FURNACE	4
5	LOUVER DAMPERS/ EXH FAN	.5	20/ 1	20/ 1		SPARE	6
7	SPARE		20/ 1	20/ 1		SPARE	8
9	SPARE		20/ 1	20/ 1		SPARE	10
11	BLANK					BLANK	12
13	BLANK			60/ 2		MAIN BREAKER (TO BE BACKFED)	14
15	BLANK						16

NOTES: 1. MAXIMUM FAULT CURRENT RATING: 22 KAIC.
2. PROVIDE BOLT-IN BREAKERS

TOTAL LOAD (KVA) = 3.65 KVA
TOTAL CURRENT LOAD (AMPS) = 15 AMPS

MOTOR & SPECIAL OUTLET SCHEDULE

ECH-MOTOROUTLET_LS-01 1

MARK	TAG	DESCRIPTION	HP	KW	VOLT /Ø	CKT FROM	LOCATION	NOTES
M1	WF	WALL FURNACE		0.5	120/1	LP1	GENERATOR BUILDING	
M2	EJH	ENGINE JACKET HEATER		1.5	120/ 1	LP1	GENERATOR BUILDING	
M3	EF	EXHAUST FAN	1/12		120/ 1	LP1	GENERATOR BUILDING	
M4	P1	LIFT PUMP #1	5		480/3	ATS	WET WELL	
M5	P2	LIFT PUMP #2	5		480/3	ATS	WET WELL	

NOTES:
1. EXISTING PUMP TO BE REUSED. REWIRE TO NEW PCP.

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LIFT STATION NO. 9, 12, AND 14
ONE-LINE DIAGRAMS AND SCHEDULES
FOR LIFT STATION NO. 9
LAKE PEWAUKEE SANITARY DISTRICT
WAUKESHA COUNTY, WISCONSIN

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Z-CPL-4 PT STATION 12 SITE PLAN Layout1

EFFREY R AND JESSICA L BURNS
W265N2970 PETERSON DR
TAX KEY: PWC 0930005

THOMAS H KOEPP AND KRISTINE A KOEPP
W265N2989 PETERSON DR
TAX KEY: PWC 0930004

DEAN URBANOWSKI
W265N2999 PETERSON DR
TAX KEY: PWC 0930003

PETER AND JEANNINE PETTIT
W265N3011 PETERSON DR
TAX KEY: PWC 0930001001

PETERSON DRIVE

CHARLES AND BONNIE REVIE
N30W26506 PETERSON DR
TAX KEY: PWC 0930027

DAVID AND BONNIE PUETZER
N30W26488 PETERSON DR
TAX KEY: PWC 0929993

PRIVATE RD

EXISTING LIFT STATION
WET WELL. REWIRE PUMPS FROM
230V TO 480V.

PROVIDE REMOTE HOA SWITCH DEVICE IN NEMA 3R ENCLOSURE AND
EXPLOSION PROOF SEAL FITTING TO SERVE PUMP FOR STOP/RUN OPERATION.
TIE TO PCP IN GENERATOR HOUSE FOR OPERATION/MONITORING.

REMOVE AND REPLACE
FIVE (5) FLOAT SWITCHES

PULL BOX FOR PUMP
FEEDERS AND CONTROLS WITH
EXPLOSION PROOF SEAL FITTINGS.

PROVIDE NATURAL GAS METER

PROVIDE ELECTRIC METER

ASPHALTIC PAVEMENT

TREES & BRUSH

224'-5"

TREES & BRUSH

17'-0"

31'-7"

22'-5"

12'-0"

SITE LIMITS

FIELD VERIFY BEST CONDUITS ROUTING.

DEMOLISH EXISTING CONTROL
PANEL

PULL BOX FOR PUMP
FEEDERS AND CONTROLS

PROVIDE GENERATOR
BUILDING

WDNR
WETLAND
INDICATOR
SOILS

ROBERT AND MARY ELORANTA
W262N3051 PROSPECT AVE
TAX KEY: PWC 0929996

ROBERT ELORANTA AND MARY ELORANTA
N30W26451 PETERSON DR
TAX KEY: PWC 0929996001

LIFT STATION 12
SITE PLAN
0 10 20 40 FT

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LIFT STATION NO. 9, 12, AND 14

SITE PLAN
FOR LIFT STATION NO. 12
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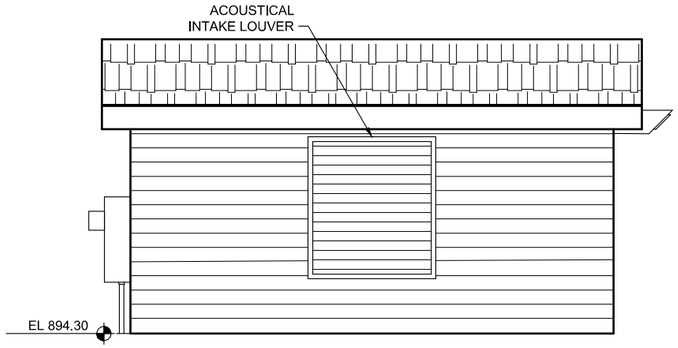

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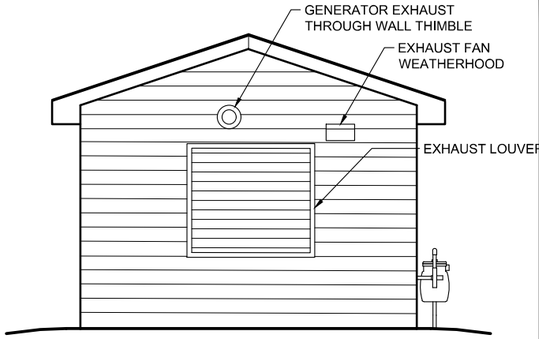

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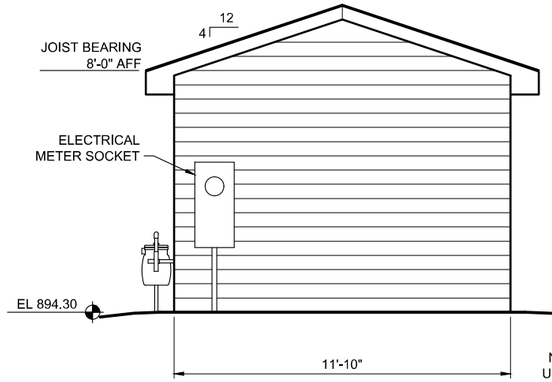

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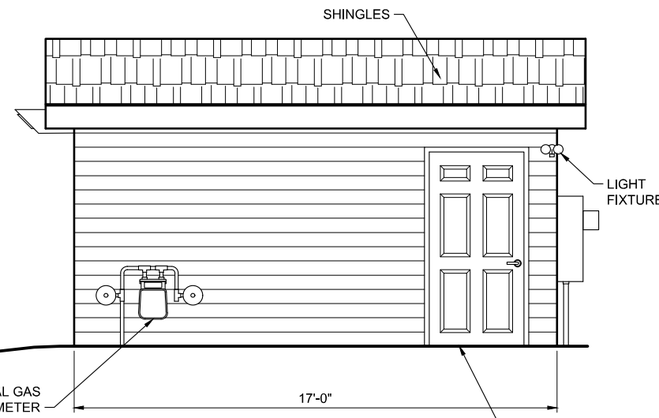
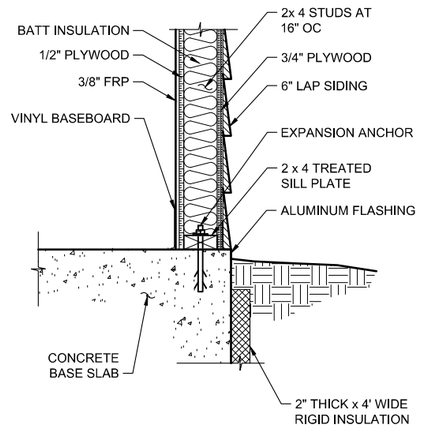


WEST ELEVATION

GENERATOR BUILDING ELEVATIONS

AELV01_LS 12 32

0 1 2 3 4 FT

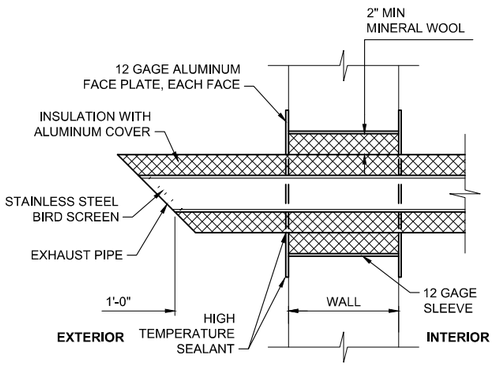


A A1201

WALL DETAIL

TYP WALL DETAIL (LAP SIDING) 8

NO SCALE



B A1201

ENGINE EXHAUST WALL SLEEVE

ENGINE EXH WALL SLEEVE 8

NO SCALE

REVISIONS	DATE
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LIFT STATION NO. 9, 12, AND 14

GENERATOR BUILDING ELVATIONS AND DETAILS
FOR LIFT STATION NO. 12
LAKE PEWAUKEE SANITARY DISTRICT
WAUKESHA COUNTY, WISCONSIN

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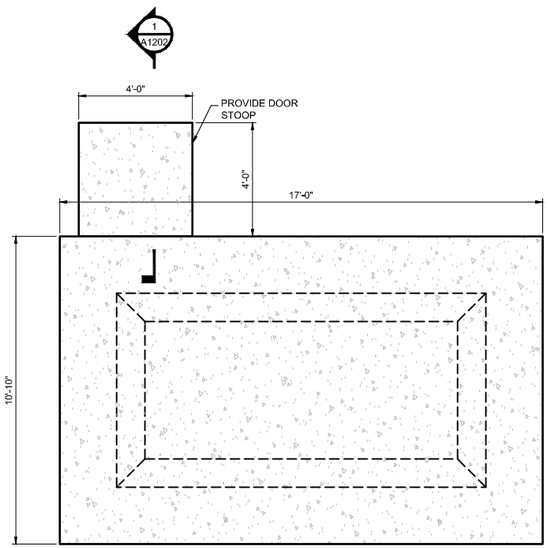
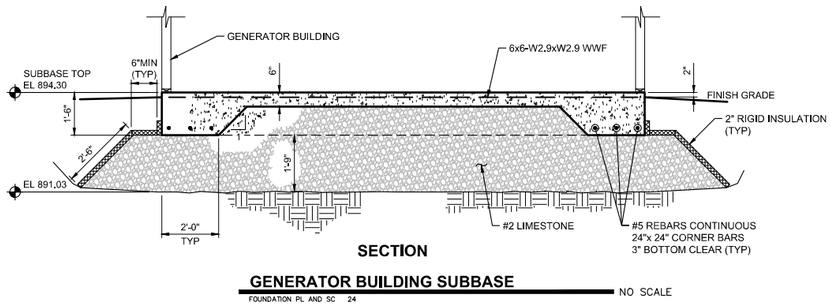
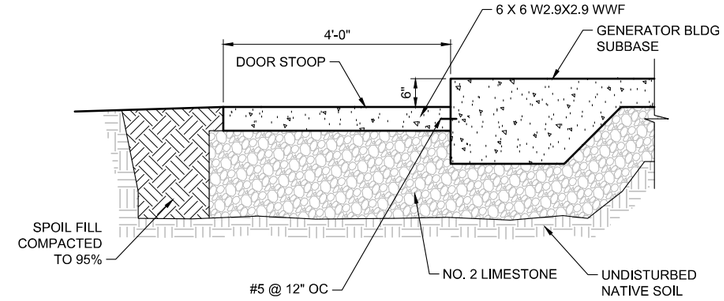


PLAN



SECTION

GENERATOR BUILDING SUBBASE
FOUNDATION PL AND SC 24
NO SCALE



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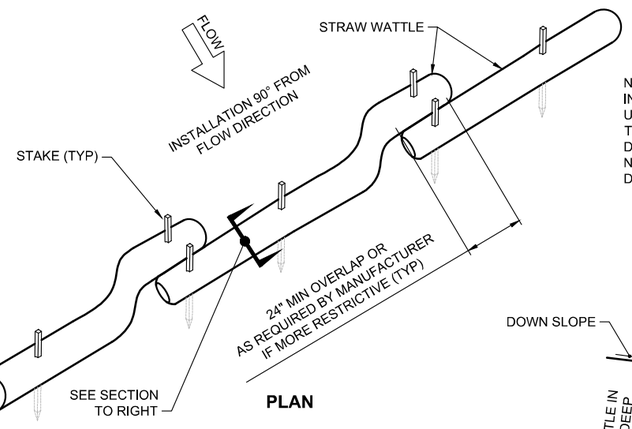
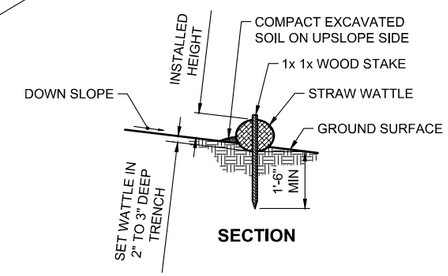


PLAN

NOTE:
INSTALLED HEIGHT IS MEASURED FROM THE UPSLOPE GROUND SURFACE TO THE TOP OF THE PRODUCT. DUE TO SETTLEMENT AND/ OR DEFORMATION, THE INSTALLED HEIGHT MAY NOT BE EQUIVALENT TO THE NOMINAL DIAMETER OF THE PRODUCT.



SECTION

A A1202 **STRAW WATTLE INSTALLATION**
EC-WATTLE 24
NO SCALE

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LIFT STATION NO. 9, 12, AND 14

BUILDING AND EROSION CONTROL DETAILS FOR LIFT STATION NO. 12

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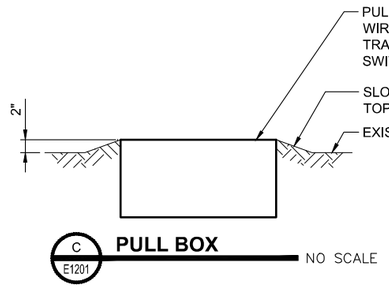
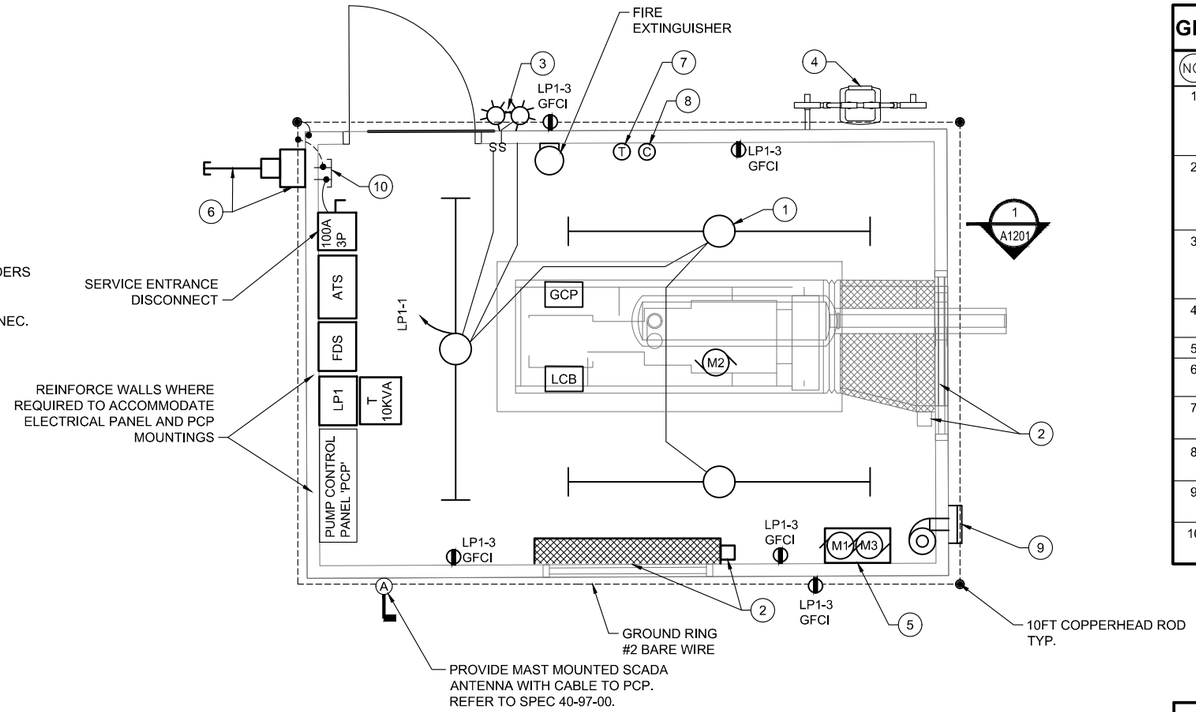
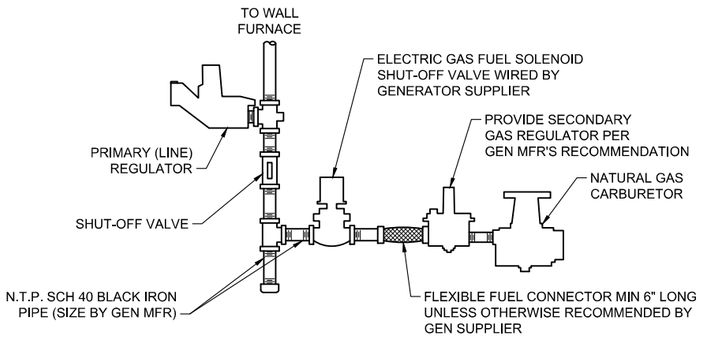




GENERATOR BLDG FLOOR PLAN SCHEDULE

133423SCH 1

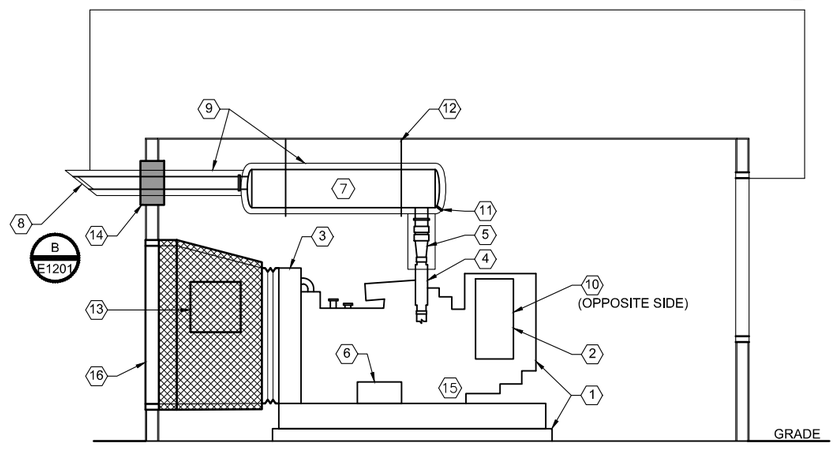
NO.	DESCRIPTION
1	8' ENCLOSED & GASKETED LED FIXTURE, HUBBELL LXEM835MLRFAEU. CEILING MOUNT USING 1-1/2" SPACERS. (TYP. OF 2)
2	LOUVER & DAMPER WITH MOTOR OPERATOR, FRAC. HP, 115V, 1Ø, WIRE OPERATOR "POWER TO CLOSE, SPRING TO OPEN". INTERLOCK CIRCUIT LP1-5 TO OPEN WITH RUN OF GENERATOR (TYP. OF 2). LOUVER AND DAMPER SUPPLIED BY OWNER.
3	PATRIOT LIGHTING DUAL HEAD MOTION SENSOR SECURITY FLOOD LIGHT. DUALUX OW9227W, OR EQUAL. LP1-1. TOP OF FIXTURE AT 6'-8" AFF. CONTROL OF LIGHT TO BE BY INTEGRAL MOTION SENSOR AND BY OVERRIDE SWITCH INSIDE BUILDING.
4	NATURAL GAS UTILITY METER. POSITION WITH REGULATOR 4' FROM DOOR AND 10' FROM NORTH WALL INTAKE LOUVER.
5	NATURAL GAS DIRECT VENT WALL FURNACE, LP1-4.
6	UTILITY-APPROVED METER WITH CONDUIT STUBBED OUT PER UTILITY REQUIREMENTS. PROVIDE WATERTIGHT CAP
7	WALL FURNACE THERMOSTAT, PROVIDE ENGRAVED NAMEPLATE "HEATER"
8	EXHAUST FAN COOLING THERMOSTAT WITH ENGRAVED NAMEPLATE "EXHAUST FAN"
9	EXHAUST FAN AND EXHAUST LOUVER. SEE VENTILATION WIRING DIAGRAM.
10	PROVIDE 12" GROUND BUS BAR.



B E1201 **NATURAL GAS FUEL SYSTEM** 231123GAS_01 1 NO SCALE

GENERATOR BUILDING FLOOR PLAN

EPLFL01_01 24 0 1 2 3 FT



1 E1201 **SECTION** ESX0001_LS 10 24 NO SCALE

ENGINE/GENERATOR MATERIAL LIST

263213LEG_01 1

NO.	DESCRIPTION
1	40 KW, 277 / 480V, 3Ø, 4W, NATURAL GAS, STANDBY GENERATOR
2	UNIT-MOUNTED GENERATOR CONTROL PANEL "GCP"
3	UNIT-MOUNTED RADIATOR WITH SURGE/EXPANSION TANK
4	4" SEAMLESS, STAINLESS STEEL, FLEXIBLE EXHAUST CONNECTION
5	4" EXHAUST PIPE
6	12 Vdc STARTING BATTERIES
7	EXHAUST SILENCER, CRITICAL GRADE, WITH 4" 90° INLET AND 4" OUTLET, COMPLETE WITH COMPANION FLANGES. MOUNT SILENCER SO THAT IT IS NOT SUPPORTED BY ENGINE/GENERATOR SET
8	4" BLACK STEEL EXHAUST PIPE WITH STAINLESS STEEL BIRD SCREEN WELDED ON 45° OUTLET
9	INSULATION WITH ALUMINUM COVER. 2" THICK OVER EXHAUST PIPING, 4" THICK OVER EXHAUST SILENCER
10	UNIT-MOUNTED 60/3 LINE CIRCUIT BREAKER (WEST SIDE)
11	CONDENSATION TRAP WITH DRAIN VALVE (INSTALLED PER SILENCER MANUFACTURER'S RECOMMENDATIONS)
12	ISOLATION-TYPE PIPE HANGERS TO SUPPORT EXHAUST SILENCER AND PIPING. EXHAUST SILENCER SUPPLIED BY OWNER.
13	20 GAGE MIN. HOT-DIPPED GALVANIZED SHEET METAL DUCT WITH FLEXIBLE SECTION AND MIN. 12"x 12" CAM-ATTACHED ACCESS DOOR.
14	ENGINE EXHAUST WALL SLEEVE (SEE DETAIL)
15	NATURAL GAS CONNECTION, SEE NATURAL GAS FUEL SYSTEM DETAIL.
16	DAMPER DUCTWORK. INSULATE DUCTWORK BETWEEN INSIDE FACE OF BUILDING WALL AND FACE OF DUCTWORK.

ABBREVIATIONS

ATS	AUTOMATIC TRANSFER SWITCH	LCB	LINE CIRCUIT BREAKER
FDS	FUSED DISCONNECT SWITCH	LP	LIGHTING PANEL
GCP	GENERATOR CONTROL PANEL	MCB	MAIN CIRCUIT BREAKER
LA	LIGHTNING ARRESTOR		

REVISIONS	7	6	5	4	3	2	1
TOWN:							
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LIFT STATION NO. 9, 12, AND 14
GENERATOR FLOOR PLAN, SCHEDULES, AND DETAILS
FOR LIFT STATION NO. 12
LAKE PEWAUKEE SANITARY DISTRICT
WAUKESHA COUNTY, WISCONSIN

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Mar 21, 2023 7:42am PLOTTED BY: wbancroft SAVED BY: WBANCROFT
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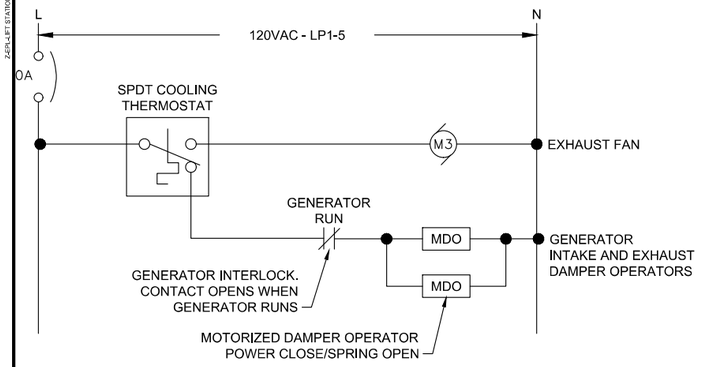
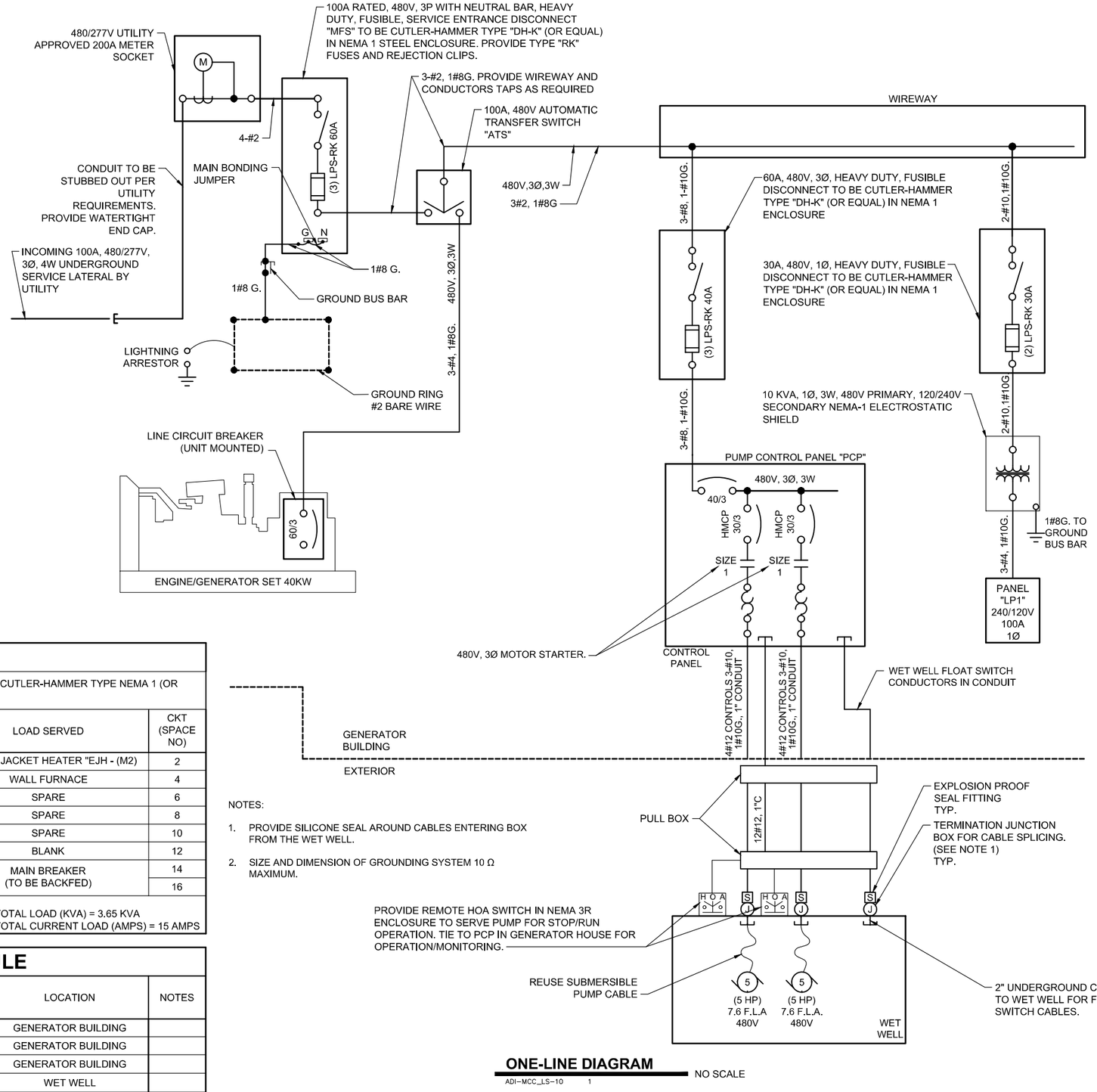


GENERATOR BUILDING VENTILATION WIRING

NO SCALE

16150VEN3_LS-01 1



NOTES:

1. PROVIDE SILICONE SEAL AROUND CABLES ENTERING BOX FROM THE WET WELL.
2. SIZE AND DIMENSION OF GROUNDING SYSTEM 10 Ω MAXIMUM.

ONE-LINE DIAGRAM

NO SCALE

ADI-MCC_LS-10 1

CONTROL DEVICE SCHEDULE

ECH-CONTROL DEVICE_LS-01 1

TAG	WIRE TO	CABLE TYPE	COMMENTS
ATS	PCP	4-#14	POWER FAIL STATUS
ATS	GCP	PER MFR	GENERATOR CONTROL / BATTERY CHARGER
FLT1	PCP	2-#14	WET WELL HIGH LEVEL ALARM FLOAT
FLT2	PCP	2-#14	WET WELL LAG PUMP START FLOAT
FLT3	PCP	2-#14	WET WELL LEAD PUMP START FLOAT
FLT4	PCP	2-#14	WET WELL PUMPS STOP FLOAT
FLT5	PCP	2-#14	WET WELL LOW LEVEL ALARM FLOAT
GCP	PCP	4-#14	GENERATOR "RUN" & "FAIL" STATUS

NOTES:
1. FURNISH AND INSTALL ALL WIRING FROM CONTROL DEVICES TO CONTROL PANELS IN CONDUIT.
2. MATCH EXISTING WET WELL FLOAT ELEVATIONS.

ECH-PANEL-LP1_LS-01 1

PANEL "LP1"

LOCATION: GENERATOR BUILDING

DESCRIPTION: 120/240V, 1Ø, 3W, CUTLER-HAMMER TYPE NEMA 1 (OR EQUAL)

CKT (SPACE NO)	LOAD SERVED	LOAD	BRK (AMP/ POLE)	BRK (AMP/ POLE)	LOAD	LOAD SERVED	CKT (SPACE NO)
1	LIGHTING	.25	20/ 1	20/ 1	1.5	ENGINE JACKET HEATER "EJH - (M2)	2
3	GFCI RECEPTACLES	.5	20/ 1	20/ 1	.5	WALL FURNACE	4
5	LOUVER DAMPERS/ EXH FAN	1	20/ 1	20/ 1		SPARE	6
7	SPARE		20/ 1	20/ 1		SPARE	8
9	SPARE		20/ 1	20/ 1		SPARE	10
11	BLANK					BLANK	12
13	BLANK			60/ 2		MAIN BREAKER (TO BE BACKFED)	14
15	BLANK						16

NOTES: 1. MAXIMUM FAULT CURRENT RATING: 22 KAIC.
2. PROVIDE BOLT-IN BREAKERS

TOTAL LOAD (KVA) = 3.65 KVA
TOTAL CURRENT LOAD (AMPS) = 15 AMPS

ECH-MOTOROUTLET_LS-01 1

MOTOR & SPECIAL OUTLET SCHEDULE

MARK	TAG	DESCRIPTION	HP	KW	VOLT /Ø	CKT FROM	LOCATION	NOTES
M1	WF	WALL FURNACE		0.5	120/1	LP2	GENERATOR BUILDING	
M2	EJH	ENGINE JACKET HEATER		1.5	120/ 1	LP2	GENERATOR BUILDING	
M3	EF	EXHAUST FAN	1/12		120/ 1	LP2	GENERATOR BUILDING	
M4	P1	LIFT PUMP #1	5		480/3	LP1	WET WELL	
M5	P2	LIFT PUMP #2	5		480/3	LP1	WET WELL	

NOTES:
1. EXISTING PUMP TO BE REUSED. REWIRE TO NEW PCP.

REVISIONS	TOWN:	RANGE:	SECTION(s):
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LIFT STATION NO. 9, 12, AND 14
ONE-LINE DIAGRAMS AND SCHEDULES FOR LIFT STATION NO. 12
LAKE PEWAUKEE SANITARY DISTRICT
WAUKESHA COUNTY, WISCONSIN

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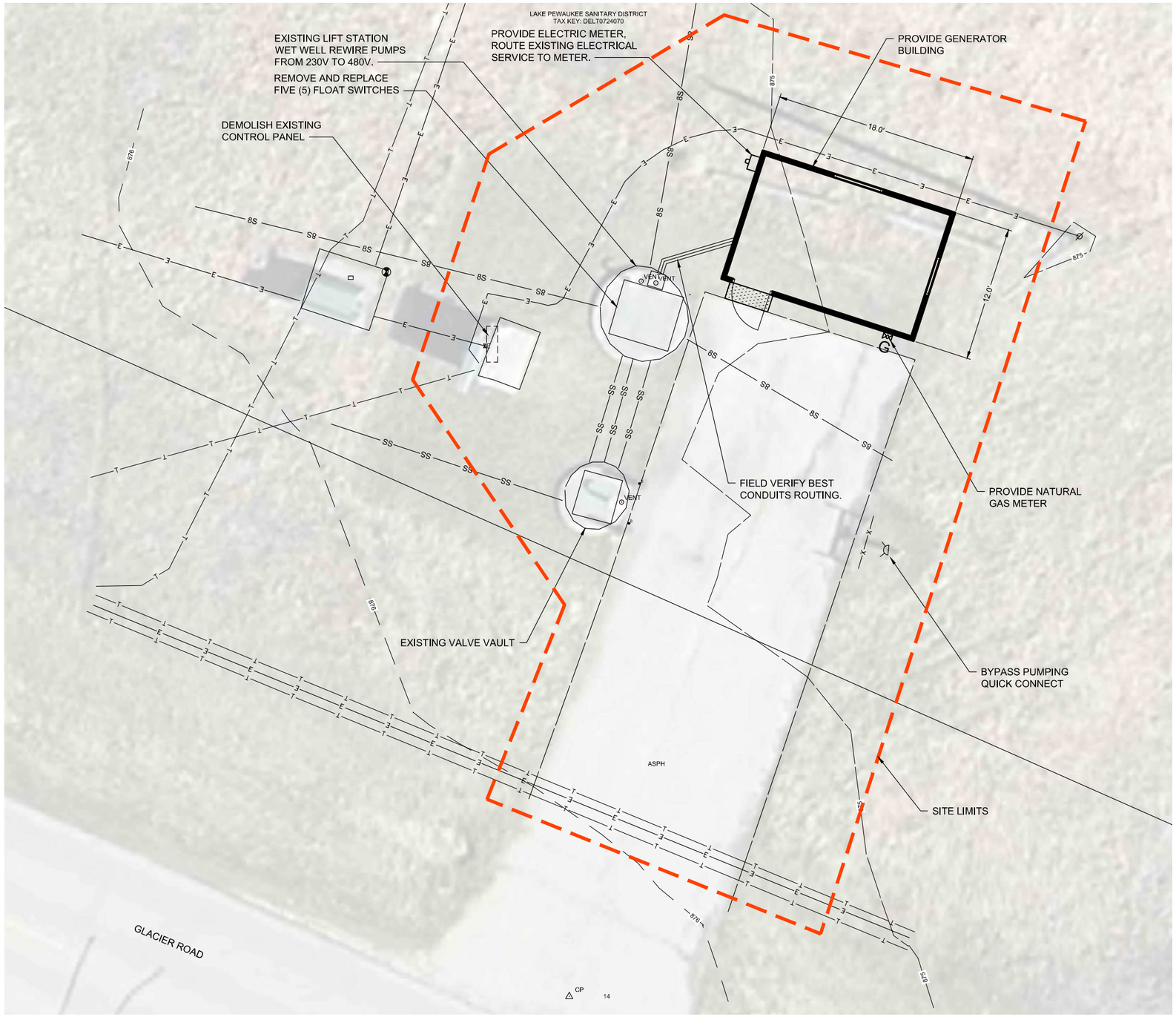

LIFT STATION 14
SITE PLAN

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LIFT STATION NO. 9, 12, AND 14

SITE PLAN
FOR LIFT STATION NO. 14
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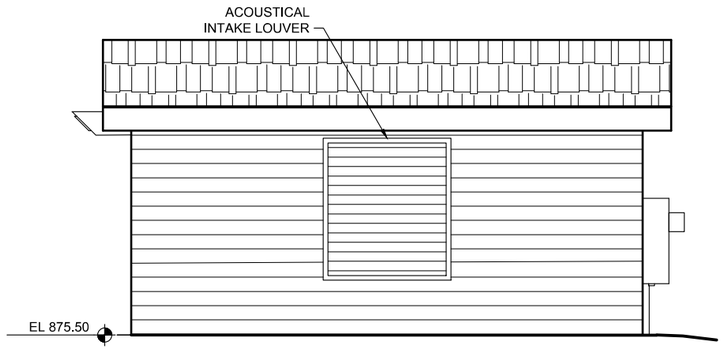
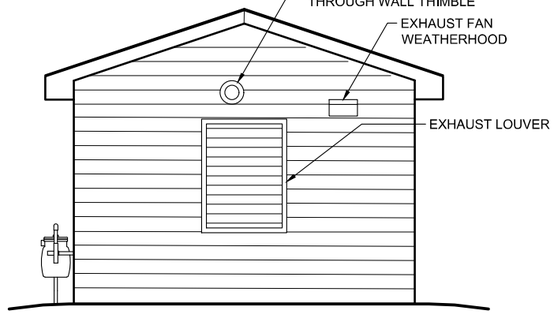
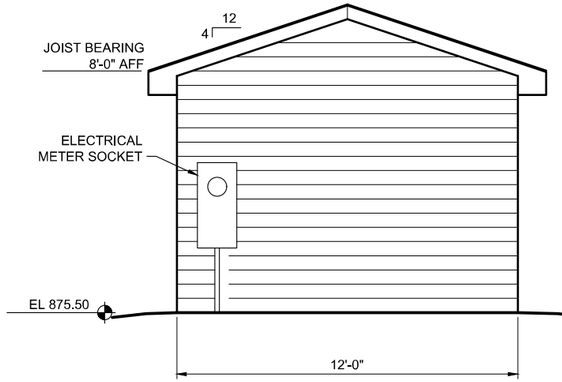




NORTH ELEVATION

EAST ELEVATION



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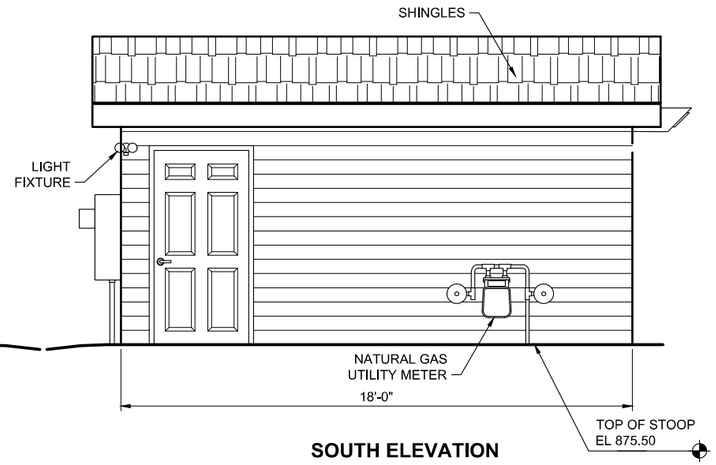

SOUTH ELEVATION

GENERATOR BUILDING ELEVATIONS

AELV01_LS 12 32

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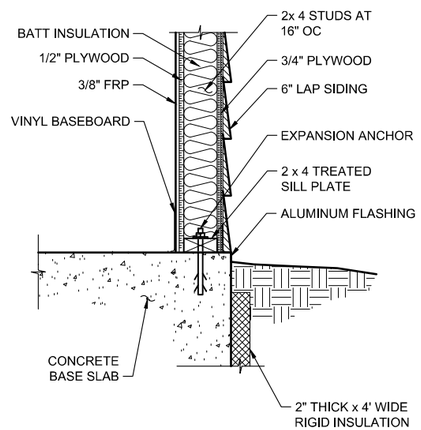

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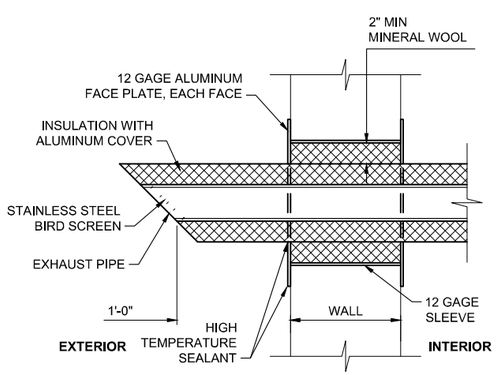

B A1401 **ENGINE EXHAUST WALL SLEEVE** NO SCALE

ENGINE EXH WALL SLEEVE 8

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LIFT STATION NO. 9, 12, AND 14

GENERATOR BUILDING ELEVATIONS AND DETAILS FOR LIFT STATION NO. 14

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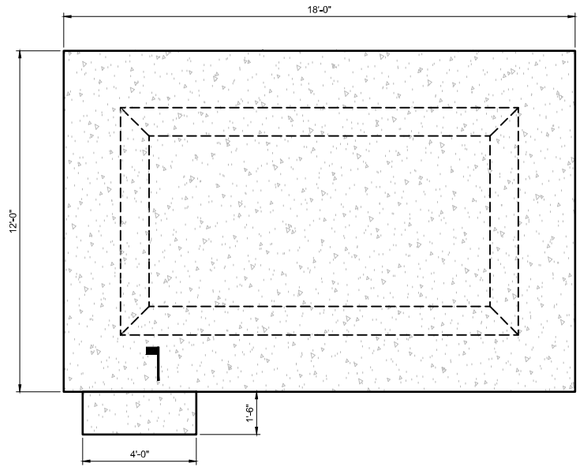
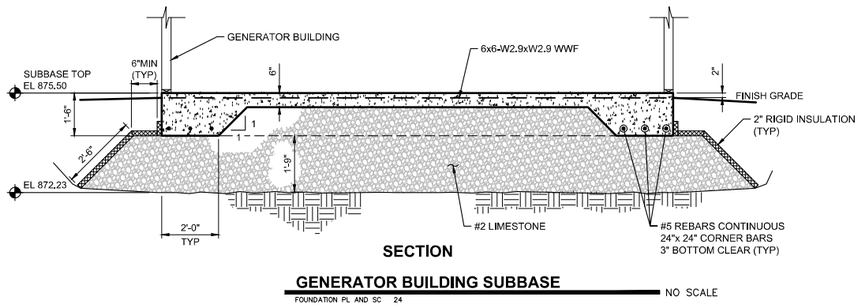


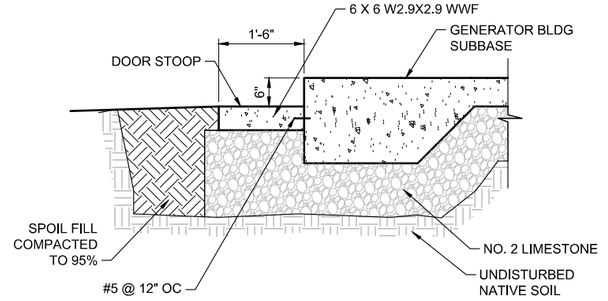
PLAN



SECTION

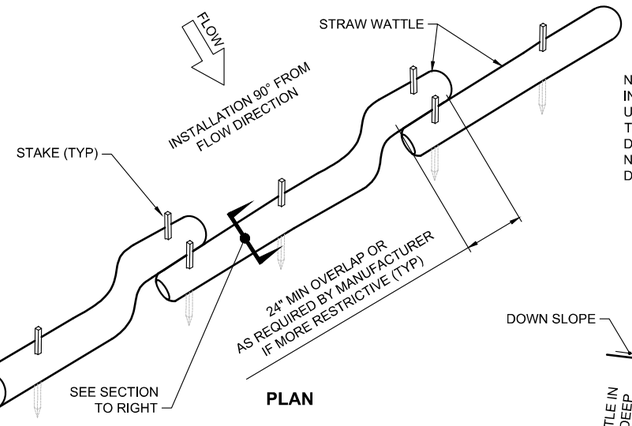
GENERATOR BUILDING SUBBASE

FOUNDATION PL AND SC 24 NO SCALE



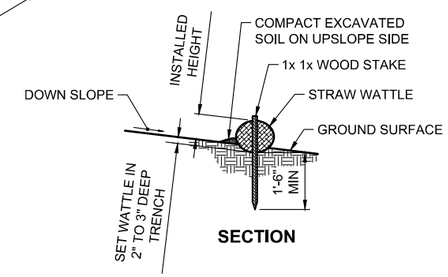
1 A1402 **SECTION** NO SCALE

033000FT4--14 16



PLAN

NOTE:
INSTALLED HEIGHT IS MEASURED FROM THE UPSLOPE GROUND SURFACE TO THE TOP OF THE PRODUCT. DUE TO SETTLEMENT AND/ OR DEFORMATION, THE INSTALLED HEIGHT MAY NOT BE EQUIVALENT TO THE NOMINAL DIAMETER OF THE PRODUCT.



SECTION

A A1402 **STRAW WATTLE INSTALLATION** NO SCALE

EC-WATTLE 24

7	
6	
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REVISIONS	
TOWN:	RANGE: SECTION(s):

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LIFT STATION NO. 9, 12, AND 14

BUILDING AND EROSION CONTROL DETAILS FOR LIFT STATION NO. 14

LAKE PEWAUKEE SANITARY DISTRICT WAUKESHA COUNTY, WISCONSIN

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DESIGNED BY: DWA
DRAFTED BY: WCB
CHECKED BY: DJH
DATE: MARCH, 2023
FILE NO. 8193-10016

SHEET NO. A1402

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Mar 21, 2023 7:43am PLOTTED BY: dbancroft SAVED BY: WBANGROFT
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XREFS: TITLE BLOCK_LS NO. 14 FOUNDATION PL AND SC, AEL-ALL_LS 14, ENGINE EXH WALL SLEEVE, TYP WALL DETAIL (LAP SIDING), EC-WATTLE, 033000FT4--14
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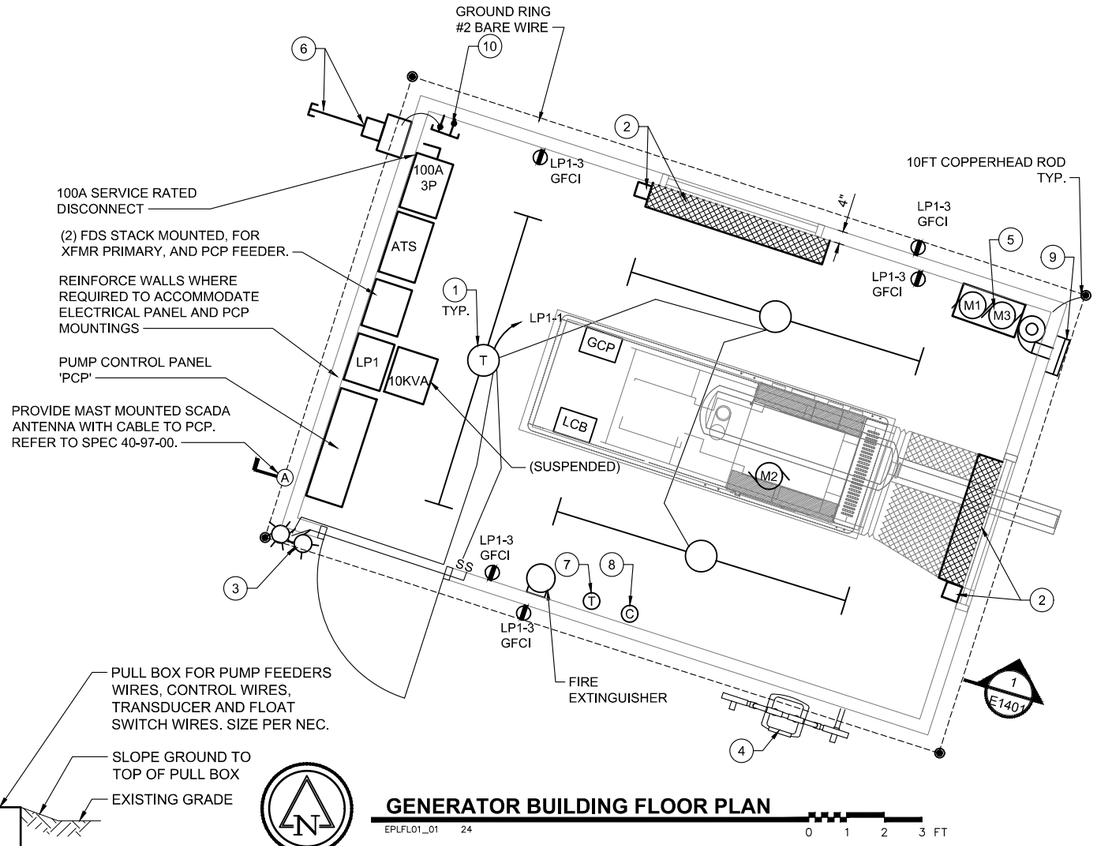
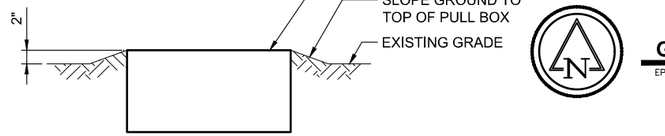


GENERATOR BUILDING FLOOR PLAN

EPLFL01_01 24

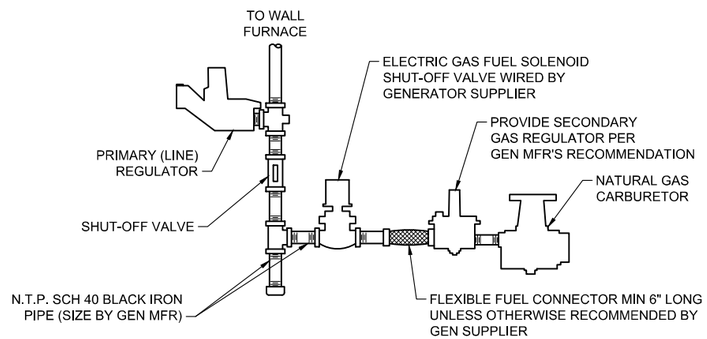
0 1 2 3 FT

GENERATOR BLDG FLOOR PLAN SCHEDULE 133423SCH 1	
NO.	DESCRIPTION
1	8' ENCLOSED & GASKETED LED FIXTURE, HUBBELL LXEM835MLRFAEU. CEILING MOUNT USING 1-1/2" SPACERS. (TYP. OF 2)
2	LOUVER & DAMPER WITH MOTOR OPERATOR, FRAC. HP, 115V, 1Ø, WIRE OPERATOR "POWER TO CLOSE, SPRING TO OPEN". INTERLOCK CIRCUIT LP1-5 TO OPEN WITH RUN OF GENERATOR (TYP. OF 2). LOUVER AND DAMPER SUPPLIED BY OWNER.
3	PATRIOT LIGHTING DUAL HEAD MOTION SENSOR SECURITY FLOOD LIGHT. DUALUX OW9227W, OR EQUAL. LP1-1. TOP OF FIXTURE AT 6'-8" AFF. CONTROL OF LIGHT TO BE BY INTEGRAL MOTION SENSOR AND BY OVERRIDE SWITCH INSIDE BUILDING.
4	NATURAL GAS UTILITY METER. POSITION WITH REGULATOR 4' FROM DOOR AND 10' FROM NORTH WALL INTAKE LOUVER.
5	NATURAL GAS DIRECT VENT WALL FURNACE, LP1-4.
6	UTILITY-APPROVED METER WITH CONDUIT STUBBED OUT PER UTILITY REQUIREMENTS. PROVIDE WATERTIGHT CAP
7	WALL FURNACE THERMOSTAT, PROVIDE ENGRAVED NAMEPLATE "HEATER"
8	EXHAUST FAN COOLING THERMOSTAT WITH ENGRAVED NAMEPLATE "EXHAUST FAN"
9	EXHAUST FAN AND EXHAUST LOUVER. SEE VENTILATION WIRING DIAGRAM.
10	PROVIDE 12" GROUND BUS BAR.



C E1401 PULL BOX

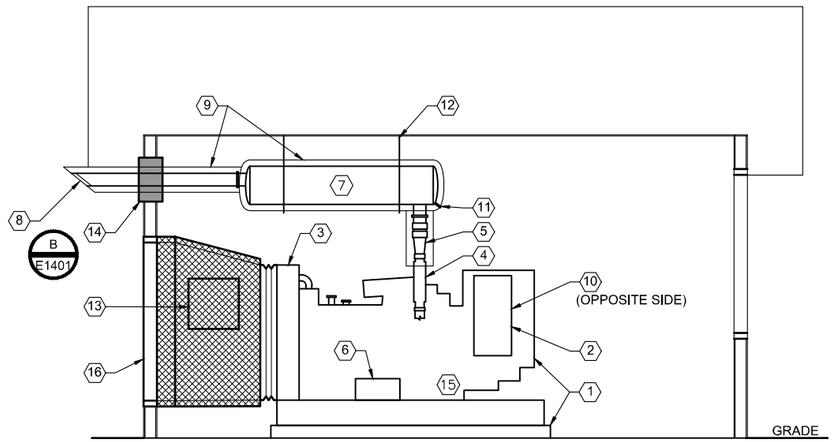
NO SCALE



B E1401 NATURAL GAS FUEL SYSTEM

231123GAS_01 1

NO SCALE



1 E1401 SECTION

ESX0001_LS 10 24

NO SCALE

ABBREVIATIONS

ATS	AUTOMATIC TRANSFER SWITCH	LCB	LINE CIRCUIT BREAKER
FDS	FUSED DISCONNECT SWITCH	LP	LIGHTING PANEL
GCP	GENERATOR CONTROL PANEL	MCB	MAIN CIRCUIT BREAKER
LA	LIGHTNING ARRESTOR		

ENGINE/GENERATOR MATERIAL LIST 263213LEG_01 1	
NO.	DESCRIPTION
1	125 KW, 277 / 480V, 3Ø, 4W, NATURAL GAS, STANDBY GENERATOR SET
2	UNIT-MOUNTED GENERATOR CONTROL PANEL "GCP"
3	UNIT-MOUNTED RADIATOR WITH SURGE/EXPANSION TANK
4	4" SEAMLESS, STAINLESS STEEL, FLEXIBLE EXHAUST CONNECTION
5	4" EXHAUST PIPE
6	12 Vdc STARTING BATTERIES
7	EXHAUST SILENCER, CRITICAL GRADE, WITH 4" 90° INLET AND 4" OUTLET, COMPLETE WITH COMPANION FLANGES. MOUNT SILENCER SO THAT IT IS NOT SUPPORTED BY ENGINE/GENERATOR SET
8	4" BLACK STEEL EXHAUST PIPE WITH STAINLESS STEEL BIRD SCREEN WELDED ON 45° OUTLET
9	INSULATION WITH ALUMINUM COVER. 2" THICK OVER EXHAUST PIPING, 4" THICK OVER EXHAUST SILENCER
10	UNIT-MOUNTED 200/3 LINE CIRCUIT BREAKER (WEST SIDE)
11	CONDENSATION TRAP WITH DRAIN VALVE (INSTALLED PER SILENCER MANUFACTURER'S RECOMMENDATIONS)
12	ISOLATION-TYPE PIPE HANGERS TO SUPPORT EXHAUST SILENCER AND PIPING. EXHAUST SILENCER SUPPLIED BY OWNER.
13	20 GAGE MIN. HOT-DIPPED GALVANIZED SHEET METAL DUCT WITH FLEXIBLE SECTION AND MIN. 12"x 12" CAM-ATTACHED ACCESS DOOR.
14	ENGINE EXHAUST WALL SLEEVE (SEE DETAIL)
15	NATURAL GAS CONNECTION, SEE NATURAL GAS FUEL SYSTEM DETAIL.
16	DAMPER DUCTWORK. INSULATE DUCTWORK BETWEEN INSIDE FACE OF BUILDING WALL AND FACE OF DUCTWORK.

REVISIONS	TOWN:	RANGE:	SECTION(s):
7			
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LIFT STATION NO. 9, 12, AND 14

GENERATOR FLOOR PLAN, SCHEDULES, AND DETAILS FOR LIFT STATION NO. 14

LAKE PEWAUKEE SANITARY DISTRICT
WAUKESHA COUNTY, WISCONSIN

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DESIGNED BY: OLV

DRAFTED BY: OLV

CHECKED BY: DJH

DATE: MARCH, 2023

FILE NO.
8193-10016

SHEET NO.
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Mar 21, 2023 7:43am PLOTTED BY: vbancroft SAVED BY: VBANCROFT
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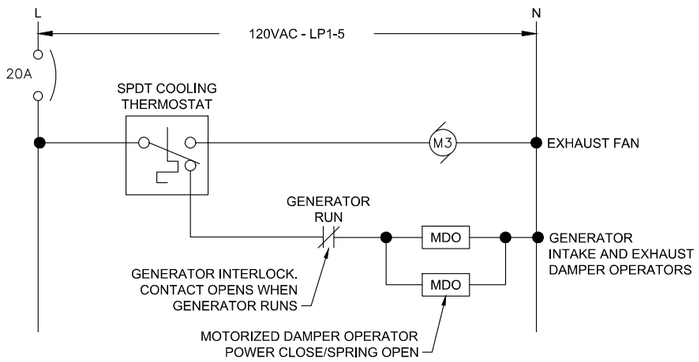


GENERATOR BUILDING VENTILATION WIRING

16150VEN3_LS-01 1 NO SCALE

CONTROL DEVICE SCHEDULE

ECH-CONTROL DEVICE_LS-01 1

TAG	WIRE TO	CABLE TYPE	COMMENTS
ATS	PCP	4-#14	POWER FAIL STATUS
ATS	GCP	PER MFR	GENERATOR CONTROL / BATTERY CHARGER
FLT1	PCP	2-#14	WET WELL HIGH LEVEL ALARM FLOAT
FLT2	PCP	2-#14	WET WELL LAG PUMP START FLOAT
FLT3	PCP	2-#14	WET WELL LEAD PUMP START FLOAT
FLT4	PCP	2-#14	WET WELL PUMPS STOP FLOAT
FLT5	PCP	2-#14	WET WELL LOW LEVEL ALARM FLOAT
GCP	PCP	4-#14	GENERATOR "RUN" & "FAIL" STATUS

NOTES:
1. FURNISH AND INSTALL ALL WIRING FROM CONTROL DEVICES TO CONTROL PANELS IN CONDUIT.
2. MATCH EXISTING WET WELL FLOAT ELEVATIONS.

MOTOR & SPECIAL OUTLET SCHEDULE

ECH-MOTOROUTLET_LS-01 1

MARK	TAG	DESCRIPTION	HP	KW	VOLT /Ø	CKT FROM	LOCATION	NOTES
M1	WF	WALL FURNACE		0.5	120/1	LP2	GENERATOR BUILDING	
M2	EJH	ENGINE JACKET HEATER		1.5	120/ 1	LP2	GENERATOR BUILDING	
M3	EF	EXHAUST FAN	1/12		120/ 1	LP2	GENERATOR BUILDING	
M4	P1	LIFT PUMP #1	30		480/3	LP1	WET WELL	
M5	P2	LIFT PUMP #2	30		480/3	LP1	WET WELL	

NOTES:
1. EXISTING PUMP TO BE REUSED. REWIRE TO NEW PCP.

PANEL "LP1"

ECH-PANEL-LP1_LS-01 1

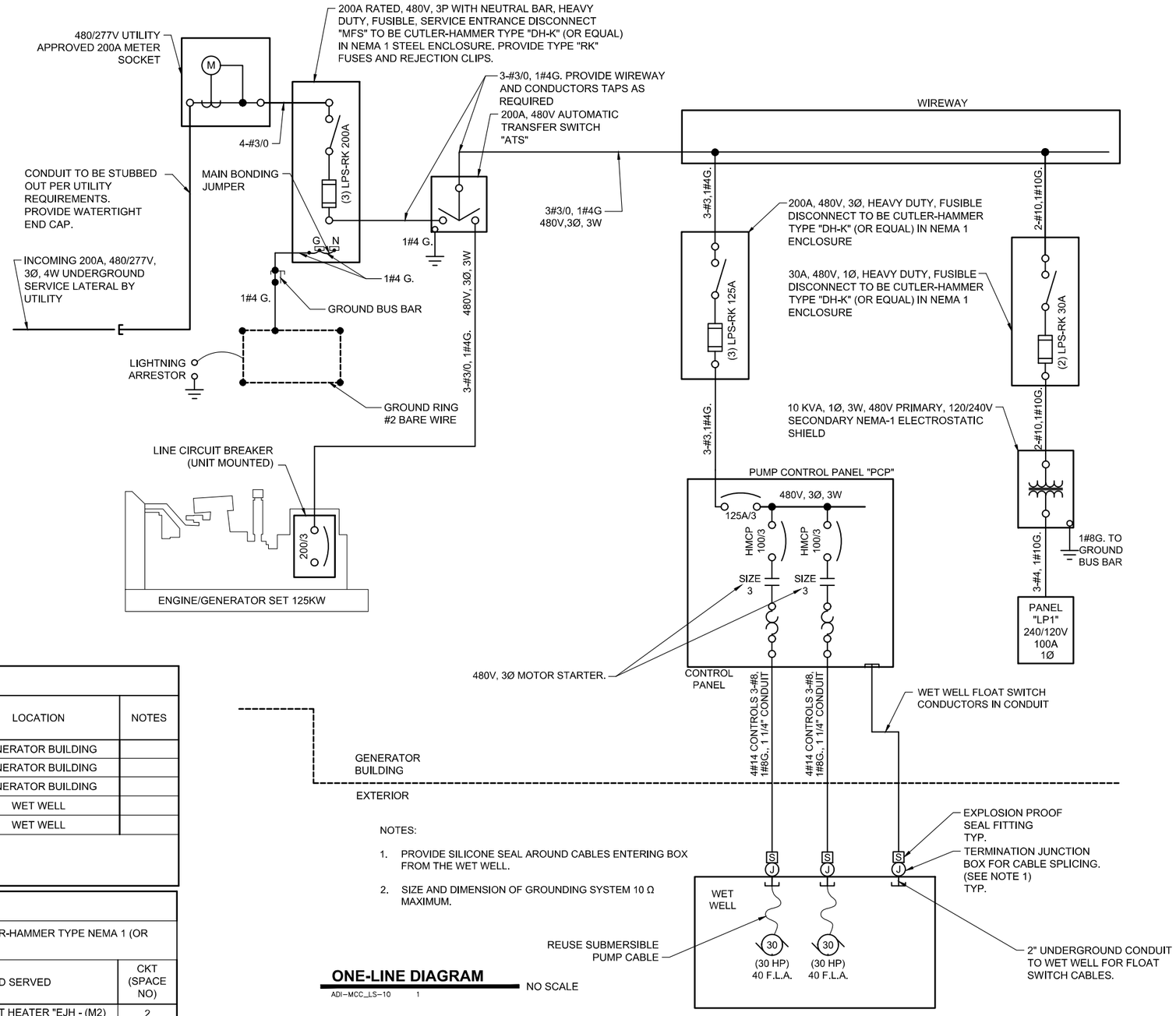
LOCATION: GENERATOR BUILDING

DESCRIPTION: 120/240V, 1Ø, 3W, CUTLER-HAMMER TYPE NEMA 1 (OR EQUAL)

CKT (SPACE NO)	LOAD SERVED	LOAD	BRK (AMP/ POLE)	BRK (AMP/ POLE)	LOAD	LOAD SERVED	CKT (SPACE NO)
1	LIGHTING	.25	20/ 1	20/ 1	1.5	ENGINE JACKET HEATER "EJH - (M2)	2
3	GFCI RECEPTACLES	.9	20/ 1	20/ 1	.5	WALL FURNACE	4
5	LOUVER DAMPERS/ EXH FAN	.5	20/ 1	20/ 1		SPARE	6
7	SPARE		20/ 1	20/ 1		SPARE	8
9	SPARE		20/ 1	20/ 1		SPARE	10
11	BLANK					BLANK	12
13	BLANK			60/ 2		MAIN BREAKER (TO BE BACKFED)	14
15	BLANK						16

NOTES: 1. MAXIMUM FAULT CURRENT RATING: 22 KAIC.
2. PROVIDE BOLT-IN BREAKERS

TOTAL LOAD (KVA) =3.65 KVA
TOTAL CURRENT LOAD (AMPS) = 15 AMPS



NOTES:

1. PROVIDE SILICONE SEAL AROUND CABLES ENTERING BOX FROM THE WET WELL.
2. SIZE AND DIMENSION OF GROUNDING SYSTEM 10 Ω MAXIMUM.

ONE-LINE DIAGRAM

ADI-MCC_LS-10 1 NO SCALE

REVISIONS	TOWN:	RANGE:	SECTION(s):
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LIFT STATION NO. 9, 12, AND 14
ONE-LINE DIAGRAMS AND SCHEDULES FOR LIFT STATION NO. 14
LAKE PEWAUKEE SANITARY DISTRICT
WAUKESHA COUNTY, WISCONSIN

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DESIGNED BY: OLV
DRAFTED BY: OLV
CHECKED BY: DJH
DATE: MARCH, 2023
FILE NO. 8193-10016

SHEET NO. E1402

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Z:\EPL-LIFT STATION NO-14 E1402
Mar 21, 2023 7:43am PLOTTED BY:wbancroft SAVED BY:WBANCROFT
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Document Number	Document Title
	SANITARY SEWER GENERATOR AND CONTROL BUILDING EASEMENT

Recording Area

Name and Return Address

Haight & Fabyan, S.C.
A. Erick Fabyan
115 E Capitol Dr
Hartland WI 53029

Parcel Identification Number (PIN)

THIS AGREEMENT made this _____ day of _____, 2023, by and between the City of Pewaukee, a city located in Waukesha County, Wisconsin (the "Grantor") and the Lake Pewaukee Sanitary District, a public utility located in Waukesha County, Wisconsin, (the "LPSD").

RECITALS

WHEREAS, the Grantor is the owner of that certain public road known as Peterson Drive in the City of Pewaukee, Waukesha County, Wisconsin; and

WHEREAS, the LPSD owns and operates sewer facilities; and

WHEREAS, the LPSD desires to build a building to contain a generator and to house the pump controls and radio systems for the operation of a sanitary sewer pumping station together with appurtenances thereto (the "Building") in the portion of Peterson Drive having the following legal description and as more particularly described on attached Exhibit A (the "Easement Area"):

Part of Peterson Drive as dedicated on Certified Survey Map No. 4721, being part of the Northwest 1/4 of the Northeast 1/4 of Section 17, T7N, R19E, City of Pewaukee, Waukesha County, Wisconsin bounded and described as follows:

Commencing at the Southwest corner of Lot 1 of Certified Survey Map No. 4721, thence South 89° 44' 19" West, 26.00 feet to the point of beginning of the lands to be described; thence South 89° 44' 19" West, 15.00 feet; thence North 00° 15' 41" West, 250.00 feet; thence North 49° 44' 14" East, 2.04 feet, thence North 89° 45' 49" East, 39.44 feet; thence South 00° 15' 41" East, 37.00 feet; thence South 89° 45' 49" West, 26.00 feet; thence South 00° 15' 41" East, 214.30 feet to the point of beginning.

Contains 4,730 square feet, 0.11 acres.

WHEREAS, the Grantor acknowledges that locating the Building in the Easement Area necessitates installing electrical that go to the Building and from the Building to the sanitary pumping station, and Grantor desires to grant and LPSD desires to acquire a permanent and perpetual right for the construction, installation, operation, repair, maintenance, and replacement of conduit and cables underground, together with markers and other appurtenant equipment, and together with all necessary and usual appurtenant equipment above ground, all for the purpose of transmitting electric energy, gas, heat and radio controls to the sanitary pumping station located on the Easement Area; and

WHEREAS, the LPSD desires to acquire, and Grantor desires to grant, a permanent and perpetual right for the construction, operation, use, maintenance and repair (including reconstruction) of the Building and appurtenances thereto, including the right of entry, in and across the Easement Area.

NOW, THEREFORE, in consideration of good and valuable consideration, receipt of which is hereby acknowledged,

1. Grantor grants and conveys unto LPSD a perpetual easement for the construction, operation, use, maintenance and repair (including reconstruction) of a Building to contain a generator and to house the pump controls and radio systems for the operation of a sanitary sewer pumping station, together with appurtenances thereto, through the Easement Area so described above and as set forth on the attached Exhibit A;

2. Grantor grants and conveys unto LPSD a perpetual easement for the construction, installation, operation, repair, maintenance and replacement of conduit and cables underground, together with markers and other appurtenant equipment, and together with all necessary and usual appurtenant equipment above ground, all for the purpose of transmitting electric energy, gas, heat and radio controls to the sanitary pumping station located on the Easement Area. LPSD shall be authorized to execute any utility easements as the grantor of said utility easements over said described land for the purposes set forth herein.

UPON CONDITION

4. The right, permission and authority is also granted to LPSD to trim and/or cut down certain trees and/or brush where said trees and/or brush interfere with the construction or maintenance of the Building, represent a hazard to the Building, interfere with the construction or maintenance of the electrical, gas, or radio equipment and underground or aboveground facilities, or represent a hazard to such electrical, gas or radio equipment or underground or aboveground facilities.

5. The Grantor, and Grantor's heirs, successors and assigns, covenant(s) and agree(s) to restrict the use of the land included in the Easement Area described hereinabove so that no obstruction of access to the Building shall be created in the future and that no building, trees, shrubs, structures or items that may interfere with the use, maintenance or repair of the Building within the vertical planes of the easement area.

6. The Grantor, and Grantor's heirs, successors and assigns, covenant(s) and agree(s) to restrict the use of the land included in the Easement described hereinabove so that no building, trees, shrubs, structures or items will be erected over and/or under or placed in such close proximity to the electrical, gas or radio equipment and either underground or aboveground electrical, gas or radio facilities as to create a violation of the Wisconsin State Electrical Code, or any amendments thereto. The Grantors, and Grantor's heirs, successors and assigns, further covenant(s) and agree(s) that after the installation and construction of said electrical facilities, the elevation of the existing ground surface within the Easement Area shall not be altered by more than four (4) inches without the written consent of Grantee.

7. LPSD and its agents shall have the right to enter upon the Easement Area for the purpose of exercising its rights herein acquired.

8. Grantor consents to the entry by the servants, employees, workmen, agents or independent contractors of LPSD for and incidental to the construction, operation, use, maintenance and repair (including reconstruction) of such Building.

9. This indenture shall run with the land hereinbefore described and shall be binding upon and inure to the benefit of the parties hereto, their respective heirs, administrators, successors and assigns.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, first party has executed this Agreement the day and year first above written.

GRANTOR:
Executed pursuant to the authority granted by the City of Pewaukee on the _____ day of _____, 2023.

_____

STATE OF WISCONSIN)
) SS.
WAUKESHA COUNTY)

Personally came before me this _____ day of _____, 2023, the above named _____, to me known to be the persons who executed the foregoing instrument and acknowledged the same.

_____
Print Name_____
Notary Public, _____ County, Wisconsin
My Commission expires _____.

Accepted pursuant to the authority granted by the Lake Pewaukee Sanitary District on the _____ day of _____, 2023.

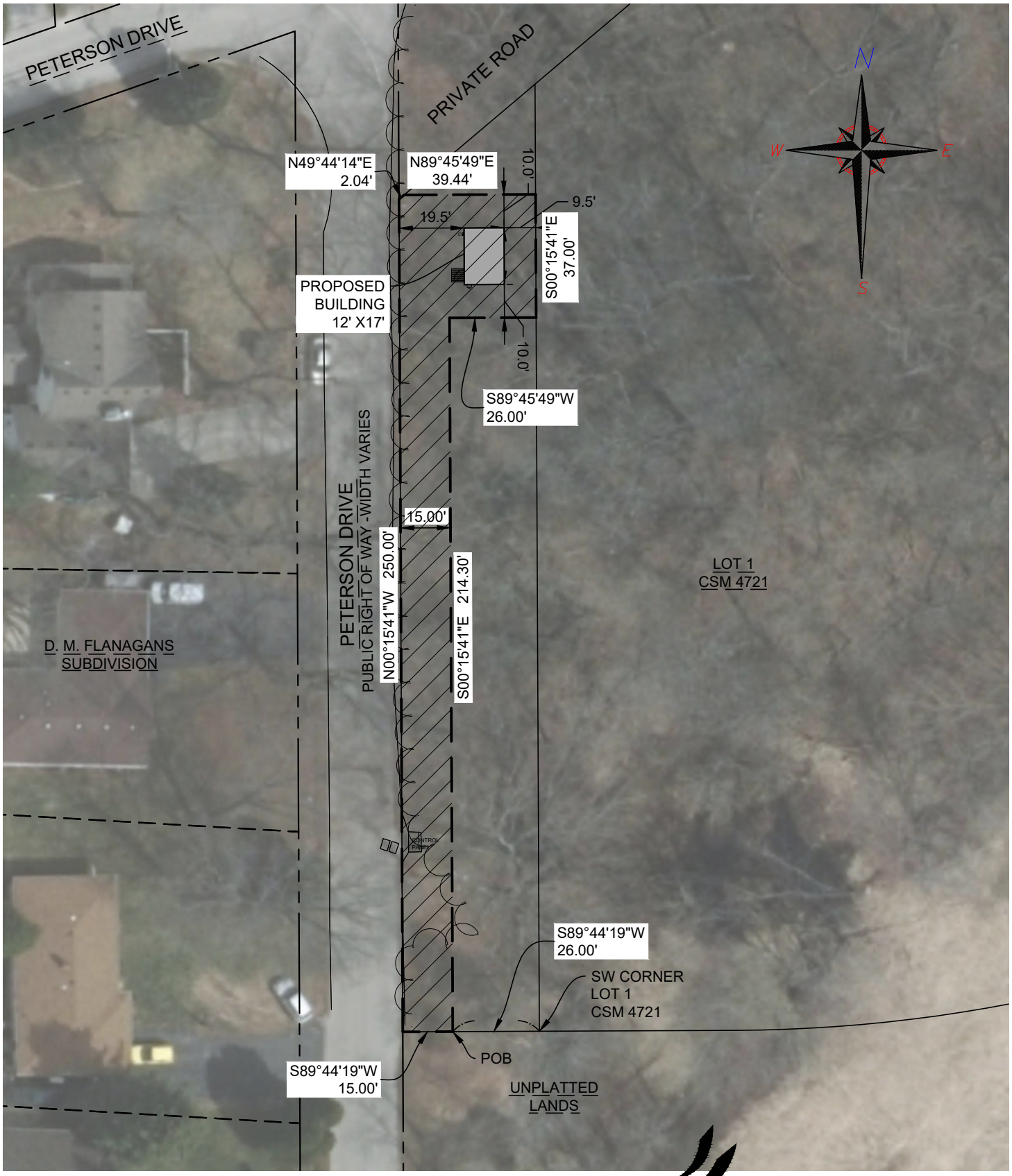
_____
John Ruf, President

STATE OF WISCONSIN)
) SS.
WAUKESHA COUNTY)

Personally came before me this _____ day of _____, 2023, the above named John Ruf, President, to me known to be the person who executed the foregoing instrument and acknowledged the same.

_____
A. Erick Fabyan
Notary Public, Waukesha County, Wisconsin
My Commission is permanent.

EXHIBIT-LIFT STATION 12



SCALE: 1" = 40'

0 20 40 80

EASEMENT AREA
4,730 S.F.
0.11 AC.

SEH
PHONE: 414.949.8919
501 MAPLE AVENUE
DELAFIELD, WI 53018-9351
www.sehinc.com

PROJECT LAPSD #149010 SHEET 1 OF 2

EXHIBIT A

EXHIBIT-LIFT STATION 12

Part of Peterson Drive as dedicated on Certified Survey Map No. 4721, being part of the Northwest 1/4 of the Northeast 1/4 of Section 17, T7N, R19E, City of Pewaukee, Waukesha County, Wisconsin bounded and described as follows:

Commencing at the Southwest corner of Lot 1 of Certified Survey Map No. 4721, thence South 89°44'19" West, 26.00 feet to the point of beginning of the lands to be described; thence South 89°44'19" West, 15.00 feet; thence North 00°15'41" West, 250.00 feet; thence North 49°44'14" East, 2.04 feet, thence North 89°45'49" East, 39.44 feet; thence South 00°15'41" East, 37.00 feet; thence South 89°45'49" West, 26.00 feet; thence South 00°15'41" East, 214.30 feet to the point of beginning.to the point of beginning.

Contains 4,730 square feet, 0.11 acres

SEH
PHONE: 414.949.8919
501 MAPLE AVENUE
DELAFIELD, WI 53018-9351
www.sehinc.com

SANITARY SEWER
GENERATOR AND CONTROL BUILDING
EASEMENT

Document Number

Document Title

Recording Area

Name and Return Address

Haight & Fabyan, S.C.
A. Erick Fabyan
115 E Capitol Dr
Hartland WI 53029

Parcel Identification Number (PIN)

THIS AGREEMENT made this _____ day of _____, 2023, by and between the City of Pewaukee, a city located in Waukesha County, Wisconsin (the "Grantor") and the Lake Pewaukee Sanitary District, a public utility located in Waukesha County, Wisconsin, (the "LPSD").

RECITALS

WHEREAS, the Grantor is the owner of that certain public road known as Milwaukee Avenue situated in the Plat of Bellevue Subdivision in the City of Pewaukee, Waukesha County, Wisconsin; and

WHEREAS, the LPSD owns and operates sewer facilities; and

WHEREAS, the LPSD desires to build a building to contain a generator and to house the pump controls and radio systems for the operation of a sanitary sewer pumping station together with appurtenances thereto (the "Building") in the portion of Milwaukee Avenue having the following legal description and as more particularly described on attached Exhibit A (the "Easement Area"):

Part of Milwaukee Avenue as platted by the Plat of Bellevue, being part of the Northwest 1/4 of the Southwest 1/4 of Section 18, T7N, R19E, City of Pewaukee, Waukesha County, Wisconsin bounded and described as follows:

Commencing at the Southeast corner of Lot 1, Block B of the Plat of Bellevue; thence South 87° 13' 38" West along the North line of Milwaukee Avenue 405.44 feet to the point of beginning of the lands to be described; thence South 06°58'37" East, 42.99 feet; thence North 90°00'00" West, 65.09 feet; thence North 02°46'21" West, 39.73 feet to the North line of Milwaukee Avenue; thence North 87°13'38" East along said North line 61.87 feet to the point of beginning.

Contains 2,618 square feet, 0.06 acres; and

WHEREAS, the Grantor acknowledges that locating the Building in the Easement Area necessitates installing electrical that go to the Building and from the Building to the sanitary pumping station, and Grantor desires to grant and LPSD desires to acquire a permanent and perpetual right for the construction, installation, operation, repair, maintenance, and replacement of conduit and cables underground, together with markers and other appurtenant equipment, and together with all necessary and usual appurtenant equipment above ground, all for the purpose of transmitting electric energy, gas, heat and radio controls to the sanitary pumping station located on the Easement Area; and

WHEREAS, the LPSD desires to acquire, and Grantor desires to grant, a permanent and perpetual right for the construction, operation, use, maintenance and repair (including reconstruction) of the Building and appurtenances thereto, including the right of entry, in and across the Easement Area.

NOW, THEREFORE, in consideration of good and valuable consideration, receipt of which is hereby acknowledged,

1. Grantor grants and conveys unto LPSD a perpetual easement for the construction, operation, use, maintenance and repair (including reconstruction) of a Building to contain a generator and to house the pump controls and radio systems for the operation of a sanitary sewer pumping station, together with appurtenances thereto, through the Easement Area so described above and as set forth on the attached Exhibit A;

2. Grantor grants and conveys unto LPSD a perpetual easement for the construction, installation, operation, repair, maintenance and replacement of conduit and cables underground, together with markers and other appurtenant equipment, and together with all necessary and usual appurtenant equipment above ground, all for the purpose of transmitting electric energy, gas, heat and radio controls to the sanitary pumping station located on the Easement Area. LPSD shall be authorized to execute any utility easements as the grantor of said utility easements over said described land for the purposes set forth herein.

UPON CONDITION

4. The right, permission and authority is also granted to LPSD to trim and/or cut down certain trees and/or brush where said trees and/or brush interfere with the construction or

maintenance of the Building, represent a hazard to the Building, interfere with the construction or maintenance of the electrical, gas, or radio equipment and underground or aboveground facilities, or represent a hazard to such electrical, gas or radio equipment or underground or aboveground facilities.

5. The Grantor, and Grantor's heirs, successors and assigns, covenant(s) and agree(s) to restrict the use of the land included in the Easement Area described hereinabove so that no obstruction of access to the Building shall be created in the future and that no building, trees, shrubs, structures or items that may interfere with the use, maintenance or repair of the Building within the vertical planes of the easement area.

6. The Grantor, and Grantor's heirs, successors and assigns, covenant(s) and agree(s) to restrict the use of the land included in the Easement described hereinabove so that no building, trees, shrubs, structures or items will be erected over and/or under or placed in such close proximity to the electrical, gas or radio equipment and either underground or aboveground electrical, gas or radio facilities as to create a violation of the Wisconsin State Electrical Code, or any amendments thereto. The Grantors, and Grantor's heirs, successors and assigns, further covenant(s) and agree(s) that after the installation and construction of said electrical facilities, the elevation of the existing ground surface within the Easement Area shall not be altered by more than four (4) inches without the written consent of Grantee.

7. LPSD and its agents shall have the right to enter upon the Easement Area for the purpose of exercising its rights herein acquired.

8. Grantor consents to the entry by the servants, employees, workmen, agents or independent contractors of LPSD for and incidental to the construction, operation, use, maintenance and repair (including reconstruction) of such Building.

9. This indenture shall run with the land hereinbefore described and shall be binding upon and inure to the benefit of the parties hereto, their respective heirs, administrators, successors and assigns.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, first party has executed this Agreement the day and year first above written.

GRANTOR:
Executed pursuant to the authority granted by the City of Pewaukee on the _____ day of _____, 2023.

_____

STATE OF WISCONSIN)
) SS.
WAUKESHA COUNTY)

Personally came before me this _____ day of _____, 2023, the above named _____, to me known to be the persons who executed the foregoing instrument and acknowledged the same.

_____
Print Name_____
Notary Public, _____ County, Wisconsin
My Commission expires _____.

Accepted pursuant to the authority granted by the Lake Pewaukee Sanitary District on the _____ day of _____, 2023.

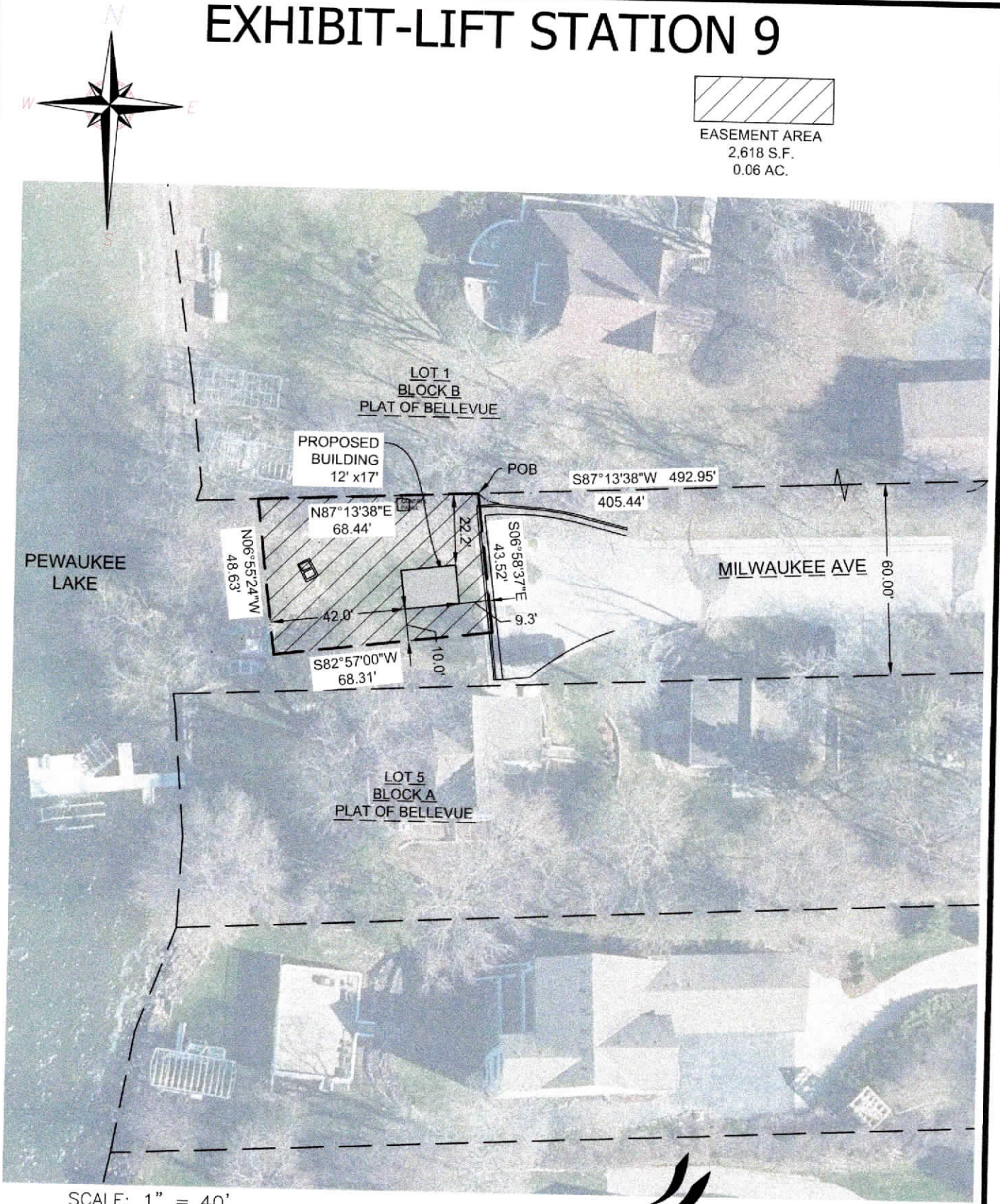
_____
John Ruf, President

STATE OF WISCONSIN)
) SS.
WAUKESHA COUNTY)

Personally came before me this _____ day of _____, 2023, the above named John Ruf, President, to me known to be the person who executed the foregoing instrument and acknowledged the same.

_____
A. Erick Fabyan
Notary Public, Waukesha County, Wisconsin
My Commission is permanent.

EXHIBIT-LIFT STATION 9



SCALE: 1" = 40'

0 20 40 80

SEH
PHONE: 414.949.8919
501 MAPLE AVENUE
DELAFIELD, WI 53018-9351
www.sehinc.com

PROJECT LAPSD #149010

SHEET 1 OF 2

EXHIBIT

Part of Milwaukee Avenue as platted by the Plat of Bellevue, being part of the Northwest 1/4 of the Southwest 1/4 of Section 18, T7N, R19E, City of Pewaukee, Waukesha County, Wisconsin bounded and described as follows:

Commencing at the Southeast corner of Lot 1, Block B of the Plat of Bellevue; thence South 87°13'38" West along the North line of Milwaukee Avenue 405.44 feet to the point of beginning of the lands to be described; thence South 06°58'37" East, 43.52 feet; thence South 82°57'00" West, 68.31 feet; thence North 06°55'24" West, 48.63 feet to the North line of Milwaukee Avenue; thence North 87°13'38" East along said North line 68.44 feet to the point of beginning.

Contains 3,146 square feet, 0.07 acres

SEH
PHONE: 414.949.8919
501 MAPLE AVENUE
DELAFIELD, WI 53018-9351
www.sehinc.com

PROJECT LAPSD #149010 SHEET 2 OF 2

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of April 20, 2023

Date: April 12, 2023

Project Name: Site & Building Plan Review

Project Address/Tax Key No.: W276N2697 Rocky Point Rd./PWC 0934045 & W265N2989 Peterson Dr./PWC 0930004

Applicant: Lake Pewaukee Sanitary District

Property Owner: City of Pewaukee

Current Zoning: Rs-5 Single-Family Residential/Rs-7-Single Family Residential

2050 Land Use Map Designation: Low-Medium Density Residential (1/2 Ac. - 2 Ac. / D.U.) / Floodplains, Lowland & Upland Conservancy and Other Natural Areas

Use of Surrounding Properties: Rs-5 to the north and south, F-1 to the west, and Milwaukee Ave. to the east / Rs-1 to the east and south and Peterson Dr. to the west and north

Project Description/Analysis

The applicant, Lake Pewaukee Sanitary District (LPSD) has submitted plans for generator buildings for Lift Station No.9 located at W276N2696 Rock Point Road and Lift Station No.12 located at W265N2989 Peterson Drive. Note that Lift Station No. 14 was included in the submittal; however, that lift station is located in the Town of Delafield and not subject to this review.

The Lift Station No. 9 generator building is located at the west end of Milwaukee Avenue and is positioned just at the end of the street. The building is approximately 204 square feet and has a peak height of 11-feet.

The Lift Station No. 12 building is located at the north end of Peterson Drive. This generator building is positioned just at the end of Peterson Drive, on the east side of the road. The building is also about 204 square feet with a height of 11-feet.

Both properties will require an easement acquisition, which has already been drafted for both properties. The applicant has also been working with the Public Works Department on the location of these buildings to ensure there are no issues with the City's maintenance of these rights-of-way.

The buildings consist of lap siding, louvers on the north and east elevations, and a service door. The appearance is similar to the generator building located on Rocky Point Avenue, which was approved in May 2021.

It should be noted that these generator buildings are considered an essential service and are exempt from yard and distance requirements of the Zoning Code in accordance with Section 17.0902(d) (below).

Essential Services such as utilities, and electric power and communication transmission lines are exempt from the yard and distance requirements of this Ordinance.

The definition of an essential service is also below for review.

> Essential Services
> Services provided by public and private utilities, necessary or required for the exercise of the principal use or service of the principal structures. These services include underground, surface, or overhead gas, electrical, steam, water, sanitary sewerage, storm water drainage, and communication systems and accessories thereto, such as poles, towers, wires, mains, drains, vaults, culverts, laterals, sewers, pipes, catch basins, water storage tanks, conduits, cables, fire alarm boxes, police call boxes, traffic signals, pumps, lift stations, and hydrants, but not including buildings.

Recommendation

Staff recommends approval for the proposed generator buildings for both Lift Station No.9 located at W276N2696 Rock Point Road and Lift Station No.12 located at W265N2989 Peterson Drive.

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 10.

DATE: April 20, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding a Two-Lot Certified Survey Map for the City of Pewaukee Department of Public Works for Properties Located at W225 N3131 Duplainville Road and W224 N3297 Duplainville Road for the Purpose of the Reconfiguration of Lot Lines for the New DPW Facility (PWC 0911993006 & PWC 0911989001)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

DPW staff report 4.20.23

DPW CSM

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of April 20, 2023

Date: April 11, 2023

Project Name: City of Pewaukee DPW Certified Survey Map

Project Address/Tax Key No.: W225N3131 Duplainville Road & W224N3297/PWC 0911993006 & 0911989001

Applicant: City of Pewaukee

Property Owner: DUPLAINVILLE RD LLC & QUAD GRAPHICS INC.

Current Zoning: I-2 Rural Institutional

2050 Land Use Map Designation: Governmental/Institutional

Use of Surrounding Properties: Agricultural to the north, residential to the south across from Green Rd., residential to the west

Project Description

The Department of Public Works filed a 2-Lot Certified Survey Map (CSM) Application consistent with the lot configuration and land combination that occurred as part of the development of the new DPW facility and acquisition of a portion of the Quad Graphics property to the north.

The CSM is being completed to better formalize the acquisition, property boundaries, and easement locations on the properties.

Lot 1 is approximately 11.27 acres and is the property retained by Quad Graphics, Inc. Lot 2 has an area of about 27.81 acres and is the City of Pewaukee owned property consisting of the new DPW building and the two existing school buildings.

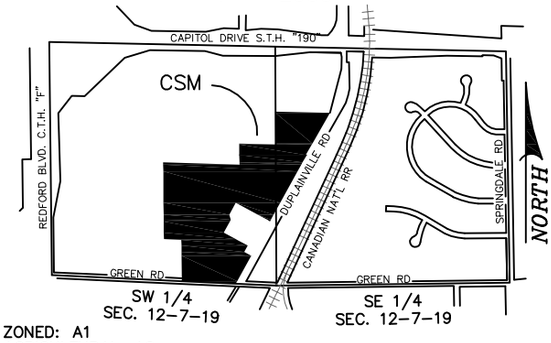
Recommendation

A motion recommending approval of the Certified Survey Map for properties located at W225N3131 and W224N3297 Duplainville Road.

CERTIFIED SURVEY MAP NO. _____

LOT 1 OF CERTIFIED SURVEY MAP NO. 8748 AND LANDS IN THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 12, TOWN 7 NORTH, RANGE 19 EAST IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN.

VICINITY MAP
1" = 2000'



PREPARED FOR:
CITY OF PEWAUKEE D.P.W.
W223 N3178 DUPLAINVILLE RD
PEWAUKEE, WI

TAX KEY NOS.: PWC-0911989, PWC-0911993006

NE CORNER
SW 1/4 SEC. 12-7-19
CONC. MON.
W/BRASS CAP FND
N 399,816.00
E 2,450,491.39

ZONED: A1 AGRICULTURAL, A2 AGRICULTURAL, M2 LIMITED INDUSTRIAL, AND I2 RURAL INSTITUTIONAL

MIN. SETBACK REQUIREMENTS FOR ZONES A1 AND M2 PER CITY OF PEWAUKEE ZONING CODE ARE:

STREET = 45'
SIDE = 25'
REAR = 25'(50' FOR ZONE A1)
FLOODLINE = 75'

UNPLATTED LANDS

S 88°50'57" E 619.86'

741.59'

N 00°15'56" W 371.58'

25' SETBACK LINE

25'

LOT 1
490,814 S.F.
11.2675 AC.

45' SETBACK LINE

S 29°56'19" W 554.89'

ZONED: M2

50.00'

L1

S 29°56'19" W 212.84'

173.42'

650.03'

S 28°45'09" W

DUPLAINVILLE ROAD
(PUBLIC RIGHT OF WAY WIDTH VARIES)

DUPLAINEVILLE ROAD REF. LINE N 28°45'09" E

40.00'

UNPLATTED LANDS

S 88°53'21" E 416.28'

N 00°35'21" W 240.10'

50' SETBACK LINE

50'

ZONED: A1

FRAME BLDG. #W224 N3297

148.53'

212.53'

EAST LINE OF THE SOUTHEAST 1/4 SECTION 12-7-19
N 00°15'56" W 2719.57'

S 82°28'01" E 582.39'

N 00°16'33" E 150.00'

SB-1 SB-2 SB-3 SB-4 SB-5 SB-6 SB-7

UNPLATTED LANDS

ZONED: M2

476.61'

S 28°45'09" W 157.00'

FND 1" IP

20' UTILITY EASEMENT PER CSM 8748

N 61°14'51" W 442.98'

L3

L2

UNPLATTED LANDS

N 28°45'09" E 789.00'

418.71'

SUBJECT LANDS ARE IN ZONE "X" PER FLOOD INSURANCE RATE MAP # 55133C0204G EFFECTIVE DATE 11/05/2014.

ALL DIMENSIONS SHOWN ARE MEASURED TO THE NEAREST THOUSANDTH OF A FOOT.

ALL BEARINGS REFER TO THE SOUTH LINE OF THE SOUTHWEST 1/4 OF SECTION 12-7-19, WHICH HAS A WISCONSIN STATE PLANE COORDINATE SYSTEM SOUTH ZONE (NAD83/2011) BEARING OF S 87°22'17" E.

ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88(2012)), USING THE WISCONSIN CONTINUALLY OPERATING REFERENCE STATIONS (WISCORS & GEOID 12A).

NORTH

CSE

CAPITOL SURVEY ENTERPRISES
220 REGENCY CT STE 210
BROOKFIELD, WI 53045
PH: (262)-786-6600
WWW.CAPITOLSURVEY.COM

SE CORNER
SE 1/4 SEC. 12-7-19
CONC. MON.
W/BRASS CAP FND
N 397,129.77
E 2,453,160.22

SOUTH CORNER
SEC. 12-7-19
CONC. MON.
W/BRASS CAP FND
N 397.096.70
E 2,450,504.00

SW CORNER
SW 1/4 SEC. 12-7-19
CONC. MON.
W/BRASS CAP FND
N 397,214.03
E 2,447,948.26

SOUTH LINE OF THE SOUTHWEST 1/4 SECTION 12-7-19
S 87°22'17" E 2558.65'

SOUTH LINE OF THE SOUTHEAST 1/4 SECTION 12-7-19
N 89°17'12" E 2656.66'

LINE TABLE		
LINE	BEARING	LENGTH
L1	S 89°07'56" E	11.46'
L2	N 61°14'51" W	40.00'
L3	S 16°14'04" E	60.80'

● INDICATES 1 INCH DIA. IRON PIPE, 18 INCHES IN LENGTH, WEIGHING 2.67 LBS. PER LINEAL FOOT, SET.

○ INDICATES 1 INCH DIA. IRON PIPE, FOUND.

SB-1 INDICATES SOIL BORING LOCATION.

GRAPHIC SCALE

0 200 400

1 INCH = 200 FT.

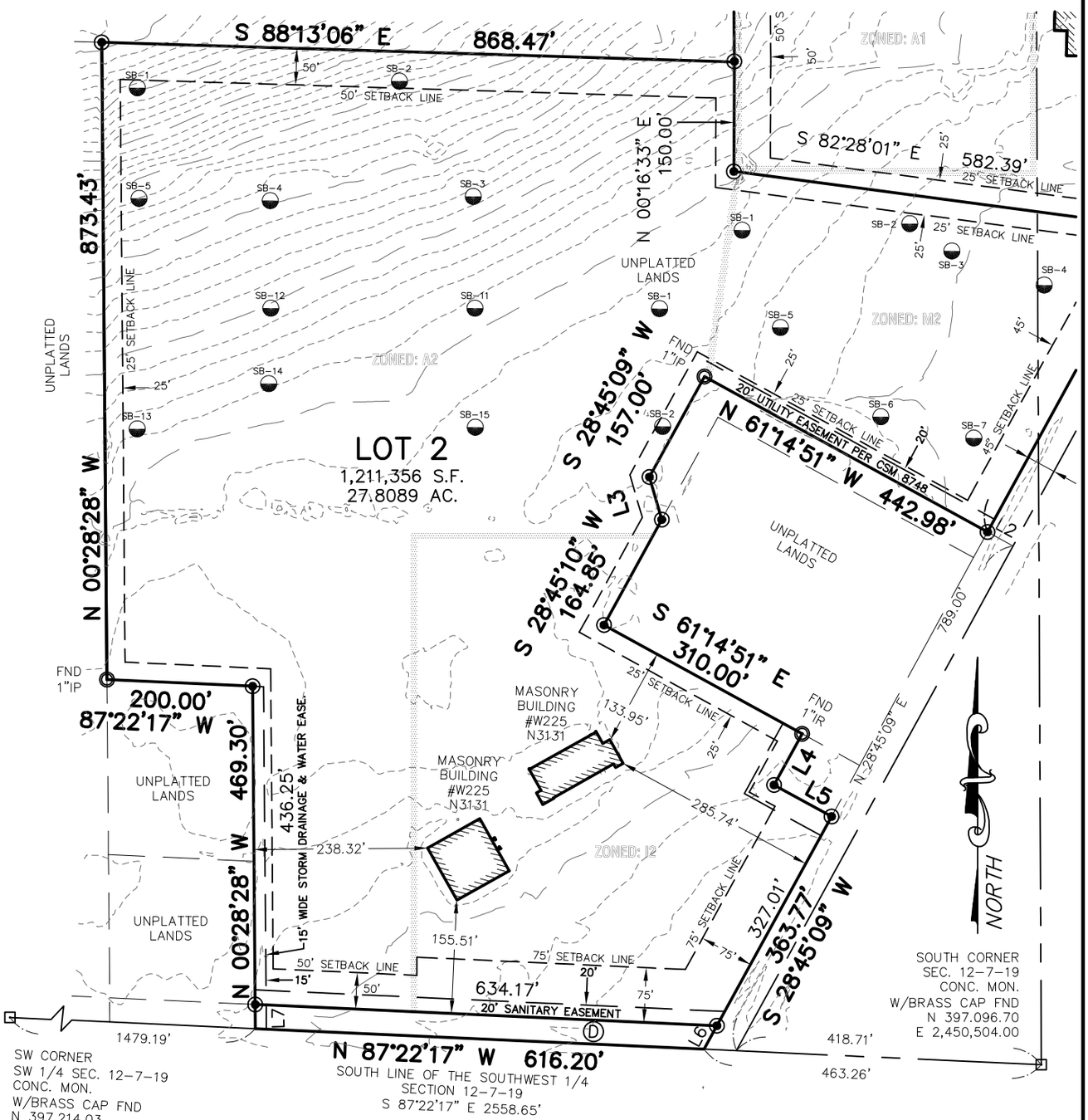
WISCONSIN
MICHAEL J. BERRY
S-2545
BROOKFIELD, WI
LAND SURVEYOR

THIS INSTRUMENT DRAFTED BY NICHOLAS J. FIRER

SHEET 1 OF 5

CERTIFIED SURVEY MAP NO. _____

LOT 1 OF CERTIFIED SURVEY MAP NO. 8748 AND LANDS IN THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 12, TOWN 7 NORTH, RANGE 19 EAST IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN.



- ◉ INDICATES 1 INCH DIA. IRON PIPE, 18 INCHES IN LENGTH, WEIGHING 2.67 LBS. PER LINEAL FOOT, SET.
- ○ INDICATES 1 INCH DIA. IRON PIPE, FOUND.
- INDICATES SOIL BORING LOCATION.
- Ⓓ INDICATES 20,631 S.F. DEDICATED TO CITY OF PEWAUKEE FOR PUBLIC RIGHT OF WAY PURPOSES.

SEE SHEET 3 FOR LINE TABLE

MIN. SETBACK REQUIREMENTS FOR ZONE A2 PER CITY OF PEWAUKEE ZONING CODE ARE:

STREET = 50' (100' FARM BLDG.)
SIDE = 25'
REAR = 25'(50' FOR FARM BLDG.)
FLOODLINE = 75'

MIN. SETBACK REQUIREMENTS FOR ZONE I2 PER CITY OF PEWAUKEE ZONING CODE ARE:

STREET = 75'
SIDE = 25'
REAR = 25'
FLOODLINE = 75'

GRAPHIC SCALE

0 200 400

1 INCH = 200 FT.

WISCONSIN MICHAEL J. BERRY S-2545 BROOKFIELD, WI LAND SURVEYOR

THIS INSTRUMENT DRAFTED BY NICHOLAS J. FIRER

SHEET 2 OF 5

CERTIFIED SURVEY MAP NO._____

LOT 1 OF CERTIFIED SURVEY MAP NO. 8748 AND LANDS IN THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 12, TOWN 7 NORTH, RANGE 19 EAST IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN.

SURVEYOR'S CERTIFICATE

STATE OF WISCONSIN)
RACINE COUNTY) SS

I, MICHAEL J BERRY, A PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY:

THAT I HAVE SURVEYED, DIVIDED, MAPPED, AND DEDICATED, LOT 1 OF CERTIFIED SURVEY MAP NO. 8748 AND LANDS IN THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 12, TOWN 7 NORTH, RANGE 19 EAST IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN, BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTH CORNER OF SAID SECTION; THENCE N 87°22'17' W 463.26 FEET ALONG THE SOUTH LINE OF THE SOUTHWEST CORNER OF SAID SECTION TO THE POINT OF BEGINNING OF LANDS TO BE DESCRIBED; THENCE CONTINUING N 87°22'17" W 616.20 FEET; THENCE N 00°28'28" W 469.30 FEET; THENCE N 87°22'17" W 200.00 FEET; THENCE N 00°28'28" W 873.43 FEET; THENCE S 88°13'06" E 868.47 FEET; THENCE N 00°35'21" W 240.10 FEET; THENCE S 88°53'21" E 416.28 FEET; THENCE N 00°15'56" W 371.58 FEET; THENCE S 88°50'57" E 619.86 FEET TO THE WESTERLY LINE OF DUPLAINEVILLE ROAD; THENCE S 29°56'19" W 554.89 FEET; THENCE S 89°07'56" E 11.46 FEET; THENCE S 29°56'19" W 212.84 FEET; THENCE S 28°45'09" W 650.03 FEET; THENCE N 61°14'51" W 442.98 FEET; THENCE S 28°45'09" W 157.00 FEET; THENCE S 16°14'04" E 60.80 FEET; THENCE S 28°45'10" W 164.85 FEET; THENCE S 61°14'51" E 310.00 FEET; THENCE S 28°45'09" W 80.00 FEET; THENCE S 61°14'51" E 90.00 FEET; THENCE S 28°45'09" W 363.77 FEET TO THE POINT OF BEGINNING.

CONTAINING: 1,722,797 SQUARE FEET OR 39.5500 ACRES.

THAT I HAVE MADE SUCH SURVEY, LAND DIVISION, MAP, AND DEDICATION BY THE DIRECTION OF QUAD/GRAPHICS, INC., AND THE CITY OF PEWAUKEE, OWNERS OF SAID LAND.

THAT SUCH MAP IS A CORRECT REPRESENTATION OF ALL EXTERIOR BOUNDARIES OF THE LAND SURVEYED AND THE DIVISION THEREOF MADE.

THAT I HAVE FULLY COMPLIED WITH THE PROVISIONS OF CHAPTER 236.34 OF THE STATUTES OF THE STATE OF WISCONSIN AND CHAPTER 18 OF THE CITY OF PEWAUKEE MUNICIPAL CODE IN SURVEYING, DIVIDING, AND MAPPING THE SAME.

DATED THIS 28TH DAY OF JUNE, 2022.

MICHAEL J. BERRY
PROFESSIONAL LAND SURVEYOR,
S-2545
STATE OF WISCONSIN

WISCONSIN
MICHAEL J. BERRY
S-2545
BROOKFIELD, WI
LAND SURVEYOR

LINE TABLE		
LINE	BEARING	LENGTH
L1	S 83°07'56" E	11.46'
L2	N 61°14'51" W	40.00'
L3	S 16°14'04" E	60.80'
L4	S 28°45'09" W	80.00'
L5	S 61°14'51" E	90.00'
L6	S 28°45'09" W	36.75'
L7	N 00°28'28" W	33.05'

THIS INSTRUMENT DRAFTED BY NICHOLAS J. FIRER

SHEET 3 OF 5

CERTIFIED SURVEY MAP NO._____

LOT 1 OF CERTIFIED SURVEY MAP NO. 8748 AND LANDS IN THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 12, TOWN 7 NORTH, RANGE 19 EAST IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN.

CORPORATE OWNER'S CERTIFICATE

QUAD/GRAPHICS INC., A CORPORATION DULY ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF WISCONSIN, AS OWNER, CERTIFIES THAT IT HAS CAUSED THE LAND DESCRIBED ON THIS MAP TO BE SURVEYED, DIVIDED, MAPPED, AND DEDICATED AS REPRESENTED ON THIS MAP IN ACCORDANCE WITH THE ORDINANCES OF THE CITY OF PEWAUKEE.

IN WITNESS WHEREOF, QUAD/GRAPHICS, INC. HAS CAUSED THESE PRESENTS TO

BE SIGNED BY SHERILYN WHITMOYER, ITS ASSISTANT SECRETARY, AT _____ , WISCONSIN, THIS

_____ DAY OF_____ , 2023.

_____
SHARILYN WHITMOYER,
ASSISTANT SECRETARY

STATE OF WISCONSIN)
WAUKESHA COUNTY) SS

PERSONALLY CAME BEFORE ME THIS_____DAY OF_____, 2023 SHERILYN WHITMOYER, TO ME KNOWN TO BE THE PERSON WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THE SAME.

_____
NOTARY PUBLIC
STATE OF WISCONSIN
MY COMMISSION EXPIRES:_____

OWNER'S CERTIFICATE

THE CITY OF PEWAUKEE, DULY ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF WISCONSIN, AS OWNER, CERTIFIES THAT IT HAS CAUSED THE LAND DESCRIBED ON THIS MAP TO BE SURVEYED, DIVIDED, MAPPED, AND DEDICATED AS REPRESENTED ON THIS MAP IN ACCORDANCE WITH THE ORDINANCES OF THE CITY OF PEWAUKEE.

IN WITNESS WHEREOF, THE CITY OF PEWAUKEE, HAS CAUSED THESE PRESENTS TO

BE SIGNED BY STEVE BIERCE, MAYOR, AT _____, WISCONSIN, THIS_____

DAY OF _____, 2023.

_____
STEVE BIERCE, MAYOR

STATE OF WISCONSIN)
WAUKESHA COUNTY) SS

PERSONALLY CAME BEFORE ME THIS_____DAY OF_____, 2023 [REPRESENTATIVE], TO ME KNOWN TO BE THE PERSON WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THE SAME.

_____
NOTARY PUBLIC
STATE OF WISCONSIN
MY COMMISSION EXPIRES:_____

THIS INSTRUMENT DRAFTED BY NICHOLAS J. FIRER

SHEET 4 OF 5

CERTIFIED SURVEY MAP NO. _____

LOT 1 OF CERTIFIED SURVEY MAP NO. 8748 AND LANDS IN THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 12, TOWN 7 NORTH, RANGE 19 EAST IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN.

PLAN COMMISSION APPROVAL

APPROVED BY THE PLAN COMMISSION OF THE CITY OF PEWAUKEE ON THIS_____ DAY OF

_____,2023.

_____
STEVE BIERCE, PLAN COMMISSION CHAIR

_____
KELLY TARCZEWSKI
CITY CLERK/TREASURER

COMMON COUNCIL APPROVAL

THIS CERTIFIED SURVEY MAP, LOT 1 OF CERTIFIED SURVEY MAP NO. 8748 AND LANDS IN THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 12, TOWN 7 NORTH, RANGE 19 EAST IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN, HAVING BEEN APPROVED BY THE PLAN COMMISSION BEING THE SAME, IS HEREBY APPROVED AND ACCEPTED BY THE COMMON COUNCIL OF THE CITY OF PEWAUKEE ON THIS

_____DAY OF_____,2023.

_____
STEVE BIERCE, MAYOR

_____
KELLY TARCZEWSKI
CITY CLERK/TREASURER

THIS INSTRUMENT DRAFTED BY NICHOLAS J. FIRER

SHEET 5 OF 5