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| **MEETING:** | **REGULAR MEETING OF THE PLAN COMMISSION** |
| **DATE & TIME:** | **Monday, April 8, 2024 at 6:30 PM** |
| **LOCATION:** | **Germantown Village Hall Board Room**<br>**N112 W17001 Mequon Road** |

Any member of the body and/or citizen also attend the meeting virtually through the WebEx platform, Meeting #: **2553 216 2843** Password: **qRNiKJrY345** which can be accessed by phone at **408-418-9388** or by logging on at:
**https://villageofgermantown.my.webex.com/villageofgermantown.my/j.php?MTID=m3e60c9657945a5ad89155bdbfd3c356f**

Citizens not wishing to attend the meeting personally or virtually may submit any public comments by sending an email to comments@germantownwi.gov by 4 p.m. on the day of the meeting so that it can be provided to the members of the body for their consideration. Previously recorded Village Meeting Videos can be viewed at
**https://www.youtube.com/channel/UCOYp0EgELzTCa9X_iCohyhQ**

## AGENDA

**I. CALL TO ORDER:** *This meeting has been given public notice in accordance with Section 19.83 and 19.84, Wis. Stats, in such form that will apprise the general public and news media of subject matter that is intended for consideration and action.*

**II. ROLL CALL:**

**III. APPROVAL OF MINUTES:**

A. March 11, 2024

**IV. NEW BUSINESS:**

A. Public Hearing regarding a proposed amendment of the Project Plan for Tax Incremental District (TID) No. 7 and a proposed amendment of the Project Plan for TID No. 8 followed by consideration and possible action on a Resolution Approving an Amendment to the Project Plan for TID No. 7 and consideration and possible action on a Resoultion Approving an Amendment to the Project Plan for TID No. 8. (PUBLIC HEARING & ACTION)

B. Crew Carwash, Agent for Nomies Investments, LLC, Property Owner - N96 W17500 County Line Road. Conditional Use Permit (CUP) and Site Plan Applications for redevelopment of the property for construction of a new 4,500 sqft self-serve carwash. (PUBLIC HEARING & ACTION)

C. Village of Germantown Community Development Department - Proposed Text Amendments to Chapter 17 of the Village of Germantown Municipal Code: 17.07 Temporary Uses; 17.08 Definitions; 17.33 M-1 Limited Industrial District; and 17.41 Accessory Uses, Buildings and Structures. (PUBLIC HEARING & ACTION)

D. Briohn Building Corp. Agent for Green Bay Packaging, Inc., and AHST 355 LLC, Property Owners - Approximately 52 acres north of Holy Hill Road, east of Hwy. 41, south of Rockfield Road. Site Plan Application for a 270,000 sqft light manufacturing and 12,500 office building. (ACTION)

**V. CITIZEN INPUT/PUBLIC APPEARANCE:** *(Please be advised per 19.84(2) that information and comment will be received from the public. It is the policy of this municipality that public input be limited to a three (3) minute period per person with a time extension granted at the discretion of the Chairperson. Be advised that there may*

*be limited discussion of the information received but no action will be taken under public comments.)*

## VI. ANNOUNCEMENTS:

## VII. ADJOURNMENT:

UPON REASONABLE NOTICE, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service, please contact the Village Clerk at (262)250-4745 at least 2 days prior to the meeting. Notice is given that a majority of the Village Board may attend this meeting to gather information about an item over which they have decision-making responsibility. This may constitute a meeting of the Village Board per State ex rel.Badke v Greendale Village Board, even though the Village Board will not take formal action at this meeting.

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| **MEETING:** | **REGULAR MEETING OF THE PLAN COMMISSION** |
| **DATE AND TIME:** | **Monday, March 11, 2024 6:30 PM** |
| **LOCATION:** | **Germantown Village Hall Board Room**<br>**N112 W17001 Mequon Road** |

## MINUTES

**I. CALL TO ORDER:** *This meeting has been given public notice in accordance with Section 19.83 and 19.84, Wis. Stats, in such form that will apprise the general public and news media of subject matter that is intended for consideration and action.*
Chairman Wolter called the meeting to order at 6:30 pm.

**II. ROLL CALL:**

**III. APPROVAL OF MINUTES:**

A. February 12, 2024
MOTION Baum second Shadid to Approve the Minutes from February 12, 2024.
MOTION carried unanimously.

**IV. NEW BUSINESS:**

A. Dawn DiNicola, Property Owner of W158 N9763 Sumac Road. Zoning Permit application to install a 4' fence in a utility & drainage easement. (ACTION)
Director Retzlaff summarized the proposal.
MOTION Baum second Shadid to Approve the zoning permit application to install a 4' high chain link fence within the 8' utility & drainage easement on the residential property located at W158 N9763 Sumac road subject to the following conditions:
1. It shall be the responsibility of the homeowner to always maintain a free flow of water within the drainage easement.
2. If the fence needs to be removed to make improvements and/or conduct maintenance within the drainage easement, the property owner shall be responsible for removing the fence to the extent necessary within three (3) days of being notified by the Village of Germantown. If not removed within three days, the Village may remove the fence at its discretion and charge back any/all costs of doing so to the property owner. The property owner shall be responsible for any/all costs associated with any damage, removal, or re-installation of said fence.
3. The property owner shall enter into an encroachment agreement with the Village for purposes of attaching the requirements of Condition #2 above to ensure that the property owner and any successors in interest are aware of these requirements.
4. A fence permit is required from Inspection Services prior to installation. Contact SAFEBuilt for more information.

Dawn DiNicola confirmed she was OK with Condition #2 and would let her neighbors

know she will be installing a fence.
MOTION carried 6-1 (Laszewski)

B. Robert & Coral Kline, Property Owners of W156 N10876 Catskill Lane. Zoning Permit application to install a 6' fence in a storm sewer easement. (ACTION)

Director Retzlaff summarized the proposal.
MOTION Baum second Shadid to Approve the zoning permit application to install a 6' vinyl privacy fence within the storm sewer easement along the south line of the Kline property located at W156 N10876 Catskill Lane subject to the following conditions:
1. The fence shall be installed a minimum setback of 2 feet from the Pilgrim Road right-of-way/property line and the bottom of the boards a minimum of 2 inches above the finished grade.
2. It shall be the responsibility of the homeowner to maintain a free flow of water within the private drainage easement at all times.
3. A fence permit is required from the Building Inspection Department. Contact SafeBuilt for more information.
4. If the fence needs to be removed to make improvements and/or conduct maintenance within the drainage easement, the property owner shall be responsible for all costs associated with removing the fence to the extent necessary within seven (7) days of being notified by the Village (or another mutually agreeable deadline). The property owner shall be responsible for any and all costs associated with any damage, removal or re-installation of said fence.
5. The property owner shall enter into an encroachment agreement with the Village for purposes of attaching the requirements of Condition #4 above to ensure that the property owner and any successors in interest are aware of these requirements.
6. The property owner and/or fence installer shall be responsible for locating and visually marking the 12" storm sewer location within the easement at least three (3) business days prior to installation and contacting the Village Engineer once marked. The property owner and/or fence installer shall be liable for any and all damage to the storm sewer and all site restoration within the easement.

Mr. Kline confirmed he was aware of Condition #4.
MOTION carried unanimously.

C. Mark Brooks, Agent for Das Barrel Room Tavern & Grill, and Doctors LLC, Property Owner of W201 N10466 Appleton Avenue. Application to Amend Conditional Use Permit No. #13-2019 to allow expansion of the existing off-site parking area pursuant to Section 17.28(3)(u) and Section 17.45(5) of the Village Zoning Code. (ACTION; TABLED from October 9, 2023)

Director Retzlaff summarized the proposal. He explained a motion on the CUP amendment proposal is needed if one of the two options are acceptable or if further changes are wanted they should be discussed.

MOTION Baum second Tarantino to Approve Option #1 to amend Conditional Use Permit #13-2019 for Mark Brooks and Doctors LLC to allow expansion of the "off-site" parking area on the undeveloped 2.1-acre parcel located adjacent to the restaurant/bar parcel located at W201 N10466 Appleton Avenue subject to the following amendments to the adopted conditions:
1. This conditional use permit allows the continued use of the existing 4,800 sqft paved area for an off-site parking area as shown in the site plan July 11, 2019, subject

to any further requirements and revisions set forth or required herein.
2. Improvements to the existing pavement shall be limited to general maintenance, including but not limited to sealcoating, crack-filling, stripping. ~~No expansion or additional off-site parking or other enhancements, e.g. additional lighting, signage, shall be made without obtaining Zoning Permit and/or Site Plan approval from the Village~~.
3. Expansion of the off-site parking area or the existing on-site parking area on the east side of the building may be allowed subject to approval of an amendment to this conditional use permit.
4. , and, Expansion of the "off-site" parking area east of the restaurant/bar will require:
a. Plan Commission approval of site, grading & erosion control, and storm water management plans;
b. Compliance with applicable Zoning Code and development requirements, including all setback, pavement, storm water management, landscaping and buffering requirements of the Village and MMSD;
c. re-construction and/or other modifications necessary to make the "off-site" parking area compliant with all setback, landscaping, and other applicable Zoning Code requirements in effect at that time.
5. The off-site parking area shall be used for parking by the patrons and employees of the restaurant/bar operation during normal business hours. The off-site parking area shall not be used for overnight storage (other than snow storage) of any materials or equipment and shall be kept clean and continuously maintained.
6. In the event that the 2.1-acre undeveloped parcel is developed separately from the restaurant/bar operation, the existing 4,800 sqft "off-site" paved parking area may be required to be removed or modified to comply with all current Zoning Code requirements in effect at that time or as needed to accommodate the separate development. The continued or shared use of the off-site parking area with any development on the 2.1-acre parcel shall be addressed as an amendment to this conditional use permit.
7. Any signage displayed on the off-site parking area shall be reviewed and approved by the Village subject to applicable sign regulations.
8. If the use, activities and/or operation subject of this permit falls out of conformity with the conditions herein, or where there is a change in the nature, character, intensity or extent of the permitted conditional uses and activities which cause special problems or harmful effects associated with the permitted uses and activities that were not revealed or anticipated at the time this CUP was granted, or, where conditions imposed by this CUP that were anticipated to mitigate or eliminate harmful effects associated with the uses and activities but are subsequently insufficient to do so, or, for similar cause based upon consideration for the public comfort, safety, and welfare, this conditional use permit may be terminated or modified by the Village Board by the amendment to or addition of conditions after public hearing thereon.
9. Unless otherwise provided herein, this conditional use permit shall run with the land and transfer to subsequent owners in interest of the business and/or property.
10. Option 1 (Sheet 2 dated 2/20/2024) is approved provided that the 56'x72' parking area and 16' wide connecting driveway be paved with asphalt or concrete.
11. A minimum 10' wide permanent vegetated buffer designed to filter storm water run-off from the existing and new parking areas and connecting driveway be installed along the east and north edge as part of restoring the site.

Discussion followed. Trustee Baum asked what the total parking requirement is for the business. Director Retzlaff stated the existing parking both on the .9 acre site and west of the building and the 4,800 sqft of pre-existing non conforming parking area provides adequate parking for the interior capacity but it goes above that with the outdoor entertainment and there's no limitation on people coming to the site for that purpose. Clearly there is a need for additional parking due to the popularity of the business. The gravel wasn't put down to be used every night, its a overflow parking area for the business. Trustee Baum stated the existing parking plus the 5,000 sqft is not enough to adequately support the operation in summer. Director Retzlaff said Mr. Brooks is asking for an additional 2,500 sqft of gravel in addition to what was put down originally but now with stormwater management requirements, Option 1 is the limitation with 5,000 sqft. But Mr. Brooks may seek to expand that to add 5 or 6 more stalls if possible.

Brenna Bublitz, W201N10466 Appleton Avenue, the GM for Das Barrel Room spoke on Mr. Brooks behalf. She said Option1 is what they want as it provides extra stalls, however cost is an issue because they are only leasing. Discussion continued. Trustee Baum asked what the code requirement is for how much parking this facility is supposed to have. Director Retzlaff stated there is no guideline for outdoor area with no specific limit for quantity of seats or patrons for number of parking and you cannot calculate the lawn requirement. He said the popularity of the outdoor music has demanded the need for additional parking. Trustee Baum said he sees this as a temporary situation. Ms. Bublitz commented they have approval to park at the BP gas station across the street. Trustee Baum said that doesn't stop people from parking on the grass. Ms. Bublitz said they could add car stops in the grass and signs. Discussion continued.
Director Retzlaff stated there is a need for more parking than what they are willing to pay for. Commissioner Laszewski said Option 1 removes some cars from the road but doesn't cure the whole problem of cars on the road and traffic. Director Retzlaff asked how do we require them to provide enough parking for an event when theres a need for 50 additional stalls without requiring them to pay for the parking. He said there is an unwillingness to make more parking than what is needed without them paying for it. Chairman Wolter said the zoning regulations are based on internal dimensions and nothing to do with external or outside stations. Director Retzlaff agreed and that there are no outside Village provisions that deal with port a potties. Discussion continued. Trustee Baum stated he thinks this needs to go to the Village Board to make the determination of the zoning we need to apply to this. He's looking for the rule they need to follow for the amount of parking they really need to provide for a Saturday evening when there are 500 people standing outside. Director Retzlaff feels more parking is needed, it should be installed properly and paved, address any storm water management requirements and sized more appropriately to the need for the business. But that conflicts with what the operation can or is willing to do. Chairman Wolter understands there is a need because of the success of this business so we are willing to look at what those options are. But we need to protect what's to the south of there with Willow Creek and some of the wetland areas that come through that area. The way its proposed today is really its best second option. We need to look past the lot that is already there. If we make it conform they are not gaining any parking, only 15 lots. Trustee Baum said Option 1 as presented brings the parking up to a level of

parking adequate for the existing building and patio. There are no other ordinances for people standing in the grass. He thinks at Village Board level we will discuss what we want to do for these types of situations going forward, where there is no building, what do we do for toilets and parking. Director Retzlaff said that would require some further code changes to address. He said we need to look down the road and assuming 2024 is as popular they are going to fill up Option 1 paved parking and unless there is a restriction, they will either park on the grass or in some other area. Trustee Baum asked should we add a condition that some type of barrier be put up to restrict parking in that area. Ms. Bublitz said they will rope it off and tell people they can't park in the grass. Trustee Baum asked what are the provisions that allow a stage in the backyard. What mechanism allows that. Director Retzlaff stated outdoor entertainment is a liquor license premise extension issue and not a Plan Commission issue. Trustee Baum said Village Board needs to debate that issue. He added the applicant can ask why Dheinsville or the church can park on the grass. Director Retzlaff said its a frequency issue. Is it for a special event or 3 season every weekend issue. Some businesses ask for special consideration that isn't given or asked by others. He doesn't fault Mr. Brooks for it because the property owner should be sharing in the expense.

MOTION to Amend Baum second Shadid to add Condition #12 that the applicant put some type of barrier around the asphalt paving to tell people not to park on the grass and eliminate Condition 4b and 4c.
MOTION to Amend carried unanimously.

Chairman Wolter asked if the other gravel will be cleaned up as a result of the motion. Director Retzlaff said the cleanup is part of the plan, but the site plan will need to be cleaned up and that will come back to the Plan Commission. The Village Board will review the amendment to the CUP which is exclusively for the off site parking. He said the premise extension is handled through the liquor licensing process. Chairman Wolter explained the Village Board will review the Conditional Use Permit and the provisions within the Conditional Use Permit and not with the outside premise extension for the liquor license.

MOTION to Approve as Amended carried 6-1 carried Williams.

**V. CITIZEN INPUT/PUBLIC APPEARANCE:** *(Please be advised per 19.84(2) that information and comment will be received from the public. It is the policy of this municipality that public input be limited to a three (3) minute period per person with a time extension granted at the discretion of the Chairperson. Be advised that there may be limited discussion of the information received but no action will be taken under public comments.)*

Comments were received from:
Tom & Lynn Steinbach, W204 N10609 Hilltop Drive
Melanie Smythe, W140 N17938 Cedar Lane
Trustee Jan Miller, W151 N10297 Windsong Circle
Jason Giguere, W202 N10462 Appleton Avenue

**VI. ANNOUNCEMENTS:**

Chairman Wolter stated there would be a Candidate Forum for the school and Village Trustees at 5:30 tomorrow at the Village Hall Board Room.

## VII. ADJOURNMENT:

The meeting was adjourned at 7:49pm.

# AMENDMENT TO TAX INCREMENTAL DISTRICT (TID) No. 7

**4-8-24 Plan Commission Meeting**

## Germantown Community Development Department

**Village Planner Report** **Germantown, Wisconsin**

**BACKGROUND**

Tax Incremental District No. 7 (TID7) is a 331.4 acre "Industrial" District located south of Holy Hill Road east of the I-41 interchange and extending easterly along the WSOR railroad to Goldendale Road then easterly south of the railroad (see attached map).

TID7 was originally 160.5 acres created in 2017 to provide infrastructure financing related to the J.W. Speaker campus expansion and promote additional industrial development. In 2021, the boundary of TID7 was expanded to include an additional 170.8 acres and provide additional infrastructure financing necessary to support the creation of the new Capstone 41 Business Park.

The original Project Plan for TID7 included infrastructure projects totaling $2.69 million that would yield land and improvement value added in the new industrial district to approximately $26.8 million with a tax increment value of $7.55 million. The 2021 TID7 Project Plan amendment added another $2.25 million in project costs that was expected to yield an additional improvement value of $44.2 million with a tax increment value of $17.3 million.

**PROPOSAL**

As detailed in the amended Project Plan for TID7 (copy attached),the purpose for this amendment is to add $1,870,000 in project costs for the following improvements to be completed within ½ mile of the TID7 boundary (see attached map):

- The installation of sanitary sewer & water along Freistadt Road from High Point Pass to I-41; and
- The re-construction of Freistadt Road from High Point Pass to I-41

Although the Village anticipates development will occur as a result of the frontage road being constructed, as well as, water & sewer being installed along Freistadt Road, no additional improvement value has been added in the Project Plan assumptions.

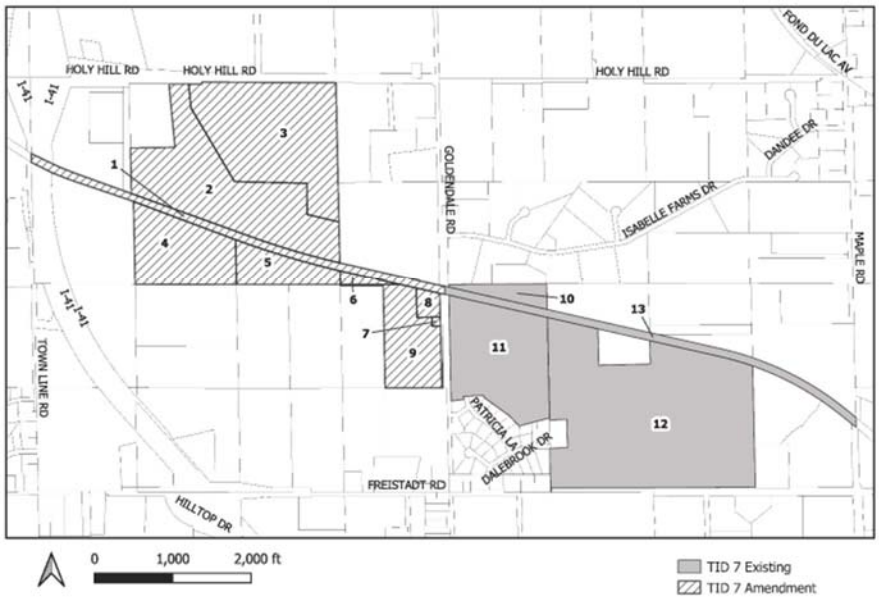
The Village anticipates that the proposed TID7 amendment will generate sufficient tax increment to pay all project costs within 17 years of the maximum allowable 20 years.

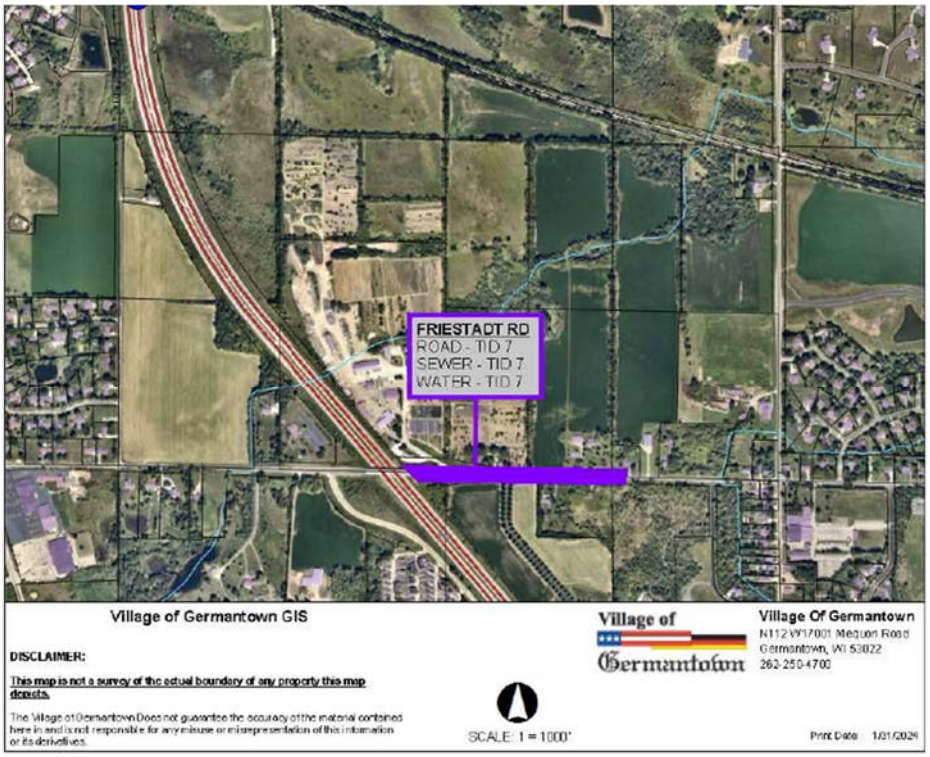
**PROCESS**

As with previous TID proposals, the Plan Commission is responsible for holding a public hearing of the amended TID7 Project Plan prior to making a recommendation to the Village Board and the TID7 Joint Review Board through action on a proposed resolution (copy attached).

Additional information will be provided as part of the public hearing and prior to discussion of the proposed resolution by Village staff and Ehlers, the Village's financial consultant.

Amendment to TID 7



**PLAN COMMISSION**
**RESOLUTION NO. 01-2024**

**RESOLUTION APPROVING AN AMENDMENT TO THE PROJECT PLAN FOR TAX INCREMENTAL DISTRICT NO. TAX INCREMENTAL DISTRICT NO. 7**

WHEREAS, the Village of Germantown (the "Village") has determined that use of Tax Incremental Financing is required to promote development and redevelopment within the Village; and

WHEREAS, Tax Incremental District No. 7 (the "District") was created by the Village on December 18, 2017 as an industrial district; and

WHEREAS, the Village now desires to amend the Project Plan of the District (the "Amendment") in accordance with the provisions of Wisconsin Statutes Section 66.1105 (the "Tax Increment Law"); and

WHEREAS, such Amendment will amend the categories, locations or costs of project costs to be made as permitted under Wisconsin Statutes Section 66.1105(4)(h)1.

WHEREAS, an amended Project Plan for the District (the "Amendment") has been prepared that includes:

a. A statement listing of the kind, number and location of all proposed public works or improvements within the District, or to the extent provided in Wisconsin Statutes Sections 66.1105(2)(f)1.k. and 66.1105(2)(f)1.n., outside of the District;
b. An economic feasibility study;
c. A detailed list of estimated project costs;
d. A description of the methods of financing all estimated project costs and the time when the related costs or monetary obligations are to be incurred;
e. A map showing existing uses and conditions of real property in the District;
f. A map showing proposed improvements and uses in the District;
g. Proposed changes of zoning ordinances, master plan, map, building codes and Village ordinances;
h. A list of estimated non-project costs;
i. A statement of the proposed plan for relocation of any persons to be displaced;
j. A statement indicating how the District promotes the orderly development of the Village;
k. An opinion of the Village Attorney or of an attorney retained by the Village advising that the plan is complete and complies with Wisconsin Statutes Section 66.1105(4)(f); and

WHEREAS, prior to its publication, a copy of the notice of public hearing was sent to the chief executive officers of Washington County, the Germantown School District, and the Milwaukee Area Technical College District, and any other entities having the power to levy taxes on property located within the District, in accordance with the procedures specified in the Tax Increment Law; and

WHEREAS, in accordance with the procedures specified in the Tax Increment Law, the Plan Commission, on April 8, 2024 held a public hearing concerning the proposed amendment to the District's Project Plan, providing interested parties a reasonable opportunity to express their views thereon.

NOW, THEREFORE, BE IT RESOLVED by the Plan Commission of the Village of Germantown that:

1. The boundaries of Tax Incremental District No. 7 will not change as a result of this Amendment and will remain as designated in Exhibit A of this Resolution.

2. It approves and adopts the amended Project Plan for the District, attached as Exhibit B, and recommends its approval to the Village Board.

3. Amendment of the District's Project Plan promotes orderly development in the Village.

Adopted this 8th day of April, 2024.

_____
Dean Wolter, Plan Commission Chair

_____
Laura Johnson, Secretary of the Plan Commission

**EXHIBIT A -**

TAX INCREMENTAL DISTRICT NO. 7
**BOUNDARY MAP**

[INCLUDED IN PROJECT PLAN]

# EXHIBIT B -

# PROJECT PLAN

[DISTRIBUTED SEPARATELY]

# NOTICE OF PUBLIC HEARING
# AND JOINT REVIEW BOARD MEETING
# VILLAGE OF GERMANTOWN, WISCONSIN

NOTICE IS HEREBY GIVEN that the Village of Germantown will hold a Joint Review Board meeting on April 8, 2024 at 6:00 PM.

The meeting will be held at the Germantown Village Hall, located at N112 W17001 Mequon Rd.

**Join from the meeting link**

https://villageofgermantown.my.webex.com/villageofgermantown.my/j.php?MTID=mb07597633e8dcf91fff1bb6d88dabe16

**Join by meeting number**

Meeting number (access code): 2550 486 1925

Meeting password: HXmeWpAM272

**Tap to join from a mobile device (attendees only)**

+1-408-418-9388,,25504861925## United States Toll

The purpose of the meeting is to organize the Joint Review Board for consideration of the Village's proposal to amend Tax Incremental Districts No. 7 & 8.

NOTICE IS HEREBY GIVEN that the Plan Commission of the Village of Germantown will hold a public hearing on April 8, 2024 at 6:30 PM.

The meeting will be held at the Germantown Village Hall, located at N112 W17001 Mequon Rd.

**Join from the meeting link**

https://villageofgermantown.my.webex.com/villageofgermantown.my/j.php?MTID=m3e60c9657945a5ad89155bdbfd3c356f

**Join by meeting number**

Meeting number (access code): 2553 216 2843

Meeting password: qRNiKJrY345

**Tap to join from a mobile device (attendees only)**

+1-408-418-9388,,25532162843## United States Toll

**Join by phone**

+1-408-418-9388 United States Toll

Global call-in numbers

The hearing will be held to provide the public a reasonable opportunity to comment on the proposed amendments to the Project Plan for Tax Incremental Districts No. 7 & 8.

## TID No. 7 Amendment:

Based on the planned use of properties within its boundaries at time of creation, territory within the District was previously identified as suitable for industrial development.

Projects to be undertaken within the District and costs to be incurred (Project Costs) will continue to be for the purpose of promoting industrial development and will include acquisition of property, rights of way or easements, site preparation, installation or rehabilitation of utilities and streets, professional services and organizational costs, administrative costs, financing costs and other costs as may be necessary to implement the District's Project Plan. Projects will be undertaken within the District's proposed boundary and in areas located in the Village within ½ mile of that boundary.

As permitted under Wisconsin Statutes Section 66.1105(4)(h)1., the list of estimated Project Costs in the current Project Plan would be amended and increased by approximately $1,520,000.

TID No. 8 Amendment:

Based on the planned use of properties within its boundaries at time of creation, territory within the District was previously identified as suitable for industrial development.

Projects to be undertaken within the District and costs to be incurred (Project Costs) will continue to be for the purpose of promoting industrial development and will include acquisition of property, rights of way or easements, site preparation, installation or rehabilitation of utilities and streets, professional services and organizational costs, administrative costs, financing costs and other costs as may be necessary to implement the District's Project Plan. Projects will be undertaken within the District's proposed boundary and in areas located in the Village within ½ mile of that boundary.

As permitted under Wisconsin Statutes Section 66.1105(4)(h)1., the list of estimated Project Costs in the current Project Plan would be amended and increased approximately $5,375,000.

All interested parties will be given a reasonable opportunity to comment on the proposed amendments to the District Project Plans. A copy of the proposed amendments to the District Project Plans, is available for public inspection and will be provided on request during normal business hours at the office of the Village Clerk at the Germantown Village Hall, located at N112 W17001 Mequon Rd. This information can also be viewed on the Village's website at https://www.germantownwi.gov/742/Agendas-Minutes

By Order of the Village of Germantown, Wisconsin

*Published March 27, 2024*

April 3, 2024

PROJECT PLAN AMENDMENT

# Village of Germantown, Wisconsin

## Tax Incremental District No. 7

EHLERS
PUBLIC FINANCE ADVISORS

**Prepared by:**

Ehlers
N19W24400 Riverwood Drive,
Suite 100
Waukesha, WI 53188

BUILDING COMMUNITIES. IT'S WHAT WE DO.

# KEY DATES

| | |
|---|---|
| Organizational Joint Review Board Meeting Held: | Scheduled for April 8, 2024 |
| Public Hearing Held: | Scheduled for April 8, 2024 |
| Approval by Plan Commission: | Scheduled for April 8, 2024 |
| Adoption by Village Board: | Scheduled for April 15, 2024 |
| Approval by the Joint Review Board: | Scheduled for TBD |

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# SECTION 1:
# Executive Summary

## DESCRIPTION OF DISTRICT

Tax Incremental District ("TID") No. 7 ("District") is a 331.41 - acre Industrial District created on December 18, 2017. The original District acreage was 160.558 before being amended to add 170.85 acres. The District was created to:

- Provide financing for infrastructure related to the planned J.W. Speaker Corporation
- Promote Industrial development.

The TID was amended on March 15, 2021, to:

- Add territory to the District as permitted under Wis. Stat. § 66.1105(4)(h)2. This is the first of four permitted territory amendments available to the District. This amendment will add 170.85 acres of land of which over 50% is suitable for industrial development.
- Amend the categories, locations, or costs of project costs to be made as permitted under Wis. Stat. § 66.1105(4)(h)1. ("Project").

### Purpose of Amendment

The purpose of this amendment, referred to hereafter as the Plan, the Amendment, or the Plan Amendment, is to:

- Amend the categories, locations or costs of project costs to be made as permitted under Wis. Stat. § 66.1105(4)(h)1. ("Project").

### Estimated Total Project Cost Expenditures

The Village anticipates making total expenditures of approximately $1,870,000 ("Project Costs") to undertake the projects listed in this Project Plan ("Plan"). Project Costs include an estimated $930,000 in road construction and reconstruction, $660K in sewer costs, $330K in water costs, and $10K for professional services.

### Incremental Valuation

The Village projects that additional development will likely occur one the frontage road is complete. The proposed public infrastructure costs being added to TID 7 because of this amendment, will open additional land for development. However, currently, no additional development is being added to the development assumptions. A table detailing current development

assumptions, timing, and associated values is included in the Economic Feasibility Study located within this Plan.

### Expected Termination of District

Based on the Economic Feasibility Study located within Section 9 of this Plan, the Village anticipates that the District will generate sufficient tax increment to pay all Project Costs within 17 of its allowable 20 years.

### Summary of Findings

As required by Wis. Stat. § 66.1105, and as documented in this Plan and the exhibits contained and referenced herein, the following findings are made:

1. That "but for" the creation of this District, the development projected to occur as detailed in this Plan: 1) would not occur; or 2) would not occur in the manner, at the values, or within the timeframe desired by the Village. In reaching this determination, the Village has considered:

   The substantial investment needed to provide the public infrastructure necessary to support TID 7 and continue to allow for development within the District. Absent the use of tax incremental financing, the Village is unable to fully fund this program of infrastructure improvements.

2. **The economic benefits of the District, as measured by increased employment, business and personal income, and property value, are sufficient to compensate for the cost of the improvements. In making this determination, the Village has considered the following information:**

   That the Developer is likely to purchase goods and services from local suppliers in construction of the Project, and induced effects of employee households spending locally for goods and services from retailers, restaurants and service companies.

3. **The benefits of the proposal outweigh the anticipated tax increments to be paid by the owners of property in the overlying taxing jurisdictions.** As required by Wis. Stat. § 66.1105(4)(i)4., a calculation of the share of projected tax increments estimated to be paid by the owners of property in the overlying taxing jurisdictions has been prepared and can be found in this Plan. However, because the Project would not occur without the use of tax incremental financing, these tax increments would not be paid but for creation of the District. Accordingly, the Village finds that the benefits expected to be realized as set forth in this Plan outweigh the value of the tax increments to be invested in the Project.

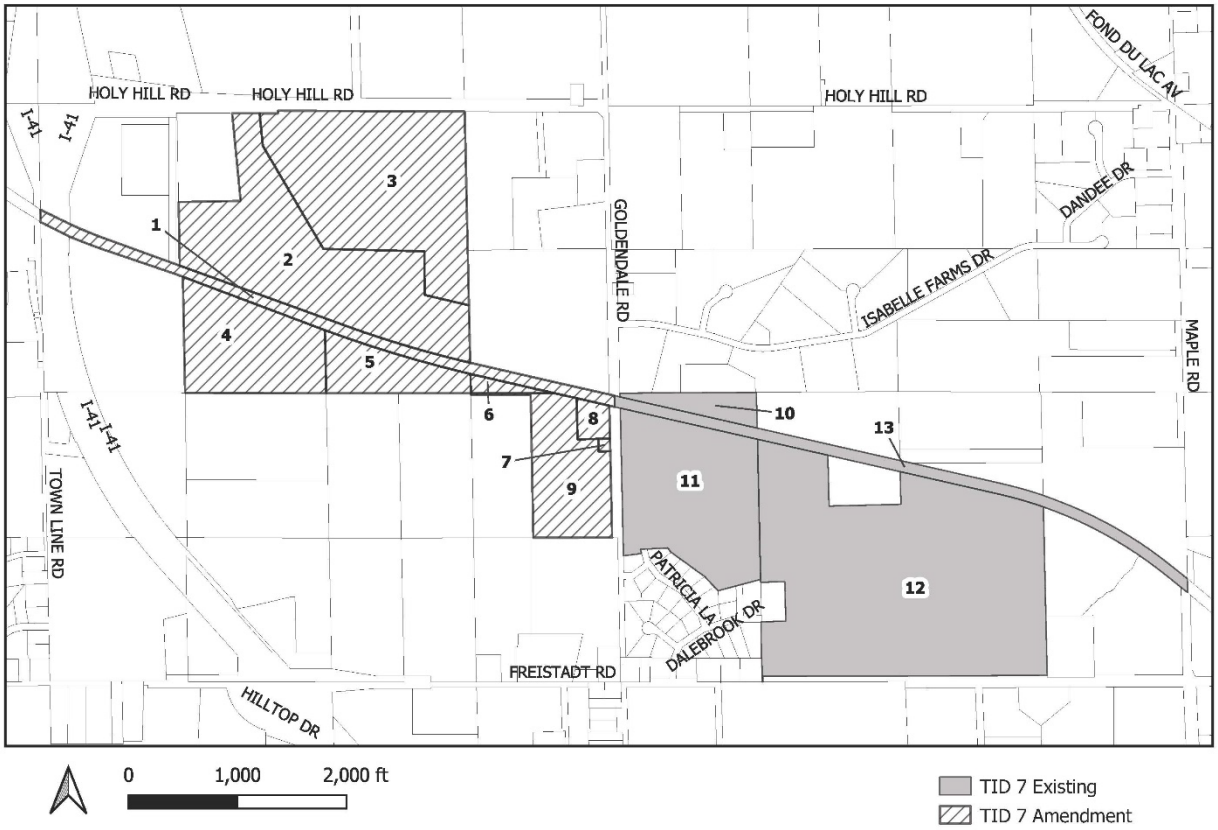
4. The boundaries of the District are not being amended.

5. That Project Costs relate directly to promoting industrial development in the District, consistent with the purpose for which the District is created.
6. Improvements to be made in the District are likely to significantly enhance the value of substantially all of the other real property in the District.
7. The Plan for the District is feasible and is in conformity with the Master Plan of the Village.
8. The Village estimates that none of the territory within the District will be devoted to retail business at the end of the District's maximum expenditure period, pursuant to Wis. Stat. § 66.1105(5)(b).

## SECTION 2:
## Map of Current District Boundary

A map identifying the current boundaries of the District is found on the following page. The District's boundaries are not being amended.

## Amendment to TID 7



## SECTION 3:
## Map Showing Existing Uses and Conditions

The District's boundaries are not being amended. The "Map Showing Existing Uses and Conditions" included within the District's amended Project Plan approved by the Village Board on March 15, 2021, remains unchanged and is incorporated by reference as part of this Plan Amendment.

# SECTION 4:
# Equalized Value Test

No territory will be added to the District. Demonstration of compliance with the equalized value test is not required for this Plan Amendment.

# SECTION 5:
# Statement Listing the Kind, Number and Location of All Proposed Public Works or Improvements Within the District

Project Costs are any expenditure made, estimated to be made, or monetary obligations incurred or estimated to be incurred as outlined in this Plan. Project Costs will be diminished by any income, special assessments or other revenues, including user fees or charges, other than tax increments, received or reasonably expected to be received in connection with the implementation of the Plan. If Project Costs incurred benefit territory outside the District, a proportionate share of the cost is not a Project Cost. Costs identified in this Plan are preliminary estimates made prior to design considerations and are subject to change after planning, design and construction is completed.

With all Project Costs, the costs of engineering, design, survey, inspection, materials, construction, restoring property to its original condition, apparatus necessary for public works, legal and other consultant fees, testing, environmental studies, permits, updating ordinances and plans, judgments or claims for damages and other expenses are included as Project Costs. The map found in Section 7 of this Plan along with the Detailed List of Project Costs found in Section 8 provide additional information as to the kind, number and location of potential Project Costs.

The "Statement of Kind, Number and Location of Proposed Public Works and Other Projects" set forth in the original District Project Plan approved on December 18, 2017 and its subsequent amendments approved on March 15, 2021 is amended to add the following Project Costs that the Village has made, expects to make, or may need to make, in conjunction with the implementation of the District's Plan or this Plan Amendment.

## Property, Right-of-Way and Easement Acquisition

### ***Property Acquisition for Development***

To promote and facilitate development the Village may acquire property within the District. The cost of property acquired, and any costs associated with the transaction, are eligible Project Costs. Following acquisition, other Project Costs within the categories detailed in this Section may be incurred to make the property suitable for development. Any revenue received by the Village from the sale of property acquired pursuant to the execution of this Plan will be used to reduce the total project costs of the District. If total Project Costs incurred by the Village to acquire property and make it suitable for

development exceed the revenues or other consideration received from the sale or lease of that property, the net amount shall be considered "real property assembly costs" as defined in Wis. Stat. § 66.1105(2)(f)1.c., and subject to recovery as an eligible Project Cost.

### *Property Acquisition for Conservancy*

To promote the objectives of this Plan, the Village may acquire property within the District that it will designate for conservancy. These conservancy objectives include: preserving historic resources or sensitive natural features; protection of scenic and historic views; maintaining habitat for wildlife; maintaining adequate open space; reduction of erosion and sedimentation by preserving existing vegetation; and providing adequate areas for management of stormwater. The cost of property acquired for conservancy, and any costs associated with the transaction, are eligible Project Costs.

### *Acquisition of Rights-of-Way*

The Village may need to acquire property to allow for installation of streets, driveways, sidewalks, utilities, stormwater management practices and other public infrastructure. Costs incurred by the Village to identify, negotiate and acquire rights-of-way are eligible Project Costs.

### *Acquisition of Easements*

The Village may need to acquire temporary or permanent easements to allow for installation and maintenance of streets, driveways, sidewalks, utilities, stormwater management practices and other public infrastructure. Costs incurred by the Village to identify, negotiate and acquire easement rights are eligible Project Costs.

### *Relocation Costs*

If relocation expenses are incurred in conjunction with the acquisition of property, those expenses are eligible Project Costs. These costs may include but are not limited to: preparation of a relocation plan; allocations of staff time; legal fees; publication of notices; obtaining appraisals; and payment of relocation benefits as required by Wis. Stat. Chapter 32 and Wis. Admin. Code ADM 92.

## Site Preparation Activities

### *Environmental Audits and Remediation*

If it becomes necessary to evaluate any land or improvement within the District, any cost incurred by the Village related to environmental audits, testing, and remediation are eligible Project Costs.

### *Site Grading*

Land within the District may require grading to make it suitable for development, to provide access, and to control stormwater runoff. The Village may need to remove and dispose of excess material, or bring in fill material to provide for proper site elevations. Expenses incurred by the Village for site grading are eligible Project Costs.

## Utilities

### *Sanitary Sewer System Improvements*

To allow development to occur, the Village may need to construct, alter, rebuild or expand sanitary sewer infrastructure within the District. Eligible Project Costs include, but are not limited to, construction, alteration, rebuilding or expansion of: collection mains; manholes and cleanouts; service laterals; force mains; interceptor sewers; pumping stations; lift stations; wastewater treatment facilities; and all related appurtenances. To the extent sanitary sewer projects undertaken within the District provide direct benefit to land outside of the District, the Village will make an allocation of costs based on such benefit. Those costs corresponding to the benefit allocated to land within the District, and necessitated by the implementation of the Project Plan, are eligible Project Costs. Implementation of the Project Plan may also require that the Village construct, alter, rebuild or expand sanitary sewer infrastructure located outside of the District. That portion of the costs of sanitary sewer system projects undertaken outside the District which are necessitated by the implementation of the Project Plan are eligible Project Costs.

### *Water System Improvements*

To allow development to occur, the Village may need to construct, alter, rebuild or expand water system infrastructure within the District. Eligible Project Costs include, but are not limited to, construction, alteration, rebuilding or expansion of: distribution mains; manholes and valves; hydrants; service laterals; pumping stations; wells; water treatment facilities; storage tanks and reservoirs; and all related appurtenances. To the extent water system projects undertaken within the District provide direct benefit to land outside of the District, the Village will make an allocation of costs based on such benefit. Those costs corresponding to the benefit allocated to land within the District, and necessitated by the implementation of the Project Plan, are eligible Project Costs. Implementation of the Project Plan may also require that the Village construct, alter, rebuild or expand water system infrastructure located outside of the District. That portion of the costs of water system projects undertaken outside the District

which are necessitated by the implementation of the Project Plan are eligible Project Costs.

***Stormwater Management System Improvements***

Development within the District will cause stormwater runoff. To manage this stormwater runoff, the Village may need to construct, alter, rebuild or expand stormwater management infrastructure within the District. Eligible Project Costs include, but are not limited to, construction, alteration, rebuilding or expansion of: stormwater collection mains; inlets, manholes and valves; service laterals; ditches; culvert pipes; box culverts; bridges; stabilization of stream and river banks; and infiltration, filtration and detention Best Management Practices (BMP's). To the extent stormwater management system projects undertaken within the District provide direct benefit to land outside of the District, the Village will make an allocation of costs based on such benefit. Those costs corresponding to the benefit allocated to land within the District, and necessitated by the implementation of the Project Plan, are eligible Project Costs. Implementation of the Project Plan may also require that the Village construct, alter, rebuild or expand stormwater management infrastructure located outside of the District. That portion of the costs of stormwater management system projects undertaken outside the District which are necessitated by the implementation of the Project Plan are eligible Project Costs.

***Electric Service***

To create sites suitable for development, the Village may incur costs to provide, relocate or upgrade electric services. Relocation may require abandonment and removal of existing poles or towers, installation of new poles or towers, or burying of overhead electric lines. Costs incurred by the Village to undertake this work are eligible Project Costs.

***Gas Service***

To create sites suitable for development, the Village may incur costs to provide, relocate or upgrade gas mains and services. Costs incurred by the Village to undertake this work are eligible Project Costs.

***Communications Infrastructure***

To create sites suitable for development, the Village may incur costs to provide, relocate or upgrade infrastructure required for voice and data communications, including, but not limited to: telephone lines, cable lines and fiber optic cable. Costs incurred by the Village to undertake this work are eligible Project Costs.

## Streets and Streetscape

### *Street Improvements*

To allow development to occur, the Village may need to construct or reconstruct streets, highways, alleys, access drives and parking areas. Eligible Project Costs include, but are not limited to: excavation; removal or placement of fill; construction of road base; asphalt or concrete paving or repaving; installation of curb and gutter; installation of sidewalks and bicycle lanes; installation of culverts, box culverts and bridges; rail crossings and signals; utility relocation, to include burying overhead utility lines; street lighting; installation of traffic control signage and traffic signals; pavement marking; right-of-way restoration; installation of retaining walls; and installation of fences, berms, and landscaping.

### *Streetscaping and Landscaping*

To attract development consistent with the objectives of this Plan, the Village may install amenities to enhance development sites, rights-of-way and other public spaces. These amenities include but are not limited to: landscaping; lighting of streets, sidewalks, parking areas and public areas; installation of planters, benches, clocks, tree rings, trash receptacles and similar items; and installation of brick or other decorative walks, terraces and street crossings. These and any other similar amenities installed by the Village are eligible Project Costs.

## Miscellaneous

### *Rail Spur*

To allow for development, the Village may incur costs for installation of a rail spur or other railway improvements to serve development sites located within the District.

### *Projects Outside the Tax Increment District*

Pursuant to Wis. Stat. § 66.1105(2)(f)1.n, the Village may undertake projects within territory located within one-half mile of the boundary of the District provided that: 1) the project area is located within the Village's corporate boundaries; and 2) the projects are approved by the Joint Review Board. The cost of projects completed outside the District pursuant to this section are eligible project costs and may include any project cost that would otherwise be eligible if undertaken within the District. The Village intends to make the following project cost expenditures outside the District:

| | |
|---|---|
| Freistadt Road - High Point Pass to Interstate 41 (Road Re-construction) | 930,000 |
| Freistadt Road - High Point Pass to Interstate 41 (Sewer) | 600,000 |
| Freistadt Road - High Point Pass to Interstate 41 (Water) | 330,000 |

### *Professional Service and Organizational Costs*

The costs of professional services rendered, and other costs incurred, in relation to the creation, administration and termination of the District, and the undertaking of the projects contained within this Plan, are eligible Project Costs. Professional services include but are not limited to: architectural; environmental; planning; engineering; legal; audit; financial; and the costs of informing the public with respect to the creation of the District and the implementation of the Plan.

### *Administrative Costs*

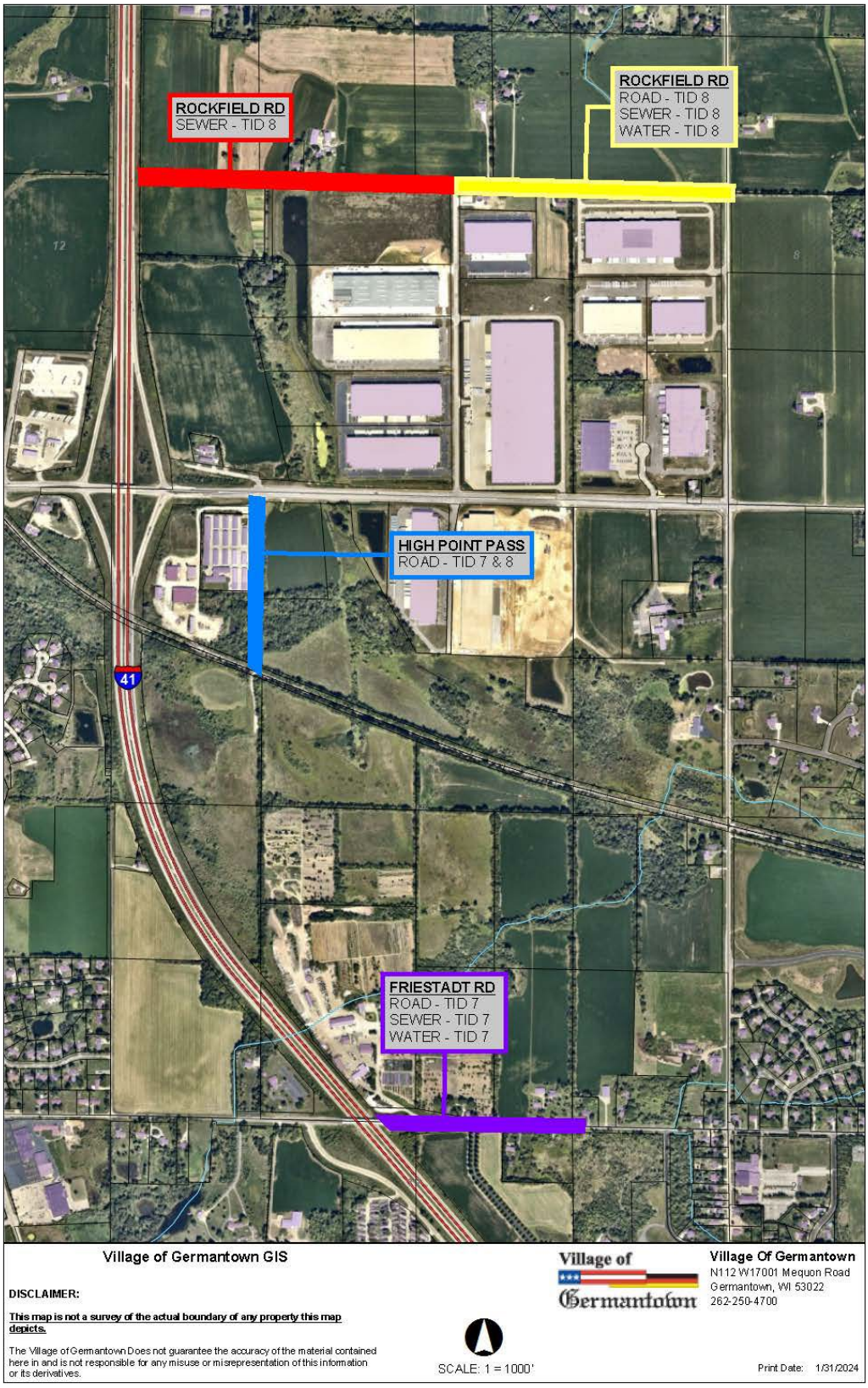
The Village may charge to the District as eligible Project Costs reasonable allocations of administrative costs, including, but not limited to, employee salaries. Costs allocated will bear a direct connection to the time spent by Village employees relating to the implementation of the Plan.

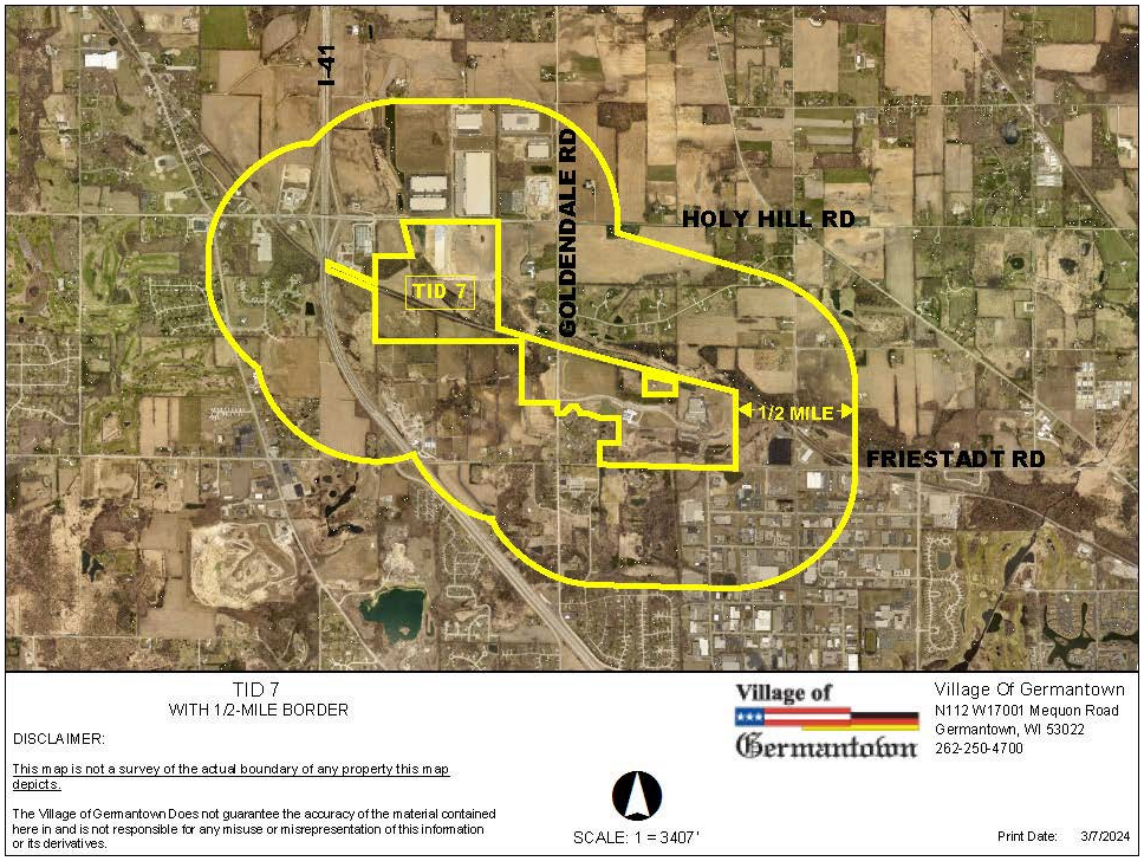
### *Financing Costs*

Interest expense, debt issuance expenses, redemption premiums, and any other fees and costs incurred in conjunction with obtaining financing for projects undertaken under this Plan are eligible Project Costs.

# SECTION 6:
# Map Showing Proposed Improvements and Uses

The District's boundaries are not being amended. The "Map Showing Proposed Improvements and Uses" can be found on the following pages.


ROCKFIELD RD
SEWER - TID 8
ROCKFIELD RD
ROAD - TID 8
SEWER - TID 8
WATER - TID 8
HIGH POINT PASS
ROAD - TID 7 & 8
41
FRIESTADT RD
ROAD - TID 7
SEWER - TID 7
WATER - TID 7
Village of Germantown GIS
DISCLAIMER:
This map is not a survey of the actual boundary of any property this map depicts.
The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.
SCALE: 1 = 1000'
Village of Germantown
Village Of Germantown
N112 W17001 Mequon Road
Germantown, WI 53022
262-250-4700
Print Date: 1/31/2024


I-41
GOLDENDALE RD
HOLY HILL RD
TID 7
1/2 MILE
FRIESTADT RD
TID 7
WITH 1/2-MILE BORDER
DISCLAIMER:
This map is not a survey of the actual boundary of any property this map depicts.
The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.
Village of Germantown
Village Of Germantown
N112 W17001 Mequon Road
Germantown, WI 53022
262-250-4700
SCALE: 1 = 3407'
Print Date: 3/7/2024

# SECTION 7:
# Detailed List of Estimated Project Costs

The following list identifies the Project Costs that the Village has made, expects to make, or may need to make in conjunction with the implementation of the District's Plan or this Plan Amendment. All projects identified and related costs reflect the best estimates available as of the date of preparation of this Plan Amendment. All costs are preliminary estimates and may increase or decrease. Certain Project Costs listed may become unnecessary, and other Project Costs not currently identified may need to be made. (Section 6 details the general categories of eligible Project Costs). Changes in Project Cost totals or the types of Project Costs to be incurred will not require that this Plan be amended. This Plan is not meant to be a budget nor an appropriation of funds for specific Project Costs, but a framework within which to manage Project Costs.

| Project ID | Project Name/Type | 2nd Amendment | Total |
|---|---|---|---|
| 1 | Freistadt Road - High Point Pass to Interstate 41 (Road Re-construction) | 930,000 | 930,000 |
| 2 | Freistadt Road - High Point Pass to Interstate 41 (Sewer) | 600,000 | 600,000 |
| 3 | Freistadt Road - High Point Pass to Interstate 41 (Water) | 330,000 | 330,000 |
| 4 | Professional Service Costs - Administrative | 10,000 | 10,000 |
| Total Projects | | 1,870,000 | 1,870,000 |

Notes:

# SECTION 8:
# Economic Feasibility Study, Description of the Methods of Financing Estimated Project Costs and the Time When Related Costs or Monetary Obligations are to be Incurred

This Section includes an updated forecast of the valuation increases expected within the District, the associated tax increment collections, a summary of how remaining Project Costs would be financed, and a projected cash flow demonstrating that the District remains economically feasible.

## Key Assumptions

Project Costs the Village plans to make are expected to create $64M in incremental value by 2025. Estimated valuations and timing for construction of the Project are included in Table 1. Assuming the Village's current equalized TID Interim tax rate of $15.56 per thousand of equalized value and declining by 1% annually, and no economic appreciation or depreciation, the Project would generate $14M in incremental tax revenue over the 20-year term of the District as shown in Table 2.

# Table 1 – Development Assumptions

| Construction Year | | Actual | Capstone #2 | Capstone # 3 | Annual Total | Construction Year | |
|---|---|---|---|---|---|---|---|
| 1 | 2018 | 2,366,700 | | | 2,366,700 | 2018 | 1 |
| 2 | 2019 | 2,424,100 | | | 2,424,100 | 2019 | 2 |
| 3 | 2020 | (464,600) | | | (464,600) | 2020 | 3 |
| 4 | 2021 | 2,507,600 | | | 2,507,600 | 2021 | 4 |
| 5 | 2022 | 16,840,100 | | | 16,840,100 | 2022 | 5 |
| 6 | 2023 | | 17,000,000 | | 17,000,000 | 2023 | 6 |
| 7 | 2024 | | 3,000,000 | 20,000,000 | 23,000,000 | 2024 | 7 |
| 8 | 2025 | | | | 0 | 2025 | 8 |
| 9 | 2026 | | | | 0 | 2026 | 9 |
| 10 | 2027 | | | | 0 | 2027 | 10 |
| | Totals | 23,673,900 | 20,000,000 | 20,000,000 | 63,673,900 | | |

Notes:

# Table 2 – Tax Increment Projection Worksheet

| | | |
|---|---|---|
| Type of District | Industrial | |
| Creation Date | December 18, 2017 | |
| Valuation Date | Jan 1, | 2018 |
| Max Life (Years) | 20 | |
| Expenditure Periods/Termination | 15 | 12/18/2032 |
| Revenue Periods/Final Year | 20 | 2039 |
| Extension Eligibility/Years | Yes | 3 |
| Adverse Impact Eligibility | | |
| Recipient District | No | |

| | |
|---|---|
| Base Value | 9,642,400 |
| Appreciation Factor | 0.00% |
| Base Tax Rate | $15.56 |
| Rate Adjustment Factor | -1.00% |

| | Construction Year | Value Added | Valuation Year | Inflation Increment | Total Increment | Revenue Year | Tax Rate | Tax Increment |
|---|---|---|---|---|---|---|---|---|
| **1** | **2018** | **2,366,700** | **2019** | **0** | **2,366,700** | **2020** | **$17.76** | **42,025** |
| **2** | **2019** | **2,424,100** | **2020** | **0** | **4,790,800** | **2021** | **$18.17** | **87,070** |
| 3 | **2020** | **(464,600)** | **2021** | **0** | **4,326,200** | **2022** | **$16.70** | **72,248** |
| 4 | **2021** | **2,507,600** | **2022** | **0** | **6,833,800** | **2023** | **$15.56** | **106,364** |
| 5 | **2022** | **16,840,100** | **2023** | **0** | **23,673,900** | **2024** | $15.41 | **364,785** |
| 6 | 2023 | 17,000,000 | 2024 | 0 | 40,673,900 | 2025 | $15.25 | **620,466** |
| 7 | 2024 | 23,000,000 | 2025 | 0 | 63,673,900 | 2026 | $15.10 | **961,610** |
| 8 | 2025 | 0 | 2026 | 0 | 63,673,900 | 2027 | $14.95 | **951,994** |
| 9 | 2026 | 0 | 2027 | 0 | 63,673,900 | 2028 | $14.80 | **942,474** |
| 10 | 2027 | 0 | 2028 | 0 | 63,673,900 | 2029 | $14.65 | **933,049** |
| 11 | 2028 | 0 | 2029 | 0 | 63,673,900 | 2030 | $14.51 | **923,719** |
| 12 | 2029 | 0 | 2030 | 0 | 63,673,900 | 2031 | $14.36 | **914,482** |
| 13 | 2030 | 0 | 2031 | 0 | 63,673,900 | 2032 | $14.22 | **905,337** |
| 14 | 2031 | 0 | 2032 | 0 | 63,673,900 | 2033 | $14.08 | **896,283** |
| 15 | 2032 | 0 | 2033 | 0 | 63,673,900 | 2034 | $13.94 | **887,321** |
| 16 | 2033 | 0 | 2034 | 0 | 63,673,900 | 2035 | $13.80 | **878,447** |
| 17 | 2034 | 0 | 2035 | 0 | 63,673,900 | 2036 | $13.66 | **869,663** |
| 18 | 2035 | 0 | 2036 | 0 | 63,673,900 | 2037 | $13.52 | **860,966** |
| 19 | 2036 | 0 | 2037 | 0 | 63,673,900 | 2038 | $13.39 | **852,357** |
| 20 | 2037 | 0 | 2038 | 0 | 63,673,900 | 2039 | $13.25 | **843,833** |
| | **Totals** | **63,673,900** | | **0** | | | **Future Value of Increment** | **13,914,494** |

Notes:

Actual results will vary depending on development, inflation of overall tax rates.

## Financing and Implementation

Table 3 provides a summary of the District's financing plan.

Based on the Project Cost expenditures as included within the cash flow exhibit (Table 4), the District is projected to accumulate sufficient funds by the year 2036 to pay off all Project cost liabilities and obligations. The projected closure is based on the various assumptions noted in this Plan and will vary dependent on actual Project Costs incurred and the actual amount of tax increments collected.

### Table 3 – Financing Plan

| | | G.O. Promissory Note 2022A |
|---|---|---|
| Projects | | |
| 2nd Amendment Costs | | 1,860,000 |
| Total Project Funds | | 1,860,000 |
| Estimated Finance Related Expenses | | 50,850 |
| Underwriter Discount | 11.00 | 21,120 |
| Capitalized Interest | | |
| Total Financing Required | | 1,931,970 |
| Estimated Interest | 4.00% | (12,400) |
| Assumed spend down (months) | 2 | |
| Rounding | | 430 |
| Net Issue Size | | 1,920,000 |
| Notes: | | |

# Table 4 – Cash Flow

| Year | Projected Revenues | | | | | Expenditures | | | | | | | | | | | | | | | | | Balances | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | GO Bonds, Series 2018A 2,480,000 | | | GO Notes, Series 2022A 710,000 | | Taxable GO Notes, Series 2022B 2,550,000 | | Water Revenue Bonds, 2022C 685,000 | | Water Revenue Bond, Series 2024A 697,000 | | | GO Bonds, Series 2024B 1,920,000 | | | | | | | |
| | Tax Increments | Interest on Fund Balance | JW Speaker Shortfall Pmt | Bid Premium | Total Revenues | Dated Date: Principal | 06/06/18 Rate | Interest | Dated Date: | 05/25/22 Interest | Dated Date: | 05/25/22 Interest | Dated Date: Principal | 05/25/22 Interest | Dated Date: Principal | 09/01/24 Est. Rate | Interest | Dated Date: Principal | 09/01/24 Est. Rate | Interest | Professional Services | Admin. + 3% | Total Expenditures | Annual | Cumulative | Year |
| | | 3.50% | | | | | | | | | | | | | | | | | | | | | | | | |
| 2022 | | | | | | | | | | | | | | | | | | | | | | | | | **462,645** | 2022 |
| 2023 | 106,364 | 16,193 | | 18,488 | 141,044 | 120,000 | 3.00% | 74,430 | | 32,860 | | 107,400 | | 34,967 | | | | | | | 5,000 | 40,000 | 414,657 | (273,612) | 189,033 | 2023 |
| 2024 | 364,785 | 6,616 | 112,204 | | 483,605 | 120,000 | 3.00% | 70,830 | | 25,550 | | 83,508 | | 24,069 | | | | | | | 15,000 | 41,200 | 380,156 | 103,449 | 292,482 | 2024 |
| 2025 | 620,466 | 10,237 | 118,454 | | 749,157 | 130,000 | 3.00% | 67,080 | 75,000 | 24,050 | | 83,508 | 30,000 | 23,469 | 8,000 | 4.00% | 52,075 | | 3.75% | 72,000 | 5,000 | 42,436 | 612,617 | 136,540 | 429,022 | 2025 |
| 2026 | 961,610 | 15,016 | 129,329 | | 1,105,955 | 145,000 | 3.00% | 62,955 | 85,000 | 20,850 | 300,000 | 78,633 | 55,000 | 21,769 | 24,500 | 4.00% | 33,838 | | 3.75% | 72,000 | 5,000 | 43,709 | 948,253 | 157,702 | 586,724 | 2026 |
| 2027 | 951,994 | 20,535 | 129,904 | | 1,102,433 | 150,000 | 3.00% | 58,530 | 85,000 | 17,450 | 310,000 | 68,720 | 60,000 | 19,469 | 25,500 | 4.00% | 32,588 | 25,000 | 3.75% | 72,000 | 5,000 | 45,020 | 974,277 | 128,157 | 714,881 | 2027 |
| 2028 | 942,474 | 25,021 | 125,404 | | 1,092,899 | 150,000 | 3.00% | 54,030 | 90,000 | 13,950 | 325,000 | 58,401 | 60,000 | 17,069 | 26,500 | 4.00% | 31,288 | 25,000 | 3.75% | 71,063 | 5,000 | 46,371 | 973,671 | 119,228 | 834,109 | 2028 |
| 2029 | 933,049 | 29,194 | | | 962,243 | 225,000 | 3.00% | 48,405 | 90,000 | 10,350 | 375,000 | 47,026 | 60,000 | 14,669 | 27,500 | 4.00% | 29,938 | 25,000 | 3.75% | 70,125 | 5,000 | 47,762 | 1,075,775 | (113,531) | 720,577 | 2029 |
| 2030 | 923,719 | 25,220 | | | 948,939 | 300,000 | 3.00% | 40,530 | 95,000 | 7,125 | 400,000 | 34,433 | 60,000 | 12,269 | 28,500 | 4.00% | 28,538 | 50,000 | 3.75% | 69,188 | 5,000 | 49,195 | 1,179,776 | (230,837) | 489,740 | 2030 |
| 2031 | 914,482 | 17,141 | | | 931,623 | 300,000 | 3.10% | 31,380 | 95,000 | 4,275 | 415,000 | 21,085 | 65,000 | 10,094 | 29,500 | 4.00% | 27,088 | 50,000 | 3.75% | 67,313 | 5,000 | 50,671 | 1,171,405 | (239,782) | 249,958 | 2031 |
| 2032 | 905,337 | 8,749 | | | 914,085 | 300,000 | 3.15% | 22,005 | 95,000 | 1,425 | 425,000 | 7,119 | 65,000 | 8,103 | 31,000 | 4.00% | 25,575 | 50,000 | 3.75% | 65,438 | 5,000 | 52,191 | 1,152,855 | (238,770) | 11,188 | 2032 |
| 2033 | 896,283 | 392 | | | 896,675 | 540,000 | 3.20% | 8,640 | | | | | 70,000 | 5,950 | 32,000 | 4.00% | 24,000 | 75,000 | 3.75% | 63,563 | 5,000 | 53,757 | 877,909 | 18,766 | 29,954 | 2033 |
| 2034 | 887,321 | 1,048 | | | 888,369 | | | | | | | | 70,000 | 3,631 | 33,500 | 4.00% | 22,363 | 500,000 | 3.75% | 60,750 | 5,000 | 55,369 | 750,613 | 137,756 | 167,710 | 2034 |
| 2035 | 878,447 | 5,870 | | | 884,317 | | | | | | | | 70,000 | 1,225 | 34,500 | 4.00% | 20,663 | 550,000 | 3.75% | 42,000 | 5,000 | 57,030 | 780,418 | 103,899 | 271,609 | 2035 |
| 2036 | 869,663 | 9,506 | | | 879,169 | | | | | | | | | | 36,000 | 4.00% | 18,900 | 570,000 | 3.75% | 21,375 | 20,000 | 58,741 | 725,016 | 154,153 | 425,762 | 2036 |
| 2037 | 860,966 | 14,902 | | | 875,868 | | | | | | | | | | 38,000 | 4.00% | 17,050 | | | | | 60,504 | 115,554 | 760,314 | 1,186,077 | 2037 |
| 2038 | 852,357 | 41,513 | | | 893,869 | | | | | | | | | | 39,500 | 4.00% | 15,113 | | | | | 62,319 | 116,931 | 776,938 | 1,963,015 | 2038 |
| 2039 | 843,833 | 68,706 | | | 912,539 | | | | | | | | | | 282,500 | 4.00% | 13,088 | | | | | 64,188 | 359,776 | 552,763 | 2,515,778 | 2039 |
| Total | 13,713,151 | 315,857 | 615,295 | 18,488 | 14,662,791 | 2,480,000 | | 538,815 | 710,000 | 157,885 | 2,550,000 | 589,831 | 665,000 | 196,751 | 697,000 | | 392,100 | 1,920,000 | | 746,813 | 95,000 | 870,464 | 12,609,658 | | | Total |

Notes: The 2024A issue is a the previously approved TID 7 portion of the future well project.

# SECTION 9:

## Annexed Property

A tax incremental district cannot include annexed territory unless at least three years have elapsed since the annexation, or certain other requirements are met. No territory is being added to the District as part of this Plan Amendment.

## SECTION 10:
## Estimate of Property to be Devoted to Retail Business

Pursuant to Wis. Stat. § 66.1105(5)(b), the Village estimates that none of the territory within the District will be devoted to retail business at the end of the District's maximum expenditure period.

# SECTION 11:
# Proposed Changes of Zoning Ordinances, Master Plan, Map, Building Codes and Village Ordinances

## Zoning Ordinances

The proposed Plan Amendment is in general conformance with the Village's current zoning ordinances. Individual properties may require rezoning at the time of development. Land within the District zoned industrial at the time of District creation will remain in a zoning classification suitable for industrial sites for the life of the District.

## Master (Comprehensive) Plan and Map

The proposed Plan Amendment is in general conformance with the Village's Comprehensive Plan identifying the area as appropriate for industrial development.

## Building Codes and Ordinances

Development within the District will be required to conform to State Building Codes and will be subject to the Village's permitting and inspection procedures. The proposed Plan Amendment conforms to all relevant State and local ordinances, plans, and codes. No changes to the existing regulations are proposed or needed.

## SECTION 12:
## Statement of the Proposed Method for the Relocation of any Persons to be Displaced

Should the continued implementation of this Plan require relocation of individuals or business operations, relocations will be handled in compliance with Wis. Stat. Chapter 32 and Wis. Admin. Code ADM 92.

## SECTION 13:
## How Amendment of the Tax Incremental District Promotes the Orderly Development of the Village

This Plan Amendment promotes the orderly development of the Village by creating opportunities for mixed use development and by providing necessary public infrastructure improvements. Through use of tax increment financing, the Village can attract new investment that results in increased tax base. Development will occur in an orderly fashion in accordance with approved plans so that the Projects will be compatible with adjacent land uses. Development of new uses in the District will add to the tax base and will generate positive secondary impacts in the community such as increased employment opportunities.

## SECTION 14:
## List of Estimated Non-Project Costs

Non-project costs are public works projects which only partly benefit the District. Costs incurred that do not benefit the District may not be paid with tax increments. Examples of non-project costs are:

- A public improvement made within the District that also benefits property outside the District. That portion of the total Project Costs allocable to properties outside of the District would be a non-project cost.
- A public improvement made outside the District that only partially benefits property within the District. That portion of the total Project Costs allocable to properties outside of the District would be a non-project cost.
- Projects undertaken within the District as part of the implementation of this Project Plan, the costs of which are paid fully or in part by impact fees, grants, special assessments, or revenues other than tax increments.

The Plan includes the following non-project costs:

| | |
|---|---|
| Freistadt Road - High Point Pass to Interstate 41 (Road Re-construction) | 930,000 |
| Freistadt Road - High Point Pass to Interstate 41 (Sewer) | 600,000 |
| Freistadt Road - High Point Pass to Interstate 41 (Water) | 330,000 |

Approximately 50% of each of the costs listed above or $1,860,000 are non-TID project costs being paid from other sources.

# SECTION 15:
# Legal Opinion Advising Whether the Plan is Complete and Complies with Wis. Stat. § 66.1105(4)(f)

NEED WET SIGNATURE & DATED LEGAL OPINION ON ATTORNEY LETTERHEAD

SAMPLE

Village President
Village of Germantown
N112 W17001 Mequon Rd
Germantown, Wisconsin 53022

RE: Project Plan Amendment for Tax Incremental District No. 7

Dear Village President:

Wisconsin Statute 66.1105(4)(f) requires that a project plan for a tax incremental financing district include an opinion provided by the Village Attorney advising as to whether the plan is complete and complies with Wisconsin Statute 66.1105. As Village Attorney for the Village of Germantown, I have been asked to review the above-referenced project plan amendment for compliance with the applicable statutory requirements. Based upon my review, in my opinion, the amended Project Plan for the Village of Germantown Tax Incremental District No. 7 is complete and complies with the provisions of Wisconsin Statute 66.1105.

Sincerely,

Village Attorney

# SECTION 16:
# Calculation of the Share of Projected Tax Increments Estimated to be Paid by the Owners of Property in the Overlying Taxing Jurisdictions

The following projection is provided to meet the requirements of Wis. Stat. § 66.1105(4)(i)4.

| Revenue Year | Washington County | Village of Germantown | Germantown School District | Milwaukee Area Technical | Total | Revenue Year |
|---|---|---|---|---|---|---|
| 2020 | 4,612 | 13,789 | 21,308 | 2,316 | 42,025 | 2020 |
| 2021 | 9,555 | 28,570 | 44,147 | 4,799 | 87,070 | 2021 |
| 2022 | 7,929 | 23,706 | 36,631 | 3,982 | 72,248 | 2022 |
| 2023 | 11,673 | 34,900 | 53,929 | 5,862 | 106,364 | 2023 |
| 2024 | 40,032 | 119,694 | 184,955 | 20,104 | 364,785 | 2024 |
| 2025 | 68,091 | 203,588 | 314,592 | 34,195 | 620,466 | 2025 |
| 2026 | 105,529 | 315,524 | 487,561 | 52,996 | 961,610 | 2026 |
| 2027 | 104,474 | 312,369 | 482,686 | 52,466 | 951,994 | 2027 |
| 2028 | 103,429 | 309,245 | 477,859 | 51,941 | 942,474 | 2028 |
| 2029 | 102,395 | 306,153 | 473,080 | 51,422 | 933,049 | 2029 |
| 2030 | 101,371 | 303,091 | 468,349 | 50,907 | 923,719 | 2030 |
| 2031 | 100,357 | 300,060 | 463,666 | 50,398 | 914,482 | 2031 |
| 2032 | 99,354 | 297,060 | 459,029 | 49,894 | 905,337 | 2032 |
| 2033 | 98,360 | 294,089 | 454,439 | 49,395 | 896,283 | 2033 |
| 2034 | 97,376 | 291,148 | 449,894 | 48,901 | 887,321 | 2034 |
| 2035 | 96,403 | 288,237 | 445,396 | 48,412 | 878,447 | 2035 |
| 2036 | 95,439 | 285,354 | 440,942 | 47,928 | 869,663 | 2036 |
| 2037 | 94,484 | 282,501 | 436,532 | 47,449 | 860,966 | 2037 |
| 2038 | 93,539 | 279,676 | 432,167 | 46,975 | 852,357 | 2038 |
| 2039 | 92,604 | 276,879 | 427,845 | 46,505 | 843,833 | 2039 |
| **Totals** | **1,527,006** | **4,565,633** | **7,055,008** | **766,847** | **13,914,494** | |

# AMENDMENT TO TAX INCREMENTAL DISTRICT (TID) No. 8

**4-8-24 Plan Commission Meeting**

## Germantown Community Development Department

**Village Planner Report** **Germantown, Wisconsin**

**BACKGROUND**

Tax Incremental District No. 8 (TID8) is a 224.8 acre "Industrial" District located north of Holy Hill Road, east of I-41, south of Rockfield Road, and west of Goldendale Road (see attached map). TID8 was created in 2018 to provide infrastructure financing related to the Germantown Gateway Corporate Park and to promote additional industrial development along the Holy Hill corridor.

The original Project Plan for TID8 included infrastructure projects totaling $14.2 million that would yield land and improvement value added in the new industrial district to approximately $88.25 million with a tax increment value of $11.1 million over the 20-year life of the TID. However, to date, the amount of value added has reached approximately $208.7 million.

**PROPOSAL**

As detailed in the amended Project Plan for TID8 (copy attached),the purpose for this amendment is to add $4,945,000 in project cost for the following improvements to be completed within ½ mile of the TID8 boundary (see attached map):

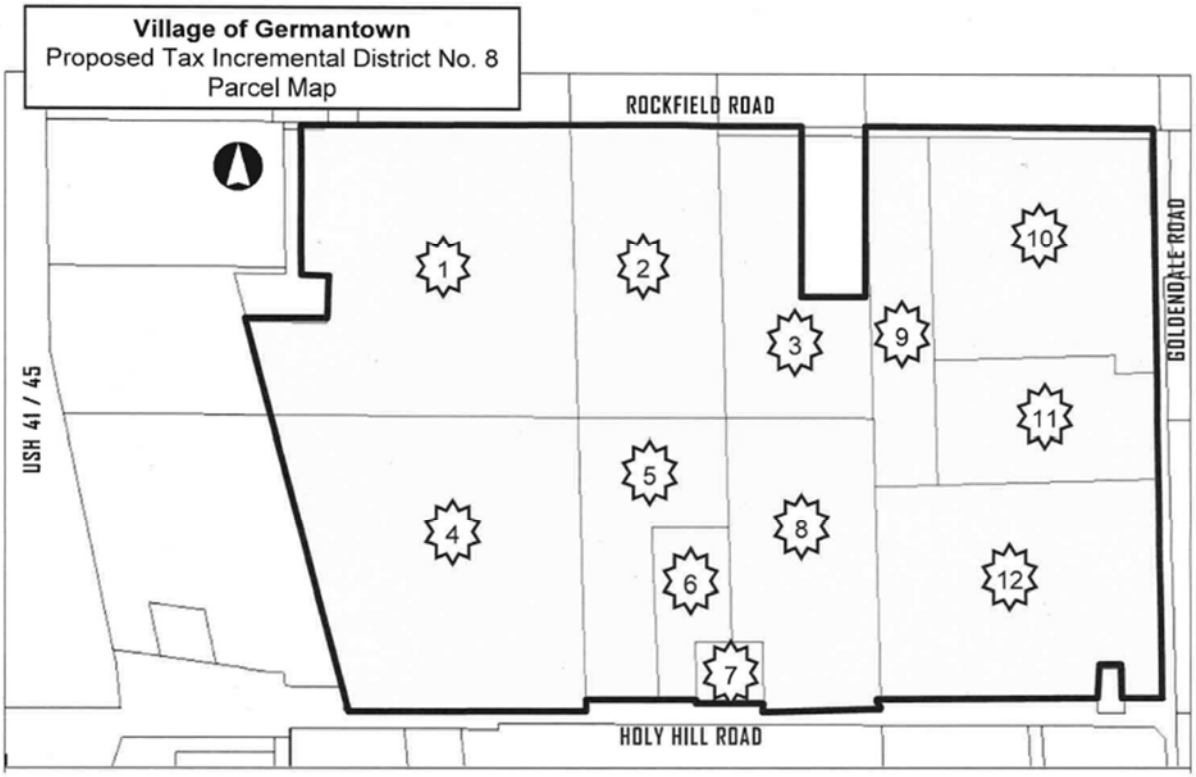
- Rockfield Road urban design re-construction (Goldendale to Gateway Crossing)
- Rockfield Road sewer installation (Goldendale to Gateway Crossing)
- Rockfield Road water installation (Goldendale to Gateway Crossing)
- Rockfield Road sewer installation (i-41 to Gateway Crossing)
- The construction of High Point Pass, a new public "frontage road" south of Holy Hill Road to the WSOR railroad;

Although the Village anticipates development will occur as a result of the Rockfield Road improvements, no additional improvement value has been added in the Project Plan assumptions. The Village anticipates that the proposed TID8 amendment will generate sufficient tax increment to pay all project costs within 9 years of the maximum allowable 20 years.

**PROCESS**

As with previous TID proposals, the Plan Commission is responsible for holding a public hearing of the amended TID8 Project Plan prior to making a recommendation to the Village Board and the TID8 Joint Review Board through action on a proposed resolution (copy attached).

Additional information will be provided as part of the public hearing and prior to discussion of the proposed resolution by Village staff and Ehlers, the Village's financial consultant.


Village of Germantown
Proposed Tax Incremental District No. 8
Parcel Map
ROCKFIELD ROAD
GOLDENDALE ROAD
USH 41 / 45
HOLY HILL ROAD
1
2
3
4
5
6
7
8
9
10
11
12

ROCKFIELD RD
SEWER - TID 8
ROCKFIELD RD
ROAD - TID 8
SEWER - TID 8
WATER - TID 8
HIGH POINT PASS
ROAD - TID 7 & 8
41

**PLAN COMMISSION**
**RESOLUTION NO. 02-2024**

**RESOLUTION APPROVING AN AMENDMENT TO THE PROJECT PLAN FOR TAX INCREMENTAL DISTRICT NO. TAX INCREMENTAL DISTRICT NO. 8**

WHEREAS, the Village of Germantown (the "Village") has determined that use of Tax Incremental Financing is required to promote development and redevelopment within the Village; and

WHEREAS, Tax Incremental District No. 8 (the "District") was created by the Village on July 2, 2018 as an industrial district; and

WHEREAS, the Village now desires to amend the Project Plan of the District (the "Amendment") in accordance with the provisions of Wisconsin Statutes Section 66.1105 (the "Tax Increment Law"); and

WHEREAS, such Amendment will amend the categories, locations or costs of project costs to be made as permitted under Wisconsin Statutes Section 66.1105(4)(h)1.

WHEREAS, an amended Project Plan for the District (the "Amendment") has been prepared that includes:

a. A statement listing of the kind, number and location of all proposed public works or improvements within the District, or to the extent provided in Wisconsin Statutes Sections 66.1105(2)(f)1.k. and 66.1105(2)(f)1.n., outside of the District;
b. An economic feasibility study;
c. A detailed list of estimated project costs;
d. A description of the methods of financing all estimated project costs and the time when the related costs or monetary obligations are to be incurred;
e. A map showing existing uses and conditions of real property in the District;
f. A map showing proposed improvements and uses in the District;
g. Proposed changes of zoning ordinances, master plan, map, building codes and Village ordinances;
h. A list of estimated non-project costs;
i. A statement of the proposed plan for relocation of any persons to be displaced;
j. A statement indicating how the District promotes the orderly development of the Village;
k. An opinion of the Village Attorney or of an attorney retained by the Village advising that the plan is complete and complies with Wisconsin Statutes Section 66.1105(4)(f); and

WHEREAS, prior to its publication, a copy of the notice of public hearing was sent to the chief executive officers of Washington County, the Germantown School District, and the Milwaukee Area Technical College District, and any other entities having the power to levy taxes on property located within the District, in accordance with the procedures specified in the Tax Increment Law; and

WHEREAS, in accordance with the procedures specified in the Tax Increment Law, the Plan Commission, on April 8, 2024 held a public hearing concerning the proposed amendment to the District's Project Plan, providing interested parties a reasonable opportunity to express their views thereon.

NOW, THEREFORE, BE IT RESOLVED by the Plan Commission of the Village of Germantown that:

1. The boundaries of Tax Incremental District No. 8 will not change as a result of this Amendment and will remain as designated in Exhibit A of this Resolution.

2. It approves and adopts the amended Project Plan for the District, attached as Exhibit B, and recommends its approval to the Village Board.

3. Amendment of the District's Project Plan promotes orderly development in the Village.

Adopted this 8TH day of April, 2024.

_____
Dean Wolter, Plan Commission Chair

_____
Laura Johnson, Secretary of the Plan Commission

**EXHIBIT A -**

TAX INCREMENTAL DISTRICT NO. 8
**BOUNDARY MAP**

[INCLUDED IN PROJECT PLAN]

# EXHIBIT B -

# PROJECT PLAN

[DISTRIBUTED SEPARATELY]

# NOTICE OF PUBLIC HEARING
# AND JOINT REVIEW BOARD MEETING
# VILLAGE OF GERMANTOWN, WISCONSIN

NOTICE IS HEREBY GIVEN that the Village of Germantown will hold a Joint Review Board meeting on April 8, 2024 at 6:00 PM.

The meeting will be held at the Germantown Village Hall, located at N112 W17001 Mequon Rd.

**Join from the meeting link**

https://villageofgermantown.my.webex.com/villageofgermantown.my/j.php?MTID=mb07597633e8dcf91fff1bb6d88dabe16

**Join by meeting number**

Meeting number (access code): 2550 486 1925

Meeting password: HXmeWpAM272

**Tap to join from a mobile device (attendees only)**

+1-408-418-9388,,25504861925## United States Toll

The purpose of the meeting is to organize the Joint Review Board for consideration of the Village's proposal to amend Tax Incremental Districts No. 7 & 8.

NOTICE IS HEREBY GIVEN that the Plan Commission of the Village of Germantown will hold a public hearing on April 8, 2024 at 6:30 PM.

The meeting will be held at the Germantown Village Hall, located at N112 W17001 Mequon Rd.

**Join from the meeting link**

https://villageofgermantown.my.webex.com/villageofgermantown.my/j.php?MTID=m3e60c9657945a5ad89155bdbfd3c356f

**Join by meeting number**

Meeting number (access code): 2553 216 2843

Meeting password: qRNiKJrY345

**Tap to join from a mobile device (attendees only)**

+1-408-418-9388,,25532162843## United States Toll

**Join by phone**

+1-408-418-9388 United States Toll

Global call-in numbers

The hearing will be held to provide the public a reasonable opportunity to comment on the proposed amendments to the Project Plan for Tax Incremental Districts No. 7 & 8.

## TID No. 7 Amendment:

Based on the planned use of properties within its boundaries at time of creation, territory within the District was previously identified as suitable for industrial development.

Projects to be undertaken within the District and costs to be incurred (Project Costs) will continue to be for the purpose of promoting industrial development and will include acquisition of property, rights of way or easements, site preparation, installation or rehabilitation of utilities and streets, professional services and organizational costs, administrative costs, financing costs and other costs as may be necessary to implement the District's Project Plan. Projects will be undertaken within the District's proposed boundary and in areas located in the Village within ½ mile of that boundary.

As permitted under Wisconsin Statutes Section 66.1105(4)(h)1., the list of estimated Project Costs in the current Project Plan would be amended and increased by approximately $1,520,000.

TID No. 8 Amendment:

Based on the planned use of properties within its boundaries at time of creation, territory within the District was previously identified as suitable for industrial development.

Projects to be undertaken within the District and costs to be incurred (Project Costs) will continue to be for the purpose of promoting industrial development and will include acquisition of property, rights of way or easements, site preparation, installation or rehabilitation of utilities and streets, professional services and organizational costs, administrative costs, financing costs and other costs as may be necessary to implement the District's Project Plan. Projects will be undertaken within the District's proposed boundary and in areas located in the Village within ½ mile of that boundary.

As permitted under Wisconsin Statutes Section 66.1105(4)(h)1., the list of estimated Project Costs in the current Project Plan would be amended and increased approximately $5,375,000.

All interested parties will be given a reasonable opportunity to comment on the proposed amendments to the District Project Plans. A copy of the proposed amendments to the District Project Plans, is available for public inspection and will be provided on request during normal business hours at the office of the Village Clerk at the Germantown Village Hall, located at N112 W17001 Mequon Rd. This information can also be viewed on the Village's website at https://www.germantownwi.gov/742/Agendas-Minutes

By Order of the Village of Germantown, Wisconsin

*Published March 27, 2024*

April 3, 2024

PROJECT PLAN AMENDMENT

# Village of Germantown, Wisconsin

## Tax Incremental District No. 8

EHLERS
PUBLIC FINANCE ADVISORS

**Prepared by:**

Ehlers
N19W24400 Riverwood Drive,
Suite 100
Waukesha, WI 53188

BUILDING COMMUNITIES. IT'S WHAT WE DO.

# KEY DATES

| | |
|---|---|
| Organizational Joint Review Board Meeting Held: | Scheduled for April, 8, 2024 |
| Public Hearing Held: | Scheduled for April 8, 2024 |
| Approval by Plan Commission: | Scheduled for April 8, 2024 |
| Adoption by Village Board: | Scheduled for April 15, 2024 |
| Approval by the Joint Review Board: | Scheduled for TBD |

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# SECTION 1:
# Executive Summary

## DESCRIPTION OF DISTRICT

Tax Incremental District ("TID") No. 8 ("District") is a 224.8- acre Industrial District created on July 2, 2018. The District was created to:

- The District was created in collaboration with Zilber Property Group to support industrial development on the west side of the Village.
- The District was to pay development incentives and public infrastructure to promote industrial development.

### Purpose of Amendment

The purpose of this amendment, referred to hereafter as the Plan, the Amendment, or the Plan Amendment, is to:

- Amend the categories, locations or costs of project costs to be made as permitted under Wis. Stat. § 66.1105(4)(h)1. ("Project").

### Estimated Total Project Cost Expenditures

The Village anticipates making total expenditures of approximately $4,945,000 ("Project Costs") to undertake the projects listed in this Project Plan ("Plan"). Project Costs include an estimated $2.5M for road construction and reconstruction, $1.9M in sewer costs, $540K in water costs, and $15K in professional services.

### Incremental Valuation

The Village isn't projecting additional development, but the improvements proposed in this amendment will support the existing and future development in TID 8. However, currently, no additional development is being added to the development assumptions. A table detailing current development assumptions, timing, and associated values is included in the Economic Feasibility Study located within this Plan.

### Expected Termination of District

Based on the Economic Feasibility Study located within Section 9 of this Plan, the Village anticipates that the District will generate sufficient tax increment to pay all Project Costs within 9 of its allowable 20 years.

### Summary of Findings

As required by Wis. Stat. § 66.1105, and as documented in this Plan and the exhibits contained and referenced herein, the following findings are made:

1. That "but for" the creation of this District, the development projected to occur as detailed in this Plan: 1) would not occur; or 2) would not occur in the manner, at the values, or within the timeframe desired by the Village. In reaching this determination, the Village has considered:

   The substantial investment needed to provide the public infrastructure necessary to support TID 8 and continue to allow for future development within the District. Absent the use of tax incremental financing, the Village is unable to fully fund this program of infrastructure improvements.

2. **The economic benefits of the District, as measured by increased employment, business and personal income, and property value, are sufficient to compensate for the cost of the improvements. In making this determination, the Village has considered the following information:**

   That the Developer is likely to purchase goods and services from local suppliers in construction of the Project, and induced effects of employee households spending locally for goods and services from retailers, restaurants and service companies.

3. **The benefits of the proposal outweigh the anticipated tax increments to be paid by the owners of property in the overlying taxing jurisdictions.** As required by Wis. Stat. § 66.1105(4)(i)4., a calculation of the share of projected tax increments estimated to be paid by the owners of property in the overlying taxing jurisdictions has been prepared and can be found in this Plan. However, because the Project would not occur without the use of tax incremental financing, these tax increments would not be paid but for creation of the District. Accordingly, the Village finds that the benefits expected to be realized as set forth in this Plan outweigh the value of the tax increments to be invested in the Project.

4. The boundaries of the District are not being amended.

5. That Project Costs relate directly to promoting industrial development in the District, consistent with the purpose for which the District is created.

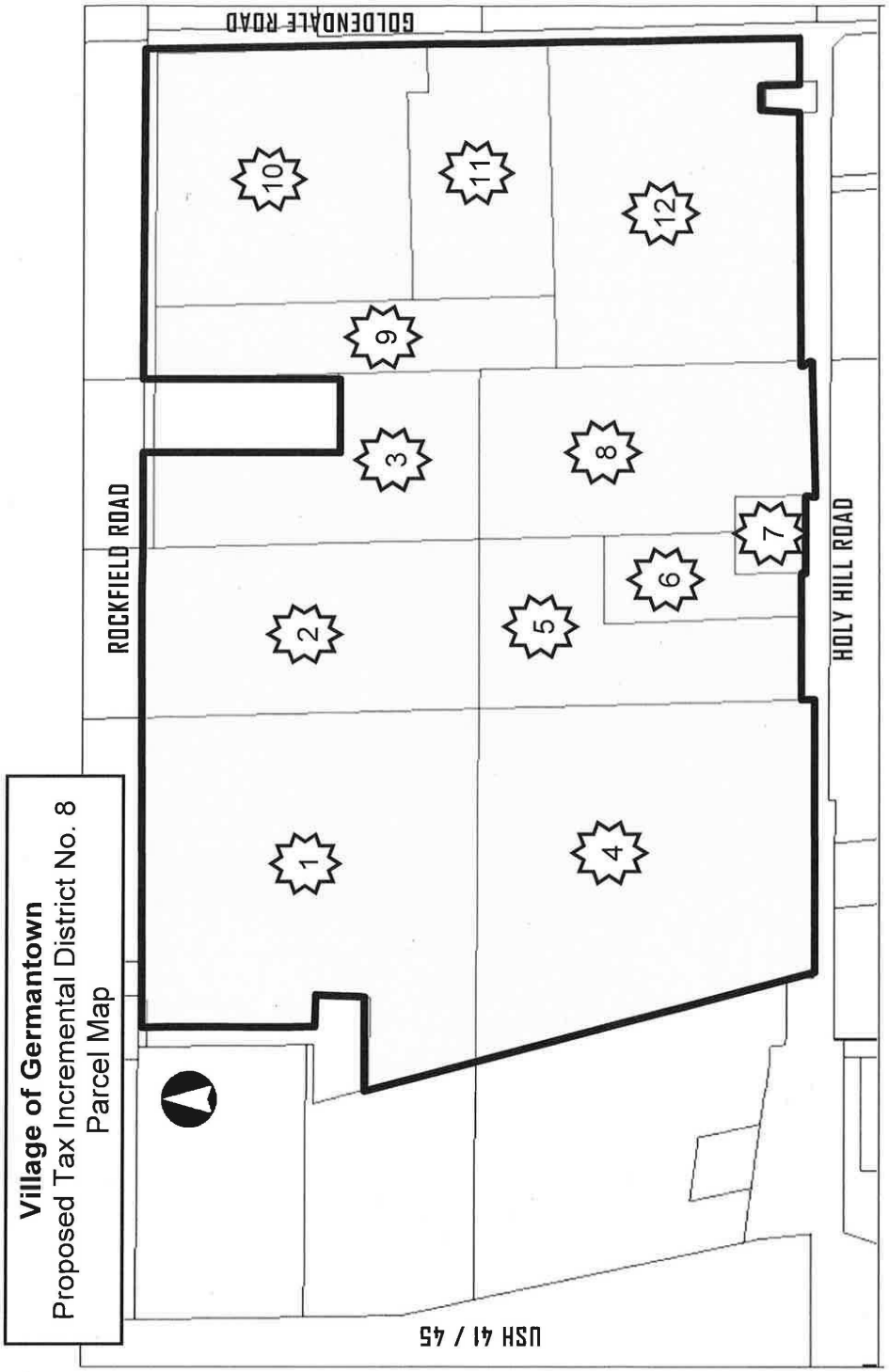
6. Improvements to be made in the District are likely to significantly enhance the value of substantially all of the other real property in the District.

7. The Plan for the District is feasible and is in conformity with the Master Plan of the Village.

8. The Village estimates that none of the territory within the District will be devoted to retail business at the end of the District's maximum expenditure period, pursuant to Wis. Stat. § 66.1105(5)(b).

## SECTION 2:
## Map of Current District Boundary

A map identifying the current boundaries of the District is found on the following page. The District's boundaries are not being amended.


Village of Germantown
Proposed Tax Incremental District No. 8
Parcel Map
ROCKFIELD ROAD
GOLDENDALE ROAD
HOLY HILL ROAD
USH 41 / 45
1
2
3
4
5
6
7
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11
12

## SECTION 3:
## Map Showing Existing Uses and Conditions

The District's boundaries are not being amended. The "Map Showing Existing Uses and Conditions" included within the District's original Project Plan dated July 2, 2018 remains unchanged and is incorporated by reference as part of this Plan Amendment.

## SECTION 4:
## Equalized Value Test

No territory will be added to the District. Demonstration of compliance with the equalized value test is not required for this Plan Amendment.

# SECTION 5:
# Statement Listing the Kind, Number and Location of All Proposed Public Works or Improvements Within the District

Project Costs are any expenditure made, estimated to be made, or monetary obligations incurred or estimated to be incurred as outlined in this Plan. Project Costs will be diminished by any income, special assessments or other revenues, including user fees or charges, other than tax increments, received or reasonably expected to be received in connection with the implementation of the Plan. If Project Costs incurred benefit territory outside the District, a proportionate share of the cost is not a Project Cost. Costs identified in this Plan are preliminary estimates made prior to design considerations and are subject to change after planning, design and construction is completed.

With all Project Costs, the costs of engineering, design, survey, inspection, materials, construction, restoring property to its original condition, apparatus necessary for public works, legal and other consultant fees, testing, environmental studies, permits, updating ordinances and plans, judgments or claims for damages and other expenses are included as Project Costs. The map found in Section 7 of this Plan along with the Detailed List of Project Costs found in Section 8 provide additional information as to the kind, number and location of potential Project Costs.

The "Statement of Kind, Number and Location of Proposed Public Works and Other Projects" set forth in the original District Project Plan approved on July 2, 2018 is amended to add the following Project Costs that the Village has made, expects to make, or may need to make, in conjunction with the implementation of the District's Plan or this Plan Amendment.

## Property, Right-of-Way and Easement Acquisition

### *Property Acquisition for Development*

To promote and facilitate development the Village may acquire property within the District. The cost of property acquired, and any costs associated with the transaction, are eligible Project Costs. Following acquisition, other Project Costs within the categories detailed in this Section may be incurred to make the property suitable for development. Any revenue received by the Village from the sale of property acquired pursuant to the execution of this Plan will be used to reduce the total project costs of the District. If total Project Costs incurred by the Village to acquire property and make it suitable for development exceed the revenues or other consideration received from the

sale or lease of that property, the net amount shall be considered "real property assembly costs" as defined in Wis. Stat. § 66.1105(2)(f)1.c., and subject to recovery as an eligible Project Cost.

### *Property Acquisition for Conservancy*

To promote the objectives of this Plan, the Village may acquire property within the District that it will designate for conservancy. These conservancy objectives include: preserving historic resources or sensitive natural features; protection of scenic and historic views; maintaining habitat for wildlife; maintaining adequate open space; reduction of erosion and sedimentation by preserving existing vegetation; and providing adequate areas for management of stormwater. The cost of property acquired for conservancy, and any costs associated with the transaction, are eligible Project Costs.

### *Acquisition of Rights-of-Way*

The Village may need to acquire property to allow for installation of streets, driveways, sidewalks, utilities, stormwater management practices and other public infrastructure. Costs incurred by the Village to identify, negotiate and acquire rights-of-way are eligible Project Costs.

### *Acquisition of Easements*

The Village may need to acquire temporary or permanent easements to allow for installation and maintenance of streets, driveways, sidewalks, utilities, stormwater management practices and other public infrastructure. Costs incurred by the Village to identify, negotiate and acquire easement rights are eligible Project Costs.

### *Relocation Costs*

If relocation expenses are incurred in conjunction with the acquisition of property, those expenses are eligible Project Costs. These costs may include but are not limited to: preparation of a relocation plan; allocations of staff time; legal fees; publication of notices; obtaining appraisals; and payment of relocation benefits as required by Wis. Stat. Chapter 32 and Wis. Admin. Code ADM 92.

## Site Preparation Activities

### *Environmental Audits and Remediation*

If it becomes necessary to evaluate any land or improvement within the District, any cost incurred by the Village related to environmental audits, testing, and remediation are eligible Project Costs.

### *Site Grading*

Land within the District may require grading to make it suitable for development, to provide access, and to control stormwater runoff. The Village may need to remove and dispose of excess material or bring in fill material to provide for proper site elevations. Expenses incurred by the Village for site grading are eligible Project Costs.

## Utilities

### *Sanitary Sewer System Improvements*

To allow development to occur, the Village may need to construct, alter, rebuild or expand sanitary sewer infrastructure within the District. Eligible Project Costs include, but are not limited to, construction, alteration, rebuilding or expansion of: collection mains; manholes and cleanouts; service laterals; force mains; interceptor sewers; pumping stations; lift stations; wastewater treatment facilities; and all related appurtenances. To the extent sanitary sewer projects undertaken within the District provide direct benefit to land outside of the District, the Village will make an allocation of costs based on such benefit. Those costs corresponding to the benefit allocated to land within the District, and necessitated by the implementation of the Project Plan, are eligible Project Costs. Implementation of the Project Plan may also require that the Village construct, alter, rebuild or expand sanitary sewer infrastructure located outside of the District. That portion of the costs of sanitary sewer system projects undertaken outside the District which are necessitated by the implementation of the Project Plan are eligible Project Costs.

### *Water System Improvements*

To allow development to occur, the Village may need to construct, alter, rebuild or expand water system infrastructure within the District. Eligible Project Costs include, but are not limited to, construction, alteration, rebuilding or expansion of: distribution mains; manholes and valves; hydrants; service laterals; pumping stations; wells; water treatment facilities; storage tanks and reservoirs; and all related appurtenances. To the extent water system projects undertaken within the District provide direct benefit to land outside of the District, the Village will make an allocation of costs based on such benefit. Those costs corresponding to the benefit allocated to land within the District, and necessitated by the implementation of the Project Plan, are eligible Project Costs. Implementation of the Project Plan may also require that the Village construct, alter, rebuild or expand water system infrastructure located outside of the District. That portion of the costs of water system projects undertaken outside the District

which are necessitated by the implementation of the Project Plan are eligible Project Costs.

***Stormwater Management System Improvements***

Development within the District will cause stormwater runoff. To manage this stormwater runoff, the Village may need to construct, alter, rebuild or expand stormwater management infrastructure within the District. Eligible Project Costs include, but are not limited to, construction, alteration, rebuilding or expansion of: stormwater collection mains; inlets, manholes and valves; service laterals; ditches; culvert pipes; box culverts; bridges; stabilization of stream and river banks; and infiltration, filtration and detention Best Management Practices (BMP's). To the extent stormwater management system projects undertaken within the District provide direct benefit to land outside of the District, the Village will make an allocation of costs based on such benefit. Those costs corresponding to the benefit allocated to land within the District, and necessitated by the implementation of the Project Plan, are eligible Project Costs. Implementation of the Project Plan may also require that the Village construct, alter, rebuild or expand stormwater management infrastructure located outside of the District. That portion of the costs of stormwater management system projects undertaken outside the District which are necessitated by the implementation of the Project Plan are eligible Project Costs.

***Electric Service***

To create sites suitable for development, the Village may incur costs to provide, relocate or upgrade electric services. Relocation may require abandonment and removal of existing poles or towers, installation of new poles or towers, or burying of overhead electric lines. Costs incurred by the Village to undertake this work are eligible Project Costs.

***Gas Service***

To create sites suitable for development, the Village may incur costs to provide, relocate or upgrade gas mains and services. Costs incurred by the Village to undertake this work are eligible Project Costs.

***Communications Infrastructure***

To create sites suitable for development, the Village may incur costs to provide, relocate or upgrade infrastructure required for voice and data communications, including, but not limited to: telephone lines, cable lines and fiber optic cable. Costs incurred by the Village to undertake this work are eligible Project Costs.

## Streets and Streetscape

### *Street Improvements*

To allow development to occur, the Village may need to construct or reconstruct streets, highways, alleys, access drives and parking areas. Eligible Project Costs include, but are not limited to: excavation; removal or placement of fill; construction of road base; asphalt or concrete paving or repaving; installation of curb and gutter; installation of sidewalks and bicycle lanes; installation of culverts, box culverts and bridges; rail crossings and signals; utility relocation, to include burying overhead utility lines; street lighting; installation of traffic control signage and traffic signals; pavement marking; right-of-way restoration; installation of retaining walls; and installation of fences, berms, and landscaping.

### *Streetscaping and Landscaping*

To attract development consistent with the objectives of this Plan, the Village may install amenities to enhance development sites, rights-of-way and other public spaces. These amenities include but are not limited to: landscaping; lighting of streets, sidewalks, parking areas and public areas; installation of planters, benches, clocks, tree rings, trash receptacles and similar items; and installation of brick or other decorative walks, terraces and street crossings. These and any other similar amenities installed by the Village are eligible costs.

### *Projects Outside the Tax Increment District*

Pursuant to Wis. Stat. § 66.1105(2)(f)1.n, the Village may undertake projects within territory located within one-half mile of the boundary of the District provided that: 1) the project area is located within the Village's corporate boundaries; and 2) the projects are approved by the Joint Review Board. The cost of projects completed outside the District pursuant to this section are eligible project costs and may include any project cost that would otherwise be eligible if undertaken within the District. The Village intends to make the following project cost expenditures outside the District:

| | | |
|---|---|---|
| Rockfield Road - Goldendale to Gateway (Road Reconstruction) | | 1,380,000 |
| Rockfield Road - Goldendale to Gateway (Sewer) | | 880,000 |
| Rockfield Road - Goldendale to Gateway (Water) | | 540,000 |
| Rockfield Road - Gateway Crossing to I 41 (Sewer) | | 1,050,000 |
| High Point Pass - Holy Hill to Railroad (Road Construction) | | 1,080,000 |

### *Professional Service and Organizational Costs*

The costs of professional services rendered, and other costs incurred, in relation to the creation, administration and termination of the District, and the

undertaking of the projects contained within this Plan, are eligible Project Costs. Professional services include but are not limited to: architectural; environmental; planning; engineering; legal; audit; financial; and the costs of informing the public with respect to the creation of the District and the implementation of the Plan.

***Administrative Costs***

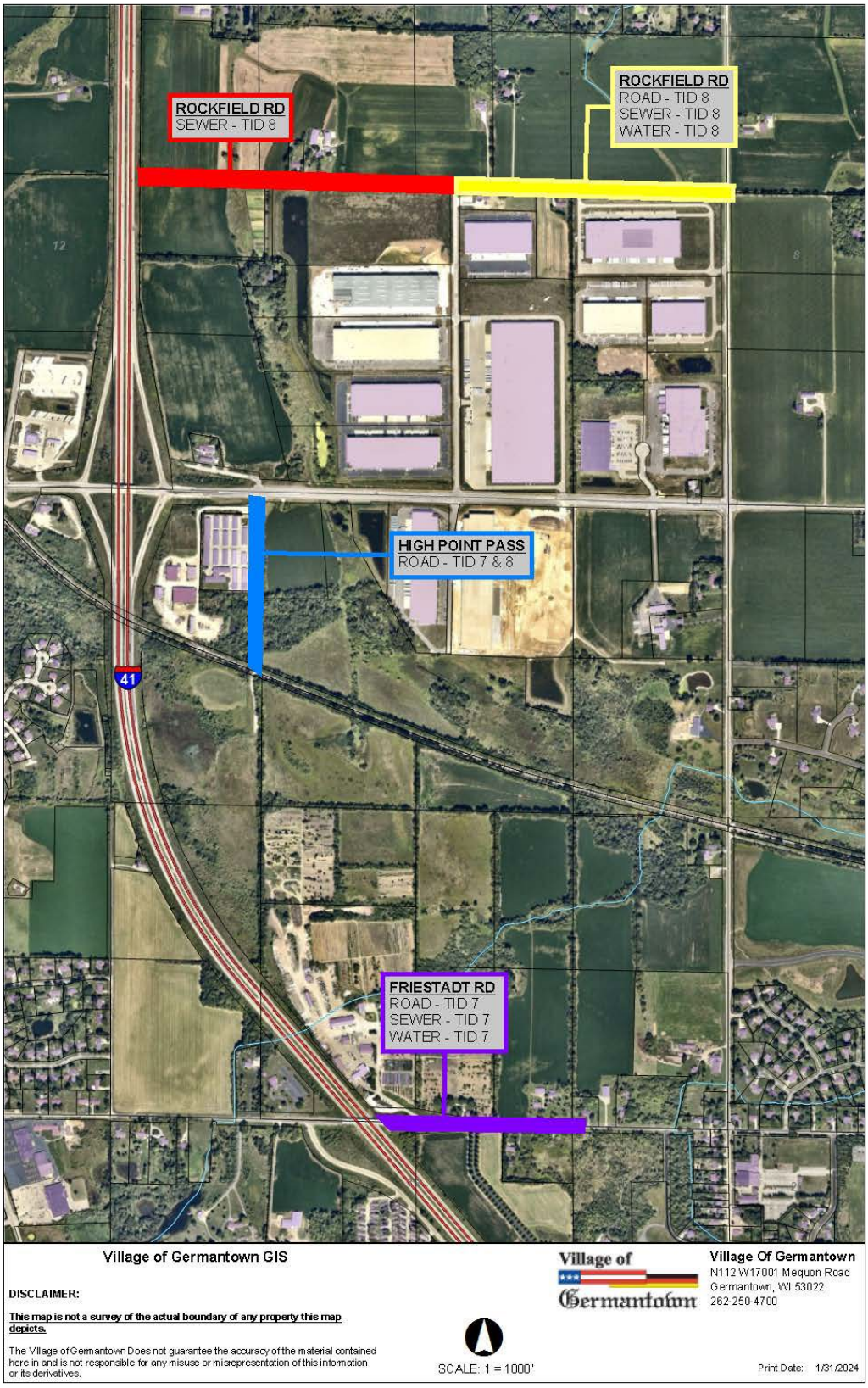
The Village may charge to the District as eligible Project Costs reasonable allocations of administrative costs, including, but not limited to, employee salaries. Costs allocated will bear a direct connection to the time spent by Village employees relating to the implementation of the Plan.

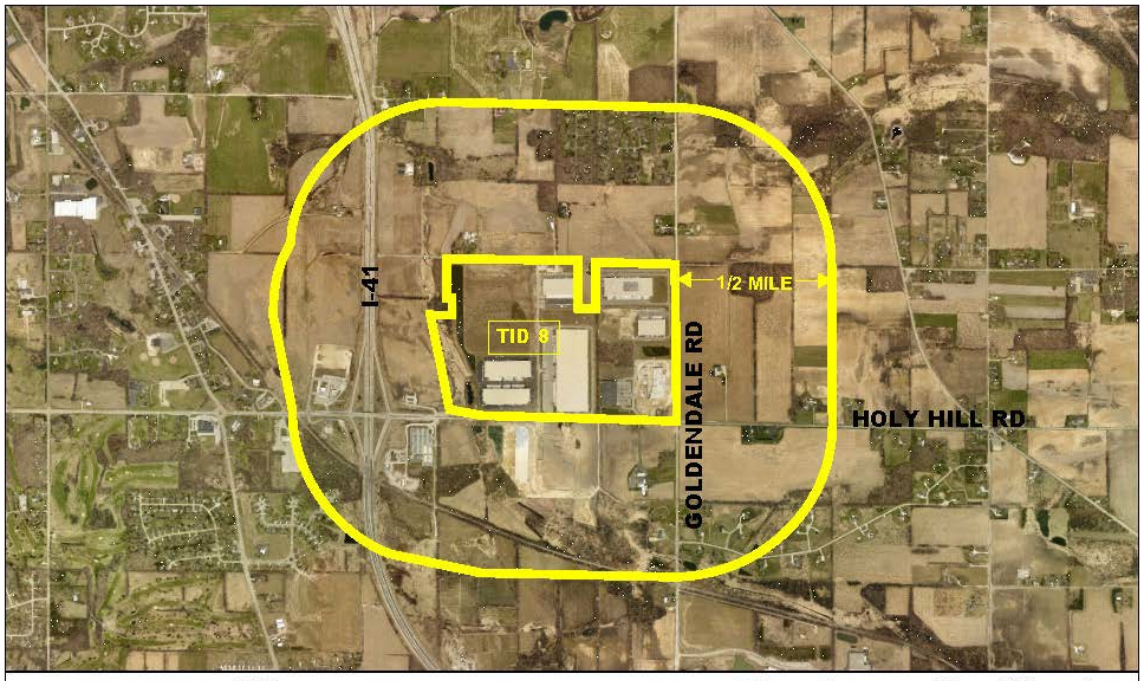
***Financing Costs***

Interest expense, debt issuance expenses, redemption premiums, and any other fees and costs incurred in conjunction with obtaining financing for projects undertaken under this Plan are eligible Project Costs.

# SECTION 6:
# Map Showing Proposed Improvements and Uses

The District's boundaries are not being amended. The "Map Showing Proposed Improvements and Uses" can be found on the following pages.


ROCKFIELD RD
SEWER - TID 8
ROCKFIELD RD
ROAD - TID 8
SEWER - TID 8
WATER - TID 8
HIGH POINT PASS
ROAD - TID 7 & 8
41
FRIESTADT RD
ROAD - TID 7
SEWER - TID 7
WATER - TID 7
Village of Germantown GIS
DISCLAIMER:
This map is not a survey of the actual boundary of any property this map depicts.
The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.
SCALE: 1 = 1000'
Village of Germantown
Village Of Germantown
N112 W17001 Mequon Road
Germantown, WI 53022
262-250-4700
Print Date: 1/31/2024




TID 8
WITH 1/2-MILE BORDER

DISCLAIMER:

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.

SCALE: 1 = 2589'

Village of Germantown

Village Of Germantown
N112 W17001 Mequon Road
Germantown, WI 53022
262-250-4700

Print Date: 3/6/2024

# SECTION 7:
# Detailed List of Estimated Project Costs

The following list identifies the Project Costs that the Village has made, expects to make, or may need to make in conjunction with the implementation of the District's Plan or this Plan Amendment. All projects identified and related costs reflect the best estimates available as of the date of preparation of this Plan Amendment. All costs are preliminary estimates and may increase or decrease. Certain Project Costs listed may become unnecessary, and other Project Costs not currently identified may need to be made. (Section 6 details the general categories of eligible Project Costs). Changes in Project Cost totals or the types of Project Costs to be incurred will not require that this Plan be amended. This Plan is not meant to be a budget nor an appropriation of funds for specific Project Costs, but a framework within which to manage Project Costs.

| Project ID | Project Name/Type | 1st Amendment | Total (Note 1) |
|---|---|---|---|
| 1 | Rockfield Road - Goldendale to Gateway (Road Reconstruction) | 1,380,000 | 1,380,000 |
| 2 | Rockfield Road - Goldendale to Gateway (Sewer) | 880,000 | 880,000 |
| 3 | Rockfield Road - Goldendale to Gateway (Water) | 540,000 | 540,000 |
| 4 | Rockfield Road - Gateway Crossing to I 41 (Sewer) | 1,050,000 | 1,050,000 |
| 5 | High Point Pass - Holy Hill to Railroad (Road Construction) | 1,080,000 | 1,080,000 |
| 6 | Professional Service Costs - Administrative | 15,000 | 15,000 |
| Total Projects | | 4,945,000 | 4,945,000 |

Notes:

Note 1 Project costs are estimates and are subject to modification

# SECTION 8:
# Economic Feasibility Study, Description of the Methods of Financing Estimated Project Costs and the Time When Related Costs or Monetary Obligations are to be Incurred

This Section includes an updated forecast of the valuation increases expected within the District, the associated tax increment collections, a summary of how remaining Project Costs would be financed, and a projected cash flow demonstrating that the District remains economically feasible.

## Key Assumptions

The Project Costs the Village plans to make are expected to create $208M in incremental value by 2025. Estimated valuations and timing for construction of the Project are included in Table 1. Assuming the Village's current equalized TID Interim tax rate of $15.56 per thousand of equalized value and declining annually by 1%, and no economic appreciation or depreciation, the Project would generate $50M in incremental tax revenue over the 20-year term of the District as shown in Table 2.

# Table 1 – Development Assumptions

| Construction Year | | Actual | Zilber #6 | Dickman - Golden Pet | Annual Total | Construction Year | |
|---|---|---|---|---|---|---|---|
| 1 | 2019 | 13,359,300 | | | 13,359,300 | 2019 | 1 |
| 2 | 2020 | 61,107,600 | | | 61,107,600 | 2020 | 2 |
| 3 | 2021 | 28,092,100 | | | 28,092,100 | 2021 | 3 |
| 4 | 2022 | 78,122,200 | | | 78,122,200 | 2022 | 4 |
| 5 | 2023 | | 20,000,000 | | 20,000,000 | 2023 | 5 |
| 6 | 2024 | | | 8,000,000 | 8,000,000 | 2024 | 6 |
| 7 | 2025 | | | | 0 | 2025 | 7 |
| 8 | 2026 | | | | 0 | 2026 | 8 |
| 9 | 2027 | | | | 0 | 2027 | 9 |
| 10 | 2028 | | | | 0 | 2028 | 10 |
| | Totals | 180,681,200 | 20,000,000 | 8,000,000 | 208,681,200 | | |

Notes:

# Table 2 – Tax Increment Projection Worksheet

| | | |
|---|---|---|
| Type of District | Industrial | |
| District Creation Date | July 2, 2018 | |
| Valuation Date | Jan 1, | 2018 |
| Max Life (Years) | 20 | |
| Expenditure Period/Termination | 15 | 7/2/2033 |
| Revenue Periods/Final Year | 20 | 2038 |
| Extension Eligibility/Years | Yes | 3 |
| Eligible Recipient District | No | |

| | |
|---|---|
| Base Value | 640,700 |
| Appreciation Factor | 0.00% |
| Current Tax Rate | $15.56 |
| Rate Adjustment Factor | -1.00% |

| | Construction Year | Value Added | Valuation Year | Inflation Increment | Total Increment | Revenue Year | Tax Rate | Tax Increment |
|---|---|---|---|---|---|---|---|---|
| | | Tech College Ext. | 0 | | | | | 0 |
| 1 | **2018** | **0** | **2019** | **0** | **0** | **2020** | **$17.76** | **0** |
| 2 | **2019** | **13,359,300** | **2020** | **0** | **13,359,300** | **2021** | **$18.17** | **242,738** |
| 3 | **2020** | **61,107,600** | **2021** | **0** | **74,466,900** | **2022** | **$16.70** | **1,243,490** |
| 4 | 2021 | **28,092,100** | **2022** | **0** | **102,559,000** | **2023** | **$15.56** | **1,596,268** |
| 5 | 2022 | **78,122,200** | 2023 | 0 | **180,681,200** | 2024 | $15.41 | **2,784,070** |
| 6 | 2023 | 20,000,000 | 2024 | 0 | 200,681,200 | 2025 | $15.25 | **3,061,322** |
| 7 | 2024 | 8,000,000 | 2025 | 0 | 208,681,200 | 2026 | $15.10 | **3,151,526** |
| 8 | 2025 | 0 | 2026 | 0 | 208,681,200 | 2027 | $14.95 | **3,120,011** |
| 9 | 2026 | 0 | 2027 | 0 | 208,681,200 | 2028 | $14.80 | **3,088,811** |
| 10 | 2027 | 0 | 2028 | 0 | 208,681,200 | 2029 | $14.65 | **3,057,923** |
| 11 | 2028 | 0 | 2029 | 0 | 208,681,200 | 2030 | $14.51 | **3,027,343** |
| 12 | 2029 | 0 | 2030 | 0 | 208,681,200 | 2031 | $14.36 | **2,997,070** |
| 13 | 2030 | 0 | 2031 | 0 | 208,681,200 | 2032 | $14.22 | **2,967,099** |
| 14 | 2031 | 0 | 2032 | 0 | 208,681,200 | 2033 | $14.08 | **2,937,428** |
| 15 | 2032 | 0 | 2033 | 0 | 208,681,200 | 2034 | $13.94 | **2,908,054** |
| 16 | 2033 | 0 | 2034 | 0 | 208,681,200 | 2035 | $13.80 | **2,878,973** |
| 17 | 2034 | 0 | 2035 | 0 | 208,681,200 | 2036 | $13.66 | **2,850,184** |
| 18 | 2035 | 0 | 2036 | 0 | 208,681,200 | 2037 | $13.52 | **2,821,682** |
| 19 | 2036 | 0 | 2037 | 0 | 208,681,200 | 2038 | $13.39 | **2,793,465** |
| 20 | 2037 | 0 | 2038 | 0 | 208,681,200 | 2039 | $13.25 | **2,765,530** |
| | **Totals** | **208,681,200** | | **0** | | | **Future Value of Increment** | **50,292,988** |

Notes:

Actual results will vary depending on development, inflation of overall tax rates.

## Financing and Implementation

**Table 3** provides a summary of the District's financing plan.

Based on the Project Cost expenditures as included within the cash flow exhibit **(Table 4)**, the District is projected to accumulate sufficient funds by the year 2032 to pay off all Project cost liabilities and obligations. The projected closure is based on the various assumptions noted in this Plan and will vary dependent on actual Project Costs incurred and the actual amount of tax increments collected.

### Table 3 – Financing Plan

| | | G.O. Bond 2024B |
|---|---|---|
| Projects | | |
| TID #8 Infrastructure - 1st Amendment | | 4,930,000 |
| Total Project Funds | | 4,930,000 |
| Estimated Finance Related Expenses | | 55,850 |
| Underwriter Discount | 11.00 | 55,110 |
| Total Financing Required | | 5,040,960 |
| Estimated Interest | 4.00% | (32,867) |
| Assumed spend down (months) | 2 | |
| Rounding | | 1,907 |
| Net Issue Size | | 5,010,000 |
| Notes: | | |

# Table 4 – Cash Flow

| Year | Projected Revenues | | | | Expenditures | | | | | | | | | | | | | | | | | | | Balances | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Tax Exempt Bonds, Series 2019A 6,725,000 | | | Taxable Bonds, Series 2019B 1,755,000 | | | GO Corp Purpose Bonds, Series 2019D 7,850,000 | | | Municipal Rev. Obligation (MRO) 1,000,000 | | G.O. Corp Purpose Bonds, Series 2024A 2,091,000 | | | G.O. Corp Purpose Bonds, Series 2024B 5,010,000 | | | | | | | |
| | Tax Increments | Interest Earnings/ (Cost) | Misc. Revenue | Total Revenues | Dated Date: 02/05/19 Prin (3/1) | Rate | Interest | Dated Date: 02/05/19 Prin (3/1) | Rate | Interest | Dated Date: 12/11/19 Prin (3/1) | Rate | Interest | Dated Date: 11/01/18 Principal | Interest | Dated Date: 05/01/24 Principal | Est. Rate | Interest | Dated Date: 06/01/24 Principal | Est. Rate | Interest | Professional Services Costs | Admin. + 3% | Total Expenditures | Annual | Cumulative | Year |
| | | 3.50% | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | (686,615) | 2022 |
| 2023 | 3,283,779 | 0 | | 3,283,779 | 100,000 | 5.00% | 225,500 | 165,000 | 3.00% | 47,188 | 205,000 | 4.00% | 285,956 | 44,487 | 35,059 | | | | | | | 25,000 | 80,000 | 1,213,189 | 2,070,590 | 1,383,975 | 2023 |
| 2024 | 3,283,779 | 48,439 | | 3,332,219 | 100,000 | 5.00% | 220,500 | 180,000 | 3.00% | 42,013 | 235,000 | 4.00% | 272,456 | 46,187 | 33,359 | | | | | | | 40,000 | 82,400 | 1,251,914 | 2,080,304 | 3,464,279 | 2024 |
| 2025 | 3,429,175 | 121,250 | | 3,550,425 | 125,000 | 5.00% | 214,875 | 200,000 | 3.05% | 36,263 | 265,000 | 4.00% | 257,556 | 47,952 | 31,594 | 24,000 | 4.00% | 156,225 | 500,000 | 3.00% | 157,800 | 25,000 | 84,872 | 2,126,136 | 1,424,288 | 4,888,567 | 2025 |
| 2026 | 3,429,175 | 171,100 | | 3,600,275 | 125,000 | 5.00% | 208,625 | 225,000 | 3.15% | 29,669 | 395,000 | 4.00% | 239,256 | 49,784 | 29,761 | 73,500 | 4.00% | 101,513 | 500,000 | 3.00% | 142,800 | 25,000 | 87,418 | 2,232,326 | 1,367,948 | 6,256,516 | 2026 |
| 2027 | 3,429,175 | 218,978 | | 3,648,153 | 150,000 | 5.00% | 201,750 | 250,000 | 3.20% | 22,125 | 425,000 | 4.00% | 217,556 | 51,687 | 27,859 | 76,500 | 4.00% | 97,763 | 800,000 | 3.00% | 127,800 | 25,000 | 90,041 | 2,563,080 | 1,085,073 | 7,341,589 | 2027 |
| 2028 | 3,429,175 | 256,956 | | 3,686,131 | 175,000 | 5.00% | 193,625 | 265,000 | 3.30% | 13,753 | 455,000 | 3.00% | 197,431 | 53,662 | 25,883 | 79,500 | 4.00% | 93,863 | 850,000 | 3.00% | 103,800 | 25,000 | 92,742 | 2,624,259 | 1,061,872 | 8,403,460 | 2028 |
| 2029 | 3,429,175 | 294,121 | | 3,723,296 | 250,000 | 4.00% | 184,250 | 280,000 | 3.35% | 4,690 | 510,000 | 3.00% | 178,681 | 55,713 | 23,833 | 82,500 | 4.00% | 89,813 | 850,000 | 3.00% | 78,300 | 25,000 | 95,524 | 2,708,304 | 1,014,992 | 9,418,453 | 2029 |
| 2030 | 3,429,175 | 329,646 | | 3,758,821 | 550,000 | 4.00% | 168,250 | | | | 515,000 | 2.25% | 161,375 | 57,842 | 21,703 | 85,500 | 4.00% | 85,613 | 860,000 | 3.00% | 52,800 | 25,000 | 98,390 | 2,681,473 | 1,077,348 | 10,495,801 | 2030 |
| 2031 | 3,429,175 | 367,353 | | 3,796,528 | 600,000 | 3.00% | 148,250 | | | | 515,000 | 2.25% | 146,356 | 60,053 | 19,493 | 88,500 | 4.00% | 81,263 | 900,000 | 3.00% | 27,000 | 25,000 | 101,342 | 2,712,256 | 1,084,272 | 11,580,073 | 2031 |
| 2032 | 3,429,175 | 405,303 | | 3,834,478 | 600,000 | 3.00% | 130,250 | | | | 515,000 | 2.38% | 130,863 | 62,348 | 17,198 | 93,000 | 4.00% | 76,725 | | | | 40,000 | 104,382 | 1,769,765 | 2,064,712 | 13,644,785 | 2032 |
| 2033 | 3,429,175 | 477,567 | | 3,906,742 | 600,000 | 3.00% | 112,250 | | | | 515,000 | 2.38% | 114,891 | 64,731 | 14,815 | 96,000 | 4.00% | 72,000 | | | | | 107,513 | 1,697,200 | 2,209,543 | 15,854,328 | 2033 |
| 2034 | 3,429,175 | 554,901 | | 3,984,076 | 600,000 | 3.13% | 93,875 | | | | 515,000 | 2.50% | 98,375 | 67,204 | 12,341 | 100,500 | 4.00% | 67,088 | | | | | 110,739 | 1,665,122 | 2,318,955 | 18,173,282 | 2034 |
| 2035 | 3,429,175 | 636,065 | | 4,065,240 | 625,000 | 3.25% | 74,344 | | | | 510,000 | 2.50% | 81,375 | 69,773 | 9,773 | 103,500 | 4.00% | 61,988 | | | | | 114,061 | 1,649,813 | 2,415,427 | 20,588,709 | 2035 |
| 2036 | 3,429,175 | 720,605 | | 4,149,780 | 625,000 | 3.25% | 54,031 | | | | 510,000 | 2.50% | 64,313 | 72,439 | 7,107 | 108,000 | 4.00% | 56,700 | | | | | 117,483 | 1,615,072 | 2,534,708 | 23,123,417 | 2036 |
| 2037 | 3,429,175 | 809,320 | | 4,238,495 | 650,000 | 3.38% | 32,906 | | | | 510,000 | 2.63% | 46,694 | 75,207 | 4,338 | 114,000 | 4.00% | 51,150 | | | | | 121,007 | 1,605,303 | 2,633,192 | 25,756,609 | 2037 |
| 2038 | 3,429,175 | 901,481 | | 4,330,656 | 650,000 | 3.38% | 10,969 | | | | 510,000 | 2.63% | 28,581 | 78,082 | 1,464 | 118,500 | 4.00% | 45,338 | | | | | 124,637 | 1,567,571 | 2,763,086 | 28,519,694 | 2038 |
| 2039 | 3,429,175 | 998,189 | | 4,427,364 | | | | | | | 525,000 | 2.75% | 9,763 | | | 124,500 | 4.00% | 39,263 | | | | | 128,377 | 826,902 | 3,600,463 | 32,120,157 | 2039 |
| 2040 | 3,429,175 | 1,124,206 | | 4,553,380 | | | | | | | | | | | | 130,500 | 4.00% | 32,888 | | | | | 132,228 | 295,615 | 4,257,765 | 36,377,922 | 2040 |
| 2041 | 3,429,175 | 1,273,227 | | 4,702,402 | | | | | | | | | | | | 136,500 | 4.00% | 26,213 | | | | | 136,195 | 298,907 | 4,403,495 | 40,781,418 | 2041 |
| 2042 | 3,429,175 | 1,427,350 | | 4,856,525 | | | | | | | | | | | | 144,000 | 4.00% | 19,200 | | | | | 140,280 | 303,480 | 4,553,044 | 45,334,462 | 2042 |
| 2043 | 3,429,175 | 1,586,706 | | 5,015,881 | | | | | | | | | | | | 151,500 | 4.00% | 11,813 | | | | | 144,489 | 307,801 | 4,708,080 | 50,042,541 | 2043 |
| 2044 | 1,534,537 | 1,751,489 | | 3,286,026 | | | | | | | | | | | | 160,500 | 4.00% | 4,013 | | | | | 148,824 | 313,336 | 2,972,690 | 53,015,231 | 2044 |
| Total | 73,256,420 | 14,474,251 | | 87,730,672 | 6,525,000 | | 2,274,250 | 1,565,000 | | 195,699 | 7,630,000 | | 2,531,478 | 957,151 | 315,580 | 2,091,000 | | 1,270,425 | 5,410,000 | | 690,300 | 280,000 | 2,442,942 | 32,815,636 | | | Total |

Notes: The 2024A issue is the previously approved TID 8 portion of the future well project.

Projected TID Closure

# SECTION 9:

## Annexed Property

A tax incremental district cannot include annexed territory unless at least three years have elapsed since the annexation, or certain other requirements are met. No territory is being added to the District as part of this Plan Amendment.

## SECTION 10:
## Estimate of Property to be Devoted to Retail Business

Pursuant to Wis. Stat. § 66.1105(5)(b), the Village estimates that none of the territory within the District will be devoted to retail business at the end of the District's maximum expenditure period.

# SECTION 11:
# Proposed Changes of Zoning Ordinances, Master Plan, Map, Building Codes and Village Ordinances

## Zoning Ordinances

The proposed Plan Amendment is in general conformance with the Village's current zoning ordinances. Individual properties may require rezoning at the time of development. Land within the District zoned industrial at the time of District creation will remain in a zoning classification suitable for industrial sites for the life of the District.

## Master (Comprehensive) Plan and Map

The proposed Plan Amendment is in general conformance with the Village's Comprehensive Plan identifying the area as appropriate for industrial development.

## Building Codes and Ordinances

Development within the District will be required to conform to State Building Codes and will be subject to the Village's permitting and inspection procedures. The proposed Plan Amendment conforms to all relevant State and local ordinances, plans, and codes. No changes to the existing regulations are proposed or needed.

## SECTION 12:
## Statement of the Proposed Method for the Relocation of any Persons to be Displaced

Should the continued implementation of this Plan require relocation of individuals or business operations, relocations will be handled in compliance with Wis. Stat. Chapter 32 and Wis. Admin. Code ADM 92.

## SECTION 13:
## How Amendment of the Tax Incremental District Promotes the Orderly Development of the Village

This Plan Amendment promotes the orderly development of the Village by creating new industrial sites by providing necessary public infrastructure improvements and appropriate financial incentives for private development projects. Through use of tax increment financing, the Village can attract new investment that results in increased tax base. Development will occur in an orderly fashion in accordance with approved plans so that the Projects will be compatible with adjacent land uses. Development of new uses in the District will add to the tax base and will generate positive secondary impacts in the community such as increased employment opportunities.

## SECTION 14:
## List of Estimated Non-Project Costs

Non-project costs are public works projects which only partly benefit the District. Costs incurred that do not benefit the District may not be paid with tax increments. Examples of non-project costs are:

- A public improvement made within the District that also benefits property outside the District. That portion of the total Project Costs allocable to properties outside of the District would be a non-project cost.
- A public improvement made outside the District that only partially benefits property within the District. That portion of the total Project Costs allocable to properties outside of the District would be a non-project cost.
- Projects undertaken within the District as part of the implementation of this Project Plan, the costs of which are paid fully or in part by impact fees, grants, special assessments, or revenues other than tax increments.

| | | |
|---|---|---|
| Rockfield Road - Goldendale to Gateway (Road Reconstruction) | | 1,380,000 |
| Rockfield Road - Goldendale to Gateway (Sewer) | | 880,000 |
| Rockfield Road - Goldendale to Gateway (Water) | | 540,000 |
| Rockfield Road - Gateway Crossing to I 41 (Sewer) | | 1,050,000 |
| High Point Pass - Holy Hill to Railroad (Road Construction) | | 1,080,000 |

Approximately 50% of each of the costs listed above or $4,930,000 are non-TID project costs being paid from other sources.

# SECTION 15:
# Legal Opinion Advising Whether the Plan is Complete and Complies with Wis. Stat. § 66.1105(4)(f)

NEED WET SIGNATURE & DATED LEGAL OPINION ON ATTORNEY LETTERHEAD

SAMPLE

Village President
Village of Germantown
N112 W17001 Mequon Rd
Germantown, Wisconsin 53022

RE: Project Plan Amendment for Tax Incremental District No. 8

Dear Village President:

Wisconsin Statute 66.1105(4)(f) requires that a project plan for a tax incremental financing district include an opinion provided by the Village Attorney advising as to whether the plan is complete and complies with Wisconsin Statute 66.1105. As Village Attorney for the Village of Germantown, I have been asked to review the above-referenced project plan amendment for compliance with the applicable statutory requirements. Based upon my review, in my opinion, the amended Project Plan for the Village of Germantown Tax Incremental District No. 8 is complete and complies with the provisions of Wisconsin Statute 66.1105.

Sincerely,

Village Attorney

# SECTION 16:
# Calculation of the Share of Projected Tax Increments Estimated to be Paid by the Owners of Property in the Overlying Taxing Jurisdictions

The following projection is provided to meet the requirements of Wis. Stat. § 66.1105(4)(i)4.

| Revenue Year | Washington County | Village of Germantown | Germantown School District | Milwaukee Area Technical | Total | Revenue Year |
|---|---|---|---|---|---|---|
| 2020 | 0 | 0 | 0 | 0 | 0 | 2020 |
| 2021 | 26,639 | 79,648 | 123,075 | 13,378 | 242,738 | 2021 |
| 2022 | 136,463 | 408,015 | 630,481 | 68,530 | 1,243,490 | 2022 |
| 2023 | 175,178 | 523,769 | 809,349 | 87,972 | 1,596,268 | 2023 |
| 2024 | 305,530 | 913,511 | 1,411,595 | 153,434 | 2,784,070 | 2024 |
| 2025 | 335,956 | 1,004,483 | 1,552,170 | 168,714 | 3,061,322 | 2025 |
| 2026 | 345,855 | 1,034,081 | 1,597,905 | 173,685 | 3,151,526 | 2026 |
| 2027 | 342,397 | 1,023,740 | 1,581,926 | 171,948 | 3,120,011 | 2027 |
| 2028 | 338,973 | 1,013,503 | 1,566,107 | 170,229 | 3,088,811 | 2028 |
| 2029 | 335,583 | 1,003,368 | 1,550,446 | 168,526 | 3,057,923 | 2029 |
| 2030 | 332,227 | 993,334 | 1,534,941 | 166,841 | 3,027,343 | 2030 |
| 2031 | 328,905 | 983,401 | 1,519,592 | 165,173 | 2,997,070 | 2031 |
| 2032 | 325,616 | 973,567 | 1,504,396 | 163,521 | 2,967,099 | 2032 |
| 2033 | 322,360 | 963,831 | 1,489,352 | 161,886 | 2,937,428 | 2033 |
| 2034 | 319,136 | 954,193 | 1,474,458 | 160,267 | 2,908,054 | 2034 |
| 2035 | 315,945 | 944,651 | 1,459,714 | 158,664 | 2,878,973 | 2035 |
| 2036 | 312,785 | 935,204 | 1,445,117 | 157,078 | 2,850,184 | 2036 |
| 2037 | 309,657 | 925,852 | 1,430,666 | 155,507 | 2,821,682 | 2037 |
| 2038 | 306,561 | 916,594 | 1,416,359 | 153,952 | 2,793,465 | 2038 |
| 2039 | 303,495 | 907,428 | 1,402,195 | 152,412 | 2,765,530 | 2039 |
| **Totals** | **5,519,260** | **16,502,170** | **25,499,843** | **2,771,715** | **50,292,988** | |

# SITE PLAN & CONDITIONAL USE PERMIT (CUP) APPLICATIONS

**4/8/28 Plan Commission Meeting**

## Crew Carwash / Nomies Investments LLC

**Staff Report & Recommendation** **Germantown, Wisconsin**


**Summary**

Crew Carwash, agent for Nomies Investments LLC, property owner, is requesting Site Plan approval and a Conditional Use Permit (CUP) to allow the construction and operation of a 4,512 sqft self-serve carwash facility located at N96 W17500 County Line Road.


**Property Location:** N96 W17500 County Line Road (existing BP Station)

**Agent/**
**Property Owner:**

Katherine Rayner
Crew Carwash
11700 Exit 5 Pkwy
Fishers, IN

Nomies Investments LLC
N96 W17500 County Line Road
Germantown, WI

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**Current Zoning:** B-5: Highway Business

| Adjacent Land Uses | | Zoning |
|---|---|---|
| North | Highway Business | B-5 |
| South | Highway Business | B-5 |
| East | Highway Business | B-5 |
| West | Highway Business | B-5 |

**Background/Proposal**
Crew Carwash, agent for Nomies Investments LLC, property owner, is requesting Site Plan approval and a Conditional Use Permit (CUP) to allow the construction and operation of a 4,512 sqft self-serve carwash facility located at N96 W17500 County Line Road.

As presented on their website, Crew Carwash is a multi-generational, family-owned business founded in 1948 and based in Fiskers, Indiana. https://crewcarwash.com/the-crew-story/ . Crew Carwash currently has 45 locations in Indiana and Minnesota. The proposed site in Germantown is one of a few leading their expansion into Wisconsin.

**Conditional Use Permit (CUP)**
Within the B-5 District, a self-serve carwash requires a Conditional Use Permit (CUP). The proposed Germantown facility and operation has the following components:

- 4,512 sqft self-serve carwash building w/ 345 sqft kiosk
- Business operations Sunday to Saturday from 7:00a to 9:00p with 2-3 shifts per day
- 25 Total Employees (2-5 employees per shift)

**Site Plan**
As indicated in the applications and February 12 project narrative, the proposed development includes a complete demolition and replacement of the existing BP gasoline station and carwash. The new Crew Carwash will have the following features:

- 4,512 sqft single-story carwash building 20' height w/ tower feature to 35' height
- 345 sqft single-story kiosk 13' height w/ 4-lane canopy (vehicle entry point)
- Masonry walls comprised of ground (smooth) face concrete masonry units color red with a knee-high wall and upper banding of limestone split-face concrete units with a buff color
- Tower feature comprised of architectural wall panel color pewter
- Aluminum-framed storefront and glazing system color clear anodized w/ overhead supported canopies above all windows
- Flat roof w/ exposed RTU's
- Paved curb & gutter parking area w/ 5 vehicle parking stalls for employees (1 ADA compliant) & 9 stalls with self-serve vacuum bays
- 20 vehicle staging area w/ 4 lanes wide
- New lighting & landscaping

Parking, Access & Traffic Circulation
Access will remain the same with two (2) driveways to Emmer Road on the southeast side of the property. The Village's parking guidelines do not include carwashes, but the number of stalls provided for employees (5) appears sufficient.

Storm Water Management
This 1.0-acre site is a re-development site with 90% of the area expected to be disturbed. A total of 30,506 sqft (70%) of impervious surfaces are proposed as part of the new development leaving 13,052 sqft or 30% in open/green space. Stormwater facilities include storm sewer, roof drains and grading to convey run-off from the building, staging, vacuum, and parking areas to on-site catch basins and storm sewer located through the middle of the site to an existing concrete pipe south the site in the Emmer Road ROW and to a new "green infrastructure" rain garden feature in the southeast corner of the site.

Utilities
Sanitary and water utilities will be upgraded and replace the existing in easements running north across the hotel property to existing laterals.

Landscaping & Buffering
Existing established landscaping along the north property line is going to be removed and replaced with a 1'-2' high retaining wall. A very large deciduous shade tree is going to be removed along the east property line and replaced with sod for a snow storage area. Minimal landscaping is provided along or within the curbed areas internal to the site. Decorative stone "mulch" is placed around the plantings across the site.

Lighting.
Exterior lighting of the site and building includes:

- (4) 50W 4,000 lumens @ 5700K (cool white) LED recessed canopy lights mounted at a height of 10' under the kiosk canopy;
- (1) 131W 20,900 lumen @ 3000K (bright white) LED cut-off style pole-mounted fixtures mounted at overall 23' height on a pole near the south driveways;
- (6) 131W 13,175 lumen @ 3000K (bright white) LED cut-off style pole-mounted fixtures mounted at overall 23' height on poles around the parking and building;

Signage.
A total of (21) permanent signs are proposed for the site, including:

- (1) Refacing the exiting monument sign in the SE corner of the site with the brick base painted black (see sign rendering EC-01; sheet 1 of 15 w/ no date);
- (1) Refacing the existing 50'+ pylon sign in the NE corner of the site with the pylon support structure to be painted black (see sign rendering EC-02; sheet 2 of 15 w/ no date)
- (3) internally lit wall-mounted signs on the tower structure w/ "Crew Carwash" lettering translucent white (see sign rendering EC-03; sheet 3 of 15 w/ no date)
- (1) internally lit wall-mounted sign above the exit door on the south end of the building w/ "Crew Carwash" lettering translucent white (see sign rendering EC-04; sheet 4 of 15 w/ no date)
- (1) internally lit monument sign w/ digital menu board mounted on a painted aluminum panel base located north of the kiosk on the north side of the property (see sign rendering EC-05; sheet 5 of 15 w/ no date)
- (2) internally lit directional signs installed at the driveway entrances on the south

side of the property w/ both saying “Open” and “Enter” (see sign rendering EC-06; sheet 6 of 15 w/ no date)

- (2) non-illuminated letter sets installed on south side of the kiosk canopy above the drive lanes indicating “Unlimited Club” (see sign rendering EC-07; sheet 7 of 15 w/ no date)
- (2) non-illuminated letter sets installed on south side of the kiosk canopy above the drive lanes indicating “Cashier” (see sign rendering EC-08; sheet 8 of 15 w/ no date)
- (4) non-illuminated framed menu panels installed on the columns of the kiosk lanes (see sign rendering EC-09; sheet 9 of 15 w/ no date)
- (1) non-illuminated letter sets installed on south side of the building above the exit door indicating “Clean Car Exit” (see sign rendering EC-11; sheet 11 of 15 w/ no date)
- (1) non-illuminated pole-mounted panel sign installed near the north entrance of the building indicating “We Are Responsible For” (see sign rendering EC-12; sheet 12 of 15 w/ no date)
- (2) non-illuminated painted directional signs installed on south side of the building near the exist indicating “”Vacuums” (see sign rendering EC-14; sheet 14 of 15 w/ no date)

Note: There are detail sheets for signs EC-10, EC-13, and EC-15 but they are not included in site map showing where these signs are proposed; It is assumed that they will not be installed at this site.

**Staff Comments**

Community Development: Planning & Zoning

This property is in the “County Line Road District” under the Village’s 2050 Comprehensive Plan and the current zoning is B-5: Highway Business. The property is located within the Village’s Sanitary Sewer Service Area (SSSA) and capable of being served with public sewer and water with extensions from existing laterals nearby from the north (water main and sanitary sewer). The proposed carwash use falls under the “desirable” commercial land use.

The amount, type, and location of proposed landscaping is a concern. First, an established deciduous shrub hedge (see views from both sides below) is being removed entirely and replaced with a 1’-2’ retaining wall. The area abutting the hotel property to the north will be planted with sod. The property line runs right up against the front of the parking stalls on most of the hotel property, so all of the shrubs will be removed. Something needs to be installed to replace this hedge. There doesn’t appear to be adequate area in the minimum required 8’ buffer strip because there is a retaining wall proposed in that 8’ buffer area.

More landscaping around the perimeter is required. The Village Forester has a similar comment (see below). Also, the large tree along the east side of the property (see below) is proposed to be removed and placed with sod for a snow storage area (see Sheet C1.0). The tree species has not been identified by the developer.

Construction work is required on the adjacent hotel property to the north to install upgraded water & sanitary sewer laterals within “private utility easements” to be obtained by others. Building permits for installation of water & sanitary sewer should not be issued until the easements are obtained and the adjacent property owner agrees with the construction work required to install the utilities and restore the easements to pre-construction conditions.

Signage appears to be excessive for a business model that relies on a recurring customer base (and probably not so much signage for every step of the way through the process). More signs are proposed than trees to be installed. Many of the directional signs exceed the height and area allowances in the sign regulations. Three “Crew Carwash” signs on the tower seem excessive given the re-use of the 50’+ pylon sign and monument sign in the SE corner of the sight. The detail sheets for the sign face replacement signs do not indicate the sign area and refer to a survey being needed. For these reasons, Staff recommend that sign package be re-evaluated in light of the sign regulations with goal of only proposing code-compliant signs that provide the minimum business name notification. A Sign Permit application is also required.

Finally, the photo renderings provided in the application from other Crew Carwash locations show actual wood mulch in the landscaping beds. At this location, the proposal is to install decorative "stone mulch". Stone does not exactly satisfy the minimum 20% "green space" requirement in the B-5 Zoning District. Wood mulch is recommended.

Community Development: Inspection Services
State agency (DSPS) approved plans and a $20,000 occupancy bond are required by Inspection Services at the time of building permit application. The Village of Germantown is an authorized delegated agent of DSPS to provide all commercial plan review and inspection services through SAFEBuilt of WI and the Village of Germantown.

Public Works/ Village Engineer
The Village Engineer, Public Works Department and Utility staff have identified several technical issues and plan revisions that need to be resolved or otherwise addressed by the Developer prior to commencing construction activities and issuance of building permits. Nonetheless, Staff is recommending conditional approval of the site development and building plans subject to all the outstanding items and issues identified in the following review memos being resolved and reflected in additional information and/or revised plans submitted to Staff for further review, comment and approval prior to commencing any site construction or issuance of building permits (excluding early start site preparation and footing and foundation installation):

- April 3, 2024, memo from Kevin Driscoll, Village Engineer

Village Forester
The following issues will need to be addressed as part of a revised landscape plan prior to issuance of a building permit:

- Tree planting detail image revision on sheet C1.4: Include that root flare should be left exposed, moss/mulch line should be at or just below top of root ball.
- Recommend substitution of tree options for the two (2) Acer platanoides and the two (2) Pyrus calleryana 'Jaczam'. The Village has many Maple (Acer) trees and would benefit from an increased species diversity. Also, Pyrus calleryana has the potential to establish as an invasive tree species in Wisconsin. Acceptable substitutes: Common Hackberry (Celtis Occidentalis), Kentucky Coffeetree (seedless) (Gymnocladus dioicus), London Planetree (Platanus x acerifolia), Tulip tree (Liriodendron tulipifera), Oak spp. (Quercus)
- Per municipal code 17.43(c). Parking lot landscaping: perimeter plantings are required around the parking lot for screening from adjacent properties. This plan does not include perimeter plantings along the east boundary, the northwest, or southwest corners of the property. This is an existing perimeter planting along the property boundary to north (see similar comment above), the street tree plantings along the south side of the property are sufficient.

Fire & Police Departments
No comment. Concerns have been addressed into submitted plan set.

## VILLAGE STAFF RECOMMENDATIONS

**APPROVE** the Conditional Use Permit (CUP) application for Crew Carwash for the construction and operation of a self-serve car wash facility on the property located at N96 W17500 County Line Road subject to the following conditions:

1. The uses and activities allowed on the property shall be limited to those uses and activities specified in the conditional use permit (CUP) application, project narrative dated February 12, 2024, and supporting site plan documents dated January 12, 2024, and February 12, 2024. Days and hours of operation shall be limited to those specified in the CUP application and supporting documents submitted to the Village (Sunday through Saturday 7:00am to 9:00pm.
2. The Owner/Operator is responsible for reporting any significant changes in the type, intensity, amount, or location of the land uses and activities, days and hours of operation, size or location or other operational characteristics of said uses and activities authorized under this CUP to the Village Zoning Administrator.
3. If the use, activities and/or operation subject of this permit falls out of conformity with the conditions herein, or, where there is a change in the nature, character, intensity or extent of the activities or uses which causes problems or harmful effects that were not anticipated at the time of approval of this CUP, the conditional use permit may be modified or terminated by the Village Board by the amendment to or addition of conditions after public hearing thereon.
4. All temporary and permanent exterior signs require a permit and shall comply with all current sign regulations. Off-premises advertising and directional signage is regulated by the Village and requires a permit if/when allowed.
5. All future site improvements, including all building, parking area, landscaping, storm water management facilities, signage, exterior lighting, and any other improvements made to or on the property that are necessary for the land uses and activities authorized under this CUP shall be submitted for review and approval by the Village through the Zoning Permit or Site Plan application process as determined by the Village Zoning Administrator. If required, Site Plan review and approval will include Plan Commission review and approval.
6. Building permits and commercial building code plan approval are required for the planned demolition of existing structures on the site and the proposed building and kiosk. Contact SAFEbuilt staff in Inspection Services at Village Hall prior to any work for information about required permits and/or plan approvals.

**APPROVE** the site development and building plans submitted by Crew Carwash for a 4,512 sqft self-serve carwash facility w/ 345 sqft kiosk & canopy located at N96 W17500 County Line Road subject to the following conditions:

1. This approval is for the various plan sheets that comprise the site plan set as noted below and is subject to compliance with all the conditions and requirements set forth herein and subsequently adopted and/or revised by the Plan Commission. Approval is granted for the following unless superseded by subsequent plan sheets approved by Village Staff pursuant to revisions required herein and/or by the Plan Commission:
   *a. Architectural plans dated January 12, 2024;*
   *b. Civil Engineering plans dated February 12, 2024;*
   *c. Landscaping plans dated February 12, 2024;*
   *d. Lighting plans (photometric plan) dated February 12, 2024;*

   If revised plan sheets are necessary, each revised sheet shall contain the date of said revision clearly stamped in the lower right corner.

2. Additional landscaping shall be shown in a revised landscape plan review and approved by the Village Forester, including:
   a. along the north property to reasonably replace the existing screen hedge.
   b. Per municipal code 17.43(c) around the perimeter of the site with plantings along the east boundary, the northwest, or southwest corners of the property.

3. The mulch in the landscaping beds shall be wood mulch and not decorative stone.

4. Tree planting detail on sheet C1.4 shall be revised to include that root flare should be left exposed, moss/mulch line should be at or just below top of root ball.

5. The following tree species shall be substituted for the two (2) Acer platanoides and the two (2) Pyrus calleryana ‘Jaczam’. The Village has many Maple (Acer) trees and would benefit from an increased species diversity. Also, Pyrus calleryana has the potential to establish as an invasive tree species in Wisconsin. Acceptable substitutes: Common Hackberry (Celtis Occidentalis), Kentucky Coffeetree (seedless) (Gymnocladus dioicus), London Planetree (Platanus x acerifolia), Tulip tree (Liriodendron tulipifera), Oak spp. (Quercus)

6. The technical issues and plan revisions identified in the April 3, 2024 memo from the Village Engineer shall be addressed in revised plan sheets and/or supplemental documents as necessary prior to commencing construction activities and issuance of building permits (excluding site demolition, early

start site preparation, and footing & foundation installation).

7. State agency (DSPS) approved plans and a $20,000 occupancy bond are required by Inspection Services at the time of building permit application. The Village of Germantown is an authorized delegated agent of DSPS and may be used as an alternative to provide all commercial plan review and inspection services through SAFEBuilt of WI and the Village of Germantown.

**TABLE** the action on the sign package pending re-submittal of a sign permit application and code-compliant signs

# Engineering Department Memorandum

**To:** **Jeff Retzlaff**

**From:** **Kevin Driscoll, P.E.**

**Date:** **April 3, 2024**

**Re:** **Planning Commission Item Review – Crew Carwash**
**Site Plan Review - N96 W17500 COUNTY LINE RD - Parcel GTNV_334990**

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**Items Reviewed:**

1. Civil Plan Set Dated: 02-12-2024
2. Storm Water Management Plan Dated: 02-12-24

**General Comments:**

1. Please respond to each item below. **A written response addressing each item shall be included in your submittal**.
2. The submitted plans have been reviewed for general conformance with State and Village design guidelines. Additional comments could arise as a result of the plan completion and modifications. The items listed below will need to be fully resolved before the Engineering Dept. can recommend a formal approval of the plans and permit for construction.
3. The project will require DSPS plumbing system review and approval. Please provide a copy of the DSPS approval prior to engineering approval.
4. A professional engineer's original seal is to be affixed, signed and dated on the final set of construction plans.
5. Utility permits and permits for work within the ROW are required. Contact the Village engineering department to obtain permits.
6. As-builts prepared to Village standards shall be prepared and provided to the Village post-construction (for all applicable items).
7. As a guide to the review response: Items in *italics* are resolved or acknowledged, items in regular font are to be addressed yet, items in **Bold** are additional feedback to remaining original comment.

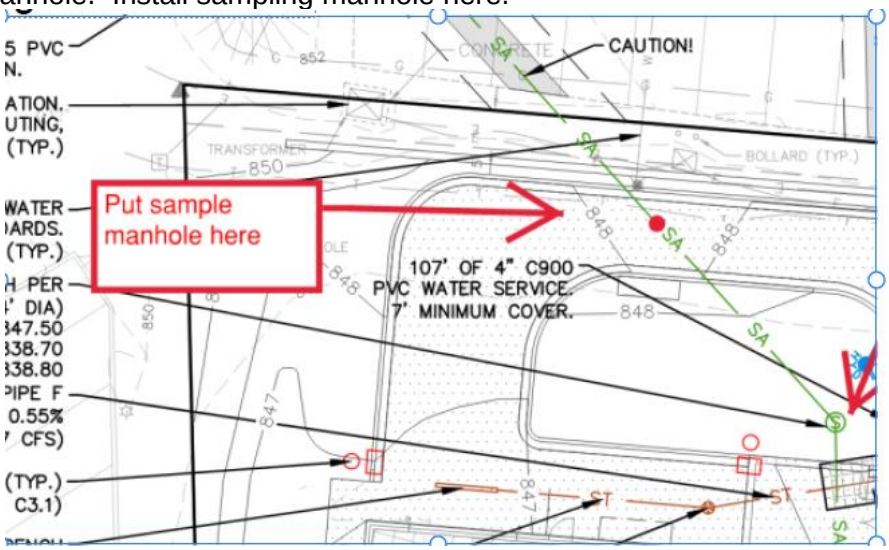
**Water Utility Comments**

1. Sheet C1.3, Explain the need for a separate sprinkler line. Normal set up is one line and the sprinkler is split off in the mechanical room.
2. Sheet C1.3, describe the dash lines around the sewer and water lines, just making sure this is not a reference for a utility easement.

3. We will require a review of the meter room for adequate space and installation requirements.
4. Call out gate valve to be Mueller onto a 8" x 6" Tapping saddle with a S.S. MJ spigot outlet.
5. Remove existing water lateral from the water main, install a full circumference Hymax repair clamp over CC tap hole. minimum 8" x 20"

**Wastewater Utility Comments:**

1. Change of direction is not allowed in the sampling manhole. Change sampling manhole to a private manhole. Install sampling manhole here.




2. Connection to existing manhole to be made via outside drop to invert of the manhole.

**C1.3 Utility Plan**

1. Copies of executed sewer and water easements are required prior to engineering plan approval.
2. Add a trench drain at the exit of the car wash to capture water before draining to the ROW.

**Stormwater Management Plan**

1. Include disturbance in the ROW and utility installation to the north and confirm the disturbance remains under 1 acre.
2. Drainage area to proposed rain garden exceeds the max allowed per WDNR technical standard 1009. Adjust to meet technical standard requirements or add a piped outlet.

Village of Germantown ...Willkommen

Fee must accompany application
- ☐ $700 Minor Addition
- ☒ $1,240 Construction <10,000 SF
- ☐ $2,095 Construction 10,000 SF to 50,000
- ☐ $3,460 Industrial Construction >50,000 SF
- ☐ $3,460 Commercial Construction >50,000
- ☐ $200 Plan Commission Consultation
- ☐ $125 Fire Department Plan Review

PAID_____ DATE_____

# SITE PLAN REVIEW APPLICATION

Pursuant to Section 17.43 of the Municipal Code

Please read and complete this application carefully. **All applications must be signed and dated.**

**1 APPLICANT OR AGENT**

Crew Carwash
11700 Exit 5 Pkwy
Fishers, IN 46037

Phone ( 317 ) 572-2408
E-Mail katherine.rayner@crewcarwash.com

**PROPERTY OWNER**

Nomies Investments LLC
N96 W17500 County Line Rd
Germantown, WI 53022

Phone ( )
E-Mail

**2 PROPERTY ADDRESS**

N96 W17500 County Line Road

**3 NEIGHBORING USES** – Specify name and type of use, e.g. Enviro Tech – Industrial, Smith – Residential, etc.

| North | South | East | West |
|---|---|---|---|
| Super 8-Business/Hotel | ROW | Landmark Credit Union-Business/Bank | McDonald's-Business/Restaurant |

**4 READ AND INITIAL THE FOLLOWING:**

KR I am aware of the Village of Germantown ordinance requiring fire sprinklers in most new construction.

KR I understand that all new development is subject to Impact and/or Connection Fees that must be paid before building permits will be issued.

KR I understand that an incomplete application will be withdrawn from the Plan Commission agenda and that all resubmissions to the Plan Commission are subject to a new application fee.

**5 SIGNATURES** – ALL APPLICATION MUST BE SIGNED

Kelly 2/9/24 — Applicant, Date

DocuSigned by: 1A6C429E20BF410... 2/9/2024 — Owner, Date

# SITE PLAN REVIEW CHECKLIST

Pursuant to Section 17.43 of the Municipal Code

This checklist provides a summary of requirements found in the Municipal Code. It is intended purely as a guide for developers and should not substitute for a full review of the Code and applicable regulations. (Revised 1/02)

## GENERAL INFORMATION

- [x] Provide Completed Checklist with submittal
- [x] Names and addresses of owner/developer/designer
- [x] Graphic scale, north arrow
- [x] Location sketch
- [x] Size of site (gross and net acreage)
- [x] Existing zoning
- [x] Adjacent zoning and uses
- N/A [ ] Number of residents (subdivisions)
- [x] Number of employees

## EXISTING SITE INFORMATION

- [x] Dimensions of site and lot lines (pipes found, pipes set, monuments)
- [x] Existing grades (2' contours minimum)
- [x] Adjacent property grades (within 10' minimum of property lines)
- [x] Adjacent structures (within 20' minimum of property lines)
- [x] Drainage systems and structures
- [x] Natural features (woods, streams, lakes, ponds, outcroppings)
- N/A [ ] Wetland boundaries (provide date of staking)
- N/A [ ] Floodplain elevation and boundaries
- [x] Environmental concerns (underground tanks, etc)
- [x] Roads, curbs, parking lots, pavement areas
- [x] Structures (location, size)
- [x] Rights-of-Way (existing/ultimate)
- [x] Easements (drainage, utility)
- [x] Existing utilities (sanitary, water, electric, gas, telephone)
- [x] Benchmark locations and elevations
- [x] Location of fences, wells, borings, etc

## ARCHITECTURAL PLANS

- [x] Existing building location
- [x] Existing building elevations/materials
- [x] Proposed use (use list from Section 17.45)
- [x] Statement of design intent (narrative)
- [x] Proposed floor plans (dimension)
- [x] Square footage (total and individual rooms/stores)
- [x] Proposed elevations (dimension)
- [x] Proposed building height
- [x] Proposed materials and colors (material sample board required for new construction)
- [x] Proposed signage (elevations, color, square footage, height, construction material, lighting)
- [x] Details of any special features

## PROPOSED SITE PLAN

- [x] Grading and spot elevations
- [x] Erosion control measures (silt fencing, hay bales, rip-rap, tracking mat, stockpile locations)
- [x] Stormwater management
  - stormwater management design report
  - general drainage pattern
  - swales w/ arrows for direction of flow
  - pond design with outfalls
  - culverts (location/size)
- [x] Utilities (size, invert elevations, length, slope, etc.)
  - sanitary
  - water
  - stormsewer
- [x] Building location (dimension)
- [x] Building elevation (finished grade)
- [x] Location of proposed signage
- [x] Details of outside storage (including trash receptacles)
- [x] Setbacks (clearly marked and dimensioned)
- [x] Vehicular entrances (dimension to centerline of nearest intersection)
- [x] Streets (dimension and direction for one-ways)
- [x] Curve radii
- [x] Sidewalks (dimension)
- [x] Parking areas (show striping/spot elevations)
- [x] Parking setback from property line
- [x] Loading areas (dimension)
- [x] Lot coverage
  - Square footage total
  - Impervious surfaces total (%)
  - Green space total (%)
  - Percent permitted (over/under %)
- [x] Municipal utility connections
  - Sanitary sewer (pipe size/elevations)
  - Water (size, valve location, elevations)
  - Location of hydrants
- [x] Easement for public water mains

## LIGHTING PLAN

- ☒ Major improvements for context
- ☒ Location/nature of existing fixtures
- ☒ Location of proposed fixtures
- ☒ Photometric report (to scale on plan)
- ☒ Manufacturers cut-sheets of all fixtures
- ☒ Lighting schedule
  - key to plan
  - number/type of fixtures
  - output (wattage)
- ☒ Installation details as appropriate

## LANDSCAPING PLAN

- ☒ Major improvements for context (building, drives, walks)
- ☒ Proposed outdoor amenities (benches, paths, etc.)
- ☒ Existing vegetation
  - Species
  - Size
  - Approximate canopy in plan
- ☒ Vegetation to be destroyed
  - List and show location
- ☒ Proposed method of saving existing vegetation during construction
- ☒ Proposed landscape features (berms, fountains)
- ☒ Existing/proposed lighting
- ☒ Irrigation/watering systems (locate outlets)
- ☒ Plant lists or schedules
  - Keyed to plan
  - Number of each species
  - Size when planted (caliper)
- ☒ Installation details/staking

## MODEL SUBMITTAL INCLUDES THE FOLLOWING PLANS:

1. Cover / Title Page
2. Existing Conditions Survey
3. General Site Plan
4. Grading, Paving & Erosion Control Plan
5. Utility Plan
6. Site Details (curbing, catch basins, detention ponds, pavement, erosion control and sign details)
7. Landscape Plan
8. Landscape details (planting schedule, berming cross-sections, method of installation)
9. Lighting Plan
10. Floor Plan
11. Exterior Building Elevations
12. Building Material Sample Board

In addition to the items on this list, Village Staff and/or the Plan Commission may require additional drawings and data to be submitted for approval.

If any public improvements or work is to be done in the Public Right-of-Way, the Village will require that a Developer's Agreement be submitted and approved by the Village Board.

Village of Germantown
Willkommen

**Fee must accompany application**

☒ **$1460** Paid _____ Date_____

# CONDITIONAL USE PERMIT APPLICATION

**Pursuant to Section 17.42 of the Municipal Code**

Please read and complete this application carefully. **All applications must be signed and dated.**

1 **APPLICANT OR AGENT**

Crew Carwash
11700 Exit 5 Pkwy
Fishers, IN 46037

Phone (317) 572-2408
Fax ( )
E-Mail katherine.rayner@crewcarwash.com

**PROPERTY OWNER**

Nomies Investments LLC
N96 W17500 County Line Rd
Germantown, WI 53022

Phone ( )

2 **TO WHOM SHOULD THE PERMIT BE ISSUED?**

Crew Carwash

3 **PROPERTY ADDRESS** / **TAX KEY NUMBER**

| PROPERTY ADDRESS | TAX KEY NUMBER |
|---|---|
| N96 W17500 County Line Road | 334990 |

4 **DESCRIPTION OF EXISTING OPERATION**

Briefly describe the use as it exists today, including use, size, number of employees, hours of operation, etc. If this permit involves new construction, describe the *current* status of the property, e.g. "vacant." Use additional pages as necessary.

Existing BP gas station to be demolished for construction of carwash.

5 **DESCRIPTION OF PROPOSED OPERATION**

Write the name of the proposed conditional use exactly as it appears in the Municipal Code

Self-Serve Carwash

Describe the proposed use, including size, number of employees, hours of operation and extent of any new construction/alterations

A 4,512 SF self-serve carwash with 346 SF kiosk. Location to staff approximately 20-25 team members with 2-5 team members per shift. Each day operation of the carwash from 7:00am-9:00pm. See narrative for additional information.

## 6 METES AND BOUNDS LEGAL DESCRIPTION OF PROPERTY – REQUIRED

Attach pages as necessary

See attached.

## 7 SUPPORTING DOCUMENTATION:

- ☐ Site Plan and elevations for new construction (can be conceptual)
- ☐ Photos of existing use and/or proposed use operating elsewhere
- ☐ _____
- ☐ _____

## 8 READ AND INITIAL THE FOLLOWING:

KR I understand that the Village is under no obligation to issue a Conditional Use Permit and will do so only if the applicant successfully demonstrates that the proposed use is harmonious with the neighborhood and the long range goals of the Village.

KR I will notify the Village if <u>any</u> aspects of the conditional use changes. I understand that failure to do so may result in the revocation of the CUP.

KR I understand that a Conditional Use Permit is valid only if the conditions and restrictions of the permit are met. I understand that failure to comply with any aspect of the permit may result in revocation.

KR I understand that Village Staff is required to post one or more signs along the street frontage of and/or on the property subject of this application that indicate to nearby property owners and the general public that a public hearing of my application will be held before the Village Plan Commission and/or Village Board prior to action being taken on this application; I hereby grant Village Staff permission to enter onto the property for the expressed purpose of installing said sign(s) provided Village Staff is responsible for installing, maintaining and removing said signs in a reasonable manner and timeframe.

## 9 SIGNATURES – ALL APPLICATIONS MUST BE SIGNED BY OWNER!

KRCyhnes 2/9/24

Applicant Date

DocuSigned by:

2/9/2024

Owner: 7A6C429E20BF410... Date

February 12, 2024

**Project Narrative**

Project: Crew Carwash
N96 W17500 County Line Road
Germantown, WI 53022

Crew Carwash is requesting Site Plan Review, Architectural Review, and Conditional Use Permit review and approval for a new carwash located at N96 W17500 County Line Road in the Village of Germantown. A BP gas station currently exists on the site and will be demolished as a part of the proposed project. The property is zoned B-5, Highway Business with Highway Interchange Area Overlay and the proposed self-serve carwash use requires Conditional Use Permit approval.

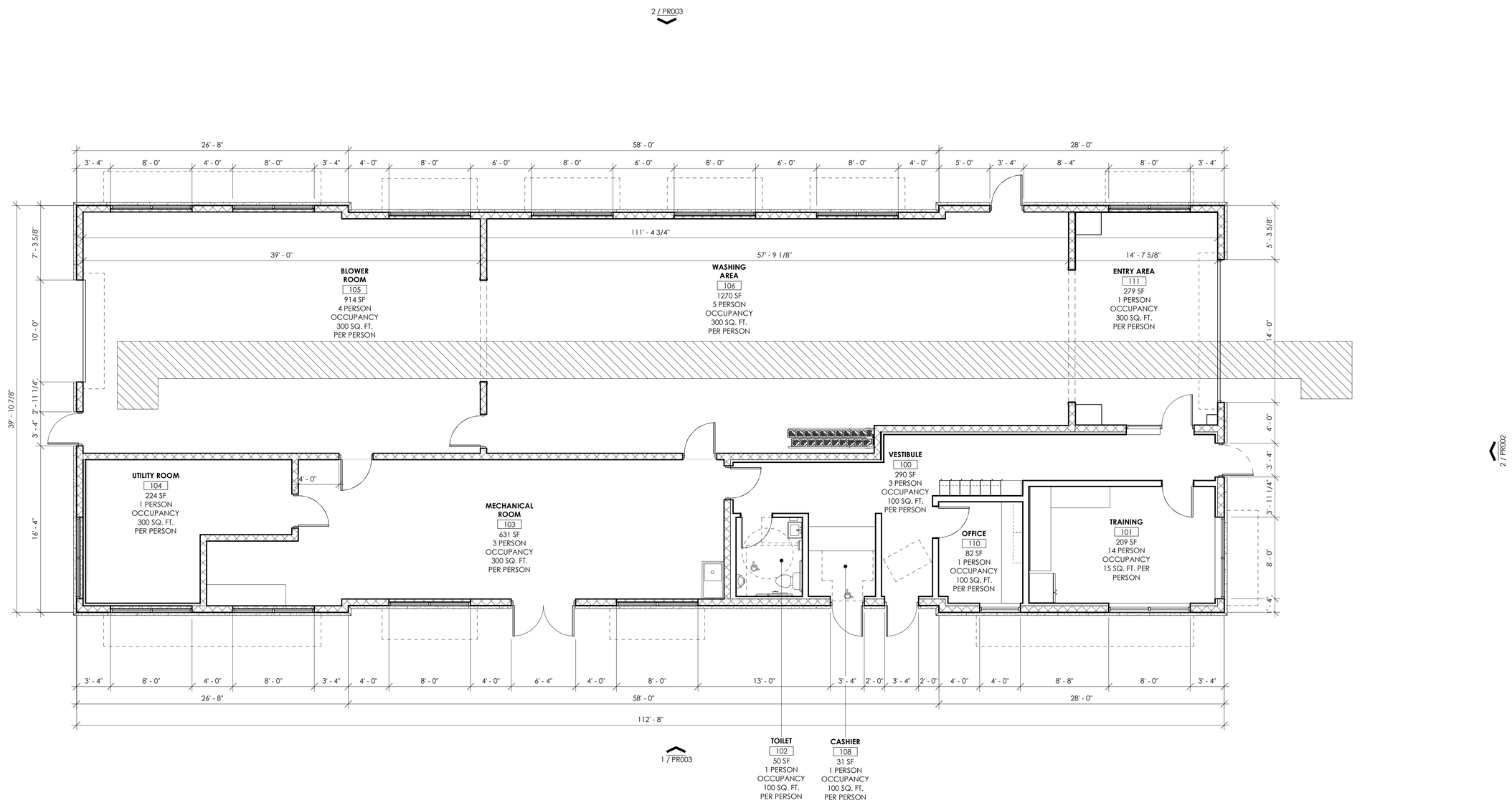
Founded in 1948, Crew Carwash is a family-owned business based in Indiana, currently has 45 locations, and is actively growing. Crew carwashes feature the most advanced technology available, specially formulated detergents, soft cloth, computer-controlled equipment, and special touchless hot air dryers. Crew carwashes utilize 40 percent recycled water and 60 percent fresh water due to water reclamation systems that filter, clean and re-use some of the water in the wash process. At Crew Carwash locations, used water runs directly to a unique collection system that filters the water and removes harmful sediments and oil before it reaches the local sanitary sewer. All cleaning and drying functions are contained inside the facility. The customer remains in the car riding on a conveyor belt the entire way through the tunnel and exits the facility themselves. Self-serve vacuum stations are provided for customers at no charge.

Crew invests approximately six-million dollars per facility and is a community-oriented company. Typically, each location staffs 20 to 25 highly trained and motivated team members with two (2) to five (5) team members per shift and two (2) to three (3) shifts each day operating the carwash from 7 AM to 9 PM. Once all appropriate approvals and permits are granted, the construction timeline is typically six (6) months.

The proposed project will include a proposed carwash building with vehicle queuing located to the far east of the site and vacuum parking stalls located to the east of the carwash facility. The proposed carwash will be 4,512 SF and the proposed kiosk will be 346 SF on a 1.00 acre site with approximately 0.99 acres of site disturbance. Building materials and colors are detailed in the included elevations and will consist of red ground face masonry and buff limestone with an architectural aluminum wall system tower in pewter mica. Clear anodized aluminum storefront and glazing is proposed. Overhead accent canopies above the windows will also be pewter mica in color. The waste enclosure gates will be Trex board in winchester gray, while the gates will consist of brick to match the main building structure.

Proposed drainage patterns will match the existing site drainage patterns. Stormwater will be conveyed via sheet flow to various new inlet structures that will convey stormwater to the same discharge point as the current site condition at the south end of the site. A rain garden green infrastructure BMP will be located at the southeast corner of the site to meet local stormwater management requirements.

The proposed development will fit in to this existing commercially developed area. The building and site will blend in with and enhance the character of the neighborhood. The property will be transformed into a commercial development that is aesthetically pleasing with high-quality exterior materials on the building along with landscaping designed to ensure species resiliency and complimentary style. Site lighting will be provided in a fashion that provides appropriate foot candles for safety with cut-off fixtures for minimal light trespass and directed inward toward the development. The site layout and internal circulation has been designed to provide adequate on-site customer vehicle queuing and efficient, safe circulation. The building and grounds will be well maintained. No hazards or nuisances to nearby neighbors are anticipated as a result of this project.



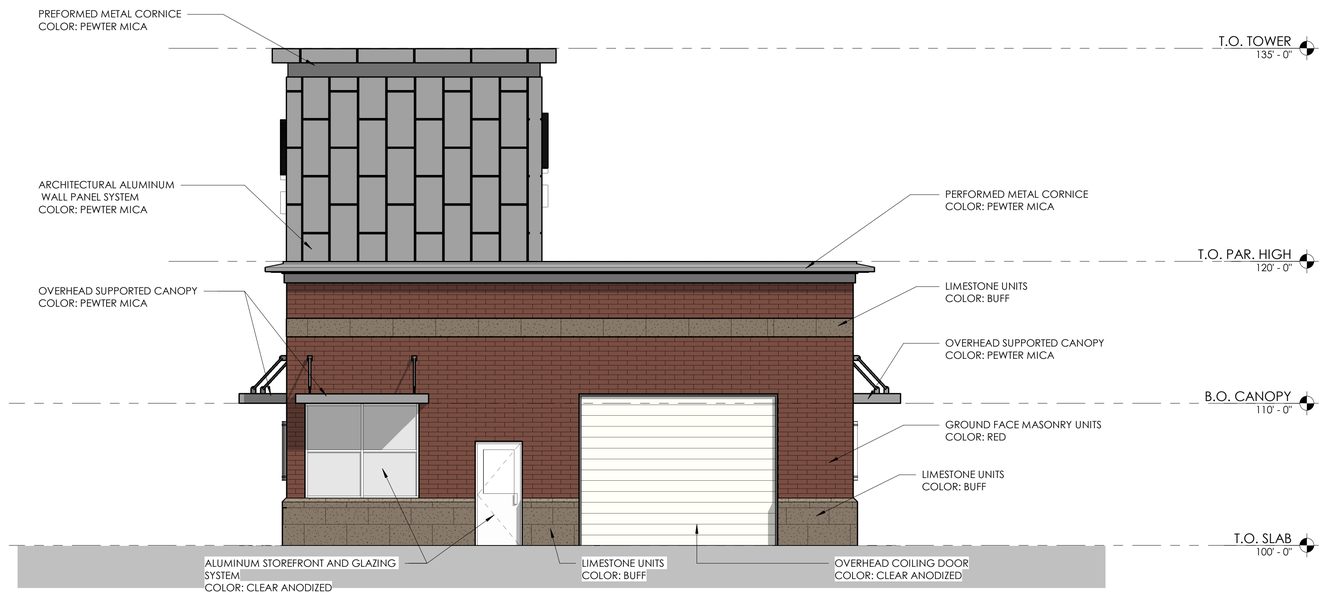

# BUILDING FLOOR PLAN

CREW CARWASH, INC
N96 W17500 COUNTY LINE RD.
GERMANTOWN, WI 53022

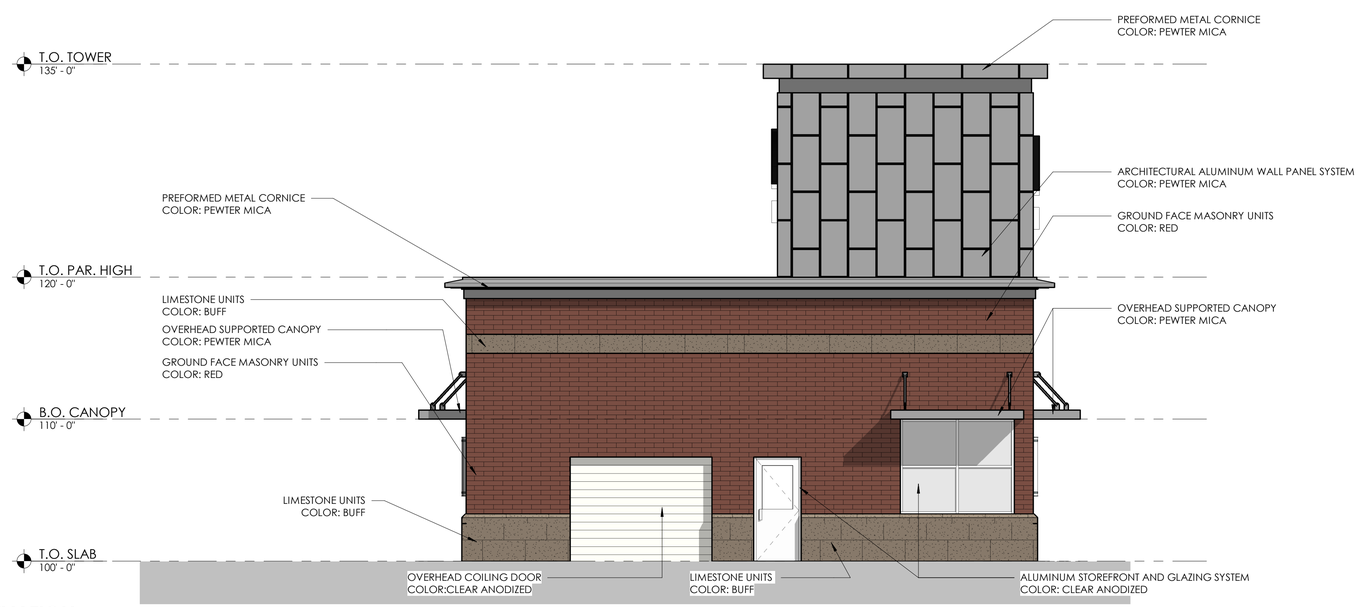
NORTH

01/12/2024
PRO2024
3/16" = 1'-0"

Cripe®
Solutions by Design Since 1937




**NORTHEAST ELEVATION**




**SOUTHWEST ELEVATION**

Crew CARWASH

# CREW CARWASH - BUILDING ELEVATIONS

CREW CARWASH, INC
N96 W17500 COUNTY LINE RD.
GERMANTOWN, WI 53022

01/12/2024
PRO2024
3/16" = 1'-0"

Cripe®
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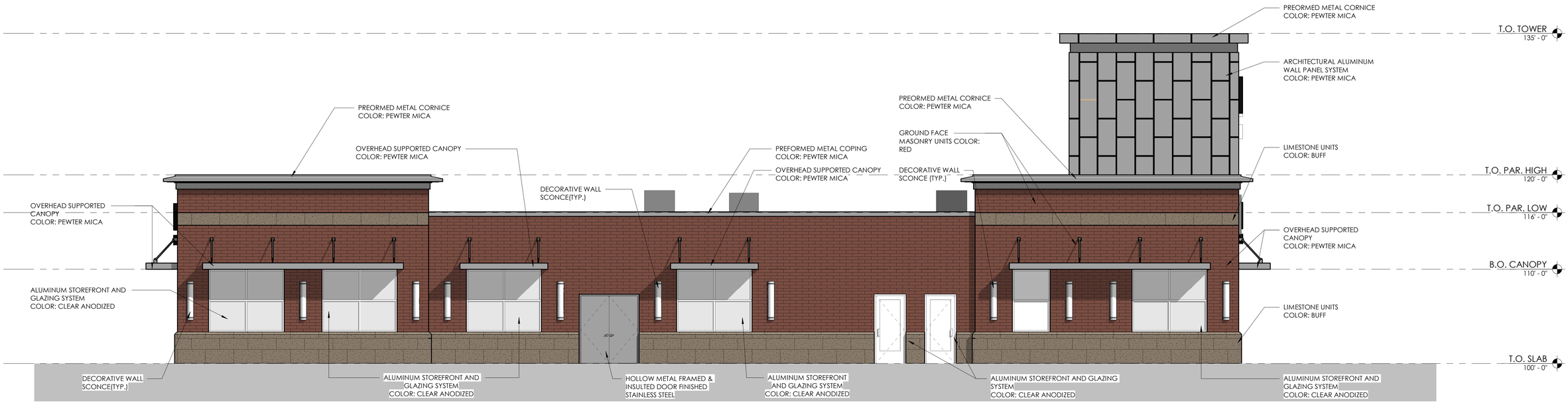
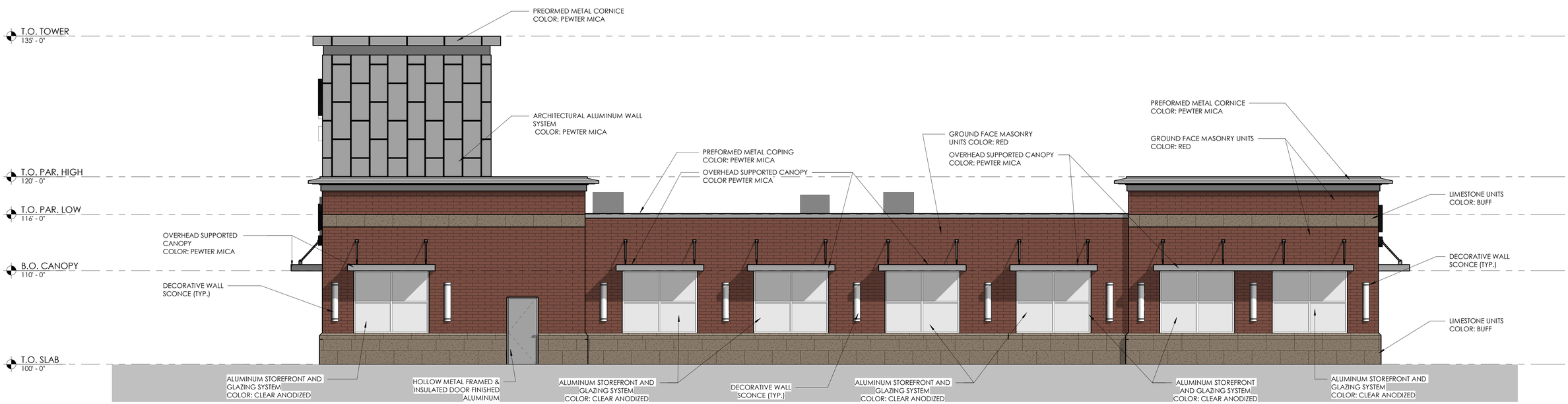



**SOUTHEAST ELEVATION**



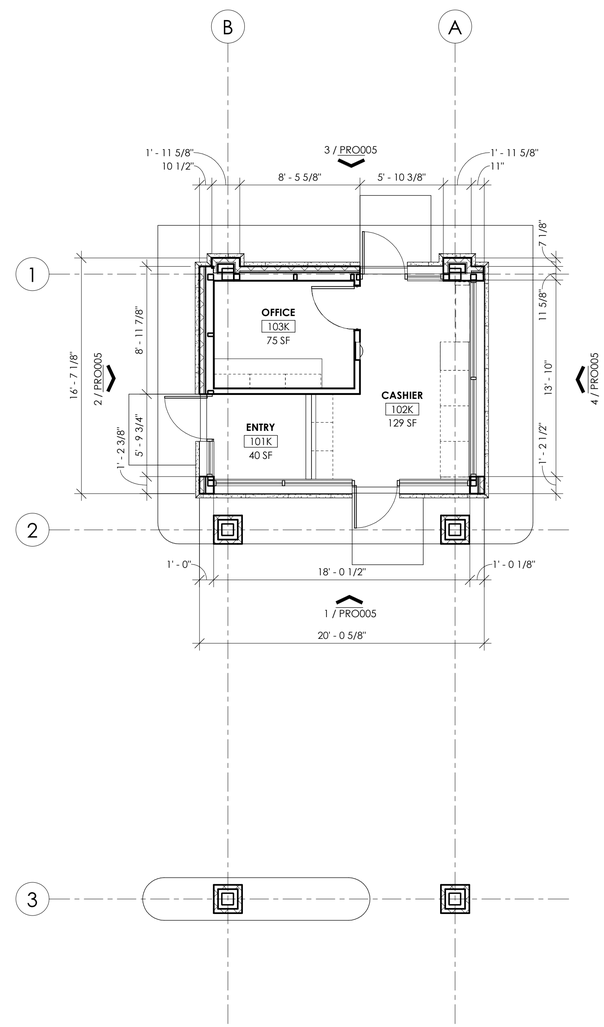

**NORTHWEST ELEVATION**

# CREW CARWASH - BUILDING ELEVATIONS

CREW CARWASH, INC
N96 W17500 COUNTY LINE RD.
GERMANTOWN, WI 53022

01/12/2024
PRO2024
3/16" = 1'-0"

Solutions by Design Since 1937



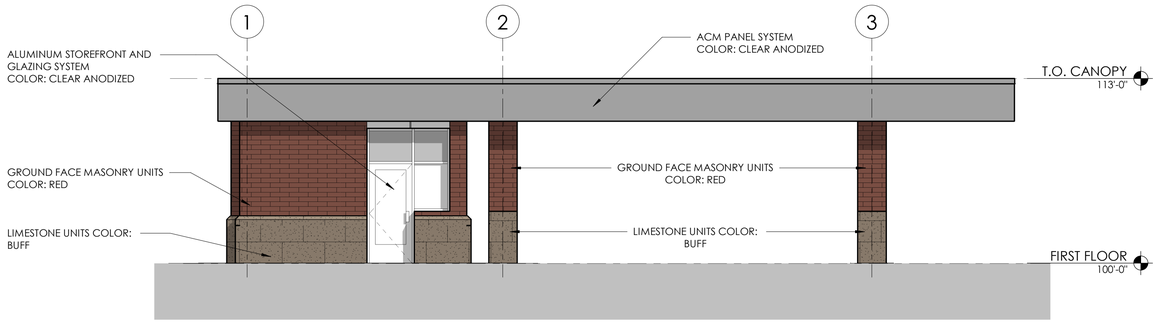

# CREW CARWASH - KIOSK FLOOR PLAN

CREW CARWASH, INC
N96 W17500 COUNTY LINE RD.
GERMANTOWN, WI 53022

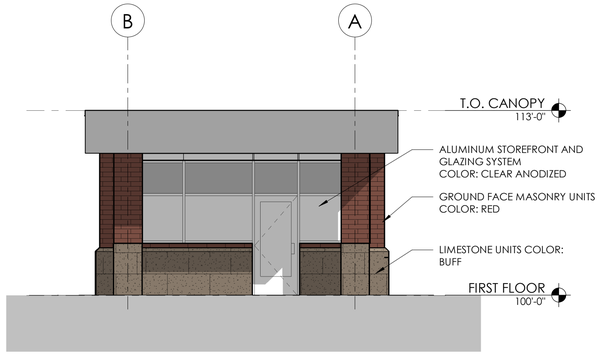
NORTH

01/12/24
PRO2024
3/16" = 1'-0"

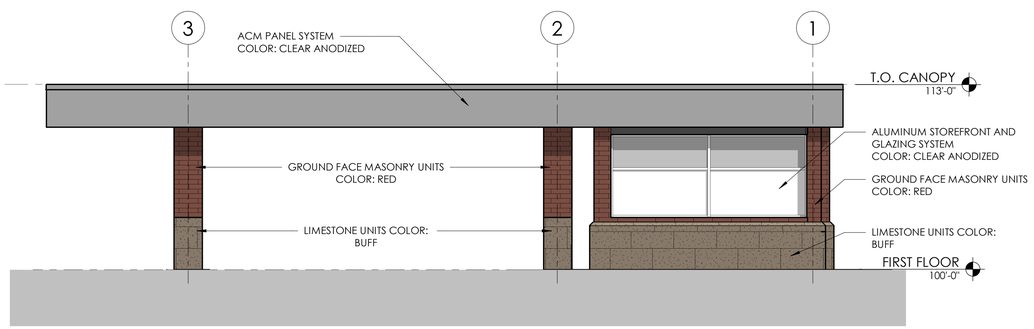
Solutions by Design Since 1937



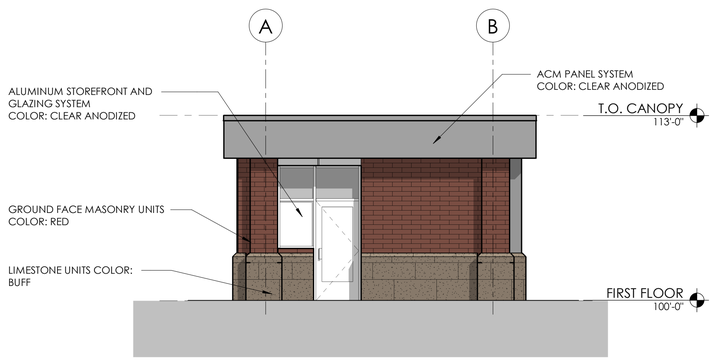

## 2 KIOSK - ENTRY
3/16" = 1'-0"




## 1 KIOSK - SOUTHEAST ELEVATION
3/16" = 1'-0"




## 4 KIOSK - EXIT
3/16" = 1'-0"




## 3 KIOSK - NORTHWEST ELEVATION
3/16" = 1'-0"

# CREW CARWASH - KIOSK ELEVATIONS

CREW CARWASH, INC
N96 W17500 COUNTY LINE RD.
GERMANTOWN, WI 53022

01/12/24
PRO2024
3/16" = 1'-0"

Cripe®
Solutions by Design Since 1937

# PROPOSED CAR WASH FOR:
# CREW CARWASH
## GERMANTOWN, WISCONSIN

## LEGEND

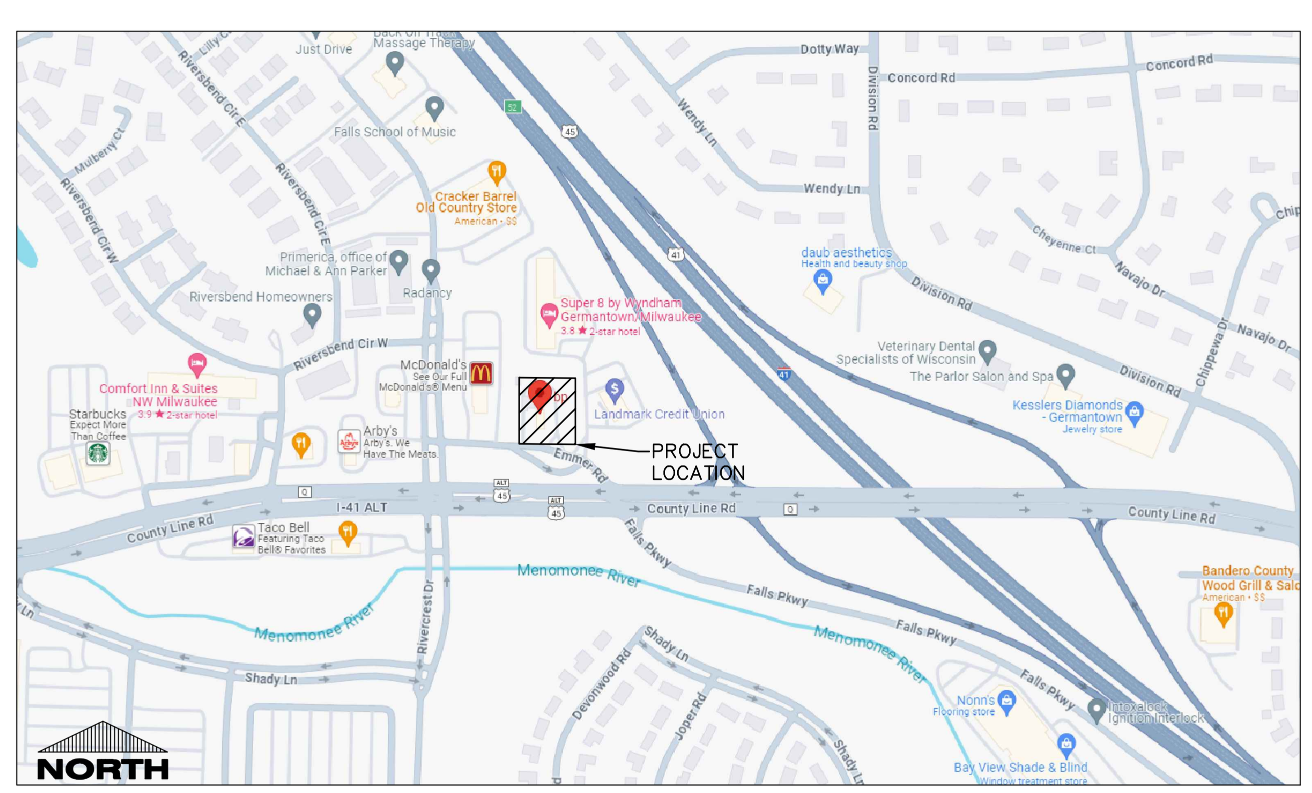
| Symbol text | Description |
|---|---|
| 000.00 | PROPOSED SPOT ELEVATIONS (FLOW LINE OF CURB UNLESS OTHERWISE SPECIFIED) |
| 000.00 EG | EXISTING GRADE SPOT ELEVATIONS |
| 000.00 BG / 000.00 FG | PROPOSED SPOT ELEVATIONS (REFERENCE R-WALL DETAIL) BG-FINISHED SURFACE GRADE AT BACK OF WALL FG-FINISHED SURFACE GRADE AT FRONT OF WALL |
| 000.00 TC / 000.00 FL | PROPOSED SPOT ELEVATIONS (TOP OF CURB, FLOWLINE OF CURB) |
| 000.00 TW / 000.00 BW | PROPOSED SPOT ELEVATIONS (TOP OF WALK, BOTTOM OF WALK @ FLOWLINE) |

EXISTING WATER VALVE IN BOX
PROPOSED WATER VALVE IN BOX
EXISTING WATER VALVE IN MANHOLE
EXISTING WATER SERVICE VALVE
EXISTING TELEPHONE MANHOLE
EXISTING STORM CATCH BASIN
PROPOSED STORM CATCH BASIN – ST CB
PROPOSED STORM FIELD INLET – ST FI
EXISTING SQUARE CATCH BASIN
EXISTING STORM CURB INLET
PROPOSED STORM CURB INLET – ST CI
EXISTING UTILITY POLE
EXISTING UTILITY POLE WITH GUY WIRE
EXISTING STREET LIGHT
EXISTING TELEPHONE PEDESTAL
EXISTING ELECTRIC PEDESTAL
EXISTING ELECTRIC BOX
EXISTING CABLE TV PEDESTAL
PROPOSED DRAINAGE FLOW
1-1/4" REBAR SET WEIGHING 4.30 LB/FT.
3/4" REBAR SET WEIGHING 1.50 LB/FT.
1-1/4" REBAR FOUND
3/4" REBAR FOUND
2" IRON PIPE FOUND
1" IRON PIPE FOUND
EXISTING FLOOD LIGHT
SECTION CORNER
PROPOSED APRON END SECTION
EXISTING MARSH AREA
EXISTING DECIDUOUS TREE WITH TRUNK DIAMETER
EROSION MATTING
IP PROPOSED INLET PROTECTION

EXISTING CONIFEROUS TREE
EXISTING SHRUB
EXISTING STUMP
SOIL BORING
EXISTING WELL
PROPOSED WELL
PROPOSED LIGHT POLE
EXISTING LIGHT POLE
PROPOSED SIGN
EXISTING SIGN
CENTER LINE
EXISTING HANDICAP PARKING STALL
PROPOSED HANDICAP PARKING STALL
EXISTING GAS VALVE
EXISTING WOODED AREA
EXISTING HEDGE
EXISTING CHAINLINK FENCE
EXISTING WOOD FENCE
EXISTING BARBED WIRE FENCE
PROPOSED PROPERTY LINE
EXISTING GUARD RAIL
ST — EXISTING STORM SEWER AND MANHOLE
ST — PROPOSED STORM SEWER AND MANHOLE – ST MH
SA — EXISTING SANITARY SEWER AND MANHOLE
SA — PROPOSED SANITARY SEWER AND MANHOLE – SAN MH
W — EXISTING WATER LINE AND HYDRANT
W — PROPOSED WATER LINE AND HYDRANT
OU — EXISTING OVERHEAD UTILITY LINE
FO — EXISTING UNDERGROUND FIBER OPTIC LINE
E — EXISTING UNDERGROUND ELECTRIC CABLE
T — EXISTING UNDERGROUND TELEPHONE CABLE
G — EXISTING UNDERGROUND GAS LINE
PROPOSED CURB AND GUTTER
EXISTING CURB AND GUTTER
GRADING/SEEDING LIMITS
RIGHT-OF-WAY LINE
INTERIOR PROPERTY LINE
RAILROAD TRACKS
800 — EXISTING GROUND CONTOUR
800 — PROPOSED GROUND CONTOUR

## CIVIL SHEET INDEX


| SHEET | SHEET TITLE |
|---|---|
| | |
| C0.1 | CIVIL COVER AND SPECIFICATION SHEET |
| C1.0 | EXISTING SITE AND DEMOLITION PLAN |
| C1.1 | SITE PLAN |
| C1.2 | GRADING AND EROSION CONTROL PLAN |
| C1.3 | UTILITY PLAN |
| C1.4 | LANDSCAPE AND RESTORATION PLAN |
| C2.0 | DETAILS |
| C2.1 | DETAILS |
| C2.2 | DETAILS |
| C3.1 | SITE PHOTOMETRIC PLAN & DETAILS |
| | |


**PROJECT LOCATION MAP**

# PLAN SPECIFICATIONS (BASED ON CSI FORMAT)

## DIVISION 31 EARTH WORK

### 31 10 00 SITE CLEARING (DEMOLITION)

A. CONTRACTOR SHALL CALL DIGGER'S HOT LINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING SITE DEMOLITION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
B. DEMOLITION PLAN IS AN OVERVIEW OF DEMOLITION TO TAKE PLACE ON SITE. CONTRACTOR TO FIELD VERIFY EXISTING SITE CONDITIONS PRIOR TO BIDDING. CONTRACTOR SHALL REMOVE, REPLACE, OR DEMOLISH ALL ITEMS AS NEEDED DURING CONSTRUCTION.
C. CONTRACTOR TO PROTECT EXISTING IMPROVEMENTS THAT ARE SCHEDULED TO REMAIN. ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPLACED AT CONTRACTORS EXPENSE.
D. ALL CONCRETE NOTED TO BE REMOVED SHALL BE REMOVED TO THE NEAREST CONTROL JOINT.

### 31 20 00 EARTH MOVING

A. CONTRACTOR SHALL CALL DIGGER'S HOT LINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING EXCAVATION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
B. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR ALL EXCAVATION, GRADING, FILL AND BACKFILL WORK AS REQUIRED TO COMPLETE THE GENERAL CONSTRUCTION WORK. ALL EXCAVATION AND BACKFILL FOR ELECTRICALS AND MECHANICALS ARE THE RESPONSIBILITY OF THE RESPECTIVE CONTRACTOR UNLESS OTHERWISE SPECIFIED IN THE BID DOCUMENTS.
C. ALL ORGANIC TOPSOIL INSIDE THE BUILDING AREA, UNDER PAVED AREAS, AND AT SITE FILL AREAS SHALL BE REMOVED. PROOF ROLL SUBGRADES BEFORE PLACING FILL WITH HEAVY PNEUMATIC-TIRED EQUIPMENT, SUCH AS A FULLY-LOADED TANDEM AXLE DUMP TRUCK, TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. CONTRACTOR SHALL VERIFY TOPSOIL DEPTHS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REVIEW AND FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ACCOUNT FOR EXISTING CONDITIONS PRIOR TO SUBMITTING BID FOR THE PROJECT. EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY LOCAL ZONING REQUIREMENTS.
D. PLACE AND COMPACT FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL LAYER BEFORE COMPACTION AS RECOMMENDED TO ACHIEVE SPECIFIED DRY DENSITY. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY, OTHERWISE SATISFACTORY SOIL MATERIAL THAT IS TOO WET TO COMPACT TO SPECIFIED DRY DENSITY.
E. PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
F. COMPACT THE SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D 698, STANDARD PROCTOR TEST. FILL MAY NOT BE PLACED ON FROZEN GROUND AND NO FROZEN MATERIALS MAY BE USED FOR BACK FILL. APPLY THE MORE STRINGENT REQUIREMENTS WHEN COMPARING BETWEEN THE FOLLOWING AND THE GEOTECHNICAL REPORT.
  1. UNDER FOUNDATIONS - SUBGRADE, AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 98 PERCENT.
  2. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS MORE THAN 3 FEET BELOW THE SLAB - PLACE A DRAINAGE COURSE LAYER OF 3/4" CRUSHED STONE, WITH 5% TO 12% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
  3. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS WITHIN 3 FEET OF THE SLAB SURFACE- PLACE A DRAINAGE COURSE LAYER OF CLEAN 3/4" CRUSHED STONE, WITH NO MORE THAN 5% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
  4. UNDER EXTERIOR CONCRETE AND ASPHALT PAVEMENTS - COMPACT THE SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT LESS THAN 95 PERCENT.
  5. UNDER WALKWAYS - COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT LESS THAN 95 PERCENT.
  6. UNDER LAWN OR UNPAVED AREAS - COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 85 PERCENT.
G. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS. CONTRACTOR SHALL PROVIDE DOCUMENTATION OF PASSING DENSITY TESTING AND PROOF-ROLLING TO ENGINEER UPON COMPLETION. IT IS SUGGESTED THAT THE GEOTECHNICAL FIRM USED TO PERFORM THE SUBSURFACE SOIL INVESTIGATION BE ENGAGED FOR THE FIELD QUALITY CONTROL TESTS.
H. ALLOW THE TESTING AGENCY TO TEST AND INSPECT SUBGRADES AND EACH FILL OR BACKFILL LAYER. PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS. PROVIDE ONE TEST FOR EVERY 2000 SQUARE FEET OF PAVED AREA OR BUILDING SLAB, ONE TEST FOR EACH SPREAD FOOTING, AND ONE TEST FOR EVERY 50 LINEAR FEET OF WALL STRIP FOOTING.
I. WHEN THE TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.
J. THE BUILDING SITE SHALL BE GRADED TO PROVIDE DRAINAGE AWAY FROM THE BUILDING AS INDICATED ON THE PLANS. SITE EARTHWORK SHALL BE GRADED TO WITHIN 0.10' OF REQUIRED EARTHWORK ELEVATIONS ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE GRADING PLAN.

### 31 30 00 EROSION CONTROL

A. THE GRADING PLAN REFLECTS LESS THAN 1 ACRE OF DISTURBED AREA. THE SITE IS THEREFORE EXEMPT FROM WISCONSIN DEPARTMENT OF NATURAL RESOURCES NR 216 NOTICE OF INTENT REQUIREMENTS. THE DESIGN ENGINEER SHALL PREPARE AN EROSION CONTROL PLAN TO MEET NR 151.105 CONSTRUCTION SITE PERFORMANCE STANDARDS FOR NON-PERMITTED SITES.
B. EROSION AND SEDIMENT CONTROL IMPLEMENTED DURING CONSTRUCTION SHALL STRICTLY COMPLY WITH THE GUIDELINES AND REQUIREMENTS SET FORTH IN WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151, THE STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES RUNOFF MANAGEMENT PERFORMANCE STANDARDS. TECHNICAL STANDARDS PUBLISHED BY THE WISCONSIN DNR SHALL ALSO BE UTILIZED TO IMPLEMENT THE REQUIRED PERFORMANCE STANDARDS. THE METHODS AND TYPES OF EROSION CONTROL WILL BE DEPENDENT ON THE LOCATION AND TYPE OF WORK INVOLVED. ALL SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION, AND INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL. BELOW IS A LIST OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES TO ACHIEVE THE PERFORMANCE STANDARDS REQUIRED.
  1. SILT FENCE SHALL BE PLACED ON SITE AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. SILT FENCE SHALL ALSO BE PROVIDED AROUND THE PERIMETER OF ALL SOIL STOCKPILES THAT WILL EXIST FOR MORE THAN 7 DAYS. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1056 (CURRENT EDITION).
  2. DITCH CHECKS SHALL BE PROVIDED TO REDUCE THE VELOCITY OF WATER FLOWING IN DITCH BOTTOMS. PLACE AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1062 (CURRENT EDITION).
  3. STONE TRACKING PADS AND TRACKOUT CONTROL PRACTICES SHALL BE PLACED AT ALL CONSTRUCTION SITE ENTRANCES AND SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE CONSTRUCTION SITE. SEE THE EROSION CONTROL PLAN FOR LOCATIONS. THE AGGREGATE USED FOR THE STONE TRACKING PAD SHALL BE 3/8" TO 3 INCH CLEAR OR WASHED STONE AND SHALL BE PLACED IN A LAYER AT LEAST 12 INCHES THICK. THE STONE SHALL BE UNDERLAIN WITH A WISDOT TYPE R GEOTEXTILE FABRIC AS NEEDED. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT (12' MIN WIDTH) AND SHALL BE A MINIMUM OF 50 FEET LONG. SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. OTHER TRACKOUT CONTROL PRACTICES INCLUDING STABILIZED WORK SURFACES, MANUFACTURED TRACKOUT CONTROL DEVICES, TIRE WASHING, AND STREET/PAVEMENT CLEANING SHALL BE IMPLEMENTED AS NECESSARY TO MITIGATE THE TRACKOUT OF SEDIMENT OFFSITE. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1057 (CURRENT EDITION).
  4. STORM DRAIN INLET PROTECTION SHALL BE PROVIDED FOR ALL NEW AND DOWNSTREAM STORM CATCH BASINS AND CURB INLETS. TYPE B OR C PROTECTION SHOULD BE PROVIDED AND SHALL BE IN CONFORMANCE WITH WISCONSIN DNR TECHNICAL STANDARD 1060 (CURRENT EDITION).
  5. DUST CONTROL MEASURES SHALL BE PROVIDED TO REDUCE OR PREVENT THE SURFACE AND AIR TRANSPORT OF DUST DURING CONSTRUCTION. CONTROL MEASURES INCLUDE APPLYING MULCH AND ESTABLISHING VEGETATION, WATER SPRAYING, SURFACE ROUGHENING, APPLYING POLYMERS, SPRAY-ON TACKIFIERS, CHLORIDES, AND BARRIERS. SOME SITES MAY REQUIRE AN APPROACH THAT UTILIZES A COMBINATION OF MEASURES FOR DUST CONTROL. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1068 (CURRENT EDITION).
  6. THE USE, STORAGE, AND DISPOSAL OF CHEMICALS, CEMENT, AND OTHER COMPOUNDS AND MATERIALS USED ON SITE SHALL BE MANAGED DURING THE CONSTRUCTION PERIOD TO PREVENT THEIR TRANSPORT BY RUNOFF INTO WATERS OF THE STATE.
  7. CONTRACTOR SHALL PROVIDE AN OPEN AGGREGATE CONCRETE TRUCK WASHOUT AREA ON SITE. CONTRACTOR TO ENSURE THAT CONCRETE WASHOUT SHALL BE CONTAINED TO THIS DESIGNATED AREA AND NOT BE ALLOWED TO RUN INTO STORM INLETS OR INTO THE OVERLAND STORMWATER DRAINAGE SYSTEM. WASHOUT AREA SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION.
  8. TEMPORARY SITE RESTORATION SHALL TAKE PLACE IN DISTURBED 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 REQUIRES VEGETATIVE COVER FOR LESS THAN ONE YEAR. THIS TEMPORARY SITE RESTORATION REQUIREMENT ALSO APPLIES TO SOIL STOCKPILES THAT EXIST FOR MORE THAN 7 DAYS. PERMANENT RESTORATION APPLIES TO AREAS WHERE PERENNIAL VEGETATIVE COVER IS NEEDED TO PERMANENTLY STABILIZE AREAS OF EXPOSED SOIL. PERMANENT STABILIZATION SHALL OCCUR WITHIN 3 WORKING DAYS OF FINAL GRADING. TOPSOIL, SEED, AND MULCH SHALL BE IN GENERAL CONFORMANCE WITH TECHNICAL STANDARDS 1058 AND 1059 AND SHALL MEET THE SPECIFICATIONS FOUND IN THE LANDSCAPING AND SITE STABILIZATION SECTION OF THIS CONSTRUCTION DOCUMENT. ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR FINAL STABILIZATION MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.
  9. IF SITE DEWATERING IS REQUIRED FOR PROPOSED CONSTRUCTION ACTIVITIES, ALL SEDIMENT LADEN WATER GENERATED DURING THE DEWATERING PROCESS SHALL BE TREATED TO REMOVE SEDIMENT PRIOR TO DISCHARGING OFF-SITE OR TO WATERS OF THE STATE. FOLLOW ALL PROCEDURES FOUND IN TECHNICAL STANDARD 1061.
  10. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A STORM EVENT SHALL BE CLEANED UP BY THE END OF EACH WORKING DAY. DUST CONTROL REQUIREMENTS SHALL BE FOLLOWED PER WI DNR TECHNICAL STANDARD 1068 (CURRENT EDITION). FLUSHING SHALL NOT BE ALLOWED.
C. ALL EROSION CONTROL DEVICES 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. MAINTENANCE SHALL BE PERFORMED PER WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151 STORMWATER MANAGEMENT TECHNICAL STANDARD REQUIREMENTS.
D. EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL THE AREA(S) SERVED HAVE ESTABLISHED VEGETATIVE COVER.
E. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL EROSION CONTROL PERMITS.

## DIVISION 32 EXTERIOR IMPROVEMENTS

### 32 10 00 AGGREGATE BASE & ASPHALT PAVEMENT

A. CONTRACTOR TO PROVIDE COMPACTED AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT WHERE INDICATED ON THE PLANS. ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. PROVIDE HOT MIX ASPHALT MIXTURE TYPES PER SECTION 460 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. CONTRACTOR TO PROVIDE AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT TYPES TO MATCH THE EXISTING PAVEMENT SECTION WHERE REMOVAL AND REPLACEMENT IS REQUIRED IN ACCORDANCE WITH LOCAL STANDARDS.
B. CONTRACTOR TO COMPACT THE AGGREGATE BASE, ASPHALT BINDER COURSE, AND ASPHALT SURFACE COURSE TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. ALL ASPHALT PAVEMENT AREAS SHALL BE PAVED TO WITHIN 0.05' OF DESIGN SURFACE GRADES WITH POSITIVE DRAINAGE BEING MAINTAINED IN ACCORDANCE WITH DESIGN PLANS.
C. HOT MIX ASPHALT CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF GEOTECHNICAL REPORT OR CONSTRUCTION DOCUMENTS.

### 32 20 00 CONCRETE AND AGGREGATE BASE

A. CONTRACTOR TO PROVIDE CRUSHED AGGREGATE BASE AND CONCRETE WHERE INDICATED ON THE PLANS.
B. ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. ALL AGGREGATE PLACED MUST BE COMPACTED TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
C. DESIGN AND CONSTRUCTION OF ALL CAST-IN-PLACE EXTERIOR CONCRETE FLAT WORK SHALL CONFORM TO ACI 330R-08 & ACI 318-08.
D. EXTERIOR CONCRETE FLAT WORK CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF THE GEOTECHNICAL REPORT OR THIS SPECIFICATION. CONCRETE FLAT WORK CONSTRUCTION IS AS FOLLOWS:
  1. <u>SIDEWALK CONCRETE</u> - 5" OF CONCRETE OVER 4" OF 3/4" CRUSHED AGGREGATE BASE. CONTRACTION JOINTS SHALL CONSIST OF 1/8" WIDE BY 1" DEEP TOOLED JOINT WHERE INDICATED ON THE PLANS.
  2. <u>HEAVY DUTY CONCRETE-</u> 6" OF CONCRETE OVER 6" OF 3/4" CRUSHED AGGREGATE. CONCRETE SHALL BE REINFORCED WITH #3 REBARS ON CHAIRS AT 3' O.C. REBAR SHALL BE PLACED PLACED IN THE UPPER 1/3 TO ½ OF THE SLAB. CONTRACTION JOINTS SHALL BE SAWCUT 1.5" IN DEPTH AND BE SPACED A MAXIMUM OF 15' ON CENTER.
  3. <u>DUMPSTER PAD/APRON CONCRETE</u> - 8" OF CONCRETE OVER 6" OF AGGREGATE BASE.
     a. CONCRETE SHALL BE STEEL REINFORCED WITH THE FOLLOWING AND PLACED IN THE UPPER 1/3 TO ½ OF THE SLAB:
        1). TIE BARS AT ALL CONTRACTION JOINTS OF THE CONCRETE. TIE BARS SHALL BE #4 REBAR 30" LONG PLACED AT 30" O.C.
     b. DUMPSTER PAD CONCRETE JOINTING SHALL BE AS FOLLOWS:
        1). CONTRACTION SAWCUT JOINT - CONTRACTOR SHALL PROVIDE A SAWCUT JOINT AT MAXIMUM SPACING OF 15' ON CENTER. SAWCUT SHALL BE 2" IN DEPTH.
        2). TYPICAL POUR CONTROL JOINT - POUR CONTROL JOINT SHALL BE PROVIDED WITH 1-1/4" DIAMETER BY 20" LONG SMOOTH DOWEL PLACED AT 12" O.C. ONE HALF OF THE DOWEL SHALL BE GREASED. GREENSTREAK 9" SPEED DOWEL TUBES SHALL BE USED.
E. DESIGN MIXES SHALL BE IN ACCORDANCE WITH ASTM C94
  1. STRENGTH TO BE MINIMUM OF 4,500 PSI AT 28 DAYS FOR EXTERIOR CONCRETE.
  2. MAXIMUM WATER/CEMENT RATIO SHALL BE 0.45.
  3. SLUMP SHALL NOT EXCEED 4" FOR EXTERIOR CONCRETE FLAT WORK
  4. SLUMP SHALL BE 2.5" OR LESS FOR SLIP-FORMED CURB AND GUTTER
  5. SLUMP SHALL BE BETWEEN 1.5" TO 3" FOR NON SLIP-FORMED CURB AND GUTTER.
  6. ALL EXTERIOR CONCRETE SHALL BE AIR ENTRAINED WITH 4% TO 7% AIR CONTENT. NO OTHER ADMIXTURES SHALL BE USED WITHOUT APPROVAL OF EXCEL ENGINEERING, INC. CALCIUM CHLORIDE SHALL NOT BE USED.
  7. MAXIMUM AGGREGATE SIZE FOR ALL EXTERIOR CONCRETE SHALL BE 0.75 INCHES.
F. VERIFY EQUIPMENT CONCRETE PAD SIZES WITH CONTRACTOR REQUIRING PAD. PADS SHALL HAVE FIBERMESH 300 FIBERS AT A RATE OF 1.5 LBS/CU. YD. OR 6 X 6-W1.4 X W1.4 WELDED WIRE MESH WITH MINIMUM 1 INCH COVER. EQUIPMENT PADS SHALL BE 5.5 INCHES THICK WITH 1 INCH CHAMFER UNLESS SPECIFIED OTHERWISE. COORDINATE ADDITIONAL PAD REQUIREMENTS WITH RESPECTIVE CONTRACTOR.
G. ALL CONCRETE FLAT WORK SURFACES AND CONCRETE CURB FLOWLINES SHALL BE CONSTRUCTED TO WITHIN 0.05' OF DESIGN SURFACE AND FLOWLINE GRADES ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE DESIGN PLANS.
H. CONCRETE FLAT WORK SHALL HAVE CONSTRUCTION JOINTS OR SAW CUT JOINTS PLACED AS INDICATED ON THE PLANS OR PER THIS SPECIFICATION. SAWCUTS SHALL BE DONE AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER CONCRETE IS PLACED. CONCRETE CURB AND GUTTER JOINTING SHALL BE PLACED EVERY 10' OR CLOSER (6' MIN.). IF CONCRETE PAVEMENT IS ADJACENT TO CONCRETE CURB, JOINTING IN THE PAVEMENT AND CURB SHALL ALIGN. ALL EXTERIOR CONCRETE SHALL HAVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE. A UNIFORM COAT OF A HIGH SOLIDS CURING COMPOUND MEETING ASTM C309 SHOULD BE APPLIED TO ALL EXPOSED CONCRETE SURFACES. ALL CONCRETE IS TO BE CURED FOR 7 DAYS. EXTERIOR CONCRETE SHALL BE SEPARATED FROM BUILDINGS WITH CONTINUOUS 0.5 INCH FIBER EXPANSION JOINT AND/OR 0.25 INCH FIBER EXPANSION JOINT AT DECORATIVE MASONRY UNITS.
I. ALL REINFORCING BARS SHALL BE ASTM A615 GRADE 60. THICKNESS OF CONCRETE COVER OVER REINFORCEMENT SHALL BE NOT LESS THAN 3" WHERE CONCRETE IS DEPOSITED AGAINST THE GROUND WITHOUT THE USE OF FORMS AND NOT LESS THAN 1.5" IN ALL OTHER LOCATIONS. ALL REINFORCING SHALL BE LAPPED 36 DIAMETERS FOR UP TO #6 BARS, 60 DIAMETERS FOR #7 TO #10 BARS OR AS NOTED ON THE DRAWINGS AND EXTENDED AROUND CORNERS WITH CORNER BARS. PLACING AND DETAILING OF STEEL REINFORCING AND REINFORCING SUPPORTS SHALL BE IN ACCORDANCE WITH CRSI AND ACI MANUAL AND STANDARD PRACTICES. THE REINFORCEMENT SHALL NOT BE PAINTED AND MUST BE FREE OF GREASE/OIL, DIRT OR DEEP RUST WHEN PLACED IN THE WORK. ALL WELDED WIRE FABRIC SHALL MEET THE REQUIREMENTS OF ASTM A 185. WELDED WIRE FABRIC SHALL BE PLACED 2" FROM TOP OF SLAB, UNLESS INDICATED OTHERWISE.
J. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO SAMPLE MATERIALS, PERFORM TESTS, AND SUBMIT TEST REPORTS DURING CONCRETE PLACEMENT. TESTS WILL BE PERFORMED ACCORDING TO ACI 301. CAST AND LABORATORY CURE ONE SET OF FOUR STANDARD CYLINDERS FOR EACH COMPOSITE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIX EXCEEDING 5 CU. YD., BUT LESS THAN 25 CU. YD., PLUS ONE SET FOR EACH ADDITIONAL 50 CU. YD. OR FRACTION THEREOF. PERFORM COMPRESSIVE-STRENGTH TESTS ACCORDING TO ASTM C 39. TEST TWO SPECIMENS AT 7 DAYS AND TWO SPECIMENS AT 28 DAYS. PERFORM SLUMP TESTING ACCORDING TO ASTM C 143. PROVIDE ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIX. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE.
K. PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. IN HOT, DRY, AND WINDY WEATHER, APPLY AN EVAPORATION-CONTROL COMPOUND ACCORDING TO MANUFACTURER'S INSTRUCTIONS AFTER SCREEDING AND BULL FLOATING, BUT BEFORE POWER FLOATING AND TROWELLING.
L. LIMIT MAXIMUM WATER-CEMENTITIOUS RATIO OF CONCRETE EXPOSED TO FREEZING, THAWING AND DEICING SALTS TO 0.45.
M. TEST RESULTS WILL BE REPORTED IN WRITING TO THE DESIGN ENGINEER, READY-MIX PRODUCER, AND CONTRACTOR WITHIN 24 HOURS AFTER TESTS. REPORTS OF COMPRESSIVE STRENGTH TESTS SHALL CONTAIN THE PROJECT IDENTIFICATION NAME AND NUMBER, DATE OF CONCRETE PLACEMENT, NAME OF CONCRETE TESTING SERVICE, CONCRETE TYPE AND CLASS, LOCATION OF CONCRETE BATCH IN STRUCTURE, DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, CONCRETE MIX PROPORTIONS AND MATERIALS, COMPRESSIVE BREAKING STRENGTH, AND TYPE OF BREAK FOR BOTH 7-DAY TESTS AND 28-DAY TESTS.
N. CONTRACTOR TO PROVIDE 4" WIDE YELLOW OR WHITE (VERIFY WITH OWNER PRIOR TO STRIPING) PAINTED STRIPING FOR PARKING STALLS, TRAFFIC LANES, AND NO PARKING AREAS. PAINT MARKINGS SHALL ALSO BE PROVIDED FOR H.C. ACCESSIBLE SYMBOLS, TRAFFIC ARROWS, AND TRAFFIC MESSAGES.

### 32 30 00 LANDSCAPING AND SITE STABILIZATION

A. <u>TOPSOIL:</u> CONTRACTOR TO PROVIDE A MINIMUM OF 6" OF TOPSOIL FOR ALL DISTURBED OPEN AREAS, OTHER THAN AT LANDSCAPE ISLANDS WITHIN PAVEMENT AREAS WHERE A MINIMUM OF 10" OF TOPSOIL SHALL BE PROVIDED. REUSE SURFACE SOIL STOCKPILED ON SITE AND SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN QUANTITIES ARE INSUFFICIENT. EXCAVATOR SHALL BE RESPONSIBLE FOR ROUGH PLACEMENT OF TOPSOIL TO WITHIN 1" OF FINAL GRADE PRIOR TO LANDSCAPER FINAL GRADING. LANDSCAPER TO PROVIDE PULVERIZING AND FINAL GRADING OF TOPSOIL. PROVIDE SOIL ANALYSIS BY A QUALIFIED SOIL TESTING LABORATORY AS REQUIRED TO VERIFY THE SUITABILITY OF SOIL TO BE USED AS TOPSOIL AND TO DETERMINE THE NECESSARY SOIL AMENDMENTS. TEST SOIL FOR PRESENCE OF ATRAZINE AND INFORM EXCEL ENGINEERING, INC. IF PRESENT PRIOR TO BIDDING PROJECT. TOPSOIL SHALL HAVE A PH RANGE OF 5.5 TO 8, CONTAIN A MINIMUM OF 5 PERCENT ORGANIC MATERIAL CONTENT, AND SHALL BE FREE OF STONES 1 INCH OR LARGER IN DIAMETER. ALL MATERIALS HARMFUL TO PLANT GROWTH SHALL ALSO BE REMOVED.
B. <u>TOPSOIL INSTALLATION:</u> LOOSEN SUBGRADE TO A MINIMUM DEPTH OF 6 INCHES AND REMOVE STONES LARGER THAN 1" IN DIAMETER. ALSO REMOVE ANY STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND DISPOSE OF THEM OFF THE PROPERTY. SPREAD TOPSOIL TO A DEPTH OF 6" BUT NOT LESS THAN WHAT IS REQUIRED TO MEET FINISHED GRADES AFTER LIGHT ROLLING AND NATURAL SETTLEMENT. DO NOT SPREAD TOPSOIL IF SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET. GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN 0.05 FEET OF FINISHED GRADE ELEVATION.
C. <u>SODDED LAWNS:</u> PROVIDE SOD CONSISTING OF THE FOLLOWING GRASS SPECIES - 65% KENTUCKY BLUEGRASS, 20% PERENNIAL RYEGRASS, 15% FINE FESCUE. PROVIDE VIABLE SOD OF UNIFORM DENSITY, COLOR, AND TEXTURE. SOD SHOULD BE STRONGLY ROOTED AND CAPABLE OF VIGOROUS GROWTH AND DEVELOPMENT WHEN PLANTED. LAY SOD WITHIN 24 HOURS OF HARVESTING. DO NOT LAY SOD IF DORMANT OR IF GROUND IS FROZEN OR MUDDY. LAY SOD WITH TIGHTLY FITTED BUTT END AND SIDE JOINTS. DO NOT STRETCH OR OVERLAP. STAGGER SOD STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. TAMP AND ROLL LIGHTLY TO ENSURE CONTACT WITH TOPSOIL. ANCHOR SOD ON SLOPES EXCEEDING 6:1 SLOPE. PROVIDE SLOW RELEASE FERTILIZER AS RECOMMENDED BY SOD SUPPLIER FOR PROPER LAWN ESTABLISHMENT. SATURATE WITH FINE WATER SPRAY WITHIN 2 HOURS OF PLANTING.
D. <u>SODDED LAWN MAINTENANCE:</u> CONTRACTOR TO PROVIDE MAINTENANCE FOR ALL SODDED AREAS FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION. AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, WELL-ROOTED, EVEN-COLORED, VIABLE LAWN SHOULD BE ESTABLISHED. THE LAWN SHOULD BE FREE OF WEEDS, OPEN JOINTS, BARE AREAS, AND SURFACE IRREGULARITIES. REESTABLISH LAWNS THAT DO NOT COMPLY WITH THESE REQUIREMENTS AND CONTINUE MAINTENANCE UNTIL LAWNS ARE SATISFACTORY.
E. <u>TREES AND SHRUBS:</u> FURNISH NURSERY-GROWN TREES AND SHRUBS WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, AND HEALTHY LOOKING STOCK. STOCK SHOULD ALSO BE FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. SEE THE LANDSCAPE PLAN FOR SPECIFIC SPECIE TYPE, SIZE, AND LOCATION.
F. <u>TREE AND SHRUB INSTALLATION:</u> EXCAVATE CIRCULAR PITS WITH SIDES SLOPED INWARD. TRIM BASE LEAVING CENTER AREA RAISED SLIGHTLY TO SUPPORT ROOT BALL. EXCAVATE PIT APPROXIMATELY THREE TIMES AS WIDE AS THE ROOT BALL DIAMETER. SET TREES AND SHRUBS PLUMB AND IN CENTER OF PIT WITH TOP OF BALL 1" ABOVE ADJACENT FINISHED GRADES. PLACE PLANTING SOIL MIX AROUND ROOT BALL IN LAYERS AND TAMP TO SETTLE MIX. WATER ALL PLANTS THOROUGHLY. PROVIDE TEMPORARY STAKING FOR TREES AS REQUIRED.
G. <u>TREE AND SHRUB MAINTENANCE/WARRANTY:</u> CONTRACTOR TO PROVIDE MAINTENANCE OF ALL LANDSCAPING FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION. MAINTENANCE TO INCLUDE REGULAR WATERING AS REQUIRED FOR SUCCESSFUL PLANT ESTABLISHMENT. CONTRACTOR TO PROVIDE 1 YEAR WARRANTY ON ALL TREES, SHRUBS, AND PERENNIALS.
H. <u>ORGANIC HARDWOOD MULCH:</u> PROVIDE 3" MINIMUM THICK BLANKET OF SHREDDED HARDWOOD MULCH AT ALL PLANTING AREAS INDICATED ON THE LANDSCAPE PLAN. INSTALL OVER NON-WOVEN WEED BARRIER FABRIC. COLOR BY OWNER.
I. <u>DECORATIVE STONE MULCH:</u> PROVIDE 3" MINIMUM THICK BLANKET OF 1.5" MINIMUM TO 2.5" MAXIMUM CRUSHED DECORATIVE STONE AT ALL PLANTING AREAS INDICATED ON THE LANDSCAPE PLAN. INSTALL OVER NON-WOVEN WEED BARRIER FABRIC. COLOR BY OWNER.
J. <u>ALUMINUM EDGING:</u> INSTALL PERMALOC CLEANLINE LANDSCAPE EDGING TO SEPARATE ALL PLANTING BEDS FROM LAWN AREAS. EDGING TO BE CL 1/8"X4" WITH 12" LONG ALUMINUM STAKES. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS. COLOR BY OWNER. VERIFY FINAL EDGING TYPES TO BE USED WITH OWNER/DIRECTOR OF PROJECTS PRIOR TO INSTALLATION.
K. <u>LANDSCAPE AND LAWN IRRIGATION:</u> CONTRACTOR TO PROVIDE DESIGN AND INSTALLATION OF IRRIGATION SYSTEM PIPING, VALVES, VALVE BOXES, SPRINKLERS, EMITTERS, DRIP TUBES, AND CONTROLS IN COMBINATIONS THAT BEST SUIT THE LANDSCAPE PLAN LAYOUT. ALL LAWN AND LANDSCAPING AREAS SHALL BE PROVIDED WITH IRRIGATION AS DELINEATED ON THE PLAN. THE DESIGN SHOULD MINIMIZE THE AMOUNT OF WATER THAT EXTENDS BEYOND THE PROPERTY AND ON PAVED AREAS. THE SYSTEM SHALL BE DESIGNED FOR FULLY AUTOMATIC OPERATION AND PROVIDE ALL NECESSARY CONTROLS, VALVES, AND WIRING TO OPERATE THE SYSTEM. THE CONTROL UNIT SHALL BE INSTALLED IN A MECHANICAL ROOM OR AT A LOCATION AGREED TO WITH THE OWNER. THE CONTROL UNIT SHOULD BE PROVIDED WITH A LOCKING COVER. POP-UP SPRAY OR ROTARY SPRINKLERS SHALL BE USED AT LAWN AREAS TO PROVIDE A UNIFORM COVERAGE OF 1 TO 2 INCHES OF WATER PER HOUR. EMITTERS AND DRIP TUBES OR SHRUBBERY SPRINKLERS SHALL BE USED AT PLANTS AND SHRUBS AS APPROPRIATE FOR THE PLANTING DENSITY AND SPECIES TYPE. ALL SPRINKLER HEADS SHALL BE COMMERCIAL GRADE. THE SYSTEM SHALL BE CIRCUITED AS REQUIRED TO PROVIDE ADEQUATE WATER FLOW TO EACH SPRINKLER HEAD. THE CONTROL SYSTEM MUST INCLUDE A RAIN SENSING SHUT OFF DEVICE. THE ENTIRE SYSTEM IS TO BE INSTALLED WITH A MINIMUM UNIFORM SLOPE OF 0.5 PERCENT TOWARD DRAIN VALVES.

## DIVISION 33 UTILITIES

### 33 10 00 SITE UTILITIES

A. CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES ON SITE. CONTRACTOR TO VERIFY PIPE LOCATIONS, SIZES, AND DEPTHS AT POINT OF PROPOSED CONNECTIONS AND VERIFY PROPOSED UTILITY ROUTES ARE CLEAR (PER CODE) OF ALL EXISTING UTILITIES AND OTHER OBSTRUCTIONS PRIOR TO CONSTRUCTION. COSTS INCURRED FOR FAILURE TO DO SO SHALL BE THE CONTRACTORS RESPONSIBILITY.
B. ALL PROPOSED SANITARY PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE ON C0.1 OF THE PROPOSED PLANSET.
C. SANITARY MANHOLES SHALL BE 48" PRECAST AND CONFORM TO THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN-CURRENT EDITION UNLESS OTHERWISE DIRECTED BY THE ENGINEER. SANITARY MANHOLE FRAME AND GRATE TO BE NEENAH R-1550-A OR EQUAL. RIM ELEVATION TO BE SET AT FINISHED GRADE IN DEVELOPED AREAS AND 12" ABOVE FINISHED GRADE IN UNDEVELOPED AREAS EXCEPT AS OTHERWISE DIRECTED BY THE ENGINEER.
D. CLEANOUTS SHALL BE PROVIDED FOR THE SANITARY SERVICE AT LOCATIONS INDICATED ON THE UTILITY PLAN. THE CLEANOUT SHALL CONSIST OF A COMBINATION WYE FITTING IN LINE WITH THE SANITARY SERVICE WITH THE CLEANOUT LEG OF THE COMBINATION WYE FACING STRAIGHT UP. THE CLEANOUT SHALL CONSIST OF A 6" VERTICAL PVC PIPE WITH A WATER TIGHT REMOVABLE CLEANOUT PLUG. AN 8" PVC FROST SLEEVE SHALL BE PROVIDED. THE BOTTOM OF THE FROST SLEEVE SHALL TERMINATE 12" ABOVE THE TOP OF THE SANITARY LATERAL OR AT LEAST 6" BELOW THE PREDICTED FROST DEPTH, WHICHEVER IS SHALLOWER. THE CLEANOUT SHALL EXTEND JUST ABOVE THE SURFACE GRADE IN LAWN OR LANDSCAPE AREAS WITH THE FROST SLEEVE TERMINATING AT THE GRADE SURFACE. THE CLEANOUT SHALL EXTEND TO 4 INCHES BELOW SURFACE GRADE IN PAVED SURFACES WITH A ZURN (Z-1474-N) HEAVY DUTY CLEANOUT HOUSING PLACED OVER THE TOP OF THE CLEANOUT FLUSH WITH THE SURFACE GRADE. IN PAVED SURFACES, THE FROST SLEEVE SHALL TERMINATE IN A CONCRETE PAD AT LEAST 6" THICK AND EXTENDING AT LEAST 9" FROM THE SLEEVE ON ALL SIDES, SLOPING AWAY FROM THE SLEEVE. THE CLEANOUT HOUSING SHALL BE CONSTRUCTED PER MANUFACTURERS' REQUIREMENTS.
E. ALL PROPOSED WATER PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE ON C0.1 OF THE PROPOSED PLANSET. 7' MINIMUM COVER SHALL BE PROVIDED OVER ALL WATER PIPING UNLESS OTHERWISE SPECIFIED.
F. ALL PROPOSED STORM PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE ON C0.1 OF THE PROPOSED PLANSET. SEE UTILITY PLANS FOR ALL STORM PIPE MATERIAL TYPES TO BE USED. PIPE SHALL BE PLACED MIN. 8' HORIZONTALLY FROM FOUNDATION WALLS.
G. SANITARY, STORM, AND WATER UTILITY PIPE INVERTS SHALL BE CONSTRUCTED WITHIN 0.10' OF DESIGN INVERT ELEVATIONS ASSUMING PIPE SLOPE AND SEPARATION IS MAINTAINED PER THE UTILITY DESIGN PLANS AND STATE REQUIREMENTS.
H. SITE UTILITY CONTRACTOR SHALL RUN SANITARY SERVICE TO A POINT WHICH IS A MINIMUM OF 5' FROM THE EXTERIOR WALL OF THE FOUNDATION. SITE UTILITY CONTRACTOR SHALL RUN STORM SEWER FOR INTERNALLY DRAINED BUILDINGS TO A POINT WHICH IS A MINIMUM OF 5' FROM THE EXTERIOR WALL OF THE FOUNDATION. SITE UTILITY CONTRACTOR SHALL RUN DOWNSPOUT LEADS TO BUILDING FOUNDATION AND UP 6" ABOVE SURFACE GRADE FOR CONNECTION TO DOWNSPOUT. ALL DOWNSPOUT LOCATIONS SHOULD BE VERIFIED WITH ARCHITECTURAL PLANS AND DOWNSPOUT CONTRACTOR/GC PRIOR TO INSTALLATION OF DOWNSPOUT LEADS. DOWNSPOUT LEADS SHALL NOT UNDERMINE BUILDING FOUNDATIONS. SITE UTILITY CONTRACTOR SHALL RUN WATER SERVICE TO A POINT WITHIN THE FOUNDATION SPECIFIED BY THE PLUMBING PLANS. CONTRACTOR TO CUT AND CAP WATER SERVICE 12" ABOVE FINISHED FLOOR ELEVATION.
I. ALL UTILITIES SHALL BE INSTALLED WITH PLASTIC COATED TRACER WIRE (10 TO 14 GAUGE SOLID COPPER, OR COPPER COATED STEEL WIRE). PLASTIC WIRE MAY BE TAPED TO PLASTIC WATER OR SEWER PIPE. IF ATTACHED, THE TRACER WIRE SHALL BE SECURED EVERY 6 TO 20 FEET AND AT ALL BENDS. TRACER WIRE SHALL HAVE ACCESS POINTS AT LEAST EVERY 300 FEET. TRACER WIRE SHALL TERMINATE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS AT GRADE OR IN TERMINATION BOX PER LOCAL/STATE REQUIREMENTS.
J. ALL UTILITIES SHALL BE INSTALLED PER STATE, LOCAL, AND INDUSTRY STANDARDS. WATER, SANITARY, AND STORM SEWER SHALL BE INSTALLED PER "STANDARD SPECIFICATION FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN". THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING STATE PLUMBING REVIEW APPROVAL. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER PERMITS REQUIRED TO INSTALL WATER, SANITARY AND STORM SEWER.
K. SEE PLANS FOR ALL OTHER UTILITY SPECIFICATIONS AND DETAILS.

**Table A: Allowable Pipe Material Schedule**

| Utility | Material | Pipe Code | Fitting Code | Joint Code |
|---|---|---|---|---|
| Irrigation Service | C901 PE | AWWA C901/C906 | ASTM D2609, ASTM D2683, ASTM D3261 | Heat fusion: ASTM D2657 |
| Water Service | C900 PVC | AWWA C900, ASTM D1785, ASTM D2241 | AWWA C110, AWWA C153, ASTM D2464, ASTM D2466, ASTM D2467, ASTM D3311, ASTM F409, ASTM F1336, ASTM F1866 | Joint: ASTM D3139 Integral Bell & Spigot<br>Elastomeric Seal: ASTM F477 |
| Sanitary Sewer | SDR 35 PVC | ASTM D1785, ASTM D2665, ASTM D3034, ASTM F891 | ASTM F1336 | Push On: ASTM D3212 for Tightness<br>Elastomeric Gasket: ASTM F477 |
| *Sanitary Sewer | SCH.40 PVC | ASTM D1785, ASTM D2665, ASTM F891 | ASTM F1336 | Primer: ASTM F656<br>Solvent Cement: ASTM D2564 |
| Storm Sewer | HDPE | ASTM F2648 | ASTM F2306 Saddle Gasket | Joint: ASTM F2648 Bell & Spigot<br>Elastomeric Seal: ASTM F477 |
| *Storm Sewer | SCH. 40 PVC | ASTM D1785, ASTM D2665, ASTM F891 | ASTM F1336 | Primer: ASTM F656<br>Solvent Cement: ASTM D2564 |

### CONSTRUCTION STAKING SERVICES

CONSTRUCTION STAKING SHALL BE COMPLETED BY EXCEL ENGINEERING AS REQUESTED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. CONTRACTOR TO CONTACT RYAN WILGREEN AT 920-926-9800 OR RYAN.W@EXCELENGINEER.COM TO GET STAKING PRICE TO INCLUDE IN BID TO OWNER. PAYMENT OF STAKING COSTS ABOVE AND BEYOND THE BASE PRICE DUE TO RESTAKING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, NOT THE OWNER. CAD DRAWING FILES AND SURVEY CONTROL WILL NOT BE PROVIDED FOR STAKING PURPOSES.

### GENERAL PROJECT NOTES

1. ALL DRIVEWAYS AND CURB CUTS TO BE CONSTRUCTED ACCORDING TO LOCAL ORDINANCES. CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL WORK IN ROW PERMITS.
3. CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AS-BUILT SURVEY OF THE STORMWATER MANAGEMENT SYSTEM UPON COMPLETION OF THE WORK.

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN
**CALL DIGGERS HOTLINE**
**1-800-242-8511**
TOLL FREE
TELEFAX (414) 259-0947
TDD (FOR THE HEARING IMPAIRED) 1-800 542-2289
**WISCONSIN STATUTE 182.0175 (1974) REQUIRES MINIMUM OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE**

# CONTACTS


**OWNER**
CREW CARWASH
11700 EXIT 5 PKWY STE 100
FISHERS, IN 46037-8003
CONTACT: KATHERINE RAYNER
P: (317) 809-5161
katherine.rayner@crewcarwash.com

**CIVIL**
EXCEL ENGINEERING
100 CAMELOT DRIVE
FOND DU LAC, WISCONSIN 54935
CONTACT: DUSTIN SALTER, PE
P: (920) 926-9800
F: (920) 926-9801
dustin.s@excelengineer.com


CIVIL COVER AND SPECIFICATION SHEET


EXCEL
Always a Better Plan
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PROJECT INFORMATION
PROPOSED CAR WASH FOR:
CREW CARWASH
N96 W17500 COUNTY LINE RD • GERMANTOWN, WI 53022

PROFESSIONAL SEAL
WISCONSIN DUSTIN SALTER 49770-6 FOND DU LAC WISCONSIN PROFESSIONAL ENGINEER

PRELIMINARY DATES
FEB. 12, 2024

NOT FOR CONSTRUCTION

JOB NUMBER
230022600

SHEET NUMBER
**C0.1**

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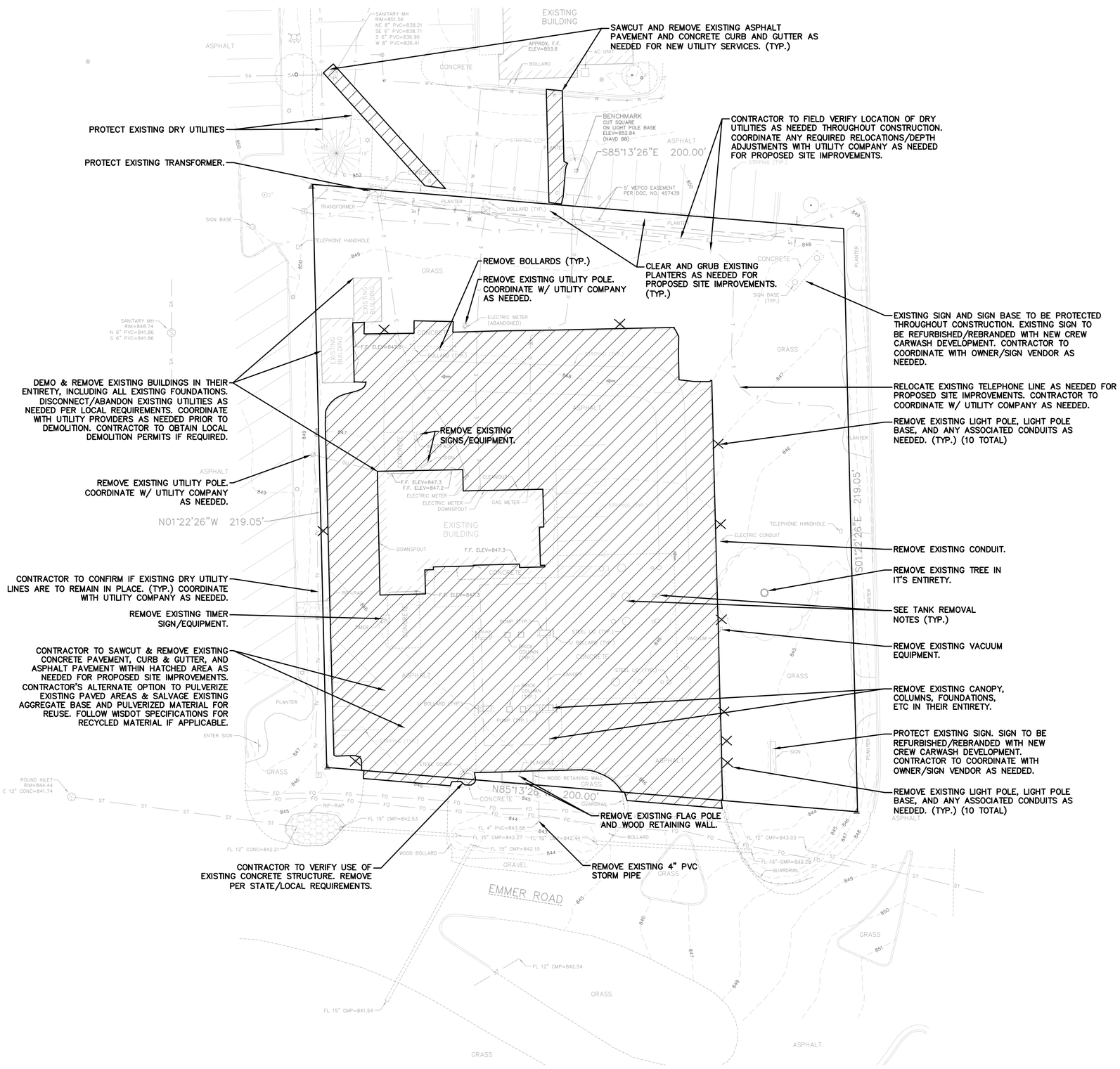
SPECIFICATION NOTE:
SEE SHEET C0.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS




NOTE:
PROPERTY LINES AND EASEMENTS SHOWN ON THIS SURVEY WERE DRAFTED FROM INFORMATION CONTAINED IN TITLE COMMITMENT NO. 2237081, BY KNIGHT BARRY TITLE, INC., DATED SEPTEMBER 19, 2023.

NOTE:
SURFACE INDICATIONS OF UTILITIES ALONG WITH DIGGER'S HOTLINE MARKINGS PER TICKET NO.: 20230306381 AND NO. 20234005120 HAVE BEEN SHOWN. SIZES AND ELEVATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD MEASUREMENTS OF VISIBLE STRUCTURES IN COMBINATION WITH AVAILABLE DATA PROVIDED TO EXCEL ENGINEERING. EXCEL ENGINEERING MAKES NO GUARANTEE THAT ALL THE EXISTING UTILITIES IN THE SURVEYED AREA HAVE BEEN SHOWN NOR THAT THEY ARE IN THE EXACT LOCATION INDICATED. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

**DEMOLITION PLAN NOTES:**

- DEMOLITION PLAN IS AN OVERVIEW OF DEMOLITION TO TAKE PLACE ON SITE. CONTRACTOR TO FIELD VERIFY EXISTING SITE CONDITIONS PRIOR TO BIDDING. CONTRACTOR SHALL REMOVE, OR DEMOLISH ITEMS AS NEEDED DURING CONSTRUCTION.
- PRIVATE LOCATE SHALL BE COMPLETED PRIOR TO CONSTRUCTION AND EXISTING UTILITY LOCATIONS AND DEPTHS SHALL BE FIELD VERIFIED AS NEEDED. PROPOSED DOWNSTREAM UTILITY CONNECTIONS SHALL BE VERIFIED PRIOR TO CONSTRUCTION. NOTIFY DESIGN ENGINEER OF CONFLICTS AND/OR DISCREPANCIES.

**TANK REMOVAL NOTE:**

NOTE THAT ALL FUELING EQUIPMENT AND UNDERGROUND FUEL STORAGE TANKS ARE TO BE COMPLETELY REMOVED BY THE SELLER AT THE SELLER'S EXPENSE PRIOR TO CONSTRUCTION OF CREW CARWASH. CONTRACTOR TO COORDINATE WITH OWNER IF ANY UNDERGROUND FUELING TANKS OR EQUIPMENT ARE DISCOVERED DURING CONSTRUCTION.

**EXISTING SEWER/WATER LATERAL NOTE:**

CONTRACTOR SHALL REMOVE EXISTING SEWER AND WATER SERVICE LATERALS TO THE PROPERTY LINE. CAP/ABANDON PER LOCAL REQUIREMENTS. COORDINATE WITH LOCAL UTILITY DEPARTMENTS AS NEEDED PRIOR TO ABANDONMENT.

NORTH

1"= 20' SCALE 20' 0 20' 40' FEET

# CIVIL EXISTING SITE AND DEMOLITION PLAN


EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com


**PROJECT INFORMATION**

PROPOSED CAR WASH FOR:
**CREW CARWASH**
N96 W17500 COUNTY LINE RD • GERMANTOWN, WI 53022

**PROFESSIONAL SEAL**

**PRELIMINARY DATES**
FEB. 12, 2024

**NOT FOR CONSTRUCTION**

**JOB NUMBER**
230022600

**SHEET NUMBER**
**C1.0**

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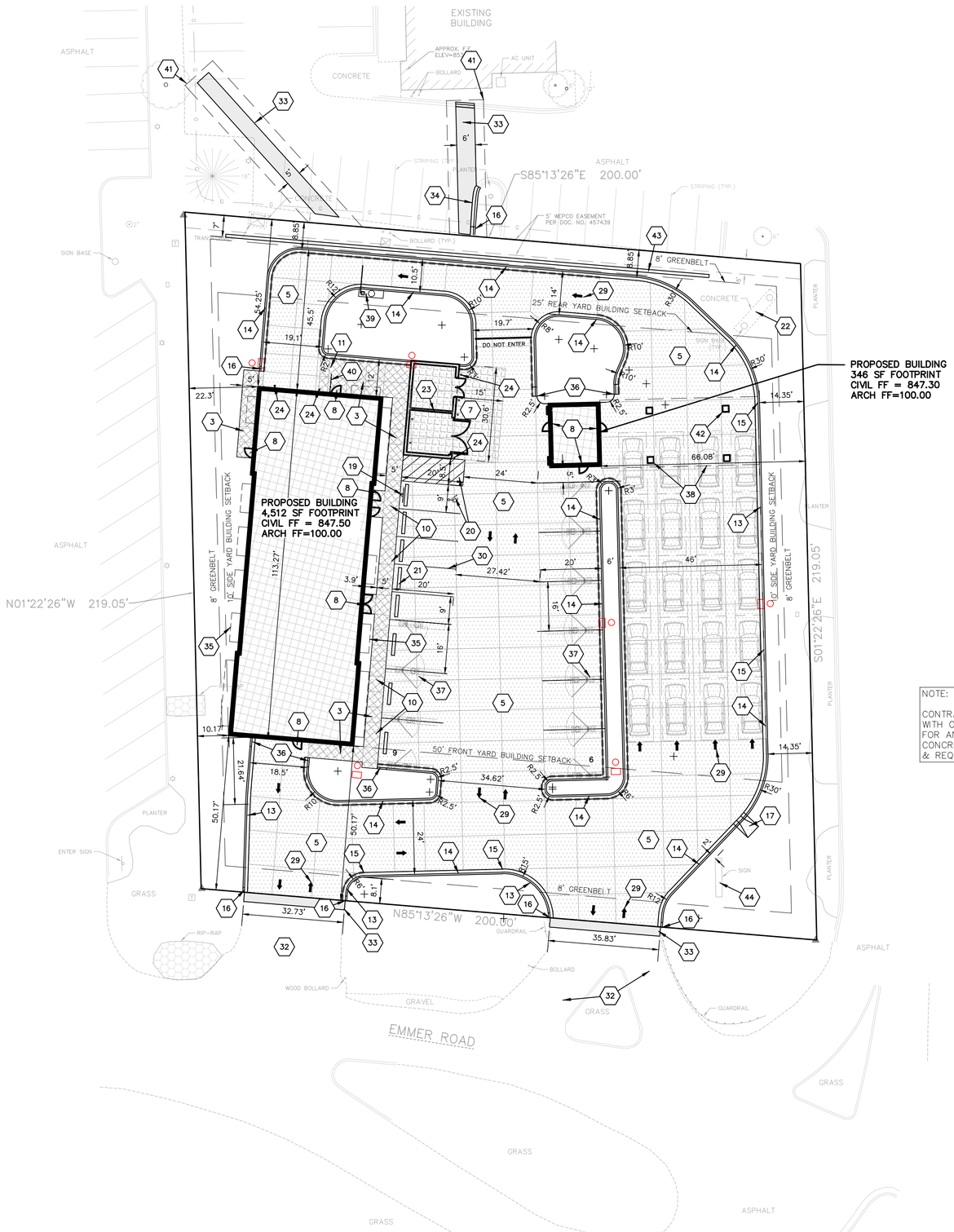


SPECIFICATION NOTE:
SEE SHEET C0.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS

SITE INFORMATION:

PROPERTY ADDRESS: N96W17500 COUNTY LINE RD, GERMANTOWN WI

PARCEL ID NUMBER: 334990

PROPERTY AREA: 43,558 S.F. (1.00 ACRES).

EXISTING ZONING: B-5 W/ HIGHWAY INTERCHANGE AREA OVERLAY

PROPOSED ZONING: B-5 W/ HIGHWAY INTERCHANGE AREA OVERLAY

ADJACENT PROPERTY ZONING: B-5

PROPOSED USE: CONVEYOR-STYLE CARWASH

AREA OF SITE DISTURBANCE: 43,346 SF (0.995 AC)

SETBACKS: BUILDING: FRONT = 50'
SIDE = 10'
REAR = 25'

PAVEMENT: FRONT = 8'
SIDE = 8'
REAR = 8'

PROPOSED BUILDING HEIGHT: 35' TO TOP OF TOWER (MAX. HEIGHT ALLOWED: 35')

PARKING REQUIRED: NO CODIFIED REQUIREMENT FOR CARWASH USE; ADEQUATE SPACE FOR EMPLOYEES AND CUSTOMERS

PARKING PROVIDED: 14 TOTAL (5 STANDARD EMPLOYEE SPACES, 9 VACUUM SPACES)

HANDICAP STALLS REQUIRED: 1 REQUIRED, 1 PROVIDED

LANDSCAPE REQUIREMENTS: MIN. LANDSCAPE SURFACE RATIO = 20% OPEN AREA

EXISTING SITE DATA

| | AREA (AC) | AREA (SF) | RATIO |
|---|---|---|---|
| PROJECT SITE | 1.00 | 43,558 | |
| BUILDING FLOOR AREA | 0.06 | 2,627 | 6.0% |
| PAVEMENT (ASP. & CONC.) | 0.50 | 21,843 | 50.1% |
| TOTAL IMPERVIOUS | 0.56 | 24,470 | 56.2% |
| LANDSCAPE/ OPEN SPACE | 0.44 | 19,088 | 43.8% |

PROPOSED SITE DATA

| | AREA (AC) | AREA (SF) | RATIO |
|---|---|---|---|
| PROJECT SITE | 1.00 | 43,558 | |
| BUILDING FLOOR AREA | 0.11 | 4,858 | 11.2% |
| PAVEMENT (ASP. & CONC.) | 0.59 | 25,648 | 58.9% |
| TOTAL IMPERVIOUS | 0.70 | 30,506 | 70.0% |
| LANDSCAPE/ OPEN SPACE | 0.30 | 13,052 | 30.0% |

NOTE:

CONTRACTOR TO COORDINATE WITH OWNER AND MEP PLANS FOR ANY EXTERIOR HEATED CONCRETE SLAB LOCATIONS & REQUIREMENTS.

NOTE:

KNOX BOX TO BE PROVIDED AT PRIMARY ENTRANCE PER LOCAL REQUIREMENTS. CONTRACTOR TO COORDINATE W/ BUILDING INSPECTOR/FIRE DEPARTMENT FOR SPECIFIC REQUIREMENTS.

PAVEMENT HATCH KEY:

- ASPHALT
- HEAVY DUTY CONCRETE
- DUMPSTER PAD CONCRETE
- SIDEWALK CONCRETE

*SEE SHEET C0.1 FOR SECTION REQUIREMENTS

CURB & GUTTER MARKING KEY:

- INVERTED CURB & GUTTER
- SHEDDING CURB & GUTTER

SITE PLAN KEYNOTES

| | |
|---|---|
| 3 | CONCRETE SIDEWALK (TYP.) |
| 5 | HEAVY DUTY CONCRETE (TYP.) |
| 7 | DUMPSTER PAD/APRON CONCRETE (TYP.) |
| 8 | CONCRETE STOOP (TYP.) SEE ARCH. PLANS FOR DETAILS. |
| 10 | FLUSH WALK (TYP.) |
| 11 | SIDEWALK RAMP, SEE SHEET C1.2. (TYP.) |
| 13 | 18" ROLL CURB, 3" CURB HEIGHT (TYP.) |
| 14 | 18" CURB & GUTTER (TYP.) |
| 15 | ROLL CURB/STANDARD CURB TRANSITION. (TYP.) |
| 16 | CURB TAPER (TYP.) |
| 17 | CURB CUT W/ 5" THICK CONCRETE PAD/FLUME WARPED TO MATCH CURB CUT (TYP.) |
| 19 | HANDICAP SIGN (TYP.) |
| 20 | HANDICAP STALL & STRIPING PER STATE CODES. |
| 21 | PRECAST CONCRETE WHEEL STOP PINNED TO PAVEMENT (9 TYP.) |
| 22 | EXISTING PYLON SIGN TO REMAIN AND BE RE-BRANDED. (DETAILS & APPROVAL BY SIGN VENDOR) |
| 23 | DUMPSTER/STORAGE ENCLOSURE. ROLL OUT DUMPSTERS REQUIRED FOR SERVICE. (SEE ARCH PLANS FOR DETAILS) |
| 24 | 6" CONCRETE BOLLARDS (SEE DETAIL) |
| 29 | TRAFFIC FLOW ARROWS. COLOR TO MATCH PARKING STALL STRIPING. |
| 30 | PAINT STRIPING (TYP). COLOR TO MATCH PARKING STALL STRIPING. |
| 32 | EXISTING DRIVEWAY ENTRANCES TO REMAIN IN PLACE (TYP.) |
| 33 | REPLACE EXISTING ASPHALT PAVEMENT PER LOCAL STANDARDS. MATCH EXISTING PAVEMENT SECTION. (TYP.) |
| 34 | REPLACE CONCRETE CURB AND GUTTER TO MATCH EXISTING. (TYP.) |
| 35 | CANOPY. SEE ARCH PLANS. (TYP.) |
| 36 | TAPER CURB TO FLUSH IN 3' (TYP.) |
| 37 | OUTDOOR VACUUM EQUIPMENT. CONTRACTOR TO COORDINATE FINAL PRODUCTS, DETAILS, ETC WITH OWNER/DIRECTOR OF PROJECTS. VERIFY CONCRETE SLAB REQUIREMENTS WITH OWNER & EQUIPMENT SUPPLIER PRIOR TO INSTALLATION. |
| 38 | ISLAND AND CANOPY TO BE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. CONTRACTOR TO VERIFY FINAL LOCATIONS, DETAILS, EQUIPMENT, ETC WITH OWNER AND EQUIPMENT SUPPLIERS PRIOR TO CONSTRUCTION. |
| 39 | BUG GATE (TYP.) CONTRACTOR TO VERIFY FINAL DETAILS AND REQUIREMENTS WITH OWNER AND EQUIPMENT SUPPLIER AS NEEDED. |
| 40 | 6' OF RAILING/GUARDRAIL. FINAL COLOR/STYLE/DETAIL BY OWNER. (TYP.) |
| 41 | PRIVATE UTILITY EASEMENTS TO BE COMPLETED BY OTHERS AS A SEPARATE DOCUMENT. OWNER TO COORDINATE AS NEEDED. SEE SHEET C1.3 FOR UTILITY SERVICE EXTENSIONS. |
| 42 | COLUMN (TYP.) COORDINATE FINAL LOCATIONS W/ CANOPY SUPPLIER DRAWINGS. |
| 43 | 157 LF OF VERSA LOK OR EQUIVALENT LANDSCAPE BLOCK RETAINING WALL. SEE SHEET C1.2 FOR WALL HEIGHTS. FINAL DESIGN DETAILS AND SPECIFICATIONS BY WALL SUPPLIER. CONTRACTOR TO COORDINATE DETAILS W/ WALL SUPPLIER & OWNER AS NEEDED. |
| 44 | EXISTING MONUMENT SIGN TO REMAIN AND BE RE-BRANDED. (DETAILS & APPROVAL BY SIGN VENDOR.) |

NORTH

1"= 20' SCALE 20' 0 20' 40' FEET

CIVIL SITE PLAN

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED CAR WASH FOR:
**CREW CARWASH**
N96 W17500 COUNTY LINE RD • GERMANTOWN, WI 53022

PROFESSIONAL SEAL

PRELIMINARY DATES
FEB. 12, 2024

NOT FOR CONSTRUCTION

JOB NUMBER
230022600

SHEET NUMBER
C1.1

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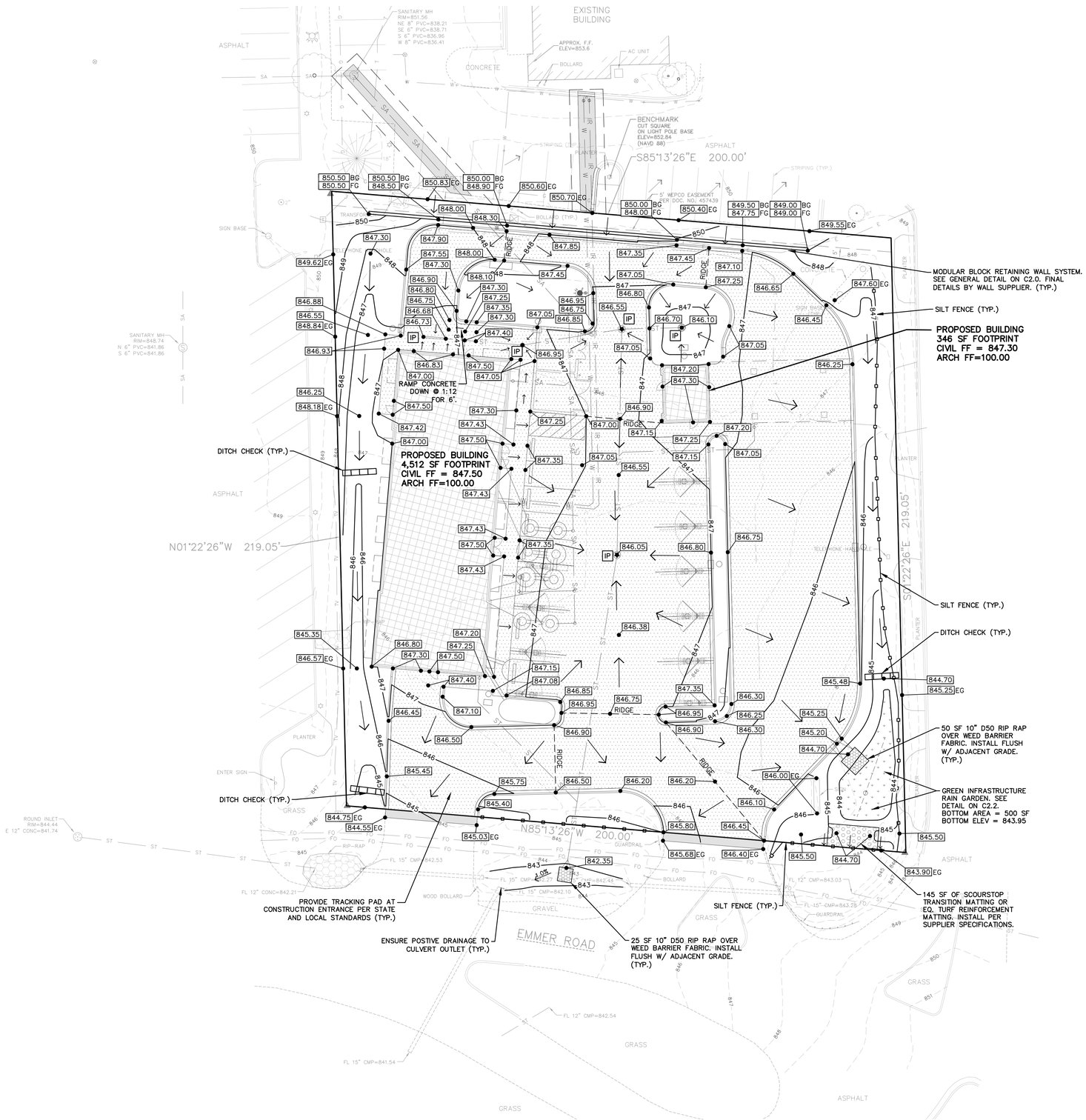


## CIVIL GRADING AND EROSION CONTROL PLAN

SPECIFICATION NOTE:
SEE SHEET C0.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS

NOTES:

1. HANDICAP STALL AND ACCESS AISLES SHALL NOT EXCEED A SLOPE OF 1.50% IN ANY DIRECTION. HANDICAP STALL & ACCESS AISLES SHALL CONFORM TO ADA REQUIREMENTS (CURRENT EDITION)
2. ALL SIDEWALKS SHALL NOT EXCEED A MAXIMUM CROSS SLOPE OF 1.50% AND RUNNING SLOPE OF 4.50% UNLESS OTHERWISE SPECIFIED.

IP

INLET PROTECTION NOTE:

CONTRACTOR SHALL PROVIDE TEMPORARY INLET PROTECTION FOR ALL CURB INLETS & CATCH BASINS ONSITE & OFFSITE IMMEDIATELY DOWNSTREAM OF THE PROJECT SITE PER LOCAL CODE.

STABILIZED CONSTRUCTION ENTRANCE NOTE:

CONTRACTOR SHALL PROVIDE STABILIZED CONSTRUCTION ENTRANCE AT CONSTRUCTION ENTRANCE FOR PROPOSED IMPROVEMENTS AS REQUIRED PER CODE.

CONCRETE WASHOUT NOTE:

CONTRACTOR SHALL PROVIDE CONCRETE WASHOUT AS REQUIRED PER CODE. FINAL LOCATION TBD BY CONTRACTOR.

SPOT ELEVATION NOTE:

ALL SPOT ELEVATIONS NOTED ON THE PLAN REPRESENT FLOW LINE OF CURB UNLESS SPECIFICALLY NOTED OTHERWISE.

GRADING NOTE:

CONTRACTOR SHALL COORDINATE PROPOSED SITE GRADING AT PERIMETER OF BUILDING AND AT TUNNEL ENTRANCE/EXIT WITH ARCH/STRUCT PLANS AS NEEDED.

EROSION CONTROL/SWM COST ESTIMATE
(FOR REFERENCE ONLY)

LAND DISTURBANCE APPROX. 0.99 AC

Itemized cost of Erosion Control:

Tracking Pad = $1500ea. x 1 = $1500
Inlet Protection = $75 x 5 = $375
Silt Fence = 325' x $2/ lin. ft = $650
Ditch Check = 3 x $100ea. = $300

Total Erosion Control Cost Estimate = $2,825

Itemized cost of Storm Water Management:

Rain Garden/Spillway = $10,000ea. x 1 = $10,000

Total Storm Water Cost = $10,000

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED CAR WASH FOR:
**CREW CARWASH**
N96 W17500 COUNTY LINE RD • GERMANTOWN, WI 53022

PROFESSIONAL SEAL

PRELIMINARY DATES
FEB. 12, 2024

NOT FOR CONSTRUCTION

JOB NUMBER
230022600

SHEET NUMBER
**C1.2**

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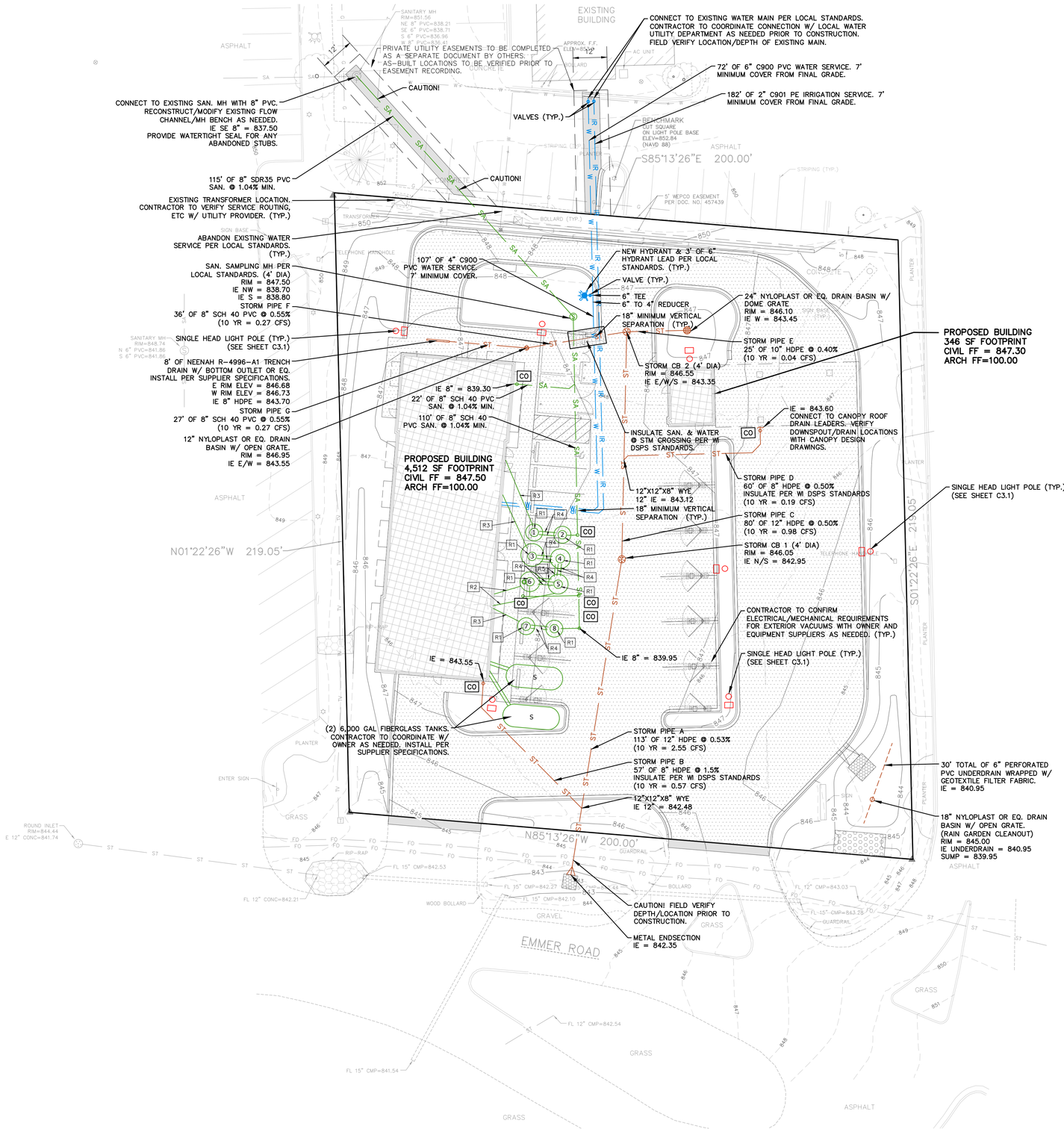


SPECIFICATION NOTE:
SEE SHEET C0.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS

CLEANOUT NOTE:

CO = DENOTES LOCATIONS WHERE CONTRACTOR SHALL INSTALL CLEANOUTS, SEE C0.1 FOR SPECIFICATION.

UTILITY NOTE:

CONTRACTOR TO VERIFY FINAL SIZE, DESIGN, AND LOCATIONS OF ALL EXTERIOR SITE UTILITIES WITH INTERNAL MEP DESIGN AND OWNER AS NEEDED.

UTILITY NOTE:

CONTRACTOR TO ENSURE ADEQUATE SEPARATION IS PROVIDED BETWEEN DOMESTIC WATER SERVICE AND SANITARY/STORM SERVICE PER WI DSPS PLUMBING CODE STANDARDS.

DRY UTILITY SERVICE NOTES:

CONTRACTOR SHALL COORDINATE DRY UTILITY SERVICE ROUTING FOR ELECTRIC, GAS, ETC WITH APPLICABLE SERVICE PROVIDERS AS NEEDED

WATER RECLAMATION SYSTEM NOTES (R):

R1. ACCESS RISER AND OPERATING 38" DIAMETER STEEL PLAT LID, MODEL PER OWNER SPECIFICATIONS. STRUCTURE TOP TO HAVE A 36" DIAMETER OPENING CASTING. LID TO BE ALIGNED WITH LADDER RUNGS IN MANHOLE.

R2. 8" PVC, SCHEDULE 40, TO RECLAIM PIT.

R3. 8" PVC, SCHEDULE 80 CONVEYOR TRENCH DRAIN. CONVEYOR TRENCH DRAINS MUST BE RUN IN STRAIGHT LINES WITH NO TURNS.

R4. 8" PVC CONNECTOR TO SLEEVES, REFER TO TABLE FOR INVERT ELEVATIONS.

R5. 4" PVC CONNECTOR SLEEVES.

GENERAL SYSTEM NOTES:

- CONTRACTOR SHALL VERIFY WATER RECLAMATION SYSTEM LAYOUT, COMPONENTS, INVERT ELEVATIONS, AND PIPE ROUTING WITH OWNER AND INTERNAL PLUMBING DESIGNER PRIOR TO ORDERING MATERIALS.
- CONTRACTOR SHALL READ AND REVIEW GEOTECHNICAL REPORT PREPARED FOR THE SITE. IF HIGH GROUNDWATER IS NOTED OR ENCOUNTERED DURING CONSTRUCTION, CONTRACTOR SHALL REVIEW WITH TANK SUPPLIER & OWNER TO DETERMINE IF ANTI-BUOYANCY ACTIONS SHALL BE TAKEN.
- CONTRACTOR SHALL INSULATE RECLAMATION SYSTEM CONNECTOR PIPES W/ POLYSTYRENE INSULATION BOARDS OR OTHER APPROVED METHOD PER WI DSPS STANDARDS.

WATER RECLAIM SYSTEM (GRIT PIT) STRUCTURE TABLE
FFE = 847.50

| STRUCTURE NUMBER | STRUCTURE DIAMETER (IN) | RIM ELEV. | INVERT IN | INVERT OUT | SUMP | SUBGRADE | PROVIDED STORAGE (CU FT) | PROVIDED STORAGE (US GAL) |
|---|---|---|---|---|---|---|---|---|
| 1 | 60 | 847.25 | 842.00 | 841.75 | 833.67 | 833.17 | 137.40 | 1028 |
| 2 | 60 | 846.87 | 841.75 | 841.50 | 833.67 | 833.17 | 132.54 | 991 |
| 3 | 84 | 847.22 | 842.00 | 841.75 | 833.67 | 833.17 | 298.25 | 2230 |
| 4 | 72 | 846.90 | 841.75 | 841.50 | 833.67 | 833.17 | 212.06 | 1586 |
| 5 | 72 | 846.87 | 841.50 | 841.25 | 833.67 | 833.17 | 205.00 | 1533 |
| 6 | 72 | 847.25 | 841.25 | 841.00 | 833.67 | 833.17 | 197.92 | 1480 |
| 7 | 60 | 847.13 | 842.00 | 841.75 | 833.67 | 833.17 | 142.35 | 1065 |
| 8 | 60 | 846.83 | 841.75 | 841.50 | 833.67 | 833.17 | 137.40 | 1028 |

NORTH

1"= 20' SCALE 20' 0 20' 40' FEET

CIVIL UTILITY PLAN

EXCEL
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PROJECT INFORMATION

PROPOSED CAR WASH FOR:
**CREW CARWASH**
N96 W17500 COUNTY LINE RD • GERMANTOWN, WI 53022

PROFESSIONAL SEAL

PRELIMINARY DATES
FEB. 12, 2024

NOT FOR CONSTRUCTION

JOB NUMBER
230022600

SHEET NUMBER
**C1.3**

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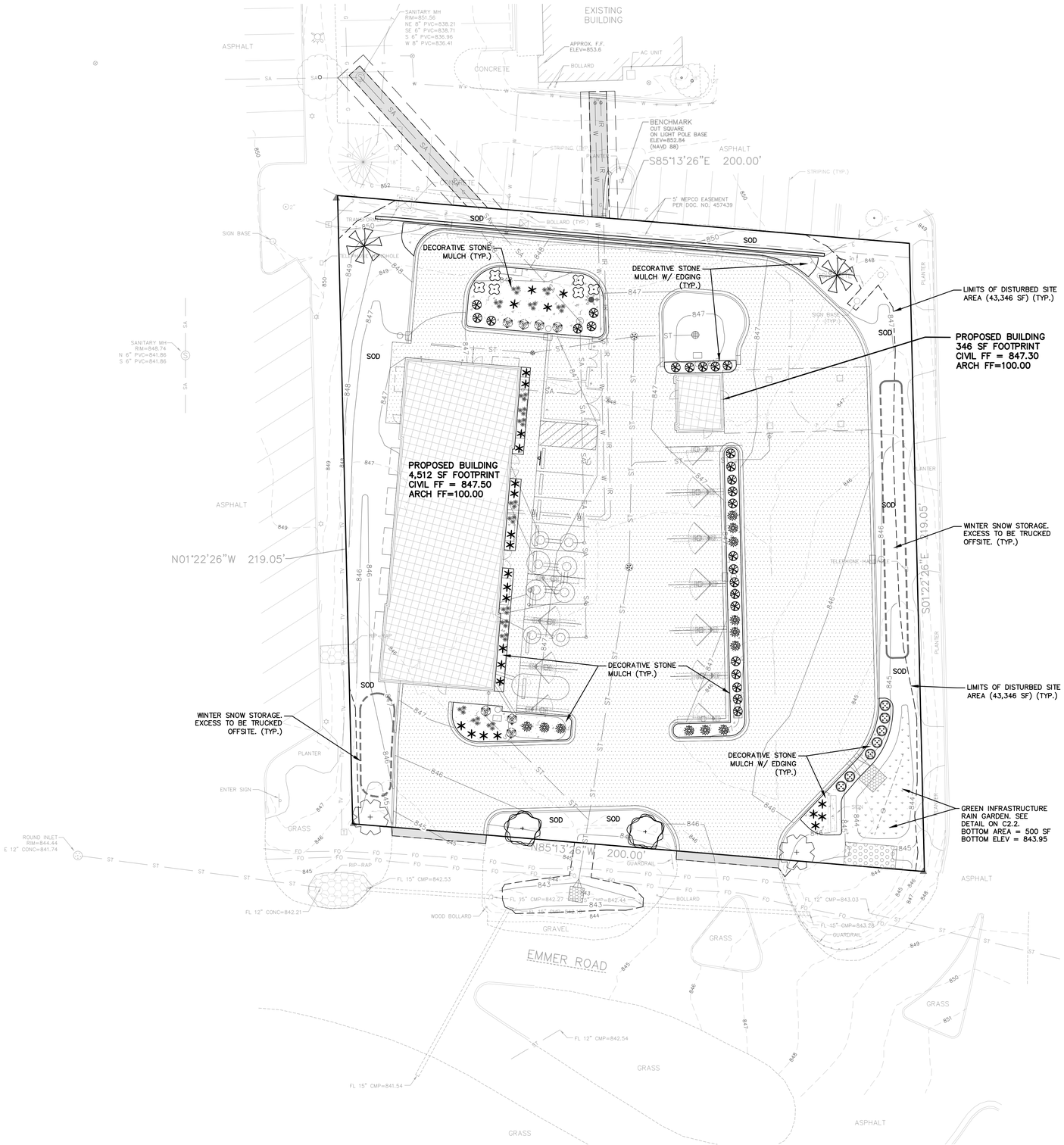



SPECIFICATION NOTE:
SEE SHEET C0.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS

## LANDSCAPING PLANTING SCHEDULE

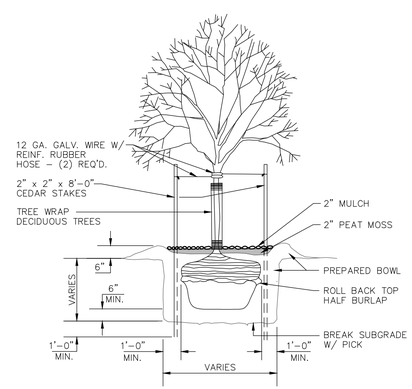
| SYMBOL | COMMON NAME | BOTANICAL NAME | PLANTED SIZE | QUANTITY |
|---|---|---|---|---|
| DECIDUOUS TREES | | | | |
| | Princeton Sentry Ginkgo | Ginkgo biloba | 3" | 2 |
| | Parkway Maple | Acer platanoides | 3" | 2 |
| | Jack Flowering Pear (Ornamental) | Pyrus calleryana "Jaczam" | 1.5" | 2 |
| DECIDUOUS SHRUBS | | | | |
| | Gro-Low Fragrant Sumac | Rhus aromatica 'Gro Low' | 18" | 6 |
| | Goldmound Spirea | Spiraea x bumalda 'Goldmound' | 15"-18" | 12 |
| | Weigela Carnaval | Weigela Florida 'courtalor' | 24" | 7 |
| EVERGREEN SHRUBS | | | | |
| | Taunton Yew | Tauntonii | 24" | 26 |
| | Emerald Green Arborvitae | Thuja occidentalis 'Emerald Green' | 36" | 7 |
| PERENNIALS | | | | |
| | Daylilies 'Stella de Oro' | Hemerocallis 'Stella de Oro' | 1 gal pot | 26 |
| | Karl Foerster Reed Grass | Clamagrostis x acutiflora 'Karl Foerster' | 1 gal pot | 16 |

## LANDSCAPING CALCULATIONS

| ZONE | REQ. PLANTS | PLANTS PROVIDED |
|---|---|---|
| STREET | 1 PER 50 LF FRONTAGE<br>200 LF FRONTAGE = 4 TREES | 4 PROVIDED |
| PARKING | 1 TREE PER 10 SPACES<br>15 SPACES = 2 TREES | 2 PROVIDED |
| TOTAL | 6 TOTAL TREES REQ. | 6 TOTAL TREES PROVIDED |

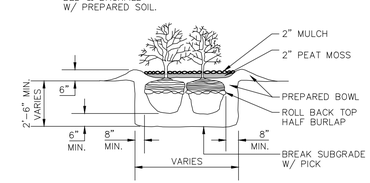
IRRIGATION NOTE: PROVIDE IRRIGATION FOR ALL LAWN/LANDSCAPED AREAS IN ACCORDANCE WITH PLAN SPECIFICATIONS ON SHEET C0.1. DESIGN-BUILD LANDSCAPE/IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL DESIGN, LAYOUT, AND INSTALLATION. COORDINATE FINAL LAYOUT WITH OWNER/GC AS NEEDED.

NOTE: LANDSCAPE CONTRACTOR SHALL REVIEW FINAL PLANTING LOCATIONS AND SPECIES WITH OWNER PRIOR TO INSTALLATION.




TREE PLANTING DETAIL
NO SCALE

NOTE:
FOR MASS PLANTINGS EXCAVATE ENTIRE BED & BACKFILL W/ PREPARED SOIL.




SHRUB PLANTING DETAIL
NO SCALE

NORTH
1" = 20'
20' 0 20' 40'
SCALE FEET

CIVIL LANDSCAPE AND RESTORATION PLAN

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100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

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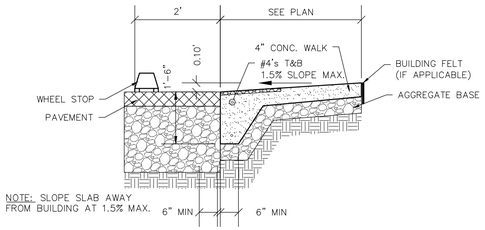
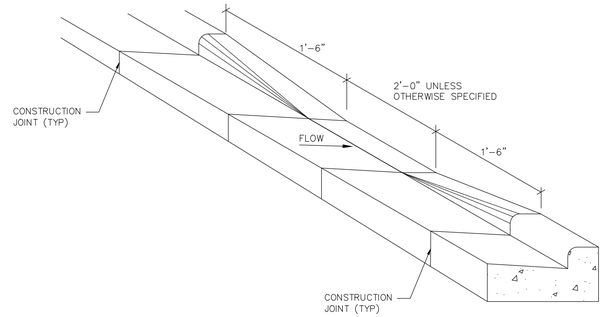
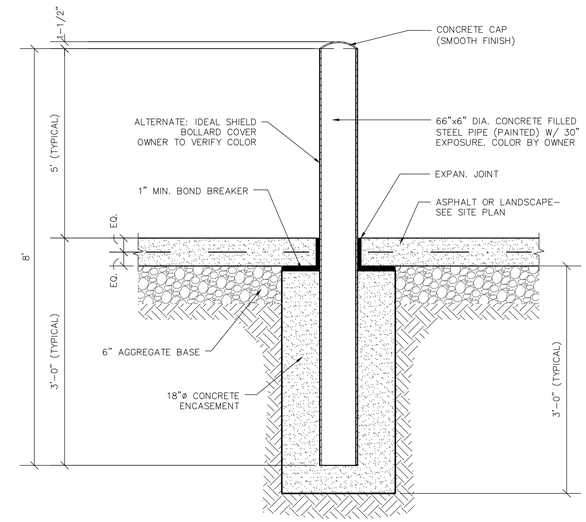


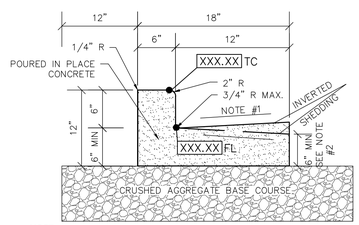

## FLUSH WALK DETAIL
NO SCALE




## CURB CUT DETAIL
NO SCALE



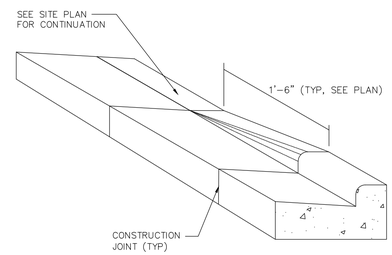

## 6" PIPE BOLLARD DETAIL
NO SCALE



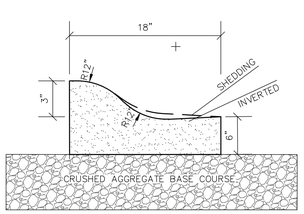

NOTE:

1. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MIN. GUTTER THICKNESS IS MAINTAINED.
3. SEE SITE PLAN & GRADING PLAN FOR INVERTED & SHEDDING CURB LOCATIONS

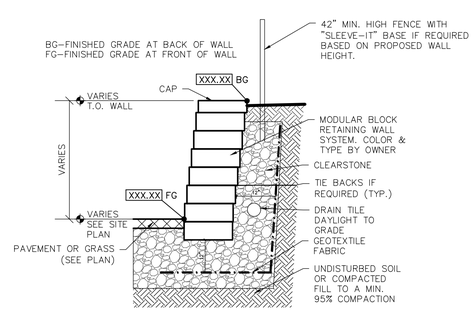
## 18" CONCRETE CURB & GUTTER DETAIL
NO SCALE




## CURB TAPER DETAIL
NO SCALE



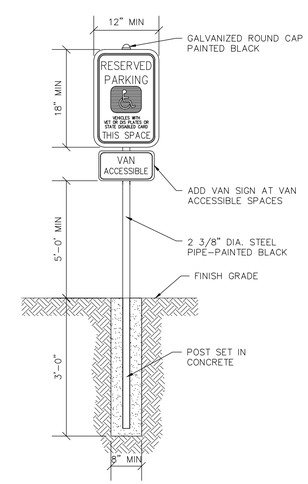

## 18" ROLLED CURB DETAIL
NO SCALE




NOTE:

THIS DETAIL IS INFORMATIONAL ONLY AND IS NOT FOR CONSTRUCTION PURPOSES. THE WALL MANUFACTURER/SUPPLIER IS RESPONSIBLE FOR FINAL DESIGN AND CONSTRUCTION DETAILS.

## RETAINING WALL DETAIL
NO SCALE




## HANDICAP SIGNAGE WITH CONCRETE BASE DETAIL
NO SCALE

CIVIL DETAILS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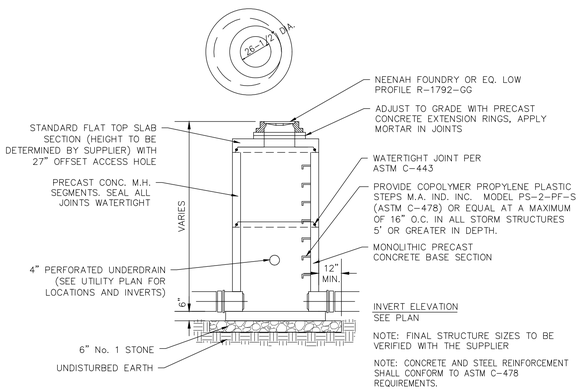
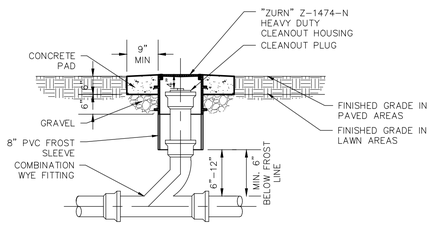
SPECIFICATIONS AND REQUIREMENTS




## STORM CATCH BASIN DETAIL

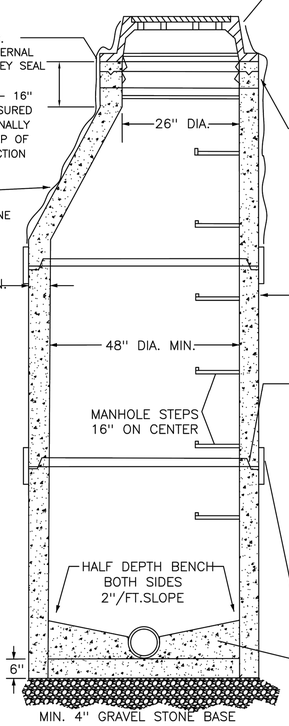
NO SCALE




## CLEANOUT TO GRADE DETAIL

NO SCALE

MAXIMUM TOTAL CHIMNEY HEIGHT, EXCLUDING MANHOLE FRAME, SHALL NOT EXCEED 16 INCHES AND BE A MINIMUM OF 2". ALL CHIMNEY'S SHALL BE BUILT ACCORDING TO THE SAN. MH. CHIMNEY ASSEMBLY DETAILS. ASSEMBLY DIFFERS FOR MH. IN PAVEMENT OR TURF.




FRAME AND COVER IN PAVED AREAS:
NEENAH R-1661 W/SELF SEALING COVER & CONCEALED PICKHOLES.
ALL MANHOLES SHALL REQUIRE A 2" PAVING RING, NEENAH R-1979 SERIES REF. # 1661-7158, SET TO 1/4" BELOW FINISH PAVEMENT GRADE.

IN TURF AREAS:
NEENAH R-1661 BOLT DOWN GASKETED SELF-SEALING LID & 2 CONCEALED PICKHOLES. FRAMES SHALL BE BOLTED TO THE CHIMNEY W/1/2" DIA. STAINLESS STEEL ANCHOR BOLTS EXTENDING 4" INTO CHIMNEY

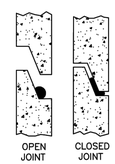
ALL CHIMNEY'S SHALL BE BUILT USING VILLAGE SPECIFICATIONS. RINGS SHALL BE INSTALLED PER MANUFACTURES INSTRUCTIONS.

NOTE:

ALL SANITARY SEWER MANHOLES AND ALL SAMPLING MANHOLES SHALL HAVE A MINIMUM PITCH OF 0.10' THRU THE TROUGH, FROM END TO END, UNLESS OTHERWISE DIRECTED BY THE VILLAGE ENGINEER.

ALL SANITARY SAMPLING MANHOLES SHALL BE BUILT USING A PRECAST CONCRETE CONE SECTION. CONCRETE FLAT TOP SECTIONS SHALL NOT BE ALLOWED UNLESS APPROVED BY THE VILLAGE ENGINEER

PRECAST CONCRETE MANHOLE BARREL SECTIONS SHALL BE JOINED WITH AN BUTYL RUBBER SEALANT OR APPROVED EQUAL.




TYPICAL BUTYL SEALANT INSTALLATION

EXTERNAL JOINT SEAL SHALL BE MACWRAP EXTERNAL JOINT SEALERS (TYP.)

THE ANNULAR SPACE BETWEEN THE SPRING LINE OF THE PIPE AND MANHOLE WALL SHALL BE FILLED WITH CONCRETE.

SPRAY EPOXY COATINGS

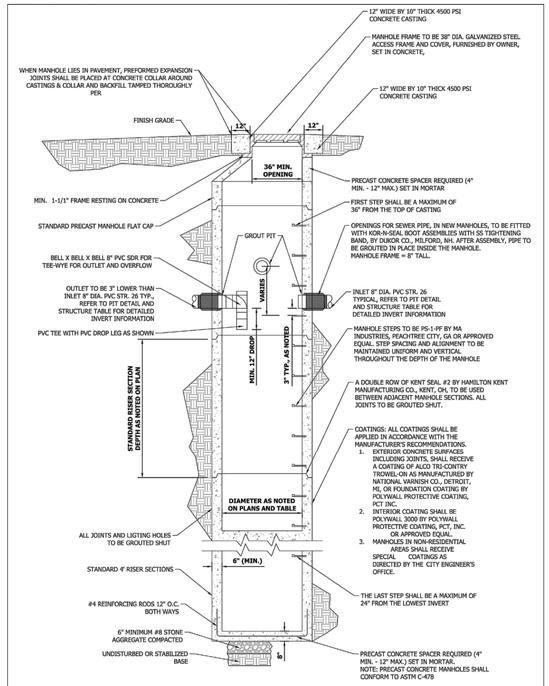
MH EXTERIOR: 2 COATS (BLACK) OF AMERON INTERNATIONAL, AMERCOAT 78 HB AT 8–10 MILS EA.
MH INTERIOR: 2 COATS (WHITE) OF PERMITE PCS–9043 TYPE II PERMOX PIPE GLAZE AT 20 MILS EA.
COATINGS SHALL BE APPLIED BY SUPPLIERS AT THE PLANT.

REVISED DATE: 10/11/2019 FJR

ENGINEERING DEPARTMENT
Village of Germantown ...Willkommen

## STANDARD SANITARY MANHOLE & SAMPLING MANHOLE DETAIL

NOT TO SCALE




## WATER RECLAIM SYSTEM GRIT PIT MANHOLE

NOT TO SCALE

CIVIL DETAILS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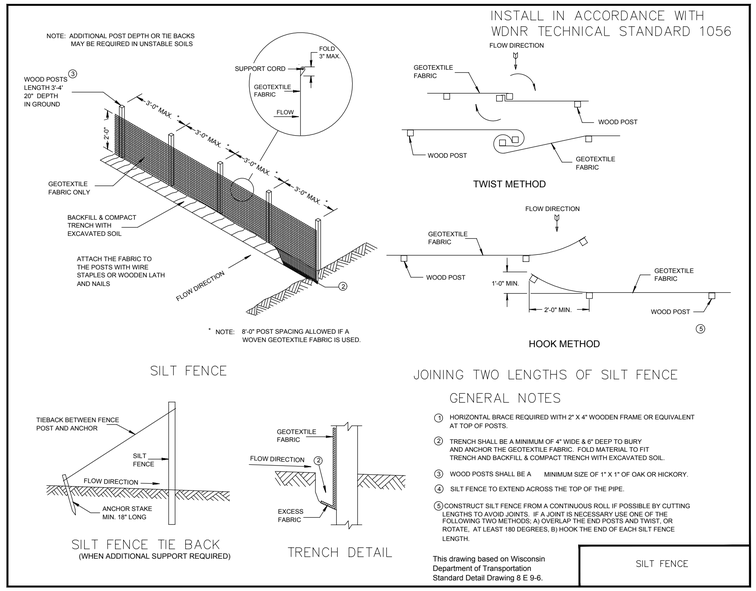
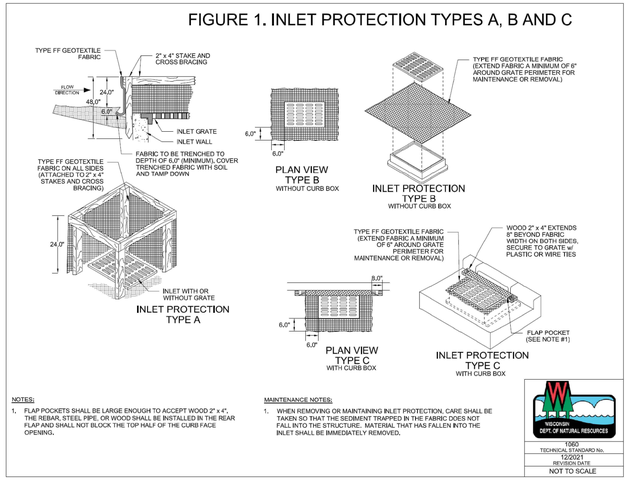


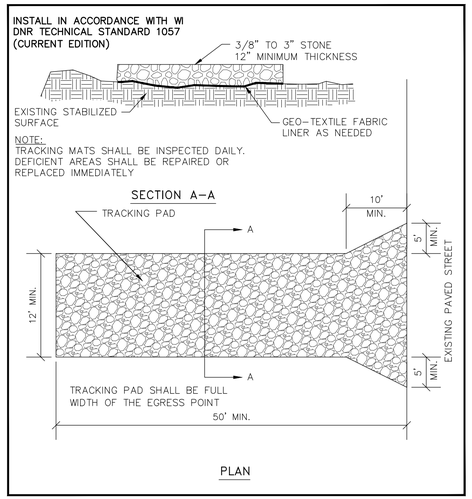

## SILT FENCE – INSTALLATION DETAIL

NO SCALE



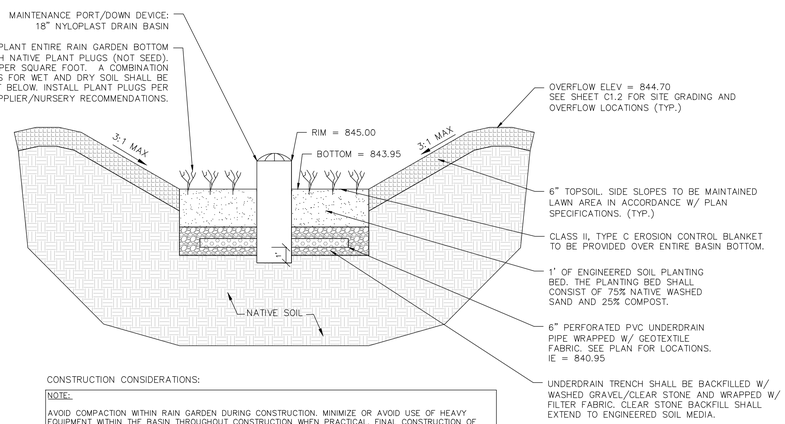

## INLET PROTECTION DETAIL

NO SCALE




## TRACKPAD DETAILS

NO SCALE




CONSTRUCTION CONSIDERATIONS:

NOTE:

AVOID COMPACTION WITHIN RAIN GARDEN DURING CONSTRUCTION. MINIMIZE OR AVOID USE OF HEAVY EQUIPMENT WITHIN THE BASIN THROUGHOUT CONSTRUCTION WHEN PRACTICAL. FINAL CONSTRUCTION OF THE RAIN GARDEN SHALL TAKE PLACE ONCE CONTRIBUTING DRAINAGE AREA IS STABILIZED TO AVOID SILTATION. REMOVE ANY SEDIMENT DEPOSITS FOLLOWING CONSTRUCTION AS NEEDED. IT IS RECOMMENDED THAT THE BOTTOM OF THE BASIN BE SCARIFIED AND RAKED TO PROMOTE PROPER INFILTRATION.

ENGINEERED SOIL:

THE NATIVE SAND SHALL BE WASHED USDA SAND, 0.02 TO 0.04 INCHES IN DIAMETER. THE COMPOST COMPONENT SHALL MEET THE REQUIREMENTS OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES SPECIFICATION S100. ENGINEERED SOIL MIX SHALL HAVE A PH BETWEEN 5.5 AND 8.0.

VEGETATION ESTABLISHMENT:

NATIVE PLANTINGS SHALL BE ESTABLISHED AT THE BOTTOM OF THE RAIN GARDEN BASIN. VEGETATION SHALL BE ESTABLISHED WITH NATIVE PLANT PLUGS. CLASS II TYPE C EROSION CONTROL BLANKET IS REQUIRED AT THE BOTTOM OF THE BASIN TO PREVENT WASHOUTS AND ENSURE PROPER ESTABLISHMENT. FOR NATIVE PLANT PLUGS, INSTALL EROSION CONTROL BLANKET PRIOR TO PLANTING AND CUT THROUGH TO INSTALL PLANT PLUGS AS NEEDED. FOLLOW WDNR TECH STANDARD 1009 FOR ADDITIONAL CONSTRUCTION RECOMMENDATIONS. LANDSCAPE CONTRACTOR SHALL COORDINATE FINAL PLANTINGS/ESTABLISHMENT METHODS WITH SUPPLIER. REGULAR WATERING SHALL OCCUR TO PROMOTE PROPER ESTABLISHMENT OF THE NATIVE VEGETATION.

RECOMMENDED PLANT LIST:

A COMBINATION OF PLANTS SUITED FOR WET AND DRY SOIL IS RECOMMENDED TO ENSURE PROPER ESTABLISHMENT. THE LIST BELOW IS PROVIDED AS A REFERENCE FOR POTENTIAL SPECIES TO INCLUDE. FINAL SELECTIONS BY LANDSCAPER/SUPPLIER.

DRY SOIL: BUTTERFLY FLOWER, PURPLE PRAIRIE CLOVER, BEE BALM, LITTLE BLUESTEM SPIDERWORT, WHITE FALSE INDIGO, VIRGINIA WATERLEAF, SWEET BLACK-EYED SUSAN, BIG BLUSTEM, CUP PLANT, COMMON IRONWEED.

WET SOIL: GIANT HISSOP, CANADA ANEMONE, MARSH MILKWEED, NEW ENGLAND ASTER, TURTLEHEAD, JOE-PYE WEED, BONESET, BLUEFLAG IRIS, GREAT BLUE LOBELIA, SWITCHGRASS OBEDIENT PLANT, MOUNTAIN MINT, TALL MEADOW RUE, CULVER'S ROOT, GOLDEN ALEXANDER.

## RAIN GARDEN DETAIL

NO SCALE

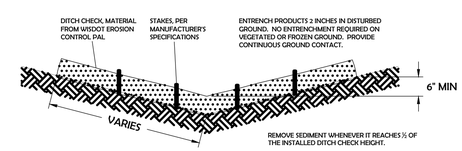
## CONSTRUCTION SEQUENCE

| PHASE | TYPE OF ACTION |
|---|---|
| 1. PRE-CONSTRUCTION ACTION | 1. CONTRACTOR TO CALL DIGGERS HOTLINE AT A MINIMUM OF 3 DAYS PRIOR TO CONSTRUCTION. |
| | 2. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF ALL UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF DISCREPANCIES. |
| | 3. PLACE ALL SILT FENCE AND INLET PROTECTION. |
| | 4. CONSTRUCT TRACKING STONE ENTRANCES AND ANY TEMPORARY CONSTRUCTION ROADWAYS AS NEEDED. |
| | 5. CONSTRUCT PERMANENT STORMWATER CONVEYANCE SYSTEMS. |
| | 6. CONSTRUCT ANY TEMPORARY STORMWATER CONVEYANCE SYSTEMS AS NEEDED. |
| | 7. STABILIZE ALL TEMPORARY AND PERMANENT EROSION CONTROL AND STORMWATER CONVEYANCE SYSTEMS BEFORE TOPSOIL CAN BE STRIPPED. |
| 2. CONSTRUCTION ACTION | 1. SITE DEMOLITION AS REQUIRED. |
| | 2. STRIP AND RELOCATE TOPSOIL TO THE DESIGNATED TOPSOIL STOCKPILE. FINAL LOCATION BY CONTRACTOR/OWNER. PROVIDE PERIMETER SILT FENCE UNTIL STABILIZED. |
| | 3. BEGIN MASS EARTH WORK FOR THE BUILDING PAD AND PAVEMENT AREAS. |
| | 4. CONSTRUCT ANY REMAINING STORMWATER CONVEYANCE SYSTEMS, AND INSTALL ALL OTHER UTILITIES ON SITE. |
| | 5. DIG AND POUR ALL BUILDING FOOTINGS. |
| | 6. PLACE GRAVEL FOR ALL PROPOSED PAVEMENT AREAS. |
| | 7. TOPSOIL, SEED, AND MULCH ALL DISTURBED AREAS OUTSIDE THE BUILDING AND PROPOSED PAVEMENT AREAS. |
| | 8. CONSTRUCT BUILDING. |
| | 9. PAVE DRIVEWAYS AND PARKING AREAS. |
| | 10. TOPSOIL, SEED, AND MULCH ALL OTHER DISTURBED AREAS. PLACE EROSION MATTING AND RIP RAP AS NEEDED. |
| | 11. ONCE SITE IS STABILIZED, FINALIZE CONSTRUCTION OF RAIN GARDEN. |
| 3. POST CONSTRUCTION ACTION | 1. CONTRACTOR TO REMOVE TEMPORARY EROSION CONTROL MEASURES UPON SITE STABILIZATION. |
| | 2. SEE THE POST CONSTRUCTION MAINTENANCE PLAN FOR PERMANENT STORMWATER MANAGEMENT SYSTEMS. |

**CONTRACTOR TO FOLLOW THE EROSION CONTROL SPECIFICATIONS FOR CONSTRUCTION EROSION CONTROL INSPECTION AND MAINTENANCE.**

## DITCH CHECK DETAIL

### LOG-TYPE DITCH CHECK

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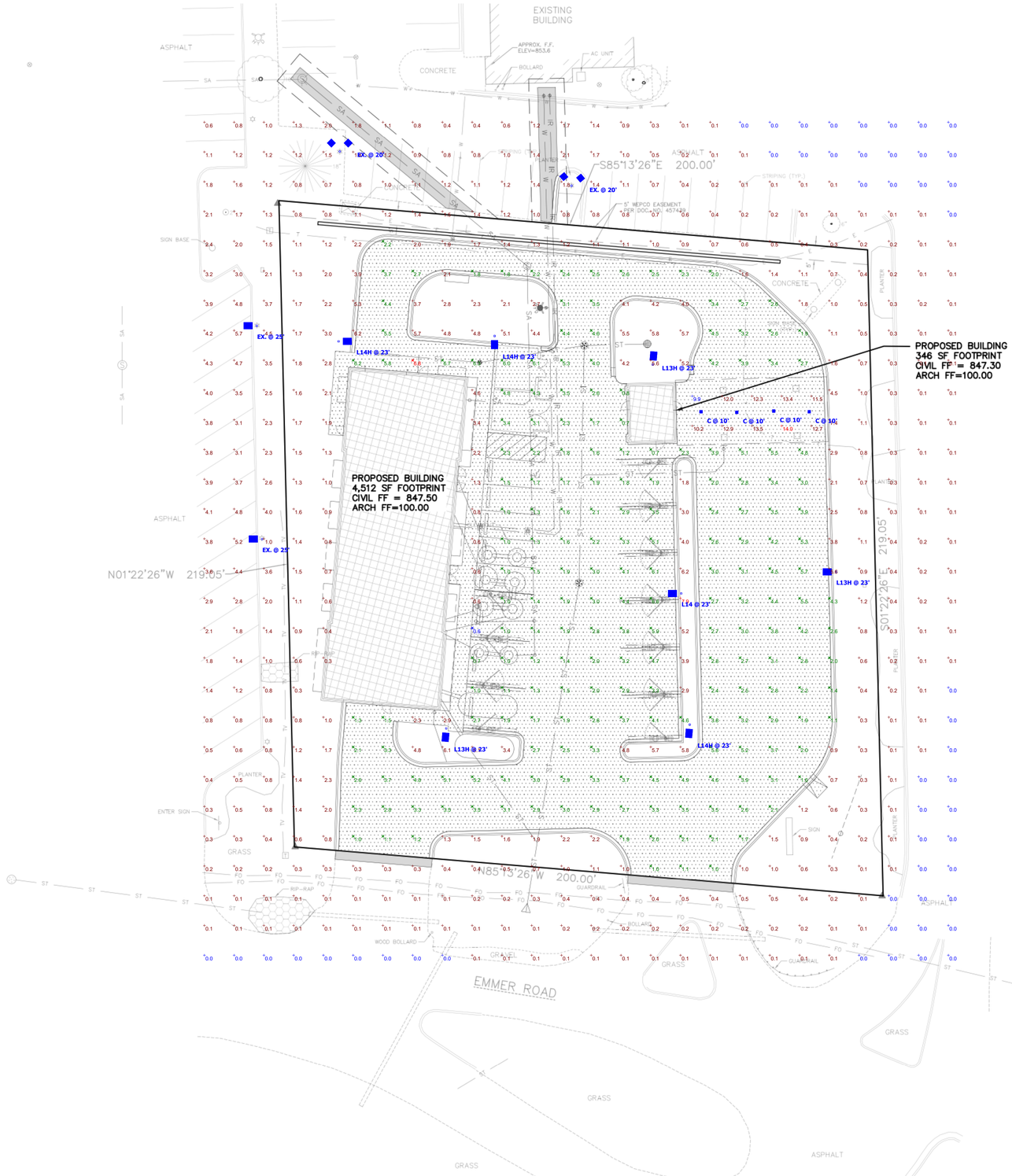


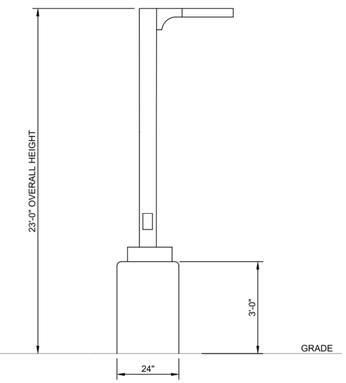


# LIGHT POLE DETAIL

NO SCALE

## OSQ Series

OSQ™ LED Area/Flood Luminaire featuring Patented NanoComfort™ Technology – Version C

Rev. Date: V7 11/01/2023

### Product Description

The OSQ™ Area/Flood luminaire blends extreme optical control, advanced thermal management and modern, clean aesthetics. Built to last, the housing is rugged cast aluminum with an integral, weatherlight LED driver compartment. Versatile mounting configurations offer simple installation. Its slim, low-profile design minimizes wind load requirements and blends seamlessly into the site providing even, quality illumination. Medium is suitable upgrade for HID applications up to 400 Watts. Large is suitable upgrade for HID applications up to 1000 Watts. Extra Large is suitable upgrade for HID applications up to multiple 1000 Watts.

**Applications:** Parking lots, walkways, campuses, car dealerships, office complexes, pickleball courts, high-mast and internal roadways

### Performance Summary

Utilizes Patented NanoComfort™ Technology

Utilizes Cree TrueWhite® Technology on 5000K Luminaires

Assembled in the USA by Cree Lighting from US and imported parts

**Initial Delivered Lumens:** 4,000 - 85,000

**Efficacy:** Up to 171 LPW

**CRI:** Minimum 70 CRI (3000K, 4000K & 5700K), 90 CRI (5000K)

**CCT:** 3000K, 4000K, 5000K, 5700K

**Limited Warranty¹:** 10 years for luminaire, 10 years for ColorFast DeltaGuard® finish; 5 years for BML sensor; up to 5 years for Synapse® accessories; 1 year for luminaire accessories

¹See https://creelighting.com/resources/warranty/luminaire-warranty for warranty terms. For Synapse accessories, consult Synapse spec sheets for details on warranty terms.

### Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately:
Example: **Mount:** OSQ-WL-C-AA-BK + **Luminaire:** OSQM-C-UL-30K7-2M-UL-MW-BK

**Mount (Luminaire must be ordered separately)***

OSQ-

| Medium/Large Mounts | Extra Large Mounts | Color Options: |
|---|---|---|
| **OSQ-WL-C-AA** Adjustable Arm<br>**OSQ-WL-C-DA** Direct Arm<br>**OSQ-WL-C-TM** Trunnion Mount | **OSQ-X-C-AA** Adjustable Arm<br>**OSQ-X-C-DA** Direct Arm | **SV** Silver **BZ** Bronze<br>**BK** Black **WH** White |

*Mounts include mounting pole gaskets, EMI, and pole configuration suitability data beginning on page 12.

**Luminaire (Mount must be ordered separately)**

OSQ

| Family | Size | Series | Lumen Package¹ | CCT / CRI | Optic | Voltage | Mount | Color Options | Controls* | Options |
|---|---|---|---|---|---|---|---|---|---|---|
| OSQ | M Medium Large X Extra Large | C | **Medium Lumens:** 4K 4,000 Lumens, 6K 6,000 Lumens, 8K 8,000 Lumens, 9K 9,000 Lumens, 11K 11,000 Lumens, 14K 14,000 Lumens, 15K 15,000 Lumens<br>**Large Lumens:** 20L 20,000 Lumens, 25L 25,000 Lumens, 30L 30,000 Lumens, 35L 35,000 Lumens, 40L 40,000 Lumens<br>**Extra Large Lumens:** 50L 50,000 Lumens, 60L 60,000 Lumens, 70L 70,000 Lumens, 80L 80,000 Lumens | **30K3** 3000K, 70 CRI<br>**40K3** 4000K, 70 CRI<br>**50K3** 5000K, 70 CRI<br>**57K3** 5700K, 70 CRI<br>**30K7** 3000K, 90 CRI<br>**40K7** 4000K, 90 CRI<br>**50K7** 5000K, 90 CRI<br>**57K7** 5700K, 90 CRI | **DF** Diffuse Lambertian (Frosted Lens)<br>**LL** Lambertian (Clear Lens) | **Asymmetric:**<br>**2M*** Type II Mid-Left Forward Throw (Factory Installed Backlight Shield Available with all lumen packages except 85L)<br>**2F*** Type II Mid-Left Forward Throw (Factory Installed Backlight Shield Available with all lumen packages except 85L)<br>**3M*** Type III Mid-Left Forward Throw<br>**3F*** Type III Mid-Left Forward Throw (Factory Installed Backlight Shield Available with all lumen packages except 85L)<br>**4M*** Type IV Mid-Left Forward Throw<br>**4F*** Type IV Mid-Left Forward Throw (Factory Installed Backlight Shield Available with all lumen packages except 85L)<br>**Symmetric:**<br>**5M** Type V Mid-Narrow<br>**5F** Type V Wide-Narrow | **UL** 120-277V, 50/60Hz<br>**HV** 347-480V, 50/60Hz | **2M** Mount<br>**2F** Mount | **BK** Black<br>**BZ** Bronze<br>**SV** Silver<br>**WH** White | **BML** **Bluetooth® Technology Enabled Multi-Level Sensor**<br>- Utilizes a smartsensor smart sensor platform<br>- Up to 40' mounting height (dependent on lumen package and ambient temperature)<br>- Factory installed in luminaire, ready-pair-and-play<br>- Not available with 2F optics<br>**NLTAIR2 Node Equipped**<br>- Not available with 5F optic<br>**SVF Single Voltage Enabled Multi-Level Sensor**<br>- Utilizes a multifunction sensor<br>- Not available with 2F optics<br>- Refer to dlc.lighting.com/ for details<br>- 8' 20' sensor zone installed on luminaire, ready-pair-and-play<br>- Factory installed in luminaire and included<br>- Not available with other controls<br>- Not available with 2F option<br>**DT-Field Adjustable Output w/TCM Dimming**<br>- Offers full range adjustability<br>- Refer to page 3 for power and lumen values<br>- Requires photocell or shorting cap by others<br>- Not available with TCM option as DT option<br>- Not available with other controls<br>- Not available with 2F option | **20KV 20kV/10kA Surge Suppression**<br>- Provides an internal 10kV/5kA surge protection device<br>- Compatible with 120V, 277V or 347V (phase to neutral)<br>- Consult factory if fusing is required for 208V, 240V or 480V<br>**F Fused Option**<br>- When sub-drilled fusing, see inline delay fuse<br>**UVLL Label and NEMA® Lx5 & Lx7 7-Pin Photocell Receptacle**<br>- Exterior, only label per ANSI C136.15-2005<br>- 7-pin receptacle per ANSI C136.41<br>**N NEMA® Lx5 & Lx7 7-Pin Photocell Receptacle**<br>- Intended for downlight applications with maximum 30' 10'<br>- Factory connected 5-15A dim leads<br>- Requires photocell or shorting cap by others<br>**R NEMA® Lx5 & Lx7 7-Pin Photocell Receptacle**<br>- Intended for downlight applications with maximum 30' 10'<br>- Factory connected 5-15A dim leads<br>- Requires photocell or shorting cap by others<br>- Refer to page 3 for compatible Synapse control offerings<br>**RL Right Label**<br>- Label and rights are rotated to the left<br>- Refer to ORDERL configuration diagram on page 27 for optic directionality<br>- Not for use with symmetric optics<br>**RR Rotate Right**<br>- Label and rights are rotated to the right<br>- Refer to ORDERL configuration diagram on page 27 for optic directionality<br>- Not for use with symmetric optics |

¹ Lumen Package codes identify approximate light output only. Actual lumen output levels vary by CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values.
* Not available with Bluetooth® Technology Enabled Multi-Level Sensor.
* Factory installed backlight shields are integral to luminaire optics and may not be removed in the field. For field-install backlight control, please refer to the External Backlight Shields in the accessory tables on page 2.

US: creelighting.com T (800) 236-4800
Canada: creelighting.canada.com T (800) 473-1234

CREE LIGHTING

## CPY500™ Series

CPY500™ LED Canopy Luminaire - Direct Mount

Rev. Date: V10 09/25/2023

### Product Description

The CPY500™ Series LED luminaire features a large 11" X 11" glass optic that delivers the best in visual comfort and performance. Diffused optics minimize glare and increase visual comfort while delivering top-of-category 175 LPW efficiency and high-performance light distribution. Its sleek and low-profile form blends into the canopy while still being easily serviceable from below. Above the canopy, its uniquely angled extruded aluminum driver housing allows the CPY500™ Series to easily install around existing structures, making it ideal for both retrofit or new construction applications. Optional bezels provide enhanced aesthetics and optical control to minimize uplight yet attract the eye of drivers.

**Applications:** Petroleum canopies, CNG fueling stations

### Performance Summary

Assembled in the USA by Cree Lighting from US and imported parts

**Initial Delivered Lumens:** Up to 20,900

**Efficacy:** Up to 175 LPW

**CRI:** Minimum 70 CRI (40K, 50K, 57K); 80 CRI (30K); 90 CRI (40K, 50K)

**CCT:** 3000K, 4000K, 5000K, 5700K

**Limited Warranty¹:** 10 years on luminaire/10 years on ColorFast DeltaGuard® finish/up to 5 years for Synapse® accessories/1 year on field-installed accessories

IP65 overall, IP66 optics/IP66 driver housing

Class I, Division 2 Hazardous Location for select models

¹See https://creelighting.com/resources/warranty/ for warranty terms

### Accessories

**Field-Installed Accessories**

**10" Square Spectra Bezel**
CPY-EC-SQ-10" (Top-down with 70R or SP-controls)
**14" Square Cut-Off Bezel**
CPY-EC-SQ-14" (Top-down with 70R or SP-controls)
**24" Square Beauty Flush**
(doors not include backlit plate)
CPY-SQ-FL-24
- May be used with bezel accessories
- Not for use with BML or 2F options
**24" Square Beauty Flush Backlit Plate**
CPY-BP-FL-BKPLT (Use with 70" canopies)
- Requires Flush Mount Backlit Shield
- Field-customizable to upgrade most existing recessed mounted luminaires
- Not available with other controls
- Not available for use with Type IV/V optics
- May be used with bezel accessories
- Not for use with BML or 2F options

**Wet Location Junction Box w/Mounting Bracket for Driver Extrusion**
CPY-JBOX-KIT
- Suitable for use with standard and hazardous locations
- 4.5" (114mm) x 4.5" (114mm) x 2.75" (70mm) 316 cast aluminum w/ gray powdercoat
- 1/2" (12mm) hub in each end and in back
**Synapse® SmartPole TRS Interface**
CAPX-TRS
- 120v-277V
- Allows for Cooper Synapse components to complete system
- Refer to dlc.lighting.com/ spec sheet for details
**Synapse® Single Port**
(does not include beauty plate)
CPY-SMP-SQ-SP (Use with 70" canopies)
CPY-SMP-SQ-BW (Use with 70" canopies)
- Field-customizable to upgrade most existing recessed mounted luminaires
- Not available with other controls or options
- May be used with bezel accessories
**Adapter Plate for Double Stick Canopies**
CPY-DS-ADAPT
- Allows for full luminaire installation from below the canopy

*Must specify color: BK (Black), BZ (Bronze), SV (Silver) or WH (White)

### Ordering Information

Example: CPY-1L-STK7-DF-UL-2M4-WH-10V

**CPY**

| Product | Lumen Package* | CCT/CRI | Optic | Voltage | Mounting** | Color Options | Controls (specify one) | Options |
|---|---|---|---|---|---|---|---|---|
| CPY | **2L** 2,100 Lumens<br>**4L** 4,100 Lumens<br>**7L** 8,500 Lumens<br>**11L** 11,000 Lumens<br>**20L** 20,900 Lumens | **30K3** 3000K, 70 CRI<br>**40K3** 4000K, 70 CRI<br>**50K3** 5000K, 70 CRI<br>**57K3** 5700K, 70 CRI<br>**30K7** 3000K, 90 CRI<br>**40K7** 4000K, 90 CRI<br>**50K7** 5000K, 90 CRI<br>**57K7** 5700K, 90 CRI | **DF** Diffuse Lambertian (Frosted Lens)<br>**LL** Lambertian (Clear Lens) | **UL** 120-277V, 50/60Hz<br>**HV** 347-480V, 50/60Hz | **2M** Direct | **BK** Black<br>**BZ** Bronze<br>**SV** Silver<br>**WH** White | **TRV** - Up to 20 timings to 10%<br>- Not available with other controls<br>- Not available with 2F option<br>**SP** - Not available with other controls<br>- Requires 2F option<br>**BLTCM Bluetooth® Technology Enabled Multi-Level Sensor**<br>- Utilizes a multifunction sensor<br>- Not available with 2F optics<br>- Refer to dlc.lighting.com/ for details<br>- 8' 20' sensor zone installed on luminaire, ready-pair-and-play<br>- Factory installed in luminaire and included<br>- Not available with other controls<br>- Not available with 2F option<br>**DT-Field Adjustable Output w/TCM Dimming**<br>- Offers full range adjustability<br>- Refer to page 3 for power and lumen values<br>- Requires photocell or shorting cap by others<br>- Not available with TCM option as DT option<br>- Not available with Bluetooth Sensor<br>- Not available with other controls<br>- Not available with 2F option | **10KV 10kV/5kA Surge Suppression Protection**<br>- Provides an internal 10kV/5kA surge protection device<br>- Compatible with 120V, 277V or 347V (phase to neutral)<br>- Consult factory if fusing is required for 208V, 240V or 480V<br>**F Fused Option**<br>- When sub-drilled fusing, see inline delay fuse<br>**UVLL Label and NEMA® Lx5 & Lx7 7-Pin Photocell Receptacle**<br>- Exterior, only label per ANSI C136.15-2005<br>- 7-pin receptacle per ANSI C136.41<br>**N NEMA® Lx5 & Lx7 7-Pin Photocell Receptacle**<br>- Intended for downlight applications with maximum 30' 10'<br>- Factory connected 5-15A dim leads<br>- Requires photocell or shorting cap by others<br>**R NEMA® Lx5 & Lx7 7-Pin Photocell Receptacle**<br>- Intended for downlight applications with maximum 30' 10'<br>- Factory connected 5-15A dim leads<br>- Requires photocell or shorting cap by others<br>- Refer to page 3 for compatible Synapse control offerings<br>**RL Right Label**<br>- Label and rights are rotated to the left<br>- Refer to ORDERL configuration diagram on page 27 for optic directionality<br>- Not for use with symmetric optics<br>**RR Rotate Right**<br>- Label and rights are rotated to the right<br>- Refer to ORDERL configuration diagram on page 27 for optic directionality<br>- Not for use with symmetric optics |

* Lumen Package codes identify approximate light output only. Actual lumen output levels vary depending on CCT. Refer to Delivered Lumens tables for specific lumen values.
** Recessed walls, recessed canopy, cut-reveal, flush & cut-end product mounts are also available. Refer to https://www.creelighting.com/products/outdoor/canopy-and-soffit/ for spec sheets for these additional mounts.

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Canada: creelighting.canada.com T (800) 473-1234

CREE LIGHTING

## Schedule

| Symbol | Label | Quantity | Manufacturer | Catalog Number | Description | Number Lamps | Lumens Per Lamp | Wattage |
|---|---|---|---|---|---|---|---|---|
| | C | 4 | Cree Lighting | CPS-4L-57K7-DF-UL-xx-xx-xxx | CP5 Canopy Luminaire, 8L Lumen Package, 5700K, 70 CRI, Diffuse Lambertian Distribution | 1 | 8091 | 50.6 |
| | L14 | 1 | Cree Lighting | OSQL-C-22L-57K7-4M-Ux-xx-xx-xx-xx CONFIGURED FROM OSQL-C-xxL-30K7-4M-UL-xx-xx-xx | CONFIGURED FROM OSQL-C Luminaire, 3000K, 70 CRI, Type IV Mid | 1 | 20900 | 131 |
| | L13H | 3 | Cree Lighting | OSQL-C-22L-57K7-3B-Ux-xx-xx-xx-xx CONFIGURED FROM OSQL-C-40L-30K7-3B-UL-xx-xx-xx | CONFIGURED FROM OSQL-C Luminaire, 40L Lumen Package, 3000K, 70CRI, Type III Mid Optic w/Internal BLS | 1 | 14375 | 131 |
| | L14H | 3 | Cree Lighting | OSQL-C-22L-57K7-4B-Ux-xx-xx-xx-xx CONFIGURED FROM OSQL-C-xxL-40K7-4B-UL-xx-xx-xx | CONFIGURED FROM OSQL-C Luminaire, 3000K, 70 CRI, Type IV Mid w-Internal BLS | 1 | 13175 | 131 |

## Statistics

| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
|---|---|---|---|---|---|---|
| POS CANOPY | + | 12.2 fc | 14.0 fc | 9.9 fc | 1.4:1 | 1.2:1 |
| Calc Zone #1 | + | 1.8 fc | 7.9 fc | 0.0 fc | N/A | N/A |
| PARKING LOT | X | 3.0 fc | 6.8 fc | 0.6 fc | 11.3:1 | 5.0:1 |

NORTH

1"= 20' SCALE 20' 0 20' 40' FEET

# CIVIL SITE PHOTOMETRIC PLAN & DETAILS


EXCEL

Always a Better Plan

100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com


**PROJECT INFORMATION**

PROPOSED CAR WASH FOR:
**CREW CARWASH**
N96 W17500 COUNTY LINE RD • GERMANTOWN, WI 53022

**PROFESSIONAL SEAL**

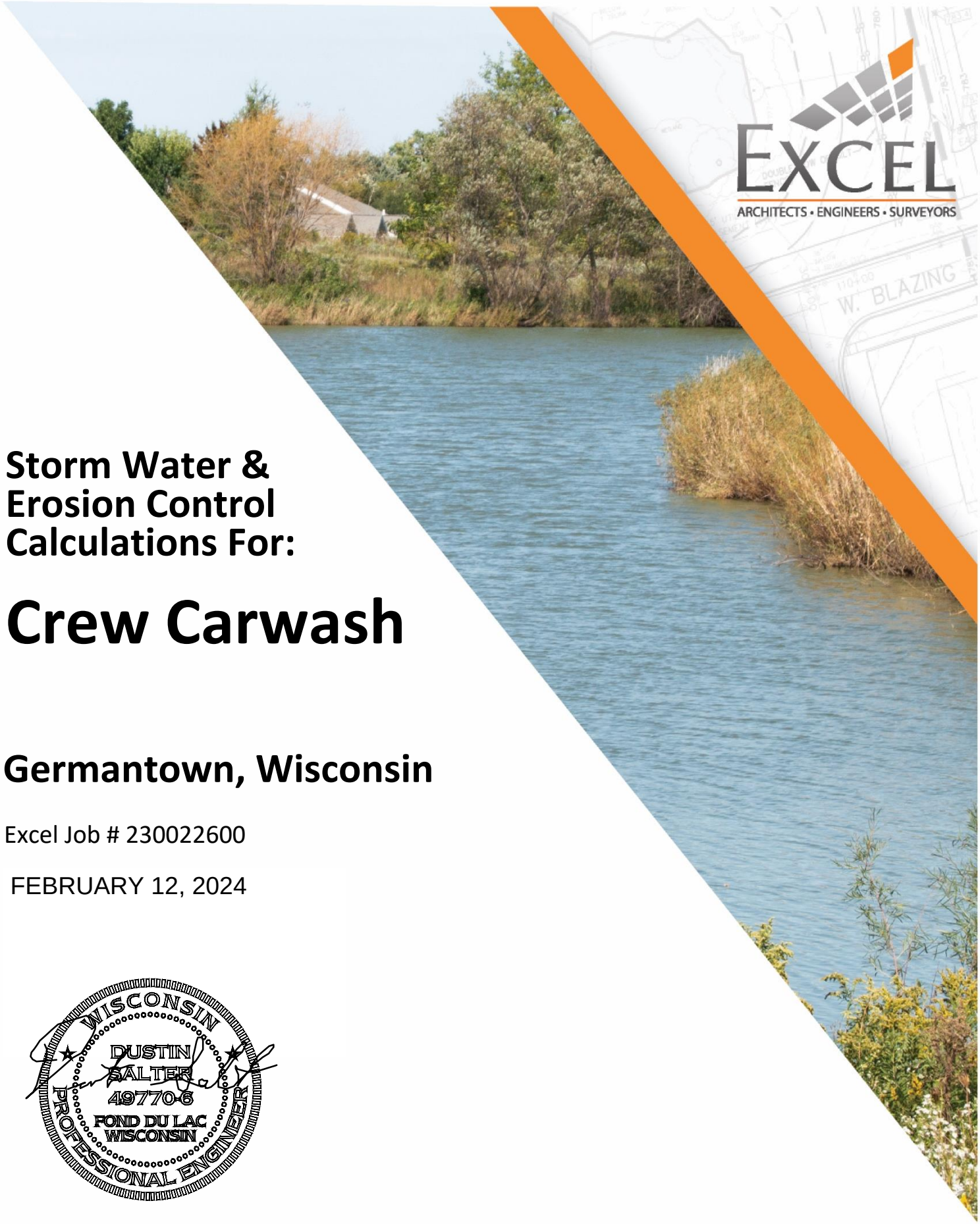
**PRELIMINARY DATES**
FEB. 12, 2024

**NOT FOR CONSTRUCTION**

**JOB NUMBER**
230022600

**SHEET NUMBER**
**C3.1**

2021 © EXCEL ENGINEERING, INC.



# Storm Water & Erosion Control Calculations For:

# Crew Carwash

## Germantown, Wisconsin

Excel Job # 230022600

FEBRUARY 12, 2024




Prepared by Dustin Salter, PE
100 Camelot Drive • Fond du Lac, WI 54935
920-926-9800 • www.excelengineer.com

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3.0 Storm Sewer Design 3
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# Appendices

Appendix A: Existing Drainage Patterns
Appendix B: Green Infrastructure Drainage Exhibit
Appendix C: Storm Pipe Calculations
Appendix D: Web Soil Survey Map
Appendix E: Post Construction Operation and Maintenance Plan

# 0.0 Introduction

## 0.1 Existing Conditions

The proposed redevelopment project site is located at N96W17500 County Line Road in the Village of Germantown, Wisconsin. The project site is approximately 1 acre in size. The site is bound by Emmer Road to the south and adjacent commercial properties to the north, east, and west. The existing site currently consists of a BP gas station along with a self-serve carwash and associated paved parking and drive lanes. The existing site will be completely razed as needed for the proposed new site improvements. The site currently sheet drains from north to south where stormwater is conveyed to a roadside ditch at the south end of the property. Stormwater is eventually conveyed via culverts to the Menomonee River located directly south of County Line Road. A representation of the existing site and current drainage patterns is provided in Appendix A.

## 0.2 Proposed Project Overview

The proposed redevelopment project consists of constructing a new Crew Carwash facility along with associated site improvements. Site improvements include concrete parking areas, sidewalks, and drive aisles. The proposed site improvements will result in approximately 43,346 square feet (0.995 acres) of disturbed site area. Proposed drainage patterns will match the existing site drainage patterns. Stormwater will be conveyed via sheet flow to various new inlet structures that will convey stormwater to the same discharge point as the current condition at the south end of the site. Refer to the construction plan set for a representation of the proposed site and final drainage patterns.

## 0.3 Stormwater Management Applicability

As previously mentioned, this project site is considered a redevelopment project site as defined by WDNR standards. Since the disturbed project area is less than one acre in total site disturbance, a construction site NOI is not required and the project is exempt from the WI DNR post construction stormwater management performance standards outlined in NR 151 for redevelopment sites. The project site will therefore be required to meet the local performance standards as required by the Village of Germantown and MMSD. Furthermore, since the redevelopment project site will disturb less than two acres of land and will add between 5,000 square feet and 21,780 square feet of new impervious area, the project site will be subject to meeting the green infrastructure requirements as defined by Chapter 13 of MMSD. The below sections of this report detail how the project site meets or exceeds the applicable requirements.

# 1.0 Design Criteria

## 1.1 Soils

Site specific geotechnical investigations have not yet been completed on the project site, therefore, soil characteristics were determined by utilizing available web soil survey information. See Table 1 below for a summary of the soils and hydrologic ratings indicated by the web soil survey map. Refer to Appendix D for the associated web soil survey map. Hydrologic soil group C soils were utilized for the site storm sewer sizing calculation.

*Table 1: Web Soil Survey*

| MAP SYMBOL | SOIL TYPE | HYDROLOGIC RATING |
|---|---|---|
| Cw | Colwood silt loam | C/D |
| MtA | Mequon silt loam | C/D |
| OuB | Ozaukee silt loam | C |

## 1.2 Rainfall Data

NOAA Atlas 14, Washington County rainfall depths with an MSE3 distribution were used for the site stormwater calculations. See Table 2 below for the rainfall data used.

*Table 2: NOAA Atlas 14 24-hour Rainfall Depth*

| DESIGN STORM | RAINFALL DEPTH (INCHES) |
|---|---|
| 10-YEAR | 3.82 |

# 2.0 Stormwater Management Requirements

## 2.1 Wisconsin DNR Summary

As previously stated, the project site will result in 43,346 square feet (0.995 acres) of disturbed site area. Therefore, a construction site NOI will not be required by WI DNR. Therefore, the performance standards relating to peak discharge, TSS removal, infiltration, etc do not apply to the proposed redevelopment project.

## 2.2 Village of Germantown/MMSD Summary

Since the redevelopment project site will disturb less than two acres of land and will add between 5,000 square feet and 21,780 square feet of new impervious area, the project site will be subject to meeting the green infrastructure requirements as defined by Chapter 13.302(3)(c) of MMSD.

### 2.3 Green Infrastructure

The redevelopment project site will utilize a rain garden BMP to meet the green infrastructure requirements as defined by Chapter 13.302(3)(c) of MMSD. A total of 432 square feet of rain garden area is required based upon the new impervious area added. The proposed rain garden will total approximately 500 square feet, therefore exceeding this requirement. See Table 3 below for a summary of the green infrastructure requirements. Refer to Appendix B for a green infrastructure drainage area exhibit. Refer to the construction plan set for design details of the proposed rain garden BMP.

Table 3. Rain Garden

| Green Infrastructure Summary | | |
|---|---|---|
| Total New Added Impervious | 6093 | sf |
| Volume Required (1/2" x New Impervious Area) | 254 | cf |
| | 1899 | gal |
| Rain Garden Area Required (Per Section 13.302(4)(b) Table) | 432 | sf |
| | | |
| Rain Garden Area Provided | 500 | sf |

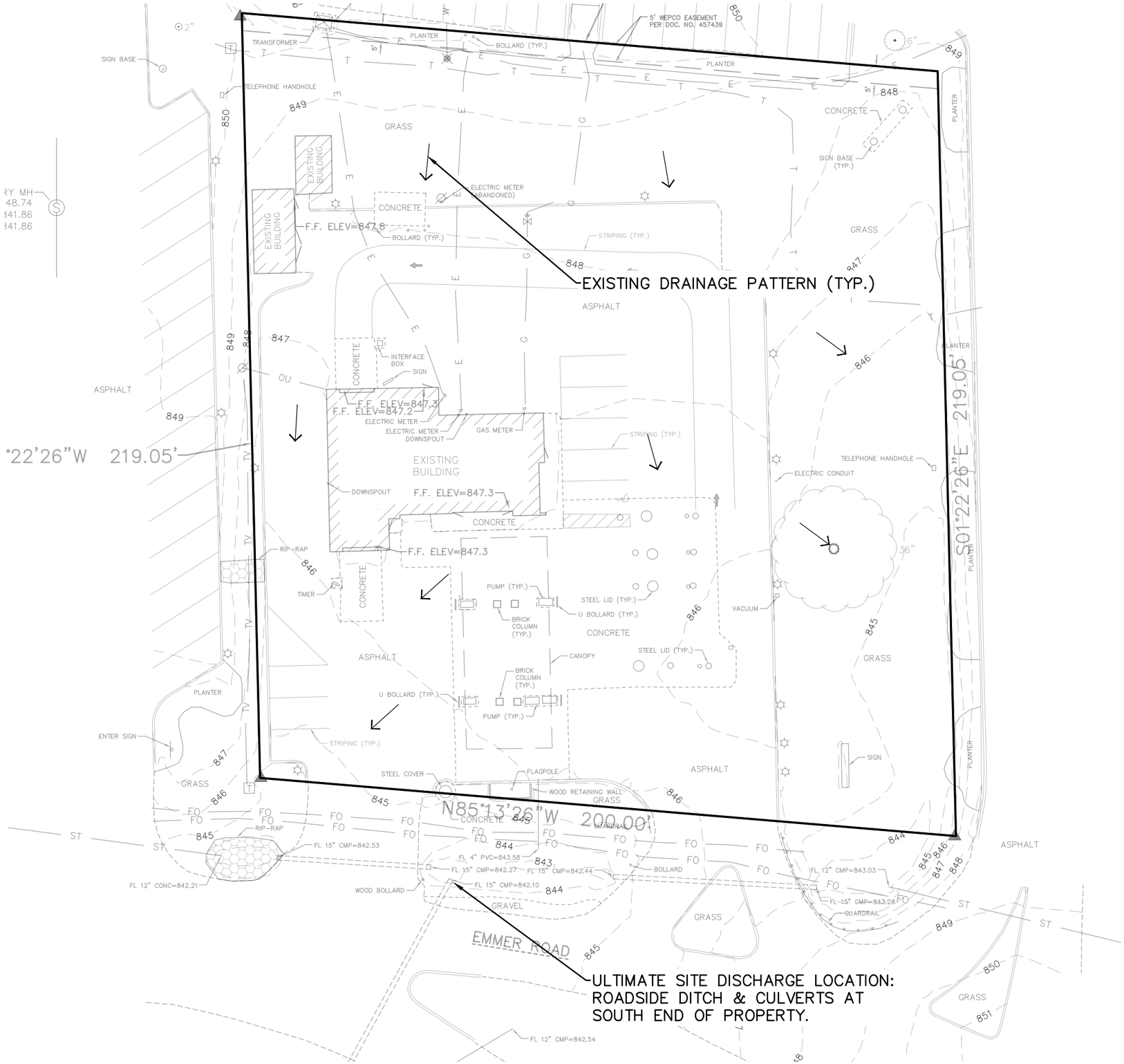
## 3.0 Storm Sewer Design

All storm sewer has been designed to convey the 10-year 24-hour post development storm. Additional capacity has been provided as a safety factor. See Appendix C, for pipe drainage areas and calculations

## 4.0 Erosion Control

The erosion control specifications, construction sequence, site stabilization notes, seeding notes, dewatering notes, and post construction and maintenance plan will be included on sheet C0.1, C1.2, and C2.2 of the construction plan set.

# Appendix A: Existing Drainage Patterns




# EXISTING SITE DRAINAGE PATTERNS

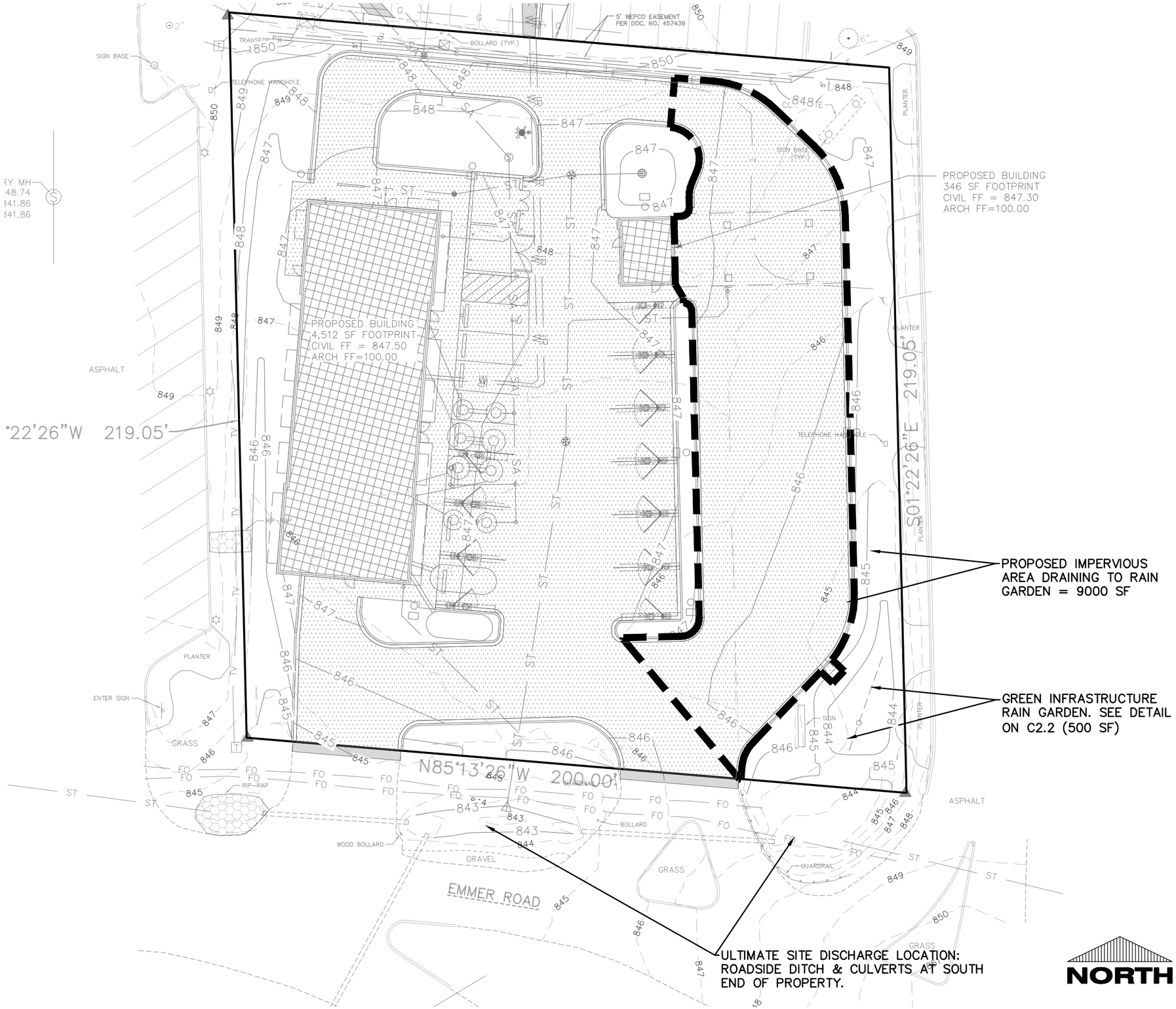
NORTH

1"= 30'

30' 0 30' 60'

SCALE FEET

# Appendix B: Green Infrastructure Drainage Exhibit




# RAIN GARDEN EXHIBIT

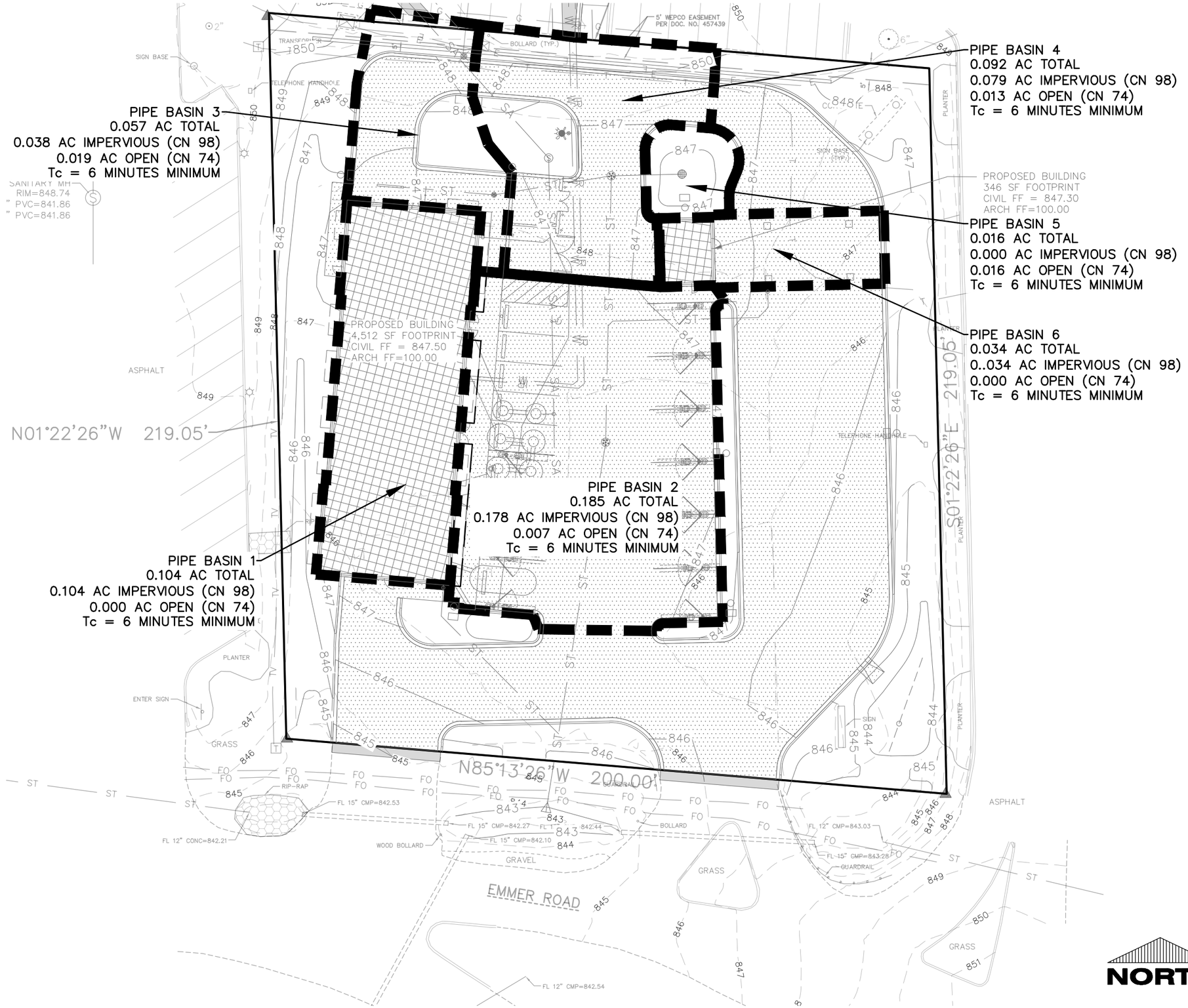
NORTH

1"= 30'

30' 0 30' 60'

SCALE FEET

# Appendix C: Storm Pipe Calculations



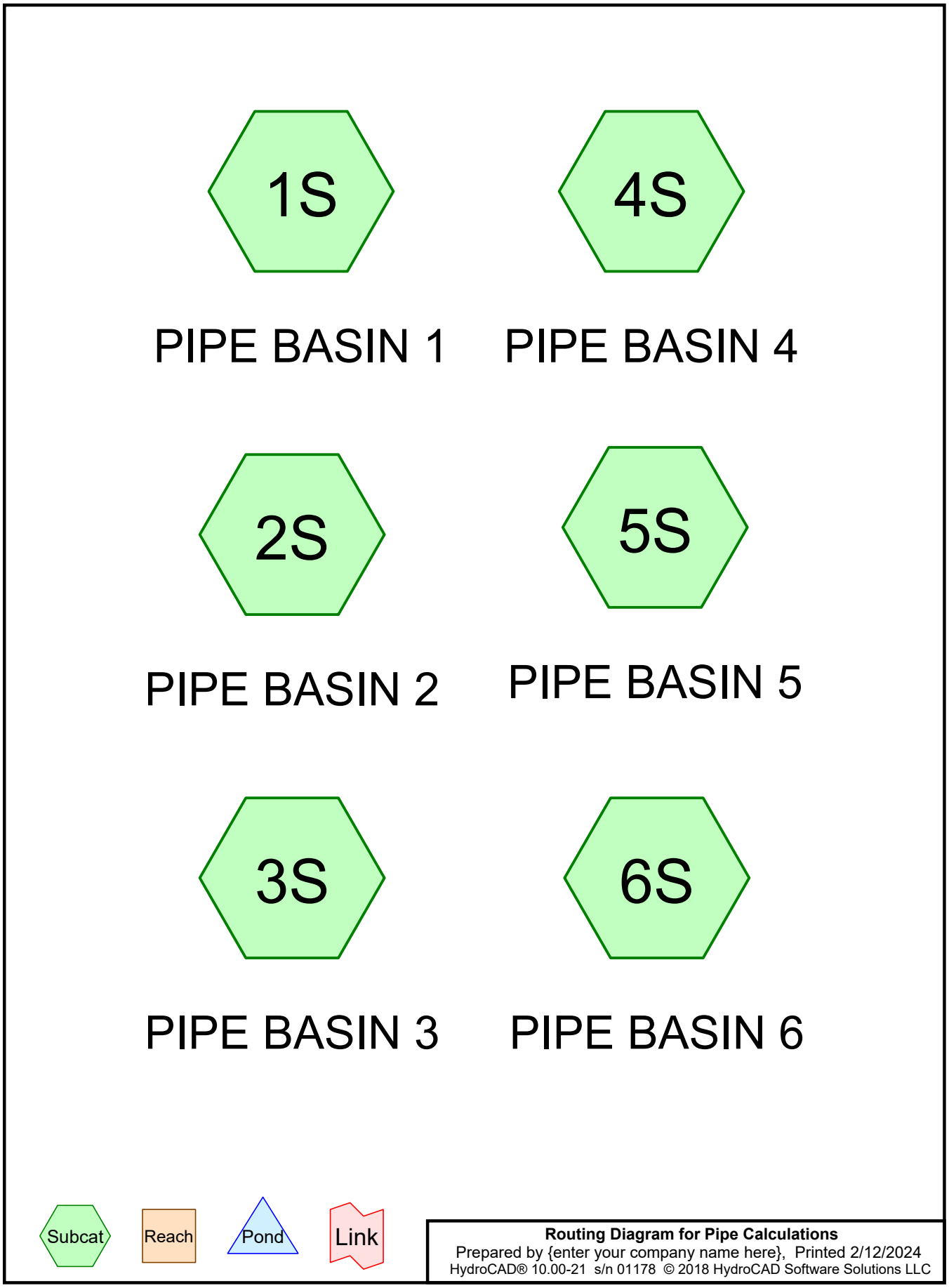

# STORM SEWER BASIN MAP

NORTH

1"= 30'

30' 0 30' 60'

SCALE FEET


1S
PIPE BASIN 1
4S
PIPE BASIN 4
2S
PIPE BASIN 2
5S
PIPE BASIN 5
3S
PIPE BASIN 3
6S
PIPE BASIN 6
Subcat
Reach
Pond
Link
Routing Diagram for Pipe Calculations
Prepared by {enter your company name here}, Printed 2/12/2024
HydroCAD® 10.00-21 s/n 01178 © 2018 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 0.433 | 98 | (1S, 2S, 3S, 4S, 6S) |
| 0.055 | 74 | (2S, 3S, 4S, 5S) |
| **0.488** | **95** | **TOTAL AREA** |

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 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: PIPE BASIN 1** Runoff Area=0.104 ac 100.00% Impervious Runoff Depth>3.58"
Tc=6.0 min CN=98 Runoff=0.57 cfs 0.031 af

**Subcatchment2S: PIPE BASIN 2** Runoff Area=0.185 ac 96.22% Impervious Runoff Depth>3.47"
Tc=6.0 min CN=97 Runoff=1.00 cfs 0.054 af

**Subcatchment3S: PIPE BASIN 3** Runoff Area=0.057 ac 66.67% Impervious Runoff Depth>2.75"
Tc=6.0 min CN=90 Runoff=0.27 cfs 0.013 af

**Subcatchment4S: PIPE BASIN 4** Runoff Area=0.092 ac 85.87% Impervious Runoff Depth>3.25"
Tc=6.0 min CN=95 Runoff=0.48 cfs 0.025 af

**Subcatchment5S: PIPE BASIN 5** Runoff Area=0.016 ac 0.00% Impervious Runoff Depth>1.47"
Tc=6.0 min CN=74 Runoff=0.04 cfs 0.002 af

**Subcatchment6S: PIPE BASIN 6** Runoff Area=0.034 ac 100.00% Impervious Runoff Depth>3.58"
Tc=6.0 min CN=98 Runoff=0.19 cfs 0.010 af

**Total Runoff Area = 0.488 ac Runoff Volume = 0.135 af Average Runoff Depth = 3.31"**
**11.27% Pervious = 0.055 ac 88.73% Impervious = 0.433 ac**

## Summary for Subcatchment 1S: PIPE BASIN 1

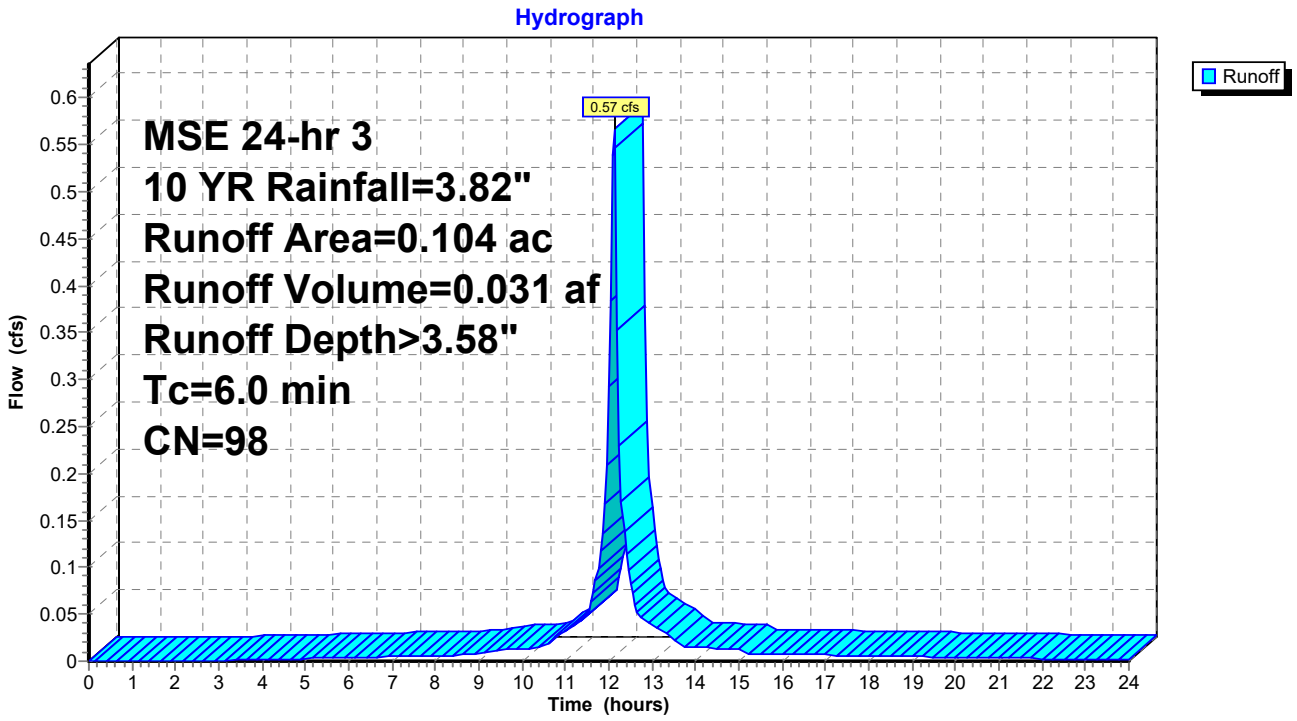
Runoff = 0.57 cfs @ 12.13 hrs, Volume= 0.031 af, Depth> 3.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10 YR Rainfall=3.82"

| | Area (ac) | CN | Description |
|---|---|---|---|
| * | 0.104 | 98 | |
| | 0.104 | | 100.00% Impervious Area |

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

## Subcatchment 1S: PIPE BASIN 1



## Summary for Subcatchment 2S: PIPE BASIN 2

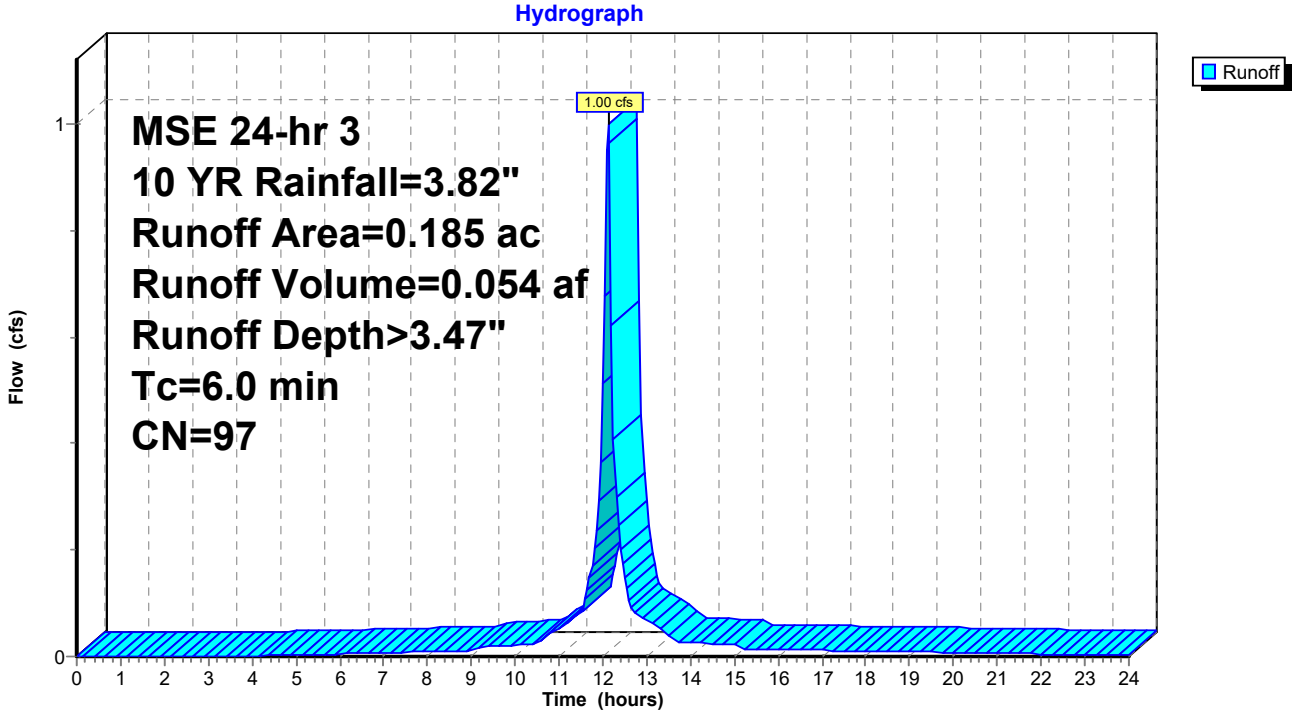
Runoff = 1.00 cfs @ 12.13 hrs, Volume= 0.054 af, Depth> 3.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10 YR Rainfall=3.82"

| | Area (ac) | CN | Description |
|---|---|---|---|
| * | 0.178 | 98 | |
| * | 0.007 | 74 | |
| | 0.185 | 97 | Weighted Average |
| | 0.007 | | 3.78% Pervious Area |
| | 0.178 | | 96.22% Impervious Area |

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

## Subcatchment 2S: PIPE BASIN 2



## Summary for Subcatchment 3S: PIPE BASIN 3

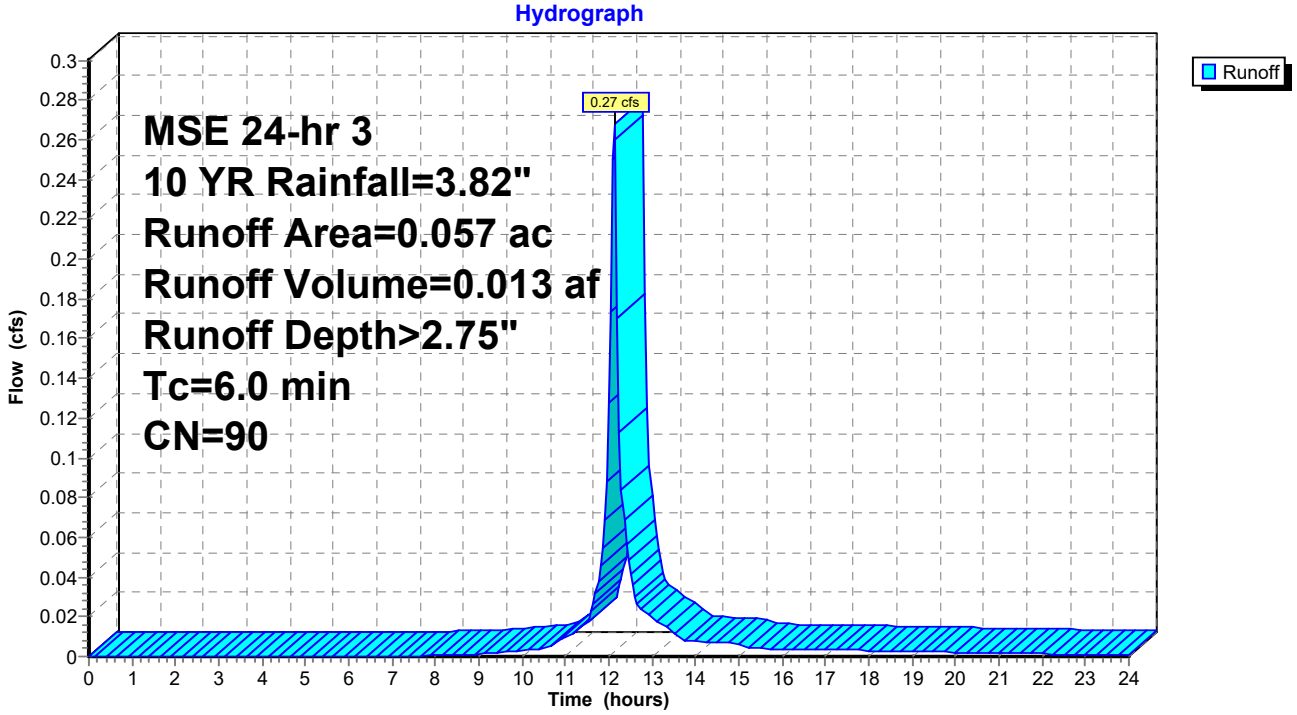
Runoff = 0.27 cfs @ 12.13 hrs, Volume= 0.013 af, Depth> 2.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10 YR Rainfall=3.82"

| | Area (ac) | CN | Description |
|---|---|---|---|
| * | 0.038 | 98 | |
| * | 0.019 | 74 | |
| | 0.057 | 90 | Weighted Average |
| | 0.019 | | 33.33% Pervious Area |
| | 0.038 | | 66.67% Impervious Area |

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

## Subcatchment 3S: PIPE BASIN 3



## Summary for Subcatchment 4S: PIPE BASIN 4

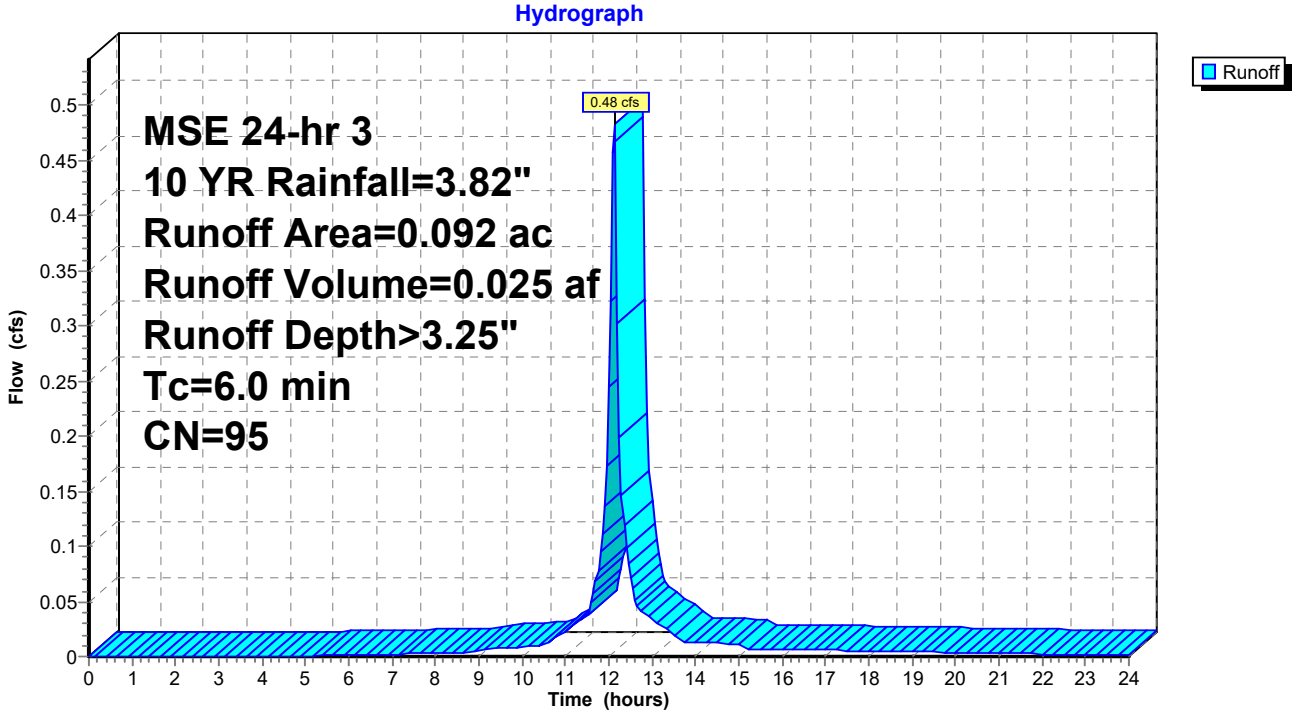
Runoff = 0.48 cfs @ 12.13 hrs, Volume= 0.025 af, Depth> 3.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10 YR Rainfall=3.82"

| | Area (ac) | CN | Description |
|---|---|---|---|
| * | 0.079 | 98 | |
| * | 0.013 | 74 | |
| | 0.092 | 95 | Weighted Average |
| | 0.013 | | 14.13% Pervious Area |
| | 0.079 | | 85.87% Impervious Area |

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

### Subcatchment 4S: PIPE BASIN 4



## Summary for Subcatchment 5S: PIPE BASIN 5

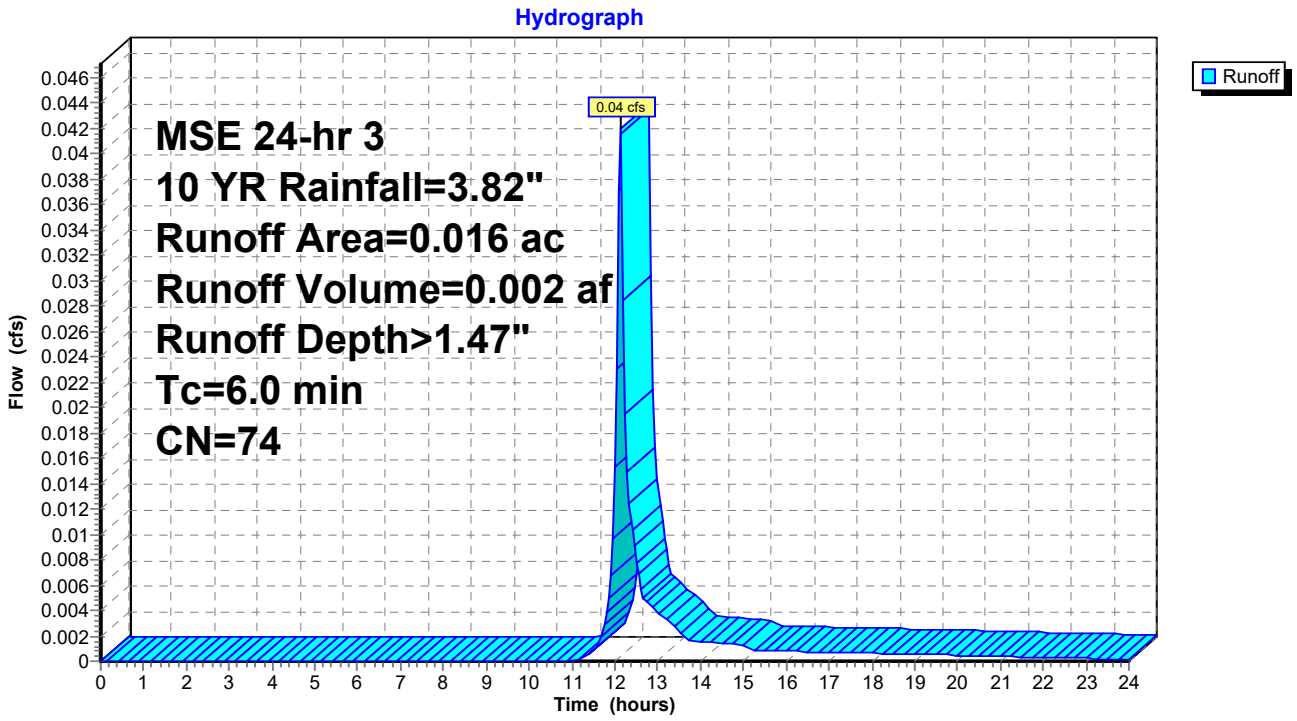
Runoff = 0.04 cfs @ 12.14 hrs, Volume= 0.002 af, Depth> 1.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10 YR Rainfall=3.82"

| | Area (ac) | CN | Description |
|---|---|---|---|
| * | 0.016 | 74 | |
| | 0.016 | | 100.00% Pervious Area |

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

## Subcatchment 5S: PIPE BASIN 5



## Summary for Subcatchment 6S: PIPE BASIN 6

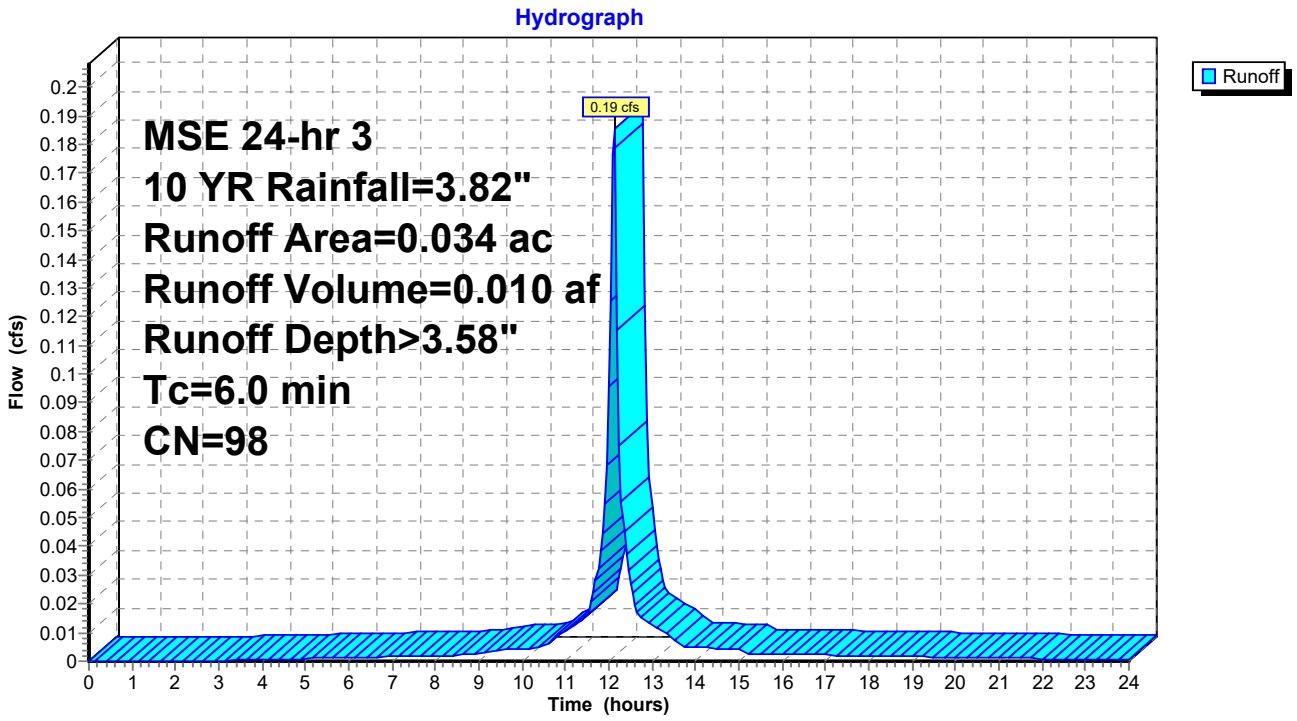
Runoff = 0.19 cfs @ 12.13 hrs, Volume= 0.010 af, Depth> 3.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10 YR Rainfall=3.82"

| | Area (ac) | CN | Description |
|---|---|---|---|
| * | 0.034 | 98 | |
| | 0.034 | | 100.00% Impervious Area |

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

## Subcatchment 6S: PIPE BASIN 6



Excel Engineering Project No. 230022600 Project Name Crew Carwash - Germantown

| Pipe Data | | | | Pipe Capacity (10-yr) | | | | |
|---|---|---|---|---|---|---|---|---|
| Pipe ID | Diameter (FT) | Slope (FT/FT) | Manning's n | Contributing Basin Numbers | Total Flow (cfs) | Total Flow (gpm) | Full Flow Capacity (cfs) | Full Flow Capacity (gpm) |
| A | 1 | 0.0053 | 0.012 | 1,2,3,4,5,6 | 2.55 | 1144 | 2.82 | 1264 |
| B | 0.67 | 0.0150 | 0.012 | 1 | 0.57 | 256 | 1.63 | 731 |
| C | 1 | 0.0050 | 0.012 | 3,4,5,6 | 0.98 | 440 | 2.74 | 1228 |
| D | 0.67 | 0.0050 | 0.012 | 6 | 0.19 | 85 | 0.94 | 422 |
| E | 0.83 | 0.0040 | 0.012 | 5 | 0.04 | 18 | 1.49 | 668 |
| F | 0.67 | 0.0055 | 0.012 | 3 | 0.27 | 121 | 0.99 | 443 |
| G | 0.67 | 0.0055 | 0.012 | 3 | 0.27 | 121 | 0.99 | 443 |

Full Flow Capacity based off Manning's Equation $Q = \frac{1.49}{n} R^{2/3} S^{1/2} a$

Where: Q = Full Flow Capacity of Pipe (cfs)
n = manning's roughness coefficient
R = hydraulic radius (ft) (D/4)
s = hydraulic gradient, slope (ft/ft)
a = flow area (sq. ft.)

Typical Manning's n

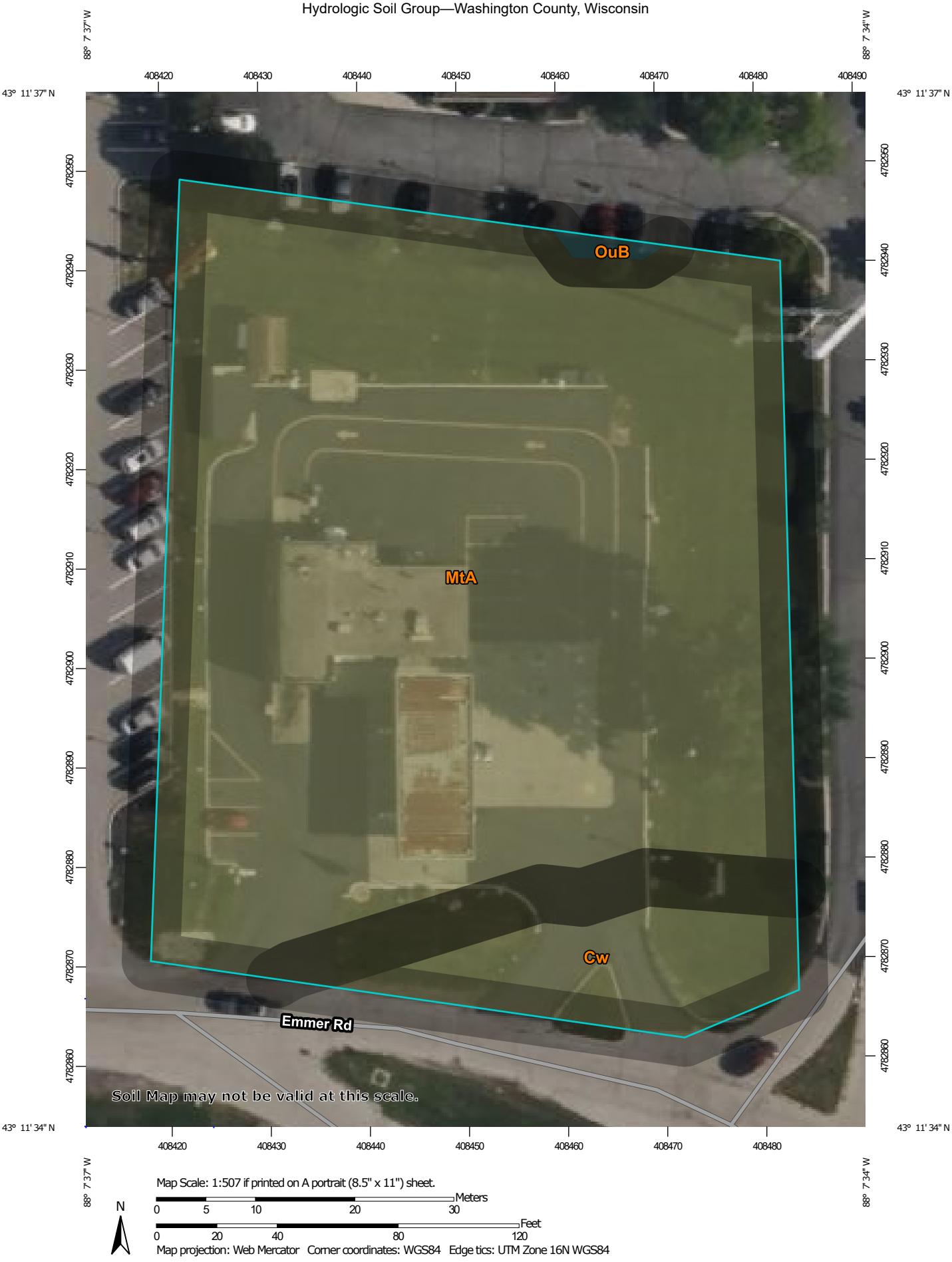
| | |
|---|---|
| HDPE | 0.012 |
| PVC | 0.012 |
| Concrete | 0.013 |
| CMP | 0.024 |

| Pipe Basin Number | 10 Yr Flow (cfs) |
|---|---|
| 1 | 0.57 |
| 2 | 1.00 |
| 3 | 0.27 |
| 4 | 0.48 |
| 5 | 0.04 |
| 6 | 0.19 |

*Total Flow calculated via TR-55 hydrologic calculations. Reference Storm Pipe Basin Map & TR-55 Calculations

# Appendix D: Web Soil Survey Map

# Hydrologic Soil Group—Washington County, Wisconsin



## MAP LEGEND

**Area of Interest (AOI)**

Area of Interest (AOI)

**Soils**

**Soil Rating Polygons**

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

**Soil Rating Lines**

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

**Soil Rating Points**

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

**Water Features**

Streams and Canals

**Transportation**

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**

Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Washington County, Wisconsin
Survey Area Data: Version 23, Sep 8, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 4, 2022—Sep 13, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Hydrologic Soil Group

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|---|---|---|---|---|
| Cw | Colwood silt loam, 0 to 2 percent slopes | C/D | 0.1 | 10.6% |
| MtA | Mequon silt loam, 1 to 3 percent slopes | C/D | 1.1 | 89.0% |
| OuB | Ozaukee silt loam, high carbonate substratum, 2 to 6 percent slopes | C | 0.0 | 0.4% |
| **Totals for Area of Interest** | | | **1.2** | **100.0%** |

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff: None Specified*

*Tie-break Rule:* Higher

# Appendix E: Post Construction Operation and Maintenance Plan

| The owner of the property affected shall inspect and maintain the following stormwater management systems frequently, especially after heavy rainfalls, but at least on an annual basis unless otherwise specified. | |
|---|---|
| **STORMWATER FACILITY** | **TYPE OF ACTION** |
| 1. Lawn and Landscaped Areas | All lawn areas shall be kept clear of any materials that block the flow of stormwater. Rills and small gullies shall immediately be filled and seeded or have sod placed in them. The lawn shall be kept mowed, tree seedlings shall be removed, and litter shall be removed from landscaped areas. |
| 2. Swales | All grassed swales showing signs of erosion, scour, or channelization shall be repaired, reinforced, and revegetated immediately. All swales shall be repaired to the original plan requirements. Mowing shall take place no less than twice per year at a height of no less than three inches. Grasses shall not be allowed to grow to a height that permits branching or bending. Mowing shall only take place when the ground is dry and able to support machinery. |
| 3. Rip Rap | All rip rap showing signs of erosion or scour shall be repaired and reinforced immediately. Rip rap should be kept clean of vegetation and sediment. All rip rap shall be repaired to the construction plan requirements. |
| 4. Catch Basin/Curb Inlet Grates | The grate openings to these structures must be kept cleared of any clogging or the blocking of stormwater flow. |
| 5. Rain Garden | During the first 2-3 months of establishment, the garden will require, at a minimum, watering on a weekly basis depending on weather. Visual inspections of the garden shall be performed annually at a minimum and more frequently during establishment. Maintenance shall be required when standing water occurs 3 days after a rain event. Rain garden can be dewatered by utilizing a submersible pump in the maintenance port/drawdown device. Maintenance shall consist of the removal of sediment, and a 2 foot undercut. Replace the undercut material with 1/3 topsoil, 1/3 compost, and 1/3 sand. Restoration of plant material shall be by plugging 1 native perennial per square foot, not by seeding. In the spring of each growing year, dead vegetation shall be removed to allow for new growth. At least 2 times during the growing season, the garden should be weeded and additional hardwood mulch shall be added as needed to assist in weed suppression. |
| 6. Record of Maintenance | The operation and maintenance plan shall remain onsite and be available for inspection when requested by the local governing agency. When requested, the owner shall make available for inspection all maintenance records to the department or agent for the life of the system. |

Crew CARWASH

*GERMANTOWN, WI*

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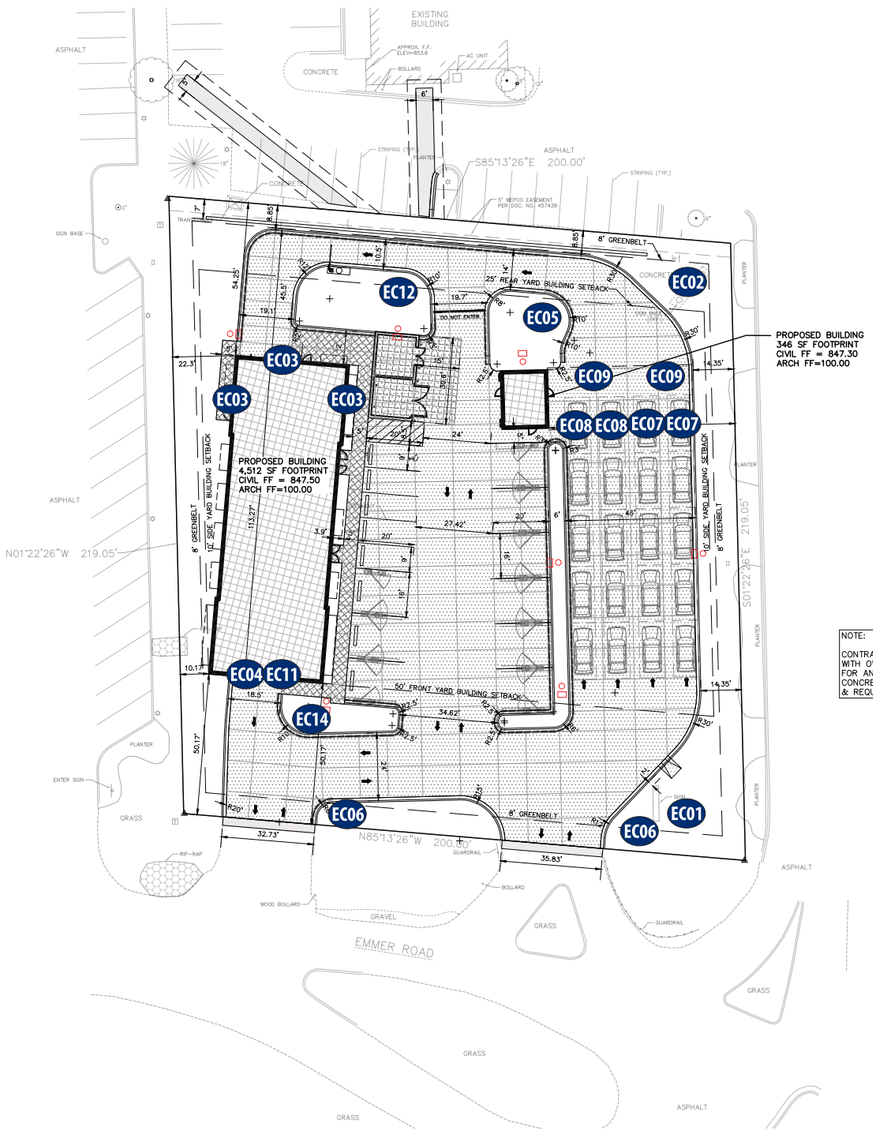
## SITE MAP




NOTE:
CONTRACTOR TO COORDINATE WITH OWNER AND MEP PLANS FOR ANY EXTERIOR HEATED CONCRETE SLAB LOCATIONS & REQUIREMENTS.

NOTE:
KNOX BOX TO BE PROVIDED AT PRIMARY ENTRANCE PER LOCAL REQUIREMENTS. CONTRACTOR TO COORDINATE W/ BUILDING INSPECTOR/FIRE DEPARTMENT FOR SPECIFIC REQUIREMENTS.

PAVEMENT HATCH KEY:
- ASPHALT
- HEAVY DUTY CONCRETE
- DUMPSTER PAD CONCRETE
- SIDEWALK CONCRETE

*SEE SHEET C0.1 FOR SECTION REQUIREMENTS

CURB & GUTTER MARKING KEY:
- INVERTED CURB & GUTTER
- SHEDDING CURB & GUTTER

SPECIFICATION NOTE:
SEE SHEET C0.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS

SITE INFORMATION:

PROPERTY ADDRESS: N96W17500 COUNTY LINE RD, GERMANTOWN WI

PARCEL ID NUMBER: 334990

PROPERTY AREA: 43,558 S.F. (1.00 ACRES).

EXISTING ZONING: B-5 W/ HIGHWAY INTERCHANGE AREA OVERLAY

PROPOSED ZONING: B-5 W/ HIGHWAY INTERCHANGE AREA OVERLAY

PROPOSED USE: CONVEYOR-STYLE CARWASH

AREA OF SITE DISTURBANCE: 43,346 SF (0.995 AC)

SETBACKS: BUILDING: FRONT = 50'
SIDE = 10'
REAR = 25'

PAVEMENT: FRONT = 8'
SIDE = 8'
REAR = 8'

PROPOSED BUILDING HEIGHT: 35' TO TOP OF TOWER (MAX. HEIGHT ALLOWED: 35')

PARKING REQUIRED: NO CODIFIED REQUIREMENT FOR CARWASH USE; ADEQUATE SPACE FOR EMPLOYEES AND CUSTOMERS

PARKING PROVIDED: 14 TOTAL (5 STANDARD EMPLOYEE SPACES, 9 VACUUM SPACES)

HANDICAP STALLS REQUIRED: 1 REQUIRED, 1 PROVIDED

LANDSCAPE REQUIREMENTS: MIN. LANDSCAPE SURFACE RATIO = 20% OPEN AREA

NORTH

1" = 20' SCALE — 20' 0 20' 40' FEET

CIVIL SITE PLAN


EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com


PROJECT INFORMATION

PROPOSED CAR WASH FOR:
**CREW CARWASH**
N96 W17500 COUNTY LINE RD • GERMANTOWN, WI 53022

PROFESSIONAL SEAL

PRELIMINARY DATES
FEB. 1, 2024
FEB. 5, 2024

*NOT FOR CONSTRUCTION*

JOB NUMBER
230022600

SHEET NUMBER
**C1.1**

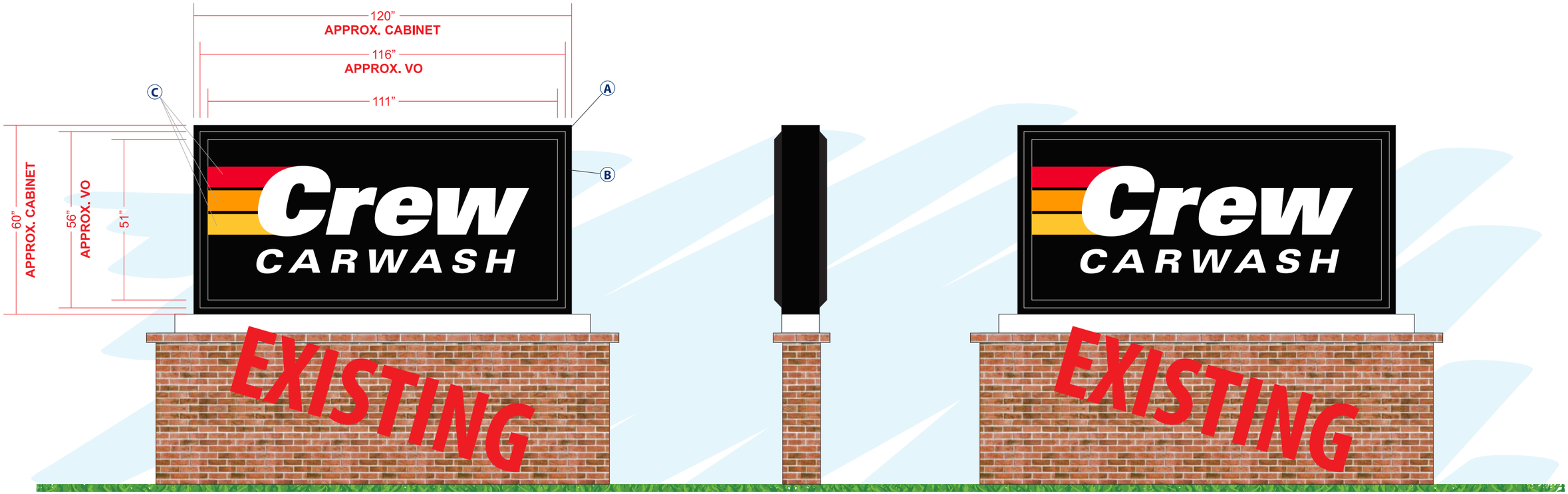
2021 © EXCEL ENGINEERING, INC.

## SIGN SPECIFICATIONS

| | |
|---|---|
| EC01 | EXISTING MONUMENT |
| EC02 | EXISTING PYLON |
| EC03 | 3 CHANNEL LETTERS |
| EC04 | EXIT CHANNEL LETTERS |
| EC05 | DIGITAL MENU BOARD |
| EC06 | 2 DIRECTIONAL SIGNS |
| EC07 | 2 UNLIMITED CLUB SETS |
| EC08 | 2 CASHIER SETS |
| EC09 | 4 SNAP FRAMES |
| EC10 | 2 SPECIAL SERVICE SIGNS |
| EC11 | CLEAN CAR EXIT |
| EC12 | WE ARE RESPONSIBLE SIGN |
| EC13 | CLEARANCE BAR |
| EC14 | VACUUMS SIGN |
| EC15 | COMING SOON SITE SIGN |

A B C D E F G H I J

## EC01




***NOTE: A SURVEY IS NEEDED TO DETERMINE SIZE OF NEW FACES**

***NOTE: CABINET TO BE REPAINTED BLACK**

**FABRICATE AND INSTALL QTY 2 NEW FACES FOR EXISTING D/F MONUMENT SIGN**

**FACES**
**MATERIAL** - PAN FORMED, EMBOSSED PLASTIC TO MATCH SPECS
**FLANGE** - 2 1/2”
**PAN DEPTH** - 2”

**INSTALLATION** - MOUNTED INTO RIGID RETAINERS

**PHOTO SCALE: 3/16” = 1’ - 0”**

Ⓐ
Ⓑ
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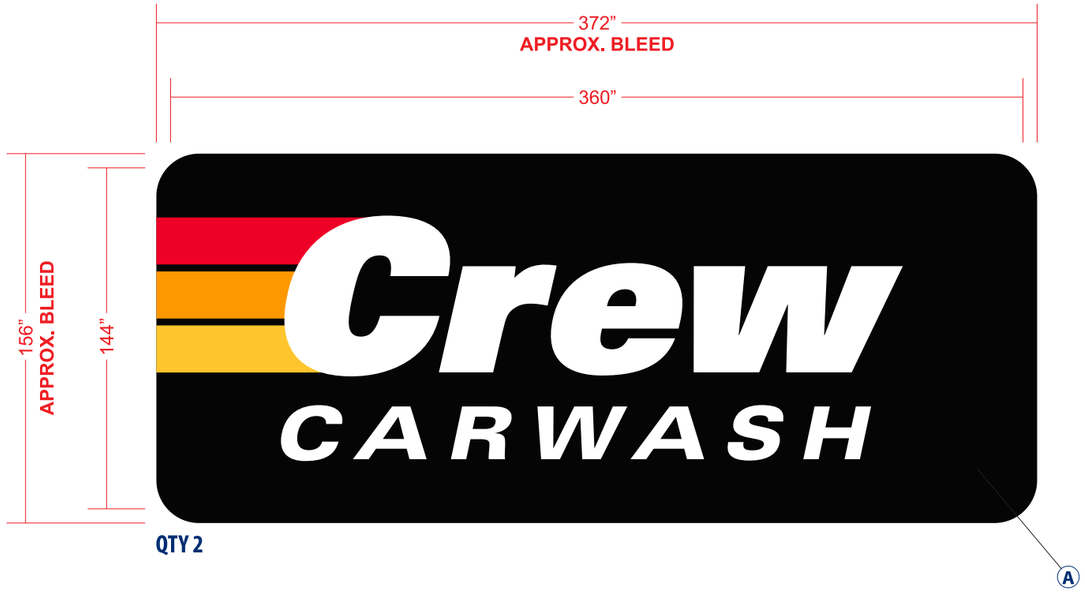
Ⓘ
Ⓙ

**ART SCALE: 3/8” = 1’ - 0”**

## EC02




QTY 2

*NOTE: A SURVEY IS NEEDED TO DETERMINE SIZE OF NEW FACES

*NOTE: PYLON TO BE REPAINTED BLACK

**FABRICATE AND INSTALL QTY 2 NEW FACES FOR EXISTING D/F PYLON SIGN**

**FACES**
**MATERIAL** - FLEX FACE MATERIAL PRINTED TO MATCH SPECS

**INSTALLATION** - MOUNTED INTO EXISTING RIGID RETAINERS

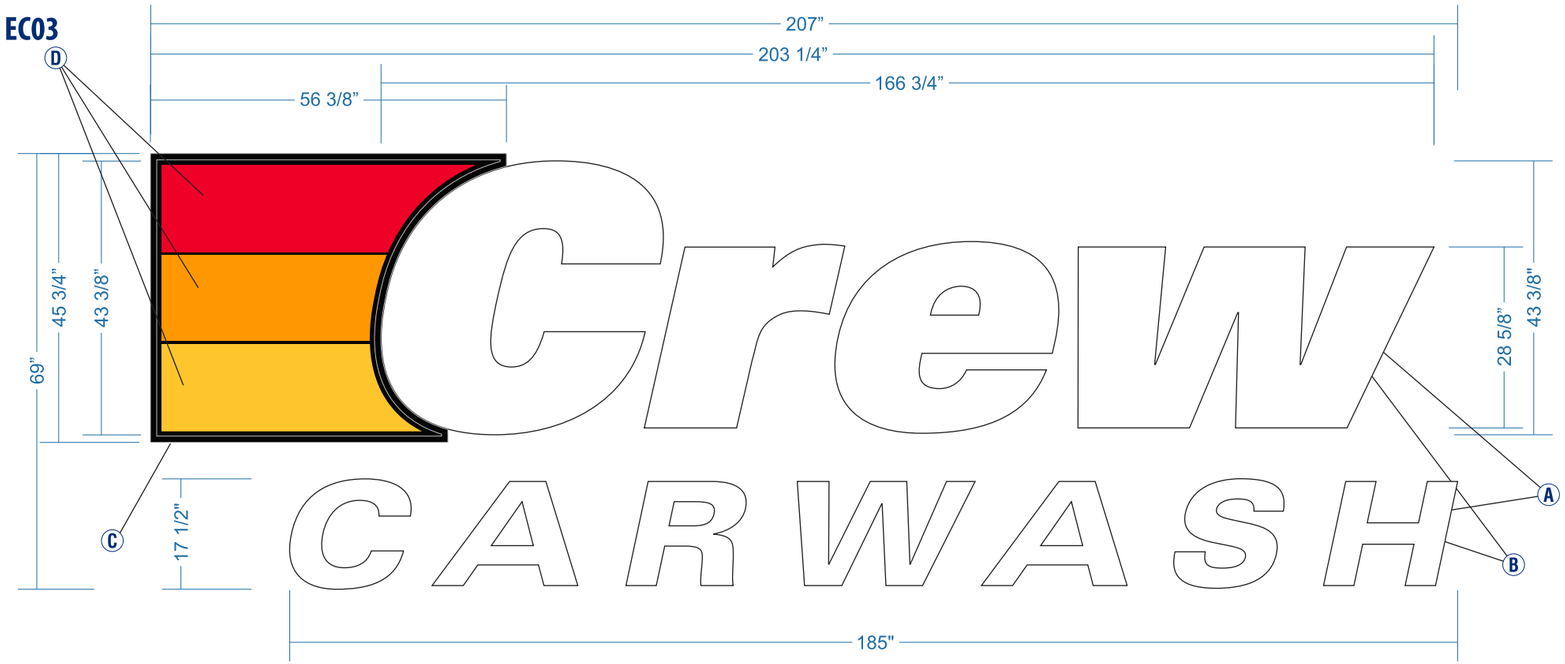
PHOTO SCALE: 1/16” = 1’ - 0”

A
B
C
D
E

F
G
H
I
J

ART SCALE: 3/16” = 1’ - 0”

## EC03




**FABRICATE AND INSTALL QTY 3 INTERNALLY ILLUMINATED FACE-LIT BUILDING SIGNS**

**RIBBON CABINET**
**BODY** - 1” ALUMINUM ANGLE SKINNED IN .090 ALUMINUM
**RETURNS** - 3” TO MATCH SPECS
**RETAINERS** - 1” RIGID RETAINERS TO MATCH SPECS
**LEDS** - WHITE - **ADD EXTRA LEDS**

**INSTALLATION** - MOUNTED FLUSH TO FASCIA

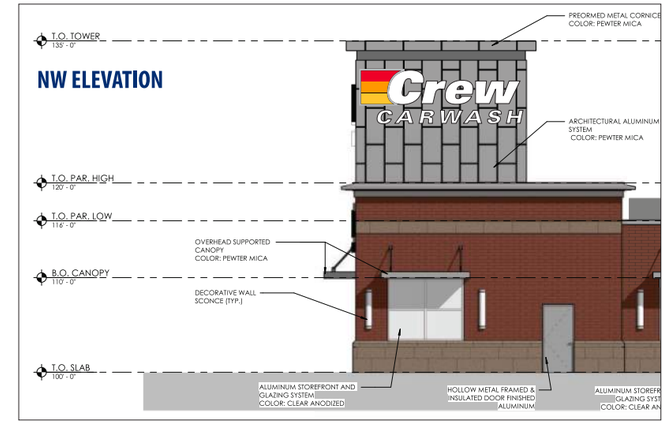
**RIBBON FACES**
**MATERIAL** - PAN FORMED, EMBOSSED PLASTIC PAINTED SECOND SURFACE TO MATCH SPECS
**FLANGE** - 1 1/4”
**PAN DEPTH** - 1”

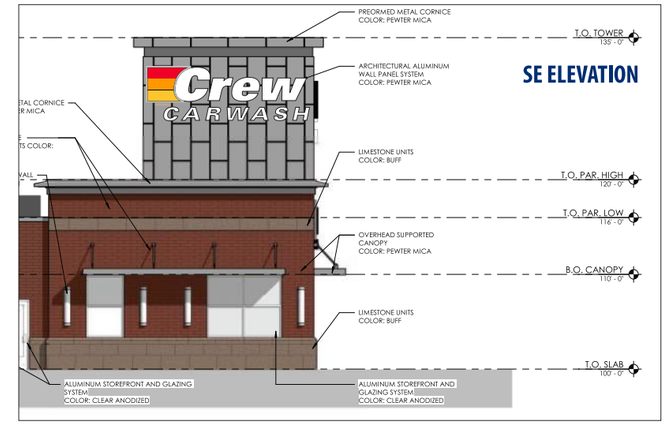
**INSTALLATION** - MOUNTED INTO RIGID RETAINERS

**“CREW” & “CARWASH”**
**FACES** - 1/8” 2447 WHITE ACRYLIC
**RETURNS** - 4” TO MATCH SPECS
**TRIM CAPS** - 1” TO MATCH SPECS
**BACKS** - .063 ALUMINUM
**LEDS** - WHITE

**INSTALLATION** - MOUNTED FLUSH TO FASCIA

Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓘ Ⓙ

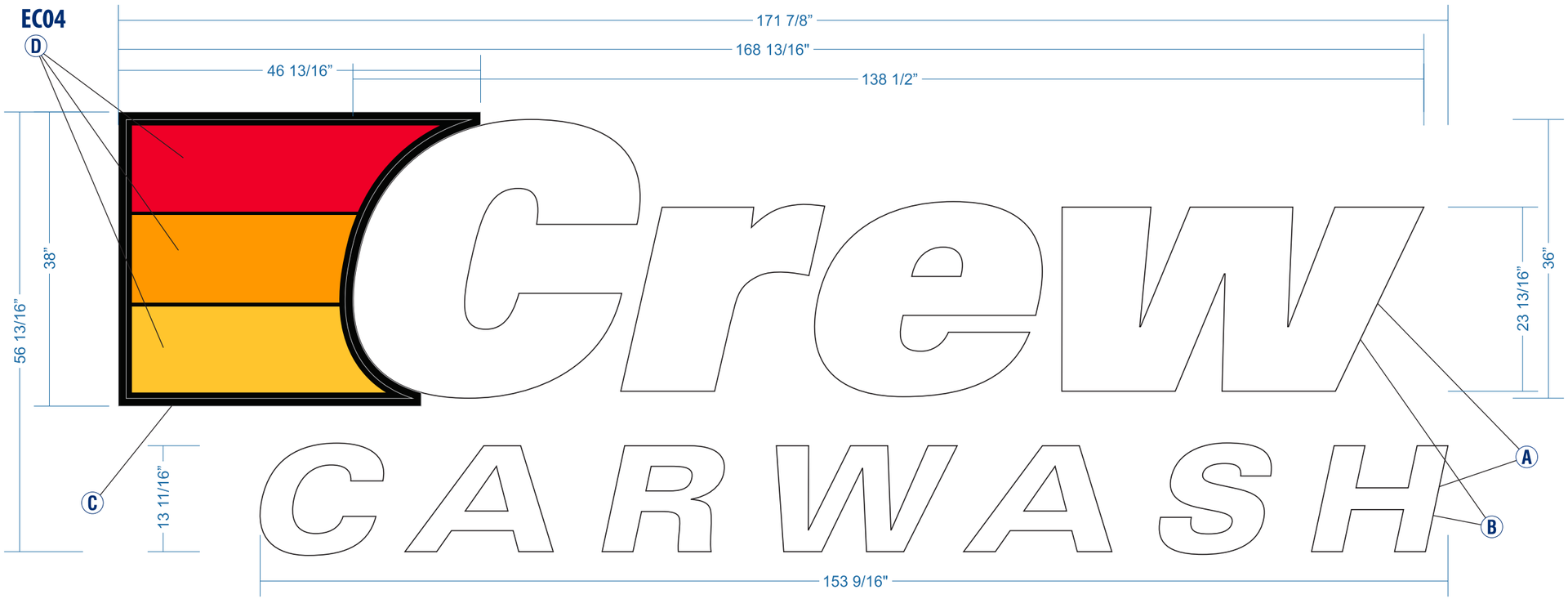


NORTHEAST ELEVATION

**PHOTO SCALE: 1/16” = 1’ - 0”**

**ART SCALE: 1/2” = 1’ - 0”**




**FABRICATE AND INSTALL QTY 1 INTERNALLY ILLUMINATED FACE-LIT BUILDING SIGN**

**RIBBON CABINET**
**BODY** - 1" ALUMINUM ANGLE SKINNED IN .090 ALUMINUM
**RETURNS** - 3" TO MATCH SPECS
**RETAINERS** - 1" RIGID RETAINERS TO MATCH SPECS
**LEDS** - WHITE - **ADD EXTRA LEDS**

**INSTALLATION** - MOUNTED FLUSH TO FASCIA

**RIBBON FACES**
**MATERIAL** - PAN FORMED, EMBOSSED PLASTIC PAINTED SECOND SURFACE TO MATCH SPECS
**FLANGE** - 1 1/4"
**PAN DEPTH** - 1"

**INSTALLATION** - MOUNTED INTO RIGID RETAINERS

**"CREW" & "CARWASH"**
**FACES** - 1/8" 2447 WHITE ACRYLIC
**RETURNS** - 4" TO MATCH SPECS
**TRIM CAPS** - 1" TO MATCH SPECS
**BACKS** - .063 ALUMINUM
**LEDS** - WHITE

**INSTALLATION** - MOUNTED FLUSH TO FASCIA

**SW ELEVATION**

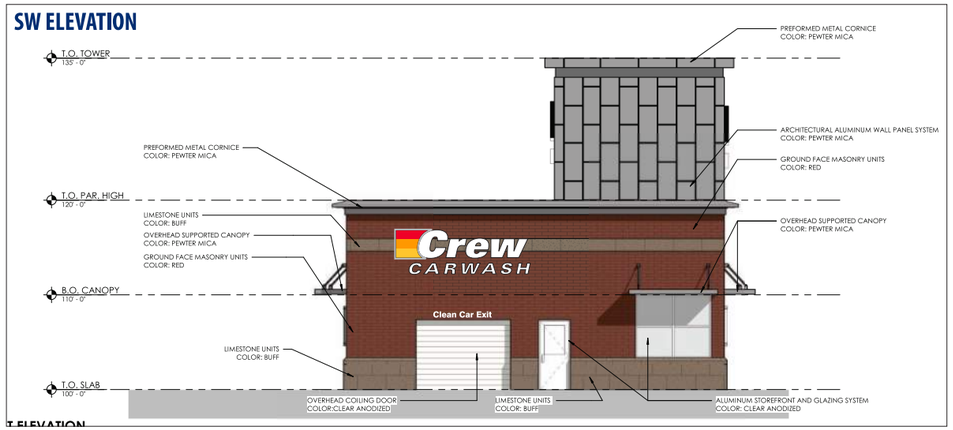



**PHOTO SCALE: 1/16" = 1' - 0"**

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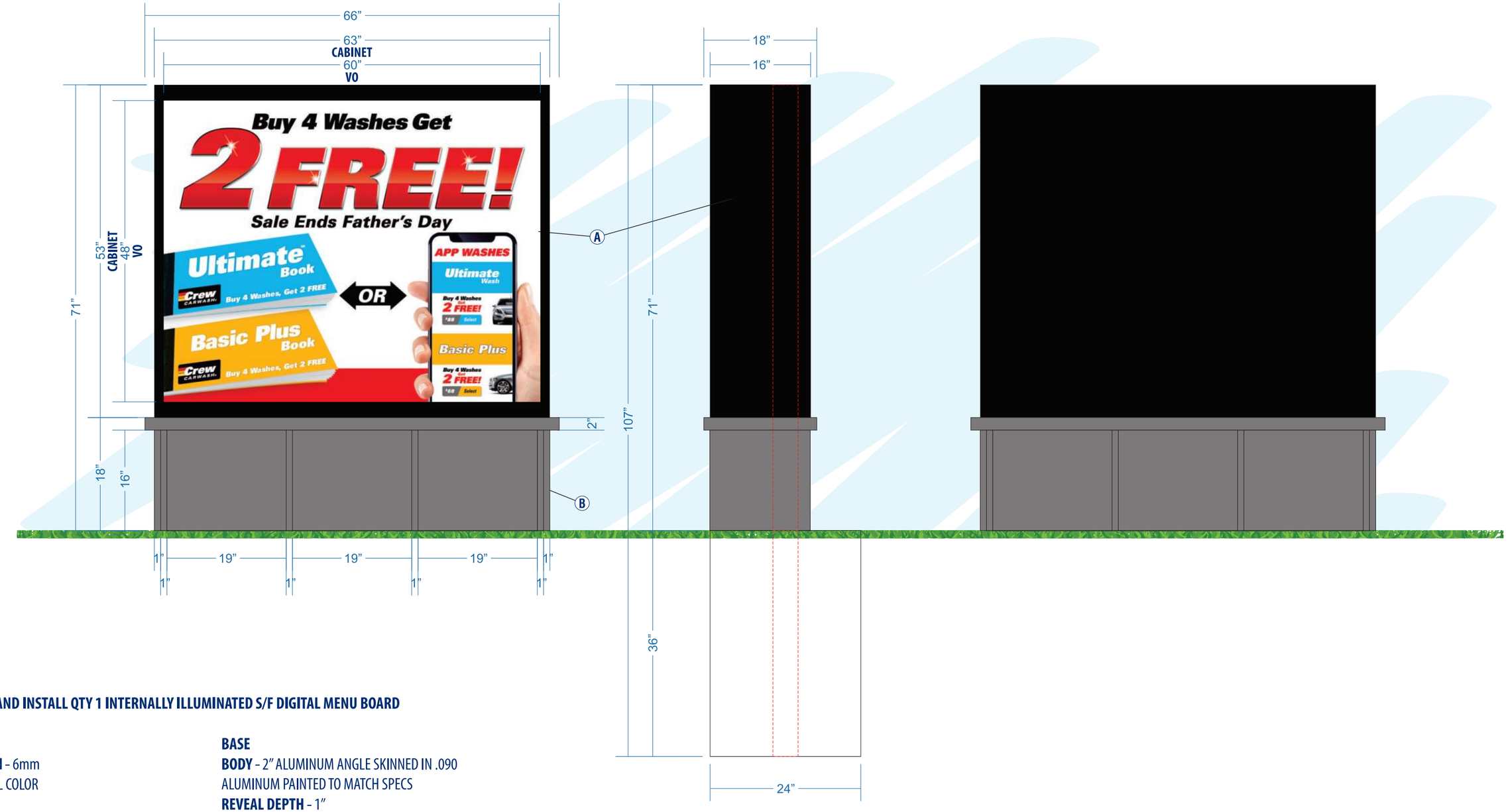
**ART SCALE: 3/4" = 1' - 0"**

**EC05**




**FABRICATE AND INSTALL QTY 1 INTERNALLY ILLUMINATED S/F DIGITAL MENU BOARD**

**EMC**
**RESOLUTION** - 6mm
**COLOR** - FULL COLOR
**DEPTH** - 5”

**INSTALLATION** - MOUNTED TO SIGN BASE & POST

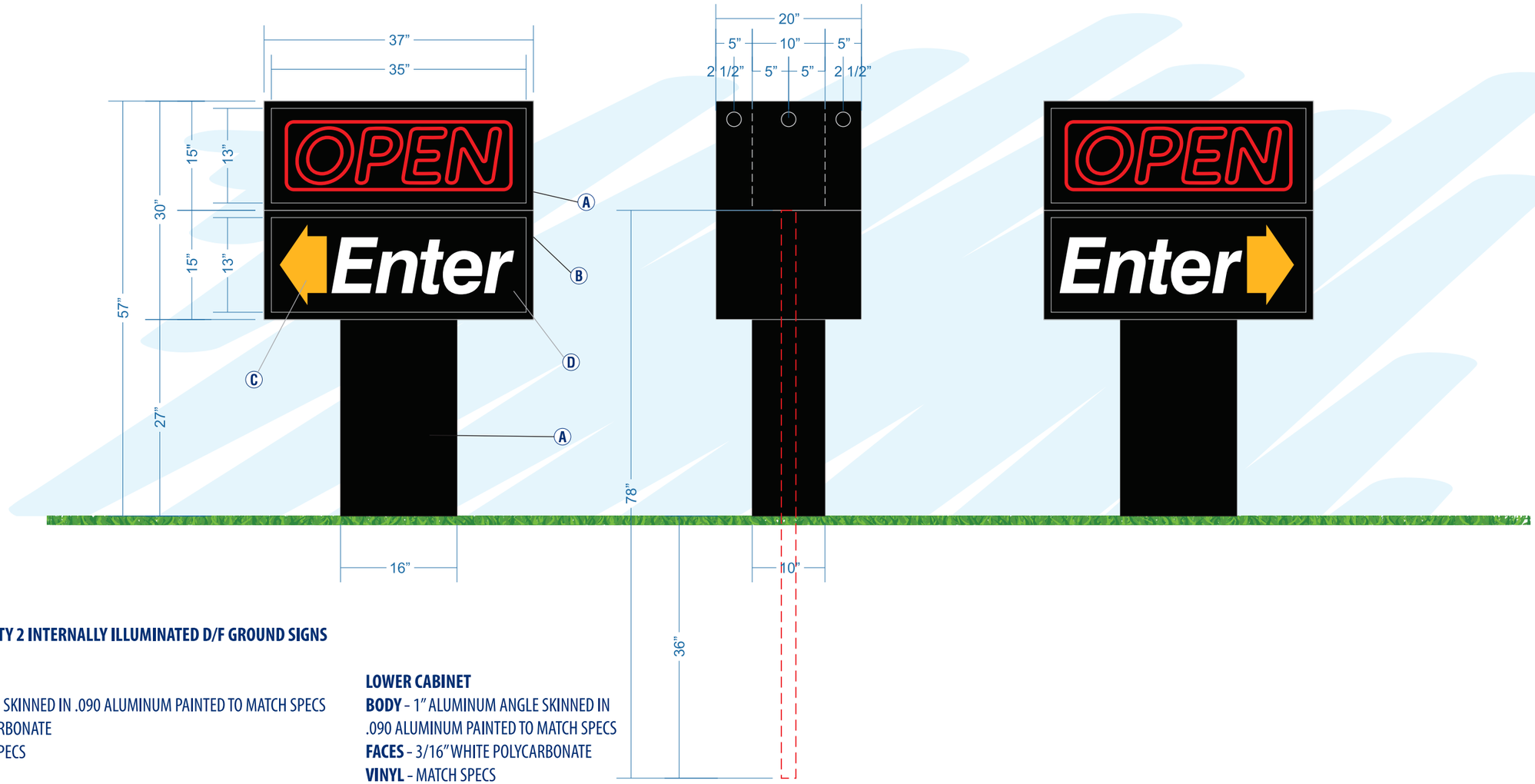
**BASE**
**BODY** - 2” ALUMINUM ANGLE SKINNED IN .090 ALUMINUM PAINTED TO MATCH SPECS
**REVEAL DEPTH** - 1”

**INSTALLATION** - MOUNTED AROUND 4” SCH 40 PIPE BURIED INTO GRADE

| | |
|---|---|
| A | F |
| B | G |
| C | H |
| D | I |
| E | J |

**ART SCALE: 3/4” = 1’ - 0”**

**EC06**




**FABRICATE AND INSTALL QTY 2 INTERNALLY ILLUMINATED D/F GROUND SIGNS**

**UPPER CABINET**
**BODY** - 1” ALUMINUM ANGLE SKINNED IN .090 ALUMINUM PAINTED TO MATCH SPECS
**FACES** - 3/16” CLEAR POLYCARBONATE
**RETAINERS** - 1”TO MATCH SPECS
**NEON** - 12 MM RED

**INSTALLATION** - BAFFLE & DIVIDER NEEDED BETWEEN TOP AND BOTTOM CABINETS

**BASE**
**BODY** - 1” ALUMINUM ANGLE SKINNED IN .090 ALUMINUM PAINTED TO MATCH SPECS

**INSTALLATION** - INSTALLED AROUND 2” SQ ALUMINUM POST BURIED INTO GRADE

**LOWER CABINET**
**BODY** - 1” ALUMINUM ANGLE SKINNED IN .090 ALUMINUM PAINTED TO MATCH SPECS
**FACES** - 3/16” WHITE POLYCARBONATE
**VINYL** - MATCH SPECS
**RETAINERS** - 1”TO MATCH SPECS

**INSTALLATION** - MOUNTED TO BASE & POST

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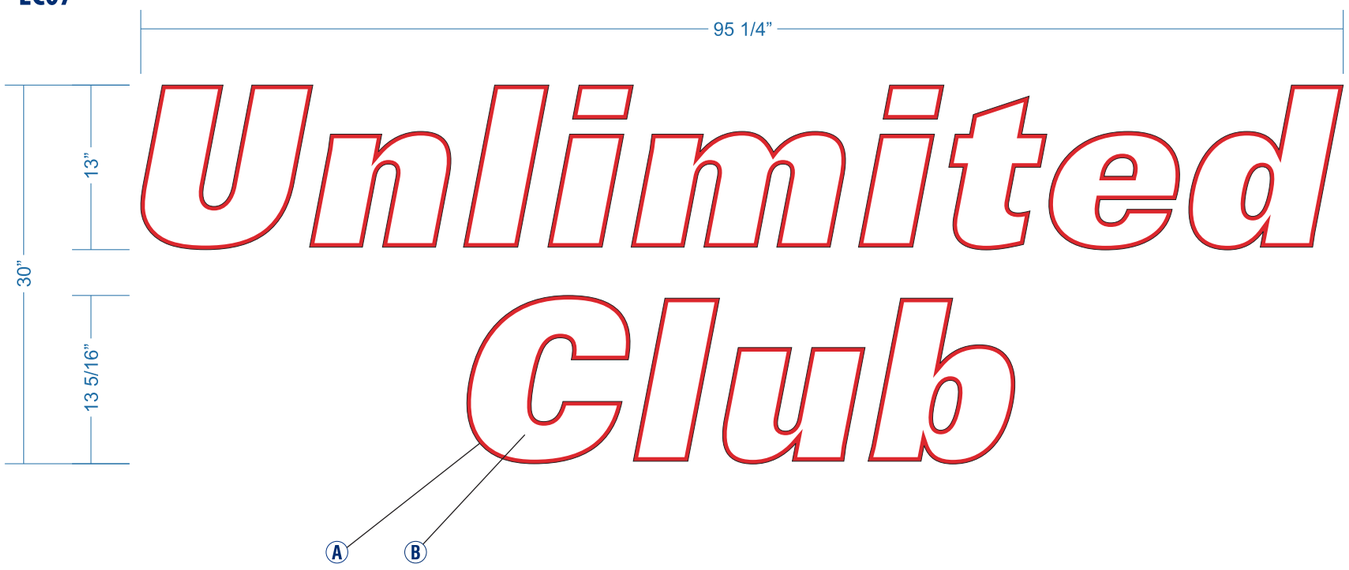
|---|---|
| A | F |
| B | G |
| C | H |
| D | I |
| E | J |

**ART SCALE: 3/4” = 1’ - 0”**

**EC07**



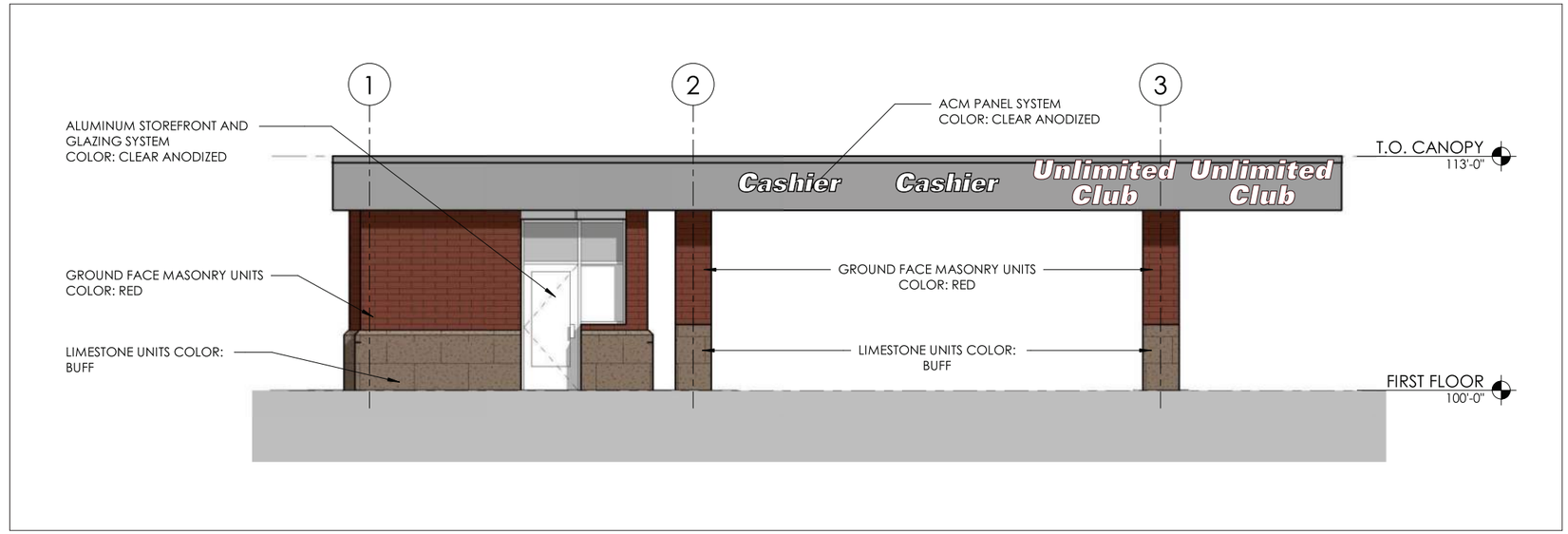




**PHOTO SCALE: 1/8" = 1' - 0"**

**FABRICATE AND INSTALL QTY 2 NON-ILLUMINATED LETTER SETS**

**FACES** - 1" WHITE PVC PAINTED TO MATCH SPECS
**VINYL** - MATCH SPECS

**INSTALLATION** - MOUNTED FLUSH TO CANOPY

| | |
|---|---|
| A | F |
| B | G |
| C | H |
| D | I |
| E | J |

**ART SCALE: 1" = 1' - 0"**

**EC08**

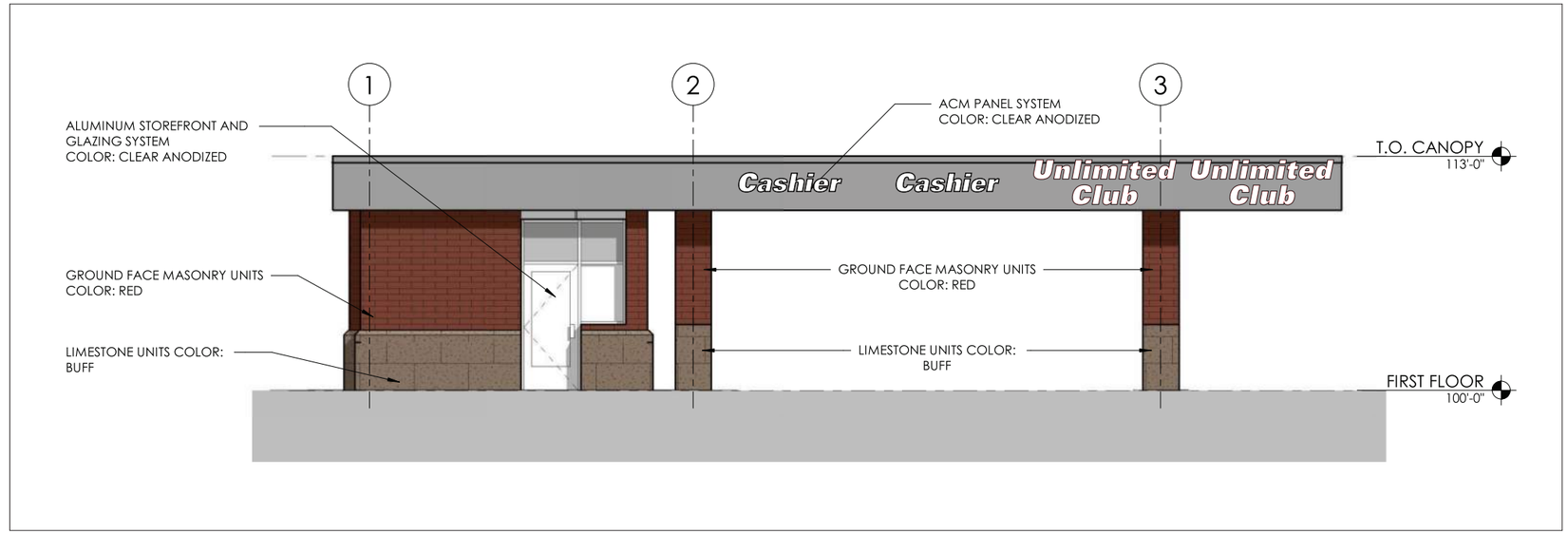



**PHOTO SCALE: 1/8″ = 1′ - 0″**

**FABRICATE AND INSTALL QTY 2 NON-ILLUMINATED LETTER SETS**

**FACES** - 1″ WHITE PVC PAINTED TO MATCH SPECS
**VINYL** - MATCH SPECS

**INSTALLATION** - MOUNTED FLUSH TO CANOPY

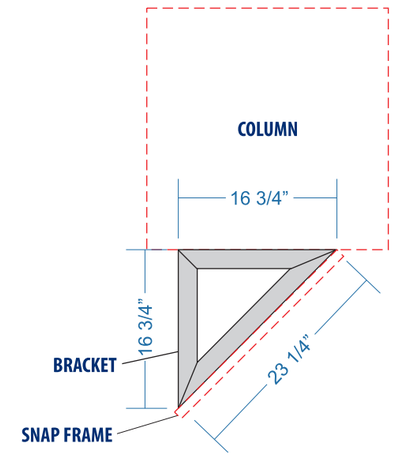
| | |
|---|---|
| A | F |
| B | G |
| C | H |
| D | I |
| E | J |

**ART SCALE: 1″ = 1′ - 0″**

## EC09

ASSEMBLED SIGN

DIBOND FACE ONLY




**FABRICATE AND INSTALL QTY 4 SNAP FRAMES**

**BODY**
**SIGN COMP KIT** - 1899 & 1869A PAINTED TO MATCH SPECS

**INSTALLATION** - QTY 2 FRAMES FLUSH MOUNTED TO COLUMNS, QTY 2 FRAMES ANGLED OFF COLUMNS

**FACES**
**MATERIAL** - 3MM WHITE DIBOND
**VINYL** - MATCH SPECS

**INSTALLATION** - MOUNTED INTO SNAP FRAMES

**ANGLED BRACKETS**
**BODY** - 2" ALUMINUM ANGLE

**INSTALLATION** - MOUNTED TO SNAP FRAME AND COLUMN

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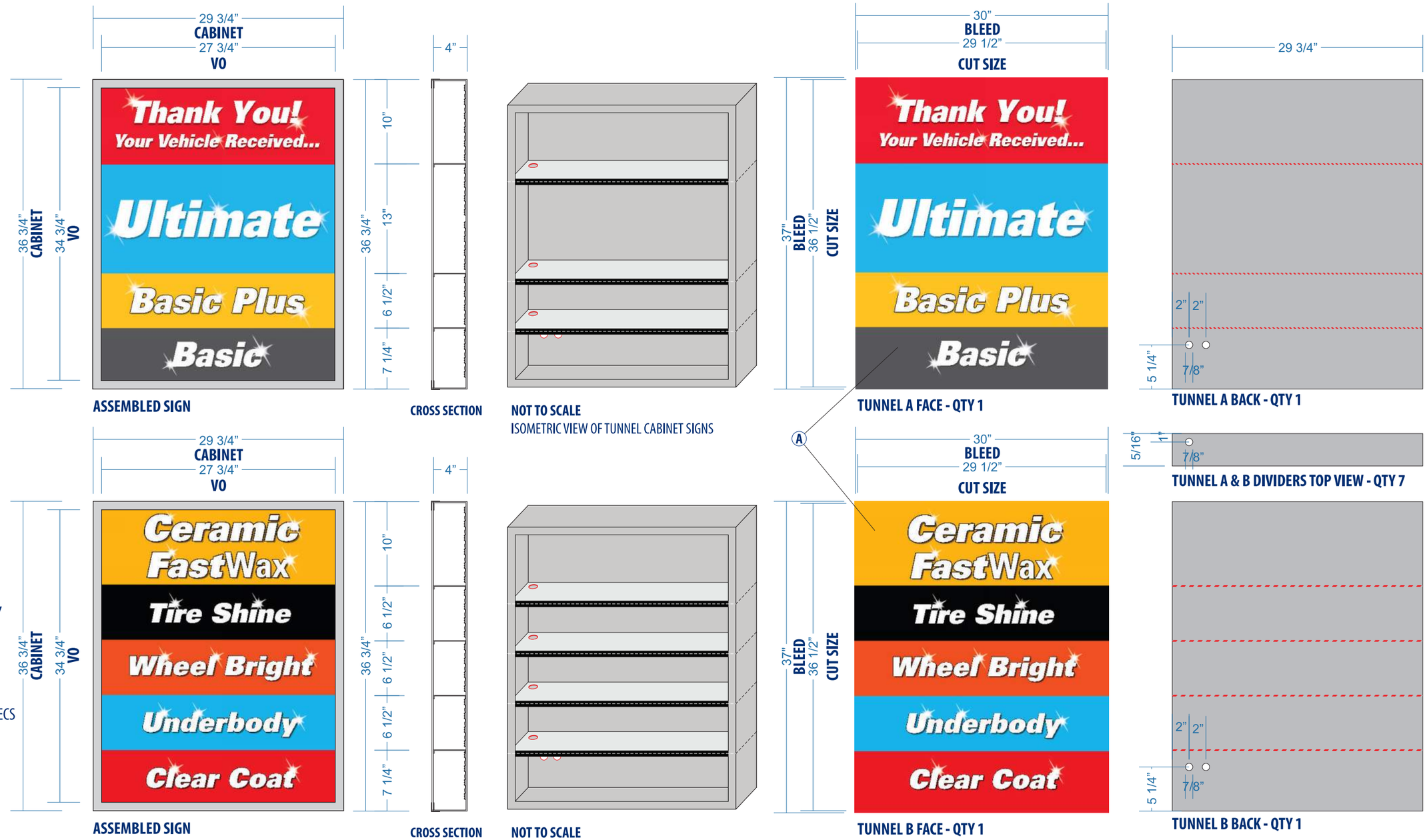
**ART SCALE: 1-1/2" = 1' - 0"**

# EC10




**FABRICATE AND DELIVER QTY 2 INTERNALLY ILLUMINATED S/F CABINET SIGNS**

**STRUCTURE**
**BODY** - STAINLESS STEEL BODY WITH BAFFLES
**RETAINERS** - 1" STAINLESS STEEL TO MATCH SPECS
**DEPTH** - 5"
**LEDS** - PRINCIPLE IP68 WHITE

**FACES**
**MATERIAL** - 3/16" CLEAR ACRYLIC
**VINYL** - MATCH SPECS

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**ART SCALE: 1" = 1' - 0"**

**EC11**

**FABRICATE AND INSTALL QTY 1 NON-ILLUMINATED LETTER SET**

**FACES** - 1”WHITE PVC PAINTED TO MATCH SPECS

**INSTALLATION** - MOUNTED FLUSH TO FASCIA

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**SW ELEVATION**

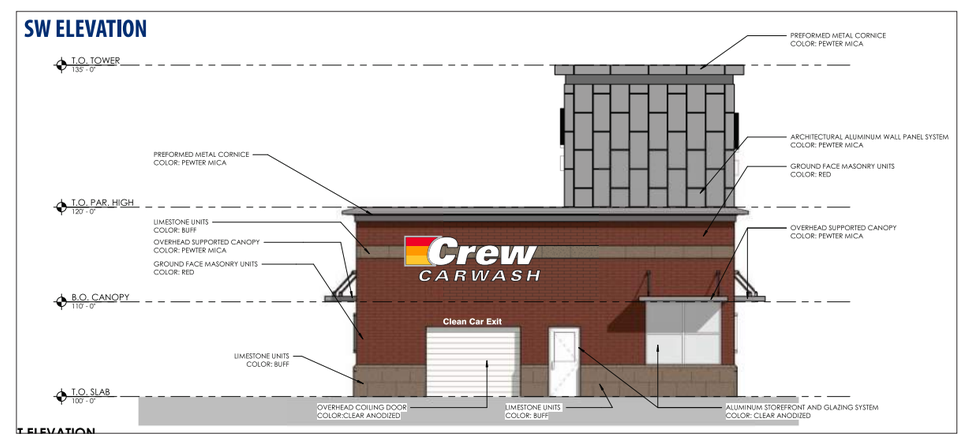
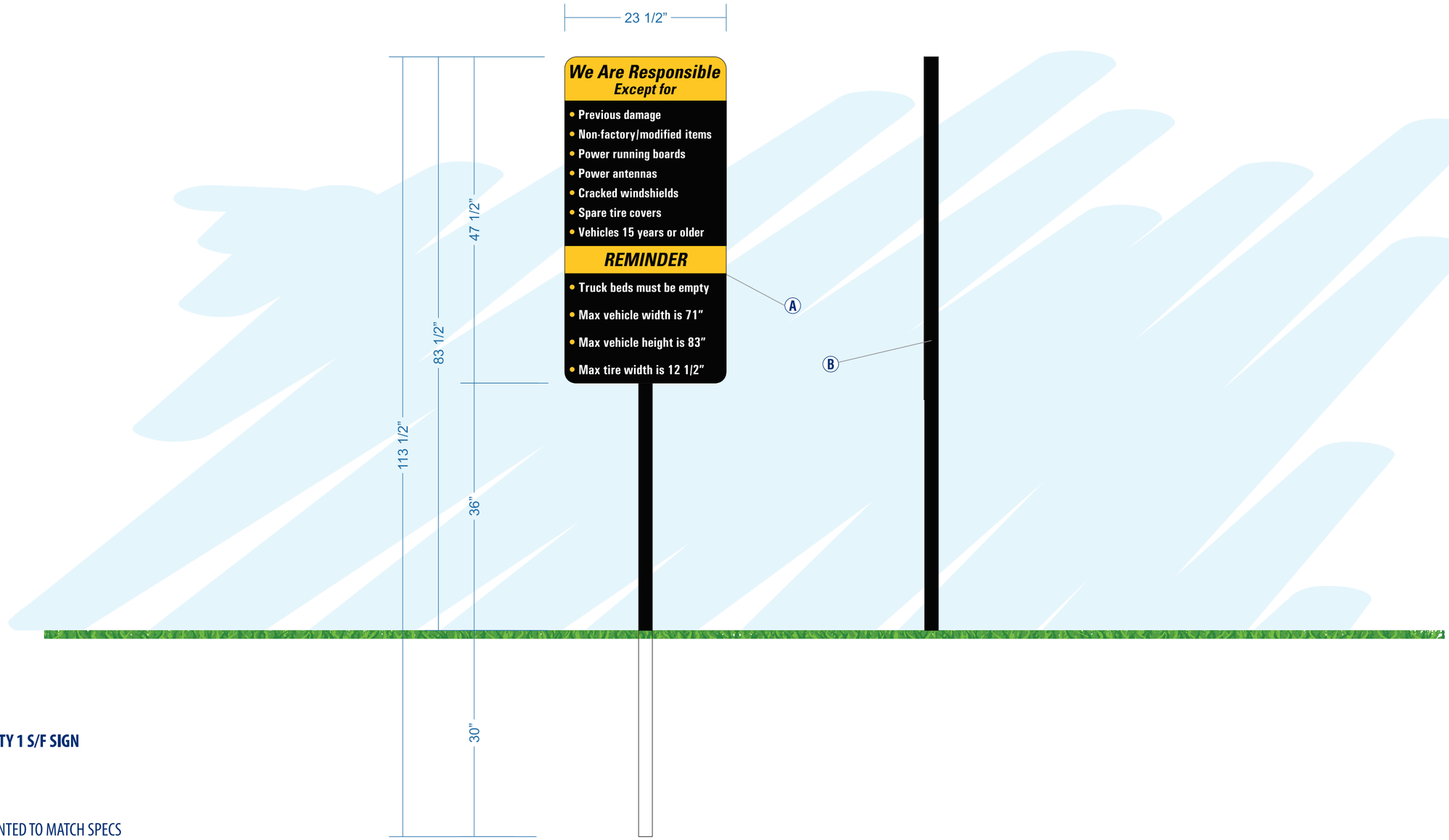



**PHOTO SCALE: 1/16” = 1’ - 0”**

**ART SCALE: 1-1/2” = 1’ - 0”**

## EC12




**FABRICATE AND INSTALL QTY 1 S/F SIGN**

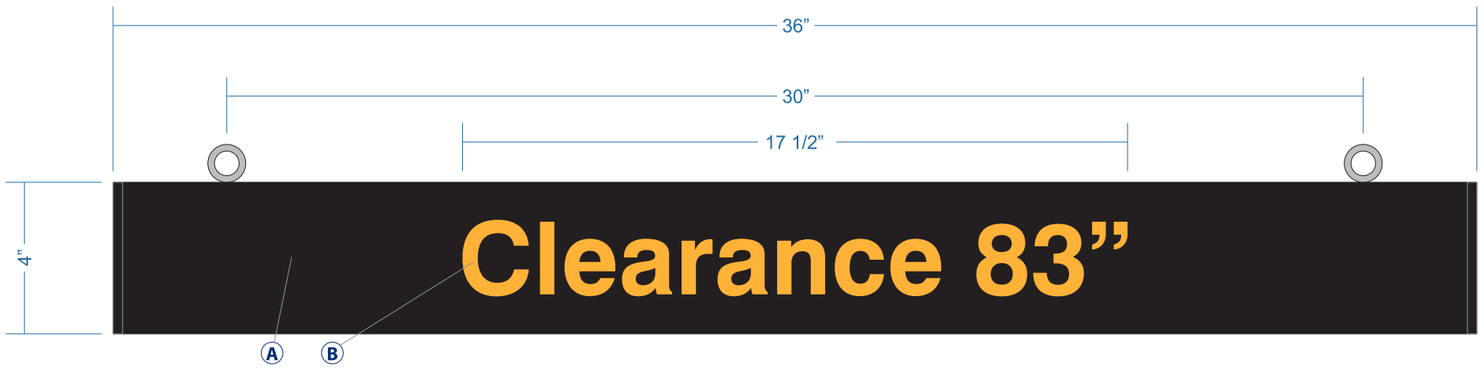
**FACES** - 3MM BLACK DIBOND
**VINYL** - MATCH SPECS
**POST** - 2" SQ ALUMINUM PAINTED TO MATCH SPECS

**INSTALLATION** - FACE MOUNTED TO POST, POST BURIED INTO GRADE

| | |
|---|---|
| A | F |
| B | G |
| C | H |
| D | I |
| E | J |

**ART SCALE: 3/4" = 1' - 0"**

## EC13




**FABRICATE AND INSTALL QTY 1 S/F CLEARANCE BAR**

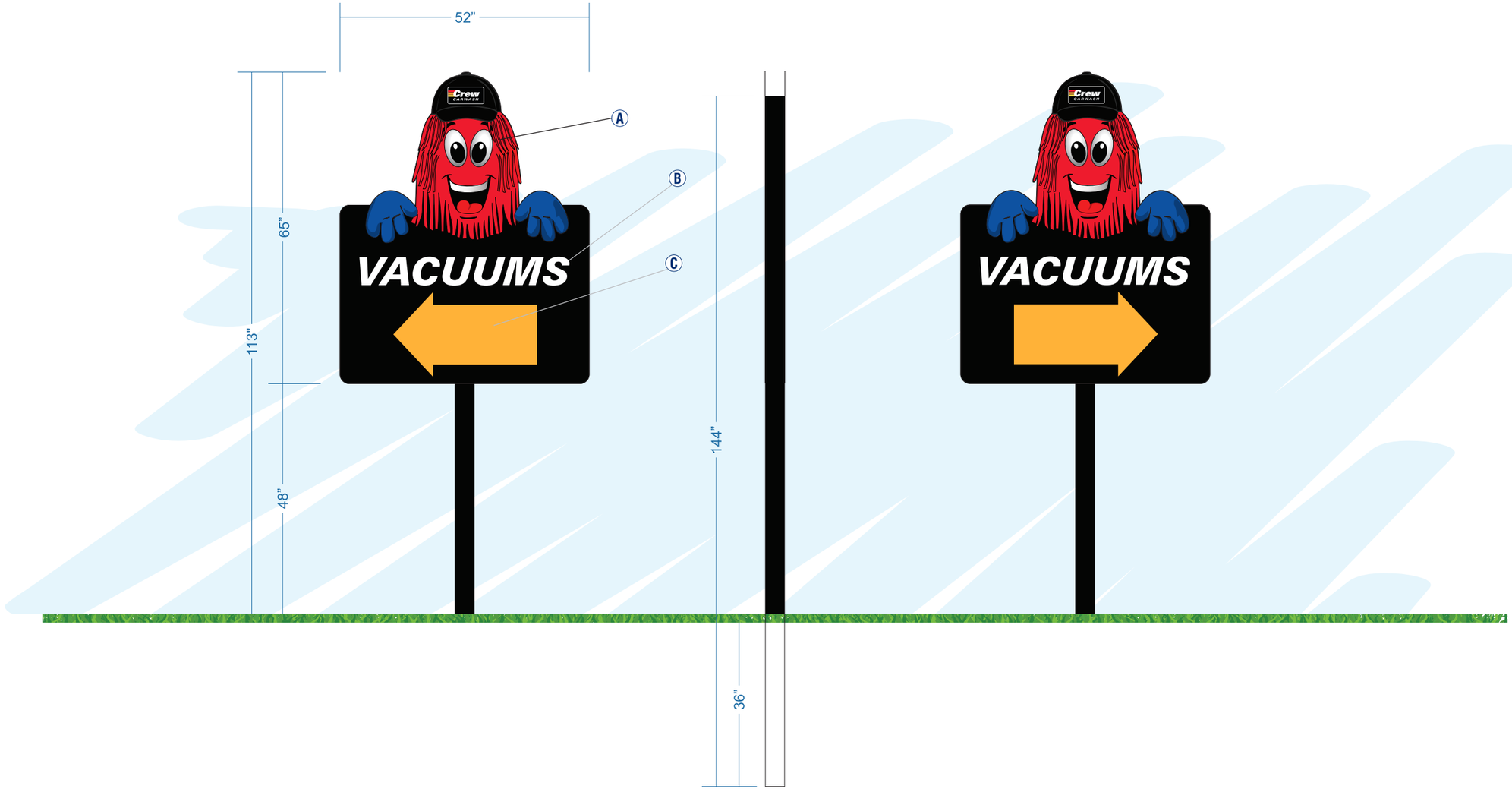
**MATERIAL** - 4” ROUND PVC PIPE WITH CAPS ON ENDS AND PAINTED TO MATCH SPECS
**EYE HOOKS** - STAINLESS STEEL
**VINYL** - TO MATCH SPECS

**INSTALLATION** - HUNG WITH AIRCRAFT CABLE 83” ABOVE GRADE

| | |
|---|---|
| A | F |
| B | G |
| C | H |
| D | I |
| E | J |

**ART SCALE: 3” = 1’ - 0”**

**EC14**



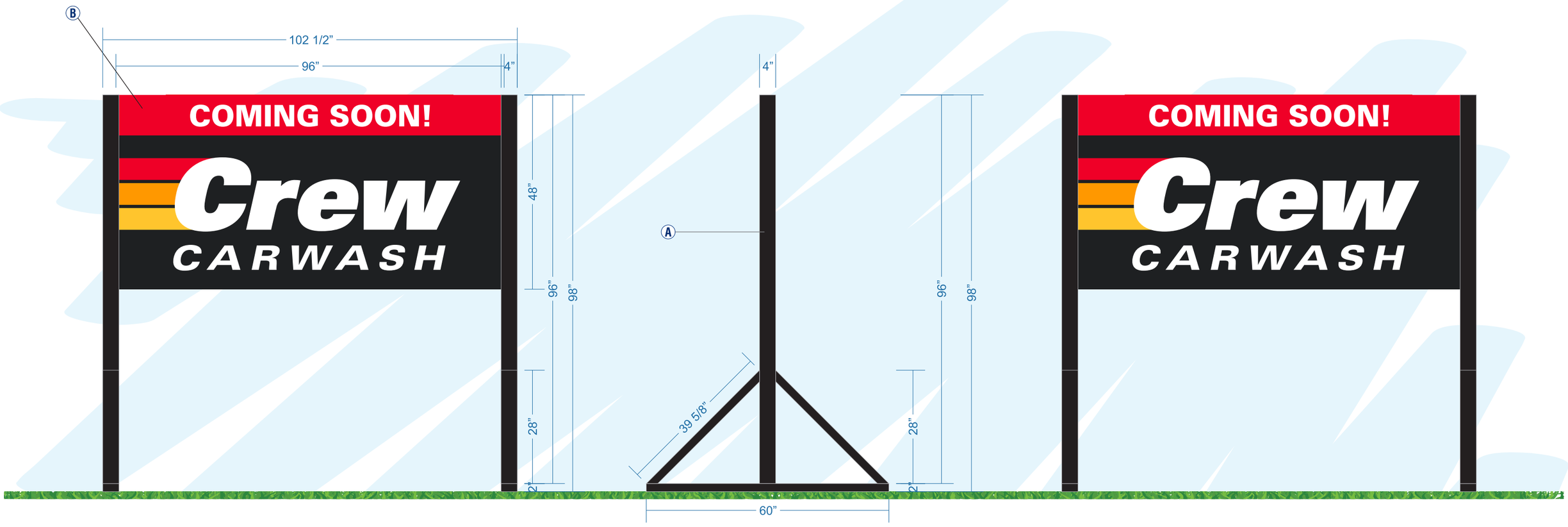

**FABRICATE AND INSTALL QTY 1 D/F VACUUM SIGN**

**FACES** - 3MM BLACK DIBOND
**VINYL** - MATCH SPECS
**POST** - 4" SQ ALUMINUM PAINTED TO MATCH SPECS

**INSTALLATION** - FACES MOUNTED TO POST, POST BURIED INTO GRADE

| | |
|---|---|
| A | F |
| B | G |
| C | H |
| D | I |
| E | J |

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




**FABRICATE AND INSTALL QTY 1 D/F STANDING SIGN POSTS W/ SANDBAGS**

**FACES** - 1/2” ALUMCORE PRINTED TO MATCH SPECS

**POSTS** - QTY 3 - 10’ 2x4 TREATED WOOD PAINTED TO MATCH SPECS
QTY 2 - 8’ 4x4 POSTS PAINTED TO MATCH SPECS

| | |
|---|---|
| A | F |
| B | G |
| C | H |
| D | I |
| E | J |

**ART SCALE: 1/2” = 1’ - 0”**

Crew
CARWASH
Crew
CARWASH
9705
Clean Car Exit
Cashier
Cashier
Unlimited Club
Unlimited Club

Crew
CARWASH
Crew
CARWASH
9705
Clean Car Exit
Cashier
Cashier
Unlimited Club
Unlimited Club

Crew
CARWASH
Cashier
Cashier
Unlimited Club
Unlimited Club

Crew
CARWASH

Crew
CARWASH

Crew
CARWASH
Friendly

# VILLAGE CODE TEXT AMENDMENTS

**4/8/24 Plan Commission Meeting**

## Germantown Community Development Department

**Village Planner Report** **Germantown, Wisconsin**


**Summary**

The Community Development Department is proposing a series of minor text amendments to Section 17 (Zoning Code) including some new definitions, clarification of accessory building & structure requirements, clarification of Temporary Use Permit requirements, and conditional uses in the M-1: Limited Industrial District.


Staff is proposing several text amendments to various sections in the Village Code as detailed in the attached draft ordinance and summarized below:

**Amendment #1** *(see Section 1)*
The amendment to Section 17.07 specifically provides more than one Temporary Use Permit (TUP) may be granted in succession by the Zoning Administrator or Plan Commission. Historically, the granting of more than one TUP in succession for a given use has occurred, usually when the property owner is waiting to finalize plans or other steps needed to complete a permanent solution for the use or activity. For example, successive TUP's have been granted to the Bier Stube for expansion of the beer garden during COVID. Successive TUP's were granted to Goodwill Industries when they were deciding whether to install a permanent donation drop-off facility in place of a semi-trailer they dropped off in the Sendik's parking lot a few years ago. Staff feels that this allowance needs to be spelled out in the code one way or another depending on PC and VB discussion.

**Amendment #2 & Amendment #3** *(see Section 2 & Section 3)*
This amendment creates/clarifies three definitions in the Definitions section of the Zoning Code. The first two, "Horticultural Services" and "Snow Removal Services", for specific business operations that are very common in our area and, in Staff's opinion, there is not enough direction in the Code to deal with these types of business operations. By their nature, the vehicles, equipment and materials used in these businesses can vary dramatically. Also, these businesses usually involve the storage of large amounts of equipment used seasonally and large amounts of product, e.g. mulch, stone, salt, kept in open containers for ease of access. These uses may not be best suited for the B-1: Neighborhood and B-2: Community Business Districts that they are currently allowed "by right". We have learned from existing business operations such as TLC Acres and DJ Frank that there is no one typical business operation and that handling these as conditional uses gives the Village the best opportunity to address the nuances of each type of operation.

In the last year, there have been multiple business operators with one or both uses under one business that wants to locate on industrial zoned property in the Village.

With respect to “Horticultural Services”, this use is listed as a permitted use in the B-1 & B-2 Business Districts and as a conditional use in the A-2: Agricultural District. This amendment creates a conditional use in the M-1 District for both uses.

**Amendment #4** *(see Section 4)*
The proposed amendment to Section 17.41 clarifies the number and type of “temporary storage structures” that can be constructed/installed on all residential and agricultural property. The amendment also increases the period that a temporary storage structure can be installed on a property without a permit from 30 to 180 days and clarifies when a temporary use permit can be used to exceed this limit. The amendment creates a provision for temporary storage structures for agricultural property and provides an exemption if the temporary storage structure is used exclusively for agricultural purposes.

A recommendation from the Plan Commission is necessary to move the proposed code amendments to the Village Board for consideration and action.

# SITE PLAN APPLICATION

**4/8/24 Plan Commission Meeting**

## Briohn Building Corporation / Green Bay Packaging Inc.

***Staff Report & Recommendation*** ***Germantown, Wisconsin***


**Summary**

Briohn Building Corp. agent for Green Bay Packaging Inc., property owner, is requesting approval of site development and building plans for a 270,000 sqft light manufacturing and 12,500 sqft office located in the northeast corner of the Holy Hill Road @ I-41 interchange in the Holy Hill Gateway District.


**Location:** Holy Hill Road @ I-41 (northeast corner north of convenience store)

**Applicant/**
**Property Owner:**

| | |
|---|---|
| Caitlin LaJoie | Bryan Hollenbach |
| Briohn Building Corp | Green Bay Packaging Inc. |
| 3885 N Brookfield Rd | 1700 Webster Court |
| Brookfield, WI | Green Bay, WI |

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**Current Zoning:** M-1: Limited Industrial

| **Adjacent Land Uses** | | **Zoning** |
|---|---|---|
| North | Agricultural | A-1 |
| South | Business/Industrial | B-5/M-1 |
| East | Industrial | M-1 |
| West | Business (Richfield) | n/a |

## Background/Proposal

As discussed in July 2023, Green Bay Packaging (GBP) is proposing to relocate their existing Great Lakes Division operation from the Germantown Industrial Park to the Holy Hill Gateway District adjacent to I-41. The 52.7-acre area is comprised of multiple parcels that will be combined and redivided into a 37 acre parcel for the Green Bay Packaging facility and potentially a separate 16-acre parcel to the north abutting Rockfield Road.

In November, 2023, the Village Board approved a request by GBP to change the future land use plan designation for this area from "Mixed-use Commercial & High Density Residential" to "Light Industrial/Warehouse" and rezone the property from A-1: Agricultural to M-1: Limited Industrial. The Village Board also decided to not pursue construction of a frontage road from Holy Hill Road to Rockfield Road.

At this time, Briohn Building is requesting approval of site development and building plans for a 270,000 sqft light manufacturing and 12,500 sqft office located in the northeast corner of the Holy Hill Road @ I-41 interchange in the Holy Hill Gateway District with the following characteristics:

*Site Improvements*

- Reconstruct the existing north approach on the Holy Hill Road intersection that will include a new driveway into the GBP property and relocation of the public road serving the convenience store/gas station property (a.k.a. 48th Street)
- Construct a perimeter driveway serving an employee & customer parking area on the west and the truck shipping & receiving dock areas on the north and south sides of the building
- Internal site landscaping around the building, parking area and driveways
- One (1) access driveway providing access to the employee and visitor parking lot on the west side of the building serving a total of 135 vehicle parking stalls (7 ADA stalls)
- (33) truck-trailer parking stalls along the north side of the building (12'x55') and (25) stalls along the south side of the building
- (2) storm water management basins on the NE & SE corners of the property

*Building Improvements*

1. 270,000 sqft single-story building w/ 12,500 sqft office (future 68,500 sqft)
    - Painted exterior insulated pre-cast concrete wall panels @ 44' & 38' wall height for warehouse building w/ light & dark gray painted finish
    - Painted exterior insulated wall panels @ 15' height w/ exposed steel stud framing
    - (9) shipping/receiving loading dock bays (5 future) on north side of buildings & (17) shipping/receiving dock bays (3 future) on south side of building

Storm Water Management. A total of 14.7 acres of impervious surfaces are proposed as part of the development or 39.1% of the total 37.65-acre site leaving 60.9% in open/green space. Storm sewer installed throughout the parking areas and driveways will convey storm water to two (2) basins, one in the southeast corner of the property and one in the northeast corner of the property.

Landscaping & Buffering. Landscaping is proposed along the parking area and building on the west side of the perimeter parking area Holy Hill Road (street trees) and the west side of the building and within the parking areas. Plantings include a variety of deciduous street and shade trees, ornamental trees, evergreen trees, deciduous and evergreen shrubs, perennial plantings, and ornamental grasses. (see Sheets L-1 through L-5). The landscaping proposed is a continuation of the type and extent of landscaping installed for Phase 1.

Lighting. Proposed exterior lighting of the site and building includes:

- (3) 97W 14000 Lumen 4000K color (bright white) LED cut-off building-mounted fixtures at a height of 22' on the west elevation;
- (12) 150W 21200 Lumen 4000K color (bright white) LED cut-off building-mounted fixtures at a height of 22' on the north and south elevations
- (11) 70W 8100 Lumen 4000K color (bright white) LED cut-off building-mounted fixtures at a height of 11' on the west elevation
- (8) 22W 3500 lumen bollard fixtures at a height of 4' in the parking area along the west elevation;
- (23) 97W 14000 lumen 4000K color (bright white) LED cut-off style pole-mounted fixtures mounted on a 20' pole and 2' base in the parking areas and perimeter driveways
- (4) 97W 21200 lumen 4000K color (bright white) LED cut-off style pole-mounted fixtures mounted on a 20' pole and 2' base in the parking areas and perimeter driveways

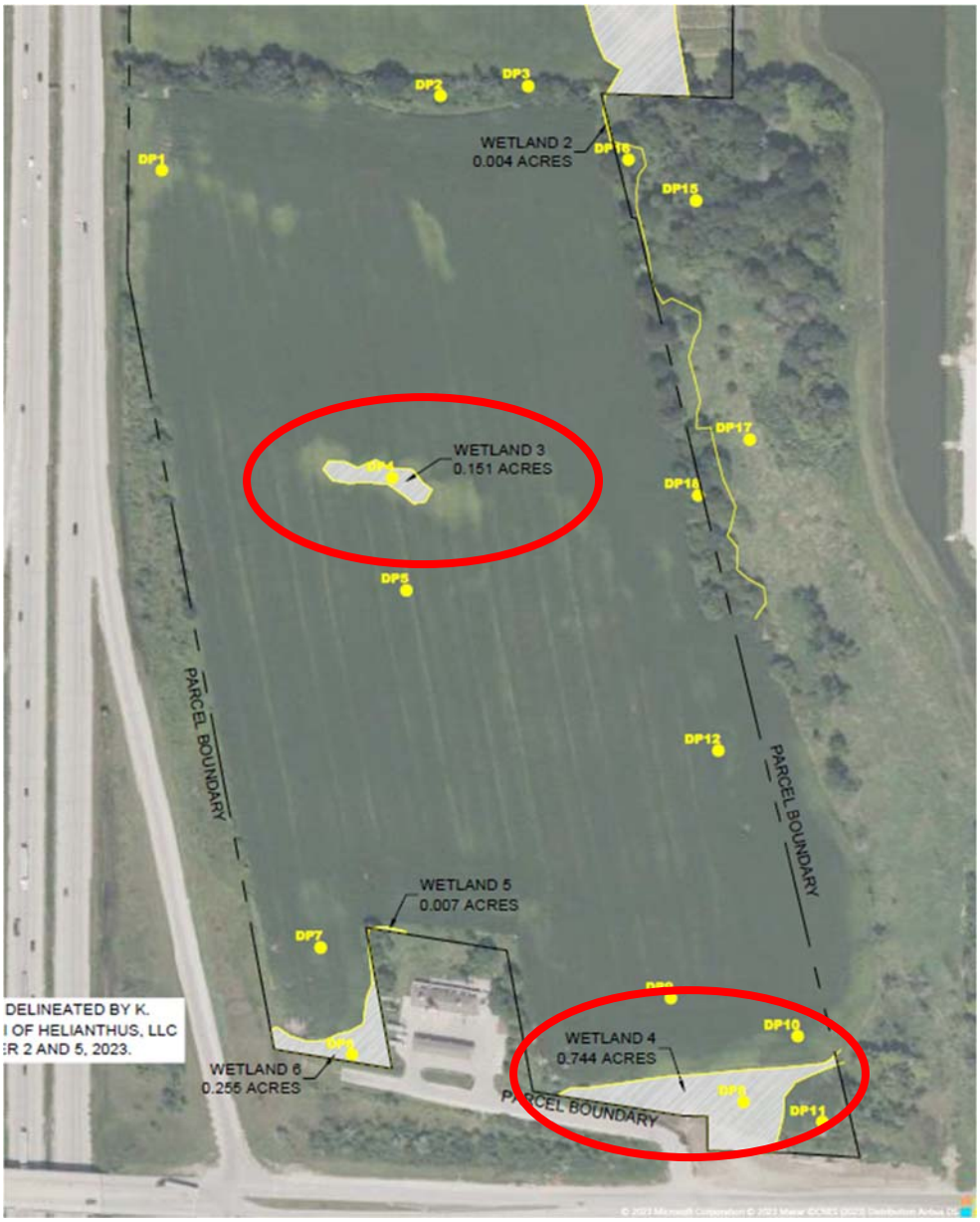
Signage. A monument sign placeholder is shown at the internal driveway split but no signage is currently proposed.

**Staff Comments**

Community Development: Planning & Zoning Services

While not a concern for the proposed development, the GBP property will be impacted by the water & sanitary sewer utility extensions to the Village of Richfield. The current design plan for that project shows the need for a 30' utility easement along the west property line abutting I-41 and a ¼ to ½ acre lift station easement along Rockfield Road. Negotiations for these easements will occur once the final design is complete.

A wetland delineation of the entire property revealed that there are two (2) wetland areas that will be impacted by the proposed development: Wetland #3 a .15-ac wetland in the center of the property as shown in the map below and Wetland #4 a .75 ac wetland at the south end of the property where the new driveway/intersection is proposed.

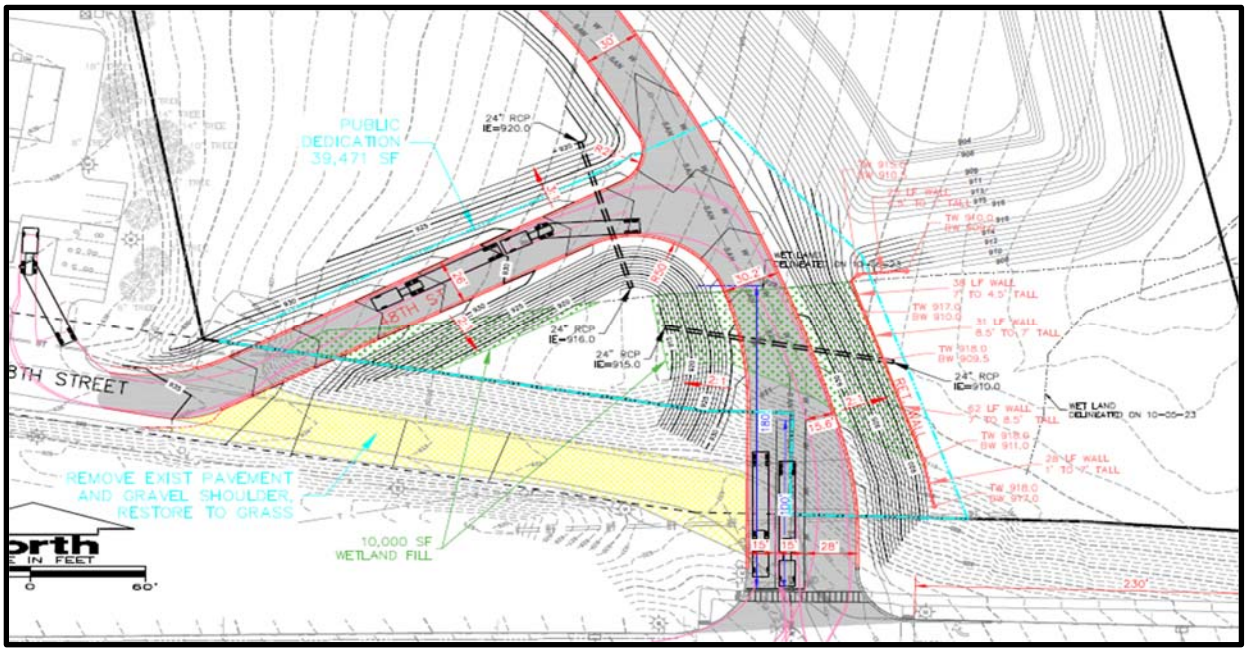


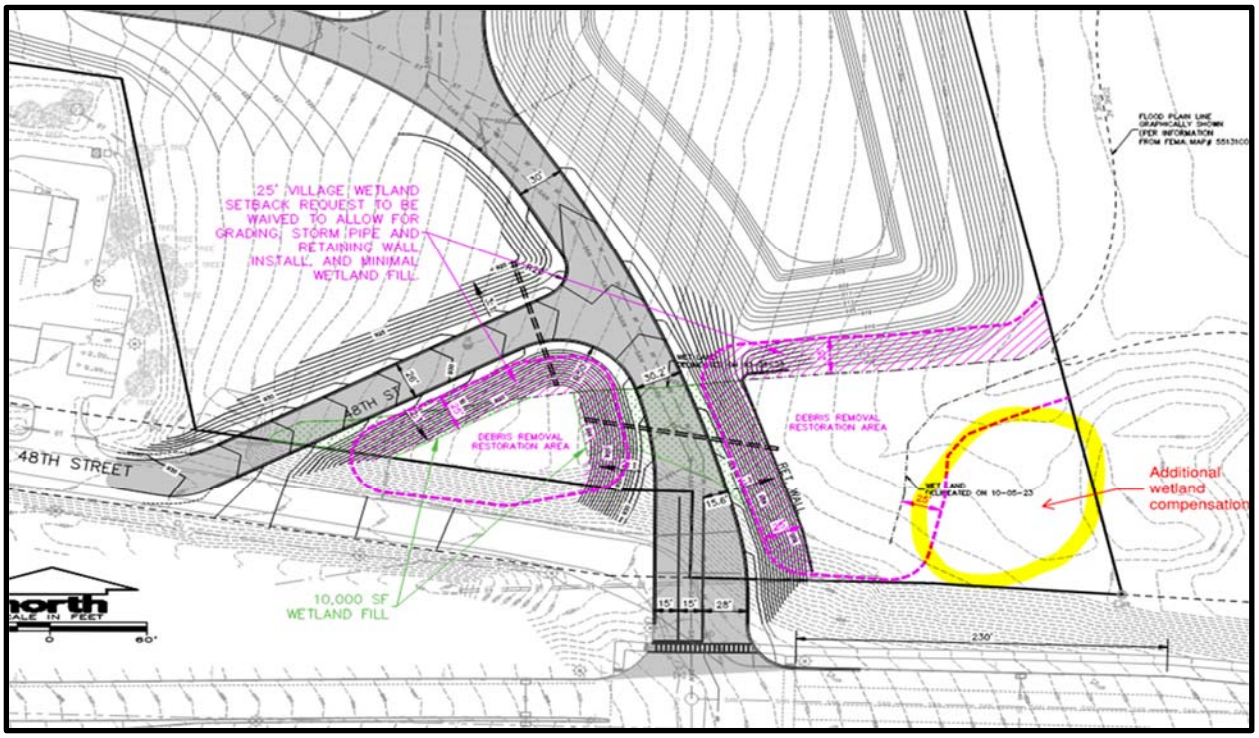

GBP has submitted application to the DNR for an artificial wetland determination for Wetland #4 based on evidence revealed through the delineation. As of this date, no decision has been made (although a decision is expected before the April 8 PC meeting). Regardless, GBP intends to file an application for either a “General Permit” or an “individual permit” to fill Wetland #3 and what, if any, portion of Wetland #4 is not deemed artificial. A General Permit can be (and regularly is) issued by the DNR for isolated wetland fill areas less than 10,000 sqft without a requirement for compensation. If the fill area is greater than 10,000 sqft, a permit issued by the DNR will require compensation.

Also, in anticipation of not getting an artificial wetland determination for Wetland #4 from

the DNR, GBP has submitted a Conditional Use Permit (CUP) application with the Village for encroaching into the Village's 25' wetland setback that would be in effect around any portion of Wetland #4 that is not deemed artificial.

As shown in the graphics below (and difficult to see), the 48th Street re-constructed & realigned coincides with the new driveway access for GBP at the north approach to the intersection. Wetland will be impacted and the 25' setback area will be impacted if Wetland #4 is NOT artificial.



At this time, any action to approve the GBP Site Plan application and plans will need to be conditionally approved subject to (1) the DNR approving the filling of Wetland #3 and Wetland #4 (or determining that the wetlands are artificial); and (2) the Village granting a CUP to encroach into the 25' wetland setback. No permits to authorize construction or building permits should be issued until the wetland fill issue is resolved.

Community Development: Inspection Services
State agency (DSPS) approved plans and a $20,000 occupancy bond are required by Inspection Services at the time of building permit application. The Village of Germantown is an authorized delegated agent of DSPS to provide all commercial plan review and inspection services through SAFEBuilt of WI and the Village of Germantown.

Public Works/ Village Engineer/Utilities
The Village Engineer and Public Works Department staff have identified several minor technical requirements and plan corrections that will need to be resolved in revised plans and/or supplemental documents prior to commencing construction activities and issuance of a building permit in the April 4, 2024 review memo (copy attached). The Village Engineer has also identified several significant access-related issues that will need to be addressed in both revised plans and a Development Agreement with the Village. These issues include:

1. Update Traffic Impact Analysis to address stop sign and stop bar location with respect to vehicles turning from northbound to westbound into the convenience store/gas station (both vehicles and semi-trucks R-20 v. R-50 v. R-120);
2. Adjust intersection design width accordingly and coordinate with Engineering Department as necessary;
3. Provide a construction sequencing plan that indicates staging to maintain uninterrupted access for the convenience store/gas station;
4. Due to proposed steep slopes a rural cross section is anticipated with guard rails. Explain basis for selecting curbs. Safety guard railing will be required. Coordinate with Engineering Department and adhere with Development Handbook, including applicable WisDOT standards. Refer to WisDOT Standard Detail Drawing 14B42 Midwest Guardrail system with type-3 marker at terminus and design consistent with minimizing roadside hazards per FDM 11-45.
5. Coordinate with village staff in preparation of a development agreement to address the traffic signals that are required based on traffic volumes projected in Traffic Impact Analysis.

The Village Engineer is also requiring that the retaining wall proposed to be install in what will be dedicated as future right-of-way for the intersection re-construction either be eliminated with necessary grading revisions or assume responsibility for the future maintenance and repair of this retaining wall as part of the development agreement.

Village Forester
The following issues will need to be addressed as part of a revised landscape plan prior to issuance of a building permit:

- Sheet L2.02. Per municipal code 17.43(c) – Interior parking lot landscaping shall include one 2" caliper tree for every ten parking spaces. The current for the west

parking lot does not meet this requirement. More trees are required.

- Sheet L2.03. Per municipal code 17.43(c) – Interior parking lot landscaping shall include one 2" caliper tree for every ten parking spaces. The current plan for the north parking lot does not meet this requirement. More trees are required.

Fire & Police Departments
No comments.

## VILLAGE STAFF RECOMMENDATIONS

**APPROVE** site development and building plans for a 270,000 sqft light manufacturing and 12,500 sqft office facility for Green Bay Packaging Inc. located in the northeast corner of the Holy Hill Road @ I-41 interchange in the Holy Hill Gateway District subject to the following conditions:

1. This approval is conditional and requires the following: (1) the DNR approving the filling of Wetland #3 and Wetland #4 (or determining that the wetlands are artificial); and (2) the Village granting a CUP to encroach into the 25' wetland setback. No permits to authorize construction or building permits should be issued until the wetland fill and 25' wetland setback issues are resolved (excluding "early start" site clearing and footing/foundation work approved by the Village and/or WI DSPS).

2. This approval is subject to all the conditions and requirements set forth herein and adopted by the Plan Commission. Approval is granted for the following plans unless superseded by subsequent plan sheets approved by Village Staff pursuant to revisions required herein and/or by the Plan Commission:
   *a. Architectural, Building & Elevation plans dated February 12, 2024;*
   *b. Civil Engineering plans dated March 18, 2024;*
   *c. Landscaping plans dated March 18, 2024;*
   *d. Lighting plans (photometric plan) dated February 9, 2024*

3. All landscaping, screening, grading, and paving improvements shown on the approved site plans shall be installed as proposed prior to issuance of an occupancy permit unless a cash bond or letter of credit in an amount equal to 120 percent of the estimated installation and material costs reviewed and approved by the Village is submitted to the Village as necessary to ensure that installation of the proposed features and improvements will be completed within one (1) year after issuance of the occupancy permit for the shell building.

4. All exterior doors (except primary entrance) shall be clearly marked with reflective 5" or larger letters/numbers to aid emergency personnel access as required by the Police Department.

5. All issues, both minor technical/plan corrections and major access and grading issues identified in the April 4, 2024 review memo from the Village Engineer shall be resolved and reflected in additional information and/or revised plans submitted to Staff for further review, comment, and approval prior to commencing construction or issuance of building permits (excluding “early start” site clearing and footing/foundation work approved by the Village and/or WI DSPS).

6. Pursuant to Section 17.43(6) of the Zoning Code (Site Plan Requirements), the Village and GBP should enter into a “Development Agreement” for purposes of addressing the major issue raised in the Village Engineer’s April 4, 2024 review memo, including but not limited to the access-related intersection re-construction, public road realignment & re-construction, traffic signal installation at the Holy Hill Road driveway intersection proposed for GBP.

7. The following issues identified by the Village Forester shall be addressed as part of a revised landscape plan submitted for review and approval prior to commencing construction or issuance of building permits (excluding “early start” site clearing and footing/foundation work approved by the Village and/or WI DSPS).

    a. Sheet L2.02. Per municipal code 17.43(c) – Interior parking lot landscaping shall include one 2” caliper tree for every ten parking spaces. The current for the west parking lot does not meet this requirement. More trees are required.
    b. Sheet L2.03. Per municipal code 17.43(c) – Interior parking lot landscaping shall include one 2” caliper tree for every ten parking spaces. The current plan for the north parking lot does not meet this requirement. More trees are required.

8. State agency (DSPS) approved plans and a $20,000 occupancy bond are required by Inspection Services at the time of building permit application. The Village of Germantown is an authorized delegated agent of DSPS to provide all commercial plan review and inspection services through SAFEBuilt of WI and the Village of Germantown.

# Engineering Department Memorandum

**To:** **Jeff Retzlaff, Director of Community Development**

**From:** **Kevin Driscoll, Village Engineer**

**Date:** **April 4, 2024**

**Re:** **Planning Commission Item Review – Green Bay Packaging Site Development - Parcel GTNV_073995**

---

**Items Reviewed:**

1. Wetland Report 11/22/2023
2. Stormwater Management Plan 2/9/2024
3. Plan Set dated 2/12/2024; revised 60% plans dated 3/18/2024 with Option C
4. Traffic Impact Analysis 2/19/2024

**General Comments:**

1. Please respond to each item below. **A written response addressing each item shall be included in your submittal**.
2. The submitted plans have been reviewed for general conformance with State and Village design guidelines. Additional comments could arise as a result of the plan completion and modifications. The items listed below will need to be fully resolved before the Engineering Dept. can recommend a formal approval of the plans and permit for construction.
3. If this project disturbs over one acre area it will require a WRAPP/NOI from the DNR. Please submit a copy of the approved permit prior to final approval.
4. A professional engineer's original seal is to be affixed, signed and dated on the final set of construction plans.
5. Utility permits and permits for work within the ROW are required. Contact the Village engineering department to obtain permits.
6. As-builts prepared to Village standards shall be prepared and provided to the Village post-construction (for all applicable items).
7. As a guide to the review response: Items in *italics* are resolved or acknowledged, items in regular font are to be addressed yet, items in **Bold** are additional feedback to remaining original comment.

**Wetlands:**

C1.20 Transmit wetland permit approval from WDNR prior to filing certified survey map to be recorded.

**Erosion Control:**

C1.30 - Transmit completed erosion control permit with respective plans to Engineering Department.

**Sanitary:**

1. Sanitary Sewer is available in Holy Hill Road.
2. C1.12 - Provide smooth bench in existing manhole for new 8-inch dia. Connection.
3. C1.20 - Coordinate with Engineering Staff for permit to construct utilities in Right-of-Way and Wastewater Utility Superintendent to observe connection in Holy Hill Road.
4. Provide Traffic Control Plan for utility connection.
5. Provide as-built survey elevation in revised drawing that show invert elevations of sanitary sewer, rim elevations, pipes diameter and lengths, and slopes of pipe segments as-built.
6. Easement planned for utility extension in proximity to I-41. Coordinate with staff to update to reflect alignment.
7. Easement planned for sanitary lift station along Rockfield Road, coordinate with staff to update to reflect location.

**Water:**

1. Water main is available in Holy Hill Road.
2. Provide DSPS Approval letter, coordinate with Engineering Staff for permit to construct utilities in Right-of-Way and Water Utility Superintendent to observe connection in Holy Hill Road.
3. Provide Traffic Control Plan for utility connection.
4. C1.20 - Easement planned for utility extension in proximity to I-41. Coordinate with staff to update necessary exhibits to reflect planned easement.
5. Sheet C1.11, at the 4 way cross (at the service lateral on the south building), install (2) gate valves north and east of 4 way T.
6. Sheet C1.11, install a T connection on the west side of building in coordination with Water Utility Superintendent for potential future connect and loop into the future distribution main that will be running north and south to Richfield. Once the tie-in alignment is chosen, Village staff to provide comment as to additional valving.
7. Sheet C1.12, Remove 10” valve #5 and #8, not needed
8. Sheet C1.12, add hydrant east side of water main 10’ south of #4 10” 45 degree bend back of curb.
9. The Utility will provide comment once we are provided the mechanical room layout for the meter install location/requirements.

**Drainage :**

1. Update culvert alignment perpendicular to proposed streets. Culvert skews vary in various plans previously submitted.
2. Identify culvert pipe material proposed in future area to be dedicated to village as right of way.
3. Update Map used for hydrocad model in stormwater management plan to reflect proposed street alignment consistent with Exhibit C. Sheet C1.20 (pages 28 & 95 of 96).

4. C1.30 – call out proposed culvert invert elevations. Provide as-built record drawings that display the constructed invert elevations.

**Access:**

1. Update Traffic Impact Analysis to address stop sign and stop bar location with respect to clearance of turning movements from northbound to westbound vehicles and semi trucks (R-20 v. R-50 v. R-120) into existing business (parcel GTVN_073996; N128 W21760 Holy Hill Rd)
2. Adjust intersection width accordingly and coordinate with Engineering Department as necessary.
3. Provide sequencing plan that show construction staging to maintain access for exiting property owner of gas station (parcel GTVN_073996; N128 W21760 Holy Hill Rd).
4. Sheet A5.7 shows curb and gutter. Due to steep slopes a rural cross section is anticipated with guard rails. Explain basis for selecting curbs. No curb exists on site.
5. Safety guard railing required due to steep slopes as proposed. Coordinate with Engineering Department and adhere with Development Handbook, including applicable WisDOT standards. Refer to WisDOT Standard Detail Drawing 14B42 Midwest Guardrail system with type-3 marker at terminus and design consistent with minimizing road side hazards per FDM 11-45.
6. Coordinate with village staff in preparation of a development agreement to address traffic signals. This is required based on traffic volumes projected in Traffic Impact Analysis.

**Grading:**

1. Show profile of existing and proposed road grades, elevations and cross sections for all required improvements.
2. C1.21 - Remove retaining wall in proposed area to be dedicated to Village as potential future right of way, and regrade. Or address in development agreement for existing property owner obligation of future maintenance and repairs including safety railing.
3. C1.23 – Clarify slope of proposed contours 925 and 934 near proposed 7 foot mound in NW quadrant near freeway
4. C5.00 – Clarify location of #12 with concrete sidewalk. Clarify location of #13 – lawn and topsoil shown as level. Roadway shoulder has steep slopes. Verify curb and sidewalk is for parking lot

**Signs:**

1. Safety sign – Add two direction large arrow with light pole
2. Stop sign – Add stop signs for south bound and east bound movements. Update TIA to reflect stop bar and turning movements.

**Safety Railing:**

1. Add thrie beam guard railing to based on WisDOT Standard Detail Drawing 14B42 Midwest guardrail system, and include type-3 object marker at terminus. Design consistent with minimizing road side hazards per WisDOT fdm 11-45.

**Lighting:**

1. Street lighting exists along frontage road to gas station intersection. Street lighting required.
2. Coordinate with village staff to update street lighting plan, including street lights types, locations, for removals and connectivity in the area to be dedicated to the Village of Germantown. This includes installation of street lighting at the terminus of B Street realigned, 18.08.

**Traffic Signal Conduit and Base**

1. Coordinate with village staff in preparation of a development agreement and
2. Update plans with conduit for future signal (per MUTCD) Chapter 7 Traffic Code and Development Handbook 5.4.2.
3. Developer to escrow amount with a letter of credit sufficient to defray the cost and design of street improvements, 18.08(15).

DocuSign Envelope ID: 1B713DF2-4EC2-42B6-B3BE-3B1E32C0C56B

Village of Germantown ...Willkommen

Fee must accompany application

- ☐ $700 Minor Addition
- ☐ $1,240 Construction <10,000 SF
- ☐ $2,095 Construction 10,000 SF to 50,000
- ☑ $3,460 Industrial Construction >50,000 SF
- ☐ $3,460 Commercial Construction >50,000
- ☐ $200 Plan Commission Consultation
- ☐ $125 Fire Department Plan Review

PAID_____ DATE_____

# SITE PLAN REVIEW APPLICATION

Pursuant to Section 17.43 of the Municipal Code

Please read and complete this application carefully. **All applications must be signed and dated.**

## 1 APPLICANT OR AGENT

Briohn Building Corp
c/o Caitlin LaJoie
3885 N Brookfield Road
Brookfield, WI 53045

Phone ( ) 262-307-8792
E-Mail clajoie@briohn.com

## PROPERTY OWNER

Green Bay Packaging, Inc.
1700 Webster Court
Green Bay, WI 54302

Phone ( )
E-Mail

## 2 PROPERTY ADDRESS

NE Quadrant Holy Hill Road / Highway 41 (PINs GTNV_073995, GTNV_073994, and GTNV_073993)

## 3 NEIGHBORING USES – Specify name and type of use, e.g. Enviro Tech – Industrial, Smith – Residential, etc.

| North | South | East | West |
|---|---|---|---|
| Farming | Holy Hill Road / storage | Industrial park | Highway 41 / Kwik Trip / farming |

## 4 READ AND INITIAL THE FOLLOWING:

X_____ I am aware of the Village of Germantown ordinance requiring fire sprinklers in most new construction.

X_____ I understand that all new development is subject to Impact and/or Connection Fees that must be paid before building permits will be issued.

X_____ I understand that an incomplete application will be withdrawn from the Plan Commission agenda and that all resubmissions to the Plan Commission are subject to a new application fee.

## 5 SIGNATURES – ALL APPLICATION MUST BE SIGNED BY OWNER!

DocuSigned by: Caitlin LaJoie AB31E8AA9F1E48E... 2/12/2024
Applicant Date

DocuSigned by: Bryan Hollenbach 83DAC9CE4C23413... 2/12/2024
Owner Date

BRIOHN BUILDING CORPORATION

DESIGN / BUILD CONSTRUCTION

ARCHITECTURAL DESIGN

DEVELOPMENT

PROPERTY MANAGEMENT

Caitlin LaJoie
Briohn Building Corporation
3885 N Brookfield Rd, Suite 200
Brookfield, WI 53045

February 12, 2024

Village of Germantown
N112W17001 Mequon Road
Germantown, WI 53022

**RE**: Green Bay Packaging – Great Lakes Division Site Plan Narrative

Dear Village Staff,

Briohn Building Corporation ("Briohn") is pleased to present the following narrative on behalf of Green Bay Packaging ("GBP") – Great Lakes Division to the Village of Germantown ("Village") for consideration of site plan approval for a new facility ("Development") at the northeast corner of Holy Hill Road and Highway 41.

## Subject Site

The subject site ("Site") is located immediately east of Highway 41 and north of Holy Hill Road extending north to Rockfield Road (Tax Keys GTVN_073995, GTVN_ 073994, and GTVN_073993) and is approximately 52.887 acres.

In connection with this Development, the Village Board approved GBP's request to rezone the land to M-1 (limited industrial zoning district) and amend the 2050 Future Land Use Plan to industrial for consistency on 11/20/2023.

## Plan of Operations

The Development is approximately 270,000 SF consisting of a 12,500 square foot main office area which was thoughtfully planned to screen the loading docks. The balance of the building will provide space for light manufacturing of corrugated containers. The building is carefully designed for potential addition(s), creating an attractive site with ample green space, generous landscaping, and amenity-like stormwater ponds. Anticipated trucking activity will be moderate with an estimated maximum of 45 total trucks entering/leaving the Development per day. Parking will be provided onsite.

The facility's daily operations and finished product is consistent with the current GBP Germantown operation. This new facility provides GBP an opportunity to operate more efficiently with a streamlined receiving, manufacturing, and shipping process.

## Site Plan

After collaboration with Village staff, it was determined the potential public road proposed to connect Holy Hill Road to Rockfield Road will not be included as part of this Development per staff's direction. Subsequentially, the Development space planned for future water and sewer utilities to be installed parallel to the western property line. The Development does not hinge on proposed utility infrastructure for its operation.

Below is a table summarizing Development compliance with M-1 lot, yard, and building requirements.

| **Requirement** | **M-1** | **GBP** |
|---|---|---|
| Lot Area* | Min. 30,000 SF | 1,639,859.76 SF |
| Building Setback – Front | Min. 30 ft | 479 ft |
| Building Setback – Side | Min. 10 ft | 194 ft (w) & 244 ft (e) |
| Building Setback – Rear | Min. 25 ft | 515 ft |
| Building Height | Max. 45 ft | 38 ft |
| Impervious Area | Max. 80% | 39% |
| Greenspace | Min. 20% | 61% |

*Excluding the northern most parcel; following recordation of the proposed CSM, the total site will be 2,303,738 SF / 52.887 acres.

## Schedule

Based on GBP's corporate mandate to improve its Germantown facility capacity, it is crucial for the success of this Development that the project schedule proceeds without delay in the proposed entitlement schedule. The current facility is not functional long-term and GBP must relocate by the summer of 2025 to continue serving its customers.

| **Task** | **Summary** | **Date** |
|---|---|---|
| Plan Commission Site Plan Submittal | Submittal | 2/12/2024 |
| Plan Commission Approval - Site Plan | PC Meeting | 4/8/2024 |
| Construction Documents Submittal | Submittal to Village/Safebuilt | 4/9/2024 |
| Early Start Permit | Begin earthwork | 4/22/2024 |
| MMSD and DNR Review/Approval | Public water and sewer approval | 5/24/2024 |
| Full Building Permit Issuance | All in-house via Safebuilt | 6/3/2024 |
| | **Break Ground** | **April 2024** |
| | **Occupancy** | **July 2025** |

Additionally, GBP will be pursuing a Certified Survey Map to combine the three parcels. Wetland mitigation is required per WDNR for construction of the building and reworking the GBP and Shell Gas Station intersection at Holy Hill Road.

## Conclusion

Thank you for reviewing the application in consideration of site plan approvals for a new GBP facility.

With four manufacturing sites in Southeast Wisconsin, GBP has a strong interest in continued business success in the area. The GBP location has been a part of the Germantown community for over 50 years. The new state-of-the-art facility will continue GBP's technology innovation and expansion in the corrugated manufacturing industry while proposing significant property tax revenue upon occupancy.

We look forward to continuing the approval process with the Village. Should you have any further questions, please do not hesitate to contact me.

Sincerely,

Caitlin LaJoie, Director of Land Development
Briohn Building Corporation
clajoie@briohn.com
262-307-8792

BRIOHN BUILDING CORPORATION

DESIGN / BUILD CONSTRUCTION

ARCHITECTURAL DESIGN

DEVELOPMENT

PROPERTY MANAGEMENT

Caitlin LaJoie
Briohn Building Corporation
3885 N Brookfield Rd, Suite 200
Brookfield, WI 53045

March 18, 2024

Village of Germantown
N112W17001 Mequon Road
Germantown, WI 53022

**RE**: Green Bay Packaging – PC Resubmittal Narrative

Dear Village Staff,

Briohn Building Corporation ("Briohn") is pleased to continue working with the Village of Germantown ("Village") for consideration of site plan and architectural approval on behalf of Green Bay Packaging ("GBP") – Great Lakes Division to for a new facility ("Development") at the northeast corner of Holy Hill Road and Highway 41.

As design and planning efforts continue, the design team is submitting revised plans fo Plan Commission approval. These revisions include:

- Updated design of intersection of Holy Hill Rd, 48th St, and GBP's private drive.
- Overhead door locations have been modified at both south and north dock areas on architectural, civil, and landscape drawings
- The entire northwest projection of the building has been increased to 44' wall panel height; previous elevations had shown the far northwest corner as a mix of 44' and 38' but interior functions require the entire portion to be taller.

We look forward to continuing the approval process with the Village. Should you have any further questions, please do not hesitate to contact me.

Sincerely,

Caitlin LaJoie,
Director of Land Development
Briohn Building Corporation
clajoie@briohn.com
262-307-8792

PROPOSED NEW BUILDING FOR:

# GREEN BAY PACKAGING - GREAT LAKES DIVISION

HOLY HILL ROAD
GERMANTOWN, WISCONSIN 53022

## SHEET INDEX


| Sheet Number | Sheet Name |
|---|---|
| 0-GENERAL | |
| T1.1 | TITLE SHEET |
| 1-CIVIL | |
| C1.10 | PROJECT LOCATION & GENERAL NOTES |
| C1.11 | SITE PLAN - OVERALL |
| C1.12 | SITE PLAN - SOUTH |
| C1.13 | SITE PLAN - CENTER |
| C1.14 | SITE PLAN - NORTH |
| C1.20 | GRADING PLAN - OVERALL |
| C1.21 | GRADING PLAN - SOUTH |
| C1.22 | GRADING PLAN - CENTER |
| C1.23 | GRADING PLAN - NORTH |
| C1.30 | EROSION CONTROL PLAN - SOUTH |
| C1.31 | EROSION CONTROL PLAN - NORTH |
| C1.40 | EXISTING SURVEY |
| C5.00 | CONSTRUCTION DETAILS |
| 2-LANDSCAPING | |
| L1.0 | LANDSCAPE PLAN - OVERALL |
| L2.01 | LANDSCAPE PLAN - SOUTH |
| L2.02 | LANDSCAPEPLAN - CENTER |
| L2.03 | LANDSCAPE PLAN - NORTH |
| L3.00 | LANDSCAPE DETAILS & NOTES |
| 4-ARCHITECTURAL | |
| A1.0 | OVERALL FLOOR PLAN |
| A1.1 | ENLARGED PARTIAL FLOOR PLAN (NORTH) |
| A1.2 | ENLARGED PARTIAL FLOOR PLAN (SOUTH) |
| A1.3 | ENLARGED PARTIAL FLOOR PLANS |
| A1.4 | OFFICE FINISH PLANS |
| A1.5 | EQUIPMENT PLAN |
| A1.6 | CLERESTORY PLAN |
| A2.1 | ENLARGED REFLECTED CEILING PLANS |
| A4.0 | ROOF PLAN |
| A5.0 | BUILDING ELEVATIONS |
| A5.1 | BUILDING ELEVATIONS |
| A5.2 | BUILDING ELEVATIONS |
| A5.3 | BUILDING ELEVATIONS |
| A5.4 | BUILDING ELEVATIONS |
| A5.5 | EXTERIOR RENDERING |
| A5.6 | EXTERIOR RENDERING |
| A5.7 | EXTERIOR RENDERING |
| A5.8 | EXTERIOR RENDERING |
| 7-ELECTRICAL | |
| E1.0 | EXTERIOR PHOTOMETRIC LIGHTING PLAN |


PLAN COMMISSION SUBMISSION WITH UPDATES
MARCH 18, 2024


**OWNER :**

GREEN BAY PACKAGING
Bryan Hollenbach

1700 NORTH WEBSTER COURT
GREEN BAY, WI 54302

**GENERAL CONTRACTOR :**

BRIOHN BUILDING CORPORATION
Cary Bilicki, PM

3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
(262) 790-0505 FAX

**ARCHITECT :**

BRIOHN DESIGN GROUP, LLC
Christopher Wenzler, AIA

3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
(262) 790-0505 FAX

**STRUCTURAL ENGINEER:**

BRIOHN DESIGN GROUP, LLC
Kevin Jankowski, PE

3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
(262) 790-0505 FAX

**CIVIL ENGINEER:**

HARWOOD ENGINEERING
Brad Seubert, P.E. VP

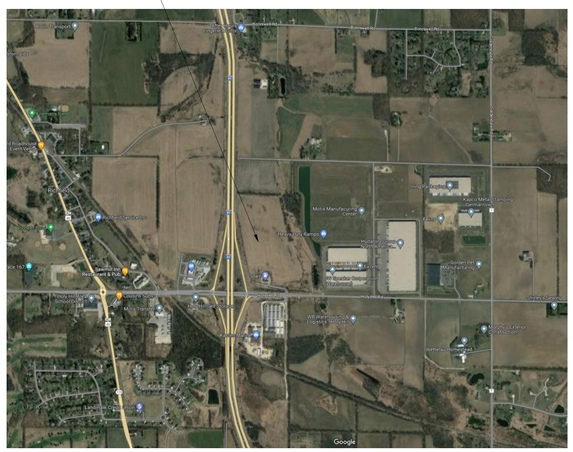
255 NORTH 21st
MILWAUKEE, WISCONSIN 53233
(414) 475-5554 PHONE

**LANDSCAPE ARCHITECT:**

HARWOOD ENGINEERING
Luke Haas, P.E.

255 NORTH 21st
MILWAUKEE, WISCONSIN 53233
(414) 475-5554 PHONE


**PROJECT LOCATION:**




1 SITE LOCATION MAP
12" = 1'-0"

## PROJECT INFORMATION:

**BUILDING CODE:**
2015 INTERNATIONAL BUILDING CODE WITH WISCONSIN AMENDMENTS SPS 362
2015 INTERNATIONAL EXISTING BUILDING CODE WITH WISCONSIN AMENDMENTS SPS 366
**ACCESSIBILITY CODE:**
2015 INTERNATIONAL BUILDING CODE WITH WISCONSIN AMENDMENTS SPS 362
2009 ICC/ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
**ENERGY CODE:**
2015 IECC INTERNATIONAL ENERGY CONSERVATION CODE WITH WISCONSIN AMENDMENTS SPS 363
**MECHANICAL CODE:**
2015 INTERNATIONAL MECHANICAL CODE WITH WISCONSIN AMENDMENTS SPS 364
**PLUMBING CODE:**
2014 WISCONSIN PLUMBING CODE SPS 381-387
**ELECTRICAL CODE:**
2017 NFPA 70 NATIONAL ELECTRICAL CODE WITH WISCONSIN AMENDMENTS SPS316
**FIRE CODE:**
SPS 314 FIRE PREVENTION

| | | | |
|---|---|---|---|
| **OCCUPANCY:** | PRIMARY | F-1 | (MOD-HAZARD FACTORY) |
| | SECONDARY | B | (BUSINESS) |
| | SECONDARY | S-1 | (MOD-HAZARD STORAGE) |
| **CLASS OF CONSTRUCTION:** | TYPE 2B UNLIMITED AREA BUILDING PER IBC 507 | | |
| **SPRINKLER SYSTEM:** | NFPA 13 OVERALL; ESFR FOR S-1 OCCUPANCY AREAS | | |
| **FLOOR LEVELS:** | 1 + MEZZANINE | | |
| **NUMBER OF STORIES** | 1 | | |
| **TOTAL SITE AREA:** | 2,303,738 SF / 52.887 ACRES | | |
| **TOTAL BUILDING AREA:** | 270,000 SF | | |

**NOTE:** ALL MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SPRINKLER ENGINEERING BY DESIGN-BUILD CONTRACTORS

APPLICABLE TO ALL PLAN VIEWS

BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
TITLE SHEET

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

PROGRESS SET
NOT FOR CONSTRUCTION

| Date | Revision |
|---|---|

| | |
|---|---|
| JOB: | 230010 |
| DRAWN: | CK |
| CHECKED: | CW |
| DATE: | 02/12/2024 |

SHEET:
T1.1

## LEGEND:

### UTILITY

**EXISTING:**

- WATERMAIN
- BURIED ELECTRIC
- OVERHEAD WIRE
- GAS LINE
- SANITARY SEWER
- STORM SEWER
- UTILITY POLE
- LIGHT POLE
- SANITARY MANHOLE
- FIRE HYDRANT
- WATER VALVE
- STORM SEWER STRUCTURE

**PROPOSED:**

- WATERMAIN
- ELECTRICAL LINE
- GAS LINE
- SANITARY SEWER
- STORM SEWER
- WATER VALVE
- STORM SEWER STRUCTURE
- FLARED END SECTION

### GRADING

**EXISTING:**

- 160 — MAJOR CONTOUR
- 160 — MINOR CONTOUR
- EXIST 100.00 — EXISTING SPOT ELEVATION

**PROPOSED:**

- 160 — MAJOR CONTOUR
- 160 — MINOR CONTOUR
- 100.00 — SPOT ELEVATION (FINISHED GRADE, TOP OF PAVEMENT, FLANGE OF CURB)
- DOOR 100.00 — DOOR ELEVATION
- GR 100.00 — GROUND GRADE AT BUILDING
- 100.50T/C 100.00E/P — SPOT ELEVATION (T/C - TOP OF CURB, E/P - EDGE OF PAVEMENT)
- 100.50T/W 100.00B/W — RETAINING WALL SPOT ELEVATION (T/W - GROUND GRADE AT TOP OF WALL, B/W - GROUND GRADE AT BOTTOM)
- 12" FES 100.00B/W — FLARED END SECTION (PIPE SIZE, INVERT ELEVATION)
- DRAINAGE FLOW DIRECTION
- EMERGENCY OVERFLOW ROUTE

### SITE

**EXISTING:**

- EXISTING PARKING COUNT
- EXISTING SIGN
- EXISTING ADA PARKING SPACE

**PROPOSED:**

- PARKING COUNT
- ADA PARKING SPACE
- SIGN
- TRUNCATED DOMES
- PAVEMENT MARKING DIRECTIONAL ARROWS

## GENERAL NOTES AND SPECIFICATIONS:

1. THE EXISTING SITE INFORMATION ON THIS PLAN WAS TAKEN FROM A SITE SURVEY PROVIDED BY CAPITOL SURVEY ENTERPRISES. THE ENGINEER MAKES NO WARRANTY OR REPRESENTATION WITH REFERENCE TO THE ACCURACY AND COMPLETENESS OF THE EXISTING CONDITIONS INDICATED OR NOT INDICATED ON THE ENGINEERING PLANS PROVIDED. VERIFY THE LOCATION OF ALL EXISTING SITE CONDITIONS INCLUDING UNDERGROUND UTILITIES, UNDERGROUND UTILITY ELEVATIONS, BUILDING SETBACKS AND EXISTING BUILDING LOCATIONS. THE CONTRACTOR SHALL INFORM THE OWNER AND ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WITH WORK. QUESTIONS REGARDING THE EXISTING SURVEY SHALL BE DIRECTED TO THE PARTIES LISTED ABOVE.
2. BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, EXCAVATE EACH EXISTING LATERAL TO BE CONNECTED TO VERIFYING ELEVATION, LOCATION AND SIZE. SHOULD THE EXISTING UTILITY NOT BE AS INDICATED ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR EVALUATION.
3. ALL UTILITY CONSTRUCTION SHALL ADHERE TO THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (2003), AS WELL AS, THE MUNICIPAL CONSTRUCTION STANDARDS AND THE DEPT. OF SAFETY AND PROFESSIONAL SERVICES SEC. 382-387.
4. ALL PERMITS MUST BE RECEIVED FROM THE MUNICIPALITY AND WDNR (IF REQUIRED) PRIOR TO THE START OF CONSTRUCTION. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE ALL APPLICABLE PERMITS ARE RECEIVED PRIOR TO STARTING CONSTRUCTION.
5. NOTIFY THE PUBLIC WORKS INSPECTION DEPT. AT LEAST 48 HOURS BEFORE STARTING CONSTRUCTION.
6. BACKFILL REQUIREMENTS AND ROADWAY/SIDEWALK RESTORATION SHALL ADHERE TO LOCAL STANDARDS (GRANULAR BACKFILL UNDER OR WITHIN 5' OF CURBS, SIDEWALK, OR PAVEMENT. SPOIL MAY BE USED ELSEWHERE. SLURRY BACKFILL WILL BE REQUIRED IN PUBLIC ROADWAYS.)
7. ALL BUILDING UTILITIES SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
8. ALL PROPOSED WATERMAIN SHALL BE PVC SDR 18, CLASS 150, AWWA C900 WITH ELASTOMERIC JOINTS (UNLESS OTHERWISE NOTED).
9. PROPOSED SANITARY SEWER PIPE SHALL BE PVC, ASTM D-3034, SDR 35 WITH RUBBER GASKETED JOINTS CONFORMING TO ASTM D-3212 (UNLESS OTHERWISE NOTED).
10. PROPOSED STORM SEWER SHALL BE PVC, ASTM D-3034, SDR 35 WITH RUBBER ELASTOMERIC JOINTS CONFORMING TO ASTM D-3212 (UNLESS OTHERWISE NOTED).
11. A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NONMETALLIC UTILITIES MUST BE PROVIDED. PROVIDE TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORD WITH THE PROVISIONS SECTIONS 182.0715(2R) OF THE STATE STATUTES.
12. UTILITY TRENCHES SHALL BE MECHANICALLY COMPACTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
13. ALL MANHOLES, CATCH BASINS, INLETS, VALVES BOXES, ETC WITHIN THE PROJECT AREA SHALL BE RESET AND ADJUSTED TO MATCH FINISH GRADE.
14. ALL EXCAVATED OR STRIPPED MATERIALS NOT BEING REPLACED IN UTILITY TRENCHES OR BEING USED FOR FILL SHALL BE REMOVED FROM THE SITE, UNLESS OTHERWISE DIRECTED BY THE OWNER.
15. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING & FOUNDATION DETAILS AND ORIENTATION.
16. ALL ON-SITE CONCRETE CURB AND GUTTER TO BE 18" WIDE VERTICAL FACE, UNLESS OTHERWISE NOTED. REVERSE OR REGULAR STYLE CURB DENOTED ON PLANS.
17. ALL CURB ELEVATIONS ARE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. SEE CURB DETAIL FOR TOP OF CURB ELEVATIONS.
18. ALL CURB RADII ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
19. CONTRACTOR SHALL MATCH PROPOSED CONCRETE CURB AND GUTTER, SIDEWALK AND PAVEMENT TO EXISTING IN ELEVATION AND ALIGNMENT.
20. REMOVAL OF CURB AND GUTTER, SIDEWALK AND PAVEMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE WISCONSIN D.O.T.
21. ALL CONCRETE FOR CURB AND GUTTER, ROADWAY AND SIDEWALKS MUST CONFORM TO THE STANDARD SPECIFICATIONS FOR READY MIXED CONCRETE. MINIMUM 28 DAY COMPRESSIVE STRENGTH TEST MUST EQUAL 4000 PSI.
22. PROTECT ALL PROPERTY CORNERS.
23. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING UTILITIES OR SITE IMPROVEMENTS. DOCUMENT ALL EXISTING DAMAGE PRIOR TO START OF CONSTRUCTION AND NOTIFY CONSTRUCTION MANAGER OF ANY FINDINGS.
24. AS-BUILTS ARE TO BE PROVIDED TO THE CLIENT TRACKING ANY CHANGES THAT OCCURRED DURING CONSTRUCTION.

## CIVIL SHEET INDEX:


| | |
|---|---|
| C1.10 | PROJECT LOCATION AND GENERAL NOTES |
| C1.11 | SITE PLAN - OVERALL |
| C1.12 | SITE PLAN - SOUTH |
| C1.13 | SITE PLAN - CENTER |
| C1.14 | SITE PLAN - NORTH |
| C1.20 | GRADING PLAN - OVERALL |
| C1.21 | GRADING PLAN - SOUTH |
| C1.22 | GRADING PLAN - CENTER |
| C1.23 | GRADING PLAN - NORTH |
| C1.30 | EROSION CONTROL PLAN - SOUTH |
| C1.31 | EROSION CONTROL PLAN - NORTH |
| C1.40 | EXISTING SURVEY |
| C5.00 | CONSTRUCTION DETAILS |


DIGGER'S HOTLINE CALL BEFORE YOU DIG 1-800-242-8511

IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

North

SCALE: 1" = 300'


BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
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(262) 790-0500 PHONE
(262) 790-0505 FAX

HARWOOD
255 N 21st Street Milwaukee, WI 53233
414-475-5554


SHEET TITLE
PROJECT LOCATION & GENERAL NOTES

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

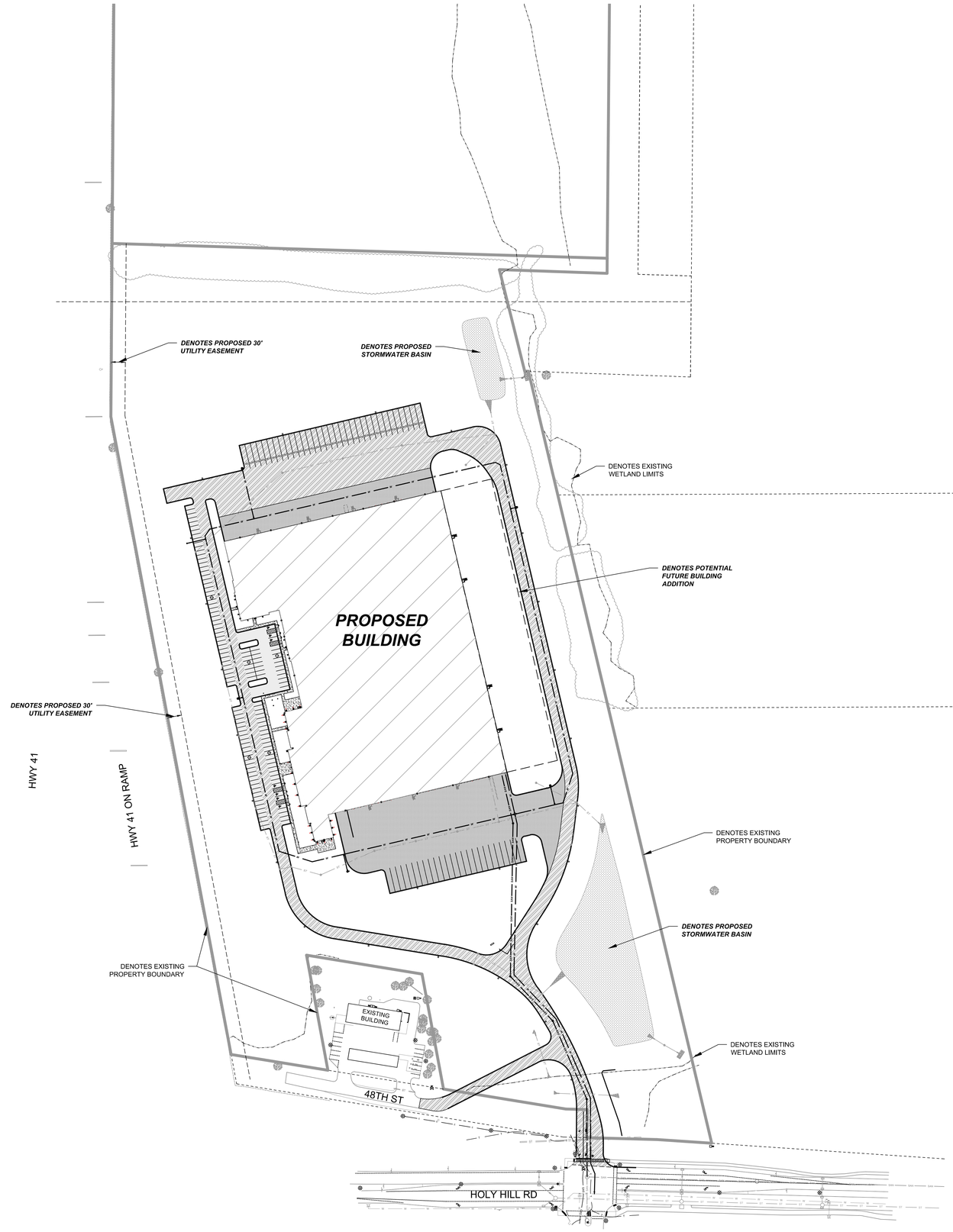
60% REVIEW

PROGRESS SET
NOT FOR CONSTRUCTION

| Date | Revision |
|---|---|

JOB: 230010
DRAWN:
CHECKED:
DATE: 03/18/2024
SHEET:

C1.10




**SITE CALCULATION TABLE**

| | |
|---|---|
| TOTAL SITE AREA | 37.646 AC |
| TOTAL DISTURBED AREA | 28.155 AC |
| EXISTING IMPERVIOUS AREA* | 0.000 AC |
| PROPOSED IMPERVIOUS AREA* | 14.729 AC |
| PROPOSED GREENSPACE* | 22.917AC (61% OF SITE) |
| PROPOSED REGULAR PARKING SPACES | 128 |
| PROPOSED HANDICAP PARKING | 7 |
| PROPOSED TOTAL PARKING | 135 |

* BASED ON PROJECT AREA

North

SCALE: 1" = 100'

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255 N 21st Street Milwaukee, WI 53233
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SHEET TITLE
SITE PLAN - OVERALL

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

60% REVIEW

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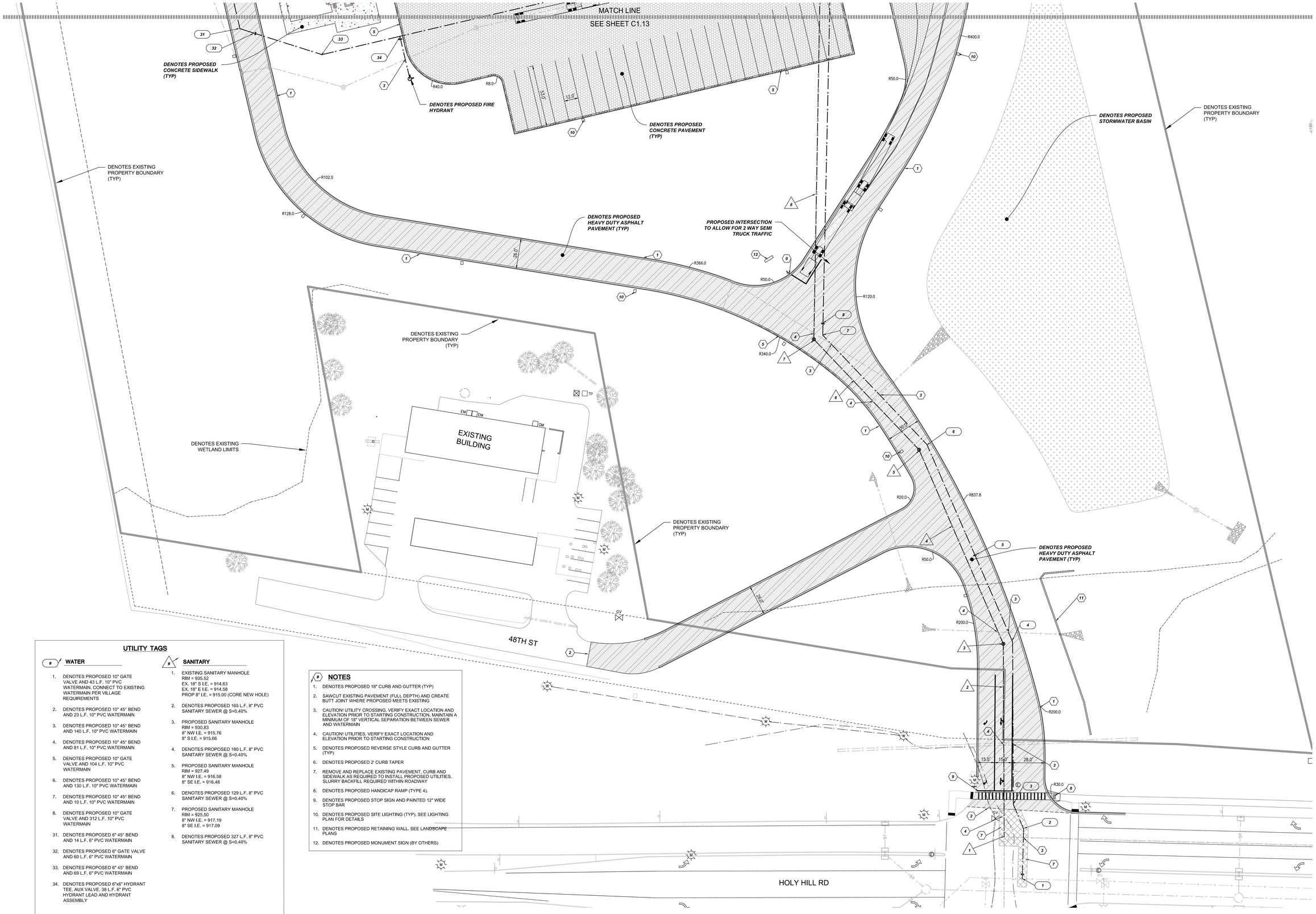


## UTILITY TAGS

### WATER

1. DENOTES PROPOSED 10" GATE VALVE AND 43 L.F. 10" PVC WATERMAIN. CONNECT TO EXISTING WATERMAIN PER VILLAGE REQUIREMENTS
2. DENOTES PROPOSED 10" 45° BEND AND 23 L.F. 10" PVC WATERMAIN
3. DENOTES PROPOSED 10" 45° BEND AND 140 L.F. 10" PVC WATERMAIN
4. DENOTES PROPOSED 10" 45° BEND AND 81 L.F. 10" PVC WATERMAIN
5. DENOTES PROPOSED 10" GATE VALVE AND 104 L.F. 10" PVC WATERMAIN
6. DENOTES PROPOSED 10" 45° BEND AND 130 L.F. 10" PVC WATERMAIN
7. DENOTES PROPOSED 10" 45° BEND AND 10 L.F. 10" PVC WATERMAIN
8. DENOTES PROPOSED 10" GATE VALVE AND 312 L.F. 10" PVC WATERMAIN
31. DENOTES PROPOSED 6" 45° BEND AND 14 L.F. 6" PVC WATERMAIN
32. DENOTES PROPOSED 6" GATE VALVE AND 60 L.F. 6" PVC WATERMAIN
33. DENOTES PROPOSED 6" 45° BEND AND 69 L.F. 6" PVC WATERMAIN
34. DENOTES PROPOSED 6"x6" HYDRANT TEE, AUX VALVE, 38 L.F. 6" PVC HYDRANT LEAD AND HYDRANT ASSEMBLY

### SANITARY

1. EXISTING SANITARY MANHOLE
   RIM = 935.52
   EX. 18" S I.E. = 914.63
   EX. 18" E I.E. = 914.58
   PROP 8" I.E. = 915.00 (CORE NEW HOLE)
2. DENOTES PROPOSED 165 L.F. 8" PVC SANITARY SEWER @ S=0.40%
3. PROPOSED SANITARY MANHOLE
   RIM = 930.83
   8" NW I.E. = 915.76
   8" S I.E. = 915.66
4. DENOTES PROPOSED 180 L.F. 8" PVC SANITARY SEWER @ S=0.40%
5. PROPOSED SANITARY MANHOLE
   RIM = 927.49
   8" NW I.E. = 916.58
   8" SE I.E. = 916.48
6. DENOTES PROPOSED 129 L.F. 8" PVC SANITARY SEWER @ S=0.40%
7. PROPOSED SANITARY MANHOLE
   RIM = 925.50
   8" NW I.E. = 917.19
   8" SE I.E. = 917.09
8. DENOTES PROPOSED 327 L.F. 8" PVC SANITARY SEWER @ S=0.40%

## NOTES

1. DENOTES PROPOSED 18" CURB AND GUTTER (TYP)
2. SAWCUT EXISTING PAVEMENT (FULL DEPTH) AND CREATE BUTT JOINT WHERE PROPOSED MEETS EXISTING
3. CAUTION! UTILITY CROSSING. VERIFY EXACT LOCATION AND ELEVATION PRIOR TO STARTING CONSTRUCTION. MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN SEWER AND WATERMAIN
4. CAUTION! UTILITIES. VERIFY EXACT LOCATION AND ELEVATION PRIOR TO STARTING CONSTRUCTION
5. DENOTES PROPOSED REVERSE STYLE CURB AND GUTTER (TYP)
6. DENOTES PROPOSED 2' CURB TAPER
7. REMOVE AND REPLACE EXISTING PAVEMENT, CURB AND SIDEWALK AS REQUIRED TO INSTALL PROPOSED UTILITIES. SLURRY BACKFILL REQUIRED WITHIN ROADWAY
8. DENOTES PROPOSED HANDICAP RAMP (TYPE 4).
9. DENOTES PROPOSED STOP SIGN AND PAINTED 12" WIDE STOP BAR
10. DENOTES PROPOSED SITE LIGHTING (TYP), SEE LIGHTING PLAN FOR DETAILS
11. DENOTES PROPOSED RETAINING WALL. SEE LANDSCAPE PLANS
12. DENOTES PROPOSED MONUMENT SIGN (BY OTHERS)

## HATCH LEGEND

- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE PAVEMENT
- PROPOSED HEAVY DUTY ASPHALT PAVEMENT
- PROPOSED REVERSE CURB

North

SCALE: 1" = 30'

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HARWOOD
255 N 21st Street Milwaukee, WI 53233
414-475-5554

SHEET TITLE
SITE PLAN - SOUTH

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

60% REVIEW

PROGRESS SET
NOT FOR CONSTRUCTION

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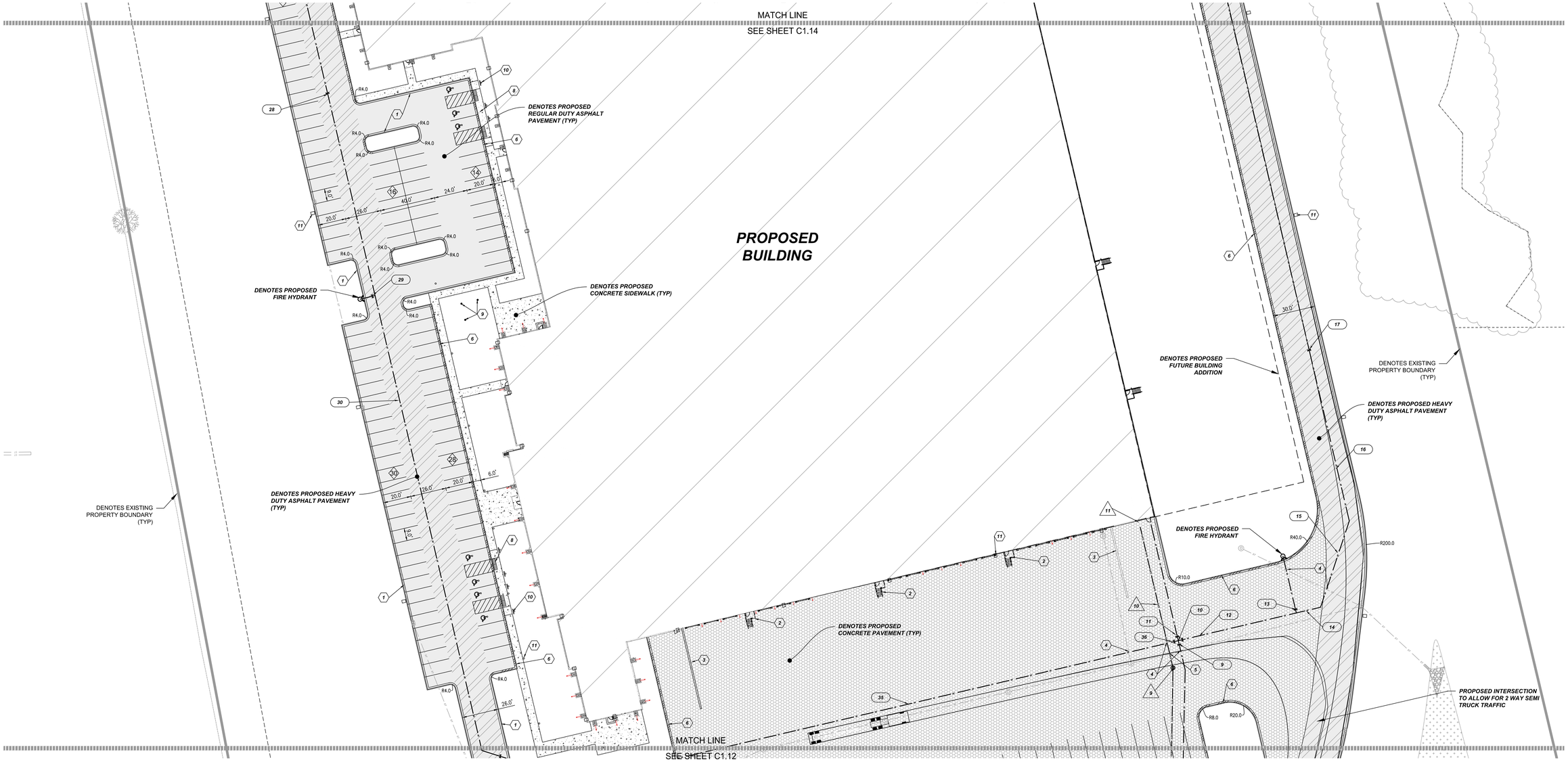


## UTILITY TAGS

### SANITARY

9. PROPOSED SANITARY SAMPLING MANHOLE
RIM = 922.88
8" N I.E. = 918.60
8" S I.E. = 918.50

10. DENOTES PROPOSED 109 L.F. 8" SANITARY SEWER @ S=0.40%

11. DENOTES PROPOSED 8" SANITARY SEWER CONNECTION AT BUILDING
8" S I.E. = 919.04
SEE PLUMBING PLANS FOR CONTINUATION INTO BUILDING

### WATER

9. DENOTES PROPOSED 10" GATE VALVE AND 3 L.F. 10" PVC WATERMAIN

10. DENOTES PROPOSED 10"x6" CROSS WATERMAIN FITTING

11. DENOTES PROPOSED 3 L.F., 10" GATE VALVE AND 83 L.F. 10" PVC WATERMAIN. SEE PLUMBING PLANS FOR CONTINUATION INTO BUILDING

12. DENOTES PROPOSED 3 L.F. 6" WATERMAIN, 6" GATE VALVE AND 85 L.F. 6" PVC WATERMAIN

13. DENOTES PROPOSED 6"x6" HYDRANT TEE, AUX VALVE, 42 L.F. 6" PVC HYDRANT LEAD AND HYDRANT ASSEMBLY

14. DENOTES PROPOSED 18 L.F. 6" PVC WATERMAIN

15. DENOTES PROPOSED 6" 45° BEND AND 66 L.F. 6" PVC WATERMAIN

16. DENOTES PROPOSED 6" 45° BEND AND 127 L.F. 6" PVC WATERMAIN

17. DENOTES PROPOSED 6" GATE VALVE AND 448 L.F. 6" PVC WATERMAIN

28. DENOTES PROPOSED 6" GATE VALVE AND 150 L.F. 6" PVC WATERMAIN

29. DENOTES PROPOSED 6"x6" HYDRANT TEE, AUX VALVE, 11 L.F. 6" PVC HYDRANT LEAD AND HYDRANT ASSEMBLY

30. DENOTES PROPOSED 338 L.F. 6" PVC WATERMAIN

35. DENOTES PROPOSED 373 L.F. 6" PVC WATERMAIN

36. DENOTES PROPOSED 6" GATE VALVE AND 3 L.F. 6" PVC WATERMAIN

## NOTES

1. DENOTES PROPOSED 18" CURB AND GUTTER (TYP)
2. DENOTES PROPOSED STAIRS. SEE ARCHITECTURAL PLANS
3. DENOTES PROPOSED RETAINING WALL. SEE ARCHITECTURAL PLANS
4. CAUTION! UTILITY CROSSING. VERIFY EXACT LOCATION AND ELEVATION PRIOR TO STARTING CONSTRUCTION. MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN SEWER AND WATERMAIN
5. CAUTION! UTILITIES. VERIFY EXACT LOCATION AND ELEVATION PRIOR TO STARTING CONSTRUCTION
6. DENOTES PROPOSED REVERSE STYLE CURB AND GUTTER (TYP)
7. DO NOT USE
8. DENOTES PROPOSED HANDICAP RAMP (TYPE 2),
9. DENOTES PROPOSED FLAG POLE. SEE LANDSCAPE PLANS
10. DENOTES PROPOSED HANDICAP SIGN (TYP)
11. DENOTES PROPOSED SITE LIGHTING (TYP). SEE LIGHTING PLANS FOR DETAILS

## HATCH LEGEND

- PROPOSED CONCRETE SIDEWALK
- PROPOSED REGULAR DUTY ASPHALT PAVEMENT
- PROPOSED HEAVY DUTY ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT

DIGGER'S HOTLINE
CALL BEFORE YOU DIG
1-800-242-8511

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North
SCALE: 1" = 30'

BRIOHN DESIGN GROUP
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BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

HARWOOD
255 N 21st Street Milwaukee, WI 53233
414-475-5554

SHEET TITLE
SITE PLAN - CENTER

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

60% REVIEW

PROGRESS SET
NOT FOR CONSTRUCTION

| Date | Revision |
|---|---|

JOB: 230010
DRAWN:
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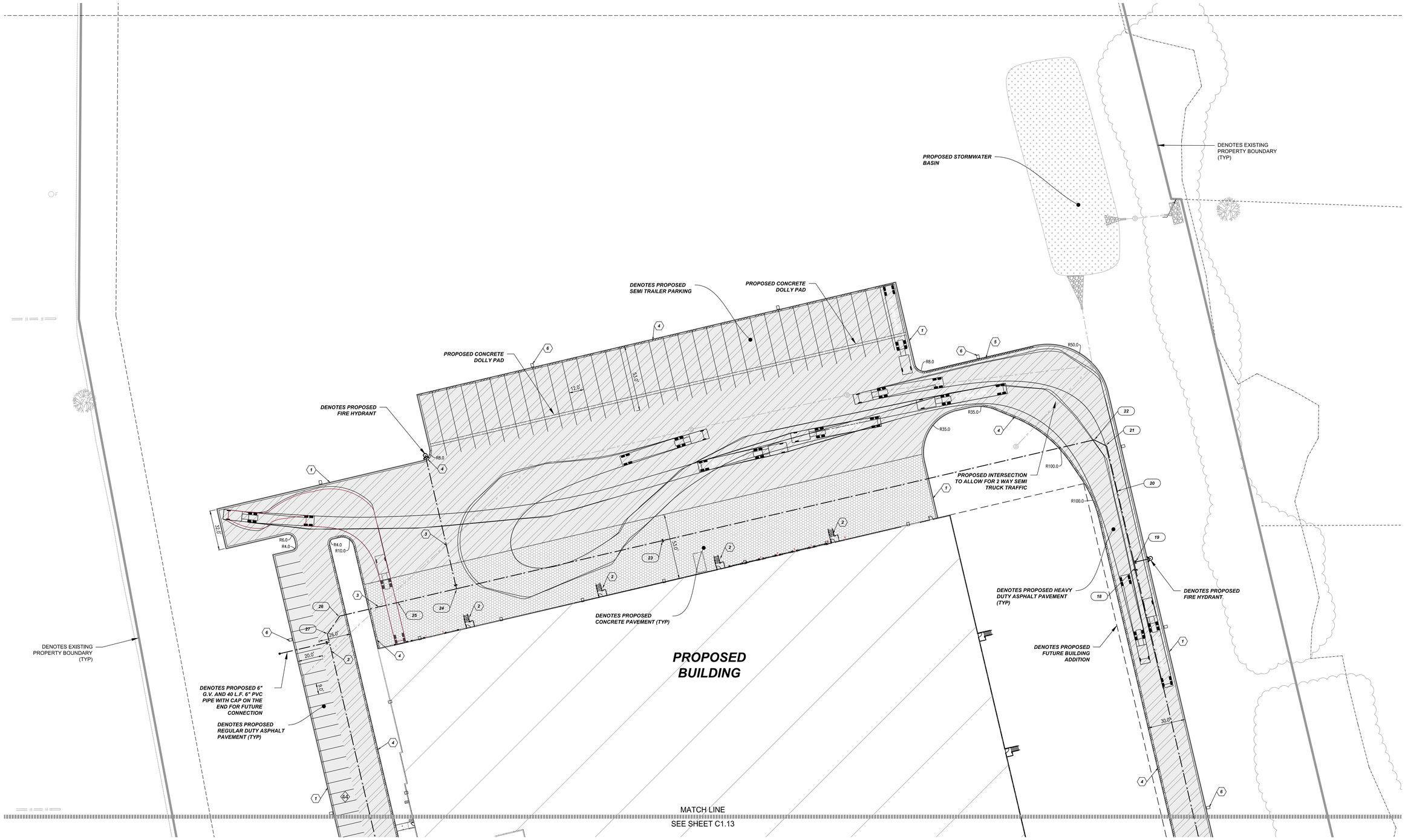


## UTILITY TAGS

**WATER**

18. DENOTES PROPOSED 6" GATE VALVE AND 6 L.F. 6" PVC WATERMAIN
19. DENOTES PROPOSED 6"x6" HYDRANT TEE, AUX VALVE, 14 L.F. 6" PVC HYDRANT LEAD AND HYDRANT ASSEMBLY
20. DENOTES PROPOSED 97 L.F. 6" PVC WATERMAIN
21. DENOTES PROPOSED 6" 45° BEND AND 12 L.F. 6" PVC WATERMAIN
22. DENOTES PROPOSED 6" 45° BEND AND 358 L.F. 6" PVC WATERMAIN
23. DENOTES PROPOSED 6" GATE VALVE AND 171 L.F. 6" PVC WATERMAIN
24. DENOTES PROPOSED 6"x6" HYDRANT TEE, AUX VALVE, 111 L.F. 6" HYDRANT LEAD AND HYDRANT ASSEMBLY
25. DENOTES PROPOSED 97 L.F. 6" PVC WATERMAIN
26. DENOTES PROPOSED 6" 45° BEND AND 18 L.F. 6" PVC WATERMAIN
27. DENOTES PROPOSED 6" 45° BEND AND 204 L.F. 6" PVC WATERMAIN

## NOTES

1. DENOTES PROPOSED 18" CURB AND GUTTER (TYP)
2. DENOTES PROPOSED STAIRS. SEE ARCHITECTURAL PLANS
3. CAUTION! UTILITY CROSSING. VERIFY EXACT LOCATION AND ELEVATION PRIOR TO STARTING CONSTRUCTION. MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN SEWER AND WATERMAIN
4. DENOTES PROPOSED REVERSE STYLE CURB AND GUTTER (TYP)
5. DENOTES PROPOSED MOUNTABLE CURB (TYP)
6. DENOTES PROPOSED SITE LIGHTING (TYP). SEE LIGHTING PLANS FOR DETAILS.

## HATCH LEGEND

- PROPOSED CONCRETE SIDEWALK
- PROPOSED REGULAR DUTY ASPHALT PAVEMENT
- PROPOSED HEAVY DUTY ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED MOUNTABLE CURB AND GUTTER
- PROPOSED REVERSE CURB

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SHEET TITLE
SITE PLAN - NORTH

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

60% REVIEW

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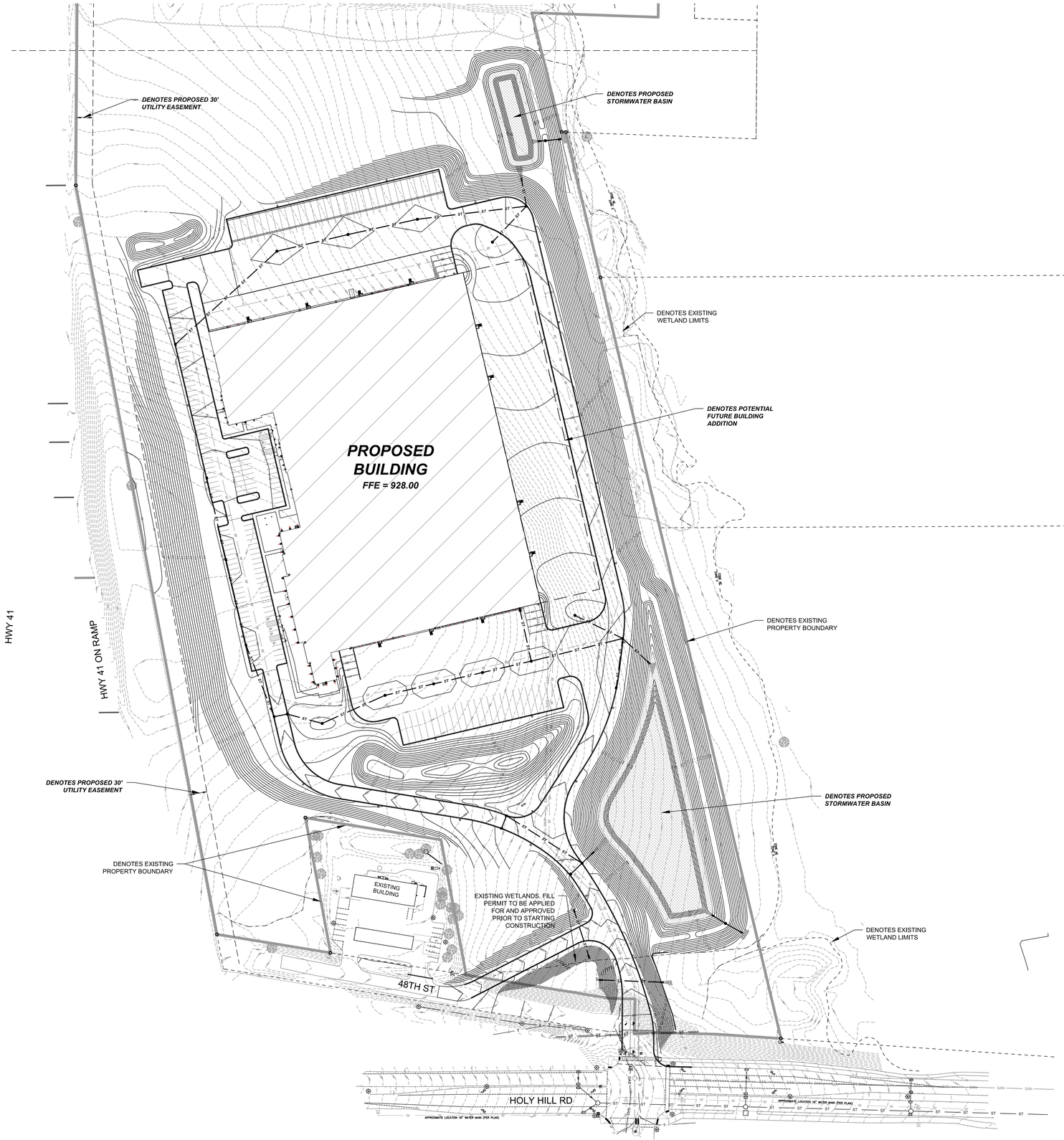


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North
SCALE: 1" = 80'

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SHEET TITLE
GRADING PLAN - OVERALL

PROPOSED NEW BUILDING FOR:
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HOLY HILL ROAD
GERMANTOWN, WISCONSIN

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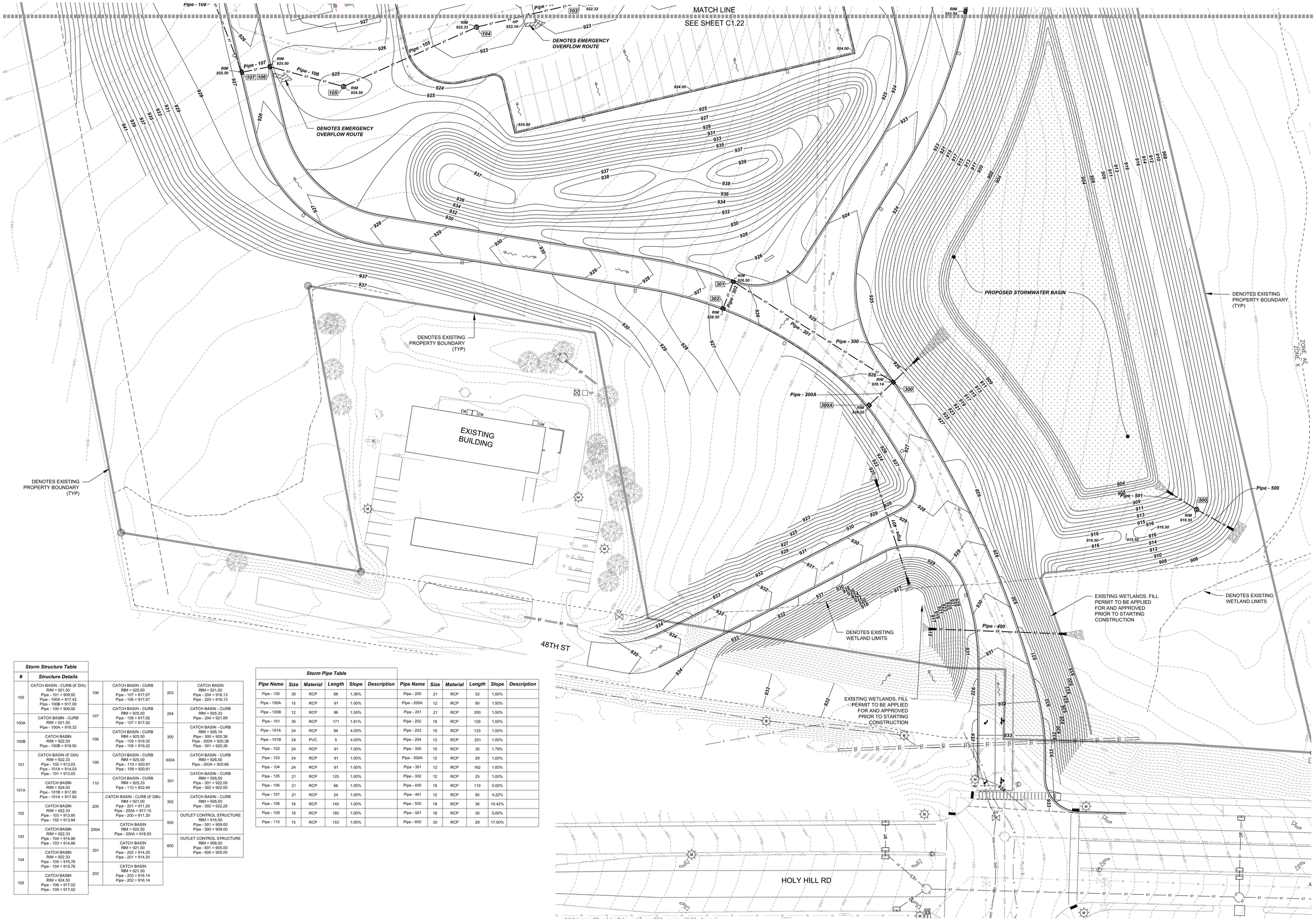


| Storm Structure Table | | | | | |
|---|---|---|---|---|---|
| # | Structure Details | | | | |
| 100 | CATCH BASIN - CURB (8' DIA)<br>RIM = 921.50<br>Pipe - 101 = 909.92<br>Pipe - 100A = 917.42<br>Pipe - 100B = 917.00<br>Pipe - 100 = 909.92 | 106 | CATCH BASIN - CURB<br>RIM = 925.50<br>Pipe - 107 = 917.67<br>Pipe - 106 = 917.67 | 203 | CATCH BASIN<br>RIM = 921.50<br>Pipe - 204 = 918.13<br>Pipe - 203 = 918.13 |
| 100A | CATCH BASIN - CURB<br>RIM = 921.50<br>Pipe - 100A = 918.32 | 107 | CATCH BASIN - CURB<br>RIM = 925.50<br>Pipe - 108 = 917.92<br>Pipe - 107 = 917.92 | 204 | CATCH BASIN - CURB<br>RIM = 925.33<br>Pipe - 204 = 921.89 |
| 100B | CATCH BASIN<br>RIM = 922.50<br>Pipe - 100B = 918.50 | 108 | CATCH BASIN - CURB<br>RIM = 925.50<br>Pipe - 109 = 919.32<br>Pipe - 108 = 919.32 | 300 | CATCH BASIN - CURB<br>RIM = 926.14<br>Pipe - 300 = 920.38<br>Pipe - 300A = 920.38<br>Pipe - 301 = 920.38 |
| 101 | CATCH BASIN (6' DIA)<br>RIM = 922.33<br>Pipe - 102 = 913.03<br>Pipe - 101A = 914.03<br>Pipe - 101 = 913.03 | 109 | CATCH BASIN - CURB<br>RIM = 925.50<br>Pipe - 110 = 920.91<br>Pipe - 109 = 920.91 | 300A | CATCH BASIN - CURB<br>RIM = 926.50<br>Pipe - 300A = 920.66 |
| 101A | CATCH BASIN<br>RIM = 924.00<br>Pipe - 101B = 917.80<br>Pipe - 101A = 917.80 | 110 | CATCH BASIN - CURB<br>RIM = 925.33<br>Pipe - 110 = 922.44 | 301 | CATCH BASIN - CURB<br>RIM = 926.50<br>Pipe - 301 = 922.00<br>Pipe - 302 = 922.00 |
| 102 | CATCH BASIN<br>RIM = 922.33<br>Pipe - 103 = 913.95<br>Pipe - 102 = 913.94 | 200 | CATCH BASIN - CURB (6' DIA)<br>RIM = 921.00<br>Pipe - 201 = 911.20<br>Pipe - 200A = 917.15<br>Pipe - 200 = 911.20 | 302 | CATCH BASIN - CURB<br>RIM = 926.50<br>Pipe - 302 = 922.25 |
| 103 | CATCH BASIN<br>RIM = 922.33<br>Pipe - 104 = 914.86<br>Pipe - 103 = 914.86 | 200A | CATCH BASIN<br>RIM = 922.50<br>Pipe - 200A = 918.50 | 500 | OUTLET CONTROL STRUCTURE<br>RIM = 916.50<br>Pipe - 501 = 909.00<br>Pipe - 500 = 909.00 |
| 104 | CATCH BASIN<br>RIM = 922.33<br>Pipe - 105 = 915.76<br>Pipe - 104 = 915.76 | 201 | CATCH BASIN<br>RIM = 921.50<br>Pipe - 202 = 914.20<br>Pipe - 201 = 914.20 | 600 | OUTLET CONTROL STRUCTURE<br>RIM = 908.50<br>Pipe - 601 = 905.00<br>Pipe - 600 = 905.00 |
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| Storm Pipe Table | | | | | | | | | | | |
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| Pipe - 101 | 36 | RCP | 171 | 1.81% | | Pipe - 202 | 18 | RCP | 129 | 1.50% | |
| Pipe - 101A | 24 | RCP | 94 | 4.00% | | Pipe - 203 | 15 | RCP | 133 | 1.50% | |
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| Pipe - 102 | 24 | RCP | 91 | 1.00% | | Pipe - 300 | 15 | RCP | 30 | 1.79% | |
| Pipe - 103 | 24 | RCP | 91 | 1.00% | | Pipe - 300A | 12 | RCP | 29 | 1.00% | |
| Pipe - 104 | 24 | RCP | 91 | 1.00% | | Pipe - 301 | 12 | RCP | 162 | 1.00% | |
| Pipe - 105 | 21 | RCP | 125 | 1.00% | | Pipe - 302 | 12 | RCP | 25 | 1.00% | |
| Pipe - 106 | 21 | RCP | 66 | 1.00% | | Pipe - 400 | 15 | RCP | 119 | 0.00% | |
| Pipe - 107 | 21 | RCP | 24 | 1.00% | | Pipe - 401 | 12 | RCP | 95 | 4.22% | |
| Pipe - 108 | 18 | RCP | 140 | 1.00% | | Pipe - 500 | 18 | RCP | 36 | 10.42% | |
| Pipe - 109 | 18 | RCP | 160 | 1.00% | | Pipe - 501 | 18 | RCP | 30 | 0.00% | |
| Pipe - 110 | 15 | RCP | 153 | 1.00% | | Pipe - 600 | 30 | RCP | 29 | 17.00% | |

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North
SCALE: 1" = 30'

BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

HARWOOD
255 N 21st Street Milwaukee, WI 53233
414-475-5554

SHEET TITLE
GRADING PLAN - SOUTH

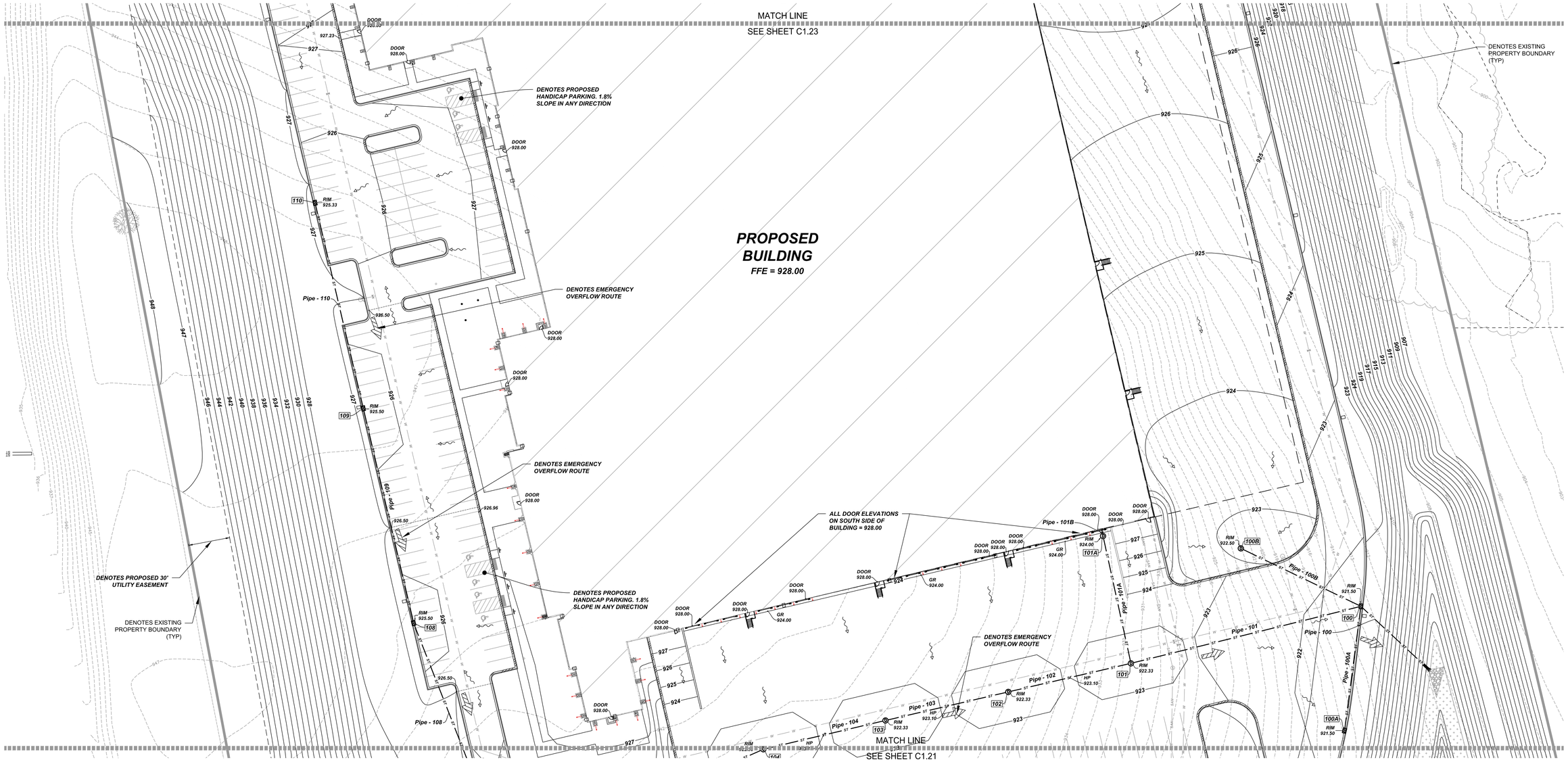
PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

60% REVIEW

PROGRESS SET
NOT FOR CONSTRUCTION

| Revision | Date |
|---|---|
| | |

JOB: 230010
DRAWN:
CHECKED:
DATE: 03/18/2024
SHEET:
C1.21

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| Pipe - 108 | 18 | RCP | 140 | 1.00% | | Pipe - 500 | 18 | RCP | 36 | 10.42% | |
| Pipe - 109 | 18 | RCP | 160 | 1.00% | | Pipe - 501 | 18 | RCP | 30 | 0.00% | |
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SHEET TITLE
GRADING PLAN - CENTER

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
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60% REVIEW

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| Revision | Date |
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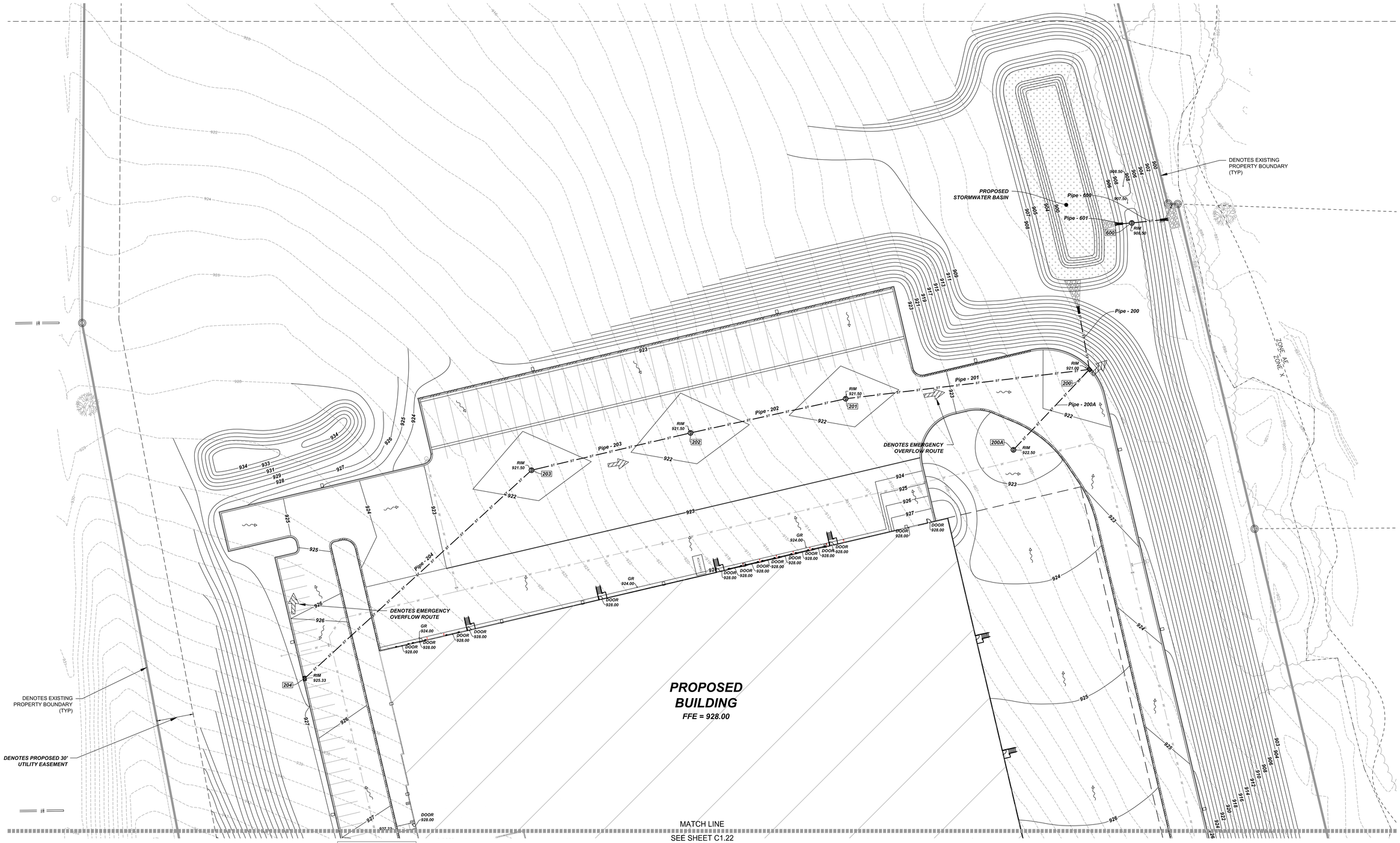
JOB: 230010
DRAWN:
CHECKED:
DATE: 03/18/2024
SHEET:
C1.22

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SHEET TITLE
GRADING PLAN - NORTH

PROPOSED NEW BUILDING FOR:
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GERMANTOWN, WISCONSIN

60% REVIEW

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| Date | Revision |
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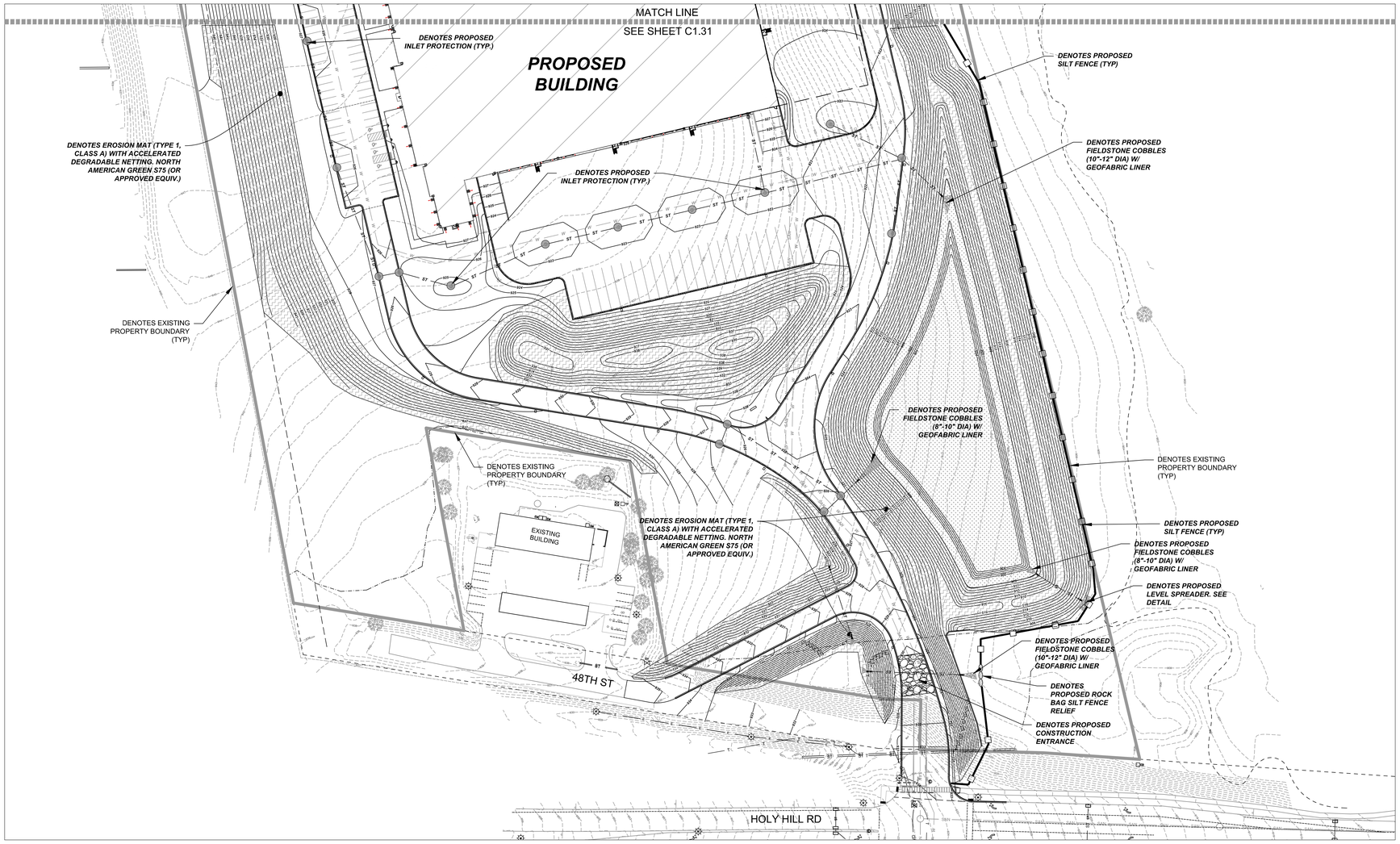



## EROSION CONTROL NOTES AND PHASING

1. WDNR PERMIT COVERAGE IS REQUIRED. POST WDNR CERTIFICATE OF PERMIT COVERAGE ON SITE AND MAINTAIN UNTIL CONSTRUCTION ACTIVITIES HAVE CEASED, THE SITE IS STABILIZED, AND A NOTICE OF TERMINATION IS FILED WITH WDNR.
2. KEEP A COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
3. SUBMIT PLAN REVISIONS OR AMENDMENTS TO THE ENGINEER AT LEAST 5 DAYS PRIOR TO FIELD IMPLEMENTATION.
4. CONTRACTOR IS RESPONSIBLE FOR ROUTINE SITE INSPECTIONS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER. KEEP INSPECTION REPORTS ON-SITE AND MAKE THEM AVAILABLE UPON REQUEST.
5. INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
6. WHEN POSSIBLE: PRESERVE EXISTING VEGETATION (ESPECIALLY ADJACENT TO SURFACE WATERS), MINIMIZE LAND-DISTURBING CONSTRUCTION ACTIVITY ON SLOPES OF 20% OR MORE, MINIMIZE SOIL COMPACTION, AND PRESERVE TOPSOIL.
7. REFER TO THE WDNR STORMWATER CONSTRUCTION TECHNICAL STANDARDS AT http://dnr.wi.gov/topic/stormwater/standards/const_standards.html.
8. INSTALL PERIMETER EROSION CONTROLS, (IF REQUIRED) AND TRACKOUT CONTROL PRACTICES PRIOR TO ANY LAND-DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRUBBING. USE WDNR TECHNICAL STANDARD 1057 FOR TRACKOUT CONTROL AT CONSTRUCTION ENTRANCE(S) (IF REQUIRED).
9. INSTALL INLET PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON INLET INSTALLATION. COMPLY WITH WDNR TECHNICAL STANDARD STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES #1060.
10. STAGE CONSTRUCTION GRADING ACTIVITIES TO MINIMIZE THE CUMULATIVE EXPOSED AREA. CONDUCT TEMPORARY GRADING FOR EROSION CONTROL PER WDNR TECHNICAL STANDARD TEMPORARY GRADING PRACTICES FOR EROSION CONTROL #1067.
11. PERMITTING OF GROUNDWATER DEWATERING IS THE RESPONSIBILITY OF THE CONTRACTOR. GROUNDWATER DEWATERING IS SUBJECT TO A DNR WASTEWATER DISCHARGE PERMIT AND A DNR HIGH CAPACITY WELL APPROVAL IF CUMULATIVE PUMP CAPACITY IS 70 GPM OR MORE.
12. PROVIDE ANTI-SCOUR PROTECTION AND MAINTAIN NON-EROSIVE FLOW DURING DEWATERING. PERFORM DEWATERING OF ACCUMULATED SURFACE RUNOFF IN ACCORDANCE WITH WDNR TECHNICAL STANDARD DE-WATERING #1061.
13. COMPLETE AND STABILIZE WET PONDS PRIOR TO MASS LAND DISTURBANCE TO CONTROL RUNOFF DURING CONSTRUCTION. REMOVE SEDIMENT AS NEEDED TO MAINTAIN 3 FEET OF DEPTH TO THE OUTLET, AND PROPERLY DISPOSE OF SEDIMENT REMOVED DURING MAINTENANCE (REFER TO NR 528). CONSTRUCT AND MAINTAIN THE SEDIMENT BASIN PER WDNR TECHNICAL STANDARD SEDIMENT BASIN #1064 AND SEDIMENT TRAP # 1063.
14. INSTALL AND MAINTAIN SILT FENCING PER WDNR TECHNICAL STANDARD SILT FENCE #1056. REMOVE SEDIMENT FROM BEHIND SILT FENCES AND SEDIMENT BARRIERS BEFORE SEDIMENT REACHES A DEPTH THAT IS EQUAL TO ONE-HALF OF THE FENCE AND/OR BARRIER HEIGHT.
15. REPAIR BREAKS AND GAPS IN SILT FENCES AND BARRIERS IMMEDIATELY. REPLACE DECOMPOSING STRAW BALES (TYPICAL BALE LIFE IS 3 MONTHS). LOCATE, INSTALL, AND MAINTAIN STRAW BALES PER WDNR TECHNICAL STANDARD DITCH CHECKS #1062.
16. INSTALL AND MAINTAIN FILTER SOCKS IN ACCORDANCE WITH WDNR TECHNICAL STANDARD INTERIM MANUFACTURED PERIMETER CONTROL AND SLOPE INTERRUPTION PRODUCTS # 1071.
17. IMMEDIATELY STABILIZE STOCKPILES AND SURROUND STOCKPILES AS NEEDED WITH SILT FENCE OR OTHER PERIMETER CONTROL IF STOCKPILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
18. IMMEDIATELY STABILIZE ALL DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR LONGER.
    - BETWEEN SEPTEMBER 15 AND OCTOBER 15: STABILZE WITH MULCH, TACKIFIER, AND A PERENNIAL SEED MIXED WITH WINTER WHEAT, ANNUAL OATS, OR ANNUAL RYE, AS APPROPRIATE FOR REGION AND SOIL TYPE
    - OCTOBER 15 THROUGH COLD WEATHER: STABILIZE WITH A POLYMER AND DORMANT SEED MIX, AS APPROPRIATE FOR REGION AND SOIL TYPE.
19. STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.
20. SWEEP/CLEAN UP ALL SEDIMENT/TRASH THAT MOVES OFF-SITE DUE TO CONSTRUCTION ACTIVITY OR STORM EVENTS BEFORE THE END OF THE SAME WORKDAY OR AS DIRECTED BY THE WDNR/MUNCIPALITY. SEPARATE SWEPT MATERIALS (SOILS AND TRASH) AND DISPOSE OF APPROPRIATELY.
21. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST PER WDNR TECHNICAL STANDARD DUST CONTROL ON CONSTRUCTION SITES # 1068.
22. PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, OR OTHER CONSTRUCTION MATERIALS) AND DO NOT ALLOW THESE MATERIALS TO BE CARRIED BY RUNOFF INTO THE RECEIVING CHANNEL.
25. FOR NON-CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES 4:1 OR GREATER (OR AS SHOWN ON THE PLAN), PROVIDE CLASS I TYPE TYPE A (WITH ACCELERATED DEGRADABLE NETTING) EROSION CONTROL MATTING. SELECT EROSION MATTING FROM WDOT'S PRODUCT ACCEPTABILITY LIST (PAL); INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD NON-CHANNEL EROSION MAT #1052.
23. FOR CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED AREAS (OR AS SHOWN ON THE PLANS), PROVIDE NORTH AMERICAN GREEN SC150 (OR APPROVED EQUAL) EROSION CONTROL MATTING. INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD CHANNEL EROSION MAT #1053.
24. MAKE PROVISIONS FOR WATERING DURING THE FIRST 8 WEEKS FOLLOWING SEEDING OR PLANTING OF DISTURBED AREAS WHENEVER MORE THAN 7 CONSECUTIVE DAYS OF DRY WEATHER OCCUR.
25. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES (SUCH AS TEMPORARY SEDIMENT BASINS, DITCH CHECKS, EROSION CONTROL MATTING, SILT FENCING, FILTER SOCKS, WATTLES, SWALES, ETC.), OR AS DIRECTED BY WDNR/MUNICIPALITY
26. NOTICE OF TERMINATION: WHEN THE SITE HAS BEEN FULLY STABILIZED AND ALL STORMWATER DISCHARGES FROM THE SITE AUTHORIZED UNDER THE NOI PERMIT HAVE BEEN ELIMINATED, A NOTICE OF TERMINATION SHALL BE FILED WITH THE DNR. CONTRACTOR SHALL SUBMIT A COMPLETED NOTICE OF TERMINATION APPLICATION IN ACCORDANCE WITH THE PERMIT REQUIREMENTS PRIOR TO FINAL PAYMENT.

GENERAL NOTES:

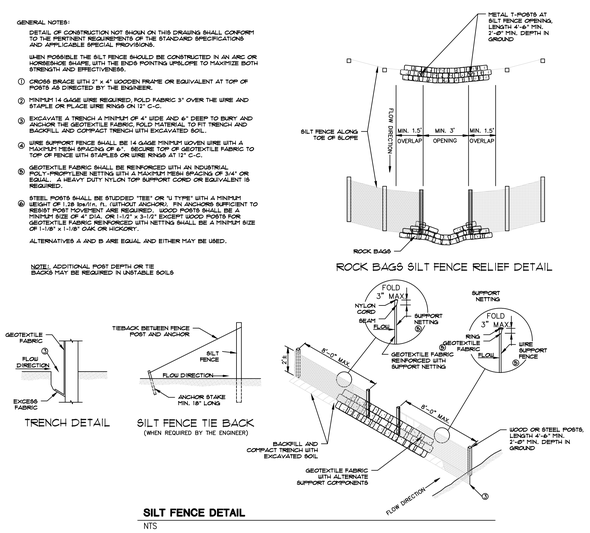
DETAIL OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

WHEN POSSIBLE THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE, WITH THE ENDS POINTING UPSLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.

1. CROSS BRACE WITH 2" x 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.
2. MINIMUM 14 GAGE WIRE REQUIRED, FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" C-C.
3. EXCAVATE A TRENCH A MINIMUM OF 4" WIDE AND 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
4. WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". SECURE TOP OF GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C-C.
5. GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLYPROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF 3/4" OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.
6. STEEL POSTS SHALL BE STUDDED "TEE" OR "U TYPE" WITH A MINIMUM WEIGHT OF 1.35 lbs/l.in. ft. (WITHOUT ANCHORS). PIN ANCHORS SUFFICIENT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIA. OR 1-1/2" x 3-1/2" EXCEPT WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTING SHALL BE A MINIMUM SIZE OF 1-1/8" x 1-1/8" OAK OR HICKORY.

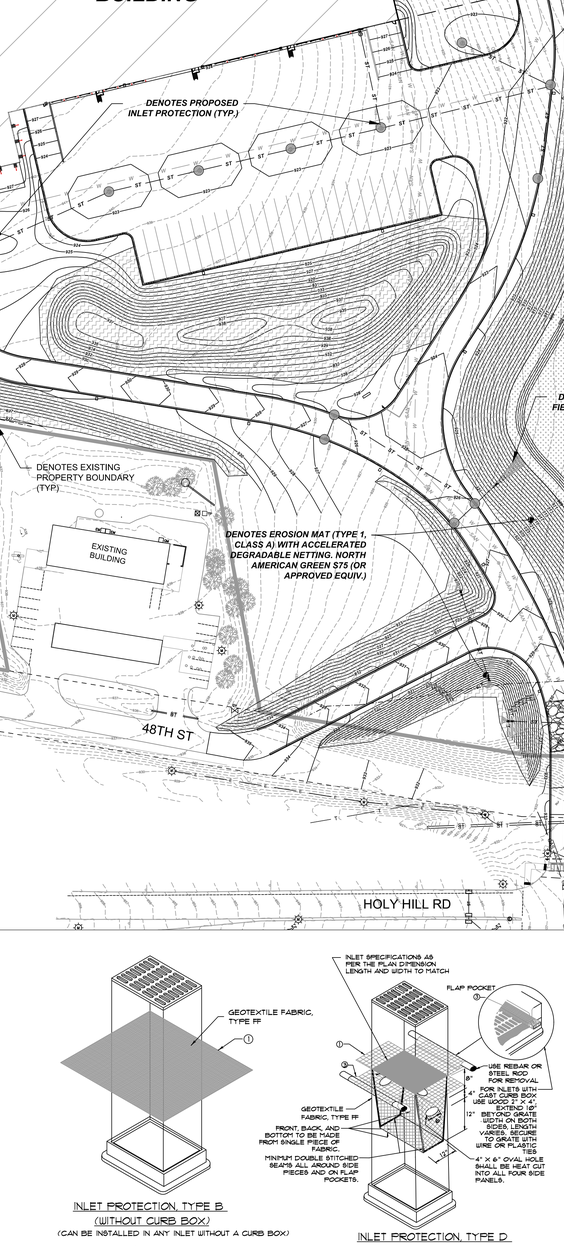
ALTERNATIVES A AND B ARE EQUAL AND EITHER MAY BE USED.

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS




ROCK BAGS SILT FENCE RELIEF DETAIL

SILT FENCE DETAIL
NTS




INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)

INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE) ③

INLET PROTECTION, TYPE C (WITH 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 INLET PROTECTION, CARE SHALL BE TAKEN SO THAT SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

FOR INLET PROTECTION, TYPE C WITH CURB BOX, AND 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.

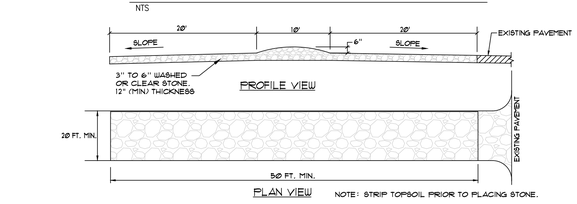
FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES:

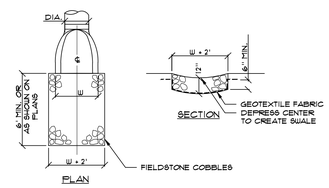
TYPES B & C:
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A DELN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D:
DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 36", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG USING PLASTIC ZIP TIES TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM IF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
NTS




CONSTRUCTION ENTRANCE AND TRACKING PAD DETAIL
NTS




FIELDSTONE COBBLES AT PIPE ENDWALL
NTS

105
11/19/10

## EROSION CONTROL LEGEND

- SILT FILTER FENCE
- CONSTRUCTION ENTRANCE
- EROSION MAT
- DITCH CHECK
- INLET SEDIMENT GUARD

DIGGER'S HOTLINE CALL BEFORE YOU DIG 1-800-242-8511

IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

North
SCALE: 1" = 60'


BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

HARWOOD
255 N 21st Street Milwaukee, WI 53233
414-475-5554


SHEET TITLE
EROSION CONTROL PLAN - SOUTH

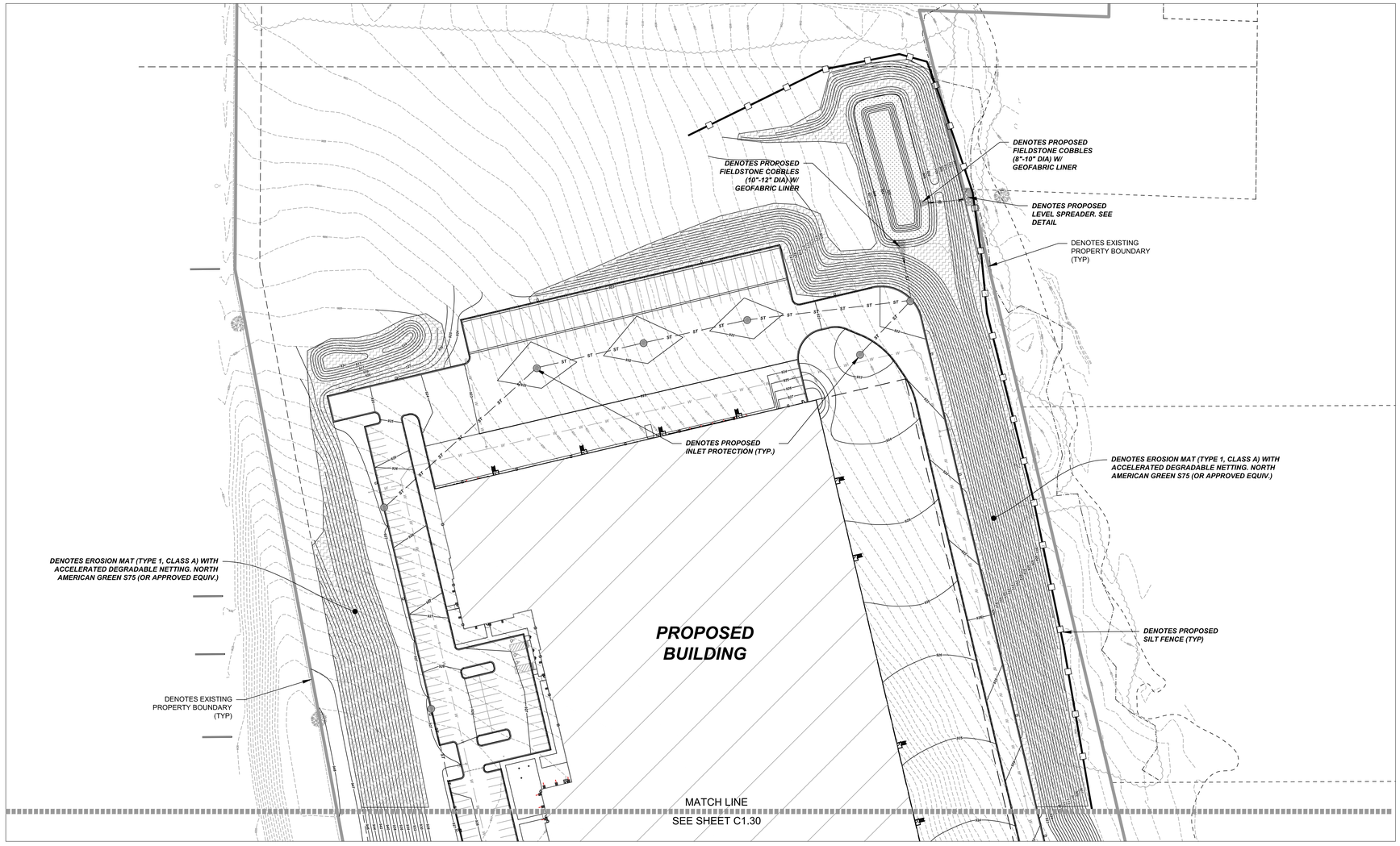
PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

60% REVIEW

PROGRESS SET
NOT FOR CONSTRUCTION

| Date | Revision |
|---|---|

JOB: 230010
DRAWN:
CHECKED:
DATE: 03/18/2024
SHEET:
C1.30




**EROSION CONTROL LEGEND**

| | |
|---|---|
| SILT FILTER FENCE | |
| EROSION MAT | |
| INLET SEDIMENT GUARD | |

DIGGER'S HOTLINE — CALL BEFORE YOU DIG — 1-800-242-8511

IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

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SCALE: 1" = 60'

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BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
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HARWOOD
255 N 21st Street Milwaukee, WI 53233
414-475-5554

SHEET TITLE
EROSION CONTROL PLAN - NORTH

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

60% REVIEW

PROGRESS SET
NOT FOR CONSTRUCTION

| Date | Revision |
|---|---|

| | |
|---|---|
| JOB: | 230010 |
| DRAWN: | |
| CHECKED: | |
| DATE: | 03/18/2024 |
| SHEET: | C1.31 |

CSE
CAPITOL SURVEY ENTERPRISES
220 REGENCY CT. STE. 210
BROOKFIELD, WI 53045
PH: (262) 786-6600
FAX: (414) 786-6608
WWW.CAPITOLSURVEY.COM

NORTH

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1 INCH = 100 FT.

www.DiggersHotline.com
DIGGERS HOTLINE
DIAL 811 OR (800) 242-8511

## LEGEND

| | | | |
|---|---|---|---|
| SAN | SANITARY SEWER | ELECTRIC TRANSFORMER | HYDRANT |
| ST | STORM SEWER | ELECTRIC METER | WATER VALVE |
| W | WATER MAIN | ELECTRIC PEDESTAL | GAS VALVE |
| G | BURIED GAS LINE | ELECTRIC BOX AT GRADE | MANHOLE |
| TEL | BURIED TELEPHONE LINE | TELEPHONE BOX AT GRADE | STORM MANHOLE |
| E | BURIED ELECTRIC LINE | TELEPHONE PEDESTAL | CATCH BASIN |
| FO | BURIED FIBER OPTIC LINE | TV PEDESTAL | CURB INLET |
| // | OVERHEAD UTILITY LINES | GAS METER | METAL LIGHT POLE |
| CATV | BURIED CABLE TELEVISION LINES | AIR CONDITIONER | CONCRETE LIGHT POLE |
| COMB | COMBINATION SEWER | UTILITY POLE | WOOD LIGHT POLE |
| | WOOD FENCE | WOOD SIGN | MAIL BOX |
| | METAL FENCE | METAL SIGN | FIBER OPTIC MARKER |
| | EDGE OF TREES AND BRUSH | FLAG POLE | GUY WIRE |
| 994.32 DS | DOOR SILL ELEVATION | BOLLARD | |
| | FIRE DEPARTMENT CONNECTION | BOLLARD LIGHT | |
| | | YARD LIGHT | |

NOTE: SURVEY COMPLETED BY CAPITOL SURVEY ENTERPRISES. THE ENGINEER MAKES NO WARRANTY OR REPRESENTATION WITH REFERENCE TO THE ACCURACY AND COMPLETENESS OF THE EXISTING CONDITIONS INDICATED OR NOT INDICATED ON THE ENGINEERING PLANS PROVIDED.

# EXISTING CONDITIONS SURVEY

FOR

## HOLY HILL RD

HOLY HILL RD
GERMANTOWN, WI

| | | | |
|---|---|---|---|
| DRAWN BY: | RAP | DATE: | 12/06/2023 |
| CHECKED BY: | MJB | DRAWING NO. | EC - 0 |
| CSE JOB NO.: | 23 - 109 | SHEET 4 | OF 4 |

North
SCALE: 1" = 100'

BRIOHN
DESIGN GROUP
3665 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

HARWOOD
255 N 21st Street Milwaukee, WI 53233
414-475-5554

SHEET TITLE
EXISTING SURVEY

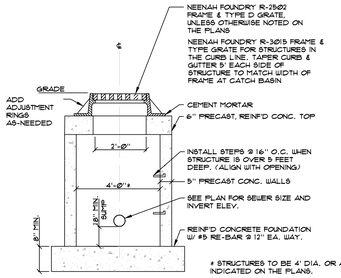
PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

60% REVIEW

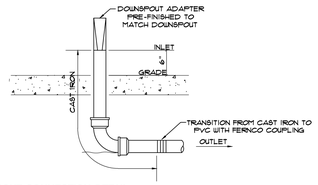
PROGRESS SET
NOT FOR CONSTRUCTION

| Date | Revision |
|---|---|

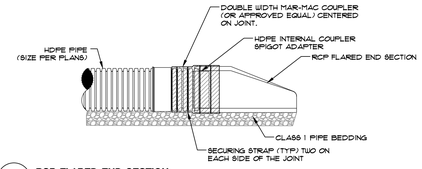
JOB: 230010
DRAWN:
CHECKED:
DATE: 03/18/2024
SHEET:
C1.40



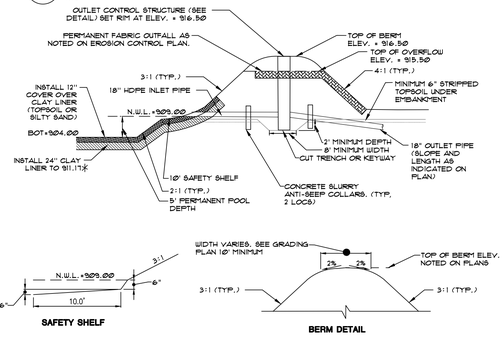

## 01 CATCH BASIN DETAIL
NTS




## 02 DOWNSPOUT CONNECTION DETAIL
NTS




## 03 RCP FLARED END SECTION
NTS

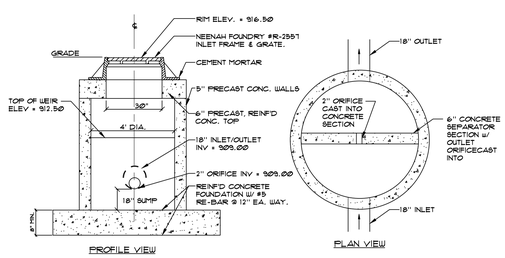



*NOTE: FOR AREAS WHERE THE IN-SITU SOILS ARE NOT SUITABLE AS A LINER (PER A GEOTECHNICAL REPRESENTATIVE), THE CONTRACTOR SHALL INSTALL A LINER PER THE DETAIL WITH THE FOLLOWING PROPERTIES:

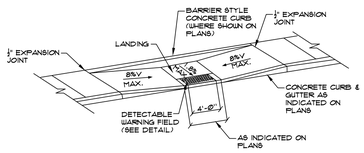
CLAY LINER TO HAVE THE FOLLOWING PROPERTIES: PI > 12 : LL ≥ 25
MOISTURE CONTENT = @-2% ABOVE OPTIMUM

PLACE LINER IN 9" LIFTS, COMPACT TO 90% MODIFIED PROCTOR

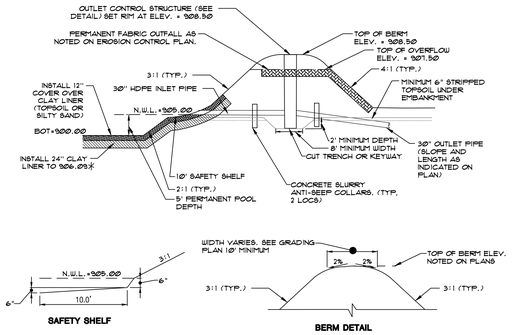
## 04 STORMWATER BASIN DETAIL - SOUTH
NTS




## 05 OUTLET CONTROL STRUCTURE - SOUTH
NTS




## 06 HANDICAP RAMP - TYPE 2
NTS

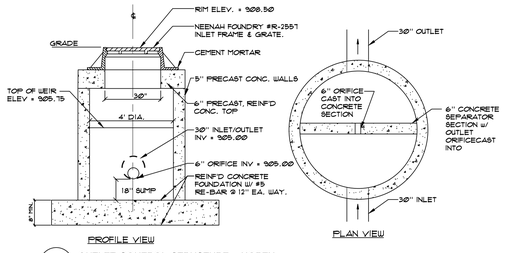



*NOTE: FOR AREAS WHERE THE IN-SITU SOILS ARE NOT SUITABLE AS A LINER (PER A GEOTECHNICAL REPRESENTATIVE), THE CONTRACTOR SHALL INSTALL A LINER PER THE DETAIL WITH THE FOLLOWING PROPERTIES:

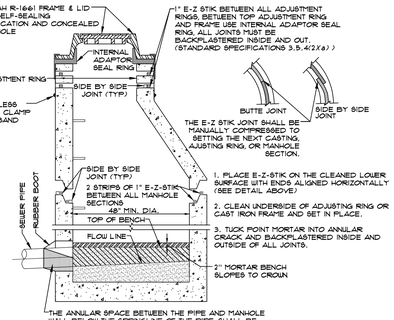
CLAY LINER TO HAVE THE FOLLOWING PROPERTIES: PI > 12 : LL ≥ 25
MOISTURE CONTENT = @-2% ABOVE OPTIMUM

PLACE LINER IN 9" LIFTS, COMPACT TO 90% MODIFIED PROCTOR

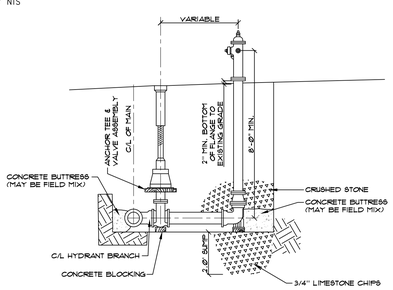
## 07 STORMWATER BASIN DETAIL - NORTH
NTS




## 08 OUTLET CONTROL STRUCTURE - NORTH
NTS




## 09 SANITARY MANHOLE DETAIL
NTS



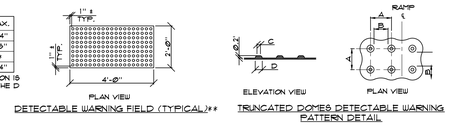

NOTE:
1) MEGALUG RESTRAINING GLANDS ON ALL MECHANICAL JOINTS. THE BOLTS & NUTS ARE TO BE HIGH STRENGTH LOW ALLOY STEEL (CORTEN) AS PER SECTION 11.6.5 OF A.W.U.A. C-111.

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 5 1/4" PACER FIRE HYDRANT

## 10 FIRE HYDRANT DETAIL
NTS

| | MIN. | MAX. |
|---|---|---|
| A | 1.6" | 2.4" |
| B | Ø.65" | 1.5" |
| C | * | * |
| D | Ø.9" | 1.4" |

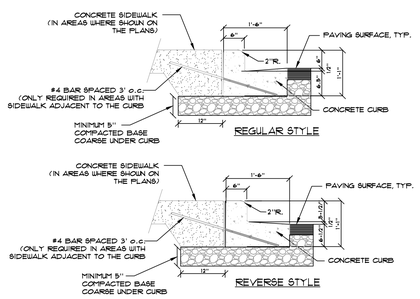
* THE C DIMENSION IS 50% TO 65% IF THE D DIMENSION



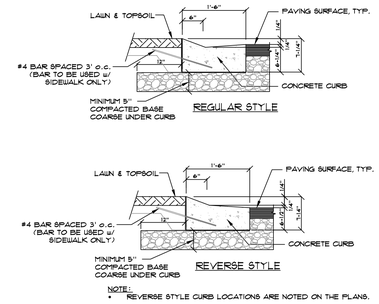

DETECTABLE WARNING FIELD (TYPICAL)** TRUNCATED DOMES DETECTABLE WARNING PATTERN DETAIL

**DETECTABLE WARNING FIELDS TO BE NEENAH FOUNDRY DETECTABLE WARNING FIELDS (OR APPROVED EQUAL) UNPAINTED NATURAL COLOR AND FIELD WEATHERED PRIOR TO INSTALLATION (VERIFY COLOR W/ OWNER PRIOR TO INSTALLATION)

## 11 TRUNCATED DOMES
NTS

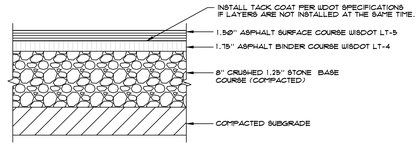



## 12 18" CURB AND GUTTER
NTS

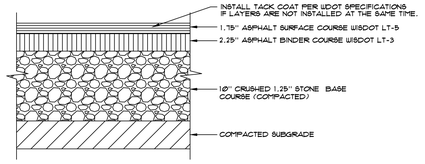



NOTE:
- REVERSE STYLE CURB LOCATIONS ARE NOTED ON THE PLANS.

## 13 DEPRESSED CURB DETAIL
NTS

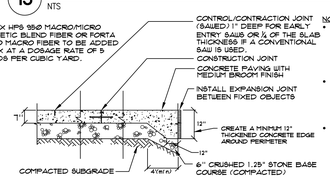



## 14 REGULAR DUTY ASPHALT PAVEMENT
NTS



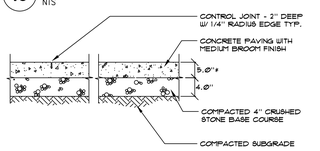

## 15 HEAVY DUTY ASPHALT PAVEMENT
NTS

NOTE:
- MATRIX HPS 950 MACRO/MICRO SYNTHETIC BLEND FIBER OR PORTA FERRO MACRO FIBER TO BE ADDED TO MIX AT A DOSAGE RATE OF 5 POUNDS PER CUBIC YARD.




NOTES:
- TIE BARS SHALL BE INSTALLED AT ALL AREAS WHERE CONCRETE PAVEMENT ABUTS CURB AND GUTTER AND CONSIST OF NO. 4 EPOXY COATED REINFORCING BARS 24 INCHES IN LENGTH AND 48 INCHES ON CENTER.
- CONTROL/ CONTRACTION/ CONSTRUCTION JOINTS SHALL BE SPACED AT 12' MAXIMUM AND CONSTRUCTED IN CONFORMANCE WITH THE AMERICAN CONCRETE INSTITUTE (ACI-330R) RECOMMENDATIONS.
- EXPANSION JOINTS SHALL BE PROVIDED WHERE PAVEMENT ABUTS FIXED OBJECTS, MEETING ACI-330R STANDARDS.

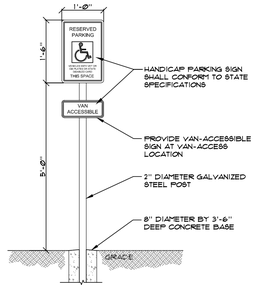
## 16 CONCRETE PAVEMENT DETAIL
NTS



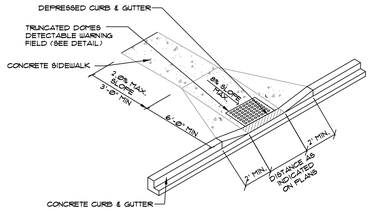

* NOTE:
SIDEWALK SHALL BE 7" AT DRIVEWAY SECTIONS

NOTES:
- CONTROL JOINT SPACING SHALL BE A MAXIMUM OF 5' AND CONSTRUCTED IN CONFORMANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) RECOMMENDATIONS.
- EXPANSION JOINTS SHOULD BE PROVIDED WHERE PAVEMENT ABUTS FIXED OBJECTS.
- MATRIX BI BLEND MICRO FIBER TO BE ADDED AT A RATE OF 1.5 POUNDS PER CUBIC YARD.

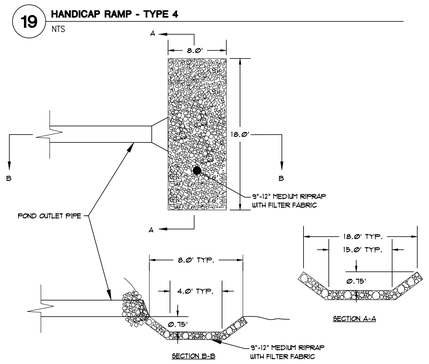
## 17 CONCRETE SIDEWALK DETAIL
NTS



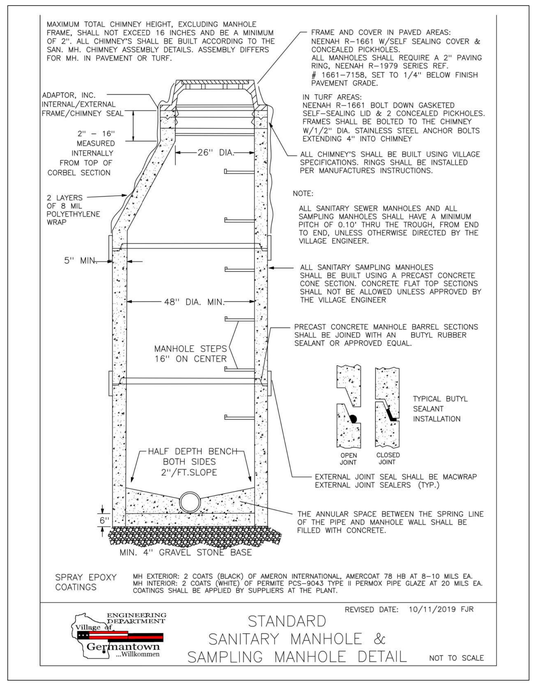

## 18 HANDICAP PARKING SIGN
NTS




## 19 HANDICAP RAMP - TYPE 4
NTS




## 20 LEVEL SPREADER DETAIL
NTS




## 21 SAMPLING MANHOLE DETAIL
NTS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SHEET TITLE
CONSTRUCTION DETAILS

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

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## LA SHEET INDEX


| | |
|---|---|
| L1.00 | LANDSCAPE PLAN - OVERALL |
| L2.01 | LANDSCAPE PLAN - SOUTH |
| L2.02 | LANDSCAPE PLAN - CENTER |
| L2.03 | LANDSCAPE PLAN - NORTH |
| L3.00 | LANDSCAPE DETAILS & NOTES |


## GENERAL NOTES

Lawn areas to be seeded with premium commercial grade bluegrass seed mix, see specifications.

Plant beds and parking lot islands to receive a 3"-4" deep layer of shredded hardwood mulch, see notes.

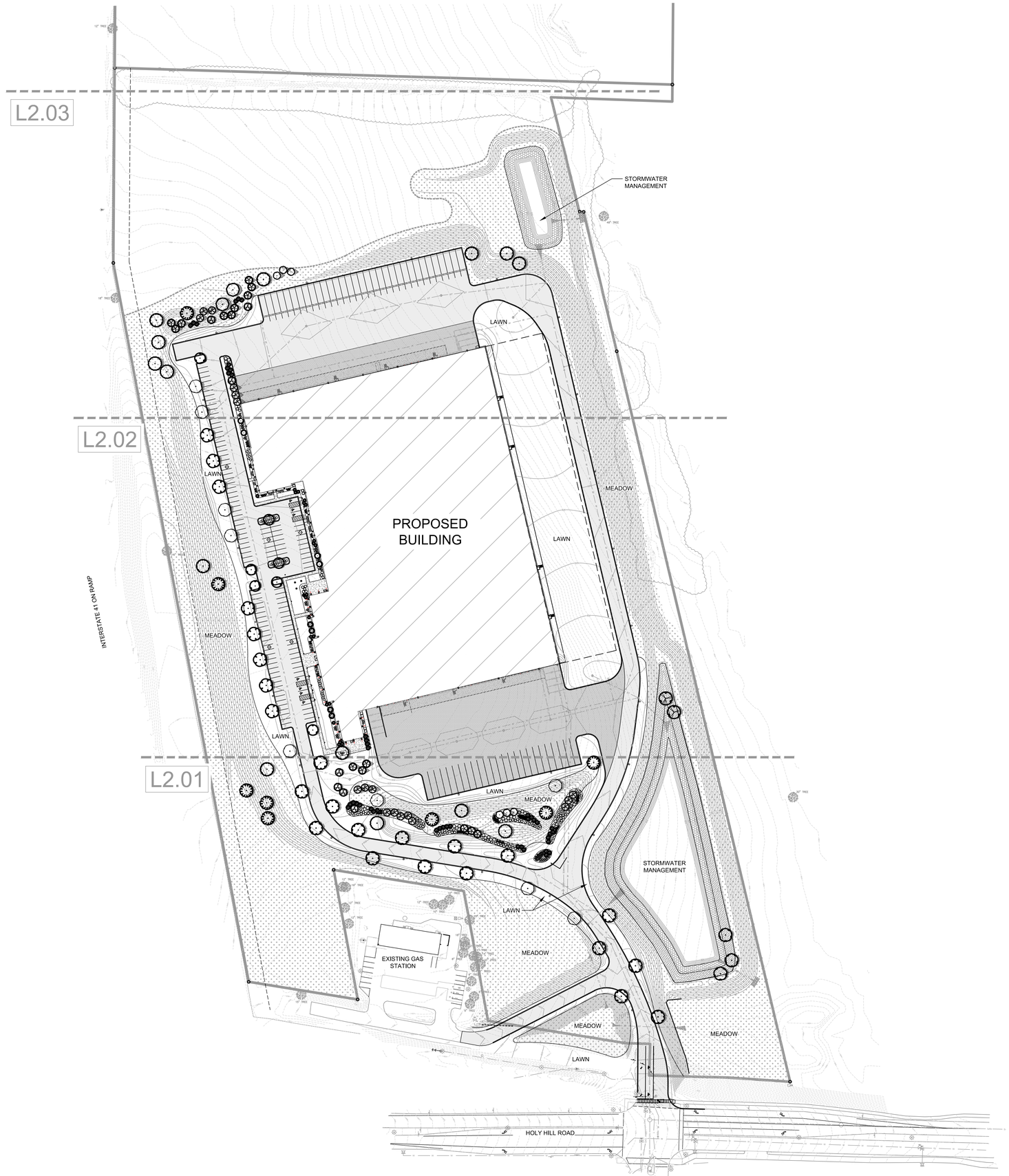
All plantings shall comply with standards as described in the American Standard of Nursery Stock - ANSI Z60.1 (Latest Version)

Caution: underground utilities are present on site. The Contractor shall verify location of all above- and below-grade utilities, both public & private, prior to commencement of site construction. If unanticipated above- or below-grade conditions are encountered, notify Client & Landscape Architect prior to proceeding. Coordinate with local public utility locating entity as needed.

Contractor to limit construction traffic to within work areas. All adjacent damage shall be the responsibility of the contractor to restore.

## LEGEND

CONCRETE
HD CONCRETE
ASPHALT
LAWN
MEADOW GRASS
WETLAND MEADOW
EMERGENT ZONE
ORNAMENTAL TREES
EVERGREEN TREES
DECIDUOUS TREES
DECIDUOUS SHRUBS
EVERGREEN SHRUBS
ORNAMENTAL GRASSES

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GERMANTOWN, WISCONSIN

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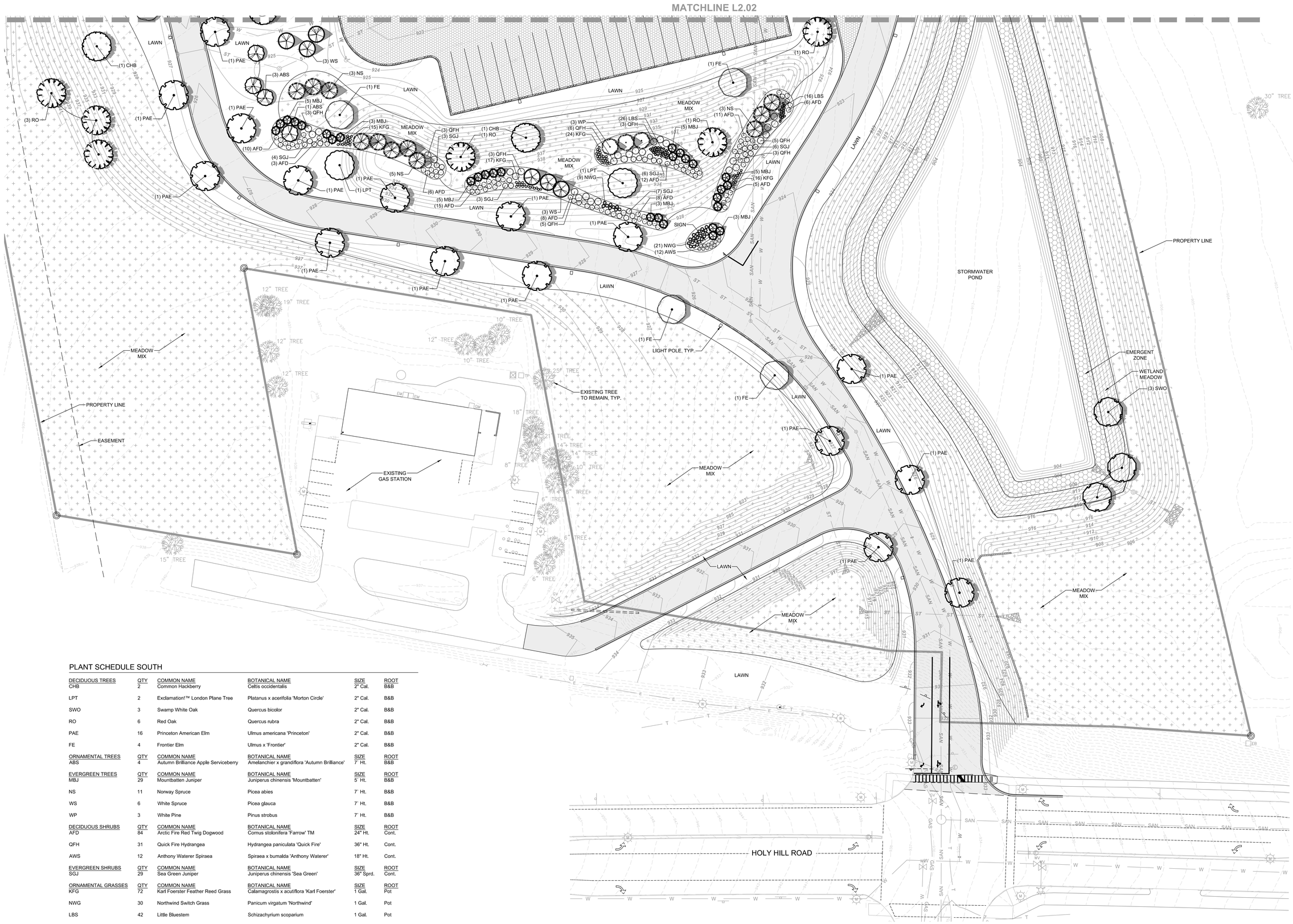


## PLANT SCHEDULE SOUTH

| DECIDUOUS TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT |
|---|---|---|---|---|---|
| CHB | 2 | Common Hackberry | Celtis occidentalis | 2" Cal. | B&B |
| LPT | 2 | Exclamation!™ London Plane Tree | Platanus x acerifolia 'Morton Circle' | 2" Cal. | B&B |
| SWO | 3 | Swamp White Oak | Quercus bicolor | 2" Cal. | B&B |
| RO | 6 | Red Oak | Quercus rubra | 2" Cal. | B&B |
| PAE | 16 | Princeton American Elm | Ulmus americana 'Princeton' | 2" Cal. | B&B |
| FE | 4 | Frontier Elm | Ulmus x 'Frontier' | 2" Cal. | B&B |
| **ORNAMENTAL TREES** | **QTY** | **COMMON NAME** | **BOTANICAL NAME** | **SIZE** | **ROOT** |
| ABS | 4 | Autumn Brilliance Apple Serviceberry | Amelanchier x grandiflora 'Autumn Brilliance' | 7' Ht. | B&B |
| **EVERGREEN TREES** | **QTY** | **COMMON NAME** | **BOTANICAL NAME** | **SIZE** | **ROOT** |
| MBJ | 29 | Mountbatten Juniper | Juniperus chinensis 'Mountbatten' | 5' Ht. | B&B |
| NS | 11 | Norway Spruce | Picea abies | 7' Ht. | B&B |
| WS | 6 | White Spruce | Picea glauca | 7' Ht. | B&B |
| WP | 3 | White Pine | Pinus strobus | 7' Ht. | B&B |
| **DECIDUOUS SHRUBS** | **QTY** | **COMMON NAME** | **BOTANICAL NAME** | **SIZE** | **ROOT** |
| AFD | 84 | Arctic Fire Red Twig Dogwood | Cornus stolonifera 'Farrow' TM | 24" Ht. | Cont. |
| QFH | 31 | Quick Fire Hydrangea | Hydrangea paniculata 'Quick Fire' | 36" Ht. | Cont. |
| AWS | 12 | Anthony Waterer Spiraea | Spiraea x bumalda 'Anthony Waterer' | 18" Ht. | Cont. |
| **EVERGREEN SHRUBS** | **QTY** | **COMMON NAME** | **BOTANICAL NAME** | **SIZE** | **ROOT** |
| SGJ | 29 | Sea Green Juniper | Juniperus chinensis 'Sea Green' | 36" Sprd. | Cont. |
| **ORNAMENTAL GRASSES** | **QTY** | **COMMON NAME** | **BOTANICAL NAME** | **SIZE** | **ROOT** |
| KFG | 72 | Karl Foerster Feather Reed Grass | Calamagrostis x acutiflora 'Karl Foerster' | 1 Gal. | Pot |
| NWG | 30 | Northwind Switch Grass | Panicum virgatum 'Northwind' | 1 Gal. | Pot |
| LBS | 42 | Little Bluestem | Schizachyrium scoparium | 1 Gal. | Pot |

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HARWOOD
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414-475-5554

SHEET TITLE
LANDSCAPE PLAN - SOUTH

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

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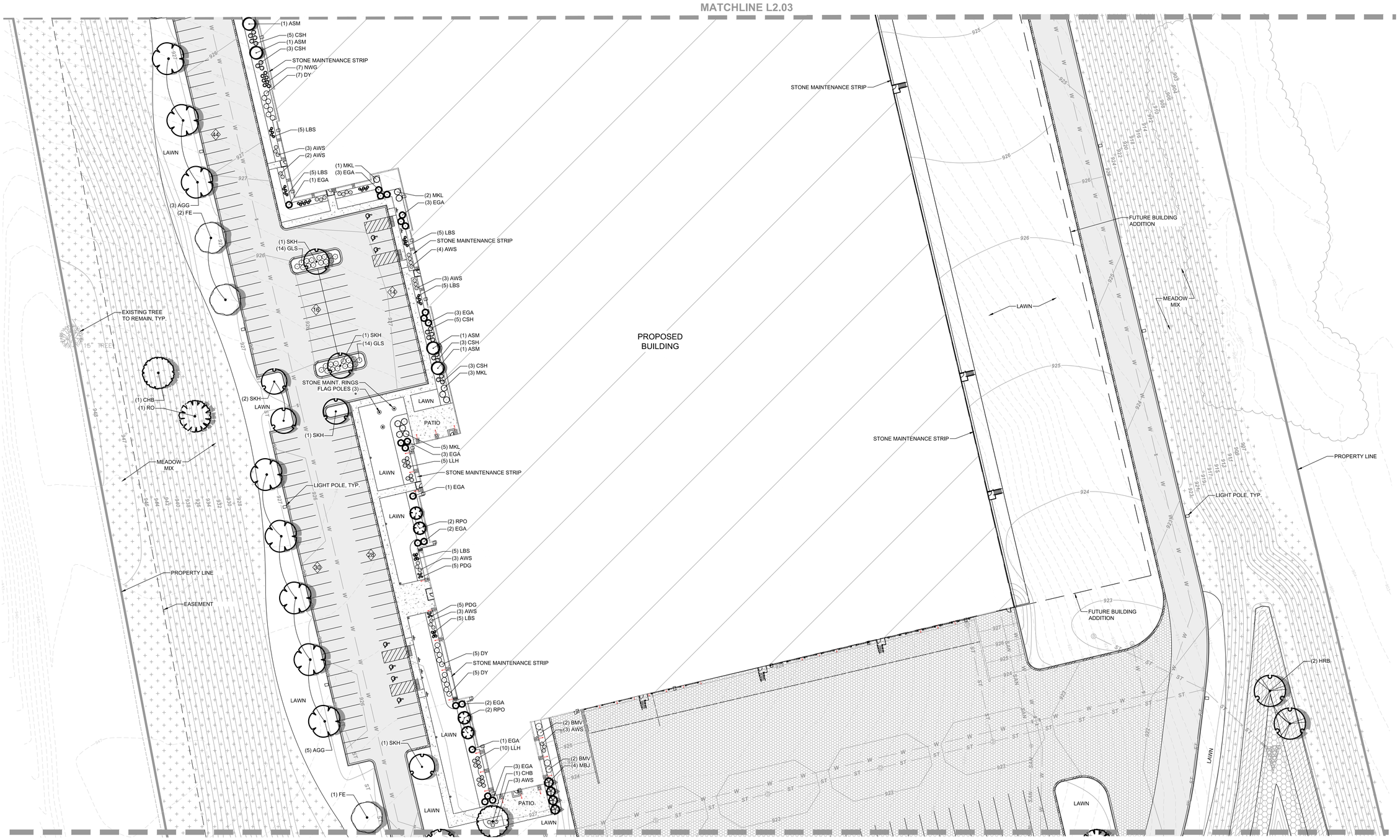


## PLANT SCHEDULE CENTER

| DECIDUOUS TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT |
|---|---|---|---|---|---|
| ASM | 4 | Apollo Sugar Maple | Acer saccharum 'Barrett Cole' TM | 2" Cal. | B&B |
| HRB | 2 | Heritage River Birch | Betula nigra 'Cully' TM | 2" Cal. | B&B |
| CHB | 2 | Common Hackberry | Celtis occidentalis | 2" Cal. | B&B |
| AGG | 8 | Autumn Gold Maidenhair Tree | Ginkgo biloba 'Autumn Gold' TM | 2" Cal. | B&B |
| SKH | 6 | Street Keeper Honey Locust | Gleditsia triacanthos inermis 'Draves' TM | 2" Cal. | B&B |
| RPO | 4 | Regal Prince Oak | Quercus robur x bicolor 'Long' TM | 2" Cal. | B&B |
| RO | 1 | Red Oak | Quercus rubra | 2" Cal. | B&B |
| FE | 3 | Frontier Elm | Ulmus x 'Frontier' | 2" Cal. | B&B |
| **EVERGREEN TREES** | **QTY** | **COMMON NAME** | **BOTANICAL NAME** | **SIZE** | **ROOT** |
| MBJ | 4 | Mountbatten Juniper | Juniperus chinensis 'Mountbatten' | 5' Ht. | B&B |
| EGA | 22 | Emerald Green Arborvitae | Thuja occidentalis 'Smaragd' | 5' Ht. | B&B |

| DECIDUOUS SHRUBS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT |
|---|---|---|---|---|---|
| CSH | 19 | Cool Splash False Honeysuckle | Diervilla sessilifolia 'Cool Splash' | 18" Ht. | Cont. |
| LLH | 18 | Little Lime Hydrangea | Hydrangea paniculata 'Jane' TM | 24" Ht. | Cont. |
| GLS | 28 | Gro-Low Fragrant Sumac | Rhus aromatica 'Gro-Low' | 18" Ht. | Cont. |
| AWS | 31 | Anthony Waterer Spiraea | Spiraea x bumalda 'Anthony Waterer' | 18" Ht. | Cont. |
| MKL | 11 | Miss Kim Korean Lilac | Syringa patula 'Miss Kim' | 36" Ht. | Cont. |
| BMV | 4 | Blue Muffin Arrowwood Viburnum | Viburnum dentatum 'Blue Muffin' | 36" Ht. | Cont. |
| **EVERGREEN SHRUBS** | **QTY** | **COMMON NAME** | **BOTANICAL NAME** | **SIZE** | **ROOT** |
| DY | 17 | Dense Japanese Yew | Taxus x media 'Densiformis' | 24" Sprd. | Cont. |
| **ORNAMENTAL GRASSES** | **QTY** | **COMMON NAME** | **BOTANICAL NAME** | **SIZE** | **ROOT** |
| NWG | 7 | Northwind Switch Grass | Panicum virgatum 'Northwind' | 1 Gal. | Pot |
| LBS | 42 | Little Bluestem | Schizachyrium scoparium | 1 Gal. | Pot |
| PDG | 10 | Prairie Dropseed | Sporobolus heterolepis | 1 Gal. | Pot |

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HARWOOD
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414-475-5554

SHEET TITLE
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HOLY HILL ROAD
GERMANTOWN, WISCONSIN

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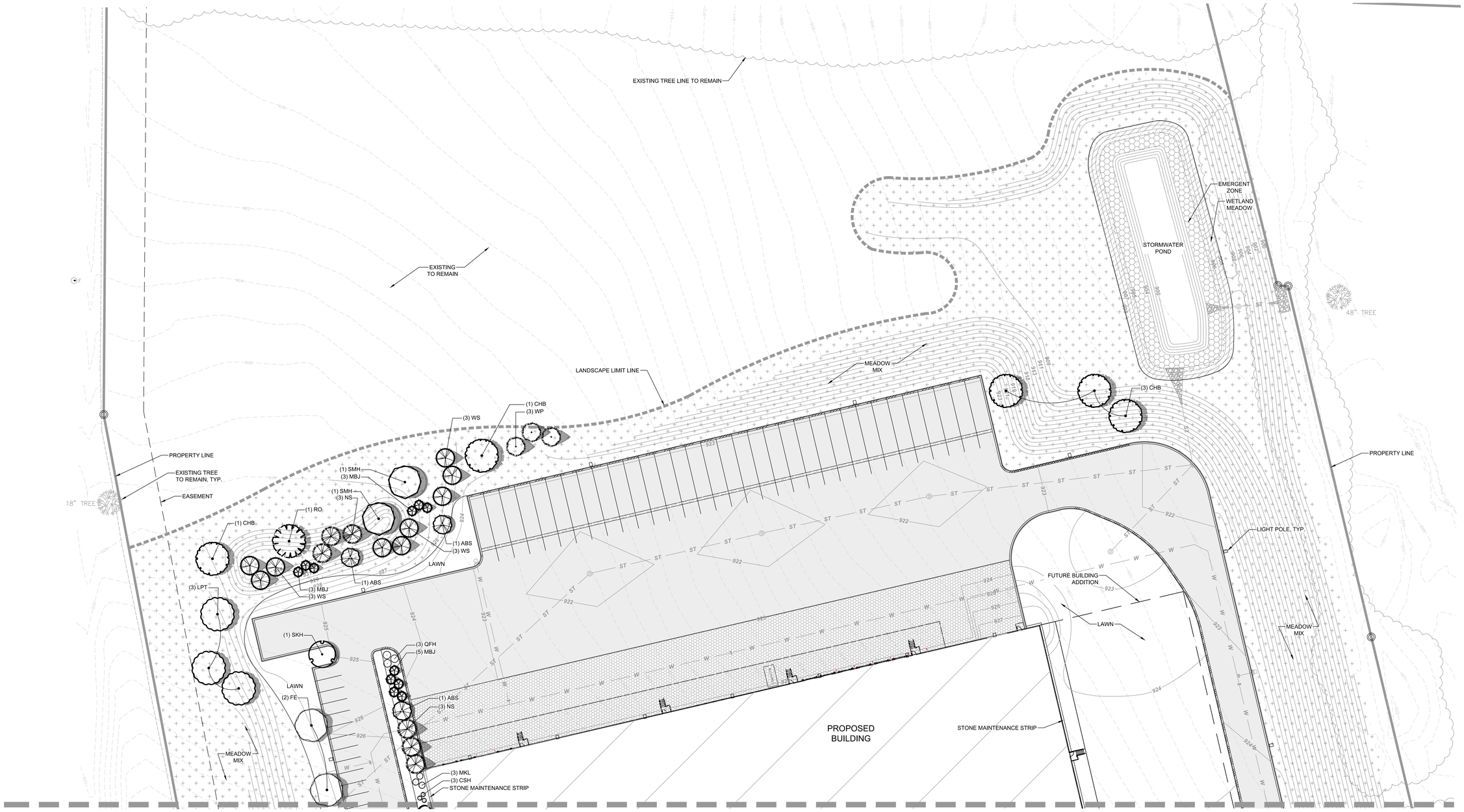


MATCHLINE L2.02

## PLANT SCHEDULE NORTH

| DECIDUOUS TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT |
|---|---|---|---|---|---|
| CHB | 5 | Common Hackberry | Celtis occidentalis | 2" Cal. | B&B |
| SKH | 1 | Street Keeper Honey Locust | Gleditsia triacanthos inermis 'Draves' TM | 2" Cal. | B&B |
| SMH | 2 | Shademaster Honey Locust | Gleditsia triacanthos inermis 'Shademaster' | 2" Cal. | B&B |
| LPT | 3 | Exclamation!™ London Plane Tree | Platanus x acerifolia 'Morton Circle' | 2" Cal. | B&B |
| RO | 1 | Red Oak | Quercus rubra | 2" Cal. | B&B |
| FE | 2 | Frontier Elm | Ulmus x 'Frontier' | 2" Cal. | B&B |
| **ORNAMENTAL TREES** | **QTY** | **COMMON NAME** | **BOTANICAL NAME** | **SIZE** | **ROOT** |
| ABS | 3 | Autumn Brilliance Apple Serviceberry | Amelanchier x grandiflora 'Autumn Brilliance' | 7' Ht. | B&B |
| **EVERGREEN TREES** | **QTY** | **COMMON NAME** | **BOTANICAL NAME** | **SIZE** | **ROOT** |
| MBJ | 11 | Mountbatten Juniper | Juniperus chinensis 'Mountbatten' | 5' Ht. | B&B |
| NS | 6 | Norway Spruce | Picea abies | 7' Ht. | B&B |
| WS | 9 | White Spruce | Picea glauca | 7' Ht. | B&B |
| WP | 3 | White Pine | Pinus strobus | 7' Ht. | B&B |
| **DECIDUOUS SHRUBS** | **QTY** | **COMMON NAME** | **BOTANICAL NAME** | **SIZE** | **ROOT** |
| CSH | 3 | Cool Splash False Honeysuckle | Diervilla sessilifolia 'Cool Splash' | 18" Ht. | Cont. |
| QFH | 3 | Quick Fire Hydrangea | Hydrangea paniculata 'Quick Fire' | 36" Ht. | Cont. |
| MKL | 3 | Miss Kim Korean Lilac | Syringa patula 'Miss Kim' | 36" Ht. | Cont. |

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PROPOSED NEW BUILDING FOR:
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GERMANTOWN, WISCONSIN

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## General Notes

1.01 All landscape installation & maintenance to conform with all applicable local codes & ordinances, including (but not limited to) select portions of Village of Germantown Municipal Code.

1.02 See Site dwgs. for work limits, scope of construction, hardscape, dimensions &/or construction notes. See Civil dwgs. for all hardscape, grading, stormwater management, site utilities & erosion control. See Landscape dwgs. for landscape plans, site amenities, details, schedules, notes. See Architectural dwgs. for all construction. See Electrical drawings for all power, circuiting, lighting & security. See Mechanical drawings for other site equipment.

1.03 Contractor shall provide shop drawings and material submittals of **all** hardscape & landscape construction elements shown in plan set for Landscape Architect review prior to construction.

1.04 Contractor to provide samples for Landscape Architect's approval on all colors, finishes & materials prior to construction, including (but not limited to) topsoil, gravels, mulches, seed mixes et al.

1.05 Caution: underground utilities are present on site. The Contractor shall verify location of all above- and below-grade utilities, both public & private, prior to commencement of site construction. If unanticipated above- or below-grade conditions are encountered, notify Client & Landscape Architect prior to proceeding. Coordinate with local public utility locating entity as needed.

1.06 Contractor to verify hardscape layout prior to construction. Contact Landscape Architect if discrepancies are found.

1.07 Contractor to limit construction traffic to within work limit lines. All adjacent damage shall be the responsibility of the contractor to restore. See Civil drawings for limits of disturbance.

1.08 All written dimensions supersede scaled dimensions. All dimensions are taken from face of curb, wall or existing building foundations.

## Landscape Notes

2.01 Rough grading & topsoil import/spreading are to be completed by others. Finish grading, seed area and planting bed preparation shall be the landscape contractor's responsibility. Verify all existing site and grading conditions prior to construction.

2.02 All areas disturbed by site construction shall be fine graded and restored with vegetative cover as shown. See plans for cover types & locations, see specifications for materials & installation.

2.03 Contractor shall verify plant quantities shown on plan. Symbol quantities take precedence over plant keys, except as noted in the plant schedule. Contractor shall forward a material list to the Landscape Architect prior to construction identifying species, sizes & plant sources to be used on the project.

2.04 All plant materials shall conform to the schedule and shall meet quality requirements outlined in the ANLA "American Standard for Nursery Stock", ANSI Z60.1-2014.The Landscape Architect reserves the right to reject any substandard planting material. Such rejected material shall be removed from the project site immediately.

2.05 An Owner's representative shall be allowed to inspect and approve trees at the nursery prior to delivery to the site.

2.06 All nursery tags/labels shall be left on plant materials until the project punch-list inspection is completed by the Landscape Architect. Untagged materials will be assumed to be deficient.

2.07 Topsoil requirements:

- All planting beds shall contain screened blended topsoil mix to a min. depth of 18". All turf, low-mow & shortgrass prairie areas shall have min. 6".
- Existing topsoil meeting project specifications may be stripped, stored & re-used if previously approved. Contractor shall remove all excessive clay, gravel & stones detrimental to healthy plant growth. Contractor shall remove all debris greater than 1" diameter.
- Contaminated soil shall be removed from the project site if discovered.
- Subgrade shall be tilled and/or scarified prior to placement of topsoil.
- Contractor shall be responsible for obtaining soil tests for existing or imported topsoil. Soil testing results shall include (but are not limited to) soil pH, % organic matter, % nitrogen / phosphorus / potassium, % calcium, and soil texture (percentages of sand, silt and/or clay.) Soil testing shall include recommendations for soil amendments if required to support growth of standard ornamental landscape materials.

2.08 Contractor is responsible for ensuring that all tree pits & planting areas drain properly. Notify Landscape Architect if drainage or moisture problems are encountered while planting.

2.09 Contractor shall backfill all trees, shrubs & evergreens with a mix of 1/3 plant starter mix & 2/3 remaining soil. Plant Starter Mix shall be 40% organic black topsoil, 30% sphagnum moss, 20% composted manure & 10% coarse sand by volume. Submit material information for review.

2.10 All perennial and groundcover areas shall receive a 3" layer of plant starter mix and perennial starter fertilizer, rototilled into the top 6" of blended topsoil in beds.

2.11 Unless otherwise shown, all perennials & shrubs to be planted in triangular arrangements. For plants not shown individually, refer to the spacing shown in the plant schedule.

2.12 Natural Mulch: All tree circles and plant beds to receive a 3" deep layer of high quality shredded hardwood bark mulch.

2.13 Edging (Natural Mulch): Edge all planting beds with a 4" deep spaded edge (shovel cut or mechanical). Bedlines are to be cut per plan. A clean definintion between the lawn and plant bed is required.

2.14 Decorative stone maintenance strips shall contain 2-3" of Mississippi washed @ min. 1" dia installed over non-woven geotextile fabric over compacted subgrade. Edge with steel edging.

2.15 Edging (Stone): Shall be 5" ht., 12-gauge steel, galvanized / powdercoated finish, color TBD from standard range. Colmet 'Commercial-Grade Steel Edging' available from Colmet, Garland TX, 800-829-8225. Or approved equal. Install per mfr's requirements.

2.16 Contractor shall provide positive drainage away from all structures for a minimum of 10'.

2.17 Contractor shall be responsible for providing base bid comprehensive landscape establishment, maintenance and warranty care for one year after installation. Work shall include all watering (as needed for establishment), weeding (once monthly), pruning (twice per season), fertilizing (twice per season), pest management (as needed, min 3 visits per season) and spring / fall clean-ups. Prior to beginning installation, the contractor shall submit a 12-mo. calendar for review/approval including all anticipated maintenance activities & dates.

## Seeding Notes & Mixes

3.01 This work shall consist of preparing the seed beds and furnishing, sowing and mulching the required seed on the various seeded areas, as outlined in the site plans and specifications. All turf restoration shall be seeded turf unless otherwise noted.

3.02 Rough grading, drainage work, topsoiling and fine grading shall be completed before sowing the seed mixes. The areas to be seeded shall be worked with plow chisels, discs & harrows, soil finishers and/or other appropriate equipment until a reasonably even and loose seedbed is obtained. Seed beds shall be prepared immediately in advance of the seeding. If proposed seed areas are weedy, contractor to apply herbicide or other weed control measures to eliminate weeds. Conform with seed supplier's specifications if required.

3.03 Confirm that anticipated project schedule date(s) fall within the respective seed supplier's approved calendar prior to installation. Installations completed outside of acceptable seeding dates shall be the performed at the sole responsibility and expense of the contractor. For dormant seeding, a min. of one over-seed application in the following season will be required.

3.04 Seeds shall be PLS and will be mixed in accordance w/ mfr's specifications. Provide invoices, bag-tags or mix analysis results for approval prior to installation.

3.05 The seed mixtures shall be sown by means of equipment adapted to the purpose. Mechanical distribution of seed (i.e. Truax seed drill, Brillion seeder, cultipacker, slit-seeder, drop spreader or broadcast spreader) are the only accepted methods. No hand-broadcasting of seed.

3.06 No seeding shall occur if the wind exceeds 12 MPH.

3.07 Coordinate erosion control and/or mulching with Civil dwgs:

- In sloped areas steeper than 4:1, erosion matting shall be installed by others. Landscape installation shall be coordinated with the erosion control contractor.
- In areas with slopes between 4:1 and 8:1, landscape contractor shall apply clean hay or straw mulch, free of debris and seeds, on all newly seeded areas. Mulch shall be uniformly spread over the designated area at a rate of 55 bales per acre or as indicated in the respective seed supplier's specifications. Mulch material shall be chopped and blown into the seeded area.
- Lightweight E.C. matting and/or hydromulch will be accepted as a no-cost alternate if approved by Landscape Architect prior to application.

3.08 See Civil dwgs for erosion control devices. Coordinate with erosion control contractor where required to ensure that topsoil, seeding and/or mat installations are properly coordinated.

3.09 Seed mix substitutions will be considered only if submitted for approval 10 days before the close of bidding. All mixes shall be installed & maintained per supplier's specifications.

BLUEGRASS MIX:
"Deluxe 50 Mix" shall be supplied by Reinders or approved equal. Apply @ 6 lbs per 1000 GSF.

MEADOW GRASS MIX:
35% little bluestem, 25% sideoats grama, 15% canada wild rye, 15% junegrass, 10% annual

WETLAND SEED MIX: "Moist Meadow - Rain Garden Mix" shall be supplied by Prairie Nursery, Westfield WI, 800-476-9453. Install & maintain per supplier's specifications. Apply @ 10 lbs per AC, (5 lbs per AC if spring seed, 15 lbs per AC if fall seed.)

EMERGENT ZONE MIX:
"Emergent Zone Mix" shall be supplied by Cardno Native Plant Nursery, Walkerton IN, 574-586-2412. Apply @ 35 lbs per AC, plus cover crop.

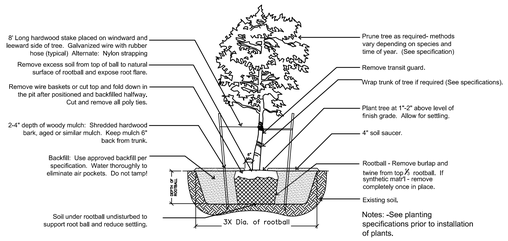
3.10 Contractor shall be responsible for providing base bid comprehensive seed area establishment, maintenance and warranty care for all seeded areas:

- Bluegrass areas shall be for 60 days after installation. Work shall include all watering (min. 1" per week, or as needed), weeding & mowing. Assume 2 mowings prior to Owner hand-off.
- All other seed areas (wet-tolerant) shall be for three years after installation. Work shall include all watering (as needed for establishment), weeding (both spot herbicide and/or hand-pulling, depending on necessity, once per month), spring / fall clean-up & mowing. Expect 4-5 mowings in the first year, 3-4 mowings in the second year and 2-3 mowings in the third year. All mowings shall be timed to cut germinating weeds but not desirable forbs / grasses. Overseed each spring any bare areas larger than 1 sq. ft.
- Prior to beginning installation, the contractor shall submit a 36-month calendar for review/approval including all anticipated maintenance activities.

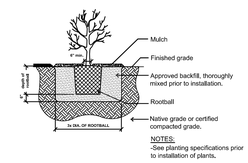
## Hardscape / Amenity Notes

4.01 Flagpoles: American flag pole shall be 35 ht. with a maximum 8' flag size. Model # 'ECXA35IH', clear anodized finish, internal halyard w/ matching flange-mount shoe bases.
State flag pole shall be 30' ht. with a maximum 7' flag size. Model # 'ECXA30IH', clear anodized finish, internal halyard w/ matching flange-mount shoe bases.
GBP flag pole shall be 30' ht. with a maximum 7' flag size. Model # 'ECXA30IH', clear anodized finish, internal halyard w/ matching flange-mount shoe bases.
Available from Eder Flag, Oak Creek WI, 800-558-6044. Or approved equal. Install per manufacturers specifications.

4.02 Site Furnishing by Owner.




1 Tree Planting Detail
Not To Scale




2 Shrub Planting Detail
Not To Scale

BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

HARWOOD
255 N 21st Street Milwaukee, WI 53233
414-475-5554

SHEET TITLE
LANDSCAPE DETAILS & NOTES

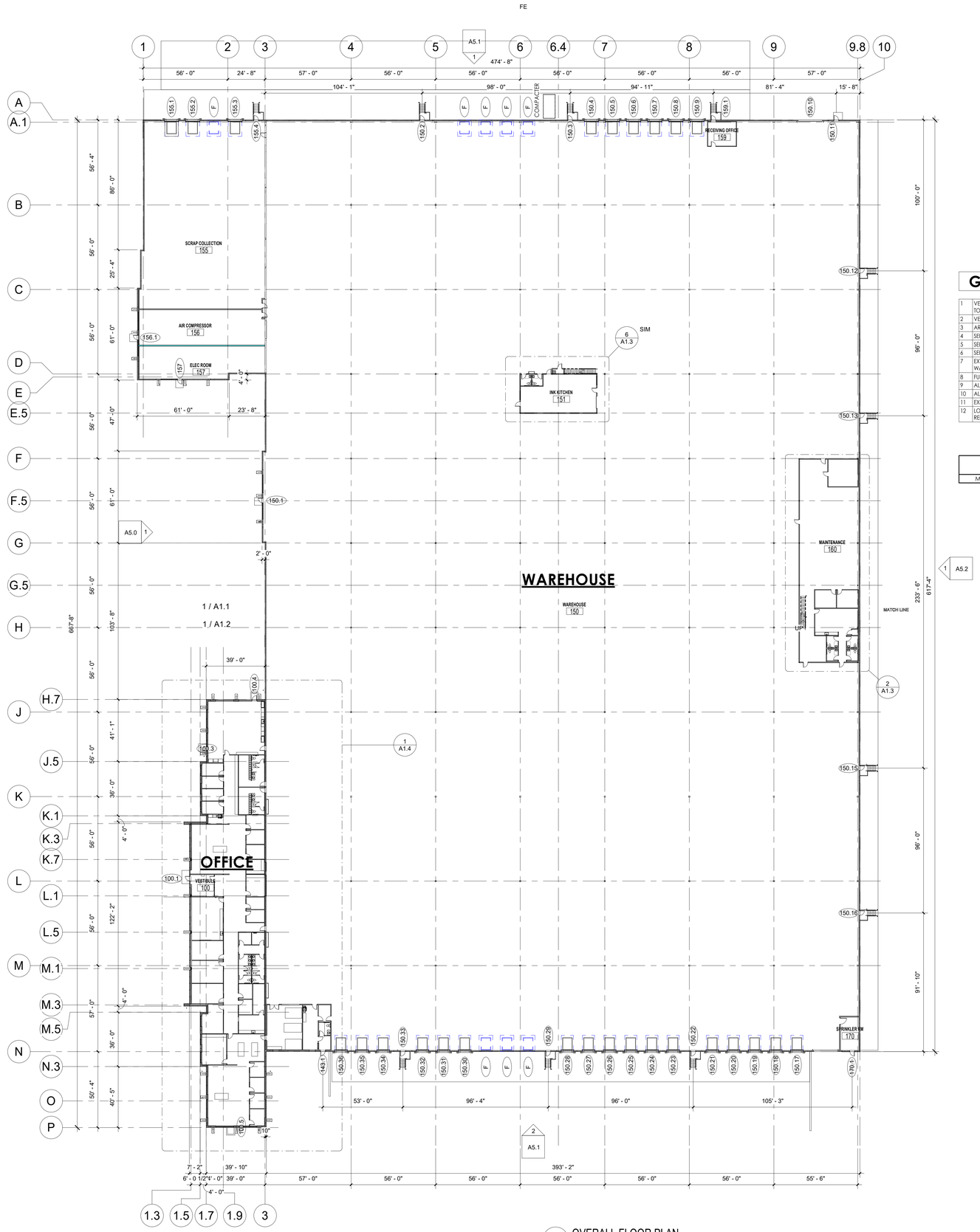
PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

60% REVIEW

PROGRESS SET
NOT FOR CONSTRUCTION

| Date | Revision |
|---|---|

JOB: 230010
DRAWN:
CHECKED:
DATE: 03/18/2024
SHEET:
L3.00




1 OVERALL FLOOR PLAN
1" = 30'-0"

## FLOOR PLAN LEGEND

| | | | |
|---|---|---|---|
| ROOM 100 | ROOM NAME / ROOM NUMBER | | PARTITION TO BE DEMOLISHED |
| 100 | DOOR NUMBER | | DOOR AND FRAME TO BE REMOVED |
| A | PARTITION TYPE | | EXISTING PARTITION TO REMAIN |
| 1 | KEYNOTES | | EXISTING DOOR TO REMAIN |
| F.E. | SURFACE MOUNTED FIRE EXTINGUISHER | | NEW CONSTRUCTION |
| F.E.C. | RECESSED EXTINGUISHER CABINET & FIRE EXTINGUISHER | | NEW DOOR & FRAME |
| | EXIT LIGHT | MATCHLINE 3 / A1.2 | MATCHLINE WITH SHEET REFERENCE |
| | EXIT LIGHT (DIRECTIONAL) | | |
| BL-1 | BORROWED LIGHT TAG | | |
| TP-1 | TOILET ACCESSORY TAG | | |

## GENERAL NOTES - NEW FLOOR...

| | |
|---|---|
| 1 | VERIFY ALL CONDITIONS, DIMENSIONS AND ALIGNMENT OF WALLS. BRING ANY DISCREPANCIES TO BRIOHN'S ATTENTION PRIOR TO FABRICATION/CONSTRUCTION BEGINS. |
| 2 | VERIFY LOCATION OF ACCESS PANELS WITH MECHANICAL AND ELECTRICAL DRAWINGS. |
| 3 | AREA SHALL BE KEPT BROOM CLEAN AND FREE OF DEBRIS DURING CONSTRUCTION. |
| 4 | SEE EXTERIOR ELEVATIONS FOR WINDOW TYPES. |
| 5 | SEE SHEET A0.1 FOR ADA REQUIREMENTS AND MOUNTING HEIGHTS |
| 6 | SEE SHEET A1.2 FOR PARTITION TYPE. |
| 7 | EXTERIOR WALLS IN OFFICE AREA TO BE FURRED OUT WITH STUD HELD 1" OFF FACE OF EXTERIOR WALL. CAVITY FILLED WITH BATT INSULATION. SEE FLOOR PLAN FOR PARTITION TYPE. |
| 8 | FURNITURE AND APPLIANCES PROVIDED BY OWNER AND ARE SHOWN FOR REFERENCE ONLY. |
| 9 | ALL WALLS TO BE PAINTED PROVIDING FRP WAINSCOT WHERE CALLED FOR. |
| 10 | ALL FLOORS THROUGH OUT ARE TO BE SEALED CONCRETE WITH CAULKED CONTROL JOINTS. |
| 11 | EXPOSED STEEL DECK, JOISTS, GIRDERS AND COLUMNS ARE TO BE PRIME GREY. |
| 12 | LOCKERS AND BENCHES IN LOCKER ROOMS ARE PROVIDED BY OWNER AND ARE SHOWN FOR REFERNCE ONLY. |

## KEYNOTE LEGEND FLOOR PLAN

| MARK | FLOOR PLAN CODED NOTES |
|---|---|

APPLICABLE TO ALL PLAN VIEWS

BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
# OVERALL FLOOR PLAN

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

PROGRESS SET
NOT FOR CONSTRUCTION

Revision
Date

| | |
|---|---|
| JOB: | 230010 |
| DRAWN: | CW |
| CHECKED: | CW |
| DATE: | 02/12/2024 |
| SHEET: | A1.0 |

# PARTITION TYPES

| TAG | STUD TYPE | STUD HEIGHT | INSULATION | VAPOR BARRIER | NOTED SIDE SURFACE MATERIAL | NOTED SIDE SURFACE HEIGHT | OPPOSITE SIDE SURFACE MATERIAL | OPPOSITE SIDE SURFACE HEIGHT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 3A | 3 5/8" STEEL STUDS | VARIES | ---- | ---- | 5/8" TYPE "X" GYPSUM WALLBOARD | VARIES | 5/8" TYPE "X" GYPSUM WALLBOARD | VARIES | LOW HEIGHT WALL - SEE PLANS/DETAILS FOR HEIGHT |
| 3B | 3 5/8" STEEL STUDS | 10'-0" A.F.F.* | 3 1/2" SOUND BATT | ---- | 5/8" TYPE "X" GYPSUM WALLBOARD | 6" ABOVE ADJACENT CEILING* | 5/8" TYPE "X" GYPSUM WALLBOARD | 6" ABOVE ADJACENT CEILING* | PROVIDE KICKERS AT STUDS TO STRUCTURE OR ALTERNATE EVERY THIRD STUD TO EXTEND TO UNDERSIDE OF DECK |
| 3D | 3 5/8" STEEL STUDS | TO UNDERSIDE OF STRUCTURE ( 14' - 0" +/- ) | 3 1/2" SOUND BATT | ---- | 5/8" TYPE "X" GYPSUM WALLBOARD | TO UNDERSIDE OF STRUCTURE ( 14' - 0" +/- ) | 5/8" TYPE "X" GYPSUM WALLBOARD | TO UNDERSIDE OF STRUCTURE ( 14' - 0" +/- ) | |
| 3F | 3 5/8" STEEL FURRING | 10'-0" A.F.F. (UNLESS DETAILED OTHERWISE) | ---- | ---- | 5/8" TYPE"X" GYPSUM WALLBOARD | 10'-0" A.F.F. (UNLESS DETAILED OTHERWISE) | ---- | ---- | HOLD STEEL STUDS 1" OFF INTERIOR FACE OF EXTERIOR PRECAST WALL U.N.O. |
| 3G | 3 5/8" STEEL FURRING | TO UNDERSIDE OF STRUCTURE ( 14' - 0" +/- ) | ---- | ---- | 5/8" TYPE"X" GYPSUM WALLBOARD | TO UNDERSIDE OF STRUCTURE ( 14' - 0" +/- ) | ---- | ---- | HOLD STEEL STUDS 1" OFF INTERIOR FACE OF EXTERIOR PRECAST WALL U.N.O. |
| 6B | 6" STEEL STUDS | 12'-0" A.F.F. | 6" SOUND BATT | ---- | 5/8" TYPE "X" GYPSUM WALLBOARD | 12'-0" A.F.F. | 5/8" TYPE "X" GYPSUM WALLBOARD | 12'-0" A.F.F. | ---- |
| 6D | 6" STEEL STUDS | TO UNDERSIDE OF STRUCTURE ( 14' - 0" +/- ) | 6" SOUND BATT | ---- | 5/8" TYPE "X" GYPSUM WALLBOARD | TO UNDERSIDE OF STRUCTURE ( 14' - 0" +/- ) | 5/8" TYPE "X" GYPSUM WALLBOARD | TO UNDERSIDE OF STRUCTURE ( 14' - 0" +/- ) | ---- |
| 6F | 6" STEEL FURRING | +/-12'-0" A.F.F. (U.N.O IN DETAILS) | ---- | ---- | 5/8" TYPE"X" GYPSUM WALLBOARD | +/-12'-0" A.F.F. (U.N.O IN DETAILS) | ---- | ---- | ---- |
| 6R | 6" STEEL STUDS | TO UNDERSIDE OF STRUCTURE ( 31' - 9" +/- ) | 6" SOUND BATT | ---- | 5/8" TYPE "X" GYPSUM WALLBOARD | TO UNDERSIDE OF STRUCTURE ( 31' - 9" +/- ) | 5/8" TYPE "X" GYPSUM WALLBOARD | TO UNDERSIDE OF STRUCTURE ( 31' - 6" +/- ) | 1 HOUR RATED, UL#419, RATED CAULKING AND SAFING AS REQUIRED AT DECK |
| 8D | 8" STEEL STUDS | TO UNDERSIDE OF STRUCTURE ( 31' - 9" +/- ) | 8" SOUND BATT | ---- | 5/8" TYPE "X" GYPSUM WALLBOARD | TO UNDERSIDE OF STRUCTURE ( 31' - 9" +/- ) | 5/8" TYPE "X" GYPSUM WALLBOARD | TO UNDERSIDE OF STRUCTURE ( 31' - 6" +/- ) | ---- |
| | | | | | | | | | |
| | | | | | | | | | |
| PC10 | 10" SOLID PRECAST | SEE SECTIONS & DETAILS | --- | ---- | ---- | ---- | ---- | ---- | 1 HOUR RATED |

1. ALL STEEL STUDS SHALL BE 25 GAUGE STUDS @ 16" O.C., (UNLESS NOTED OTHERWISE) - SEE STRUCTURAL FOR GAUGE AND SIZE
2. ALL EXPOSED GYPSUM WALL BOARD SHALL BE TAPED & COATED SMOOTH, READY FOR PAINT - LEVEL 4 FINISH
3. USE 6" METAL STUDS AND INSTALL MOISTURE RESISTANT GYPSUM WALL BOARD AT ALL "WET WALL" LOCATIONS - UNO
4. AT EXTERIOR WALLS, RETURN GYPSUM WALL BOARD INTO WINDOW JAMBS AND HEAD
5. STUDS EXTENDED TO DECK AND/OR JOIST SHALL HAVE A SLIP CONNECTION TO ALLOW FOR DEFLECTION
6. PROVIDE CONTROL JOINTS IN GYPSUM FINISHES SUCH THAT THE MAXIMUM CONTROL JOIST SPACING FOR WALLS AND CEILINGS WITHOUT PERIMETER RELIEF IS 30 FEET. WITH PERIMETER RELIEF, CONTROL JOINT SPACING TO BE 50 FEET.

**NOTE :** AT FURRING WALLS AT THE EXTERIOR PRECAST WALL PANELS, PROVIDE A 1" GAP BETWEEN PRECAST WALL INTERIOR SIDE AND STEEL STUD FURRING SUCH THAT THE FURRING WALL IS SUPPORTED INDEPENDANTLY WITH SLIP CONNECTIONS.

# KEYNOTE LEGEND FLOOR PLAN

| MARK | FLOOR PLAN CODED NOTES |
|---|---|
| 05-6 | EXTERIOR STEEL STAIRS WITH GALVANIZED STEEL BAR GRATE TREADS AND LANDING, PROVIDE STEEL CLOSED RISERS WITH PIPE GUARD/HAND RAILING DESIGN AND FABRICATION TO BE CODE/OSHA/ANSI COMPLIANT. STEEL TO BE PAINTED. |
| 05-12 | 2' TRACK GUARDS, 4'-0" EACH SIDE OVERHEAD DOOR AT TRACKS, PAINTED SAFETY YELLOW |
| 08-9 | FUTURE DOCK DOOR LOCATION |

# GENERAL NOTES - NEW FLOOR...

| | |
|---|---|
| 1 | VERIFY ALL CONDITIONS, DIMENSIONS AND ALIGNMENT OF WALLS. BRING ANY DISCREPANCIES TO BRIOHN'S ATTENTION PRIOR TO FABRICATION/CONSTRUCTION BEGINS. |
| 2 | VERIFY LOCATION OF ACCESS PANELS WITH MECHANICAL AND ELECTRICAL DRAWINGS. |
| 3 | AREA SHALL BE KEPT BROOM CLEAN AND FREE OF DEBRIS DURING CONSTRUCTION. |
| 4 | SEE EXTERIOR ELEVATIONS FOR WINDOW TYPES. |
| 5 | SEE SHEET A0.1 FOR ADA REQUIREMENTS AND MOUNTING HEIGHTS |
| 6 | SEE SHEET A1.2 FOR PARTITION TYPE. |
| 7 | EXTERIOR WALLS IN OFFICE AREA TO BE FURRED OUT WITH STUD HELD 1" OFF FACE OF EXTERIOR WALL, CAVITY FILLED WITH BATT INSULATION. SEE FLOOR PLAN FOR PARTITION TYPE. |
| 8 | FURNITURE AND APPLIANCES PROVIDED BY OWNER AND ARE SHOWN FOR REFERENCE ONLY. |
| 9 | ALL WALLS TO BE PAINTED PROVIDING FRP WAINSCOT WHERE CALLED FOR. |
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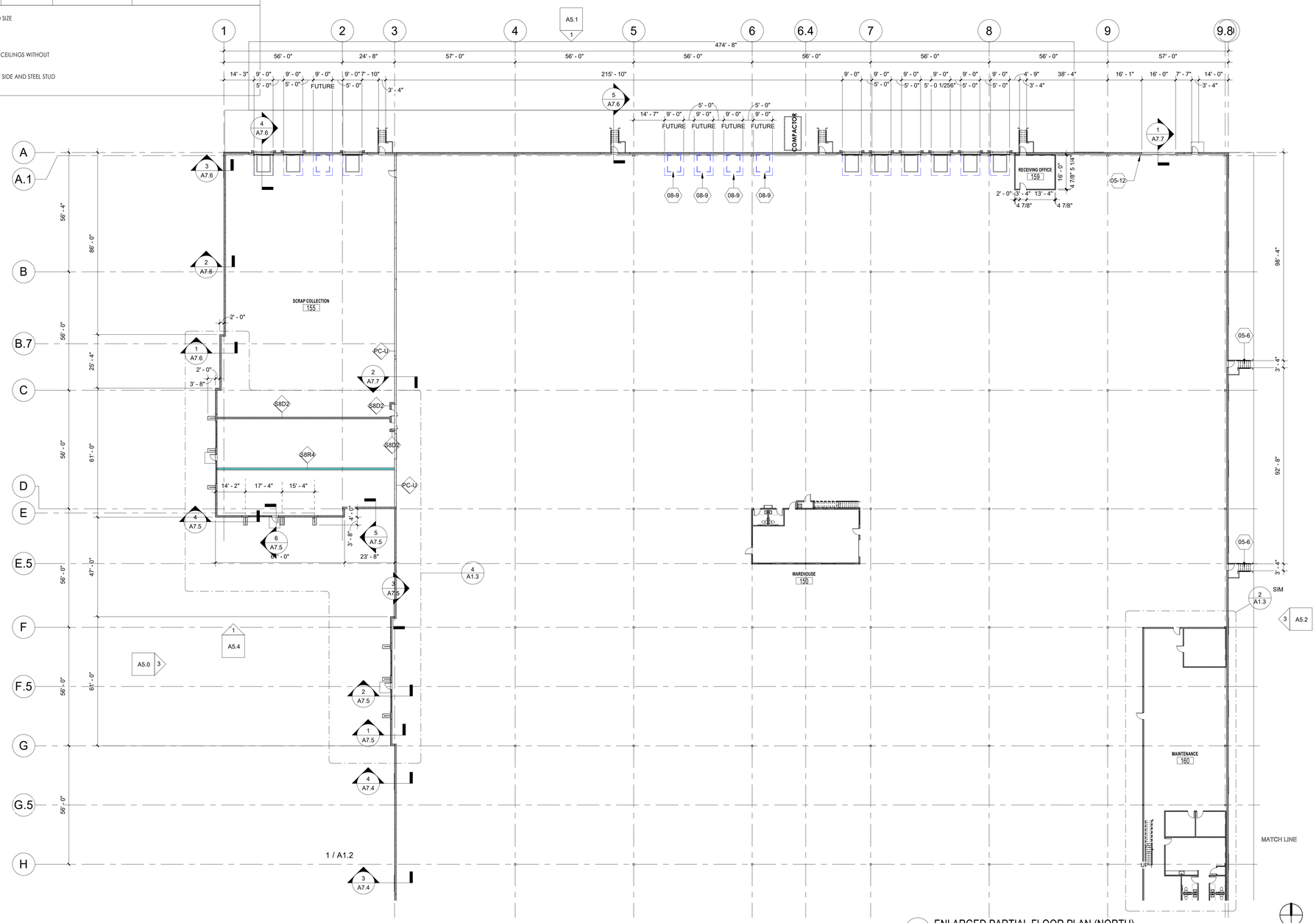
| 11 | EXPOSED STEEL DECK, JOISTS, GIRDERS AND COLUMNS ARE TO BE PRIME GREY. |
| 12 | LOCKERS AND BENCHES IN LOCKER ROOMS ARE PROVIDED BY OWNER AND ARE SHOWN FOR REFERNCE ONLY. |

# FLOOR PLAN LEGEND

| | | | |
|---|---|---|---|
| ROOM 100 | ROOM NAME / ROOM NUMBER | | PARTITION TO BE DEMOLISHED |
| 100 | DOOR NUMBER | | DOOR AND FRAME TO BE REMOVED |
| A | PARTITION TYPE | | EXISTING PARTITION TO REMAIN |
| 1 | KEYNOTES | | EXISTING DOOR TO REMAIN |
| F.E. | SURFACE MOUNTED FIRE EXTINGUISHER | | NEW CONSTRUCTION |
| F.E.C. | RECESSED EXTINGUISHER CABINET & FIRE EXTINGUISHER | | NEW DOOR & FRAME |
| | EXIT LIGHT | MATCHLINE 3 / A1.2 | MATCHLINE WITH SHEET REFERENCE |
| | EXIT LIGHT (DIRECTIONAL) | | |
| BL-1 | BORROWED LIGHT TAG | | |
| TP-1 | TOILET ACCESSORY TAG | | |




1 ENLARGED PARTIAL FLOOR PLAN (NORTH)
3/64" = 1'-0"

APPLICABLE TO ALL PLAN VIEWS

BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
ENLARGED PARTIAL FLOOR PLAN (NORTH)

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

PROGRESS SET
NOT FOR CONSTRUCTION

Revision
Date

| | |
|---|---|
| JOB: | 230010 |
| DRAWN: | CW |
| CHECKED: | CW |
| DATE: | 02/12/2024 |

SHEET:
A1.1

## KEYNOTE LEGEND FLOOR PLAN

| MARK | FLOOR PLAN CODED NOTES |
|---|---|
| 03-12 | CONCRETE RETAINING WALL (SEE CIVIL/STRUCTURAL DWGS) |
| 05-12 | 2' TRACK GUARDS, 4'-0" EACH SIDE OVERHEAD DOOR AT TRACKS, PAINTED SAFETY YELLOW |

## GENERAL NOTES - NEW FLOOR...

| | |
|---|---|
| 1 | VERIFY ALL CONDITIONS, DIMENSIONS AND ALIGNMENT OF WALLS. BRING ANY DISCREPANCIES TO BRIOHN'S ATTENTION PRIOR TO FABRICATION/CONSTRUCTION BEGINS. |
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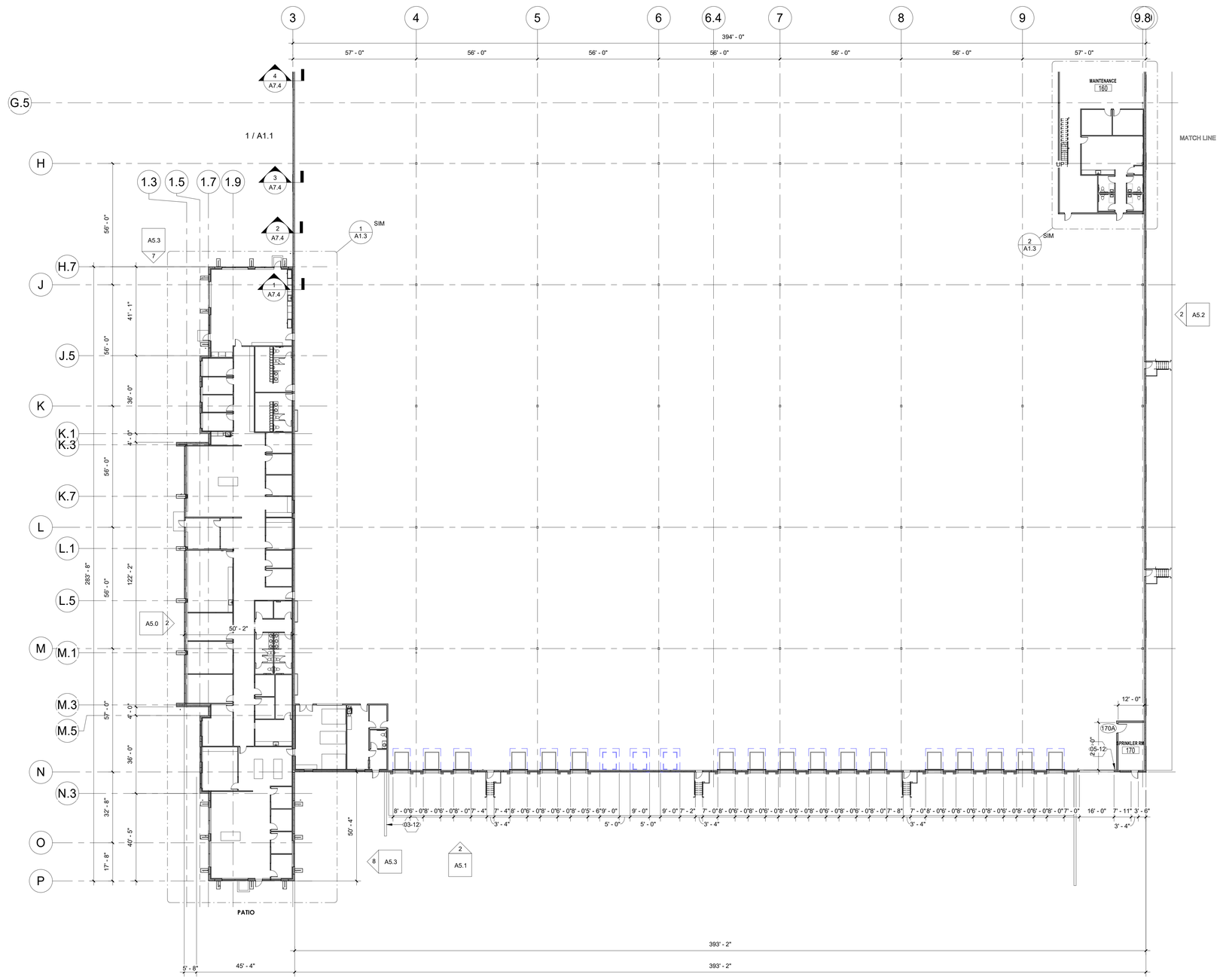
## FLOOR PLAN LEGEND

| | |
|---|---|
| ROOM 100 | ROOM NAME / ROOM NUMBER |
| 100 | DOOR NUMBER |
| A | PARTITION TYPE |
| 1 | KEYNOTES |
| F.E. | SURFACE MOUNTED FIRE EXTINGUISHER |
| F.E.C. | RECESSED EXTINGUISHER CABINET & FIRE EXTINGUISHER |
| | EXIT LIGHT |
| | EXIT LIGHT (DIRECTIONAL) |
| BL-1 | BORROWED LIGHT TAG |
| TP-1 | TOILET ACCESSORY TAG |
| | PARTITION TO BE DEMOLISHED |
| | DOOR AND FRAME TO BE REMOVED |
| | EXISTING PARTITION TO REMAIN |
| | EXISTING DOOR TO REMAIN |
| | NEW CONSTRUCTION |
| | NEW DOOR & FRAME |
| MATCHLINE 3 / A1.2 | MATCHLINE WITH SHEET REFERENCE |




1 ENLARGED PARTIAL FLOOR PLAN (SOUTH)
3/64" = 1'-0"

APPLICABLE TO ALL PLAN VIEWS


BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX


SHEET TITLE
ENLARGED PARTIAL FLOOR PLAN (SOUTH)

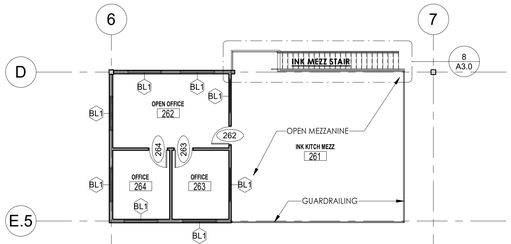
PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

PROGRESS SET
NOT FOR CONSTRUCTION

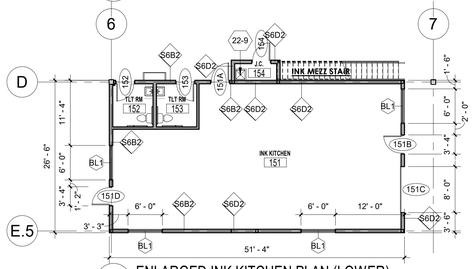
| Revision | Date |
|---|---|
| | |

| | |
|---|---|
| JOB: | 230010 |
| DRAWN: | CW |
| CHECKED: | CW |
| DATE: | 02/12/2024 |

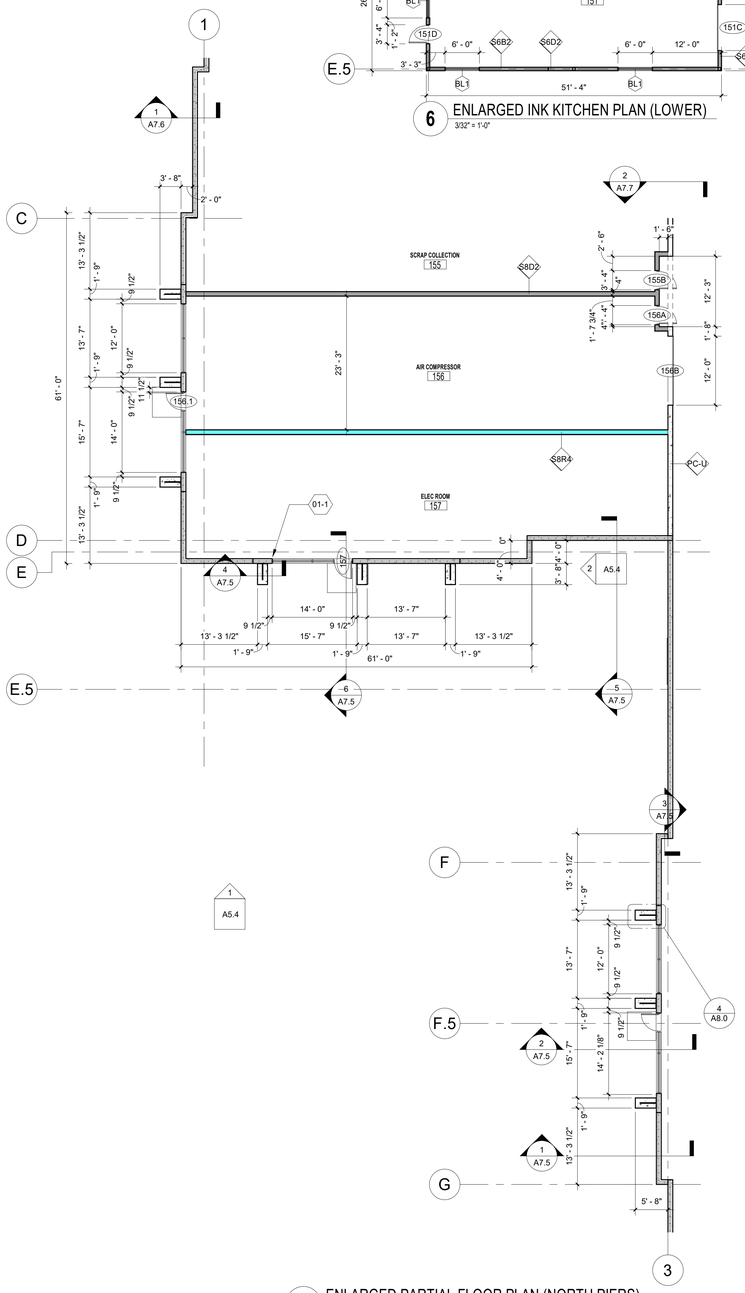
SHEET:
A1.2



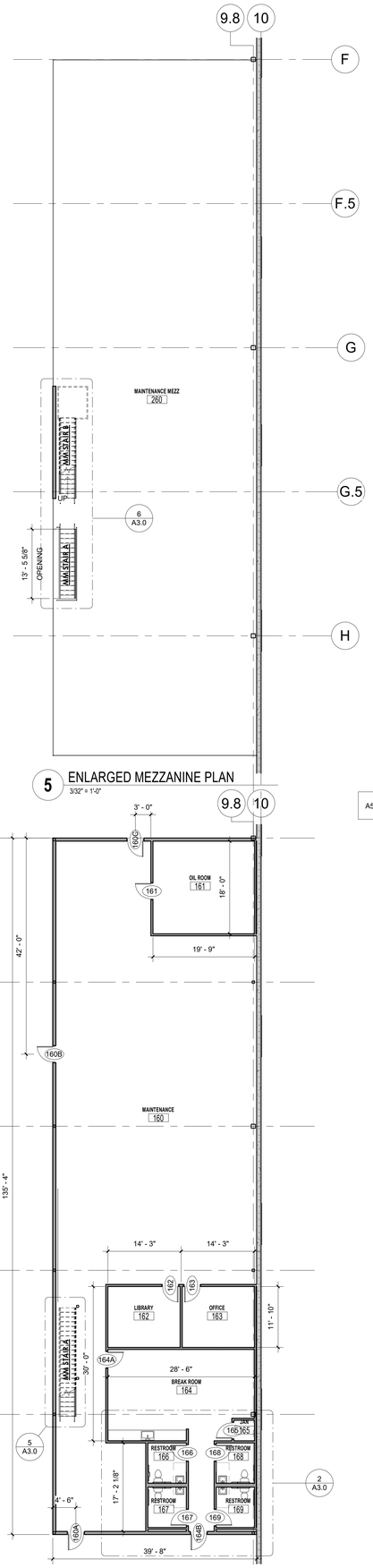

7 ENLARGED INK KITCHEN PLAN (MEZZ.)
3/32" = 1'-0"



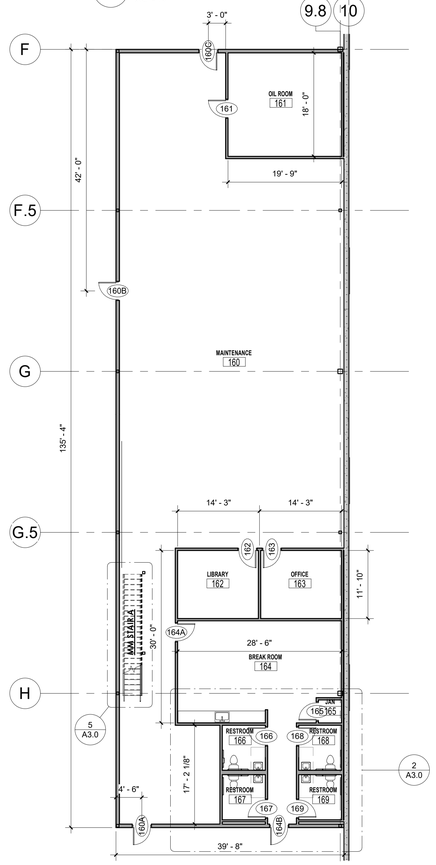

6 ENLARGED INK KITCHEN PLAN (LOWER)
3/32" = 1'-0"



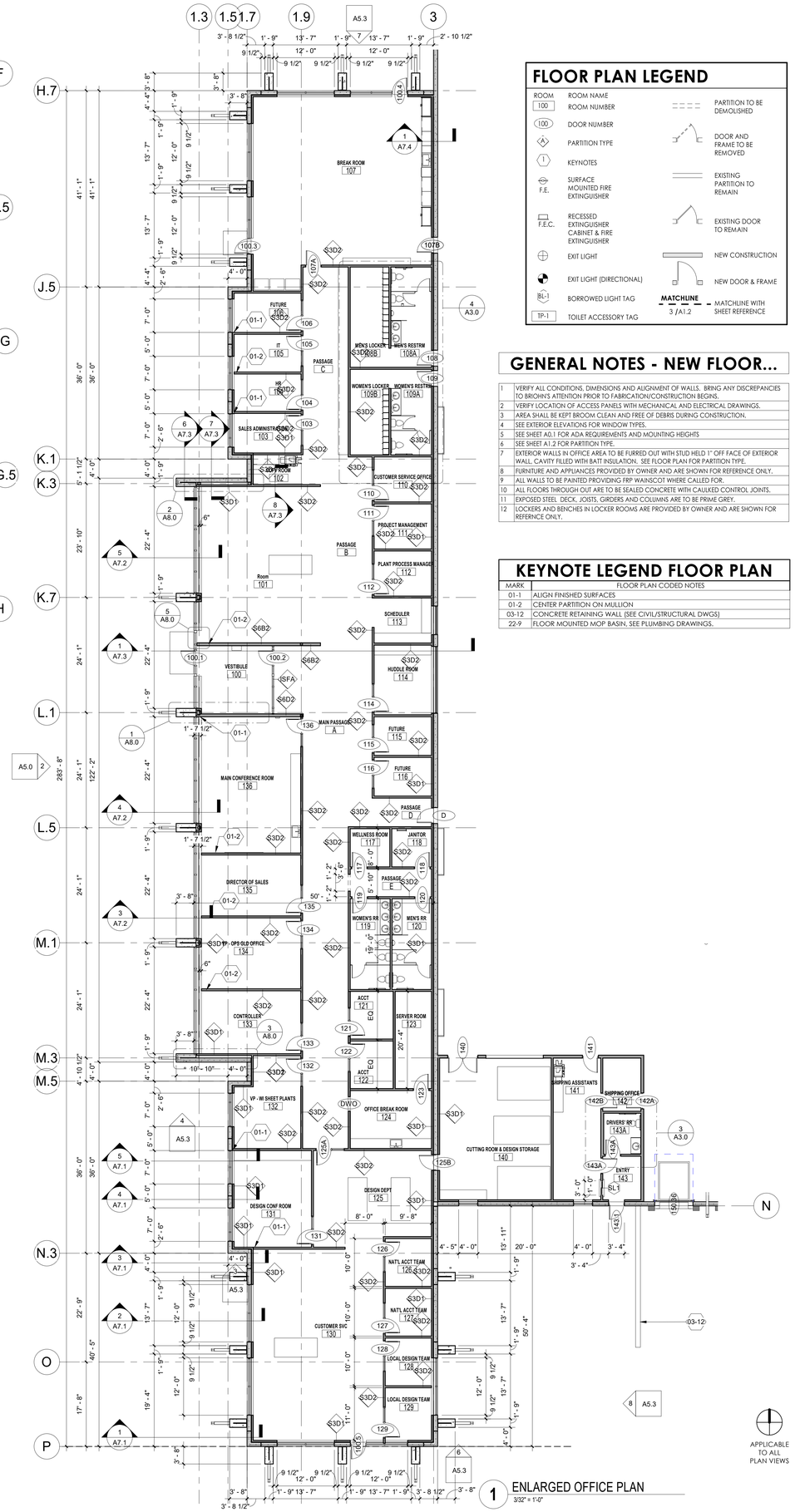

4 ENLARGED PARTIAL FLOOR PLAN (NORTH PIERS)
3/32" = 1'-0"




5 ENLARGED MEZZANINE PLAN
3/32" = 1'-0"




2 ENLARGED MAINTENANCE OFFICE PLAN
3/32" = 1'-0"




1 ENLARGED OFFICE PLAN
3/32" = 1'-0"

## FLOOR PLAN LEGEND

| | | | |
|---|---|---|---|
| ROOM 100 | ROOM NAME / ROOM NUMBER | | PARTITION TO BE DEMOLISHED |
| 100 | DOOR NUMBER | | DOOR AND FRAME TO BE REMOVED |
| A | PARTITION TYPE | | EXISTING PARTITION TO REMAIN |
| 1 | KEYNOTES | | EXISTING DOOR TO REMAIN |
| F.E. | SURFACE MOUNTED FIRE EXTINGUISHER | | NEW CONSTRUCTION |
| F.E.C. | RECESSED EXTINGUISHER CABINET & FIRE EXTINGUISHER | | NEW DOOR & FRAME |
| | EXIT LIGHT | MATCHLINE 3 / A1.2 | MATCHLINE WITH SHEET REFERENCE |
| | EXIT LIGHT (DIRECTIONAL) | | |
| BL-1 | BORROWED LIGHT TAG | | |
| TP-1 | TOILET ACCESSORY TAG | | |

## GENERAL NOTES - NEW FLOOR...

1. VERIFY ALL CONDITIONS, DIMENSIONS AND ALIGNMENT OF WALLS. BRING ANY DISCREPANCIES TO BRIOHN'S ATTENTION PRIOR TO FABRICATION/CONSTRUCTION BEGINS.
2. VERIFY LOCATION OF ACCESS PANELS WITH MECHANICAL AND ELECTRICAL DRAWINGS.
3. AREA SHALL BE KEPT BROOM CLEAN AND FREE OF DEBRIS DURING CONSTRUCTION.
4. SEE EXTERIOR ELEVATIONS FOR WINDOW TYPES.
5. SEE SHEET A0.1 FOR ADA REQUIREMENTS AND MOUNTING HEIGHTS
6. SEE SHEET A1.2 FOR PARTITION TYPE.
7. EXTERIOR WALLS IN OFFICE AREA TO BE FURRED OUT WITH STUD HELD 1" OFF FACE OF EXTERIOR WALL, CAVITY FILLED WITH BATT INSULATION. SEE FLOOR PLAN FOR PARTITION TYPE.
8. FURNITURE AND APPLIANCES PROVIDED BY OWNER AND ARE SHOWN FOR REFERENCE ONLY.
9. ALL WALLS TO BE PAINTED PROVIDING FRP WAINSCOT WHERE CALLED FOR.
10. ALL FLOORS THROUGH OUT ARE TO BE SEALED CONCRETE WITH CAULKED CONTROL JOINTS.
11. EXPOSED STEEL DECK, JOISTS, GIRDERS AND COLUMNS ARE TO BE PRIME GREY.
12. LOCKERS AND BENCHES IN LOCKER ROOMS ARE PROVIDED BY OWNER AND ARE SHOWN FOR REFERNCE ONLY.

## KEYNOTE LEGEND FLOOR PLAN

| MARK | FLOOR PLAN CODED NOTES |
|---|---|
| 01-1 | ALIGN FINISHED SURFACES |
| 01-2 | CENTER PARTITION ON MULLION |
| 03-12 | CONCRETE RETAINING WALL (SEE CIVIL/STRUCTURAL DWGS) |
| 22-9 | FLOOR MOUNTED MOP BASIN. SEE PLUMBING DRAWINGS. |

APPLICABLE TO ALL PLAN VIEWS

BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
ENLARGED PARTIAL FLOOR PLANS

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

PROGRESS SET
NOT FOR CONSTRUCTION

| Date | Revision |
|---|---|

| | |
|---|---|
| JOB: | 230010 |
| DRAWN: | CJR |
| CHECKED: | CW |
| DATE: | 02/12/2024 |
| SHEET: | A1.3 |

# ROOM SCHEDULE

| ROOM NUMBER | ROOM NAME | BASE | FLOOR | WALLS: NORTH WALL | WALLS: EAST WALL | WALLS: SOUTH WALL | WALLS: WEST WALL | CEILING | CEILING HEIGHT | CASEWORK: BASE CABINET | CASEWORK: WALL CABINET | CASEWORK: COUNTERTOP | CASEWORK: SILL | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100 | VESTIBULE | | | | | | | | | | | | | |
| 101 | Room | | | | | | | | | | | | | |
| 102 | COPY ROOM | | | | | | | | | | | | | |
| 103 | SALES ADMINISTRATION | | | | | | | | | | | | | |
| 104 | HR | | | | | | | | | | | | | |
| 105 | IT | | | | | | | | | | | | | |
| 106 | FUTURE | | | | | | | | | | | | | |
| 107 | BREAK ROOM | | | | | | | | | | | | | |
| 108A | MEN'S RESTRM | | | | | | | | | | | | | |
| 108B | MEN'S LOCKER | | | | | | | | | | | | | |
| 109A | WOMEN'S RESTRM | | | | | | | | | | | | | |
| 109B | WOMEN'S LOCKER | | | | | | | | | | | | | |
| 110 | CUSTOMER SERVICE OFFICE | | | | | | | | | | | | | |
| 111 | PROJECT MANAGEMENT | | | | | | | | | | | | | |
| 112 | PLANT PROCESS MANAGER | | | | | | | | | | | | | |
| 113 | SCHEDULER | | | | | | | | | | | | | |
| 114 | HUDDLE ROOM | | | | | | | | | | | | | |
| 115 | FUTURE | | | | | | | | | | | | | |
| 116 | FUTURE | | | | | | | | | | | | | |
| 117 | WELLNESS ROOM | | | | | | | | | | | | | |
| 118 | JANITOR | | | | | | | | | | | | | |
| 119 | WOMEN'S RR | | | | | | | | | | | | | |
| 120 | MEN'S RR | | | | | | | | | | | | | |
| 121 | ACCT | | | | | | | | | | | | | |
| 122 | ACCT | | | | | | | | | | | | | |
| 123 | SERVER ROOM | | | | | | | | | | | | | |
| 124 | OFFICE BREAK ROOM | | | | | | | | | | | | | |
| 125 | DESIGN DEPT | | | | | | | | | | | | | |
| 126 | NAT'L ACCT TEAM | | | | | | | | | | | | | |
| 127 | NAT'L ACCT TEAM | | | | | | | | | | | | | |
| 128 | LOCAL DESIGN TEAM | | | | | | | | | | | | | |
| 129 | LOCAL DESIGN TEAM | | | | | | | | | | | | | |
| 130 | CUSTOMER SVC | | | | | | | | | | | | | |
| 131 | DESIGN CONF ROOM | | | | | | | | | | | | | |
| 132 | VP - WI SHEET PLANTS | | | | | | | | | | | | | |
| 133 | CONTROLLER | | | | | | | | | | | | | |
| 134 | VP - OPS GLD OFFICE | | | | | | | | | | | | | |
| 135 | DIRECTOR OF SALES | | | | | | | | | | | | | |
| 136 | MAIN CONFERENCE ROOM | | | | | | | | | | | | | |
| 140 | CUTTING ROOM & DESIGN STORAGE | | | | | | | | | | | | | |
| 141 | SHIPPING ASSISTANTS | | | | | | | | | | | | | |
| 142 | SHIPPING OFFICE | | | | | | | | | | | | | |
| 143 | ENTRY | | | | | | | | | | | | | |
| 143A | DRIVERS' RR | | | | | | | | | | | | | |
| 150 | WAREHOUSE | | | | | | | | | | | | | |
| 151 | INK KITCHEN | | | | | | | | | | | | | |
| 152 | TLT RM | | | | | | | | | | | | | |
| 153 | TLT RM | | | | | | | | | | | | | |
| 154 | J.C. | | | | | | | | | | | | | |
| 155 | SCRAP COLLECTION | | | | | | | | | | | | | |
| 156 | AIR COMPRESSOR | | | | | | | | | | | | | |
| 157 | ELEC ROOM | | | | | | | | | | | | | |
| 159 | RECEIVING OFFICE | | | | | | | | | | | | | |
| 160 | MAINTENANCE | | | | | | | | | | | | | |
| 161 | OIL ROOM | | | | | | | | | | | | | |
| 162 | LIBRARY | | | | | | | | | | | | | |
| 163 | OFFICE | | | | | | | | | | | | | |
| 164 | BREAK ROOM | | | | | | | | | | | | | |
| 165 | JAN | | | | | | | | | | | | | |
| 166 | RESTROOM | | | | | | | | | | | | | |
| 167 | RESTROOM | | | | | | | | | | | | | |
| 168 | RESTROOM | | | | | | | | | | | | | |
| 169 | RESTROOM | | | | | | | | | | | | | |
| 170 | SPRINKLER RM | | | | | | | | | | | | | |
| 260 | MAINTENANCE MEZZ | | | | | | | | | | | | | |
| 261 | INK KITCH MEZZ | | | | | | | | | | | | | |
| 262 | OPEN OFFICE | | | | | | | | | | | | | |
| 263 | OFFICE | | | | | | | | | | | | | |
| 264 | OFFICE | | | | | | | | | | | | | |
| A | MAIN PASSAGE | | | | | | | | | | | | | |
| B | PASSAGE | | | | | | | | | | | | | |
| C | PASSAGE | | | | | | | | | | | | | |
| D | PASSAGE | | | | | | | | | | | | | |
| E | PASSAGE | | | | | | | | | | | | | |

# INTERIOR FINISH MATERIALS LIST

**VINYL TILE (F**

***LVT1***: PATCHWORK STYLE: HOMESPUN COLOR: LVT, COLOR

***VCT1***: ARMSTRONG, STYLE: EXCELON (STATIC DISSIPATING), COLOR: ARMOR GRAY, SIZE: 12" X 12"

**SEALED CONC. FLOOR FINISH:**

***SC1***: ASHFORD SEALED CONCRETE FLOOR FINISH (WAREHOUSE)

**PORCELAIN TILE (FLOOR & WALL):**

***PCT1***: DALTILE, STYLE: FORMULA, COLOR: AXIOM SILVER FM94, FINISH: UNPOLISHED, SIZE: 6" X 24" (FLOOR/SINK WALL) OR 6" X 12" (COVE BASE)

***PCT2***: DALTILE, STYLE: FABRIC ART, COLOR: MODERN LINEAR ML60, SIZE: 12" X 24" (WALL)

**RUBBER BASE (WALL):**

***RB1***: JOHNSONITE, STYLE: RUBBER COVE BASE, COLOR: MOONROCK #29, SIZE: 4" HIGH, CONTINUOUS ROLL

**CEILING FINISH:**

***ACT1***: ARMSTRONG, STYLE: ULTIMA OR DONE, ANGLED TEGULAR EDGE, COLOR: WHITE, SIZE: 24" X 24"

***ACT2***: ARMSTRONG, VINYL FACED CEILING TILE, COLOR: WHITE, SIZE: 24" X 24"

***GWB1***: SUSPENDED GYPSUM WALL BOARD CEILING, PAINTED

**SOLID SURFACES (COUNTERTOPS):**

***SS1***: WILSONART, STYLE: SOLID SURFACE COLOR: SOOTHING GRAY 9116GS

***SS2***: WILSONART, STYLE: SOLID SURFACE COLOR: ZEN GRAY 9115GS (BREAK ROOM ONLY)

**PLASTIC LAMINATE (CABINETS):**

***PLAM1***: WILSONART, STYLE: SOLICOR, COLOR: DOVE GREY D92-60, FINISH: MATTE

***PLAM2***: WILSONART, COLOR: SLATE GRAY D91-60 (BREAK & MOTHER'S ROOMS ONLY)

***PT1***: SHERWIN WILLIAMS, PROMAR 200 ES COLOR: OFFICE WALLS)

***PT2***: SHERWIN WILLIAMS, PROMAR 200 ES COLOR: WHITE (WAREHOUSE WALLS)

**PAINT (ACCENT WALL) FINISH:**

***PTA1***: SHERWIN WILLIAMS, PROMAR 200 ES COLOR: ORGANIC GREEN SW6732

***PTA2***: SHERWIN WILLIAMS, PROMAR 200 ES COLOR: CONFIDENT YELLOW SW6911

***PTA3***: SHERWIN WILLIAMS, PROMAR 200 ES COLOR: OSAGE ORANGE SW6890

***PTA4***: SHERWIN WILLIAMS, PROMAR 200 ES COLOR: CAPRI SW6788

***PTA5***: SHERWIN WILLIAMS, PROMAR 200 ES COLOR: MAJOR BLUE SW6795

***PTA6***: SHERWIN WILLIAMS, PROMAR 200 ES COLOR: GRAY MATTERS SW7066

***PTA7***: SHERWIN WILLIAMS, PROMAR 200 ES COLOR: LAKE BREEZE A003 29B-1

***PTA8***: SHERWIN WILLIAMS, PROMAR 200 ES COLOR: IVOIRE SW6127

**PAINT (DOOR FRAMES) FINISH:**

***PTD1***: SHERWIN WILLIAMS, PRECATALYZED EPOXY SG COLOR: GAUNTLET GRAY SW7019

***MISCELLANEOUS FINISHES:***

**CORNER GUARD:**

***CG1***: 150BN BLUNOSE HIGH IMPACT CORNER GUARD, 4'-0" HIGH, COLOR: DESIGNER WHITE

**WINDOW SHADE:**

***WS1***: GRAINGER HALCYON SHADES, STYLE: MANUALLY OPERATED, ROLL UP SHADES, CHAIN PULL, 95% LIGHT BLOCKAGE, POLYESTER/PVC MATERIAL COLOR: WHITE/GRAY SHADES

**GENERAL NOTES**

1. ALL COUNTERTOPS TO HAVE ROUNDED CORNERS.
2. ALL OFFICE ROOMS WITH EXTERIOR WINDOWS TO HAVE WINDOW SHADES.
3. VERIFY WITH TENANT WHICH WALLS ARE TO RECEIVE ACCENT PAINT.
4. WALL FINISH TO BE LEVEL IV TYPICAL, ACCENT WALLS TO BE LEVEL V.
5. USE DARK GROUT AT TILE WALLS AND FLOORS.
6. USE SCHLUTER COVER BASE AT PORCELAIN TILE BASE IN RESTROOMS.
7. IN RESTROOMS, PORCELAIN TILE TO BE LAID WITH 33% OFFSET, BRICK LAY PATTERN, FLOOR TO CEILING

# GENERAL NOTES - NEW FLOOR

TO BRIOHN'S ATTENTION PRIOR TO FABRICATION/CONSTRUCTION BEGINS.

3 AREA SHALL BE KEPT BROOM CLEAN AND FREE OF DEBRIS DURING CONSTRUCTION.
4 SEE EXTERIOR ELEVATIONS FOR WINDOW TYPES.
5 SEE SHEET A0.1 FOR ADA REQUIREMENTS AND MOUNTING HEIGHTS
6 SEE SHEET A1.2 FOR PARTITION TYPE.
7 EXTERIOR WALLS IN OFFICE AREA TO BE FURRED OUT WITH STUD HELD 1" OFF FACE OF EXTERIOR WALL. CAVITY FILLED WITH BATT INSULATION. SEE FLOOR PLAN FOR PARTITION TYPE.
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9 ALL WALLS TO BE PAINTED PROVIDING FRP WAINSCOT WHERE CALLED FOR.
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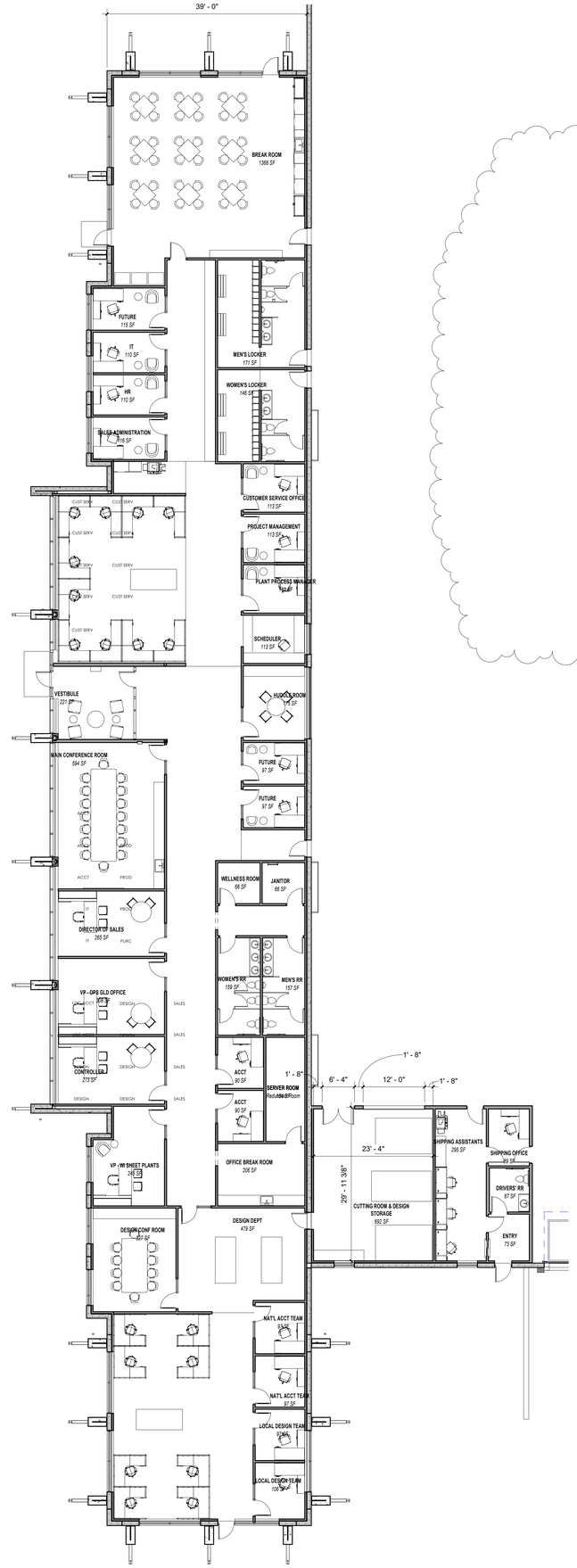
11 EXPOSED STEEL DECK, JOISTS, GIRDERS AND COLUMNS ARE TO BE PRIME GREY.
12 LOCKERS AND BENCHES IN LOCKER ROOMS ARE PROVIDED BY OWNER AND ARE SHOWN FOR REFERNCE ONLY.

# KEYNOTE LEGEND FLOOR PLAN

| MARK | FLOOR PLAN CODED NOTES |
|---|---|

# FLOOR PLAN LEGEND

| | | | |
|---|---|---|---|
| ROOM | ROOM NAME | | |
| 100 | ROOM NUMBER | | PARTITION TO BE DEMOLISHED |
| 100 | DOOR NUMBER | | DOOR AND FRAME TO BE REMOVED |
| A | PARTITION TYPE | | |
| 1 | KEYNOTES | | EXISTING PARTITION TO REMAIN |
| F.E. | SURFACE MOUNTED FIRE EXTINGUISHER | | EXISTING DOOR TO REMAIN |
| F.E.C. | RECESSED EXTINGUISHER CABINET & FIRE EXTINGUISHER | | NEW CONSTRUCTION |
| | EXIT LIGHT | | NEW DOOR & FRAME |
| | EXIT LIGHT (DIRECTIONAL) | MATCHLINE 3 / A1.2 | MATCHLINE WITH SHEET REFERENCE |
| BL-1 | BORROWED LIGHT TAG | | |
| TP-1 | TOILET ACCESSORY TAG | | |




1 ENLARGED OFFICE FINISH FLOOR PLAN
3/32" = 1'-0"

BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
OFFICE FINISH PLANS

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

PROGRESS SET
NOT FOR CONSTRUCTION

Revision
Date

| | |
|---|---|
| JOB: | 230010 |
| DRAWN: | CJR |
| CHECKED: | CW |
| DATE: | 02/12/2024 |
| SHEET: | A1.4 |

APPLICABLE TO ALL PLAN VIEWS

OVERALL EQUIPMENT PLAN

APPLICABLE TO ALL PLAN VIEWS

BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
EQUIPMENT PLAN

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

PROGRESS SET
NOT FOR CONSTRUCTION

| Date | Revision |
|---|---|

| | |
|---|---|
| JOB: | 230010 |
| DRAWN: | CJR |
| CHECKED: | CW |
| DATE: | 02/12/2024 |

SHEET:
A1.5

## FLOOR PLAN LEGEND

| | |
|---|---|
| ROOM / 100 | ROOM NAME / ROOM NUMBER |
| 100 | DOOR NUMBER |
| A | PARTITION TYPE |
| 1 | KEYNOTES |
| F.E. | SURFACE MOUNTED FIRE EXTINGUISHER |
| F.E.C. | RECESSED EXTINGUISHER CABINET & FIRE EXTINGUISHER |
| | EXIT LIGHT |
| | EXIT LIGHT (DIRECTIONAL) |
| BL-1 | BORROWED LIGHT TAG |
| TP-1 | TOILET ACCESSORY TAG |
| | PARTITION TO BE DEMOLISHED |
| | DOOR AND FRAME TO BE REMOVED |
| | EXISTING PARTITION TO REMAIN |
| | EXISTING DOOR TO REMAIN |
| | NEW CONSTRUCTION |
| | NEW DOOR & FRAME |
| MATCHLINE 3 / A1.2 | MATCHLINE WITH SHEET REFERENCE |

## GENERAL NOTES - NEW FLOOR...

| | |
|---|---|
| 1 | VERIFY ALL CONDITIONS, DIMENSIONS AND ALIGNMENT OF WALLS. BRING ANY DISCREPANCIES TO BRIOHN'S ATTENTION PRIOR TO FABRICATION/CONSTRUCTION BEGINS. |
| 2 | VERIFY LOCATION OF ACCESS PANELS WITH MECHANICAL AND ELECTRICAL DRAWINGS. |
| 3 | AREA SHALL BE KEPT BROOM CLEAN AND FREE OF DEBRIS DURING CONSTRUCTION. |
| 4 | SEE EXTERIOR ELEVATIONS FOR WINDOW TYPES. |
| 5 | SEE SHEET A0.1 FOR ADA REQUIREMENTS AND MOUNTING HEIGHTS |
| 6 | SEE SHEET A1.2 FOR PARTITION TYPE. |
| 7 | EXTERIOR WALLS IN OFFICE AREA TO BE FURRED OUT WITH STUD HELD 1" OFF FACE OF EXTERIOR WALL. CAVITY FILLED WITH BATT INSULATION. SEE FLOOR PLAN FOR PARTITION TYPE. |
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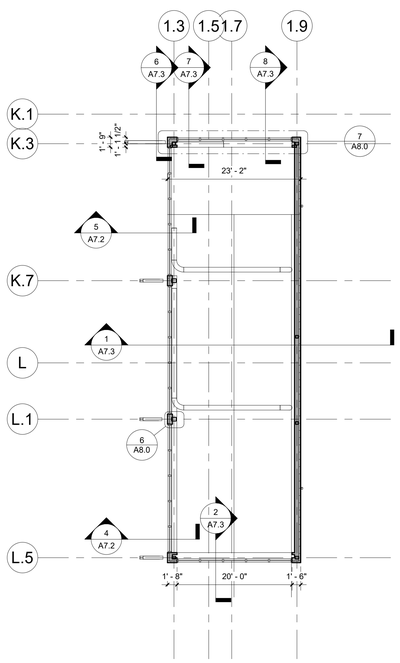
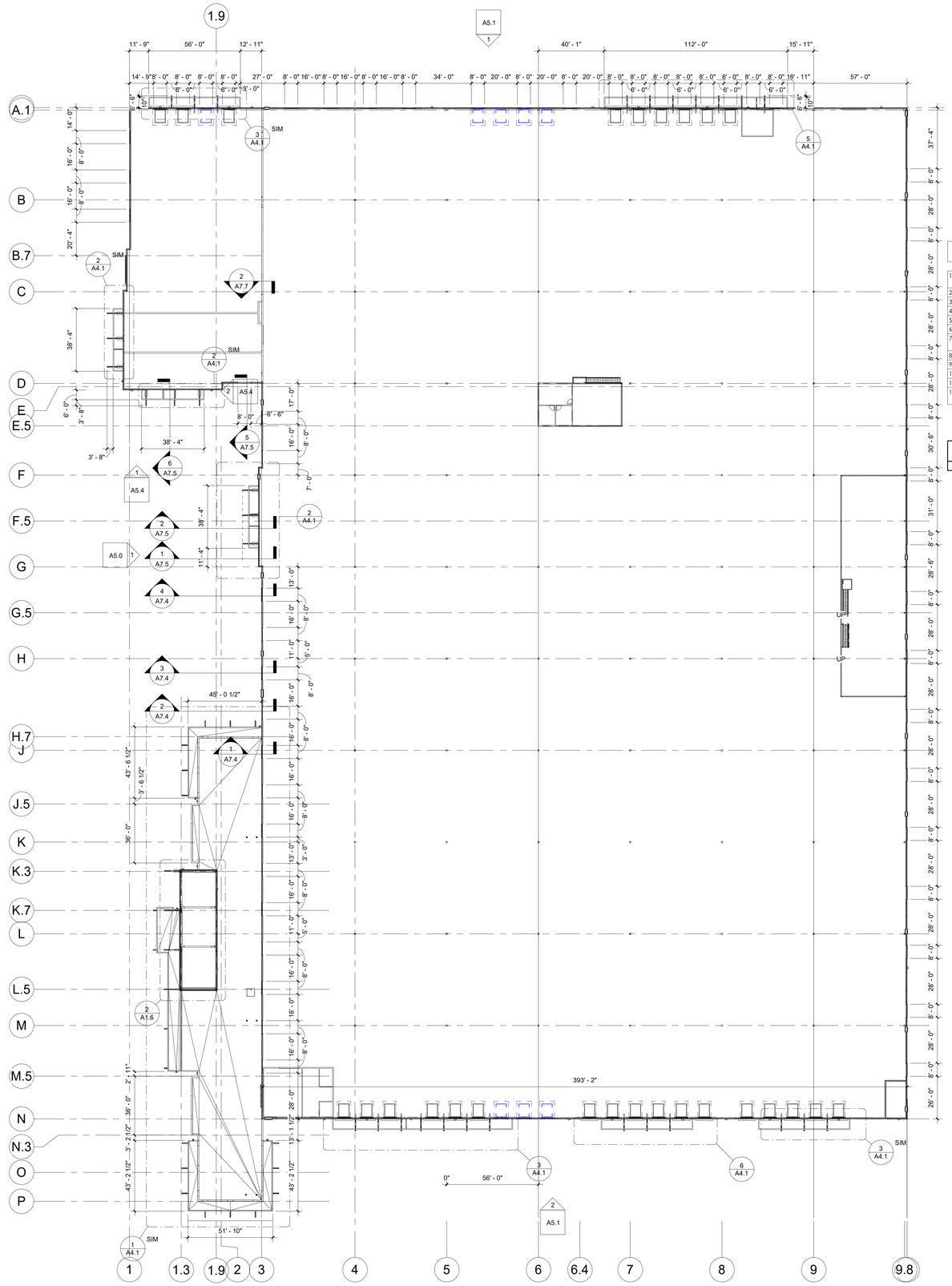
| 10 | ALL FLOORS THROUGH OUT ARE TO BE SEALED CONCRETE WITH CAULKED CONTROL JOINTS. |
| 11 | EXPOSED STEEL DECK, JOISTS, GIRDERS AND COLUMNS ARE TO BE PRIME GREY. |
| 12 | LOCKERS AND BENCHES IN LOCKER ROOMS ARE PROVIDED BY OWNER AND ARE SHOWN FOR REFERNCE ONLY. |

## KEYNOTE LEGEND FLOOR PLAN

| MARK | FLOOR PLAN CODED NOTES |
|---|---|



2 ENLARGED CLERESTORY PLAN UPPER ROOF
3/32" = 1'-0"



1 CLERESTORY PLAN
1" = 30'-0"


BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX


SHEET TITLE
CLERESTORY PLAN

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

PROGRESS SET
NOT FOR CONSTRUCTION

| Date | Revision |
|---|---|

| | |
|---|---|
| JOB: | 230010 |
| DRAWN: | CJR |
| CHECKED: | CW |
| DATE: | 02/12/2024 |

SHEET:
A1.6

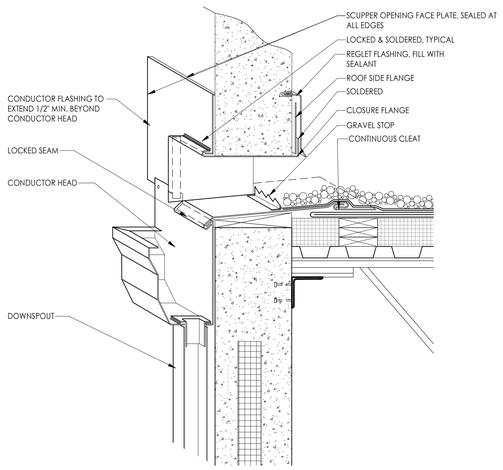
APPLICABLE TO ALL PLAN VIEWS

# KEYNOTE LEGEND ROOF PLAN

| MARK | ROOF PLAN CODED NOTES |
|---|---|
| 07-6 | ROOF SCUPPER (SECONDARY DRAINAGE) - SEE STRUCTURAL DWGS AND DETAIL FOR FURTHER INFORMATION. SCUPPERS SHALL BE LOCATED AT EACH GRID (UNLESS NOTED OTHERWISE ON ROOF PLAN), HOWEVER SHALL NOT BE PLACED OVER OPENINGS (DOORS/WINDOWS) AT ANY LOCATION. SCUPPERS TO BE PLACED AT A HEIGHT OF 2" TO 3" ABOVE PRIMARY DRAIN. SIZE TO BE DETERMINED. |
| 07-7 | FM APPROVED PREFINISHED METAL 24 GA. GRAVEL STOP COLOR SHALL BE "CLEAR ANODIZED FINISH". |
| 07-8 | FM APPROVED PREFINISHED METAL 24 GA. COPING. COLOR TO BE MATCH OVERHAND/CANOPY FASCIA METAL |
| 07-10 | FM APPROVED ROOF ASSEMBLY A: FULLY ADHERED TPO ROOF MEMBRANE ON DIRECT TO DECK ROOF INSULATION ON METAL DECK & SLOPED STRUCTURAL FRAMING (SEE STRUCTURAL DRAWINGS AND EXTERIOR SYSTEMS LEGEND FOR FURTHER INFORMATION) |
| 07-11 | FM APPROVED ROOF ASSEMBLY C (CANOPY): FULLY ADHERED TPO ROOF MEMBRANE ON TAPERED DIRECT TO DECK ROOF INSULATION. TAPER MIN. 1" TO ROOF RAIN (CANOPY ROOF - SEE STRUCTURAL DRAWINGS AND EXTERIOR SYSTEMS LEGEND FOR FURTHER INFORMATION.) |
| 11-10 | BILCO ROOF HATCH. PROVIDE CODE-COMPLIANT HATCH SIZE. FOR USE WITH OSHA APPROVED STEEL LADDER ACCESS FROM FLOOR LEVEL BELOW AS WELL AS TELESCOPING POLE AT TOP OF LADDER. PROVIDE FRAMING CURB, FLASHING AND TAPERED INSULATION FOR DRAINAGE AROUND HATCH AS REQUIRED. PROVIDE ROOF HATCH GUARD RAILING WITH SELF CLOSING GATE AT ROOF LEVEL. |
| 22-1 | 8" DIAMETER PRIMARY ROOF DRAIN (SEE STRUCTURAL) AT EACH GRID ON EAST AND WEST SIDE |
| 22-2 | |
| 22-3 | OVERFLOW FLUSH SPOUT WITH HINGED COVER. SEE ROOF PLAN FOR ADDITIONAL NOTES. COORDINATE WALL PENETRATION WITH PRECAST SUPPLIER. DO NOT PLACE OVER ANY OPENING, DOOR OR WINDOW. ALWAYS CENTER IN PANEL. |

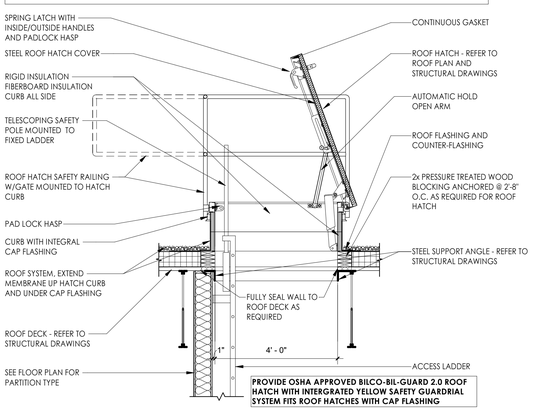
# GENERAL NOTES - ROOF PLAN

| | |
|---|---|
| 1 | ROOF ASSEMBLY INCLUDING ALL EDGE SYSTEMS SUCH AS COPINGS AND GUTTERS ARE BE FM APPROVED. |
| 2 | COORDINATE ROOF SCREEN SIZE WITH MECHANICAL UNITS. SEE STUCTURAL DRAWINGS FOR FURTHER INFORMATION. |
| 3 | SEE SHEET FOR OTHER CANOPY AND TUBE SUN SHADES PLANS |
| 4 | PROVIDE ROOF PAVERS AT ROOF HATCH AND AT ALL ROOF TOP UNITS. REFER TO HVAC PLAN BY OTHERS FOR LOCATIONS. |
| 5 | SEE STRUCTURAL DWGS FOR FURTHER STRUCTURAL INFORMATION. |

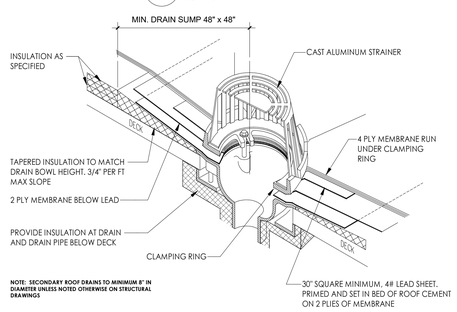



4 FM APPROVED THROUGH SCUPPER @ PRECAST PARAPET
1 1/2" = 1'-0"

## PROVIDE OSHA APPROVED GUARDRAILS FOR ROOF HATCH

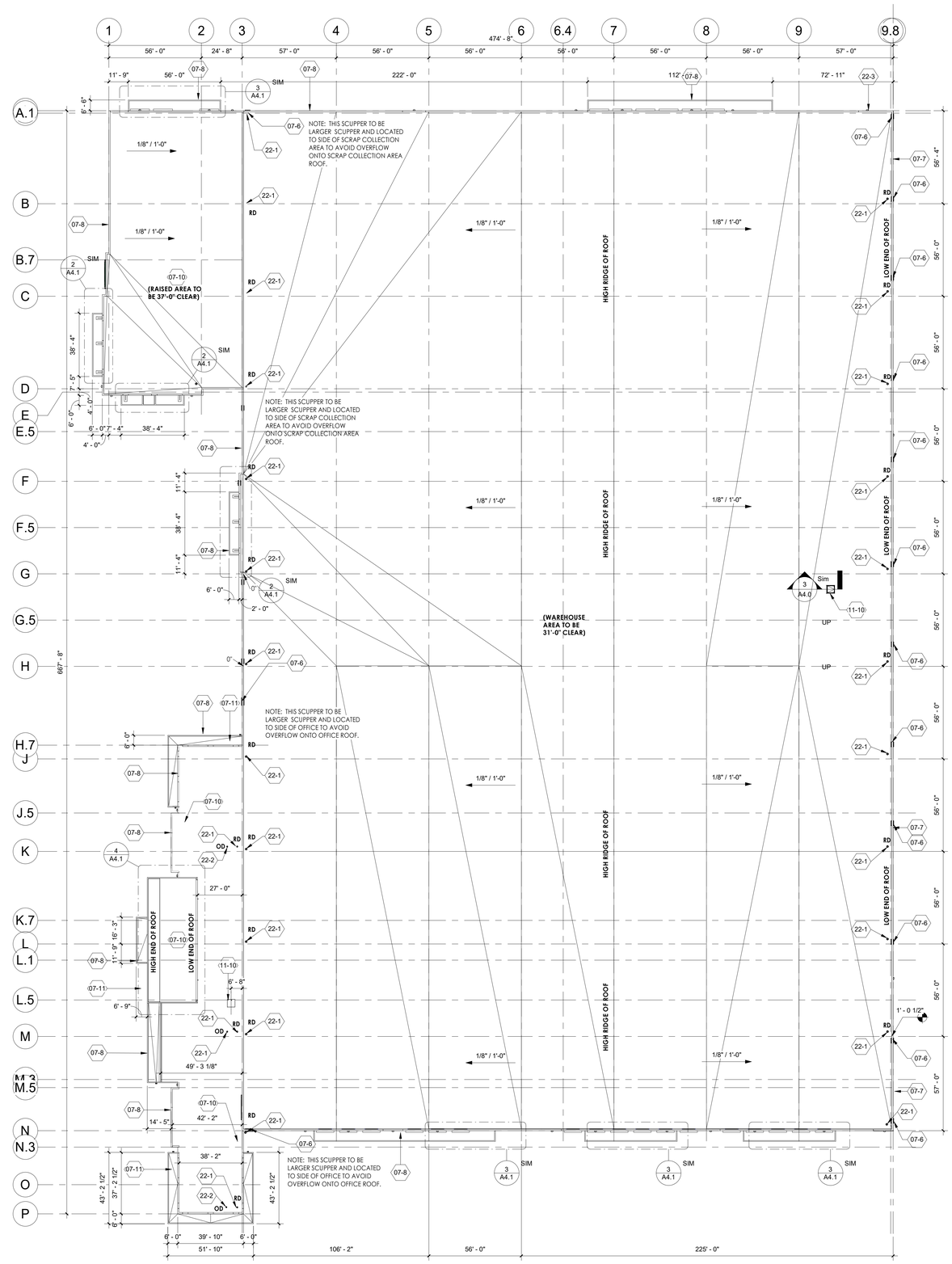



3 ROOF HATCH DETAIL
1/2" = 1'-0"




NOTE: SECONDARY ROOF DRAINS TO MINIMUM 8" IN DIAMETER UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS

2 ROOF DRAIN DETAIL
1/2" = 1'-0"




1 OVERALL ROOF PLAN
1" = 30'-0"

APPLICABLE TO ALL PLAN VIEWS

BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
ROOF PLAN

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

PROGRESS SET
NOT FOR CONSTRUCTION

Revision
Date

| | |
|---|---|
| JOB: | 230010 |
| DRAWN: | CW |
| CHECKED: | CW |
| DATE: | 02/12/2024 |

SHEET:
A4.0

THE PROPOSED COMMERCIAL NON-RESIDENTIAL BUILDING TO BE LOCATED IN CLIMATE ZONE 6 (PER IECC SECTION 502) PER TABLE 502.2 (1) BUILDING ENVELOPE REQUIREMENTS - OPAQUE ASSEMBLIES.

ROOFS - PROPOSED ROOF INSULATION ENTIRELY ABOVE DECK R-20ci REQUIRED AND R-24ci PROVIDED MEETS CODE MINIMUM.

WALLS ABOVE GRADE PROPOSED EXTERIOR WALL - MASS (PRECAST INSULATED CONCRETE) R-13.3ci REQUIRED AND R-14ci PROVIDED MEETS OR EXCEEDS CODE MINIMUM.

SLAB-ON-GRADE FLOORS - PROPOSED UNHEATED SLABS R-10 FOR 24 INCHES BELOW REQUIRED AND R-10 FOR 24 INCHES OR MORE PROVIDED MEETS OR EXCEEDS CODE MINIMUM.

PER TABLE 502.3 BUILDING ENVELOPE REQUIREMENTS: FENESTRATION
VERTICAL FENESTRATION (40% MAXIMUM ALLOWED ABOVE GRADE) 10.32% ACTUAL PROVIDED. REQUIRED U- FACTOR .40; ACTUAL PROVIDED .29 AND SHGC .41

PER 2015 IECC:

C402.5 AIR LEAKAGE THERMAL ENVELOPE.
PROPOSED BUILDING COMPLIES.

C402.5.1 AIR BARRIER PER C402.5.1.2.1 MATERIALS SEE EXCEPTION 13 CAST-IN-PLACE AND PRECAST CONCRETE.
PROPOSED BUILDING COMPLIES.

C402.5.2 AIR LEAKAGE FENESTRATION SEE EXCEPTION 1. FIELD FABRICATED FENESTRATION ASSEMBLIES THAT ARE SEALED IN ACCORDANCE WITH SECTION C402.5.1.
PROPOSED BUILDING COMPLIES.

C402.5.3 ROOMS CONTAINING FUEL - BURNING APPLIANCES EXCEPTION 1. DIRECT VENT APPLIANCES WITH BOTH INTAKE AND EXHAUST PIPES INSTALLED CONTINUOUS TO OUTSIDE.
PROPOSED BUILDING COMPLIES.

C402.5.4 DOORS AND ACCESS OPENINGS TO SHAFTS, CHUTES, STAIRWAYS AND ELEVATOR LOBBIES.
NOT APPLICABLE TO PROPOSED BUILDING.

C402.5.5 AIR INTAKES, EXHAUST OPENINGS, STAIRWAYS AND SHAFTS. IF REQUIRED TO BE DAMPERED.
PROPOSED BUILDING COMPLIES.

C402.5.6 LOADING DOCK WEATHER SEALS TO BE PROVIDED FOR LOADING DOCK DOORS.
PROPOSED BUILDING COMPLIES.

C402.5.7 VESTIBULES EXCEPTION 2. DOORS NOT INTENDED TO BE USED BY THE PUBLIC, SUCH AS DOORS TO MECHANICAL OR ELECTRICAL EQUIPMENT ROOMS, ON INTENDED SOLELY FOR EMPLOYEE USE. EXCEPTION 4 DOORS THAT OPEN DIRECTLY FROM A SPACE LESS THAN 3,000 SQUARE FEET IN AREA. EXCEPTION 6 DOORS USED PRIMARILY TO FACILITATE VEHICULAR MOVEMENT OR MATERIAL AND ADJACENT PERSONNEL DOORS.
PROPOSED BUILDING COMPLIES.

C402.5.8 RECESSED LIGHTING.
NOT APPLICABLE TO PROPOSED BUILDING.

**EXTERIOR SYSTEMS**

***FM APPROVED ROOF ASSEMBLY A***: MECHANICALLY FASTENED 60 MIL. TPO ROOF MEMBRANE, DENSDECK COVER BOARD ON (2) LAYERS 2.2" POLYISO BOARD ROOF INSULATION (R26.1 - TWO LAYERS, STAGGERED) ON METAL DECK & SLOPED STRUCTURAL FRAMING(SEE STRUCTURAL DRAWINGS)

***FM APPROVED ROOF ASSEMBLY B (TAPPERED)***: MECHANICALLY FASTNED 60 MIL. TPO ROOF MEMBRANE, DENSDECK COVER BOARD ON TAPPERED POLYISO BOARD ROOF INSULATION, (MIN. R-26.1 AT LOW POINTS) ON METAL DECK AND STRUCTURAL FRAMING (SEE STRUCTURAL DRAWINGS)

***FM APPROVED ROOF ASSEMBLY C (CANOPY ROOF)***: MECHANICALLY FASTNED 60 MIL. TPO ROOF MEMBRANE, DENSDECK COVER BOARD ON TAPPERED POLYISO BOARD ROOF INSULATION (TAPPERED TO A MIN. OF 1") ON METAL DECK AND STRUCTURAL FRAMING (SEE STRUCTURAL DRAWINGS)

***INSULATED PRECAST WALL PANEL SYSTEM***: 10" (3-3-4) INSULATED PRECAST CONCRETE WALL PANEL (R-15). NOTE: WHERE FORM LINER FINISH IS CALLED OUT FOR, FORM LINER TO BE LAPPED SIDING LOOK WITH 6" EXPOSURE LAPS.

***PREFINISHED METAL WALL PANEL SYSTEM***: PREFINISHED METAL WALL PANEL ON FURRING CHANNEL, ON 2" XPS RIGID INSULATION ON WEATHER RESISTIVE BARRIER, 5/8" GYPSUM SHEATHING ON COLD FORMEDED STUDS AS PER DETAILS, FILL CAVITY WITH BATT INSLATION, VAPOR BARRIER AND 5/8" TYPE 'X' GYPSUM BOARD INTERIOR FINISH WHERE SHOWN/EXPOSED (R-15).

***PREFINISHED METAL WALL PANEL CANOPY FASCIA SYSTEM***: PREFINISHED METAL WALL PANEL ON FURRING CHANNEL, ON WEATHER RESISTIVE BARRIER, 5/8" GYPSUM SHEATHING ON COLD FORMEDED STUDS AS PER DETAILS AND STRUCTURAL

**PRECASTER NOTE:**

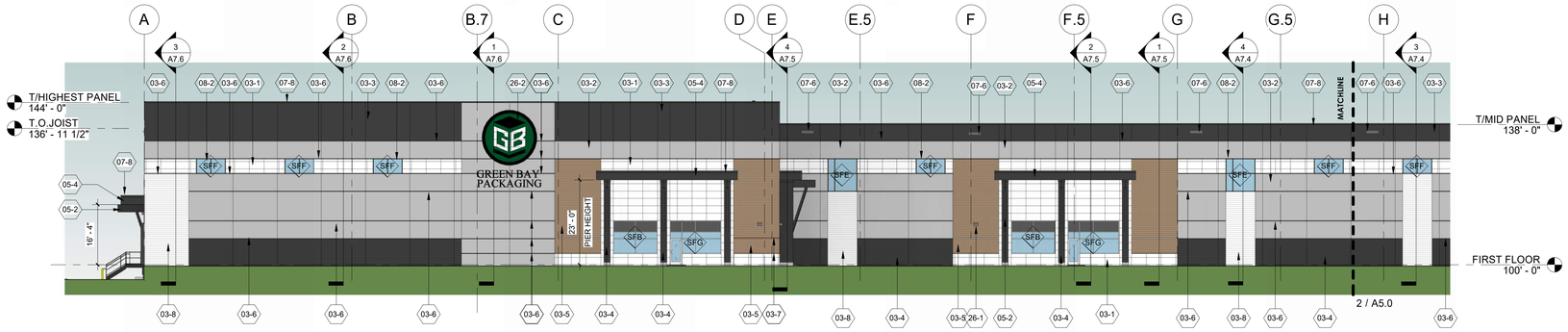
PRECASTER TO PROVIDE COVERS FOR ALL ROUND RECESSED POCKETS AND PROVIDE CLOSED CELL SPRAY FOAM INSULATION WITH STEEL PREFINISHED METAL COVER PLATES FOR ALL OTHER SHAPE OPENINGS OR RECESSED AREAS (BEAM, LINTEL, JOIST, GIRDER BEARING OR OTHER POCKETED CONDITIONS) ON INTERIOR SIDE OF THE PRECAST WALL PANELS

ELEVATION PAINT COLOR LEGEND:

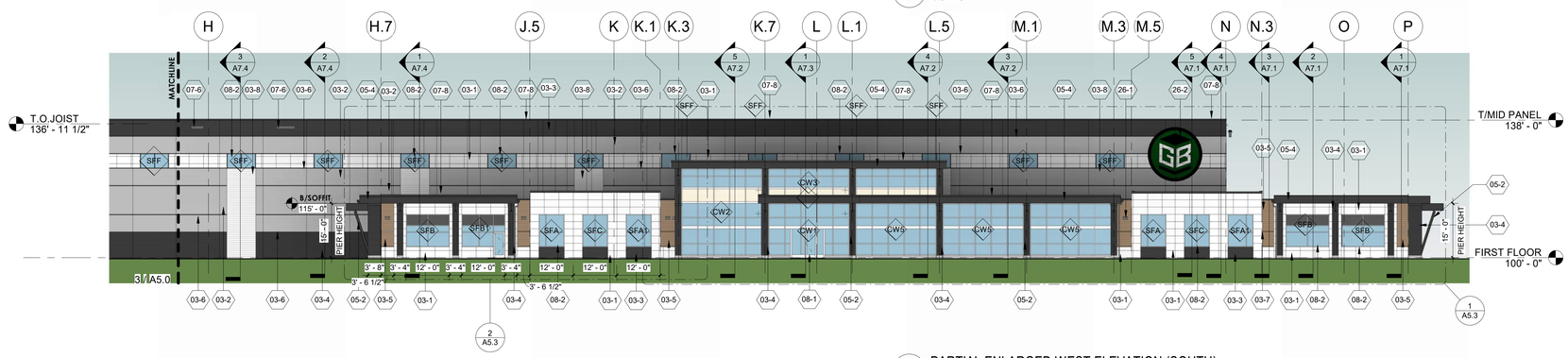
- PAINT COLOR 1: SHERWIN WILLIAMS "SW XXXX" WHITE - LIGHT ACCENT
- PAINT COLOR 2: SHERWIN WILLIAMS "SW XXXX" LIGHT GREY - MEDIUM ACCENT
- PAINT COLOR 3: SHERWIN WILLIAMS "SW XXXX" DARK GREY - DARK ACCENT
- PAINT COLOR 4: SHERWIN WILLIAMS "SW XXXX" BROWN-FORM LINER FINISH
- PAINT COLOR 3: SHERWIN WILLIAMS "SW XXXX" DARK GREY-FORM LINER FINISH
- PAINT COLOR 1: SHERWIN WILLIAMS "SW XXXX" WHITE - FORM LINER FINISH

## KEYNOTE LEGEND ELEVATION

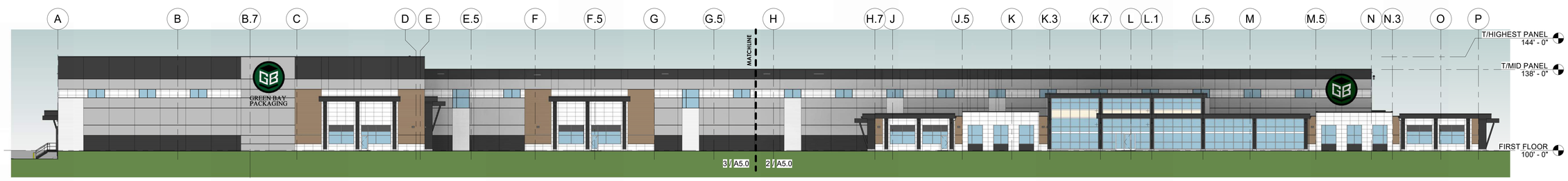
| MARK | ELEVATION CODED NOTES |
|---|---|
| 03-1 | EXTERIOR INSULATED PRECAST CONCRETE WALL PANEL WITH PAINTED FINISH - WHITE (SW XXXX) SCORED AS SHOWN IN DETAILED ELEVATION (4'-0" WIDE X 2'-0" HIGH) |
| 03-2 | EXTERIOR INSULATED PRECAST CONCRETE WALL PANEL WITH PAINTED FINISH - LIGHT GREY (SW XXXX) |
| 03-3 | EXTERIOR INSULATED PRECAST CONCRETE WALL PANEL WITH PAINTED FINISH - DARK GREY (SW XXXX) |
| 03-4 | EXTERIOR INSULATED (EXCEPT AT PIERS WHERE SHOWN OTHERWISE) PRECAST CONCRETE WALL PANEL PIER WITH FORM LINER 'LAPPED SIDING' LOOK PAINTED DARK GREY (SW XXXX) |
| 03-5 | EXTERIOR INSULATED PRECAST CONCRETE WALL PANEL WITH FORM LINER 'LAPPED SIDING' LOOK PAINTED BROWN (SW XXXX) |
| 03-6 | 2" HIGH X 1/2" DEEP REVEAL PAINTED DARK GREY (SW XXXX) |
| 03-7 | 2" HIGH X 1/2" DEEP REVEAL PAINTED BROWN (SW XXXX) |
| 03-8 | EXTERIOR INSULATED PRECAST CONCRETE WALL PANEL WITH FORM LINER 'LAPPED SIDING' LOOK PAINTED WHITE (SW XXXX) |
| 05-2 | PAINTED STEEL OVERHANG/CANOPY FRAMING (SEE DETAILS AND STRUCTURAL DWGS) |
| 05-4 | PREFINISHED METAL PANEL FINISHED OVERHANG/CANOPY FASCIA ON STEEL STUD FRAMING |
| 07-6 | ROOF SCUPPER (SECONDARY DRAINAGE) - SEE STRUCTURAL DWGS AND DETAIL FOR FURTHER INFORMATION. SCUPPERS SHALL BE LOCATED AT EACH GRID (UNLESS NOTED OTHERWISE ON ROOF PLAN), HOWEVER SHALL NOT BE PLACED OVER OPENINGS (DOORS/WINDOWS) AT ANY LOCATION. SCUPPERS TO BE PLACED AT A HEIGHT OF 2" TO 3" ABOVE PRIMARY DRAIN. SIZE TO BE DETERMINED. |
| 07-8 | FM APPROVED PREFINISHED METAL 24 GA. COPING, COLOR TO BE MATCH OVERHAND/CANOPY FASCIA METAL |
| 08-1 | ALUMINUM STOREFRONT ENTRY SYSTEM (SEE WINDOW TYPES) |
| 08-2 | ALUMINUM STOREFRONT (SEE WINDOW TYPES) |
| 26-1 | EXTERIOR LIGHT FIXTURE - CUT-OFF LED WALLPACK - SEE LIGHTING PLAN FOR FIXTURE TYPE AND MOUNTING HEIGHT |
| 26-2 | BUILDING SIGNAGE (BY OWNER) BDG TO PROVIDE ANY REQUIRED UTILITIES |




3 PARTIAL ENLARGED WEST EXTERIOR ELEVATION (NORTH)
1/16" = 1'-0"




2 PARTIAL ENLARGED WEST ELEVATION (SOUTH)
1/16" = 1'-0"




1 OVERALL WEST EXTERIOR ELEVATION
1" = 20'-0"

BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
BUILDING ELEVATIONS

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

PROGRESS SET
NOT FOR CONSTRUCTION

| Revision | Date |
|---|---|

| | |
|---|---|
| JOB: | 230010 |
| DRAWN: | CW |
| CHECKED: | CW |
| DATE: | 02/12/2024 |

SHEET:
A5.0

THE PROPOSED COMMERCIAL NON-RESIDENTIAL BUILDING TO BE LOCATED IN CLIMATE ZONE 6 (PER IECC SECTION 502) PER TABLE 502.2 (1) BUILDING ENVELOPE REQUIREMENTS - OPAQUE ASSEMBLIES.

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VERTICAL FENESTRATION (40% MAXIMUM ALLOWED ABOVE GRADE) 10.32% ACTUAL PROVIDED. REQUIRED U- FACTOR .40; ACTUAL PROVIDED .29 AND SHGC .41

PER 2015 IECC:

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C402.5.8 RECESSED LIGHTING.
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**EXTERIOR SYSTEMS**

***FM APPROVED ROOF ASSEMBLY A***: MECHANICALLY FASTENED 60 MIL. TPO ROOF MEMBRANE, DENSDECK COVER BOARD ON (2) LAYERS 2.2" POLYISO BOARD ROOF INSULATION (R26.1 - TWO LAYERS, STAGGERED) ON METAL DECK & SLOPED STRUCTURAL FRAMING(SEE STRUCTURAL DRAWINGS)

***FM APPROVED ROOF ASSEMBLY B (TAPPERED)***: MECHANICALLY FASTNED 60 MIL. TPO ROOF MEMBRANE, DENSDECK COVER BOARD ON TAPPERED POLYISO BOARD ROOF INSULATION, (MIN. R-26.1 AT LOW POINTS) ON METAL DECK AND STRUCTURAL FRAMING (SEE STRUCTURAL DRAWINGS)

***FM APPROVED ROOF ASSEMBLY C (CANOPY ROOF)***: MECHANICALLY FASTNED 60 MIL. TPO ROOF MEMBRANE, DENSDECK COVER BOARD ON TAPPERED POLYISO BOARD ROOF INSULATION (TAPPERED TO A MIN. OF 1") ON METAL DECK AND STRUCTURAL FRAMING (SEE STRUCTURAL DRAWINGS)

***INSULATED PRECAST WALL PANEL SYSTEM***: 10" (3-3-4) INSULATED PRECAST CONCRETE WALL PANEL (R-15). NOTE: WHERE FORM LINER FINISH IS CALLED OUT FOR, FORM LINER TO BE LAPPED SIDING LOOK WITH 6" EXPOSURE LAPS.

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**PRECASTER NOTE:**

PRECASTER TO PROVIDE COVERS FOR ALL ROUND RECESSED POCKETS AND PROVIDE CLOSED CELL SPRAY FOAM INSULATION WITH STEEL PREFINISHED METAL COVER PLATES FOR ALL OTHER SHAPE OPENINGS OR RECESSED AREAS (BEAM, LINTEL, JOIST, GIRDER BEARING OR OTHER POCKETED CONDITIONS) ON INTERIOR SIDE OF THE PRECAST WALL PANELS

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- PAINT COLOR 3: SHERWIN WILLIAMS "SW XXXX" DARK GREY - DARK ACCENT
- PAINT COLOR 4: SHERWIN WILLIAMS "SW XXXX" BROWN-FORM LINER FINISH
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## KEYNOTE LEGEND ELEVATION

| MARK | ELEVATION CODED NOTES |
|---|---|
| 03-1 | EXTERIOR INSULATED PRECAST CONCRETE WALL PANEL WITH PAINTED FINISH - WHITE (SW XXXX) SCORED AS SHOWN IN DETAILED ELEVATION (4'-0" WIDE X 2'-0" HIGH) |
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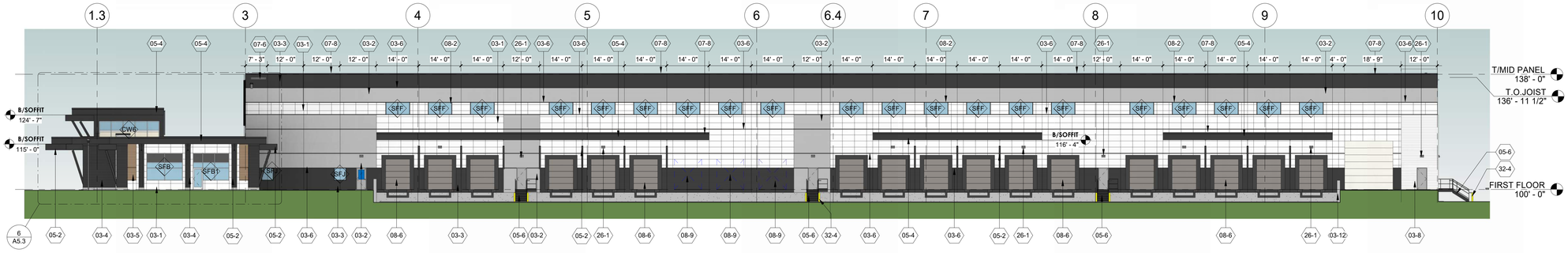
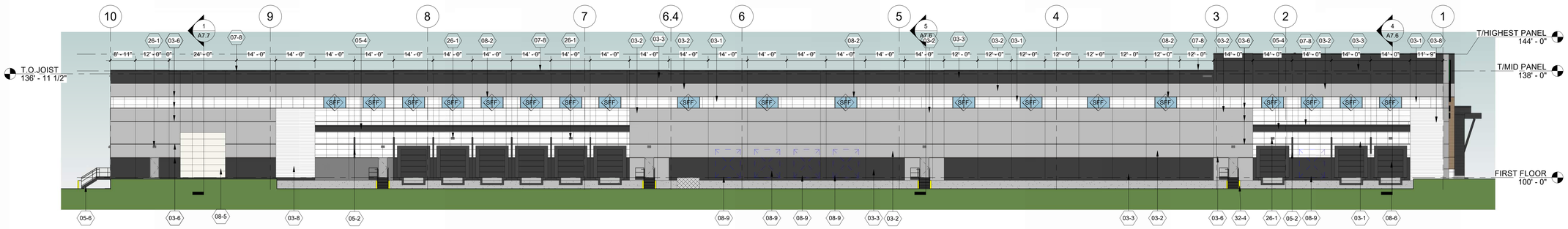
| 03-3 | EXTERIOR INSULATED PRECAST CONCRETE WALL PANEL WITH PAINTED FINISH - DARK GREY (SW XXXX) |
| 03-4 | EXTERIOR INSULATED (EXCEPT AT PIERS WHERE SHOWN OTHERWISE) PRECAST CONCRETE WALL PANEL PIER WITH FORM LINER 'LAPPED SIDING' LOOK PAINTED DARK GREY (SW XXXX) |
| 03-5 | EXTERIOR INSULATED PRECAST CONCRETE WALL PANEL WITH FORM LINER 'LAPPED SIDING' LOOK PAINTED BROWN (SW XXXX) |
| 03-6 | 2" HIGH X 1/2" DEEP REVEAL PAINTED DARK GREY (SW XXXX) |
| 03-8 | EXTERIOR INSULATED PRECAST CONCRETE WALL PANEL WITH FORM LINER 'LAPPED SIDING' LOOK PAINTED WHITE (SW XXXX) |
| 03-12 | CONCRETE RETAINING WALL (SEE CIVIL/STRUCTURAL DWGS) |
| 05-2 | PAINTED STEEL OVERHANG/CANOPY FRAMING (SEE DETAILS AND STRUCTURAL DWGS) |
| 05-4 | PREFINISHED METAL PANEL FINISHED OVERHANG/CANOPY FASCIA ON STEEL STUD FRAMING |
| 05-6 | EXTERIOR STEEL STAIRS WITH GALVANIZED STEEL BAR GRATE TREADS AND LANDING, PROVIDE STEEL CLOSED RISERS WITH PIPE GUARD/HAND RAILING DESIGN AND FABRICATION TO BE CODE/OSHA/ANSI COMPLIANT. STEEL TO BE PAINTED. |
| 07-6 | ROOF SCUPPER (SECONDARY DRAINAGE) - SEE STRUCTURAL DWGS AND DETAIL FOR FURTHER INFORMATION. SCUPPERS SHALL BE LOCATED AT EACH GRID (UNLESS NOTED OTHERWISE ON ROOF PLAN), HOWEVER SHALL NOT BE PLACED OVER OPENINGS (DOORS/WINDOWS) AT ANY LOCATION. SCUPPERS TO BE PLACED AT A HEIGHT OF 2" TO 3" ABOVE PRIMARY DRAIN. SIZE TO BE DETERMINED. |
| 07-8 | FM APPROVED PREFINISHED METAL 24 GA. COPING, COLOR TO BE MATCH OVERHAND/CANOPY FASCIA METAL |
| 08-2 | ALUMINUM STOREFRONT (SEE WINDOW TYPES) |
| 08-5 | INSULATED OH DOOR, FACTORY FINISHED, 6" DIAMETER X 4'-0" TALL CONCRETE FILLED STEEL PIPE BOLLARD(S) EA. SIDE OUTSIDE & 2' GUARDS EACH SIDE INSIDE, PAINTED SAFETY YELLOW. PROVIDE VERTICAL LIFT TYPE TRACKS. |
| 08-6 | INSULATED OH DOOR FACTORY FINISHED DOCK SEALS, DOCK LEVELERS AND BUMPERS WITH VERTICAL LIFT TYPE TRACKS |
| 08-9 | FUTURE DOCK DOOR LOCATION |
| 26-1 | EXTERIOR LIGHT FIXTURE - CUT-OFF LED WALLPACK - SEE LIGHTING PLAN FOR FIXTURE TYPE AND MOUNTING HEIGHT |
| 32-4 | 6" DIAMETER X 4'-0" TALL CONCRETE FILLED STEEL PIPE BOLLARD(S), PAINTED SAFETY YELLOW |




2 OVERALL SOUTH EXTERIOR ELEVATION
1/16" = 1'-0"




1 OVERALL NORTH EXTERIOR ELEVATION
1/16" = 1'-0"

BRIOHN DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
BUILDING ELEVATIONS

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

PROGRESS SET
NOT FOR CONSTRUCTION

Revision
Date

| | |
|---|---|
| JOB: | 230010 |
| DRAWN: | CEW |
| CHECKED: | CEW |
| DATE: | 02/12/2024 |

SHEET:
A5.1

THE PROPOSED COMMERCIAL NON-RESIDENTIAL BUILDING TO BE LOCATED IN CLIMATE ZONE 6 (PER IECC SECTION 502) PER TABLE 502.2 (1) BUILDING ENVELOPE REQUIREMENTS - OPAQUE ASSEMBLIES.

ROOFS - PROPOSED ROOF INSULATION ENTIRELY ABOVE DECK R-20ci REQUIRED AND R-24ci PROVIDED MEETS CODE MINIMUM.

WALLS ABOVE GRADE PROPOSED EXTERIOR WALL - MASS (PRECAST INSULATED CONCRETE) R-13.3ci REQUIRED AND R-14ci PROVIDED MEETS OR EXCEEDS CODE MINIMUM.

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PER TABLE 502.3 BUILDING ENVELOPE REQUIREMENTS: FENESTRATION
VERTICAL FENESTRATION (40% MAXIMUM ALLOWED ABOVE GRADE) 10.32% ACTUAL PROVIDED. REQUIRED U- FACTOR .40; ACTUAL PROVIDED .29 AND SHGC .41

PER 2015 IECC:

C402.5 AIR LEAKAGE THERMAL ENVELOPE.
PROPOSED BUILDING COMPLIES.

C402.5.1 AIR BARRIER PER C402.5.1.2.1 MATERIALS SEE EXCEPTION 13 CAST-IN-PLACE AND PRECAST CONCRETE.
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PROPOSED BUILDING COMPLIES.

C402.5.6 LOADING DOCK WEATHER SEALS TO BE PROVIDED FOR LOADING DOCK DOORS.
PROPOSED BUILDING COMPLIES.

C402.5.7 VESTIBULES EXCEPTION 2. DOORS NOT INTENDED TO BE USED BY THE PUBLIC, SUCH AS DOORS TO MECHANICAL OR ELECTRICAL EQUIPMENT ROOMS, ON INTENDED SOLELY FOR EMPLOYEE USE. EXCEPTION 4 DOORS THAT OPEN DIRECTLY FROM A SPACE LESS THAN 3,000 SQUARE FEET IN AREA. EXCEPTION 6 DOORS USED PRIMARILY TO FACILITATE VEHICULAR MOVEMENT OR MATERIAL AND ADJACENT PERSONNEL DOORS.
PROPOSED BUILDING COMPLIES.

C402.5.8 RECESSED LIGHTING.
NOT APPLICABLE TO PROPOSED BUILDING.

**EXTERIOR SYSTEMS**

***FM APPROVED ROOF ASSEMBLY A***: MECHANICALLY FASTENED 60 MIL. TPO ROOF MEMBRANE, DENSDECK COVER BOARD ON (2) LAYERS 2.2" POLYISO BOARD ROOF INSULATION (R26.1 - TWO LAYERS, STAGGERED) ON METAL DECK & SLOPED STRUCTURAL FRAMING(SEE STRUCTURAL DRAWINGS)

***FM APPROVED ROOF ASSEMBLY B (TAPPERED)***: MECHANICALLY FASTNED 60 MIL. TPO ROOF MEMBRANE, DENSDECK COVER BOARD ON TAPPERED POLYISO BOARD ROOF INSULATION, (MIN. R-26.1 AT LOW POINTS) ON METAL DECK AND STRUCTURAL FRAMING (SEE STRUCTURAL DRAWINGS)

***FM APPROVED ROOF ASSEMBLY C (CANOPY ROOF)***: MECHANICALLY FASTNED 60 MIL. TPO ROOF MEMBRANE, DENSDECK COVER BOARD ON TAPPERED POLYISO BOARD ROOF INSULATION (TAPPERED TO A MIN. OF 1") ON METAL DECK AND STRUCTURAL FRAMING (SEE STRUCTURAL DRAWINGS)

***INSULATED PRECAST WALL PANEL SYSTEM***: 10" (3-3-4) INSULATED PRECAST CONCRETE WALL PANEL (R-15). NOTE: WHERE FORM LINER FINISH IS CALLED OUT FOR, FORM LINER TO BE LAPPED SIDING LOOK WITH 6" EXPOSURE LAPS.

***PREFINISHED METAL WALL PANEL SYSTEM***: PREFINISHED METAL WALL PANEL ON FURRING CHANNEL, ON 2" XPS RIGID INSULATION ON WEATHER RESISTIVE BARRIER, 5/8" GYPSUM SHEATHING ON COLD FORMEDED STUDS AS PER DETAILS, FILL CAVITY WITH BATT INSLATION, VAPOR BARRIER AND 5/8" TYPE 'X' GYPSUM BOARD INTERIOR FINISH WHERE SHOWN/EXPOSED (R-15).

***PREFINISHED METAL WALL PANEL CANOPY FASCIA SYSTEM***: PREFINISHED METAL WALL PANEL ON FURRING CHANNEL, ON WEATHER RESISTIVE BARRIER, 5/8" GYPSUM SHEATHING ON COLD FORMEDED STUDS AS PER DETAILS AND STRUCTURAL

**PRECASTER NOTE:**

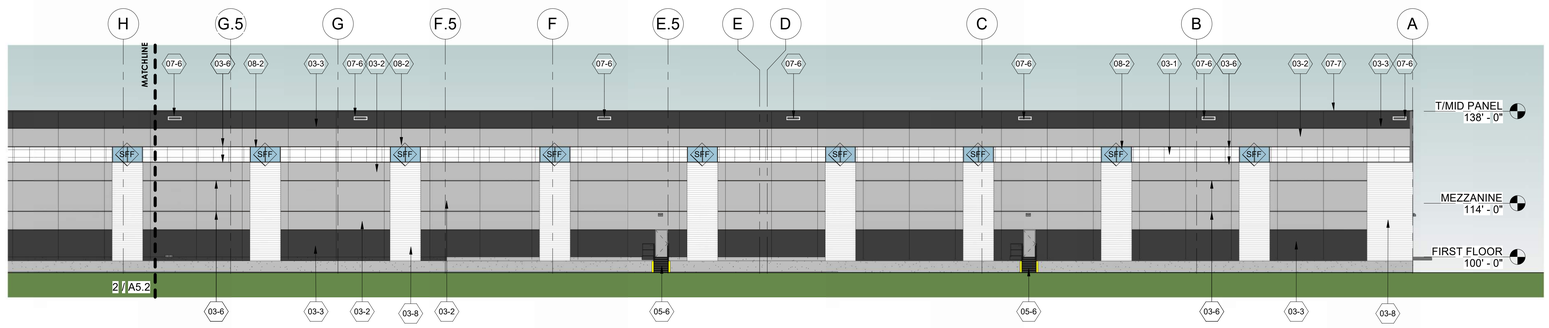
PRECASTER TO PROVIDE COVERS FOR ALL ROUND RECESSED POCKETS AND PROVIDE CLOSED CELL SPRAY FOAM INSULATION WITH STEEL PREFINISHED METAL COVER PLATES FOR ALL OTHER SHAPE OPENINGS OR RECESSED AREAS (BEAM, LINTEL, JOIST, GIRDER BEARING OR OTHER POCKETED CONDITIONS) ON INTERIOR SIDE OF THE PRECAST WALL PANELS

ELEVATION PAINT COLOR LEGEND:

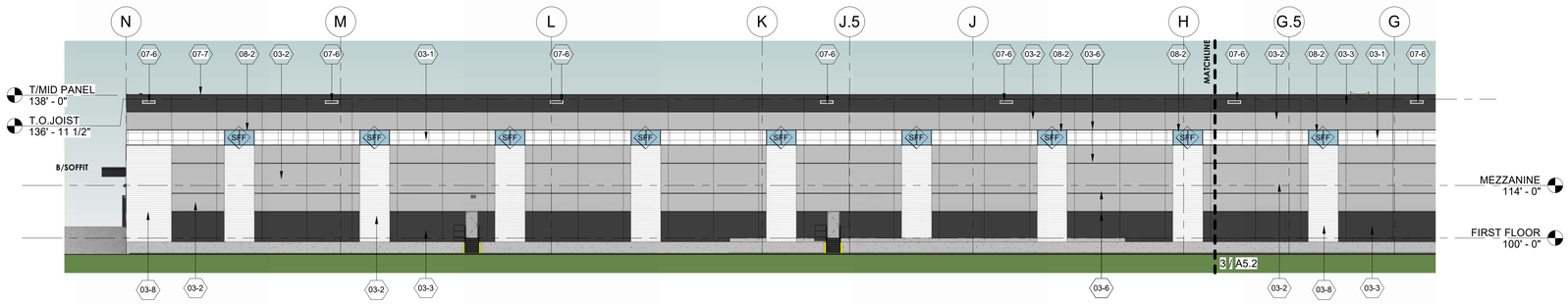
- PAINT COLOR 1: SHERWIN WILLIAMS "SW XXXX" WHITE - LIGHT ACCENT
- PAINT COLOR 2: SHERWIN WILLIAMS "SW XXXX" LIGHT GREY - MEDIUM ACCENT
- PAINT COLOR 3: SHERWIN WILLIAMS "SW XXXX" DARK GREY - DARK ACCENT
- PAINT COLOR 4: SHERWIN WILLIAMS "SW XXXX" BROWN-FORM LINER FINISH
- PAINT COLOR 3: SHERWIN WILLIAMS "SW XXXX" DARK GREY-FORM LINER FINISH
- PAINT COLOR 1: SHERWIN WILLIAMS "SW XXXX" WHITE - FORM LINER FINISH

## KEYNOTE LEGEND ELEVATION

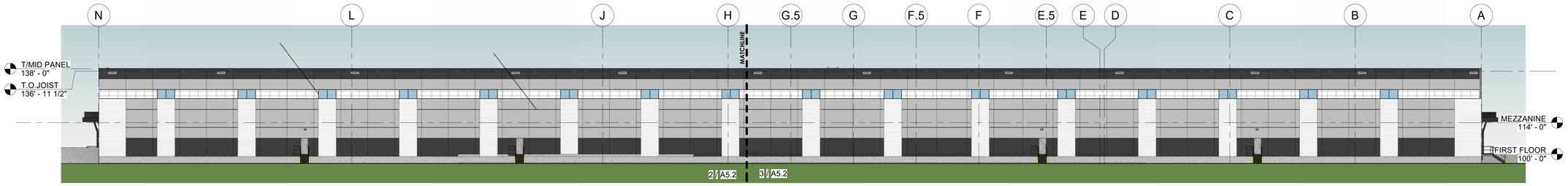
| MARK | ELEVATION CODED NOTES |
|---|---|
| 03-1 | EXTERIOR INSULATED PRECAST CONCRETE WALL PANEL WITH PAINTED FINISH - WHITE (SW XXXX) SCORED AS SHOWN IN DETAILED ELEVATION (4'-0" WIDE X 2'-0" HIGH) |
| 03-2 | EXTERIOR INSULATED PRECAST CONCRETE WALL PANEL WITH PAINTED FINISH - LIGHT GREY (SW XXXX) |
| 03-3 | EXTERIOR INSULATED PRECAST CONCRETE WALL PANEL WITH PAINTED FINISH - DARK GREY (SW XXXX) |
| 03-6 | 2" HIGH X 1/2" DEEP REVEAL PAINTED DARK GREY (SW XXXX) |
| 03-8 | EXTERIOR INSULATED PRECAST CONCRETE WALL PANEL WITH FORM LINER 'LAPPED SIDING' LOOK PAINTED WHITE (SW XXXX) |
| 05-6 | EXTERIOR STEEL STAIRS WITH GALVANIZED STEEL BAR GRATE TREADS AND LANDING, PROVIDE STEEL CLOSED RISERS WITH PIPE GUARD/HAND RAILING DESIGN AND FABRICATION TO BE CODE/OSHA/ANSI COMPLIANT. STEEL TO BE PAINTED. |
| 07-6 | ROOF SCUPPER (SECONDARY DRAINAGE) - SEE STRUCTURAL DWGS AND DETAIL FOR FURTHER INFORMATION. SCUPPERS SHALL BE LOCATED AT EACH GRID (UNLESS NOTED OTHERWISE ON ROOF PLAN), HOWEVER SHALL NOT BE PLACED OVER OPENINGS (DOORS/WINDOWS) AT ANY LOCATION. SCUPPERS TO BE PLACED AT A HEIGHT OF 2" TO 3" ABOVE PRIMARY DRAIN. SIZE TO BE DETERMINED. |
| 07-7 | FM APPROVED PREFINISHED METAL 24 GA. GRAVEL STOP COLOR SHALL BE "CLEAR ANODIZED FINISH". |
| 08-2 | ALUMINUM STOREFRONT (SEE WINDOW TYPES) |




3 PARTIAL ENLARGED EAST ELEVATION (NORTH)
1/16" = 1'-0"




2 PARTIAL ENLARGED EAST ELEVATION (SOUTH)
1/16" = 1'-0"




1 OVERALL EAST EXTERIOR ELEVATION
1" = 20'-0"

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SHEET TITLE
BUILDING ELEVATIONS

PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

PROGRESS SET
NOT FOR CONSTRUCTION

Revision

Date

| | |
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| JOB: | 230010 |
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| DATE: | 02/12/2024 |

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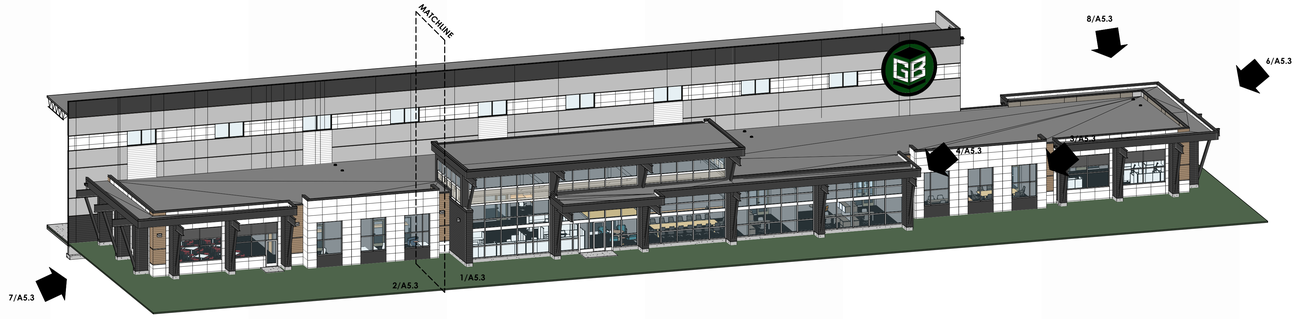
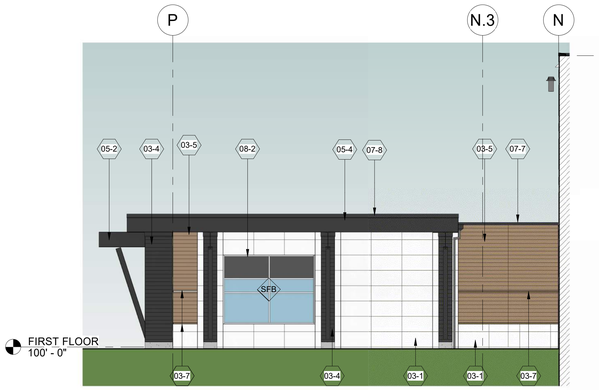
A5.2

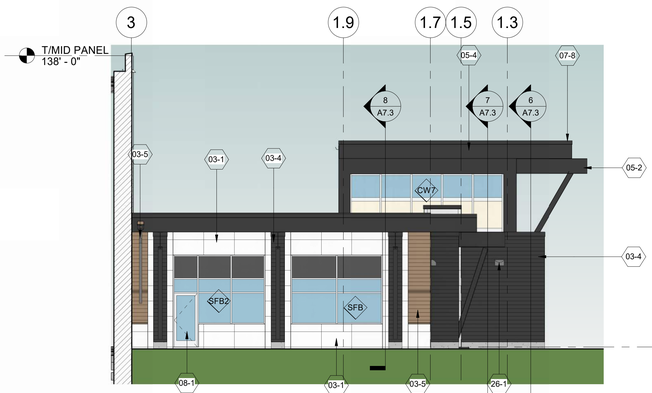



A 3D - OFFICE MARKERS
1/16" = 1'-0"

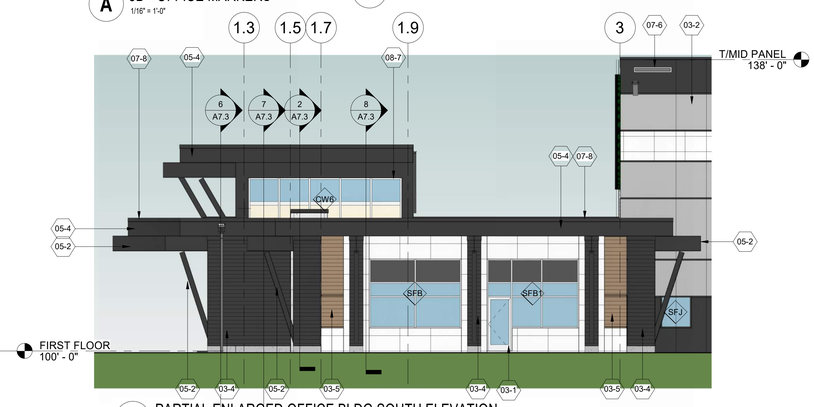
9 3D VIEW OFFICE



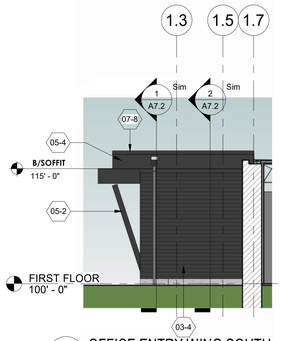

8 PARTIAL ENLARGED OFFICE BLDG EAST ELEVATION
1/8" = 1'-0"



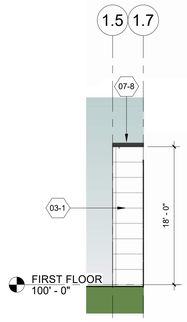

7 PARTIAL ENLARGED OFFICE BLDG NORTH ELEVATION
1/8" = 1'-0"




6 PARTIAL ENLARGED OFFICE BLDG SOUTH ELEVATION
1/8" = 1'-0"

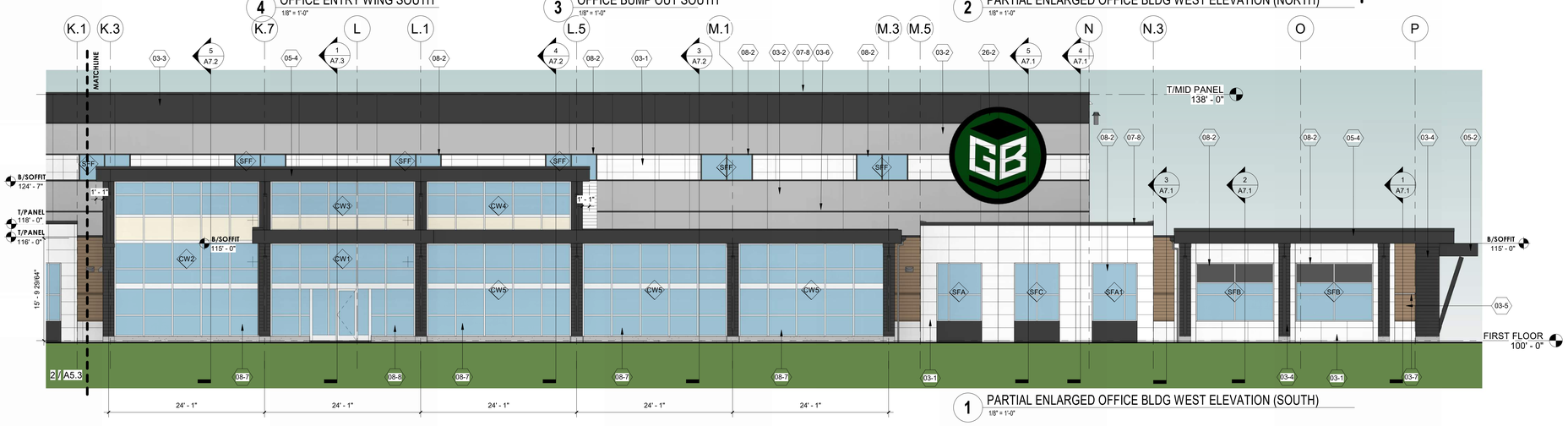



4 OFFICE ENTRY WING SOUTH
1/8" = 1'-0"




3 OFFICE BUMP OUT SOUTH
1/8" = 1'-0"

2 PARTIAL ENLARGED OFFICE BLDG WEST ELEVATION (NORTH)
1/8" = 1'-0"




1 PARTIAL ENLARGED OFFICE BLDG WEST ELEVATION (SOUTH)
1/8" = 1'-0"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PROPOSED NEW BUILDING FOR:
GREEN BAY PACKAGING
HOLY HILL ROAD
GERMANTOWN, WISCONSIN

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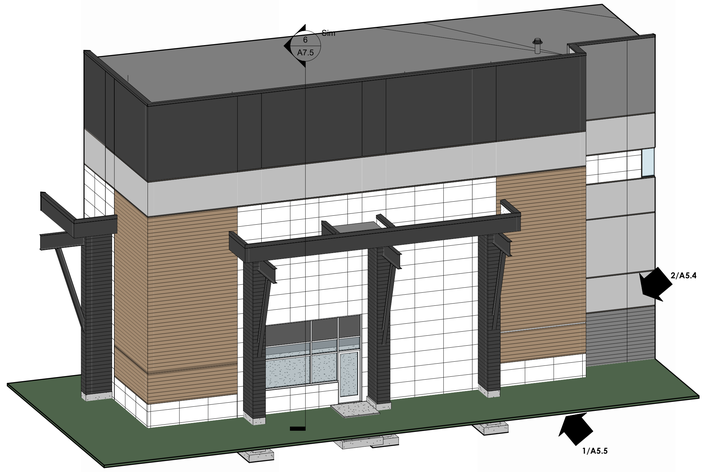
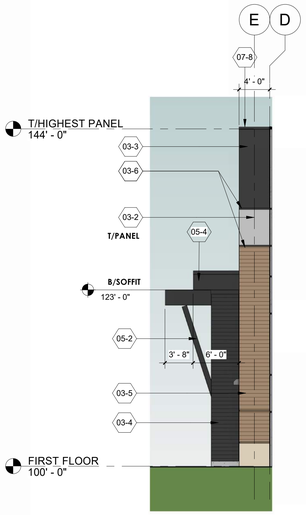
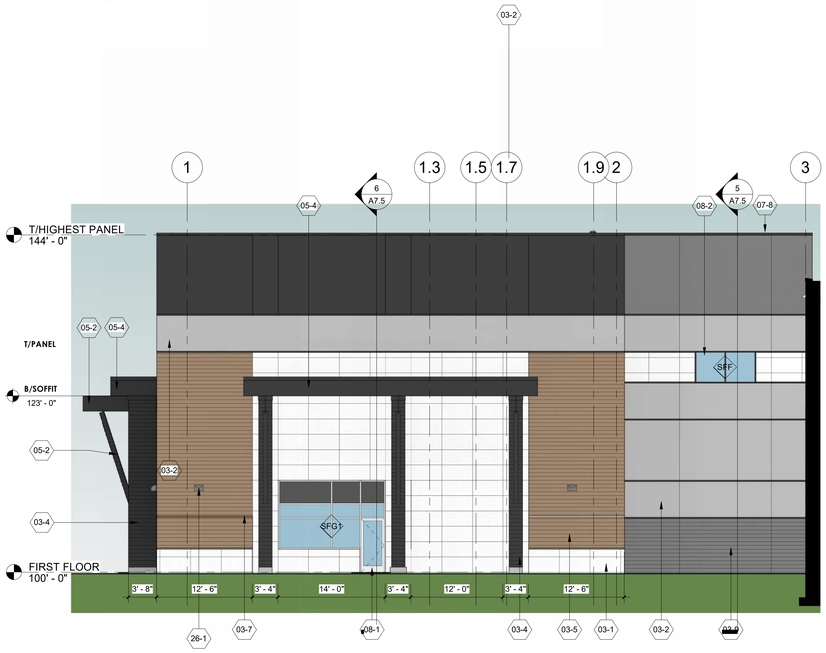
| SHEET: | A5.3 |




3D VIEW TALL PIERS/CANOPY




2 TALL COLUMN/CANOPY BUMP OUT
1/8" = 1'-0"




1 PARTIAL ENLARGED TALL COLUMN/CANOPY SOUTH ELEVATION
1/8" = 1'-0"

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SHEET TITLE
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A5.4

2 VIEW LOOKING NORTHEAST
12" = 1'-0"

1 VIEW LOOKING NORTHWEST
12" = 1'-0"


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EXTERIOR RENDERING

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A5.5

2 VIEW LOOKING NORTHEAST 2
1/2" = 1'-0"

1 VIEW LOOKING SOUTHEAST
1/2" = 1'-0"


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SHEET:
A5.6

2 VIEW LOOKING SOUTHEAST @ HIGHWAY
12" = 1'-0"

1 VIEW LOOKING NORTHWEST @ DRIVE ENTRANCE
12" = 1'-0"

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2 VIEW LOOKING EAST (OFFICE)
12" = 1'-0"

1 VIEW LOOKING SOUTHEAST (OFFICE)
12" = 1'-0"


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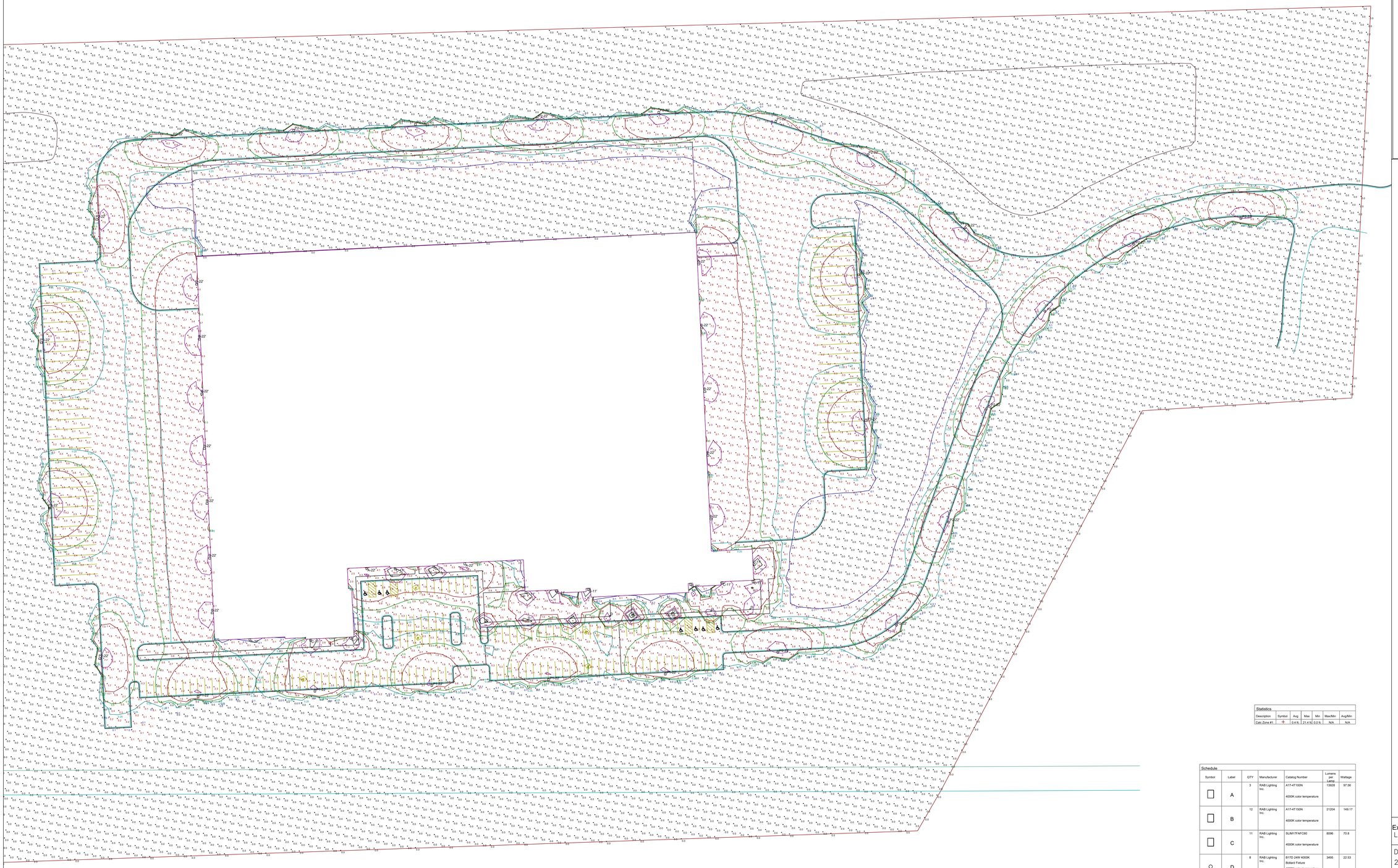

| Statistics | | | | | | |
|---|---|---|---|---|---|---|
| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
| Calc Zone #1 | + | 0.4 fc | 21.4 fc | 0.0 fc | N/A | N/A |

Schedule

| Symbol | Label | QTY | Manufacturer | Catalog Number | Lumens per Lamp | Wattage |
|---|---|---|---|---|---|---|
| | A | 3 | RAB Lighting Inc. | A17-4T100N<br>4000K color temperature | 13928 | 97.56 |
| | B | 12 | RAB Lighting Inc. | A17-4T150N<br>4000K color temperature | 21204 | 149.17 |
| | C | 11 | RAB Lighting Inc. | SLM19FAFC60<br>4000K color temperature | 8096 | 70.8 |
| | D | 8 | RAB Lighting Inc. | B1TO 24W 4000K<br>Bollard Fixture<br>4000K color temperature | 3495 | 22.53 |
| | P1 | 1 | RAB Lighting Inc. | A17-4T100N<br>20' Pole on a 2' Base<br>4000K color temperature | 13928 | 97.56 |
| | P2 | 22 | RAB Lighting Inc. | A17-3T100N<br>20' Pole on a 2' Base<br>4000K color temperature | 13928 | 97.56 |
| | P3 | 4 | RAB Lighting Inc. | A17-4T150N<br>20' Pole on a 2' Base<br>4000K color temperature | 21204 | 149.17 |

HFR electric
ELECTRICAL CONTRACTOR
RESIDENTIAL-COMMERCIAL-INDUSTRIAL

# Green Bay Packaging

Germantown, WI

Exterior Photometric
Lighting Plan

DATE:
2-9-2024

REVISIONS:

E-1.0

HFR electric inc
RESIDENTIAL · COMMERCIAL · INDUSTRIAL
227 Weil Drive · Slinger, WI 53086
Phone(262)644-6940 · Fax(262)644-7647

# Green Bay Packaging

# Exterior Lighting Submittal 2-9-2024

# A17-4T100N+A17-WM

Type: A

RAB

Color: Bronze

Weight: 11.2 lbs

| Project: | Type: |
|---|---|
| Prepared By: | Date: |

### Driver Info

| | |
|---|---|
| Type | Constant Current |
| 120V | 1.0A |
| 208V | 0.60A |
| 240V | 0.50A |
| 277V | 0.40A |
| Input Watts | 97.6W |

### LED Info

| | |
|---|---|
| Watts | 100W |
| Color Temp | 4000K (Neutral) |
| Color Accuracy | 70 CRI |
| L70 Lifespan | 100,000 Hours |
| Lumens | 13,822 lm |
| Efficacy | 141.7 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.

**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: PLBIJH80K4UJ

### Electrical

**Driver:**

Constant Current, Class 2, 120-277V, 50/60Hz, 120V: 1.50A, 208V: 0.70A, 240V: 0.70A, 277V: 0.60A

**Dimming Driver:**

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

**THD:**

3.67% at 120V, 10.35% at 277V

**Power Factor:**

99.8 % at 120V, 94 % at 277V

**Surge Protection:**

10kV

### Performance

**Lifespan:**

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

### Construction

**IES Classification:**

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semicircular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

**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)

**Lens:**

Polycarbonate lens

**Housing:**

Die-cast aluminum housing, lens frame and mounting arm

**Vibration Rating:**

3G vibration rating per ANSI C136.31

**EPA:**

1 Fixture: 0.46
2 Fixtures at 90°: 0.60
2 Fixtures at 180°: 0.93
3 Fixtures at 90°: 0.93
4 Fixtures at 90°: 0.93

**EPA with Slipfitter & Adjustable Arm Mounting Accessories (Sold Separately)**
1 Fixture: 0.66
2 Fixtures at 90°: 0.80
2 Fixtures at 180°: 1.32
3 Fixtures at 90°: 1.32
4 Fixtures at 90°: 1.32

**Mounting:**

Universal mounting arm compatible for hole spacing patterns from 1" to 5 1/2" center to center. Round Pole Adaptor plate included as a standard. Easy slide and lock to mount fixture with ease. Round pole diameter must be >4" to mount fixtures at 90° orientation.

**Finish:**

Formulated for high durability and long-lasting color


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## Technical Specifications (continued)

### Construction

**Green Technology:**

Mercury and UV free. RoHS-compliant components.

### LED Characteristics

**LEDs:**

Long-life, high-efficiency, surface-mount LEDs

**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.

### Other

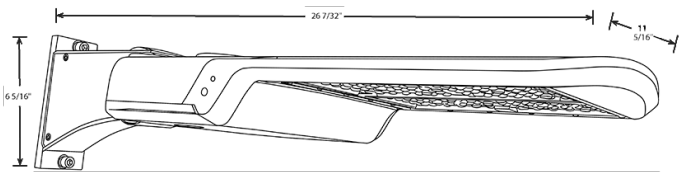
**5 Yr Limited Warranty:**

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: A17-4T100N




## Features

- 0-10V Dimming, standard
- 100,000-hour LED lifespan
- 5-Year, limited warranty

## Ordering Matrix

| Family | | Distribution | Wattage/Lumens | Mounting | Color Temp | Driver | Options |
|---|---|---|---|---|---|---|---|
| A17 | – | 4T | 100 | | N | | |
| | | **3T =** Type III<br>**4T =** Type IV<br>**5T =** Type V | **70 =** 70W/10,000LM<br>**100 =** 100W/15,000LM<br>**150 =** 150W/22,500LM<br>**200 =** 200W/30,000LM<br>**240 =** 240W/36,000LM<br>**300 =** 300W/45,000LM<br>**375 =** 375W/51,800LM | **Blank =** Universal Pole Mount<br>**SF =** Slipfitter (Factory installed SF available in 150W) | **Blank =** 5000K Cool<br>**N =** 4000K Neutral | **Blank =** 120-277V, 0-10V Dimming<br>**/480 =** 480V, 0-10V Dimming | **Blank =** No Option<br>**/3PRS =** 3-pin Receptacle and Shorting Cap<br>**/7PRS =** 7-pin Receptacle and Shorting Cap<br>**/MVS =** Microwave Motion Sensor<br>**/LC =** Lightcloud® Controller |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# A17-4T150N+A17-WM

Type: B

RAB

Color: Bronze

Weight: 13.2 lbs

| Project: | Type: |
|---|---|
| Prepared By: | Date: |

### Driver Info

| | |
|---|---|
| Type | Constant Current |
| 120V | 1.50A |
| 208V | 0.80A |
| 240V | 0.70A |
| 277V | 0.06A |
| Input Watts | 149.2W |

### LED Info

| | |
|---|---|
| Watts | 150W |
| Color Temp | 4000K (Neutral) |
| Color Accuracy | 70 CRI |
| L70 Lifespan | 100,000 Hours |
| Lumens | 21,204 lm |
| Efficacy | 142.1 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.

**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: PL7C2E05FQ0M

### Electrical

**Driver:**

Constant Current, Class 2, 120-277V, 50/60Hz, 120V: 1.50A, 208V: 0.70A, 240V: 0.70A, 277V: 0.60A

**Dimming Driver:**

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

**THD:**

3.85% at 120V, 9.26% at 277V

**Power Factor:**

99.8% at 120V, 93.2% at 277V

**Surge Protection:**

10kV

### Performance

**Lifespan:**

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

### Construction

**IES Classification:**

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semicircular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

**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)

**Lens:**

Polycarbonate lens

**Housing:**

Die-cast aluminum housing, lens frame and mounting arm

**Vibration Rating:**

3G vibration rating per ANSI C136.31

**EPA:**

1 Fixture: 0.46
2 Fixtures at 90°: 0.60
2 Fixtures at 180°: 0.93
3 Fixtures at 90°: 0.93
4 Fixtures at 90°: 0.93

**EPA with Slipfitter & Adjustable Arm Mounting Accessories (Sold Separately)**
1 Fixture: 0.66
2 Fixtures at 90°: 0.80
2 Fixtures at 180°: 1.32
3 Fixtures at 90°: 1.32
4 Fixtures at 90°: 1.32

**Mounting:**

Universal mounting arm compatible for hole spacing patterns from 1" to 5 1/2" center to center. Round Pole Adaptor plate included as a standard. Easy slide and lock to mount fixture with ease. Round pole diameter must be >4" to mount fixtures at 90° orientation.

**Finish:**

Formulated for high durability and long-lasting color


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## Technical Specifications (continued)

### Construction

**Green Technology:**

Mercury and UV free. RoHS-compliant components.

### LED Characteristics

**LEDs:**

Long-life, high-efficiency, surface-mount LEDs

**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.

### Other

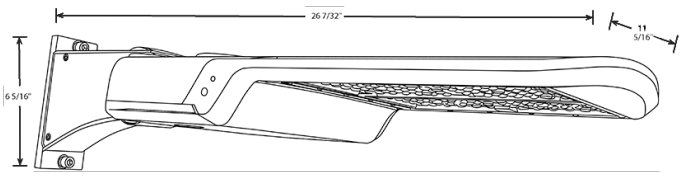
**5 Yr Limited Warranty:**

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: A17-4T150N




## Features

- 0-10V Dimming, standard
- 100,000-hour LED lifespan
- 5-Year, limited warranty

## Ordering Matrix

| Family | | Distribution | Wattage/Lumens | Mounting | Color Temp | Driver | Options |
|---|---|---|---|---|---|---|---|
| A17 | – | 4T | 150 | | N | | |
| | | **3T =** Type III<br>**4T =** Type IV<br>**5T =** Type V | **70 =** 70W/10,000LM<br>**100 =** 100W/15,000LM<br>**150 =** 150W/22,500LM<br>**200 =** 200W/30,000LM<br>**240 =** 240W/36,000LM<br>**300 =** 300W/45,000LM<br>**375 =** 375W/51,800LM | **Blank =** Universal Pole Mount<br>**SF =** Slipfitter (Factory installed SF available in 150W) | **Blank =** 5000K Cool<br>**N =** 4000K Neutral | **Blank =** 120-277V, 0-10V Dimming<br>**/480 =** 480V, 0-10V Dimming | **Blank =** No Option<br>**/3PRS =** 3-pin Receptacle and Shorting Cap<br>**/7PRS =** 7-pin Receptacle and Shorting Cap<br>**/MVS =** Microwave Motion Sensor<br>**/LC =** Lightcloud® Controller |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# SLIM17FAFC60

Type: C

RAB

Color: Bronze

Weight: 7.1 lbs

| | |
|---|---|
| Project: | Type: |
| Prepared By: | Date: |

## Driver Info

| | |
|---|---|
| Type | Constant Current |
| 120V | 0.50A |
| 208V | 0.40A |
| 240V | 0.30A |
| 277V | 0.25A |
| Input Watts | 57.9/58.4/57.2W |

## LED Info

| | |
|---|---|
| Watts | 60W |
| Color Temp | 3000K/4000K/5000K |
| Color Accuracy | 80 CRI |
| L70 Lifespan | 100,000 Hours |
| Lumens | 7035/8190/7251 lm |
| Efficacy | 121.6/140.3/126.7 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: PLMK5TZVA46N

### Performance

**Lifespan:**
100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

**Wattage Equivalency:**
Equvalent to 350W Metal Halide

### LED Characteristics

**LEDs:**
Long-life, high-efficiency, surface-mount LEDs

### Electrical

**Driver:**
Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: 0.50A, 208V: 0.40A, 240V: 0.30A, 277V: 0.25A

**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 selectable photocell that can be turned on and off.

**Surge Protection:**
L-N:4KV,L/N-GND:4KV

### Construction

**Cold Weather Starting:**
The minimum starting temperature is -40°C (-40°F)

**Ambient Temperature :**
Max Power Temp Rating: 50°C (122°F)
Middle Power Temp Rating: 50°C (122°F))
Low Power Temp Rating: 50°C (122°F)

**Housing:**
Precision die-cast aluminum housing and door frame

**Lens:**
Polycarbonate lens

**Mounting:**
Hinged wiring access and conduit entries on the back, sides, top and bottom make installation a snap

**Cut Off:**
Full cutoff (0°)

**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%)


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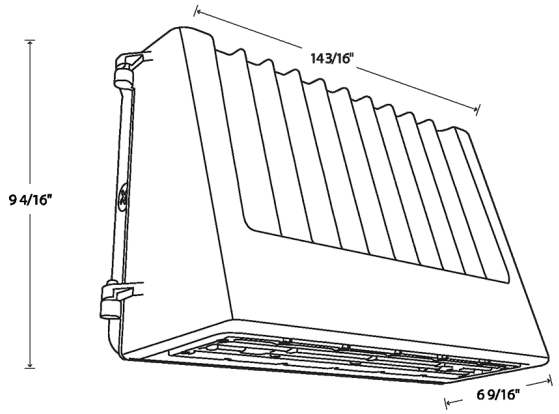
## Technical Specifications (continued)

**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
- Full cutoff
- Selectable on/off photocell
- 0-10V dimming, standard

## Ordering Matrix

| Family | Style | Wattage | Color Temp | Finish | Voltage | Options |
|---|---|---|---|---|---|---|
| SLIM17FA | FC | 60 | | | | |
| | **FC =** Full cutoff | **40 =** 40W<br>**60 =** 60W<br>**100 =** 100W<br>**120 =** 120W<br>**150 =** 150W | **Blank =** 3000K/4000K/5000K CCT Adjustable | **Blank =** Bronze | **Blank =** 120-277V | **Blank =** Selectable On/Off Photocell<br>**/MVS =** Selectable On/Off Photocell w/ Microwave Occupancy Sensor |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# B17D

Type: D

RAB

Color: Bronze

Weight: 12.0 lbs

| | |
|---|---|
| Project: | Type: |
| Prepared By: | Date: |

## Driver Info

| | |
|---|---|
| Type | Constant Current |
| 120V | 0.20A/0.16A/0.12A |
| 208V | 0.12A/0.10A/0.07A |
| 240V | 0.10A/0.08A/0.06A |
| 277V | 0.09A/0.07A/0.05A |
| Input Watts | 24/19/14W |

## LED Info

| | |
|---|---|
| Watts | 24/19/14W |
| Color Temp | 3000K/4000K/5000K |
| Color Accuracy | 72-75 CRI |
| L70 Lifespan | 50,000 Hours |
| Lumens | 1,959-3,409 lm |
| Efficacy | 143.9-156.1 lm/W |

## Technical Specifications

### Field Adjustability

**Field Adjustable:**
Field Adjustable Light Output:
24W/19W/14W (factory default 24W)
Color temperature selectable by 5000K, 4000K and 3000K (factory default 4000K)

### 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: S-VXGT3F

### Electrical

**Driver:**
Constant Current, Class 2, Class P, 120-277V, 50/60 Hz
24W: 120V: 0.20A, 208V: 0.12A, 240V: 0.10A, 277V: 0.09A
19W: 120V: 0.16A, 208V: 0.10A, 240V: 0.08A, 277V: 0.07A
14W: 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:**
5.31% at 120V, 9.2% at 277V

**Power Factor:**
99.3% at 120V, 95.5% at 277V

**Photocell:**
Integrated photocell included with on/off switch

**Surge Protection:**
4kV

### Performance

**Lifespan:**
50,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

### LED Characteristics

**LEDs:**
Long-life, high-efficiency, surface-mount LEDs

**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)

**Maximum Ambient Temperature:**
Suitable for use in up to 45°C (113°F)

**Housing:**
Die-cast aluminum

**Mounting:**
3 (Three) anchors for round version B17 and B17D. 4 (Four) anchors bolts for square version B17S. Internal base doesn't have leveling screws.


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## Technical Specifications (continued)

**Lens:**
Polycarbonate lens

**Reflector:**
Aluminum

**Top (Head):**
Dome

**Shape:**
Round

**Finish:**
Formulated for high durability and long-lasting color

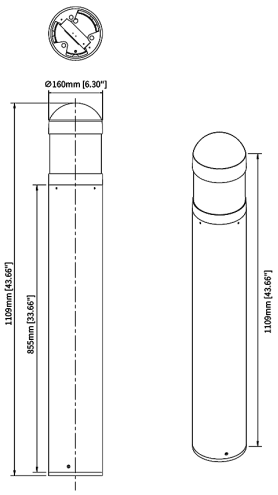
**Green Technology:**
Mercury and UV free. RoHS-compliant components.

### Other

**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

- 50,000-Hour LED lifespan
- DLC Premium Listed
- 0-10V dimming, standard
- 5-Year, limited warranty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## Ordering Matrix

| Family | Shape | Wattage | Color Temp | Voltage | Top (Head) | Finish | Options |
|---|---|---|---|---|---|---|---|
| B17 | | | | | D | | |
| | **Blank =** Round<br>**S =** Square | **Blank =** 24/19/13W Selectable | **Blank =** 3000K/4000K/5000K Selectable | **Blank =** 120-277V, 0-10V Dimming | **Blank =** Flat Top (Round & Square)<br>**D =** Dome (Round Only) | **Blank =** Bronze<br>**W =** White<br>**B =** Black | **Blank =** Integrated On/Off Photocell (Standard) |


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# A17-4T100N

Type: P1 20' pole mounted on a 2' base

RAB

Color: Bronze

Weight: 11.2 lbs

| Project: | Type: |
|---|---|
| Prepared By: | Date: |

### Driver Info

| | |
|---|---|
| Type | Constant Current |
| 120V | 1.0A |
| 208V | 0.60A |
| 240V | 0.50A |
| 277V | 0.40A |
| Input Watts | 97.6W |

### LED Info

| | |
|---|---|
| Watts | 100W |
| Color Temp | 4000K (Neutral) |
| Color Accuracy | 70 CRI |
| L70 Lifespan | 100,000 Hours |
| Lumens | 13,822 lm |
| Efficacy | 141.7 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.

**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: PLBIJH80K4UJ

### Electrical

**Driver:**

Constant Current, Class 2, 120-277V, 50/60Hz, 120V: 1.50A, 208V: 0.70A, 240V: 0.70A, 277V: 0.60A

**Dimming Driver:**

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

**THD:**

3.67% at 120V, 10.35% at 277V

**Power Factor:**

99.8 % at 120V, 94 % at 277V

**Surge Protection:**

10kV

### Performance

**Lifespan:**

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

### Construction

**IES Classification:**

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semicircular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

**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)

**Lens:**

Polycarbonate lens


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## Technical Specifications (continued)

### Construction

**Housing:**

Die-cast aluminum housing, lens frame and mounting arm

**Vibration Rating:**

3G vibration rating per ANSI C136.31

**EPA:**

1 Fixture: 0.46
2 Fixtures at 90°: 0.60
2 Fixtures at 180°: 0.93
3 Fixtures at 90°: 0.93
4 Fixtures at 90°: 0.93

**EPA with Slipfitter & Adjustable Arm Mounting Accessories (Sold Separately)**
1 Fixture: 0.66
2 Fixtures at 90°: 0.80
2 Fixtures at 180°: 1.32
3 Fixtures at 90°: 1.32
4 Fixtures at 90°: 1.32

**Mounting:**

Universal mounting arm compatible for hole spacing patterns from 1" to 5 1/2" center to center. Round Pole Adaptor plate included as a standard. Easy slide and lock to mount fixture with ease. Round pole diameter must be >4" to mount fixtures at 90° orientation.

**Finish:**

Formulated for high durability and long-lasting color

**Green Technology:**

Mercury and UV free. RoHS-compliant components.

### LED Characteristics

**LEDs:**

Long-life, high-efficiency, surface-mount LEDs

**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.

### Other

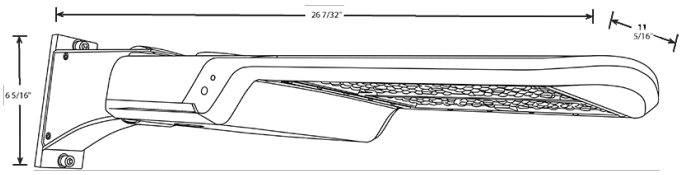
**5 Yr Limited Warranty:**

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

- 0-10V Dimming, standard
- 100,000-hour LED lifespan
- 5-Year, limited warranty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RAB

## Ordering Matrix

| Family | | Distribution | Wattage/Lumens | Mounting | Color Temp | Driver | Options |
|---|---|---|---|---|---|---|---|
| A17 | – | 4T | 100 | | N | | |
| | | **3T =** Type III<br>**4T =** Type IV<br>**5T =** Type V | **70 =** 70W/10,000LM<br>**100 =** 100W/15,000LM<br>**150 =** 150W/22,500LM<br>**200 =** 200W/30,000LM<br>**240 =** 240W/36,000LM<br>**300 =** 300W/45,000LM<br>**375 =** 375W/51,800LM | **Blank =** Universal Pole Mount<br>**SF =** Slipfitter (Factory installed SF available in 150W) | **Blank =** 5000K Cool<br>**N =** 4000K Neutral | **Blank =** 120-277V, 0-10V Dimming<br>**/480 =** 480V, 0-10V Dimming [1] | **Blank =** No Option<br>**/3PRS =** 3-pin Receptacle and Shorting Cap<br>**/7PRS =** 7-pin Receptacle and Shorting Cap<br>**/MVS =** Microwave Motion Sensor<br>**/LC =** Lightcloud® Controller |

[1] *480V driver available standard on 150W and 300W and by special order on 100, 240 and 375W. Not available on 70W or 200W models.*

*Type II distribution available as special order*

*Wall mount and adjustable universal pole mount available as optional field-installed accessories*


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# A17-3T100N

Type: P2 20' pole on a 2' base

RAB

Color: Bronze

Weight: 11.2 lbs

| Project: | Type: |
|---|---|
| Prepared By: | Date: |

### Driver Info

| | |
|---|---|
| Type | Constant Current |
| 120V | 1.0A |
| 208V | 0.60A |
| 240V | 0.50A |
| 277V | 0.40A |
| Input Watts | 99W |

### LED Info

| | |
|---|---|
| Watts | 100W |
| Color Temp | 4000K (Neutral) |
| Color Accuracy | 72 CRI |
| L70 Lifespan | 100,000 Hours |
| Lumens | 14,432 lm |
| Efficacy | 145.8 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.

**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: PLR2J0C3RS9X

### Electrical

**Driver:**
Constant Current, Class 2, 120-277V, 50/60Hz, 120V: 1.50A, 208V: 0.70A, 240V: 0.70A, 277V: 0.60A

**Dimming Driver:**
Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

**THD:**
3.67% at 120V, 10.35% at 277V

**Power Factor:**
99.8% at 120V, 94% at 277V

**Surge Protection:**
10kV

### Performance

**Lifespan:**
100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

### Construction

**IES Classification:**
The Type III distribution is ideal for roadway, general parking and other area lighting applications where a larger pool of lighting is required. It is intended to be located near the side of the area, allowing the light to project outward and fill the area.

**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)

**Lens:**
Polycarbonate lens

**Housing:**
Die-cast aluminum housing, lens frame and mounting arm

**Vibration Rating:**
3G vibration rating per ANSI C136.31

**EPA:**
1 Fixture: 0.46
2 Fixtures at 90°: 0.60
2 Fixtures at 180°: 0.93
3 Fixtures at 90°: 0.93
4 Fixtures at 90°: 0.93

**EPA with Slipfitter & Adjustable Arm Mounting Accessories (Sold Separately)**
1 Fixture: 0.66
2 Fixtures at 90°: 0.80
2 Fixtures at 180°: 1.32
3 Fixtures at 90°: 1.32
4 Fixtures at 90°: 1.32

**Mounting:**
Universal mounting arm compatible for hole spacing patterns from 1" to 5 1/2" center to center. Round Pole Adaptor plate included as a standard. Easy slide and lock to mount fixture with ease. Round pole diameter must be >4" to mount fixtures at 90° orientation.


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## Technical Specifications (continued)

**Finish:**
Formulated for high durability and long-lasting color

**Green Technology:**
Mercury and UV free. RoHS-compliant components.

### LED Characteristics

**LEDs:**
Long-life, high-efficiency, surface-mount LEDs

**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.

### Optical

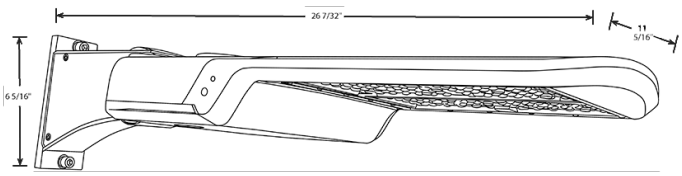
**BUG Rating:**
B3 U0 G3

### Other

**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

- 0-10V Dimming, standard
- 100,000-hour LED lifespan
- 5-Year, limited warranty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RAB

## Ordering Matrix

| Family | | Distribution | Wattage/Lumens | Mounting | Color Temp | Driver | Options |
|---|---|---|---|---|---|---|---|
| A17 | – | 3T | 100 | | N | | |
| | | **3T =** Type III<br>**4T =** Type IV<br>**5T =** Type V | **70 =** 70W/10,000lm<br>**100 =** 100W/15,000lm<br>**150 =** 150W/21,500lm<br>**200 =** 200W/30,000lm<br>**240 =** 240W/36,000lm<br>**300 =** 300W/45,000lm<br>**375 =** 375W/51,800lm | **Blank =** Universal Pole Mount<br>**SF =** Slipfitter (Factory installed SF available in 150W) | **Blank =** 5000K Cool<br>**N =** 4000K Neutral | **Blank =** 120-277V, 0-10V Dimming<br>**/480 =** 480V, 0-10V Dimming [1] | **Blank =** No Option<br>**/3PRS =** 3-pin Receptacle and Shorting Cap<br>**/7PRS =** 7-pin Receptacle and Shorting Cap<br>**/MVS =** Microwave Motion Sensor<br>**/LC =** Lightcloud® Controller |

[1] *480V driver available standard on 150W and 300W and by special order on 100, 240 and 375W. Not available on 70W or 200W models.*

*Type II distribution available as special order*

*Wall mount and adjustable universal pole mount available as optional field-installed accessories*


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# A17-4T150N

Type: P3 20' pole mounted on a 2' base

RAB

Color: Bronze

Weight: 13.2 lbs

| Project: | Type: |
|---|---|
| Prepared By: | Date: |

### Driver Info

| | |
|---|---|
| Type | Constant Current |
| 120V | 1.50A |
| 208V | 0.80A |
| 240V | 0.70A |
| 277V | 0.06A |
| Input Watts | 149.2W |

### LED Info

| | |
|---|---|
| Watts | 150W |
| Color Temp | 4000K (Neutral) |
| Color Accuracy | 70 CRI |
| L70 Lifespan | 100,000 Hours |
| Lumens | 21,204 lm |
| Efficacy | 142.1 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.

**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: PL7C2E05FQ0M

### Electrical

**Driver:**

Constant Current, Class 2, 120-277V, 50/60Hz, 120V: 1.50A, 208V: 0.70A, 240V: 0.70A, 277V: 0.60A

**Dimming Driver:**

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

**THD:**

3.85% at 120V, 9.26% at 277V

**Power Factor:**

99.8% at 120V, 93.2% at 277V

**Surge Protection:**

10kV

### Performance

**Lifespan:**

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

### Construction

**IES Classification:**

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semicircular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

**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)

**Lens:**

Polycarbonate lens


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## Technical Specifications (continued)

### Construction

**Housing:**

Die-cast aluminum housing, lens frame and mounting arm

**Vibration Rating:**

3G vibration rating per ANSI C136.31

**EPA:**

1 Fixture: 0.46
2 Fixtures at 90°: 0.60
2 Fixtures at 180°: 0.93
3 Fixtures at 90°: 0.93
4 Fixtures at 90°: 0.93

**EPA with Slipfitter & Adjustable Arm Mounting Accessories (Sold Separately)**
1 Fixture: 0.66
2 Fixtures at 90°: 0.80
2 Fixtures at 180°: 1.32
3 Fixtures at 90°: 1.32
4 Fixtures at 90°: 1.32

**Mounting:**

Universal mounting arm compatible for hole spacing patterns from 1" to 5 1/2" center to center. Round Pole Adaptor plate included as a standard. Easy slide and lock to mount fixture with ease. Round pole diameter must be >4" to mount fixtures at 90° orientation.

**Finish:**

Formulated for high durability and long-lasting color

**Green Technology:**

Mercury and UV free. RoHS-compliant components.

### LED Characteristics

**LEDs:**

Long-life, high-efficiency, surface-mount LEDs

**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.

### Other

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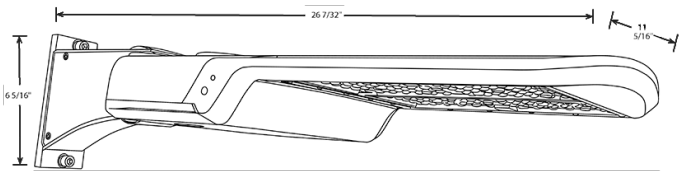


## Features

- 0-10V Dimming, standard
- 100,000-hour LED lifespan
- 5-Year, limited warranty


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RAB

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*Wall mount and adjustable universal pole mount available as optional field-installed accessories*


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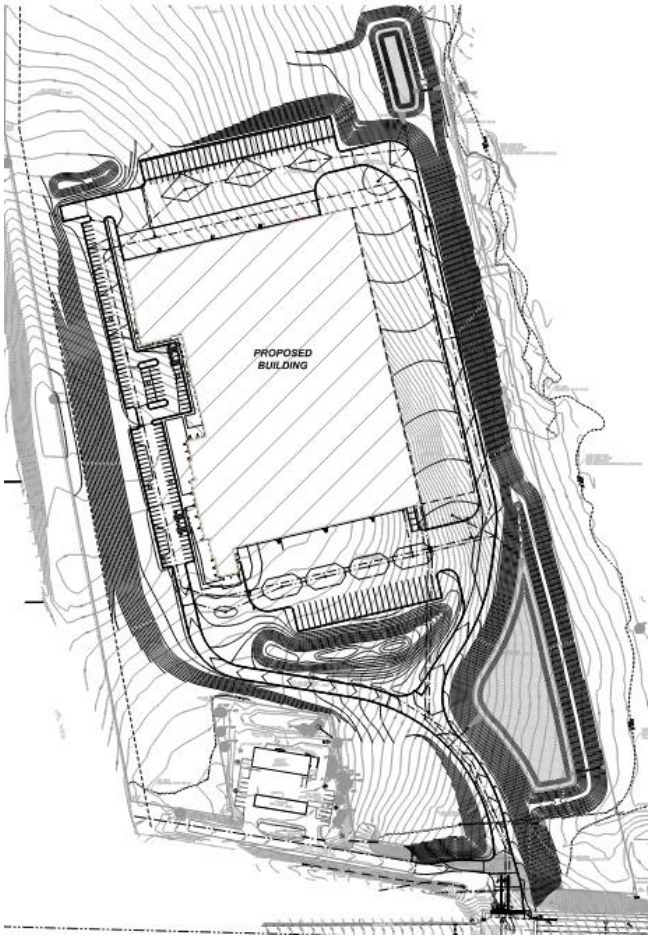
# STORMWATER MANAGEMENT REPORT

**FOR**




## Green Bay Packaging Development

Date: February 9, 2024

**Prepared By: Harwood Engineering Consultants, Ltd.**

HARWOOD
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414-475-5554

Nathan F. Schmit, P.E.
255 North 21st Street
Milwaukee, WI 53233
Ph: 414-475-5554
Reviewed By: Brad M. Seubert, P.E.
Project Number: 23-1160.00

## Introduction

Green Bay Packaging development is located at the northeast corner of the intersection of Holy Hill Road and State Highway 41 in the Village of Germantown, Wisconsin. This stormwater management report describes the practices that were used to meet the Village of Germantown, MMSD, and Wisconsin Department of Natural Resources (WDNR) stormwater management requirements.

## Method of Analysis and Requirements

- Stormwater quantity management analysis was completed using HydroCAD-10.0 modeling software. Runoff curve numbers were determined from the NRCS tables within the TR-55 handbook. The rainfall events used in this analysis were based on NRCS values for Washington County for 2-YR , 10-YR and 100-YR , 24-hour events (2.65 inches, 3.82 inches, and 6.41 inches, respectively).
- Stormwater quality analysis was completed utilizing WinSLAMM V.10.2.0. The on-site water quality design was completed using the 1969 Milwaukee rainfall files provided by WinSLAMM modeling software as well as the date ranges required by WDNR NR151.
- On-site storm sewer calculations were completed utilizing the Rational Method and Manning's equation, as well as, the Atlas 14 rainfall values.
- The stormwater quantity requirements for this site are dictated by the Village of Germantown, MMSD, and the WDNR. The volumetric design procedure will be used to meet the requirements of chapter 13.
- Stormwater quality requirements are dictated by the Village of Germantown and the WDNR and require that this new development project achieve a reduction of 80% total suspended solids (TSS) for the whole disturbed site. The ***Water Quality Summary*** section summarizes the water quality methods and results on-site.

## Soils Information

A soils exploration report has been completed, applicable sections are included within this report (see **Soils** section). The soils on site generally consist of silty, lean clay with various amounts of sandy silt, and gravel as well as covered by 7"-11" of topsoil.

## Infiltration

Infiltration rates for the site are estimated at 0.13 in/hr to 0.50 in/hr and therefore the site is exempt from infiltration requirements per NR 151.12 (5) (c) 6a.

## Existing Watershed Conditions (See Existing Conditions Exhibit)

The existing site is currently farmland with the highest point being in the center on the west side of the property line. The site slopes downward from west to north east and south east.

This report will analyze 29.252 acres of the site. The existing site was modeled as 1 drainage area.

EX-1 – This area includes the entire project area that are released undetained to the existing wetland areas to the east. It includes farmland areas.

The table below summarizes the existing watershed characteristics.

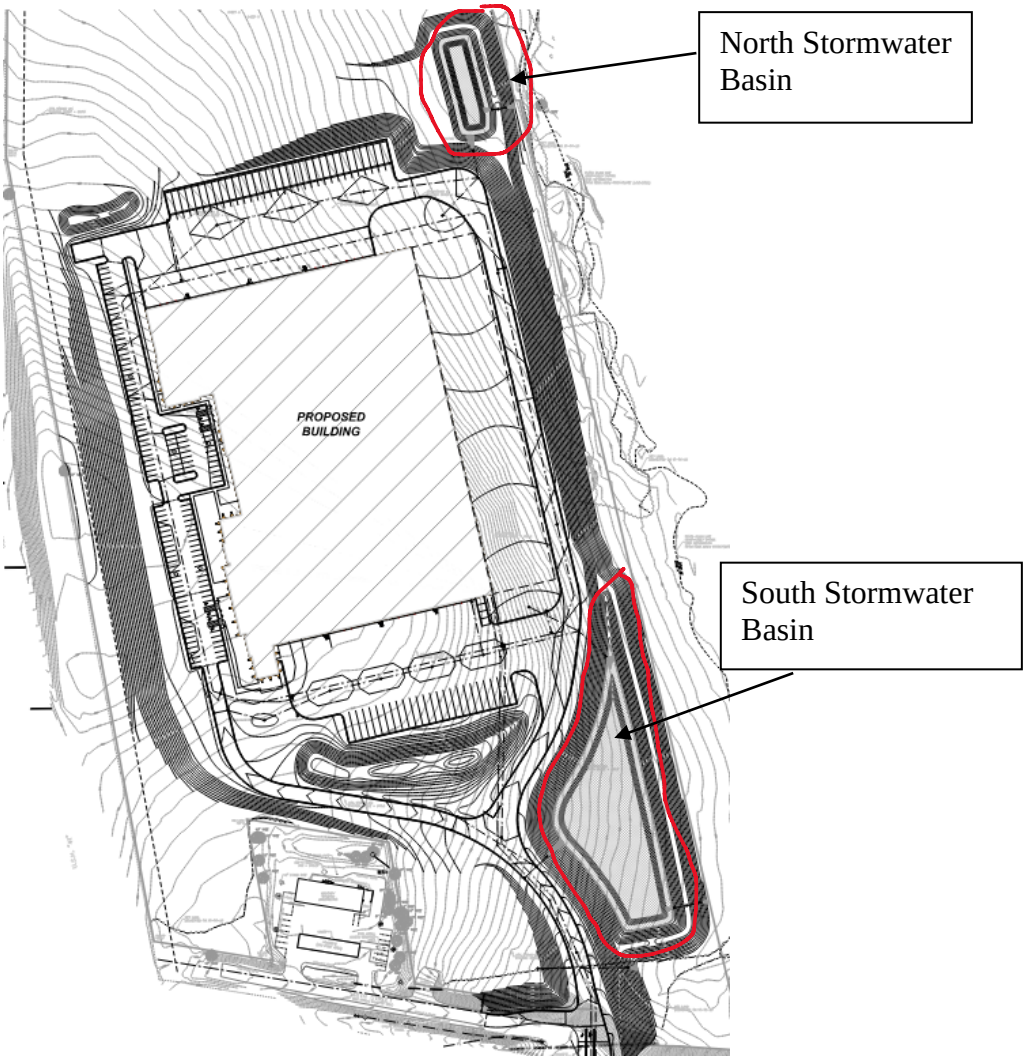
**Existing Conditions Summary**:

| Sub-Area Name | Area (acres) | Curve Number | Time of Concentration (min) |
|---|---|---|---|
| **EX-2** | 29.252 | 79 | 35.5 |
| **Total** | 29.252 | | |

## Proposed Watershed Conditions

The proposed site improvements includes a new building totaling roughly 270,400 sf along with the respective pavement and site utilities. The calculations for this stormwater management plan will take into consideration the potential future construction of a new building addition on the east side of the proposed building, totaling roughly 68,500 sf.

The proposed condition analyzes the same approximate 29.252 acres as the existing conditions. Two wet retention basins will be constructed to manage the stormwater quantity and quality from the site. They will be located on the northeast and southeast portion of the site.



The site was split into four drainage areas as described below:

PR-1 – Includes the majority of the site that is tributary to the south stormwater basin. It includes roof, greenspace and paved areas.

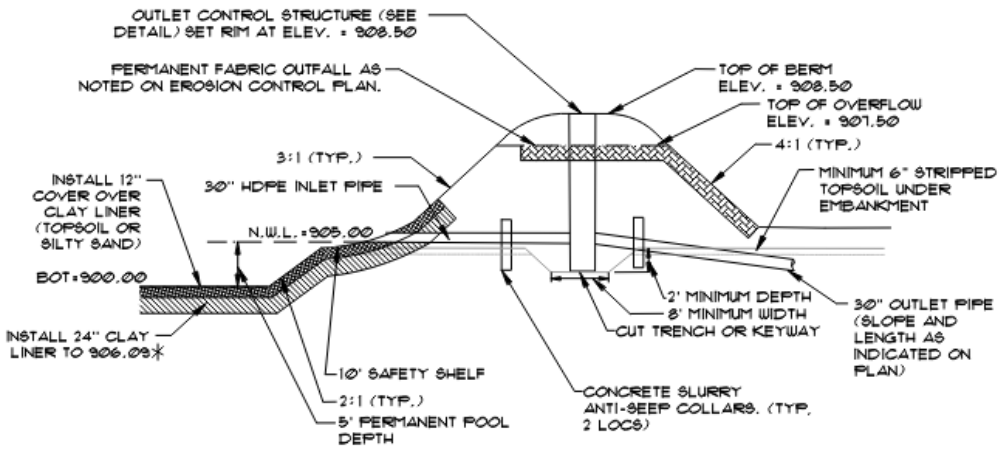
PR-2 – Includes the north portion of the site that is tributary to the north stormwater basin. This includes greenspace and paved areas.

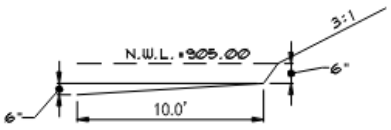
UD-1 – Includes portions of the north and east sides that will be released undetained. It includes paved and greenspace areas.

UD-2 – This area includes portions of the south central side of the site that will be released undetained. It includes paved and greenspace areas.

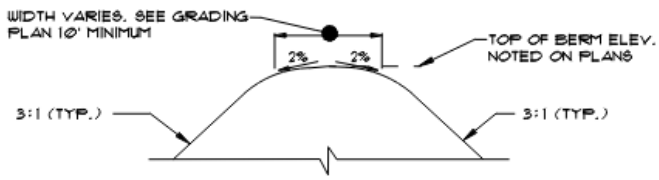
**Proposed Conditions Summary**:

| Sub-Area Name | Area (acres) | Curve Number | Time of Concentration (min) |
|---|---|---|---|
| **PR-1** | 20.416 | 88 | 8.8 |
| **PR-2** | 5.103 | 86 | 12.3 |
| **UD-1** | 3.239 | 68 | 7.3 |
| **UD-2** | 0.494 | 75 | 6.0 |
| **Total** | 29.252 | | |




**SAFETY SHELF**

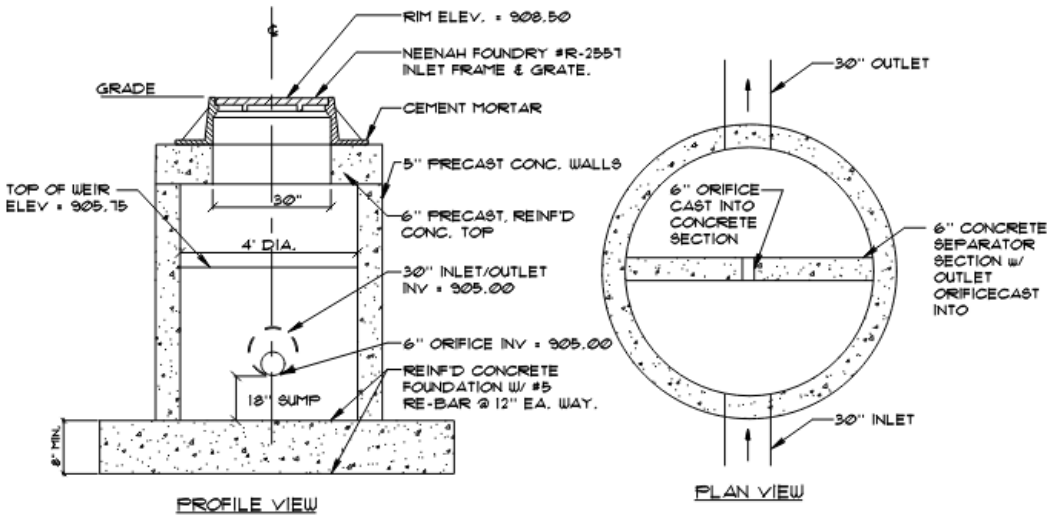



**BERM DETAIL**

*NOTE: FOR AREAS WHERE THE IN-SITU SOILS ARE NOT SUITABLE AS A LINER (PER A GEOTECHNICAL REPRESENTATIVE), THE CONTRACTOR SHALL INSTALL A LINER PER THE DETAIL WITH THE FOLLOWING PROPERTIES:

CLAY LINER TO HAVE THE FOLLOWING PROPERTIES: PI > 12 : LL ≥ 25
MOISTURE CONTENT = 0-2% ABOVE OPTIMUM

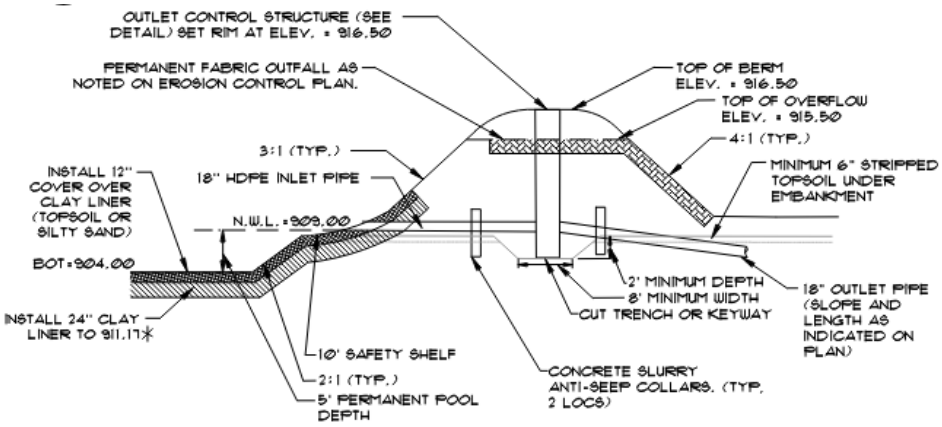
PLACE LINER IN 9" LIFTS, COMPACT TO 90% MODIFIED PROCTOR

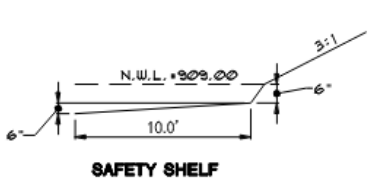



**05** **OUTLET CONTROL STRUCTURE - NORTH**
NTS

## Stormwater Basin North Summary:

| Storm Event | Elevation | Release Rate (cfs) |
|---|---|---|
| **2-yr** | 906.09 | 3.39 |
| **10-yr** | 906.49 | 9.15 |
| **100-yr** | 907.14 | 21.15 |

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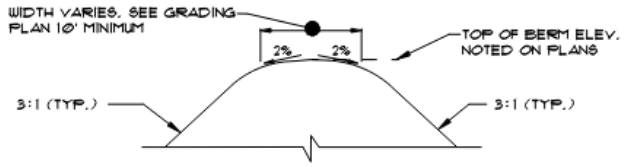


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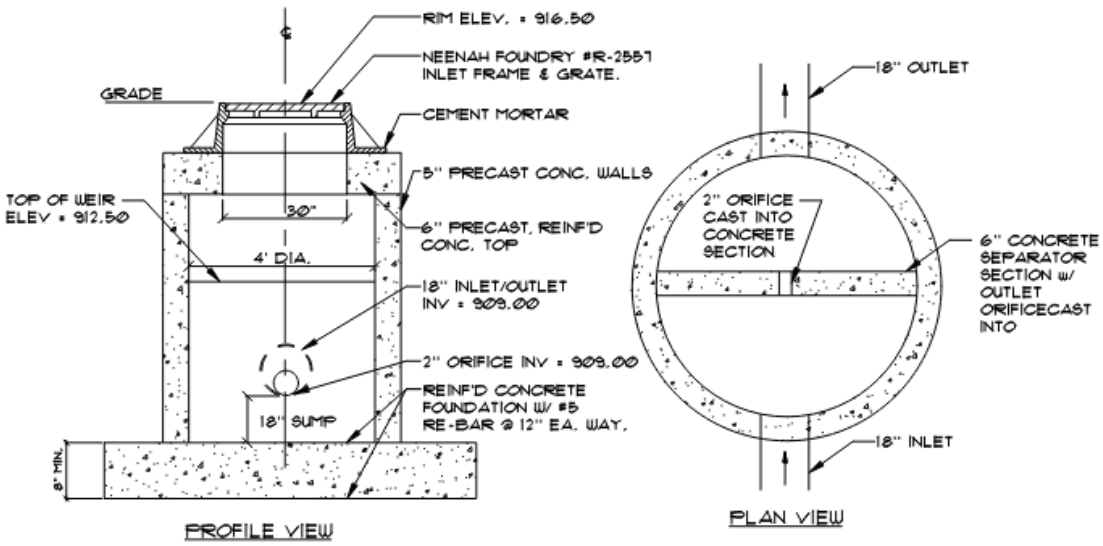
PLACE LINER IN 9" LIFTS, COMPACT TO 90% MODIFIED PROCTOR




**05** **OUTLET CONTROL STRUCTURE - SOUTH**
NTS

**Stormwater Basin South Summary:**

| Storm Event | Elevation | Release Rate (cfs) |
|---|---|---|
| **2-yr** | 911.17 | 0.15 |
| **10-yr** | 912.42 | 0.19 |
| **100-yr** | 913.35 | 10.05 |

**Overall On-Site Stormwater Volume Comparison Summary:**
The volumetric design procedure was used for this project to show the site meets the requirements of MMSD chapter 13. The volumetric design procedure analyzes the volume of water leaving the site for both the existing and proposed conditions. Based on MMSD chapter 13 requirements, the volume during the critical time period for the proposed conditions must be less than the volume for the critical time period under the existing condition.

This site is located in the Menomonee River watershed. The length of the critical time period for the Menomonee River Watershed is 9.5 hours. The critical time starts at 11.75 hours and ends at 21.15 hours.

The table below summarizes the volume from the study area under both the existing and proposed conditions and shows the volume under the proposed conditions is less than the existing conditions during the critical time period, meeting the requirements of MMSD chapter 13. Additional tables and hydrographs supporting this summary can be found in the ***Proposed Conditions*** section of the report.

| Storm Event | Existing Volume (ac-ft)* | Proposed Volume (ac-ft)* | % Volume Reduction (Proposed vs. Existing) |
|---|---|---|---|
| **2-yr** | 2.196 | 0.820 | 62.6 |
| **100-yr** | 9.065 | 5.803 | 35.9 |

*During the critical time period of 11.75 hours to 21.15 hours.

## Water Quality and Analysis

The proposed development was modeled using the water quality software WinSLAMM (Ver. 10.2.0). The Village of Germantown and the WDNR requires this new development site to provide an 80% TSS reduction for the whole disturbed site.

The stormwater basin has been modeled in WinSLAMM and show that the site exceeds the 80% requirements. See the **Water Quality** section for exhibits and calculations that demonstrate that the site meets the 80% reduction requirement.

## Erosion Control Plan

Approximately 28.155 acres of the existing site will be disturbed for this project. The Erosion Control Plan shows the methods and locations proposed to stabilize the site during and after the development project.

Prior to initiating construction onsite, the silt filter fence and the construction entrance tracking pad shall be installed in an effort to minimize sediment travelling offsite.

Construction activities shall be staged, as much as possible, to limit the combined disturbed area.

Upon completing the grading and swales, the erosion control matting shall be installed. Silt fencing shall be maintained throughout the construction process and repaired and replaced as needed.

Sediment tracking shall be minimized to the maximum extent practicable. Roadways are to be swept of debris at the end of each work day, as needed.

Disturbed areas shall be stabilized as soon as grading is completed. Restoration and seeding methods shall follow the landscaping plans and Town standards.

Dust control shall be maintained onsite with the use of a water truck if substantial dust becomes airborne.

During construction, the site shall be inspected by the contractor weekly and after every 0.5” or greater rainfall to evaluate the conditions of the erosion control practices and resolve any issues. The inspections shall be documented and maintained onsite and follow Wisconsin Department of Commerce Chapter Comm. 60.

After the site work has been substantially completed and the areas have become stabilized, the stormwater management basins, inlet and outlets, and outlet control structure shall be inspected and cleaned if necessary to remove all sediment deposits transported during construction. After all areas have been stabilized, the temporary erosion control methods should be removed permanently.

## Operation and Maintenance

Routine inspection and maintenance is required to maximize the long term water quantity and quality benefits provided by the stormwater management basins.

Culverts and inlets/outlets should be visually inspected after any large event and at a minimum of once per year. The outlet control structure should also be inspected after any large event, as well as, a minimum of twice per year (remove any debris that might create a blockage, including the grate on flared end section).

In regards to the stormwater management basins controlling weeds in areas within the basin, as well as, the side slopes is required throughout the life of the basin. Weed control should be accomplished through spot applications of herbicides only, not broadcast or sprayed. Herbicide applications should be performed by trained professionals with proper equipment and understanding of herbicide properties. A healthy stand of turf grass in areas above the basin serves as an additional sediment filter. Areas of bare soil shall be reseeded and mulched as needed. Tree seedlings within the areas upslope of the basin can be removed and/or controlled with a routine mowing schedule.

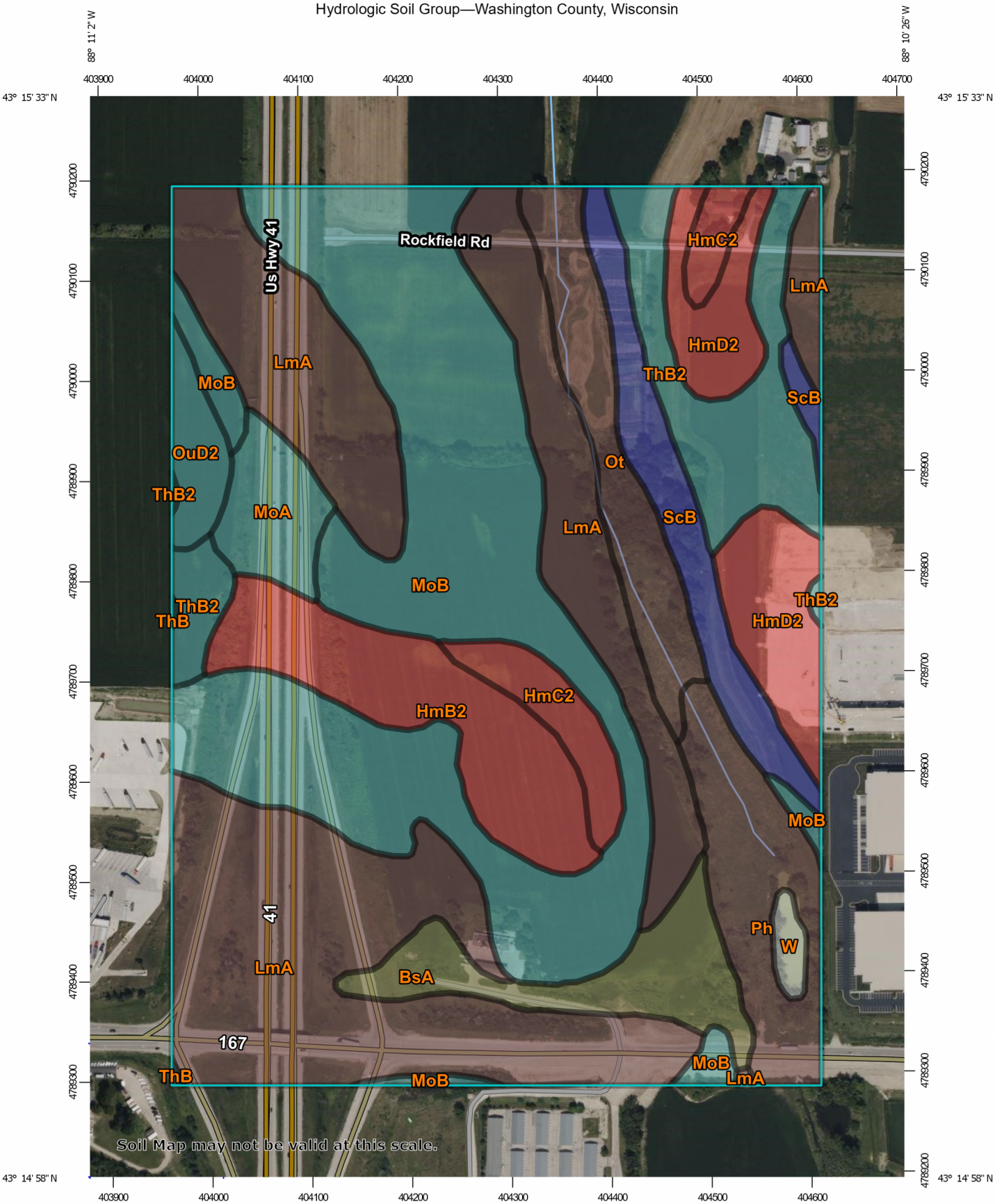
The basin area shall be routinely inspected for litter, floating debris, weeds and tree seedlings, and sediment build up. Sediment within the basin bottom shall be safely removed and disposed of on an as needed basis to maintain water quality functions.

A copy of inspections performed, as well as, any preventative and/or required maintenance shall be logged and kept on site or with the property owner.

## Conclusion

The proposed stormwater management features for the Green Bay Packaging Development has been designed to meet the requirements of the Village of Germantown, MMSD and Wisconsin Department of Natural Resources with respect to stormwater quantity, quality, and erosion control.

# Hydrologic Soil Group—Washington County, Wisconsin




Map Scale: 1:5,260 if printed on A portrait (8.5" x 11") sheet.

N

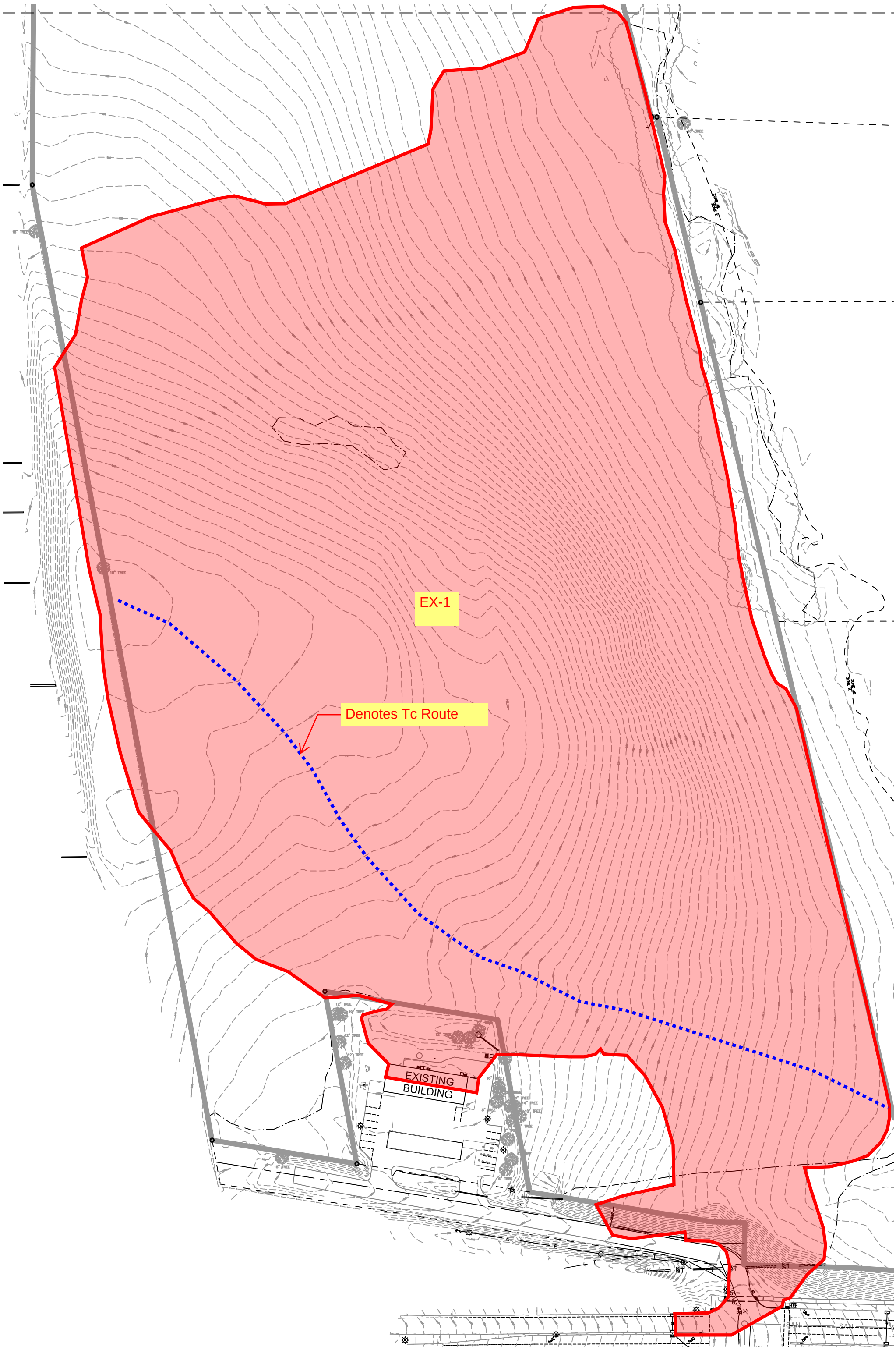
Meters: 0 50 100 200 300

Feet: 0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

# Hydrologic Soil Group

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|---|---|---|---|---|
| BsA | Brookston silt loam, 0 to 2 percent slopes | C/D | 6.1 | 4.2% |
| HmB2 | Hochheim loam, 2 to 6 percent slopes, eroded | D | 9.8 | 6.8% |
| HmC2 | Hochheim loam, 6 to 12 percent slopes, eroded | D | 3.9 | 2.7% |
| HmD2 | Hochheim loam, 12 to 20 percent slopes, eroded | D | 8.0 | 5.5% |
| LmA | Lamartine silt loam, 0 to 3 percent slopes | B/D | 43.0 | 29.7% |
| MoA | Mayville silt loam, 0 to 2 percent slopes | C | 3.5 | 2.4% |
| MoB | Mayville silt loam, 2 to 6 percent slopes | C | 37.2 | 25.7% |
| Ot | Otter silt loam | B/D | 6.9 | 4.8% |
| OuD2 | Ozaukee silt loam, high carbonate substratum, 12 to 20 percent slopes, eroded | C | 2.2 | 1.5% |
| Ph | Pella silt loam, 0 to 2 percent slopes | B/D | 7.5 | 5.2% |
| ScB | St. Charles silt loam, 2 to 6 percent slopes | B | 6.5 | 4.5% |
| ThB | Theresa silt loam, 2 to 6 percent slopes | C | 0.1 | 0.0% |
| ThB2 | Theresa silt loam, 2 to 6 percent slopes, eroded | C | 9.6 | 6.7% |
| W | Water | | 0.7 | 0.5% |
| **Totals for Area of Interest** | | | **145.0** | **100.0%** |




HARWOOD
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Green Bay Packaging
Existing HydroCAD Map

North

Scale: 1" = 120'

**State of Wisconsin**
**DEPARTMENT OF NATURAL RESOURCES**
**1027 W St Paul Ave**
**Milwaukee WI, WI, 53233**

**Tony Evers, Governor**
**Adam N. Payne, Secretary**
**Telephone 608-266-2621**
**Toll Free 1-888-936-7463**
**TTY Access via relay - 711**

April 3, 2023

Kristi Sherfinski, PLA
Helianthus LLC.
247 W. Freshwater Way #210
Milwaukee, WI 53204

Subject: 2023 Assured Wetland Delineator Confirmation

Dear Ms. Sherfinski:

This letter provides Wisconsin Department of Natural Resources (WDNR) confirmation for the wetland delineations you conduct during the 2023 growing season. You and your clients will not need to wait for the WDNR to review your wetland delineations before moving forward with project planning. This will help expedite the review process for WDNR's wetland regulatory program. Your name and contact information will continue to be listed on our website at: http://dnr.wi.gov/topic/wetlands/assurance.html.

In the instance where a municipality may require a letter of confirmation for your work prior to moving forward in the local regulatory process, this letter shall serve as that confirmation. Although your wetland delineations do not require WDNR field review, inclusion of a Wetland Delineation Report is required for projects needing State authorized wetland, waterway and/or storm water permit approvals.

To comply with Chapter 23.321, State Statutes, please supply the department with a polygon shapefile of the wetland boundaries delineated within the project area. Please do not include data such as parcel boundaries, project limits, wetland graphic representation symbols, etc. If internal upland polygons are found within a wetland polygon, then please label as UPLAND. The shapefile should utilize a State Plane Projection and be overlain onto recent aerial photography. If a different projection system is used, please indicate in which system the data are projected. In the correspondence sent with the shapefile, please supply a brief description of each wetland's plant community (eg: wet meadow, floodplain forest, etc.). Please send these data to Calvin Lawrence (608-266-0756 or email at calvin.lawrence@wisconsin.gov).

If you or any client has a question regarding your status in the Wetland Delineation Professional Assurance Program, contact me by email at kara.brooks@wisconsin.gov or phone at 414-308-6780. Thank you for all your hard work and best wishes for the upcoming field season.

Sincerely,

# WETLAND DELINEATION REPORT

## Green Bay Packaging

### Germantown, WI 53022

For

## Briohn Design Group, LLC

3885 N. Brookfield Road, Ste. 200

Brookfield, WI 53045

PROJECT #: 23-200

November 22, 2023

HELIANTHUS

1836 W. Fond Du Lac Ave., Suite 100
Milwaukee, Wisconsin – 53205

www.helianthusdesign.com

## INTRODUCTION

The subject site is comprised of three parcels in the Village of Germantown (GTNV-073933, GTNV-073994, and GTNV-073995) totaling 52.72 acres located east of Interstate 41 between Holy Hill Road and Rockfield Road. The parcels are located in Section 7, Township 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin. A map identifying the project location can be found in **FIGURE 1**. The closest waterbody to the site is an unnamed tributary to Little Cedar Creek which runs along the east side of the parcels.

The predominant land cover for this property is agricultural land and wetlands. The purpose of the wetland delineation was to identify the existing wetlands on the property and to create a map of their boundaries. A map of the surveyed wetland boundary is found in **FIGURE 9**.

Kristi Sherfinski of HELIANTHUS conducted the wetland delineation field work on October 2 and 5, 2023. Field conditions on those days were sunny with air temperatures in the 60s-70s (°F). Growing season conditions as defined in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (2010) and Northcentral and Northeast Region (2012) were documented at the site prior to beginning the delineation. Soil temperatures must be at or above 41°F at depth of 12 inches and/or at least two plant species must be emerging or breaking bud. Green and growing species included reed canary grass, tall goldenrod, and Queen Anne's lace.

Kristi Sherfinski is certified as an Assured Wetland Delineator with the Wisconsin Department of Natural Resources (WIDNR). She has over 20 years of experience delineating wetlands in the Great Lakes Region. She received her initial basic wetland training at the Wetland Training Institute in Hastings, Michigan in 2002. Kristi worked as a project manager and wetland delineator at JFNew & Associates in Grand Haven, Michigan for six years, conducting wetland delineations in Michigan, Indiana, Illinois, and Wisconsin. Kristi then moved to Wisconsin to work for the Southeastern Wisconsin Regional Planning Commission (SEWRPC) with Dr. Donald Reed. At SEWRPC, Kristi updated the Wisconsin Wetland Inventory (WWI) in 2005 and in 2010 for the seven-county area of southeast Wisconsin. Kristi participated in the Advanced Wetland Delineation training in 2006. In 2009, she attended the Wetland Delineation USACE Regional Supplement training session, the Environmental Corridor Delineation Workshop, and the Farm Service Agency (FSA) Slide Review training session. After working at SEWRPC for seven years, Kristi worked as an environmental specialist at JSD Professional Services, Inc. for two years, before she started her own business—HELIANTHUS.

## METHODS

The process of wetland delineation involves collecting information about the soils, vegetation, and hydrology of a site in order to determine where the wetland boundary is located. The methodology used to conduct the delineation followed the US Army Corps of Engineers Wetlands Delineation Manual (1987), and the appropriate Regional Supplement to the Corps of

Engineers Wetland Delineation Manual. In general, in southeastern and western Wisconsin, the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0, August, 2010) is used. The remaining portions of the state follow the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0, January, 2012). At this site, the Northcentral and Northeast Regional Supplement was used.

Prior to the site visit, several sources of data are consulted to reveal information that will aid in locating the wetlands on the site. The sources reviewed include weather records to determine antecedent hydrologic conditions, the Wisconsin Wetland Inventory (WWI) map, the soil survey map, a topographic map, and historic aerial photographs of the project area. In areas that are under active cultivation as farmland, a Farm Service Agency (FSA) Slide Review is also conducted.

Data sample points are chosen based on the potential wetland areas identified by reviewing the above-referenced sources, and other sample points are added based on information gathered while in the field. Sample points are chosen on either side of the wetland line for their ability to reveal information about the actual location of the line, and upland reference data samples are chosen in order to show the contrast between wetland and upland field conditions.

Once a data sample point is chosen and located in the field, data is collected on the vegetation, the hydrology, and the soils of the site. Vegetation is identified by strata (tree, shrub, herbaceous, and vine layers), and an aerial coverage percent is determined for each species by layer. The plot size for the tree, shrub, and vine layers is a 30-foot radius circle, and the plot size for the herbaceous layer is a 5-foot radius circle. The scientific names and wetland status of each plant species follows the National Wetland Plant List (2020). Once all species have been assigned a cover percentage, the dominance by wetland indicator plant species is assessed.

Hydrological indicators, as described in the Regional Supplements, are then listed for the sample point. A soil pit is excavated to required depths and the depth of water, saturation, and the water table is recorded. The soil profile at the sample point is also described, using the Munsell Soil-Color Charts (2009) to assess the color of the soil, and a texture analysis to determine the predominant texture of each soil layer. This data is used to determine if the soil profile meets the hydric soil indicators as defined in the Regional Supplements and the Field Guide for Identifying Hydric Soils V. 8.2 (USDA, 2018).

Once the location of the wetland line is determined from the data sampling effort, the edge of the wetland is flagged in the field and then surveyed in order to produce a map of the wetland that occurs on the subject property. Representative photographs of the sample points and of each wetland area were taken during the field visit. Any ditch, stream, pond or other water body that may be considered a Water of the U.S. and thus regulated by the U.S. Army Corps of Engineers (USACE) or the Wisconsin Department of Natural Resources (WDNR) is also identified.

## RESULTS AND DISCUSSION

### Antecedent Hydrologic Condition Analysis

Weather records were consulted from the Germantown Wastewater Utility weather station to determine if precipitation levels were normal for the three months prior to the site visit. The antecedent hydrologic condition analysis for the site revealed that climatic conditions near the site were normal at the time of the site visit (**Table 1**). Drier than normal conditions means that hydrologic indicators may be absent from the wetland sample points and the data must be interpreted accordingly. Wetter than normal conditions must be accounted for when interpreting the data because saturation or the water table may be higher than it is during normal conditions, giving false positives for hydrological indicators.

Table 1 – Antecedent Hydrologic Condition Analysis

| Month | 3 yrs in 10 Less Than (inches) | 3 yrs in 10 More Than (inches) | Rain Fall (inches) | Condition Dry, Wet, Normal | Condition Value | Month Weight Value | Product of Previous Two Columns |
|---|---|---|---|---|---|---|---|
| September | 1.89 | 3.91 | 3.32 | Normal | 2 | 3 | 6 |
| August | 2.64 | 4.61 | 4.34 | Normal | 2 | 2 | 4 |
| July | 2.75 | 4.57 | 3.72 | Normal | 2 | 1 | 2 |
| | | | | | | Sum | 12 |
| If sum is: | | | | | | | |
| 6-9 | Then prior period has been drier than normal | | | | | | |
| 10-14 | Then prior period has been normal | | | | | | |
| 15-18 | Then prior period has been wetter than normal | | | | | | |
| | | | | | | | |
| Conclusions: | A sum of 12 shows the prior period to the site visit to be normal. | | | | | | |

Note: Average rainfall data based on the years 1990-2020.

### Review of Existing Data Sources

Existing data sources were reviewed to aid in the identification of wetland areas in the field.

The topographic map (**FIGURE 2**) shows that the parcels slope steeply from west to east, from a high point of 748 feet in elevation above Mean Sea Level on top of a ridge at the western boundary and dropping about 45 feet to a creek feature near the eastern boundary of the parcels. The creek drops from 900 feet at its south end to 888 feet at the north end of the project area.

The soil survey map shows ten soil types within the project boundary. The Otter and Pella silt loams are Hydric and Predominantly Hydric and occur near the creek on the east side (**FIGURE 3 & FIGURE 4**). The Brookston, Lamartine, and St. Charles silt loams are Predominantly non-Hydric but may contain hydric soils in drainageways or depressions. These soils are located near the creek and along the south side of the project area. All of the soil types occurring on the property are listed in **Table 2**.

Table 2 – Soil Types

| Map Symbol | Map Unit Name | Hydric Soil Type |
|---|---|---|
| BsA | Brookston silt loam, 0-2% | Predominantly Non-hydric |
| HmB2 | Hochheim loam, 2-6%, eroded | Non-hydric |
| HmC2 | Hochheim loam, 6-12%, eroded | Non-hydric |
| LmA | Larmartine silt loam, 0-3% | Predominantly Non-hydric |
| MoA | Mayville silt loam, 0-2% | Non-hydric |
| MoB | Mayville silt loam, 2-6% | Non-hydric |
| Ot | Otter silt loam | Hydric |
| Ph | Pella silt loam | Predominantly Hydric |
| ScB | St. Charles silt loam, 2-6% | Predominantly Non-hydric |
| ThB2 | Theresa silt loam, 2-6%, eroded | Non-hydric |

The Wisconsin Wetland Inventory identifies several wetlands within the project area (**FIGURE 5**). One is a E2K, emergent, wetland in the southeast corner of the property. The other areas are an E2Kg, grazed emergent, wetland, a T3/E2K, forested/emergent, wetland, and another E2K wetland in order from north to south along the creek.

Historic aerial photographs revealed that the subject property was either farmed or pasture since before 1941 (**FIGURE 6**). Interstate 41 was built sometime around 1963. Since then, the farm fields became consolidated into larger fields and the area around the creek was no longer used as pasture. The land to the east of the project area started to become developed for industrial buildings around 2020.

Because agricultural fields are part of the project area, a Farm Service Agency (FSA) Slide Review was conducted to identify the potential for the presence of farmed wetlands (**FIGURE 7**). We investigated five areas that showed possible wet signatures over 12 years. Area A is located to the east of the creek and in the north parcel. It showed signs of an altered pattern or wetland signature in 42% of the years reviewed. Area B was located in the northwest corner of the middle parcel and showed signs of crop stress or drowned out conditions in 50% of years reviewed. Area C was located in the middle of the middle parcel and showed soil moisture, crop stress, or drowned out conditions in 83% of years reviewed. Area D is located in the southwest corner of the south parcel and showed signs of soil moisture or drowned out conditions in 58% of years. Finally, Area E is located in the southeast corner of the south parcel and showed wetland signatures or soil moisture in 42% of years.

Wetlands Identified During the Site Visit

A total of five wetlands were identified on the property during the field visit. Site photos of the different wetlands are included in **FIGURE 8.** The acreages and types of wetlands that were identified and flagged in the project are shown in **FIGURE 9**. Field data sheets are included in **FIGURE 10**. A description of the wetland areas follows.

### *Wetlands 1 & 2*

This wetland is a single wetland associated with the small creek that flows from south to north to the east of and within the project area. Wetlands 1 and 2 are the two pieces of the wetland that cross over onto the parcel. The wetland was sampled in three locations along its length.

The first sample transect was taken in the north parcel in Wetland 1, with sample point #13 to the west of the wetland, #14 and #19 in the wetland, and #20 to the east of the wetland and in Area A from the FSA slide review. There was 100% soybean crop cover in #13 and no agricultural weeds present. The soils were non-hydric and wetland hydrology was absent. The dominant species in #14 in the wetland was reed canary grass and in #19 was tussock sedge. The soils in both samples met the hydric criteria for F6. Redox Dark Surface. Wetland hydrology indicators included Drainage Patterns, Geomorphic Position, and FAC-Neutral Test, and Saturation in #19 only. Sample point #20 was taken upslope of the creek in an area that had been planted as a vegetable garden, with a dominant weed species of giant foxtail among planted cucumber, corn, pepper, and broccoli. Area A showed the wetness signature of Altered Patterns in 42% of years reviewed. However, it was clear from the field visit that these altered patterns were due to the different patterns created by the vegetable garden rather than due to wet conditions. Soils were non-hydric and this area was non-wetland.

Data points #15 and 16 were taken in the middle parcel in the area mapped as forested/emergent wetland in the vicinity of Wetland 2. The dominant plant species in #15 were American elm, Eastern cottonwood, American basswood, hybrid honeysuckle, common buckthorn, reed canary grass, and jewelweed. The soils met the hydric soil criteria for F6. Redox Dark Surface. Signs of wetland hydrology included Saturation, Drainage Patterns, Dry-Season Water Table, Geomorphic Position, and FAC-Neutral Test. #16 was taken in disturbed woods on a hillslope and the dominant species were American basswood, American elm, common buckthorn, and Virginia creeper. However, the soils were non-hydric and wetland indicators were absent.

Data points #17 and 18 were taken near the south parcel in an area mapped as E2K. This area was located off property but the wetland boundary was flagged because the property boundary was not staked in the field and it was unclear where the exact boundary was when the field work took place. The dominant species in #17 were American basswood, nannyberry, reed canary grass, and riverbank grape. Soils met the hydric soils criteria for F6. Redox Dark Surface. Signs of wetland hydrology included Saturation, Drainage Patterns, Dry-Season Water Table, and Geomorphic Position. #18 was taken in disturbed woods on a hillslope and the dominant species were American basswood, prickly ash, common buckthorn, common violet, Bland sedge,

riverbank grape and Virginia creeper. However, the soils were non-hydric and wetland indicators were absent.

*Wetland 3*

This wetland is a farmed wetland area that is present because of a hillside seep of groundwater in a slightly concave area on the hillslope. Even though the soybean crop was doing well, the soils had strong hydric soil characteristics and the agricultural weed that was present was chuffa, which is a FACW wetland plant species. This data point (#4) also coincided with Area C from the FSA slide review, which showed consistent wetland signatures or drowning out in 83% of the years reviewed. The soils met the hydric soils criteria for A11. Depleted Below Dark Surface, F3. Depleted Matrix, and F6. Redox Dark Surface. The wetland hydrology indicators included Saturation Visible on Aerial Imagery, Geomorphic Position, and FAC-Neutral Test. The corresponding upland data point (#5) was taken upslope of the wetland in an area of 100% soybean crop with no dominance of agricultural weeds. The soils were non-hydric and wetland hydrology indicators were absent.

*Wetland 4*

This wetland is a scrub-shrub/emergent wetland located on a hillslope. The source of water is likely a hillside seep. This area corresponded to Area E in the FSA slide review, which showed wetness signatures in 42% of years reviewed. The soils were saturated at the surface and the water table was at 20 inches below the soil surface. The dominant species (#8) were sandbar willow, red-osier dogwood, narrow-leaf cattail, and reed canary grass. The hydric soils criteria for F6. Redox Dark Surface was met. Wetland hydrology included Saturation, Dry-Season Water Table, and FAC-Neutral Test. The upland data point #9 was taken on a hillslope of 100% soybean crop with few agricultural weeds present. The soils were non-hydric and hydrology indicators were absent.

This wetland connected to the creek to the east via a small swale which continues off the property. A data sample was taken in the swale to verify the presence of wetland (#10). The dominant species were chuffa and reed canary grass. Soils met the hydric soils criteria for F6. Redox Dark Surface. Signs of hydrology included Drainage Patterns, Geomorphic Position, and FAC-Neutral Test. An upland data point (#11) was taken on a small hillslope in 100% soybean crop to the south of the swale. The dominant weed species present was Canada thistle. The soils were non-hydric and there were no signs of hydrology.

*Wetland 5*

This wetland is a farmed wetland located to the west of the gas station in Area D from the FSA slide review, which shows wetness signatures in 58% of years reviewed. The soybean plants were sparse (#6) and the dominant weed species was chuffa. The dominant species at the edge of the farm field were reed canary grass and cattails. Soils met the hydric soils criteria for A12. Thick Dark Surface. The signs of wetland hydrology included Surface Soil Cracks, Drainage Patterns, Saturation Visible on Aerial Imagery, and FAC-Neutral Test. The upland data point #7 was taken on a hillslope about two feet in elevation above #6. The dominant weed was redroot

amaranth and the soybean crop was healthy. The soils met the hydric soils criteria for A11. Depleted Below Dark Surface. No signs of wetland hydrology were present.

*Upland Data Points*

Additional upland data points were sampled to verify lack of wetland elsewhere within the area of investigation.

Data point #1 was taken in a slight swale on a hillslope in Area B from the FSA slide review. Area B showed wetness signatures in 50% of years reviewed. The dominant weed species were white goosefoot and tansy. The soy crop had some gaps in it because this area is an area where the farm equipment pivoted to turn the corner in the field. Soils met the hydric soils criteria for A11. Depleted Below Dark Surface. The only sign of wetland hydrology was the one secondary indicator for Geomorphic Position. Because of this and the fact that the vegetation was not hydrophytic, this area was determined to be non-wetland.

Data point #2 was taken on a hillslope near a wooded fencerow where there was a slight berm. The vegetation met the Dominance test, but did not meet the FAC-Neutral Test. The dominant species were bur oak, box elder, common buckthorn, reed canary grass, tall goldenrod, and riverbank grape. The soils were non-hydric and no hydrology indicators were found.

Data point #3 was taken in a drainage swale on the north side of the wooded fencerow. However, the swale runs down a 4% hillslope, so water does not collect long enough to form wetland conditions. The dominant species were black raspberry, hybrid honeysuckle, and burdock. The soils were a non-hydric mineral soil layer over rock fill at 5 inches below the ground surface. Signs of wetland hydrology included Drainage Patterns and Geomorphic Position. However, only one of the three wetland indicators was present so this area was non-wetland.

Data point #12 was taken on a concave hillslope in an area that was 100% in soybean crop. There were no weed species present. The soils were non-hydric and rocky, with pieces of disintegrating dolomite present in the bottom of the soil pit. The only sign of wetland hydrology was Geomorphic Position. Therefore, this area was non-wetland.

## CONCLUSION

HELIANTHUS LLC identified wetlands on the project site on October 2 and 5, 2023, using the standard practices described in this report and their best professional judgment. 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 the 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 Ms. Sherfinski, an Assured Wetland Delineator, obtaining a concurrence letter

from the Wisconsin Department of Natural Resources is not necessary. It should be noted that all reports conducted by an Assured Delineator are required to be submitted to WDNR for their records, and may be subject to their review as part of an annual review process. Concurrence with these wetland lines by the U.S. Army Corps of Engineers, however, is not required. If a permit is applied for, the USACOE will review the wetland delineation report during the permit application process.

In addition, because a wetland delineation is considered to be a point in time determination, wetland delineations are considered to be valid for a period of only five years for federal wetlands and 15 years for nonfederal wetlands. Permit applications may be submitted at the federal and state levels after a delineation is completed, with the request to review the delineation report and make a determination as to which, if any, wetlands on the site are nonfederal wetlands. Weather patterns and site conditions can change over time, making a new delineation necessary.

Other environmental considerations include threatened or endangered species. It is recommended that an Endangered Resources (ER) Review request be submitted to the WDNR prior to pursuing any permits for proposed work.

Any impact, alteration, or fill to either the wetland areas or to waterways that are considered Waters of the U.S. are subject to state and federal regulations and permits may be required. The WDNR administers Chapters 30 and 281 of the Wisconsin State Statues, and the USACE administers Section 404 of the Clean Water Act. Additional county, city or village ordinances may also apply to wetlands or waterways. If any disturbance occurs on the property without obtaining wetland delineation concurrence or authorization from the USACE and WDNR, it should be considered at the owner's own risk and HELIANTHUS LLC shall not be considered responsible or liable for any resulting damages.

## REFERENCES

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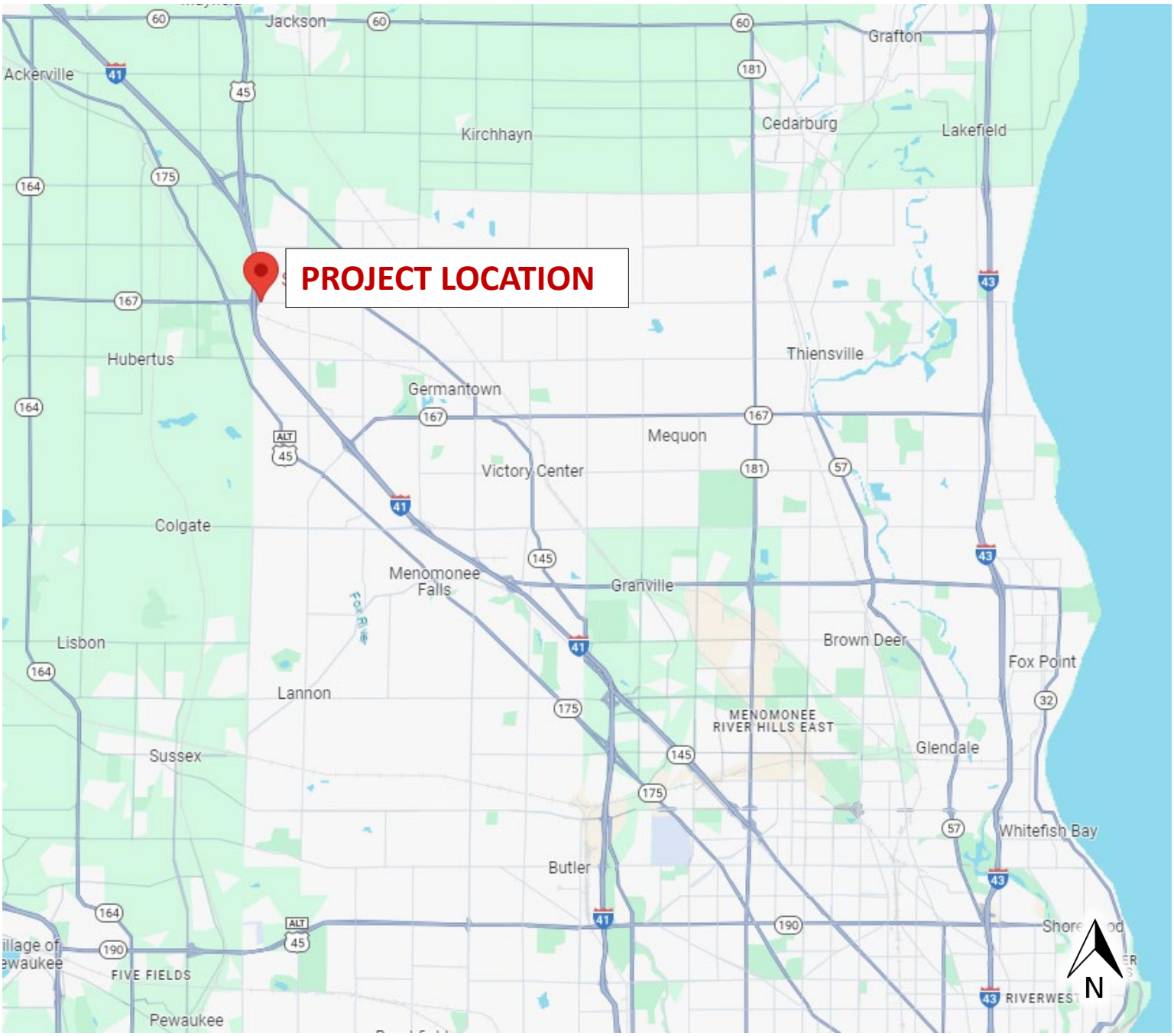
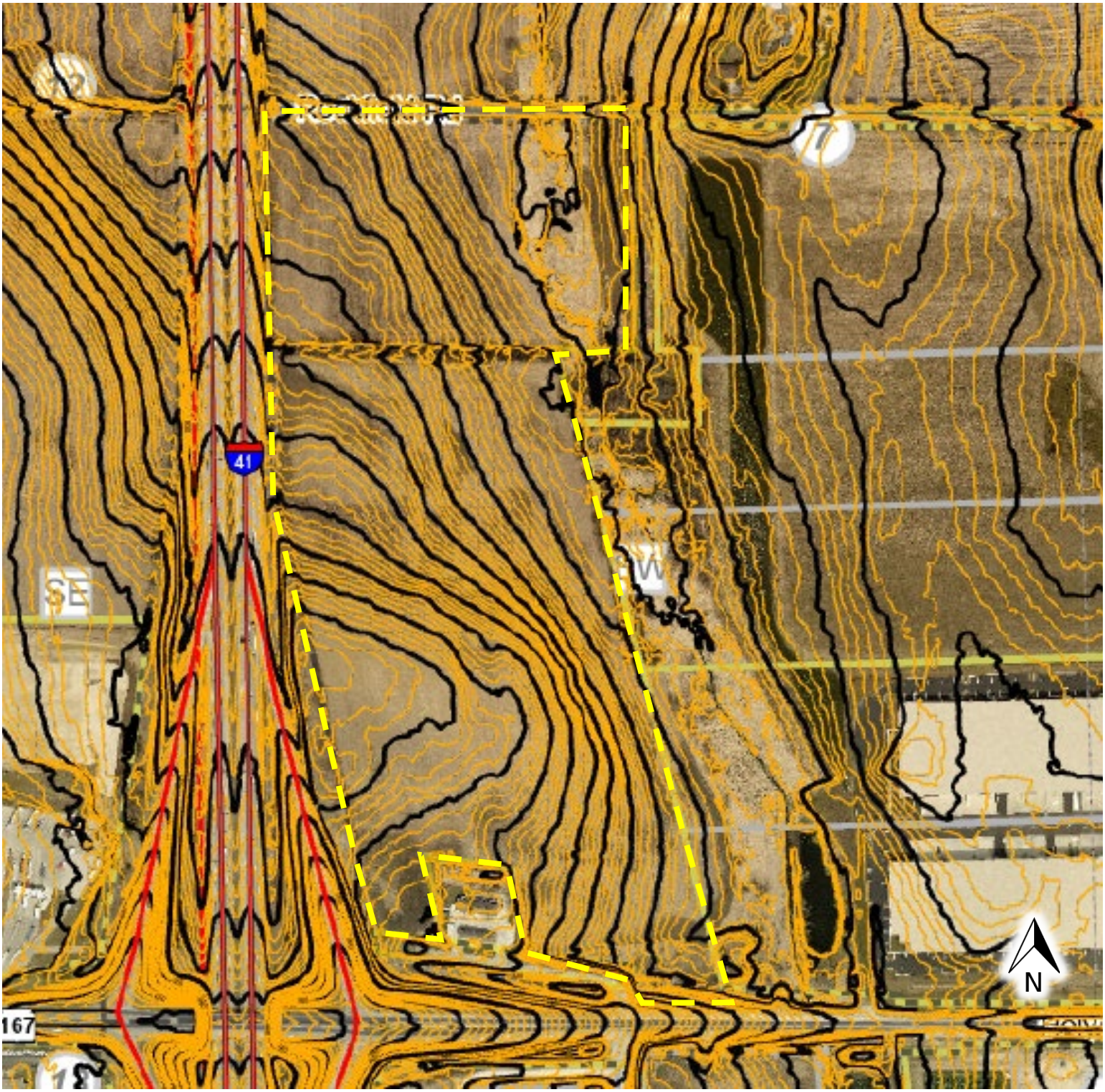



2 MI

FIGURE 1. LOCATION MAP

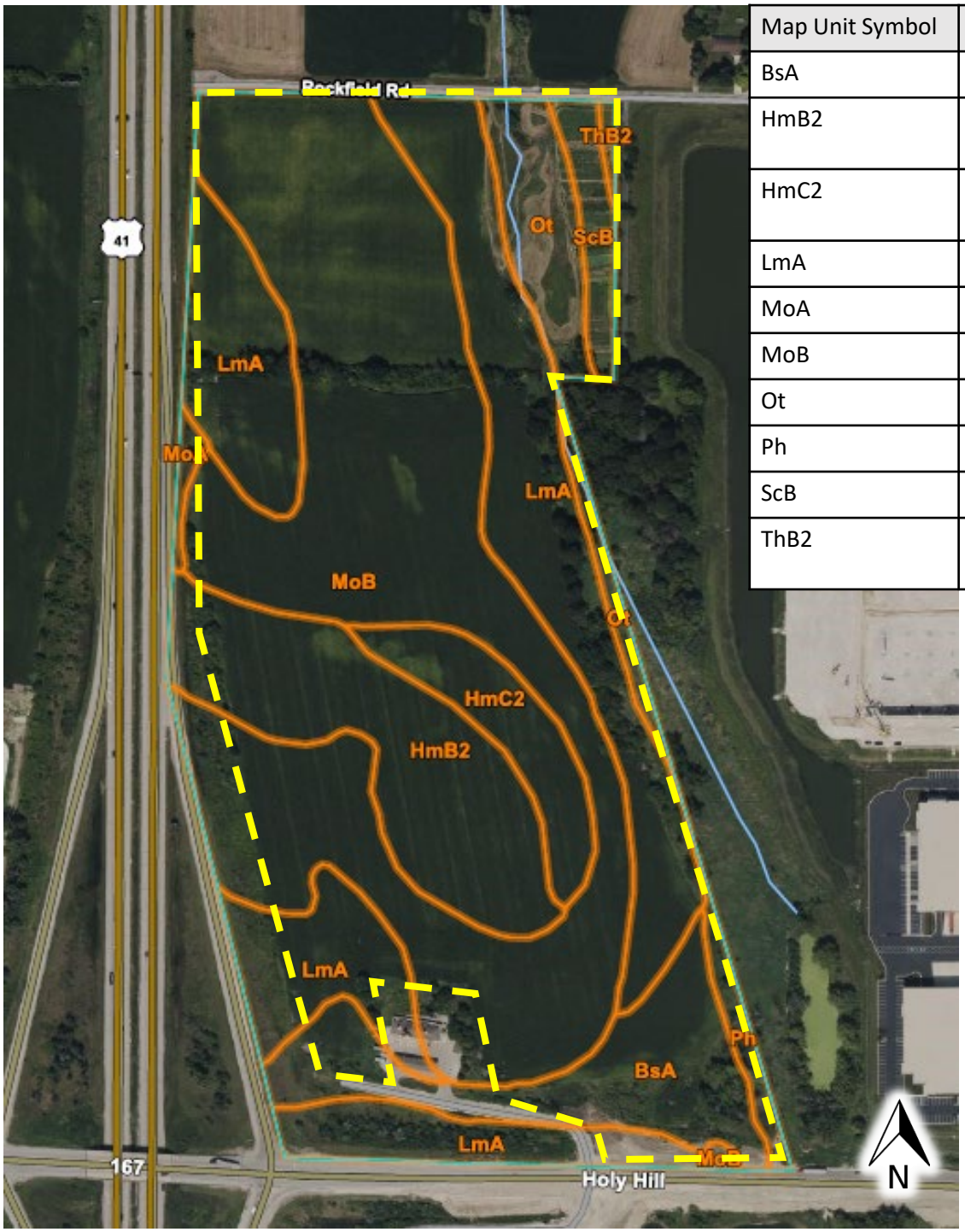
Source: Google Maps, 2023




500 FT

FIGURE 2. TOPOGRAPHIC MAP

Source: Washington County GIS, 2023

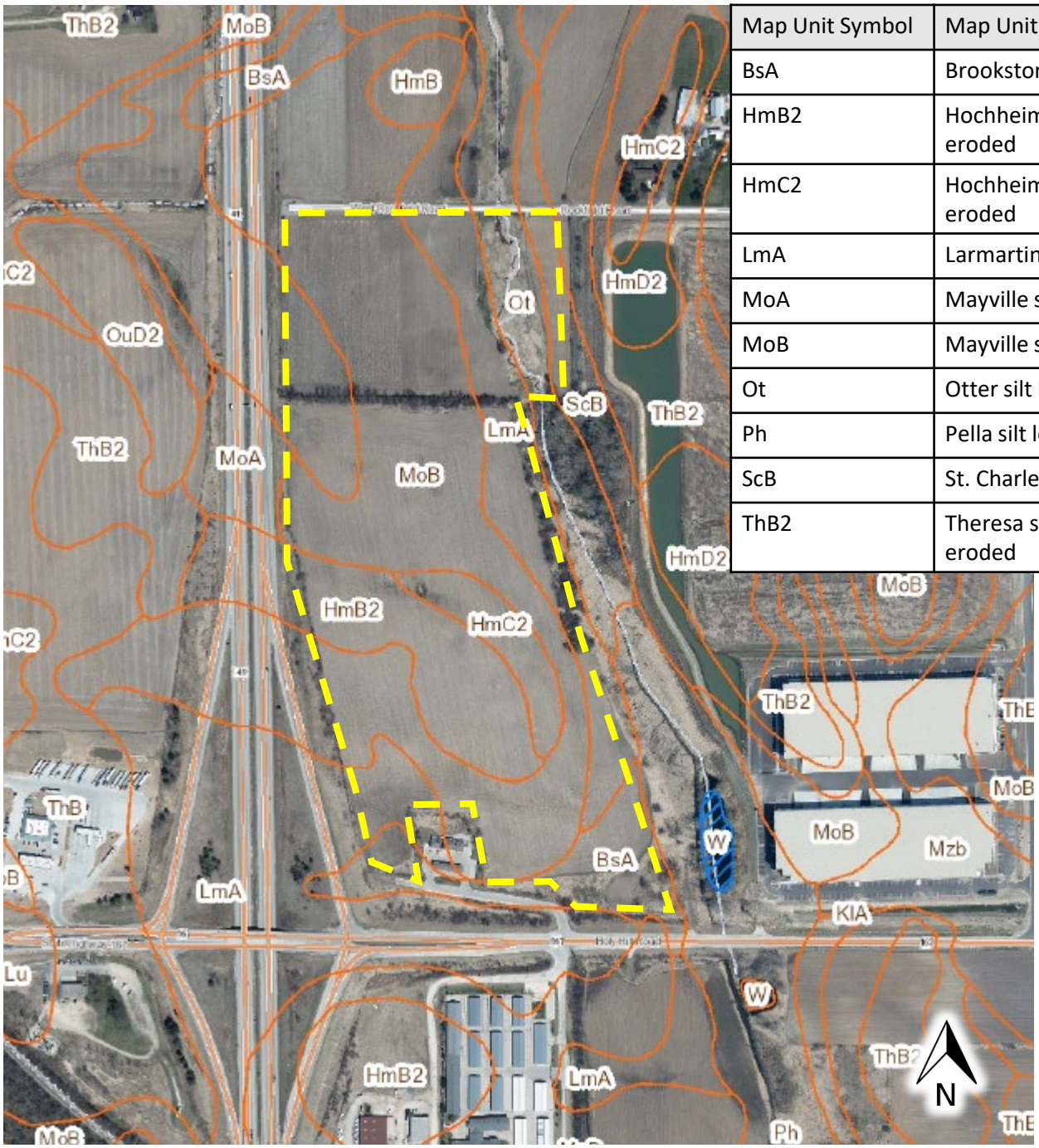



| Map Unit Symbol | Map Unit Name |
|---|---|
| BsA | Brookston silt loam, 0-2% |
| HmB2 | Hochheim loam, 2-6%, eroded |
| HmC2 | Hochheim loam, 6-12%, eroded |
| LmA | Larmartine silt loam, 0-3% |
| MoA | Mayville silt loam, 0-2% |
| MoB | Mayville silt loam, 2-6% |
| Ot | Otter silt loam |
| Ph | Pella silt loam |
| ScB | St. Charles silt loam, 2-6% |
| ThB2 | Theresa silt loam, 2-6%, eroded |

**500 FT**

FIGURE 3. SOIL SURVEY MAP

Source: Web Soil Survey, 2023

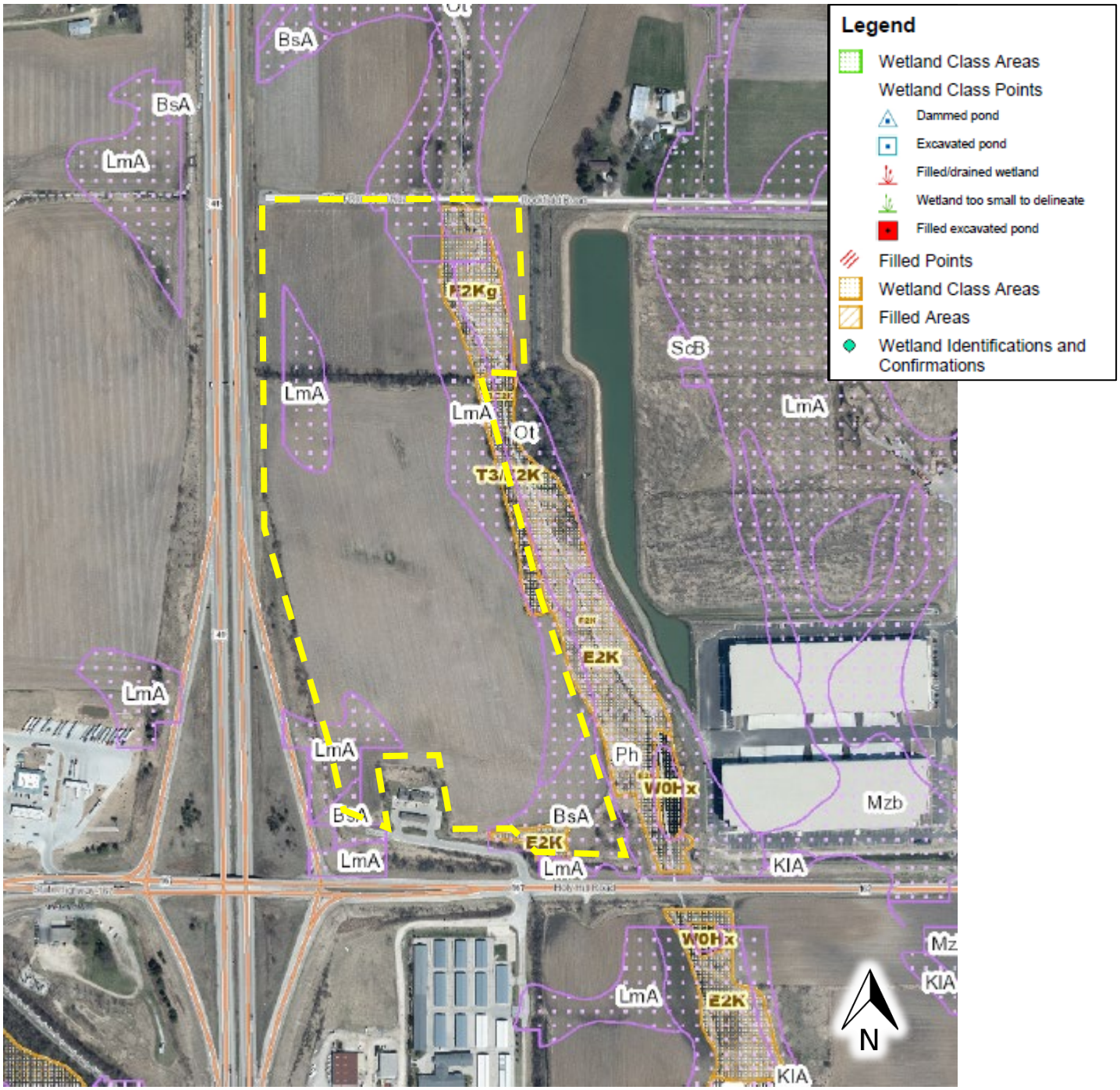



| Map Unit Symbol | Map Unit Name |
|---|---|
| BsA | Brookston silt loam, 0-2% |
| HmB2 | Hochheim loam, 2-6%, eroded |
| HmC2 | Hochheim loam, 6-12%, eroded |
| LmA | Larmartine silt loam, 0-3% |
| MoA | Mayville silt loam, 0-2% |
| MoB | Mayville silt loam, 2-6% |
| Ot | Otter silt loam |
| Ph | Pella silt loam |
| ScB | St. Charles silt loam, 2-6% |
| ThB2 | Theresa silt loam, 2-6%, eroded |

**300 FT**

FIGURE 4. NRCS WISCONSIN SOILS MAP

Source: WIDNR Surface Water Data Viewer, 2023




**300 FT**

FIGURE 5. WWI MAP

Source: WIDNR Surface Water Data Viewer, 2023

1941.

1951.

FIGURE 6. HISTORIC AERIAL PHOTOS

Source: Washington County GIS, 2023

1963.

1970.

FIGURE 6. HISTORIC AERIAL PHOTOS

Source: Washington County GIS, 2023

1980.

1990.

FIGURE 6. HISTORIC AERIAL PHOTOS

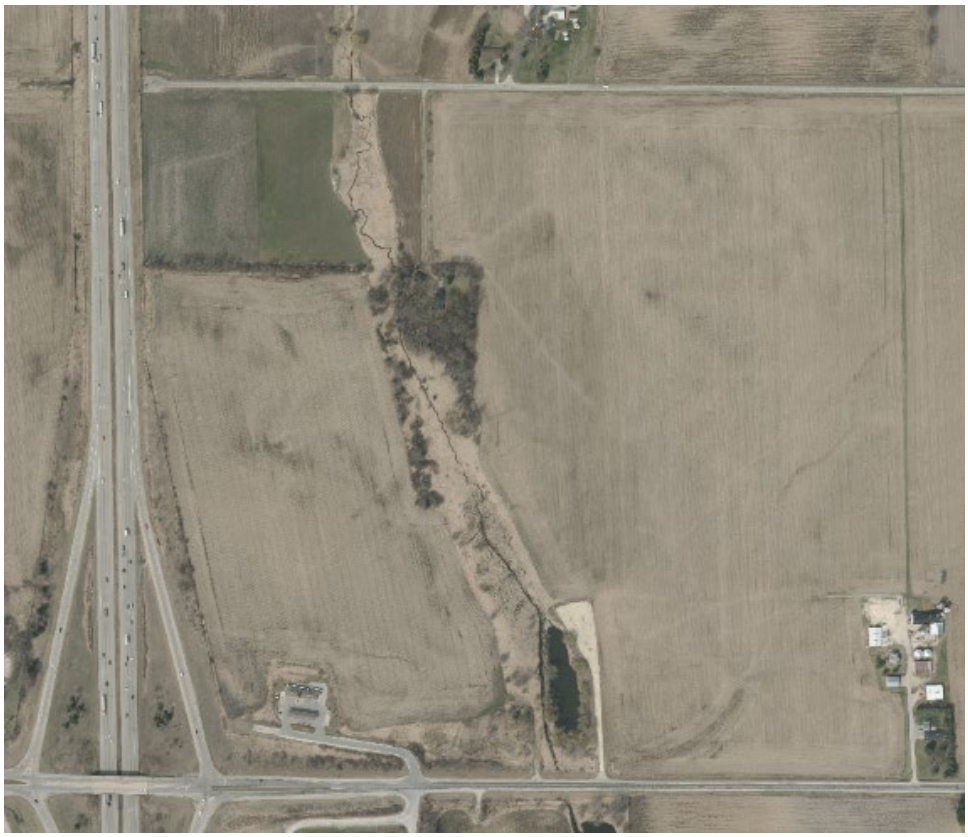
Source: Washington County GIS, 2023

2000.

2005.

FIGURE 6. HISTORIC AERIAL PHOTOS

Source: Washington County GIS, 2023



2013.

2022.

FIGURE 6. HISTORIC AERIAL PHOTOS

Source: Washington County GIS, 2023

FIGURE 7. FSA SLIDES-KEY TO AREAS

Source: SWDV Leaf-Off, 2023