

SITE PLAN REVIEW

9/13/21 Plan Commission Meeting

DJN Family Partnership / Enercon Industries Corporation

Village Planner Report

Germantown, Wisconsin

Summary

Eric Neuman, MSI General Corp, agent for DJN Family Partnership, property owner, and Enercon Industries Corporation is requesting approval of site development & building plans for Phase 1 of a 57,057 sqft building and parking lot expansion for the existing Enercon facility located at N120 W19349 Freistadt Road in the Germantown Industrial Park.

Property Location: N120 W19349 Freistadt Road

Applicant/

Property Owner:

Eric Neuman	DJN Family Partnership
MSI General Corp	494 Hunters Trail
Oconomowoc, WI	Colgate, WI

Current Zoning: M-1: Limited Industrial

Adjacent Land Uses		Zoning
North	Industrial	M-1
South	Industrial	M-1
East	Industrial	M-1
West	Industrial	M-1



Background/Proposal

Eric Neuman, MSI General Corp, agent for DJN Family Partnership, property owner, and Enercon Industries Corporation is requesting approval of site development & building plans for Phase 1 of a 57,057 sqft building and parking lot expansion for the existing Enercon facility located at N120 W19349 Freistadt Road in the Germantown Industrial Park.

Recently, Enercon Industries and MGS Automation (property to the south) agreed to relocate their common property line approximately 150' to the south to increase the total land area of the Enercon parcel from 4.18 to 5.96 acres. The purpose for the land area expansion was to create space for the 57,057 sqft building expansion of the Enercon Industries facility and relocation of their corporate headquarters to this site.

Enercon Industries Corporation is an international company based in Wisconsin that manufactures induction cap sealers providing tamper evidence, preventing leaks and preserving freshness with hermetic seals for packagers of food, beverage, pharmaceuticals, health & beauty products, chemicals & petroleum packages. Enercon also manufactures plasma surface treatment equipment, flame treaters & corona surface treaters that clean, etch & functionalize surfaces for a variety of ink, printing, coating, laminating, painting, adhesive & bonding applications for plastics, polymers, films, foils and metals. *[for more information visit their website: www.enerconind.com/index.aspx]*

As presented in the application materials, the proposed expansion will occur in two distinct phases: Phase 1 (fall 2021) includes site grading and stormwater management improvements along with construction of new parking areas on the north and south sides of the site. Phase 2 (spring 2022) will include construction of the 52,955 sqft building addition along with final grading and landscaping.

Parking, Access & traffic Circulation

Access will continue to be provided to/from McCormick Drive by two (2) driveways: the existing northernmost driveway will remain as is but will serve a larger paved parking area with curb & gutter and 70 parking stalls (vs. 5 existing stalls) for employee/visitor parking and access to the loading dock area that will be re-located to the building addition. The southernmost driveway on McCormick Drive will be relocated further south to serve a new paved parking area with 67 parking stalls (14 additional future stalls) serving employee parking and accessibility around the entire building. A total of 137 parking stalls will be provided on-site (vs. 134 recommended parking stalls).

Storm Water Management

Between the proposed building and parking lot expansion impervious area will increase to a total of 151,797 sqft or 58.5 percent of this 5.96-acre site (vs. the 80% maximum allowed) leaving 41.5 percent in green/open space. Storm water run-off from the proposed building and parking lot expansion will be conveyed via storm sewer to the existing regional storm water basin located to the east (the "Wago" pond).

Utilities

Existing public water and sanitary sewer will continue to serve the existing building via connections to the service lines from the McCormick Drive right-of-way. Additional water and sewer connections may be added as part of the actual building construction proposed in Phase 2.

Landscaping

There is a significant amount of existing landscape with most plantings to remain. Some existing trees and shrubs will be removed near the existing southernmost driveway that will be relocated further south along McCormick Drive. Also, the existing wooded area south of the existing building will be impacted by the building addition and parking expansion along the south property line. Additional landscaping will be required around the new parking areas, driveways and building addition; however, detailed landscaping plans will not be submitted until final details regarding the actual building are presented as part of Phase 2.

Lighting

New exterior lighting includes a total of six (6) pole-mounted fixtures in the north side parking area:

- (3) 70W 9200 Lumen LED pole-mounted fixtures at a height of 23' in the north parking lot median
- (3) 50W 6800 Lumen LED pole-mounted fixtures at a height of 23' north of the existing building

Staff Comments

Planning & Zoning

The proposed 30'x 70' concrete patio on the west side of the building addition is shown at a point approximately 3'-5' from the property/right-of-way line. Notes indicate that a retaining wall will also be installed for the patio. Please be advised that the minimum setback requirement for retaining walls from any property line is a distance equal to the height of the wall. Further, staff will likely be looking for some sort of landscaped buffer between the property line and patio.

Because the proposed expansion includes cutting/filling, grading and expanding the Village's regional stormwater basin onto the Enercon property, it would be prudent for both the property owner and the Village to establish a public drainage easement around those areas of the basin that are/will be expanded onto the Enercon property. A related maintenance agreement for the stormwater basin should also be recorded.

Issues that may have been raised by staff if a complete set of site & building plans had been submitted may come up when the Phase 2 portion of the project and additional plans are submitted for review. Staff retains the right to raise any such issues to be addressed as part of the Phase 2 plan review/approval process.

Fire Department/Police Department

No comment.

Building 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.

Village Forester

No comment.

Public Works Department/Village Engineer

The Public Works Department has identified issues and several minor plan revisions and technical corrections in an August 25, 2021 review memo from the Director of Public Works (copy attached). These issues and plan corrections will need to be addressed in a revised plan set or supplemental information submitted for review and approval prior to issuance of erosion control and building permits.

The most significant issue concerns the existing regional storm water basin (a.k.a. the "Wago Pond") that serves the drainage area within which this property is located. As part of the Enercon expansion project, a portion of the regional stormwater basin is proposed to be filled to accommodate a new access drive around the east side of the proposed building expansion. However, to compensate for that filling, a separate area on the Enercon property is proposed to be excavated in a manner that will provide additional pond capacity to the regional basin. Consequently, the Village Engineer and Public Works Director are requiring that the owner provide stormwater calculations and modeling of the regional basin under both pre- and post-construction conditions to ensure that there is no change in the hydrology of the basin and that the regional basin can handle the additional storm water flow resulting from the proposed building and parking area expansion. If the proposed filling/excavating negatively impacts the hydrology of the regional basin, changes may be required to the site layout and/or proposed site improvements. Given the obvious importance of modeling the proposed changes to the regional stormwater basin, this issue needs to be resolved prior to commencing any site improvements and issuance of any erosion control or building permits.

Right-of-way permits are required for any/all construction conducted in the Morse Driver right-of-way.

The Village Public Works Department/Village Engineer shall be contacted for inspection purposes prior to construction of the private storm water lateral connection to the Village storm sewer system.

VILLAGE STAFF RECOMMENDATION

APPROVE the site development plans for Phase 1 of a 57,057 sqft building and parking lot expansion for the existing Enercon facility located at N120 W19349 Freistadt Road subject to the following (10) conditions:

1. This approval is for Phase 1 of the proposed building and parking area expansion and 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 the Village Planner or Engineer pursuant to revisions required herein and/or by the Plan Commission:
 - a. Architectural plan set dated January 4, 2021
 - b. Engineering plan set dated December 28, 2021
 - c. Landscaping plan set dated January 4, 2021
 - d. Exterior Lighting plan set dated January 4, 2021
2. All landscaping, grading, paving, storm water management, utility and other improvements shown on the approved site plans shall be installed as approved prior to issuance of an occupancy permit for the building addition 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.
3. All issues, plan revisions and technical corrections identified in the August 25, 2021, review memo from the Director of Public Works shall be addressed in revised plans and/or supplemental information submitted for review and approval prior to issuance of erosion control and building permits for the Phase 1 site improvements.
4. The owner/developer shall coordinate with the Village Engineer and Public Works Director to provide stormwater calculations and results of modeling the regional basin under both pre- and post-construction conditions to ensure that there is no change in the hydrology of the regional basin and that the regional basin can handle the additional storm water flow resulting from the proposed building and parking area expansion. If it is determined by the Village Engineer that the proposed filling and excavating will negatively impact the hydrology of the regional basin, revised plans be required to for the site layout and/or site improvements. Review and approval of the stormwater calculations and modeling requirements by the Village Engineer is required prior to commencing any site improvements and issuance of erosion control or building permits.

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5. Right-of-way permits are required for any/all construction conducted in the McCormick Drive right-of-way. Contact the Public Works Department/Highway Department for details.
 6. The Village Public Works Department/Village Engineer shall be contacted for inspection purposes prior to construction of the private storm water lateral connection to the Village storm sewer system.
 7. The owner shall prepare and record easements for those areas of the regional stormwater basin that already exist and/or are being created on the Enercon property. Said easement documents shall be reviewed and approved by the Village prior to recording. A separate stormwater maintenance agreement addressing those areas of the regional basin located on the Enercon property may be required by the Village as part of or prior to completion of the Phase 2 building improvements.



Engineering Department Memorandum

To : Jeffrey W. Retzlaff, AICP, Planning Director/Zoning Administrator
From : Lawrence Ratayczak, P.E., Director of Public Works
Date : August 25, 2021
Re : Enercon Site Development

Items Reviewed:

1. Civil Plan Set Dated: 06-09-21

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. This project will require a WRAPP/NOI from the DNR. Please submit a copy of the approved permit prior to final approval.
4. The project will require DSPS plumbing system review and approval. Please provide a copy of the DSPS approval prior to engineering approval
5. As-builts prepared to Village standards shall be prepared and provided to the Village post-construction (for all applicable items).
6. A professional engineer's original seal is to be affixed, signed and dated on the final set of construction plans.
7. Provide an existing site survey that includes all utilities (sewer, water, gas, electric, phone, etc)
8. Provide a site demo plan showing what is being removed.
9. Provide construction details.
10. Utility permits and permits for work within the ROW are required. Contact the Village engineering department to obtain permits.
11. 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.

Wastewater Utility Comments:

1. Install 2" adjusting ring, I/E seal. Bolt down frame and lid on existing sampling manhole. Show existing sanitary on plan. Is new sanitary proposed for addition? If so, provide a utility plan

C-101 Site Plan

- 1 Add a site data table showing site size, existing impervious area, proposed impervious area, parking counts, etc.
2. Provide a dimensioned site plan show parking spaces sizes, driveway widths, radii, distances between buildings and parking lots and property lines, etc.
3. Confirm ADA parking has curb ramps and signs meeting ADA requirements.
4. Provide details on proposed stairs and handrails
5. Clearly show which wetlands have been exempted as artificial and which wetlands have been approved to be filled.
6. Recommend increasing radii and easing the kink in the south driveway at McCormick Drive
7. Provide information on utilities. How is the future building being served for sewer, water, and fire protection?

C-103 Grading Plan

- 1 Show overflow route through the site with large bold arrows.
2. The proposed loading dock on McCormick Drive will drain a large area of pavement to the ROW. Install a trench drain at the ROW to collect this flow on-site.
3. Show limits of the future building on the plans. It's not clear where the building is on the west side of the site.
4. Grading shown around the existing trees to remain will be difficult to install correctly. Add additional notes and flow arrows indicate drainage intent.
5. Provide top and bottom of wall elevations for all retaining walls.
6. The letter provide with the submittal indicates this is planned as a phased project with the parking and driveways to be constructed now and the building at some point in the future. Show how the building pad will be graded in the interim condition.

C-104 Erosion Control Plan

- 1 Provide an erosion control legend.
2. Provide typical erosion control notes, showing sequencing, inspection requirements, etc.
3. Provide late season stabilization requirements.
4. Provide additional information on the 'silt screen' shown on the plans.
5. Limits of silt fence is difficult to see. Please adjust the plan to clarify.
6. Provide on-site sediment traps to capture construction sediment before discharging to the Village stormwater basin. Size sediment traps per WDNR technical standards. Show how runoff will route to the basins.

Stormwater Management Comments

1. Plans propose filling a significant portion of the village's regional stormwater basin. Calculations showing that this will not reduce the capacity in the basin will be required.

-
2. This project appears to add over ½ acre of impervious and disturbs more than an acre. A stormwater management plan is required showing the site meets MMSD, Village and WDNR requirements.



- 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

Eric J Neumann
VP Senior Project Executive
MSI General Corp
PO Box 7
Oconomowoc, WI 53066
 Phone (414) 333-6800
 E-Mail eric@msgeneral.com

PROPERTY OWNER

DJN Family Limited Partnership
494 Hunters Hill Trl
Colgate, WI 53017
 Phone (262) 255-6070
 E-Mail _____

2 PROPERTY ADDRESS

N120W19349 Freistadt Rd
 Germantown, WI 53022

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

North	South	East	West
INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	Vacant Industrial

4 READ AND INITIAL THE FOLLOWING:

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

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

[Signature] 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!

[Signature] 8-2-2021
 Applicant Date

[Signature] 8/2/2021
 Owner Date

MEMORANDUM

DATE: August 2, 2021

TO: Jeffrey Retzlaff, Village Planner

RE: Enercon Germantown Expansion & Phasing

FROM: Eric J. Neumann, VP & Senior Project Executive, MSI General Corporation

Please see the attached applications, documents and data require for our ongoing efforts with the Village of Germantown, MGS Land Ownership Group to the south and Enercon to updated the CSM and purchase additional lands (CSM previously approved) and coordination with the Village to provide a quick and phased approval of the Project.

As per our previous correspondence we are submitting for an approval to grade and pave a new parking lot to the north of the existing building and parking. This request will provide the needed parking for the current employees who park on the south side of the building. This parking relocation will then allow access to the current area for a proposed 60,000sf expansion of the current 12,000sf building.

This application while being submitted at the full cost of approval is currently only for the park and grading needed to accomplish this work this late summer and fall and prior to paving plans closing. Due to the timing of this work, we are asking for this review and approval process to be in the September Plan Commission to allow work to be completed in September and October.

As you know we have requested prior and would still appreciate the opportunity to meet with Staff and needed departments to further explain the overall project. Please also know that our intention is to make the complete building and site plan submittal by the October due date for the December plan commission meeting – knowing that at any time between then and now we would be happy to meet or explain status of the project.

Part of this site plan submittal of the CUP application (if needed) for the work being done in the noted wetlands areas. As we have shared prior, we are currently working with the DNR and Army Corp of Engineers for those determinations of man-made/low quality status. Once we have that information we will share and hopefully before all of the publications commence.

After your review of these documents and applications, please contact me to confirm you have all you need, to answer any questions and most importantly that we can be included on the September 13th Plan Commission Agenda.

Thank you,

Eric J. Neumann
414-333-6800
eric@msigeneral.com



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To: Jeffrey W. Retzlaff, AICP Director, Community Development Department, Village Planner/Zoning Administrator

From: Eric J. Neumann, Vice President Senior Project Executive, MSI General Corp

RE: Enercon Village Comments - Replies

Date: 9/7/2021

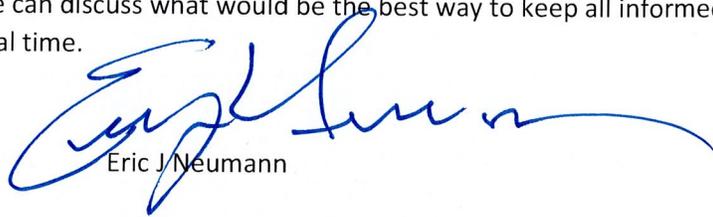
Jeff pursuant to your email and Village Staff Comments Letter Dated 8/26/2021 please see our replies to the items/issues.

1. Checklist was not turned in as request was for paving and grading for north parking lot and needed south east area grading to allow the fill needed.
 - a. Yes - Updates to existing, new and changes are or will be shown.
 - b. Landscape plan is in progress. I shared how Enercon hired David Heller for this. Landscape plan currently is well beyond Village code and this a passion of Don and Judy Nimmer. It will be far better than most of that park! If you would like a sneak peak at this I can share our work in progress plan. Just let us know.
2. See JSD Replies and Attached Report and DNR Permit.
3. See JSD Replies – Where these calculations are shown.
4. See JSD Replies and additional forthcoming plans for the October submittal. We are confirming many inter-building items that change those needs, so letting JSD get too far in front of us is not prudent. We are also confirming the Power needs and believe we will be adding a new service and possible back feed of existing which would remove current transformer from the West side of the building and placing it on the south side of the addition and about 75-100' east of the West Wall of that addition (hence hidden better).
5. Appreciate the heads up and we will work with them as needed. We did the same for Cain Industries years ago. We are getting confirmation for our October submittal on those stalls if needed now or in the future. Allowing needed access to maintain line to WE Energies will not be affected by this work (actually enhanced as this are would now be solid surface vs. brush and weeds) so once we know the Enercon plan we can start that process.
6. Yes we have zeroed in on those now and the current plans reflect those locations and sizes. These again will be finalized with the October submittal.
7. Understood
8. Understood
9. See JSD submittal documents.

MISC Items - Jeff see the email to Hardwood from 9/8/2021 attached to this memo for your understanding of the cut/fill concern of the Regional pond. We will continue to work with Hardwood and your staff to answer or resolve any questions that come up.

Engineering Memo –

See JSD Comments and attached plans. Knowing the timing of the memo 8/25/2021 and subsequent DNR and other replies, we agree a Team meeting soon would help us all get on the same sheet of music. After these responses are reviewed, we can discuss what would be the best way to keep all informed and gather your staff's comments in real time.



Eric J Neumann

MSI GENERAL CORPORATION

Vice President - Senior Project Executive

EJN:kf

Encl.

Enercon Village Comments - Replies

1. Checklist was not turned in as request was for paving and grading for north parking lot and needed south east area grading to allow the fill needed.
 - a. Yes updates to existing, new and changes are or will be shown.
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6. Yes we have zeroed in on those now and the current plans reflect those locations and sizes.
7. Understood
8. Understood
9. See JSD submittal documents.

Engineering Memo –

See JSD Comments and attached plans. Knowing the timing of the memo 8/25/2021 and subsequent DNR and other replies, we agree a Team meeting soon would help us all get on the same sheet of music. After these responses are reviewed, we can discuss what would be the best way to keep all informed and gather your staff's comments in real time.

Eric

July 16, 2021

Subject: **Artificial Wetland Exemption Criteria Statement**
Enercon
N120W19349 Freistadt Road
Germantown, WI

To whom it may concern:

The following statement is an explanation how the wetlands meets the artificial wetland exemption criteria.

Historic photos obtained from the Washington County GIS indicates that there was no previous evidence of wetland or pond prior to the year 1990. The Washington County historic photos prior to 1990 indicated the presence of a farmed field. The mapped wetland is a result of human modifications to the landscape from the construction of the surrounding development and also construction of a detention pond for that surrounding development. Please consider the supporting documentation that indicates that the mapped wetland is exempt from the NR 103 Water Quality Standards based on historic records and resultant human activities.

Please feel free to contact me via email at paul.martens@jsdinc.com or by phone at 262.513.0666.

Sincerely,
JSD Professional Services, Inc.



Paul S. Martens, P.E.
Project Engineer

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
N7725 Hwy 28
Horicon, WI, 53032

Tony Evers, Governor
Preston D. Cole, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711



July 29, 2021

Eric Neumann
W215 East Wisconsin Ave.
Nashota, WI 53058

EXE-SE-2021-67-02738

Dear Mr. Neumann:

Thank you for continuing to work with the Department of Natural Resources (DNR) on your proposed project. This letter contains important information regarding your DNR permit application to Enercon Artificial Wetland Exemption in Washington County.

We have reviewed your application material and are writing to notify you that **we need additional information to complete your application** and determine if your proposed project will meet applicable legal standards. It is important that we receive clear detailed information about your project requirements and constraints so the permit application file adequately explains your project and allows the DNR to issue a decision that is supported by the file information. **Specifically, we need the following information:**

The following attachments must be included with artificial wetland exemption determination submittals:

A statement/narrative from a qualified professional explaining how the wetland meets the artificial wetland exemption criteria

Please submit the requested information to me as soon as possible so we can determine your application to be complete and continue to the next step in the process. Please be sure to point out any additions or alterations to the project that are different from the original permit application. This is also an opportunity for you to explain how your project will avoid or minimize impacts to wetlands and public waters.

Please note that once your permit application is determined to be complete, the Department is legally required to review and issue a permit decision, which means we will be unable to refund your permit fee. At any time during the review process, you have the right to send us a letter or email requesting your application be withdrawn.

If we do not receive the requested information or hear from you in response to this letter within 30 calendar days from the date of this letter, we may dismiss your application.

If you have any questions, please contact your local Water Management Specialist, Marty Dillenburg at (920) 296-6507 or email marty.dillenburg@wisconsin.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Marty Dillenburg'.

Marty Dillenburg
Water Management Specialist

Copy to: Paul Martens, Project Engineer



August 3, 2021

Eric Neumann
W215 East Wisconsin Ave.
Nashota, WI 53058

EXE-SE-2021-67-02738

RE: Artificial Wetland Exemption Determination for an area described as a northwest edge, southwest edge, and southern finger of Wetland 1 located in the Village of Germantown, Washington County

Dear Mr. or Ms. Neumann:

This letter is in response to your request for an artificial wetland exemption determination for the above mentioned wetlands.

According to 281.36 (4n), State Statutes, a landscape feature where hydrophytic vegetation may be present as a result of human modification to the landscape or hydrology and for which no definitive evidence exists showing a prior wetland or stream history before August 1, 1991, may be exempt from state wetland regulations. The following types of artificial wetlands cannot be exempted from state wetland regulation:

- 1) a wetland that serves as a fish spawning area or that is passage to a fish spawning area and
- 2) a wetland created as a result of a wetland mitigation requirement.

In addition, DNR must also consider whether the artificial wetland is providing significant flood protection to adjacent or downstream properties and infrastructure, and/or significant water quality functions to adjacent or downstream water bodies.

The Department reviewed the following materials to aid in our exemption determination:

- The request narrative
- Historic Maps, including the Original Land Survey Plat, Bordner Survey, USGS topographic Quad maps, and soil mapping.
- Aerial photographs, including the 1937 photograph, a pre-construction photograph, and a post-construction photograph.
- Site photographs that show different angles and views of the wetland

Below is a summary of our findings:

Request Narrative

According to the request narrative, "Historic photos obtained from the Washington County GIS indicates that there was no previous evidence of wetland or pond prior to the year 1990. The Washington County historic photos prior to 1990 indicated the presence of a farmed field. The mapped wetland is a result of human modifications to the landscape from the construction of the surrounding development."

Historic Map Review

- Original Land Survey Plat. The original land survey indicates no wetlands or waterways mapped where the wetlands in question now exist. There is a mapped waterway to the west of the wetlands in question.
- Bordner Survey. The Bordner survey indicates all three wetland portions in question to have been mapped as "grass marsh" and "swamp hardwoods, poor stand."

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
N7725 Hwy 28
Horicon, WI, 53032

Tony Evers, Governor
Preston D. Cole, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711



August 24, 2021

Eric Neumann
W215 East Wisconsin Ave.
Nashota, WI 53058

GP-SE-2021-67-03158

RE: Coverage under the wetland statewide general permit to impact 0.16 acres of wetlands for residential, commercial and industrial activities, located in the Village of Germantown, Washington County, docket GP-SE-2021-67-03158.

Dear Mr. Neumann:

Thank you for submitting an application for a General Permit to impact 0.16 acres of wetlands for residential, commercial and industrial activities located in the NE 1/4, NW 1/4, Sec. 20, T. 09, R. 20E, Village of Germantown, Washington County.

You have certified that your project meets the eligibility criteria for this activity. Based upon your signed certification you may proceed with your project. Please take this time to re-read the permit standards and conditions. The eligibility standards can be found on your application checklist or in the statewide general permit (found at <http://dnr.wi.gov/topic/waterways/> - keyword: general permits). The permit conditions are attached to this letter. **You are responsible for meeting all general permit eligibility standards and permit conditions.** This includes notifying the Department before starting the project, and submitting photographs within one week of project completion. Please note your coverage is valid for 5 years from the date of the department's determination or until the activity is completed, whichever occurs first.

The Department conducts routine and annual compliance monitoring inspections. Our staff may follow up and inspect your project to verify compliance with state statutes and codes. If you need to modify your project please contact your local Water Management Specialist, Marty Dillenburg at (920) 296-6507 or email marty.dillenburg@wisconsin.gov to discuss your proposed modifications.

The Department of Natural Resources appreciates your willingness to comply with wetland regulations, which help to protect the water quality, fish and wildlife habitat, recreational value and other functions and values wetlands provide to current and future generations. You are responsible for obtaining any other local, state or federal permits that are required before starting your project.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Marty Dillenburg'.

Marty Dillenburg
Water Management Specialist

Copy to: Paul Martens, JSD Professional Services
US Army Corps of Engineers
Jeff Retzlaff, Director of Community Development, Village of Germantown

You agree to comply with the following conditions:

1. **Application.** You shall submit a complete application package to the Department as outlined in the application materials and section 2 of this permit. If requested, you shall furnish the Department, within a reasonable timeframe, any information the department needs to verify compliance with the terms and conditions of this permit.
2. **Certification.** Acceptance of general permit WDNR-GP1-2017 and efforts to begin work on the activities authorized by this general permit signifies that you have certified the project meets all eligibility standards outlined in Section 1 of this permit and that you have read, understood and have agreed to follow all terms and conditions of this general permit.
3. **Reliance on Applicant's Data.** The determination by this office that a confirmation of authorization is not contrary to wetland water quality standards will be based upon the information provided by the applicant and any other information required by the DNR.
4. **Project Plans.** This permit does not authorize any work other than what is specifically described in the notification package and plans submitted to the Department and you certified is in compliance with the terms and conditions of WDNR-GP1-2017
5. **Expiration.** This WDNR-GP1-2017 expires on August 24, 2026. The time limit for completing work authorized by the provisions of WDNR-GP1-2017 ends 5 years after the date on which the discharge is considered to be authorized under WDNR-GP1-2017 or until the discharge is completed, whichever occurs first.
6. **Other Permit Requirements.** You are responsible for obtaining any other permit or approval that may be required for your project by local zoning ordinances, other local authority, other state permits and by the U.S. Army Corps of Engineers before starting your project.
7. **Authorization Distribution.** You must supply a copy of the permit coverage authorization to every contractor working on the project.
8. **Project Start.** You shall notify the Department before starting construction.
9. **Permit Posting.** You must post a copy of this permit coverage letter at a conspicuous location on the project site prior to the execution of the permitted activity, and remaining at least five days after stabilization of the area of permitted activity. You must also have a copy of the permit coverage letter and approved plan available at the project site at all times until the project is complete.
10. **Permit Compliance.** The department may modify or revoke coverage of this permit if the project is not constructed in compliance with the terms and conditions of this permit, or if the Department determines the project will be detrimental to wetland water quality standards. Any act of noncompliance with this permit constitutes a permit violation and is grounds for enforcement action. Additionally, if any applicable conditions of this permit are found to be invalid or unenforceable, authorization for all activities to which that condition applies is denied.
11. **Construction Timing.** Once wetland work commences, all wetland construction activities must be continuous until the permitted activity is completed and the site is stabilized.
12. **Construction.** No other portion of the wetland may be disturbed beyond the area designated in the submitted plans.
13. **Project Completion.** Within one week of completion of the regulated activity, you shall submit to the Department a statement certifying the project is in compliance with all the terms and conditions of this permit, and photographs of the activities authorized by this permit. This statement must reference the Department-issued docket number, and be submitted to the Department staff member that authorized coverage.
14. **Proper Maintenance.** You must maintain the activity authorized by WDNR-GP1-2017 in good condition and in conformance with the terms and conditions of this permit utilizing best management practices. Any structure or fill authorized shall be properly maintained to ensure no additional impacts to the remaining wetlands.

15. **Site Access.** Upon reasonable notice, you shall allow access to the site to any Department employee who is investigating the project's construction, operation, maintenance or permit compliance with the terms and conditions of WDNR-GP1-2017 and applicable laws.
16. **Erosion and siltation controls.** The project site shall implement erosion and sediment control measures that adequately control or prevent erosion, and prevent damage to wetlands as outlined in NR 151.11(6m), Wis. Adm. Code.
17. **Equipment use.** The equipment used in the wetlands must be low ground weight equipment as specified by the manufacturer specifications.
18. **Invasive Species.** All project equipment shall be decontaminated for removal of invasive species prior to and after each use on the project site by utilizing other best management practices to avoid the spread of invasive species as outlined in NR 40, Wis. Adm. Code. For more information, refer to <http://dnr.wi.gov/topic/Invasives/bmp.html>.
19. **Federal and State Threatened and Endangered Species.** WDNR-GP1-2017 does not affect the DNR's responsibility to insure that all authorizations comply with Section 7 of the Federal Endangered Species Act, s. 29.604, Wis. Stats and applicable State Laws. No DNR authorization under this permit will be granted for projects found not to comply with these Acts/laws. No activity is authorized which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act and/or State law or which is likely to destroy or adversely modify the critical habitat of a species as identified under the Federal Endangered Species Act.
20. **Special Concern Species.** If the Wisconsin National Heritage Inventory lists a known special concern species to be present in the project area you will take reasonable action to prevent significant adverse impacts or to enhance the habitat for the species of concern.
21. **Historic Properties and Cultural Resources.** WDNR-GP1-2017 does not affect the DNR's responsibility to insure that all authorizations comply with Section 106 of the National Historic Preservation Act and s. 44.40, Wis. Stats. No DNR authorization under this permit will be granted for projects found not to comply with these Acts/laws. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places. If cultural, archaeological, or historical resources are unearthed during activities authorized by this permit, work must be stopped immediately and the State Historic Preservation Officer must be contacted for further instruction.
22. **Preventive Measures.** Measures must be adopted to prevent potential pollutants from entering a wetland or waterbody. Construction materials and debris, including fuels, oil, and other liquid substances, will not be stored in the construction area in a manner that would allow them to enter a wetland or waterbody as a result of spillage, natural runoff, or flooding. If a spill of any potential pollutant should occur, it is the responsibility of the permittee to remove such material, to minimize any contamination resulting from this spill, and to immediately notify the State Duty Officer at 1-800-943-0003.
23. **Suitable fill material.** All fill authorized under this permit must consist of clean suitable soil material, as defined by s. NR 500.03(214), Wis. Admin. Code, free from hazardous substances as defined by s. 289.01(11), Wis. Stats., and free from solid waste as defined by s. 289.01(11) and (33), Wis. Stats.
24. **Standard for Coverage.** Wetland impacts from the project will cause only minimal adverse environmental impacts as determined by the Department.
25. **Transfers.** Coverage under this permit is transferable to any person upon prior written approval of the transfer by the Department.
26. **Limits of State Liability.** In authorizing work, the State Government does not assume any liability, including for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
 - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the State in the public interest.
 - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work.
 - e. Damage claims associated with any future modification, suspension, or revocation of this WDNR-GP1-2017.
27. **Reevaluation of Decision.** The Department may suspend, modify or revoke authorization of any previously authorized activity and may take enforcement action if any of the following occur:
- a. The applicant fails to comply with the terms and conditions of WDNR-GP1-2017.
 - b. The information provided by the applicant in support of the permit application proves to have been false, incomplete, or inaccurate.
 - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

- USGS Topographic Quad map: The 1892 and 1906 USGS Quad maps indicate the wetlands in question to have been map immediate adjacent to mapped wetlands to the west. The 1959 and later USGS Quad maps indicate no mapped wetlands where the current wetlands are located.
- Soil Maps: The soil maps indicate the southern finger and southwest edge of Wetland 1 to be located within Pella silt loam, 0-2% slopes, a hydric soil type. The northwest edge of Wetland 1 is found in Lamartine silt loam, 0-3% slopes, a non-hydric soil type.

Aerial Photograph Review

- 1937 aerial photograph. The 1937 aerial photograph shows the wetlands to have been located in an uncropped area with moderate tree coverage. No definitive wetlands can be seen.
- Pre-construction aerial photograph: The 1942 to 1995 aerial photographs show the northwest edge and southwest edge of the current stormwater pond to be uncropped areas with no wetness signatures or definitive wetlands. The southern finger wetland in question consistently showed a small stream or channel from concentrated overland surface water flow coming from the south. The area was never cropped between 1942 and 1995.
- Post-construction aerial photograph: The 1996 to present aerial photographs show the completed construction of a stormwater pond encompassing the northwest and southwest edges of wetlands in question in this wetland exemption request. The 1998 aerial photograph shows mass grading to the south and east of the southern wetland finger for businesses with no direct impacts to the area where the southern finger wetland is located.

Site Photographs

The site photographs show a large, man-made stormwater detention feature surrounded by a heavily vegetated shoreline.

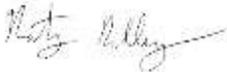
Conclusion:

- **Based upon the information provided above, the wetland identified as the southern finger of Wetland 1 had a wetland history prior to August 1, 1991 and is not exempt from state wetland regulations.**
- Based upon the information provided above, the wetlands identified as the northwest edge and southwest edge of Wetland 1 lacked a wetland history prior to August 1, 1991 and fulfill all artificial wetland exemption standards. **Therefore, the northwest edge and southwest edge of Wetland 1 are exempt from state wetland regulations.**

This letter describes DNR's decision regarding the jurisdictional status of Wetland 1 and is only valid for state jurisdictional purposes. For decisions regarding the federal jurisdictional status of Wetland 1 you will need to contact the U.S. Army Corps of Engineers.

If you have any questions, please call me at (920) 296-6507 or email marty.dillenburg@wisconsin.gov.

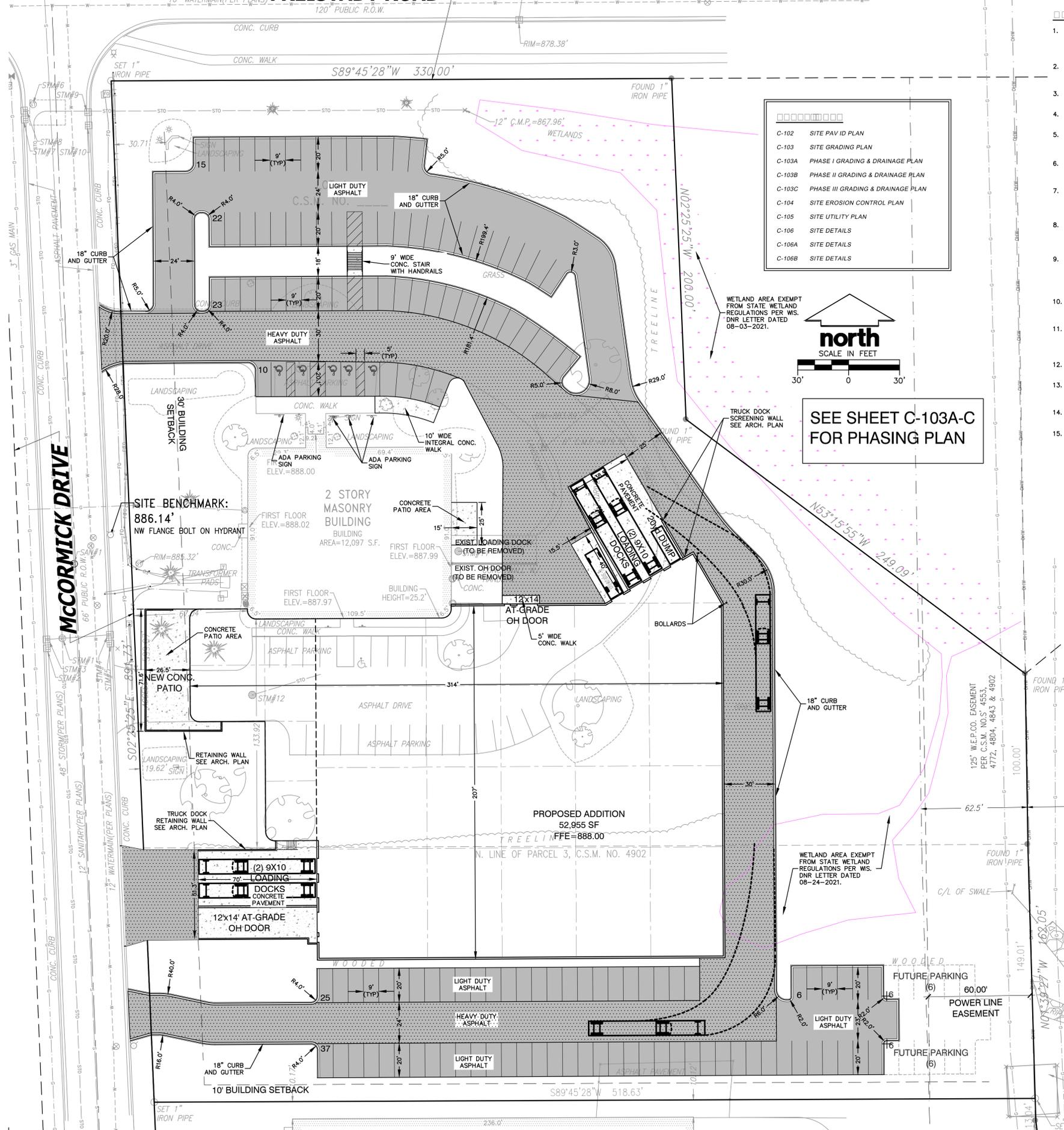
Sincerely,



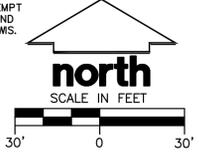
Marty Dillenburg
Water Management Specialist

Copy to: Paul Martens, JSD Professional Services
Jeff Retzlaff, Director of Community Development, Village of Germantown
Chris Jors, Sr. Specialist-Biologist, SEWRPC

FREISTADT ROAD



- C-102 SITE PAV ID PLAN
- C-103 SITE GRADING PLAN
- C-103A PHASE I GRADING & DRAINAGE PLAN
- C-103B PHASE II GRADING & DRAINAGE PLAN
- C-103C PHASE III GRADING & DRAINAGE PLAN
- C-104 SITE EROSION CONTROL PLAN
- C-105 SITE UTILITY PLAN
- C-106 SITE DETAILS
- C-106A SITE DETAILS
- C-106B SITE DETAILS



SEE SHEET C-103A-C FOR PHASING PLAN

1. THE INTENTION OF THE PLANS AND SPECIFICATIONS IS TO SET FORTH PERFORMANCE AND CONSTRUCTION MATERIAL STANDARDS FOR THE PROPER EXECUTION OF WORK. ALL WORKS CONTAINED WITHIN THE PLANS AND SPECIFICATIONS SHALL BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL, STATE, FEDERAL OR OTHER GOVERNING AGENCY'S LAWS, REGULATIONS, JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., AND THE OWNER'S DIRECTION.
2. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY ADDITIONAL SOILS INVESTIGATIONS THEY FEEL IS NECESSARY FOR THE PROPER EVALUATION OF THE SITE FOR PURPOSES OF PLANNING, BIDDING, OR CONSTRUCTING THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS, PRIOR TO SUBMISSION OF A BID PROPOSAL.
4. THE CONTRACTOR SHALL PROMPTLY REPORT ANY ERRORS OR AMBIGUITIES DISCOVERED AS PART OF THEIR REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS.
5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON THEIR OWN COMPUTATIONS AND UNDER NO CIRCUMSTANCES BE BASED ON THE ENGINEER'S ESTIMATE.
6. QUESTIONS/CLARIFICATIONS WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL RESPONSES SHALL BE BINDING ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD-OF-MOUTH DIALOG CONSTITUTE AN OFFICIAL RESPONSE.
7. PRIOR TO START OF WORK, CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE, AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, LIMITATIONS OF WORK ACCESS, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OR JOB EXTRAS.
8. COMMENCEMENT OF CONSTRUCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS REVIEWED THE PLANS AND SPECIFICATIONS IN THEIR ENTIRETY AND CERTIFIES THAT THE SUBMITTED BID PROPOSAL CONTAINS PROVISIONS TO COMPLETE THE PROJECT WITH THE EXCEPTION OF UNFORESEEN FIELD CONDITIONS; ALL APPLICABLE PERMITS HAVE BEEN OBTAINED; AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS OF THE PROJECT.
9. SHOULD ANY DISCREPANCIES OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY THE DISCREPANCIES/CONFLICTS SHALL NOT COMMENCE, OR CONTINUE, UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS DISTRIBUTED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, SPECIFICATIONS AND PLANS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.
10. THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT. OBTAINING PERMITS, OR DELAYS IN OBTAINING PERMITS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE. CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS.
11. THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND "DIGGER'S HOTLINE" IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS. CONTRACTOR IS RESPONSIBLE TO DETERMINE WHICH ORDINANCES/CODES/RULES/ETC. ARE APPLICABLE.
12. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN CONNECTION WITH THE WORK.
13. CONTRACTOR SHALL KEEP THE JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OPERATE UNDER GENERAL "GOOD HOUSEKEEPING."
14. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, JSD, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
15. ALL FIELD/RAIN TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE IMMEDIATELY REPORTED TO ENGINEER/OWNER. TILES ORIGINATING OUTSIDE THE PROJECT LIMITS SHALL BE RECONNECTED OR REROUTED TO MAINTAIN DRAINAGE. ENGINEER/OWNER SHALL DETERMINE THE MOST FAVORABLE METHOD OF RE-ESTABLISHMENT OF OFFSITE DRAINAGE. IF TILE IS ENCOUNTERED DURING TRENCH EXCAVATIONS, RE-ESTABLISHING TILE FUNCTIONALITY SHALL BE CONSIDERED AN INCIDENTAL EXPENSE.

1. ALL PAVING SHALL CONFORM TO "STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION AND APPLICABLE VILLAGE OF SUSSEX ORDINANCES."
2. CONCRETE PAVING SPECIFICATIONS -
 CODES AND STANDARDS - THE PLACING, CONSTRUCTION AND COMPOSITION OF THE CONCRETE PAVEMENT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 415 AND 416 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION. HEREAFTER, THIS PUBLICATION WILL BE REFERRED TO AS STATE HIGHWAY SPECIFICATIONS.
 CRUSHED AGGREGATE BASE COURSE - THE BASE COURSE SHALL CONFORM TO SECTIONS 301 AND 305, STATE HIGHWAY SPECIFICATIONS. CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.
 SURFACE PREPARATION - NOTIFY CONTRACTOR OF UNSATISFACTORY CONDITIONS. DO NOT BEGIN PAVING WORK UNTIL DEFICIENT SUBBASE AREAS HAVE BEEN CORRECTED AND ARE READY TO RECEIVE PAVING.
3. ASPHALTIC CONCRETE PAVING SPECIFICATIONS -
 CODES AND STANDARDS - THE PLACING, CONSTRUCTION AND COMPOSITION OF THE ASPHALTIC BASE COURSE AND ASPHALTIC CONCRETE SURFACING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 450, 455, 460 AND 465 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, EDITION OF 2005, HEREAFTER, THIS PUBLICATION WILL BE REFERRED TO AS STATE HIGHWAY SPECIFICATIONS.
 WEATHER LIMITATIONS - APPLY TACK COATS WHEN AMBIENT TEMPERATURE IS ABOVE 50° F (10° C) AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35° F (1° C) FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION. DO NOT APPLY WHEN BASE IS WET OR CONTAINS EXCESS AMOUNTS OF MOISTURE. CONSTRUCT ASPHALTIC CONCRETE SURFACE COURSE WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40° F (4° C) AND WHEN BASE IS DRY AND WHEN WEATHER IS NOT RAINY. BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30° F (-1° C).
 GRADE CONTROL - ESTABLISH AND MAINTAIN REQUIRED LINES AND ELEVATIONS FOR EACH COURSE DURING CONSTRUCTION.
 CRUSHED AGGREGATE BASE COURSE - THE TOP LAYER OF BASE COURSE SHALL CONFORM TO SECTIONS 301 AND 305, STATE HIGHWAY SPECIFICATIONS. CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.
 BINDER COURSE AGGREGATE - THE AGGREGATE FOR THE BINDER COURSE SHALL CONFORM TO SECTIONS 460.2.7 AND 315, STATE HIGHWAY SPECIFICATIONS.
 SURFACE COURSE AGGREGATE - THE AGGREGATE FOR THE SURFACE COURSE SHALL CONFORM TO SECTIONS 460.2.7 AND 465, STATE HIGHWAY SPECIFICATIONS.
 ASPHALTIC MATERIALS - THE ASPHALTIC MATERIALS SHALL CONFORM TO SECTION 455 AND 460, STATE HIGHWAY SPECIFICATIONS.
 SURFACE PREPARATION - NOTIFY CONTRACTOR OF UNSATISFACTORY CONDITIONS. DO NOT BEGIN PAVING WORK UNTIL DEFICIENT SUBBASE AREAS HAVE BEEN CORRECTED AND ARE READY TO RECEIVE PAVING.

1. CONTRACTOR SHALL CONSULT STRIPING COLOR WITH OWNER PRIOR TO CONSTRUCTION.
2. PROVIDE CONTRACTOR GRADE ACRYLIC STRIPING PAINT FOR NEW ASPHALT OR COATED ASPHALT. ALL STRIPING SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. THOROUGHLY CLEAN SURFACES FREE OF DIRT, SAND, GRAVEL, OIL AND OTHER FOREIGN MATTER. CONTRACTOR RESPONSIBLE TO INSPECT PAVEMENT SURFACES FOR CONDITIONS AND DEFECTS THAT WILL ADVERSELY AFFECT QUALITY OF WORK, AND WHICH CANNOT BE PUT INTO AN ACCEPTABLE CONDITION THROUGH NORMAL PREPARATORY WORK AS SPECIFIED.
4. DO NOT PLACE MARKING OVER UNSOUND PAVEMENTS. IF THESE CONDITIONS EXIST, NOTIFY OWNER. STARTING INSTALLATION CONSTITUTES CONTRACTOR'S ACCEPTANCE OF SURFACE AS SUITABLE FOR INSTALLATION.
5. LAYOUT MARKINGS USING GUIDE LINES, TEMPLATES AND FORMS. STENCILS AND TEMPLATES SHALL BE PROFESSIONALLY MADE TO INDUSTRY STANDARDS. "FREE HAND" PAINTING OF ARROWS, SYMBOLS, OR WORDING SHALL NOT BE ALLOWED. APPLY STRIPES STRAIGHT AND EVEN.
6. PROTECT ADJACENT CURBS, WALKS, FENCES, AND OTHER ITEMS FROM RECEIVING PAINT.
7. APPLY MARKING PAINT AT A RATE OF ONE (1) GALLON PER THREE TO FOUR HUNDRED (300-400) LINEAL FEET OF FOUR (4) INCH WIDE STRIPES. (OR TO MFG. SPECIFICATIONS)
8. BARRICADE MARKED AREAS DURING INSTALLATION AND UNTIL THE MARKING PAINT IS DRIED AND READY FOR TRAFFIC.
9. ALL HANDICAPPED ACCESSIBLE PARKING SHALL BE LOCATED PER 2009 IBC 1106.6



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SITE PAVE ID PLAN 1" = 30'-0"



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Property Acquisition Review:	2.09.2021
Owner Review:	6.09.2021
Bid Set:	
State Submittal / Permit:	
As-Built:	
REVISIONS:	
1 -	



PROJECT ADDRESS:

PROJECT NAME
 Enercon Technical Center - Addition
 STREET ADDRESS
 N120 W19349 Freistadt Rd.
 CITY/ STATE / ZIP
 Germantown, WI 53022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect: BGK
 Engineer: xxx
 Reviewed By: BGK
 Sheet Title:
 SITE PAVE ID PLAN

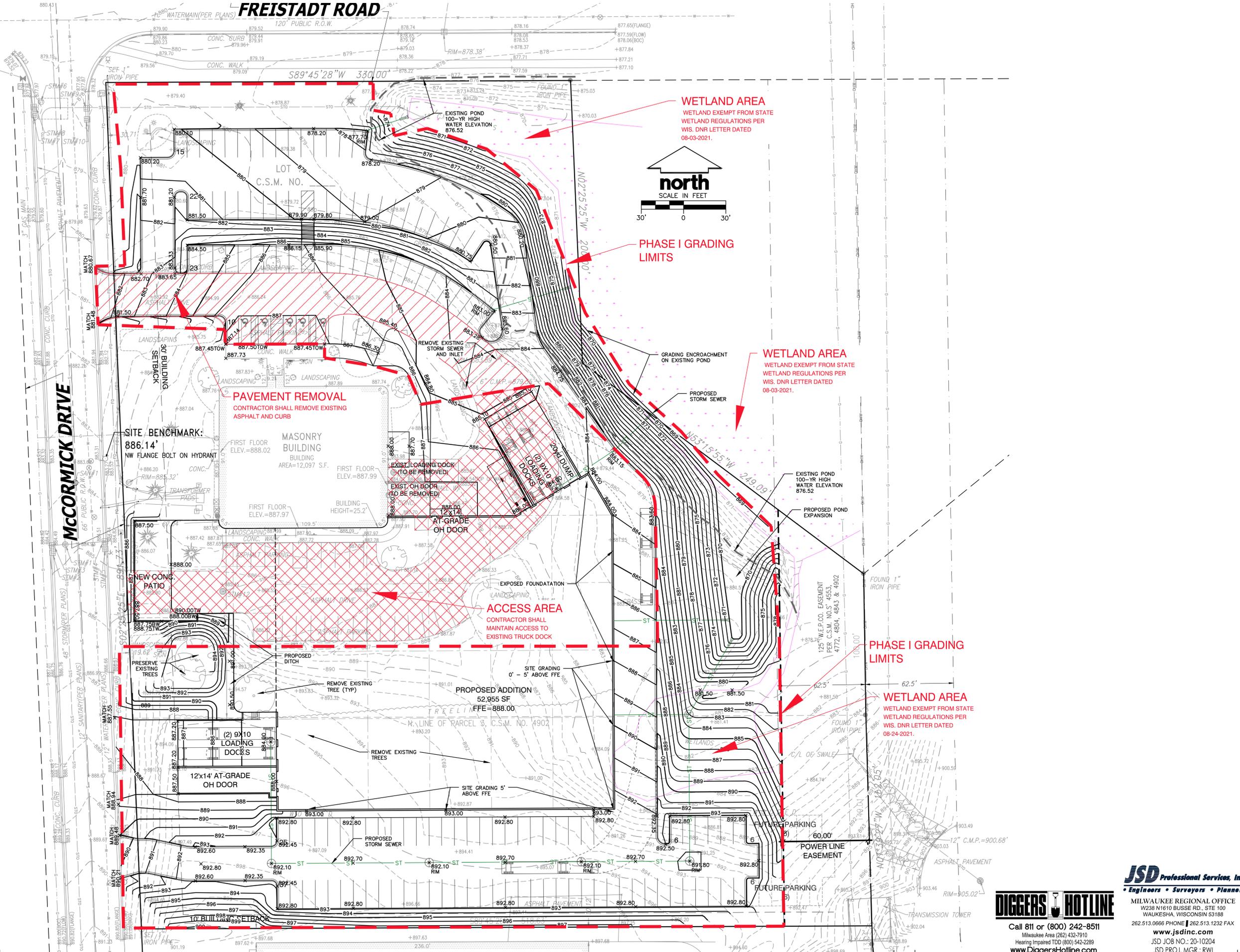
Sheet Number:
C-102
 Project Number: P12364
P12364

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ENGINEERS

CONTRACTORS

ARCHITECTS



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Architect: BGK
 Engineer: xxx
 Reviewed By: BGK

Sheet Title:
PHASE I GRADING & DRAINAGE PLAN
 Sheet Number:
C-103A
 Project Number: P12364
P12364

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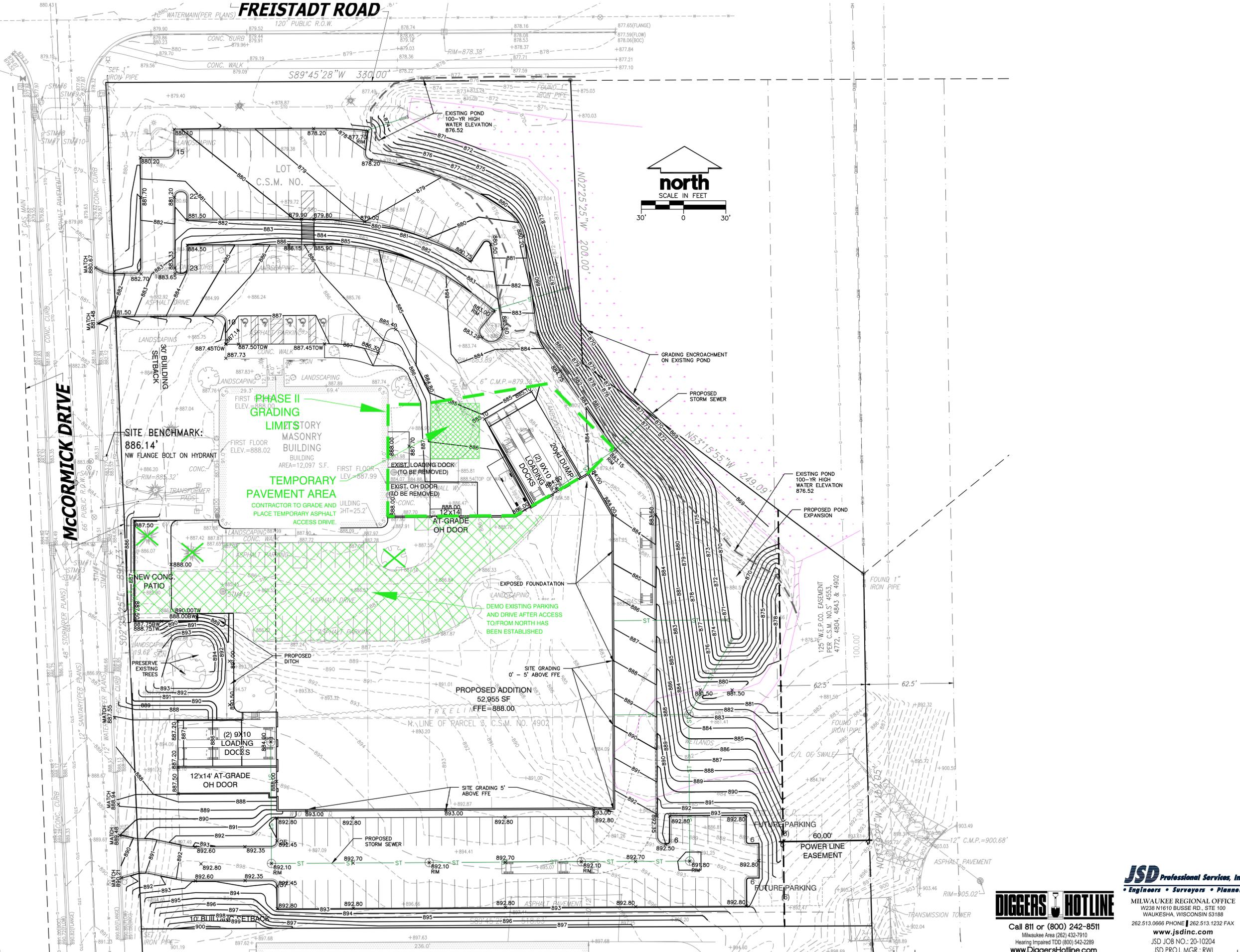
SITE GRADING & DRAINAGE PLAN 1" = 30'-0"

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 Germantown, WI 53022

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Architect: BGK
 Engineer: xxx
 Reviewed By: BGK

Sheet Title:
PHASE II GRADING & DRAINAGE PLAN
 Sheet Number:
C-103B
 Project Number: P12364
P12364

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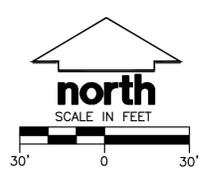
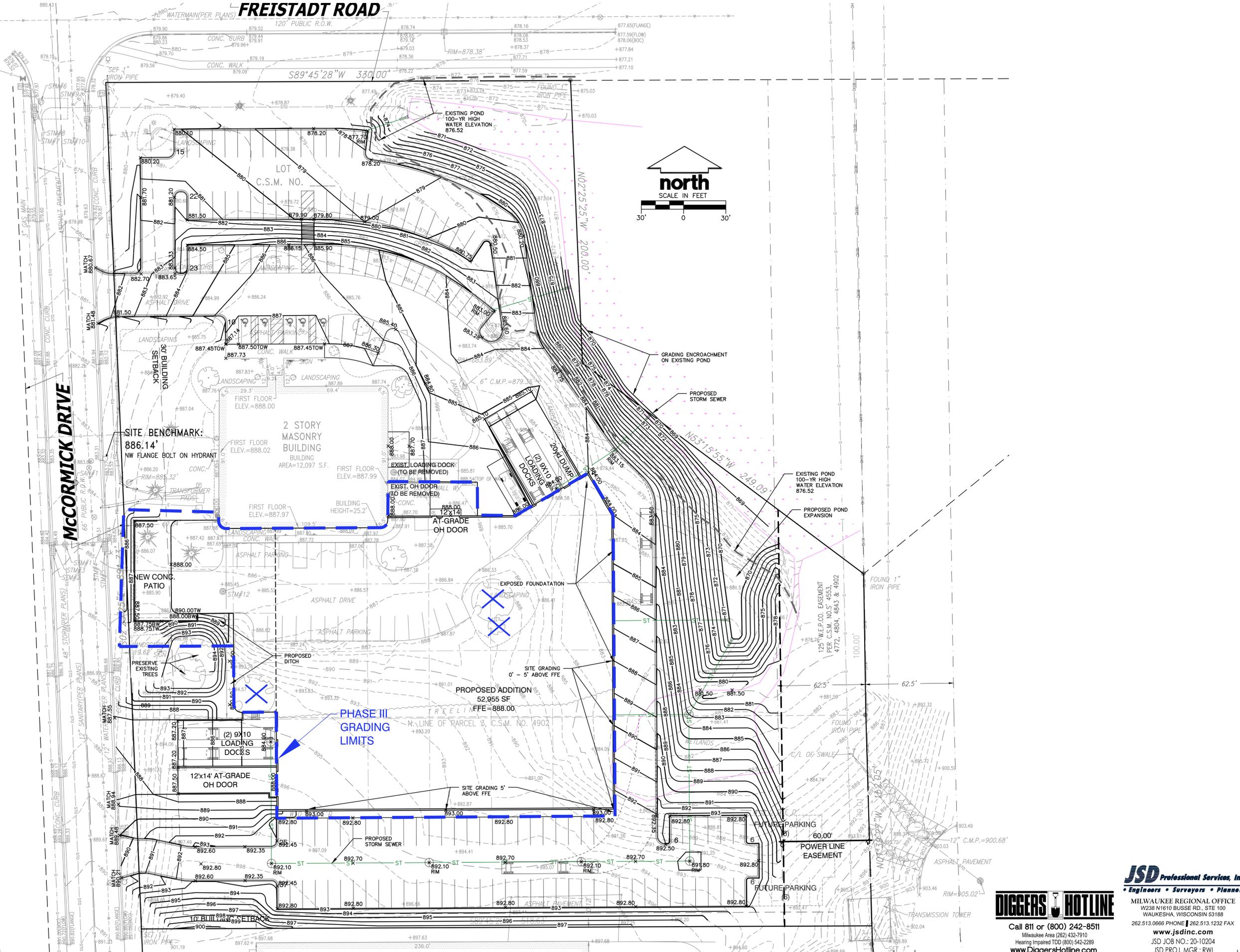
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 Germantown, WI 53022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect:	Engineer:	Reviewed By:
BGK	xxx	BGK

Sheet Title:
PHASE III GRADING & DRAINAGE PLAN
 Sheet Number:
C-103C
 Project Number: P12364
P12364

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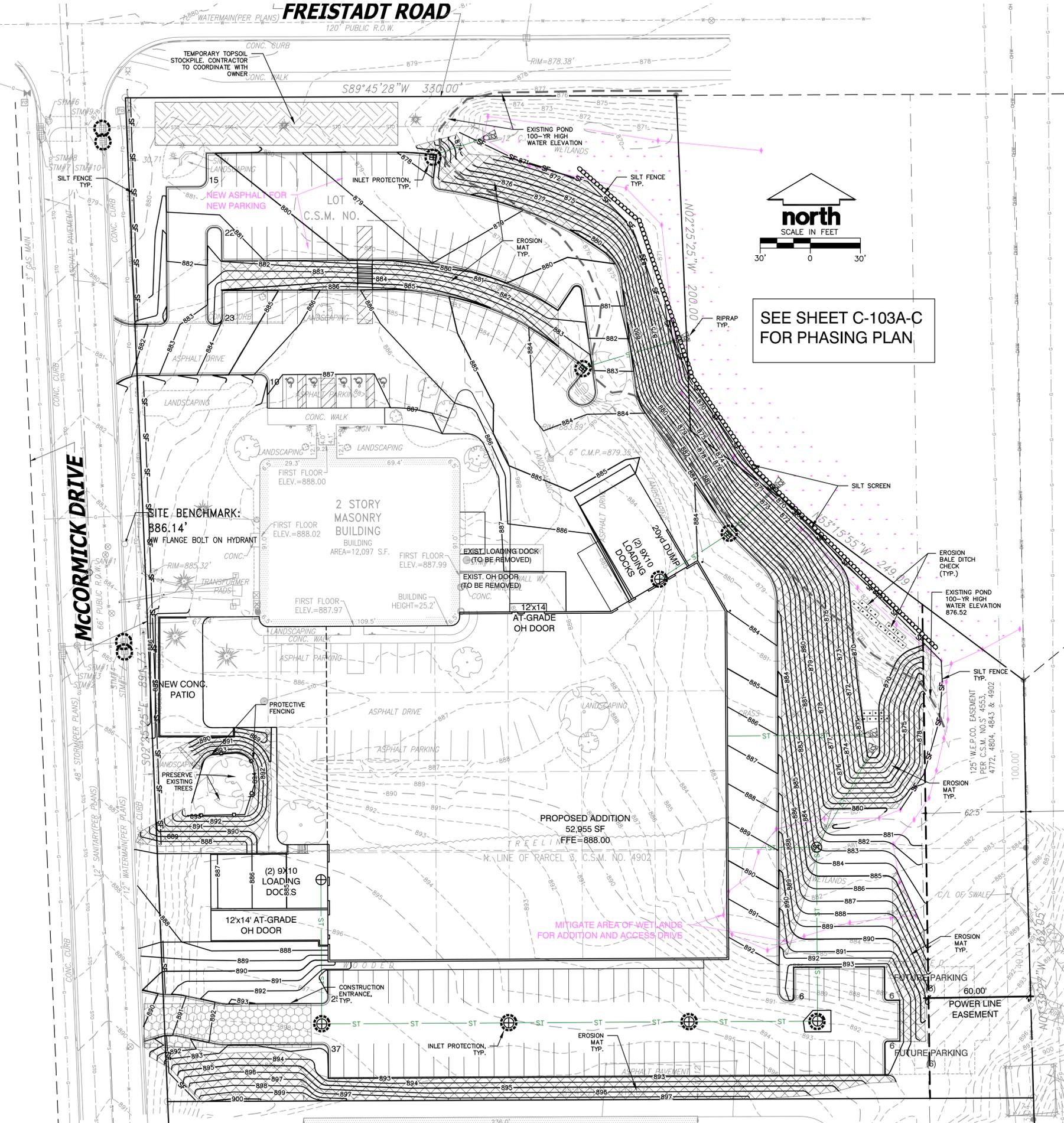
SITE GRADING & DRAINAGE PLAN 1" = 30'-0"

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS



- ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN WISCONSIN'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (DNR) TECHNICAL STANDARDS (REFERRED TO AS BMP'S) AND VILLAGE OF SUSSEX ORDINANCE. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMP'S). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF, AND UNDERSTAND, THE BMP'S PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
 - THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL CONTROL MEASURES AS DIRECTED BY JSD PROFESSIONAL SERVICES, INC. OR GOVERNING AGENCIES SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
 - MODIFICATIONS TO THE APPROVED EROSION CONTROL PLAN IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMP'S. ALL MODIFICATIONS MUST BE APPROVED BY JSD/MUNICIPALITY PRIOR TO DEVIATION OF THE APPROVED PLAN.
 - INSTALL PERIMETER EROSION CONTROL MEASURES (SUCH AS CONSTRUCTION ENTRANCES, SILT FENCE AND EXISTING INLET PROTECTION) PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE COVER, AS SHOWN ON PLAN IN ORDER TO PROTECT ADJACENT PROPERTIES/STORM SEWER SYSTEMS FROM SEDIMENT TRANSPORT.
 - CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL LOCATIONS OF VEHICLE INGRESS/EGRESS POINTS. CONTRACTOR IS RESPONSIBLE TO COORDINATE LOCATION(S) WITH THE PROPER AUTHORITIES, PROVIDE NECESSARY FEES AND OBTAIN ALL REQUIRED APPROVALS OR PERMITS. ADDITIONAL CONSTRUCTION ENTRANCES OTHER THAN AS SHOWN ON THE PLANS MUST BE PRIOR APPROVED BY THE APPLICABLE GOVERNING AGENCIES PRIOR TO INSTALLATION.
 - PAVED SURFACES ADJACENT TO CONSTRUCTION ENTRANCES SHALL BE SWEEP AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST AFTER THE END OF EACH WORK DAY AND AS REQUESTED BY THE GOVERNING AGENCIES.
 - ALL EXISTING STORM SEWER FACILITIES THAT WILL COLLECT RUNOFF FROM DISTURBED AREAS SHALL BE PROTECTED TO PREVENT SEDIMENT DEPOSITION WITHIN STORM SEWER SYSTEMS. INLET PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER. ALL INLETS, STRUCTURES, PIPES, AND SWALES SHALL BE KEPT CLEAN AND FREE OF SEDIMENTATION AND DEBRIS.
 - EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.) OUTSIDE OF THE PERIMETER CONTROLS SHALL INCORPORATE THE FOLLOWING:
 - PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
 - BACKFILL, COMPACT, AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
 - DISCHARGE TRENCH WATER INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH BMP'S PRIOR TO RELEASE INTO STORM SEWER OR DITCHES.
 - AT A MINIMUM, SEDIMENT BASINS AND NECESSARY TEMPORARY DRAINAGE PROVISIONS SHALL BE CONSTRUCTED AND OPERATIONAL BEFORE BEGINNING OF SIGNIFICANT MASS GRADING OPERATIONS TO PREVENT OFFSITE DISCHARGE OF UNTREATED RUNOFF.
 - ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR INSPECTION AND REPAIR DURING CONSTRUCTION. THE OWNER WILL BE RESPONSIBLE IF EROSION CONTROL IS REQUIRED AFTER THE CONTRACTOR HAS COMPLETED THE PROJECT.
 - TOPSOIL STOCKPILES SHALL HAVE A BERM OR TRENCH AROUND THE CIRCUMFERENCE AND PERIMETER SILT FENCE TO CONTROL SILT. IF TOPSOIL STOCKPILE REMAINS UNDISTURBED FOR MORE THAN SEVEN (7) DAYS, TEMPORARY SEEDING AND STABILIZATION IS REQUIRED.
 - EROSION CONTROL MEASURES TEMPORARILY REMOVED FOR UNAVOIDABLE CONSTRUCTION ACTIVITIES SHALL BE IN WORKING ORDER PRIOR TO THE COMPLETION OF EACH WORK DAY.
 - MAINTAIN SOIL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCES ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.
 - PUMPS MAY BE USED AS BYPASS DEVICES. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS.
 - GRADING EFFORTS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES. ALL DISTURBED AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF THIRTY (30) DAYS REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH TECHNICAL STANDARDS.
 - ALL DISTURBED SLOPES EXCEEDING 4:1 YET LESS THAN 3:1, SHALL BE STABILIZED WITH NORTH AMERICAN GREEN 575BN EROSION MATTING (OR APPROVED EQUAL) AND DISTURBED SLOPES EXCEEDING 3:1 YET LESS THAN 2:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN 12525BN (OR APPROVED EQUAL) OR APPLICATION OF AN APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF. AS REQUIRED, EROSION MATTING AND/OR NETTING USED ONSITE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
 - DURING PERIODS OF EXTENDED DRY WEATHER, THE CONTRACTOR SHALL KEEP A WATER TRUCK ON SITE FOR THE PURPOSE OF WATERING DOWN SOILS WHICH MAY OTHERWISE BECOME AIRBORNE. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING WIND EROSION (DUST) DURING CONSTRUCTION AT HIS/HER EXPENSE.
 - DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE VISUALLY INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM ON A DAILY BASIS.
 - QUALIFIED PERSONNEL (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5-INCH, OR MORE, PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERVAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH PART IV D.4. (e)-(f) OF THE NPDES GENERAL PERMIT. CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
 - THE FOLLOWING MAINTENANCE PRACTICES SHALL BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATING CONDITION, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES, AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN. UPON IDENTIFICATION, DEFICIENCIES IN STORMWATER CONTROLS SHALL BE ADDRESSED IMMEDIATELY. THE MAINTENANCE PROCEDURES FOR THIS DEVELOPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO THE BELOW.
 - SILT FENCE - REPAIR OR REPLACE ANY DAMAGED FILTER FABRIC AND/OR STAKES. REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE ABOVE GROUND HEIGHT OF THE FENCE.
 - CONSTRUCTION ENTRANCE - AS NEEDED, ADD STONE TO MAINTAIN CONSTRUCTION ENTRANCE DIMENSIONS AND EFFECTIVENESS.
 - DITCH CHECK (STRAW BALES) - RE-SECURE STAKES; ADJUST OR REPOSITION BALES TO ADDRESS PROPER FLOW OF STORMWATER; AND REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE HEIGHT OF THE BALES.
 - EROSION CONTROL MATTING - REPAIR MATTING IMMEDIATELY IF INSPECTION REVEALS BREACHED OR FAILED CONDITIONS. REPAIR AND RE-GRADE SOIL WHERE CHANNELIZATION HAS OCCURRED.
 - DIVERSION BERM/SWALE - REPLACE OR RE-COMPACT THE CONSTRUCTION MATERIALS AS NECESSARY.
 - INLET PROTECTION - CLEAN, REPAIR OR REPLACE FILTER FABRIC AND/OR STONE WHEN CONTROL MEASURE IS CLOGGED. INLET FILTER BAGS SHALL BE REPLACED ONCE BAG BECOMES ONE-HALF FULL OF SEDIMENT.
- ADDITIONAL POLLUTANT CONTROL MEASURES TO BE IMPLEMENTED DURING CONSTRUCTION ACTIVITIES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
- CONSTRUCTION WASTE SHALL BE PROPERLY DISPOSED OF. THIS INCLUDES ALL CONSTRUCTION SITE WASTE MATERIAL, SANITARY WASTE, AND WASTE FROM VEHICLE TRACKING OF SEDIMENTS. THE CONTRACTOR SHALL ENSURE THAT NO MATERIALS OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, BURNED, OR DISCHARGED TO THE WATERS OF THE STATE. VEHICLES HAULING MATERIAL AWAY FROM THE SITE SHALL BE COVERED WITH A TARPULIN TO PREVENT BLOWING DEBRIS.
 - DUST CONTROL SHALL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:
 - COVERING 50% OR MORE OF THE SOIL SURFACE WITH A NON-ERODIBLE MATERIAL.
 - ROUGHENING THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND. RIDGES SHALL BE AT LEAST SIX (6) INCHES IN HEIGHT.
 - FREQUENT WATERING OF EXCAVATION AND FILL AREAS.
 - PROVIDING GRAVEL OR PAVING AT ENTRANCE/EXIT DRIVES, PARKING AREAS AND TRANSIT PATHS.
 - STREET SWEEPING SHALL BE PERFORMED TO IMMEDIATELY REMOVE ANY SEDIMENT TRACKED ON PAVEMENTS.
- CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM 1 AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS.
- INSTALL PERIMETER SILT FENCE, EXISTING INLET PROTECTION, AND TEMPORARY CONSTRUCTION ENTRANCE.
 - STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE.
 - CONDUCT ROUGH GRADING EFFORTS.
 - INSTALL UTILITY PIPING AND STRUCTURES, IMMEDIATELY INSTALL INLET PROTECTION.
 - COMPLETE FINAL GRADING, INSTALLATION OF GRAVEL BASE COURSES, PLACEMENT OF CURBS, PAVEMENTS, WALKS, ETC.
 - PLACE TOPSOIL AND IMMEDIATELY STABILIZE DISTURBED AREAS WITH EROSION CONTROLS.
 - EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER THAT MEETS OR EXCEEDS THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES DEFINITION OF "FINAL STABILIZATION".



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ISSUE DATES:

Owner Review:	11.03.2020
Property Acquisition Review:	2.09.2021
Owner Review:	6.09.2021

Bid Set:
State Submittal / Permit:
As-Built:
REVISIONS:
1 -



PROJECT ADDRESS:
PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W1949 Freistadt Rd.
CITY/ STATE / ZIP
Germantown, WI 53022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect: BGK
Engineer: xxx
Reviewed By: BGK

Sheet Title:
SITE EROSION CONTROL PLAN
Sheet Number:
C-104
Project Number: P12364
P12364



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SITE EROSION CONTROL PLAN 1" = 30'-0"

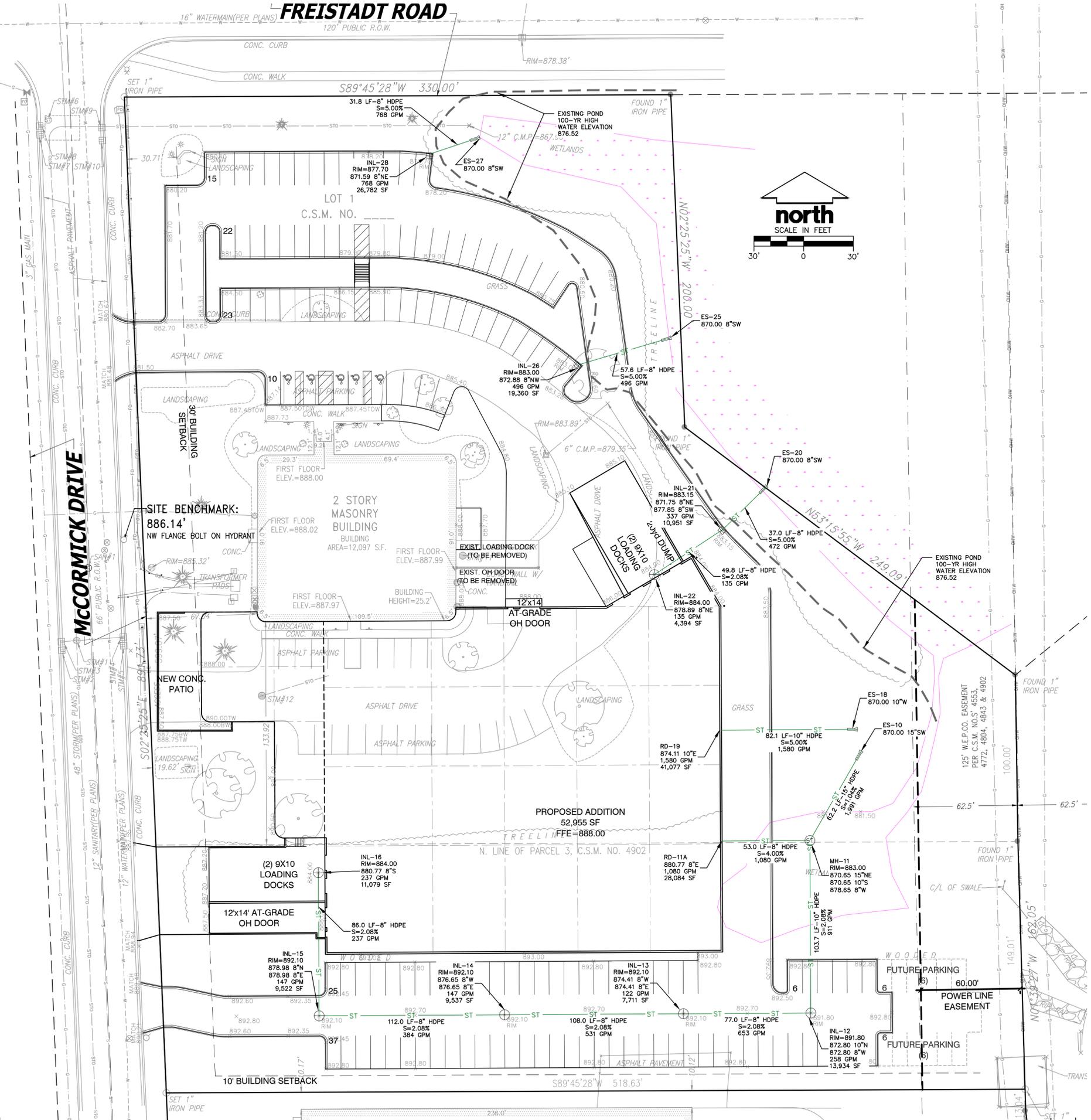
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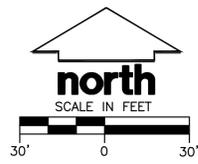
CONTRACTORS

ARCHITECTS

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- EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY FOR PROPOSED UTILITY CONNECTIONS AND/OR TO AVOID DAMAGE THERETO. CONTRACTOR SHALL CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.
- ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN (WISCONSIN LATEST EDITION AND ADDENDUM) AND ALL STATE AND LOCAL CODES AND SPECIFICATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WHICH SPECIFICATIONS AND CODES APPLY, AND TO COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE LOCAL AND STATE AUTHORITIES.
- UTILITY CONSTRUCTION AND SPECIFICATIONS SHALL COMPLY WITH THE VILLAGE OF SUSSEX SPECIAL PROVISIONS AND WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES DSPS 382.
- TRACER WIRES SHALL BE INSTALLED AS NECESSARY IN ACCORD WITH 182.0715(2R) OF THE STATE STATUTES AND VILLAGE OF SUSSEX REQUIREMENTS.
- LENGTHS OF PROPOSED UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLAN. LENGTHS ARE SHOWN FOR CONTRACTOR CONVENIENCE ONLY. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPUTATIONS OF MATERIALS REQUIRED TO COMPLETE WORK. LENGTHS SHALL BE FIELD VERIFIED DURING CONSTRUCTION.
- CONTRACTOR SHALL ADJUST AND/OR RECONSTRUCT EXISTING UTILITY COVERS (SUCH AS MANHOLE COVERS, VALVE BOX COVERS, ETC.) TO MATCH FINISHED GRADES OF THE AREAS DISTURBED DURING CONSTRUCTION.
- CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS, AND SIZES OF PROPOSED UTILITIES AND CHECK ALL UTILITY CROSSINGS FOR CONFLICTS PRIOR TO ATTEMPTING CONNECTIONS AND BEGINNING UTILITY CONSTRUCTION.
- STORM SEWER SPECIFICATIONS -
PIPE - REINFORCED CONCRETE PIPE (RCP) SHALL MEET THE REQUIREMENTS OF ASTM CLASS IV (MINIMUM C-76 WITH RUBBER GASKET JOINTS CONFORMING TO ASTM C-443; HIGH DENSITY DUAL-WALL POLYETHYLENE N-12 CORRUGATED PIPE (HDPE) SHALL BE AS MANUFACTURED BY ADS OR EQUAL WITH WATER TIGHT JOINTS, AND SHALL MEET THE REQUIREMENTS OF AASHTO DESIGNATION M-294 TYPE "S", OR POLYVINYL CHLORIDE (PVC) - CLASS PS46 MEETING AASHTO SF78, AS NOTED.
INLETS/CATCH BASINS - INLETS/CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FILE NO. 25 OF THE "STANDARD SPECIFICATIONS" WITH A 1'-8" X 2'-6" MAXIMUM OPENING. FRAME & GRATE SHALL BE NENAH R-1580 WITH TYPE G GRATE, OR EQUAL. CURB FRAME & GRATE SHALL BE NENAH R-3067, OR EQUAL.
BACKFILL AND BEDDING - STORM SEWER SHALL BE CONSTRUCTED WITH GRAVEL BACKFILL AND CLASS "B" BEDDING IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS".
MANHOLE FRAMES AND COVERS - MANHOLE FRAMES AND COVERS SHALL BE NENAH R-1642 WITH TYPE "B" SELF SEALING LIDS, NON-ROCKING OR EQUAL.
FIELD TILE CONNECTION - ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE INCLUDED IN THE UNIT PRICE(S) FOR STORM SEWER. TILE LINES CROSSED BY THE TRENCH SHALL BE REPLACED WITH THE SAME MATERIAL AS THE STORM SEWER.



SEE SHEET C-103A-C
FOR PHASING PLANS

⊙	SANITARY SEWER MANHOLE	— SAN —	SANITARY SEWER
⊕	STORM MANHOLE	— W —	WATER MAIN
⊕	CATCH BASIN ROUND	— ST —	STORM SEWER
⊕	CATCH BASIN SQUARE	— RD —	ROOF DRAIN
⊕	FIRE HYDRANT	— G —	UNDERGROUND GAS
⊕	WATER VALVE	— E —	UNDERGROUND ELECTRIC
⊕	GAS VALVE	— T —	UNDERGROUND TELEPHONE
⊕	LIGHT POLE	— FIB —	UNDERGROUND FIBER OPTICS
⊕	TELEPHONE PEDESTAL	— OH —	OVERHEAD UTILITY
⊕	ELECTRICAL MANHOLE	— SF —	SILT FENCE
⊕	SIGN		
⊕	POWER POLE		
⊕	GUY WIRE		
⊕		⊕	CONIFEROUS TREE
		⊕	DECIDUOUS TREE



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Owner Review:	11.03.2020
Property Acquisition Review:	2.09.2021
Owner Review:	6.09.2021
Bid Set:	
State Submittal / Permit:	
As-Built:	
REVISIONS:	
1 -	



PROJECT ADDRESS:
PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W19349 Freistadt Rd.
CITY/ STATE / ZIP
Germantown, WI 53022

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Architect: BGK
Engineer: xxx
Reviewed By: BGK
Sheet Title:
SITE UTILITY PLAN
Sheet Number:
C-105
Project Number: P12364
P12364

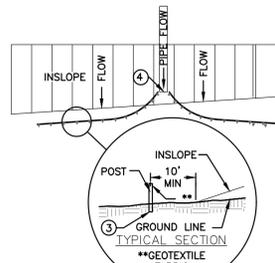


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W238 N610 BUSSE RD., STE 100
WALKESHA, WISCONSIN 53188
262.513.0666 PHONE | 262.513.1232 FAX
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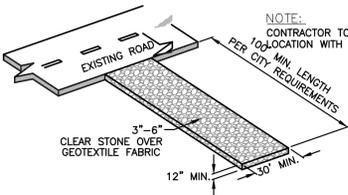
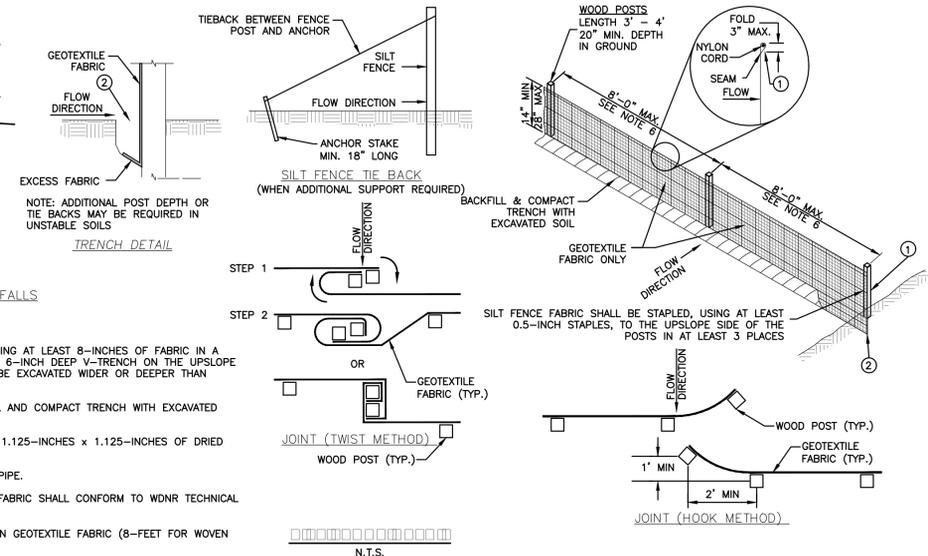
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SILT FENCE ALONG SLOPES & OUTFALLS

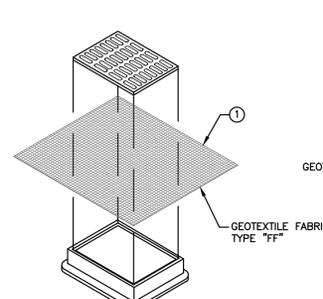
GENERAL NOTES

- SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8-INCHES OF FABRIC IN A 4-INCH WIDE AND 8-INCH DEEP TRENCH OR 6-INCH DEEP V-TRENCH ON THE UPSLOPE SIDE OF THE FENCE. TRENCHES SHALL NOT BE EXCAVATED WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.
- FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
- WOOD POSTS SHALL BE A MINIMUM SIZE OF 1.125-INCHES X 1.125-INCHES OF DRIED OAK OR HICKORY.
- SILT FENCE TO EXTEND ABOVE THE TOP OF PIPE.
- SILT FENCE CONSTRUCTION AND GEOTEXTILE FABRIC SHALL CONFORM TO WDNR TECHNICAL STANDARD 1056.
- POST SPACING SHALL BE SELECTED BASED ON GEOTEXTILE FABRIC (8- FEET FOR WOVEN & 3- FEET FOR NON-WOVEN)



GENERAL NOTES

- TRACKING PADS SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE SITE.
- THE AGGREGATE FOR TRACKING PADS SHALL BE 3 TO 6-INCH CLEAR OR WASHED STONE. ALL MATERIAL TO BE RETAINED ON A 3-INCH SIEVE.
- THE AGGREGATE SHALL BE PLACED IN A LAYER AT LEAST 12-INCHES THICK. ON SITES WHERE SATURATED CONDITIONS ARE EXPECTED DURING THE LIFE OF THE PAD, THE PAD SHALL BE UNDERLAIN WITH WADOT TYPE "FF" GEOTEXTILE FABRIC TO PREVENT MIGRATION OF UNDERLYING SOILS INTO THE STONE LAYER.
- THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT. THE TRACKING PAD SHALL BE A MINIMUM 100- FEET LONG.
- ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, AT THE END OF EACH WORKING DAY.
- TRACKING PADS SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24-HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5-INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.
- THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.

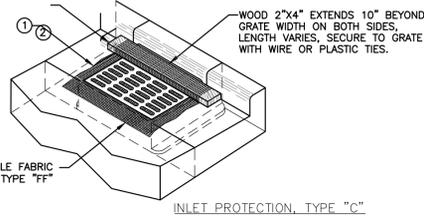


INLET PROTECTION - TYPE "B" (WITHOUT CURB BOX)

TYPE "B" INSTALLATION NOTES

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.

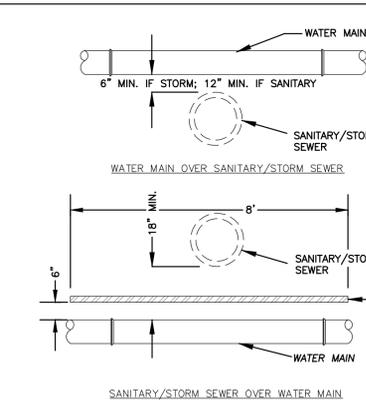
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHODS TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.



INLET PROTECTION, TYPE "C" (WITH CURB BOX)

GENERAL NOTES

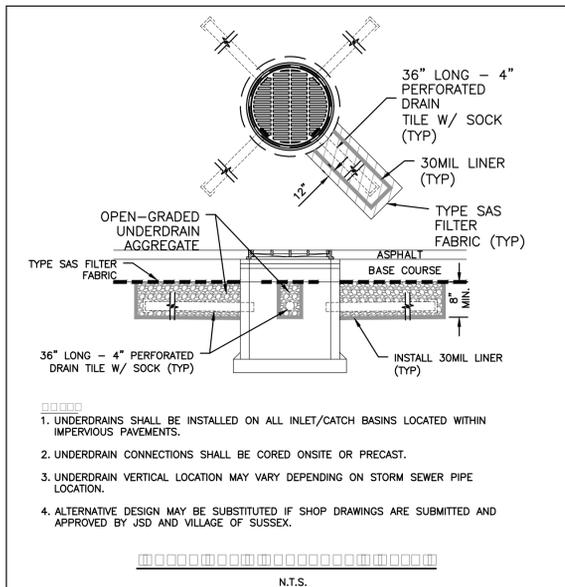
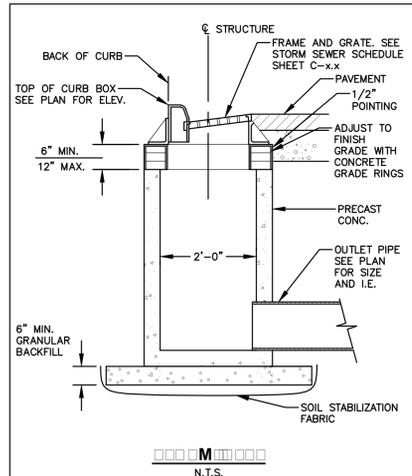
- TYPE "FF" GEOTEXTILE FABRIC INLET PROTECTION SHALL BE SELECTED FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S PRODUCT ACCEPTABILITY (PAL) LIST. FABRIC INLET PROTECTION AND MANUFACTURED ALTERNATIVES SHALL BE IN COMPLIANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD 1060.
- WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.
- FINISHED SIZE, INCLUDING FLAP POCKET WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- FOR INLET PROTECTION, TYPE "C" (WITH CURB BOX), AN ADDITIONAL 18 INCHES OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.



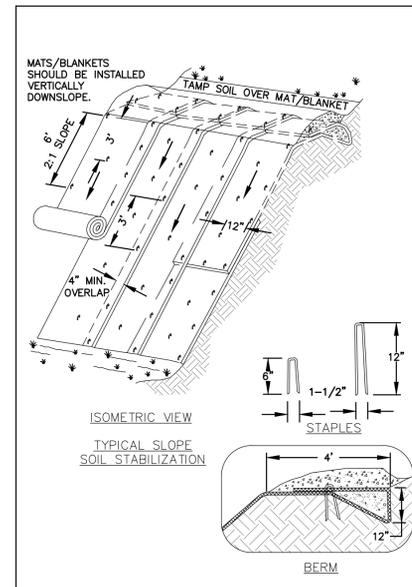
AT CROSSING, ONE FULL 18 FOOT LENGTH OF WATER MAIN SHALL BE CENTERED ON THE SEWER. MAINTAIN A MINIMUM HORIZONTAL SEPARATION OF 8 FEET.

4'x8'x2" POLYSTYRENE BOARD INSULATION* IF SEPARATION IS LESS THAN 3' AND DEPTH OF BURY TO TOP OF SEWER IS LESS THAN 6'.

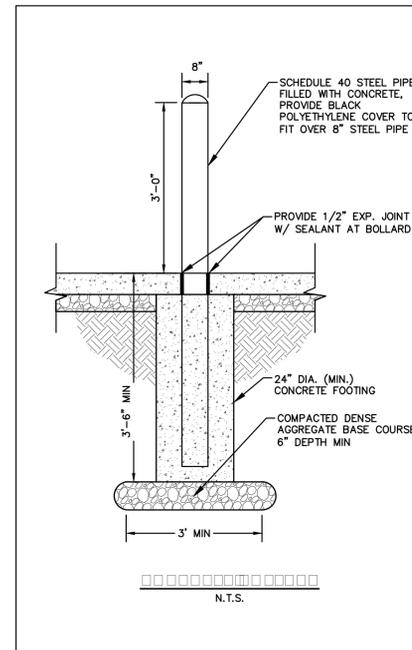
* FROST PROTECTION METHOD TO FOLLOW SPS 382.30(11)(c)



- UNDERDRAINS SHALL BE INSTALLED ON ALL INLET/CATCH BASINS LOCATED WITHIN IMPERVIOUS PAVEMENTS.
- UNDERDRAIN CONNECTIONS SHALL BE CORED ONSITE OR PRECAST.
- UNDERDRAIN VERTICAL LOCATION MAY VARY DEPENDING ON STORM SEWER PIPE LOCATION.
- ALTERNATIVE DESIGN MAY BE SUBSTITUTED IF SHOP DRAWINGS ARE SUBMITTED AND APPROVED BY JSD AND VILLAGE OF SUSSEX.



- EROSION MAT CONSTRUCTION SHALL BE IN ACCORDANCE WITH WISCONSIN DNR TECHNICAL STANDARD 1052 "NON-CHANNEL EROSION MAT".
- ONLY WADOT EROSION CONTROL PRODUCT ACCEPTABILITY LIST (PAL) APPROVED MATS SHALL BE ALLOWED. REFER TO EROSION CONTROL PLAN FOR EXACT MAT CLASSIFICATION.
- APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
- LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
- ONLY WADOT EROSION CONTROL PRODUCT ACCEPTABILITY LIST (PAL) APPROVED MATS SHALL BE ALLOWED. REFER TO EROSION CONTROL PLAN FOR EXACT MAT CLASSIFICATION.



MSI GENERAL CORPORATION
P.O. BOX 7
OCONOMOWOC, WI 53066
PHONE: 262-367-3661

WWW.MSIGENERAL.COM
SINGLE SOURCE RESPONSIBILITY™

ISSUE DATES:
Owner Review: 11.03.2020
Property Acquisition Review: 2.09.2021
Owner Review: 6.09.2021

As-Built:
REVISIONS:

1	--
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PROJECT ADDRESS:

PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W19349 Freistadt Rd.
CITY/ STATE / ZIP
Germantown, WI 53022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect: BGK
Engineer: xxx
Reviewed By: BGK

SITE DETAILS

Sheet Number:
C-106
Project Number: P12364

P12364



Call 811 or (800) 242-8511
Milwaukee Area (262) 432-7910
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com



MILWAUKEE REGIONAL OFFICE
W238 N1610 BUSSE RD., STE 100
WALUKESHA, WISCONSIN 53188
262.513.0666 PHONE | 262.513.1232 FAX
www.jsdinc.com
JSD JOB NO.: 20-10204
JSD PROJ. MGR.: RWI

SITE DETAILS

MANAGERS

ENGINEERS

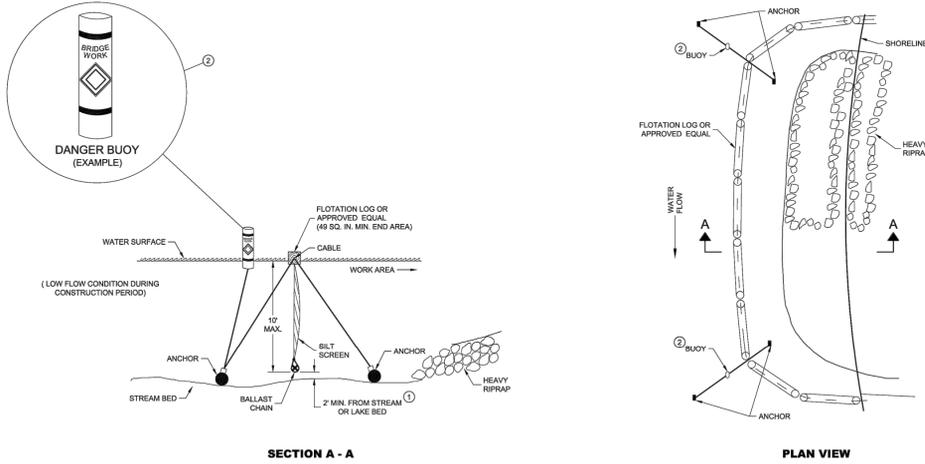
CONTRACTORS

ARCHITECTS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① 2' MINIMUM SHALL BE MAINTAINED DURING CONSTRUCTION PERIOD.
- ② USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



SILT SCREEN PLACEMENT DETAIL

SILT SCREEN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE: 8/24/21 BY: Beth Caronista
DATE: _____ CHIEF PROGRAM DEVELOPMENT ENGINEER

6

6

SDD 08E12 - 01

SDD 08E12 - 01

SILT SCREEN DETAIL



MSI GENERAL CORPORATION
P.O. BOX 7
OCONOMOWOC, WI 53066
PHONE: 262-367-3661

WWW.MSIGENERAL.COM
SINGLE SOURCE RESPONSIBILITY™

ISSUE DATES:

Owner Review:	11.03.2020
Property Acquisition Review:	2.09.2021
Owner Review:	6.09.2021

Bid Set:
State Submittal / Permit:

As-Built:

REVISIONS:

1 --



PROJECT ADDRESS:

PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W19349 Freistadt Rd.
CITY/ STATE / ZIP
Germantown, WI 53022

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Architect:	Engineer:	Reviewed By:
BGK	xxx	BGK

SITE DETAILS

Sheet Number:
C-106B
Project Number: P12364
P12364

DIGGERS HOTLINE
Call 811 or (800) 242-8511
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Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

JSD Professional Services, Inc.
• Engineers • Surveyors • Planners
MILWAUKEE REGIONAL OFFICE
W238 N1610 BUSSE RD., STE 100
WAUKESHA, WISCONSIN 53188
262.513.0666 PHONE | 262.513.1232 FAX
www.jsdinc.com
JSD JOB NO.: 20-10204
JSD PROJ. MGR.: RWI

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS



Agrecol LLC
www.agrecol.com
10101 N. Casey Road
Evansville, Wisconsin 53536
Ph: 608-223-3571

Economy Prairie Seed Mix

Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses/Sedges/Rushes:		
<i>Andropogon gerardii</i>	Big Bluestem	8.00
<i>Bouteloua curtipendula</i>	Side Oats Grama	32.00
<i>Elymus canadensis</i>	Canada Wild Rye	16.00
<i>Elymus virginicus</i>	Virginia Wild Rye	20.00
<i>Panicum virgatum</i>	Switchgrass	8.00
<i>Schizachyrium scoparium</i>	Little Bluestem	16.00
<i>Spatina pectinata</i>	Prairie Cordgrass	12.00
Total		112.00
Forbs:		
<i>Asclepias tuberosa</i>	Butterfly Weed	2.00
<i>Aster novae-angliae</i>	New England Aster	0.50
<i>Chamaecrista fasciata</i>	Partridge Pea	8.00
<i>Coreopsis lanceolata</i>	Lance-Leaf (Sand) Coreopsis	2.00
<i>Dalea purpurea</i>	Purple Prairie Clover	4.00
<i>Echinacea purpurea</i>	Purple Coneflower	8.00
<i>Heliopsis helianthoides</i>	Early Sunflower	6.00
<i>Liatris pycnostachya</i>	Prairie Blazing Star	2.00
<i>Monarda fistulosa</i>	Wild Bergamot	1.00
<i>Penstemon digitalis</i>	Foxglove Beard Tongue	0.50
<i>Ratibida pinnata</i>	Yellow Coneflower	4.00
<i>Rudbeckia hirta</i>	Black-eyed Susan	2.00
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan	1.00
<i>Solidago rigida</i>	Stiff Goldenrod	1.00
<i>Tradescantia ohioensis</i>	Ohio Spiderwort	4.00
<i>Zizia aurea</i>	Golden Alexanders	2.00
Total		48.00

Approximate area of coverage:
Total area (SF) of coverage: 19,305
Total area (acres) of coverage: 0.44

NATIVE PRAIRIE SEED MIX

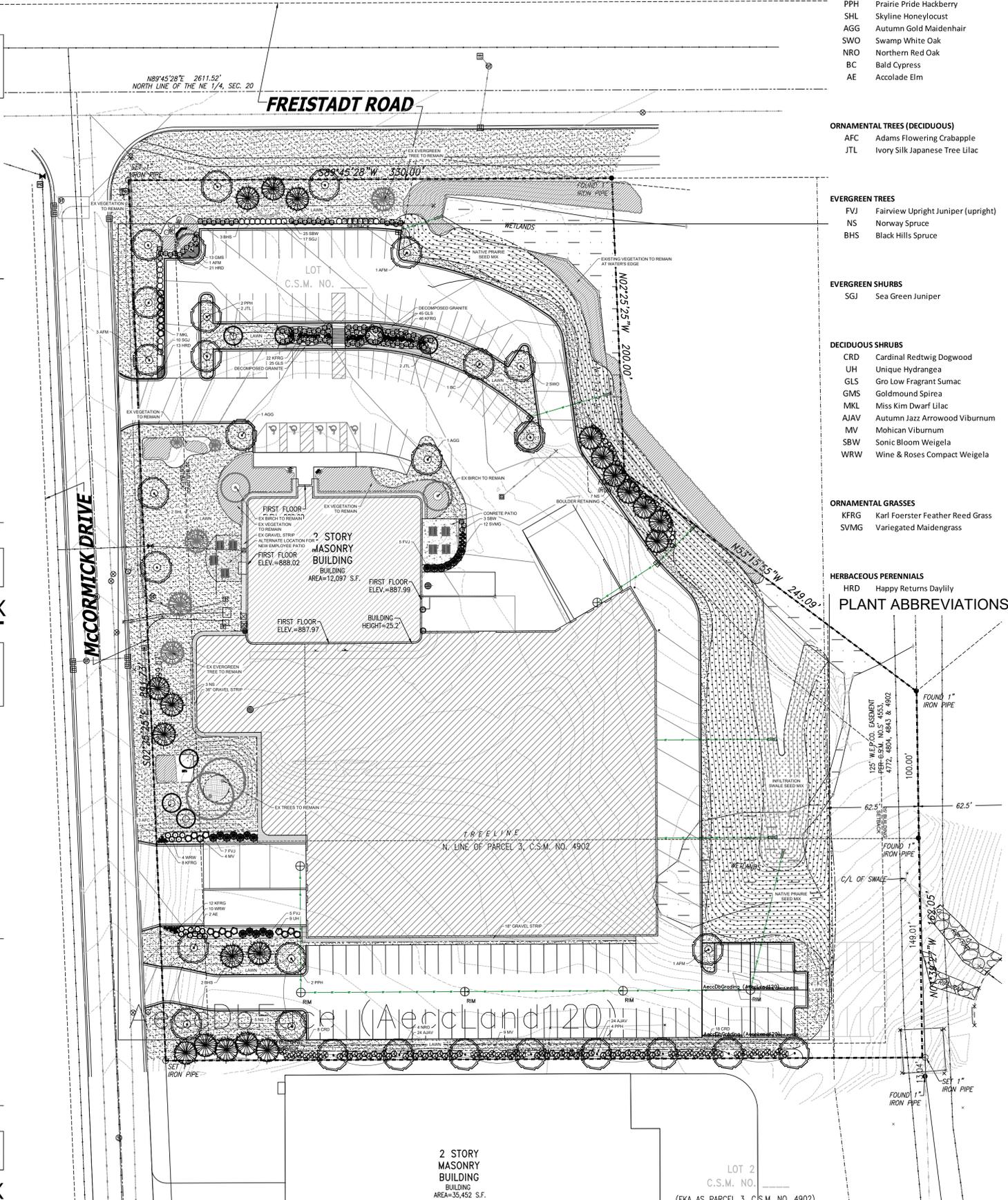
Agrecol LLC
www.agrecol.com
10101 N. Casey Road
Evansville, Wisconsin 53536
Ph: 608-223-3571

Infiltration Swale Seed Mix

Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses/Sedges/Rushes:		
<i>Andropogon gerardii</i>	Big Bluestem	10.00
<i>Bromus ciliatus</i>	Fringed Brome	36.00
<i>Carex comosa</i>	Bristly Sedge	5.00
<i>Carex vulpinoidea</i>	Brown Fox Sedge	1.50
<i>Elymus virginicus</i>	Virginia Wild Rye	36.00
<i>Glyceria striata</i>	Fowl Manna Grass	2.00
<i>Panicum virgatum</i>	Switchgrass	3.00
<i>Scirpus atrovirens</i>	Dark-Green Bullrush	0.50
<i>Scirpus cyperinus</i>	Wool Grass	0.25
<i>Sorghastrum nutans</i>	Indian Grass	16.00
<i>Spatina pectinata</i>	Prairie Cordgrass	8.00
Total		118.25
Forbs:		
<i>Alisma subcordatum</i>	Common Water Plantain	2.00
<i>Asclepias incarnata</i>	Marsh (Red) Milkweed	6.00
<i>Aster novae-angliae</i>	New England Aster	2.00
<i>Desmodium canadense</i>	Canada Tick Trefoil	4.00
<i>Ratibida pinnata</i>	Yellow Coneflower	3.00
<i>Rudbeckia hirta</i>	Black-eyed Susan	2.00
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan	2.00
<i>Solidago ohioensis</i>	Ohio Goldenrod	1.00
<i>Verbena hastata</i>	Blue Vervain	1.75
<i>Vernonia fasciculata</i>	Ironweed	2.00
Total		25.75

Approximate area of coverage:
Total area (SF) of coverage of infiltration area: 4,510
Total area (acres) of coverage of infiltration area: 0.10

INFILTRATION SWALE SEED MIX



- SHADE TREES (DECIDUOUS)**
- AFM Autumn Fantasy Maple
 - PPH Prairie Pride Hackberry
 - SHL Skyline Honeylocust
 - AGG Autumn Gold Maidenhair
 - SWO Swamp White Oak
 - NRO Northern Red Oak
 - BC Bald Cypress
 - AE Accolade Elm

- ORNAMENTAL TREES (DECIDUOUS)**
- AFC Adams Flowering Crabapple
 - JTL Ivory Silk Japanese Tree Lilac

- EVERGREEN TREES**
- FVJ Fairview Upright Juniper (upright)
 - NS Norway Spruce
 - BHS Black Hills Spruce

- EVERGREEN SHRUBS**
- SGJ Sea Green Juniper

- DECIDUOUS SHRUBS**
- CRD Cardinal Redtwig Dogwood
 - UH Unique Hydrangea
 - GLS Gro Low Fragrant Sumac
 - GMS Goldmound Spirea
 - MKL Miss Kim Dwarf Lilac
 - AJAV Autumn Jazz Arrowwood Viburnum
 - MV Mohican Viburnum
 - SBW Sonic Bloom Weigela
 - WRW Wine & Roses Compact Weigela

- ORNAMENTAL GRASSES**
- KFRG Karl Foerster Feather Reed Grass
 - SVMG Variegated Maidengrass

- HERBACEOUS PERENNIALS**
- HRD Happy Returns Daylily

PLANT ABBREVIATIONS

PROJECT
ENERCON TECHNICAL CENTER
enercon logo

N120 W19349
Freistadt Road
Germantown, WI

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
8.10.21	FIRST ISSUE

Information contained herein is based on survey information, field inspection, and believed to be accurate.
SHEET TITLE
OVERALL LANDSCAPE PLAN

PROJECT MANAGER WDH
PROJECT NUMBER 21-058
DATE 08.10.21
SHEET NUMBER

OVERALL LANDSCAPE PLAN
Scale: 1" = 40'0"

L 1.0



N89°45'28"E 2611.52'
NORTH LINE OF THE NE 1/4, SEC. 20

FREISTADT ROAD

HELLER & ASSOCIATES, LLC
LANDSCAPE ARCHITECTURE
P.O. Box 1359
Lake Geneva, Wisconsin 53147-1359
ph 262.639.9733
david@wdavidheller.com
www.wdavidheller.com



PROJECT
ENERCON TECHNICAL CENTER

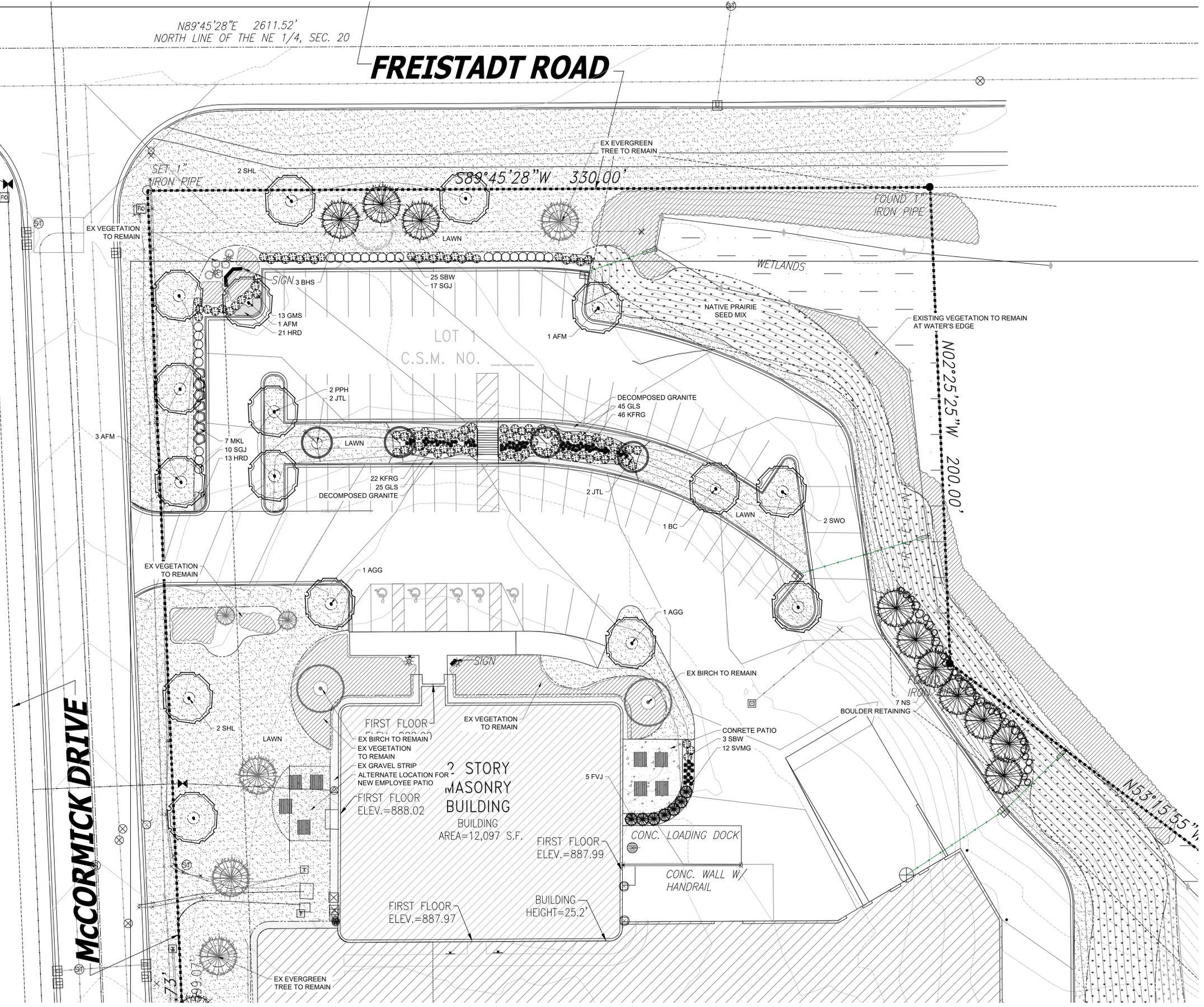


N120 W19349
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- PLANT ABBREVIATIONS**



ENLARGED LANDSCAPE PLAN

Scale: 1" = 20'0"

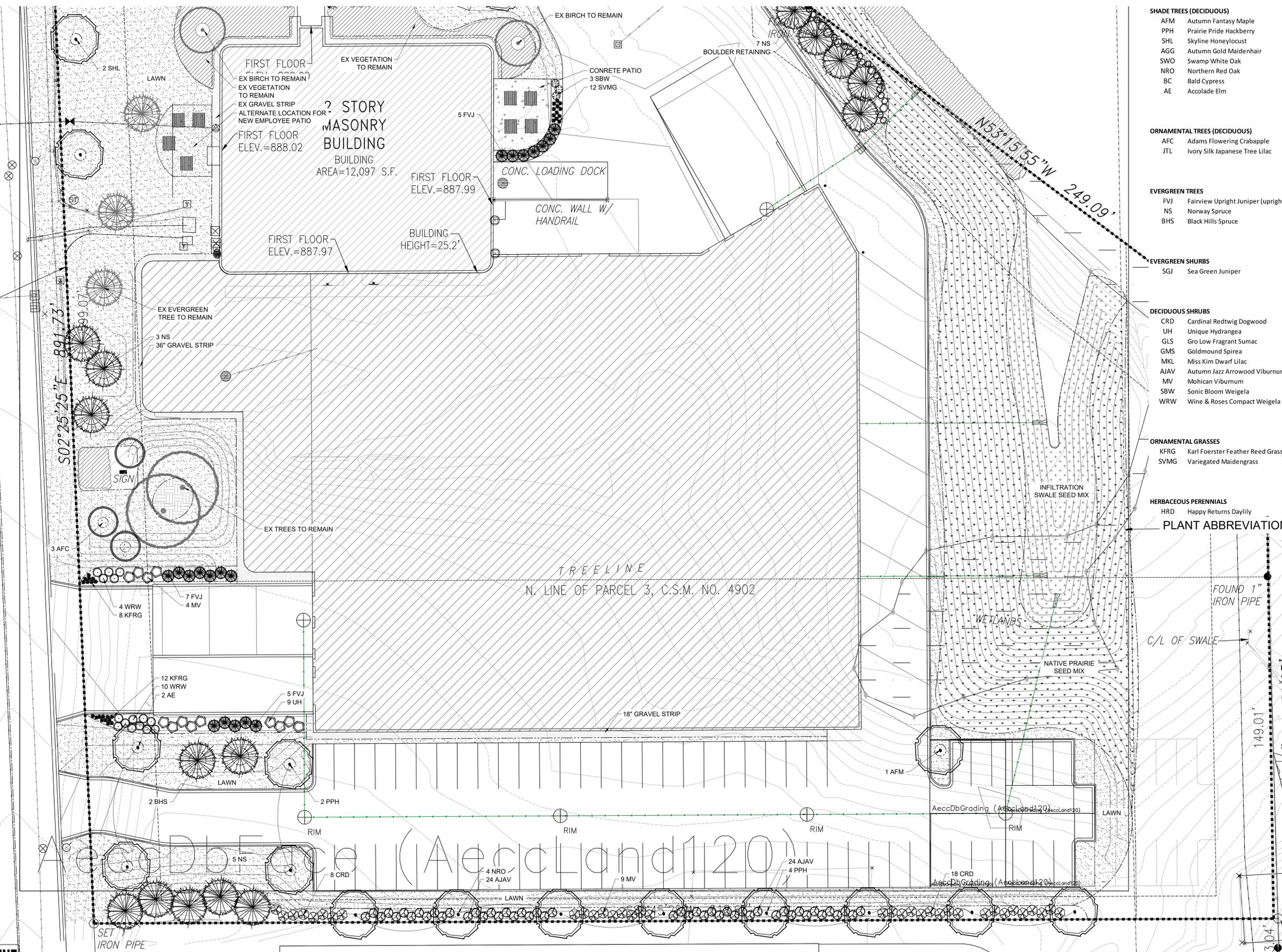
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ENLARGED LANDSCAPE PLAN

PROJECT MANAGER	WDH
PROJECT NUMBER	21-058
DATE	08.10.21
SHEET NUMBER	

L 1.1

MCCORMICK DRIVE



- SHADE TREES (DECIDUOUS)**
- AFM Autumn Fantasy Maple
 - PPH Prairie Pride Hackberry
 - SHL Skyline Honeylocust
 - AGG Autumn Gold Maidenhair
 - SWO Swamp White Oak
 - NRO Northern Red Oak
 - BC Bald Cypress
 - AE Accolade Elm

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 - JTL Ivory Silk Japanese Tree Lilac

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- KFRG Karl Foerster Feather Reed Grass
 - SVMG Variegated Maidengrass

- HERBACEOUS PERENNIALS**
- HRD Happy Returns Daylily

PLANT ABBREVIATIONS

HELLER & ASSOCIATES, LLC
 LANDSCAPE ARCHITECTURE
 P.O. Box 1359
 Lake Geneva, Wisconsin 53147-1359
 ph 262.639.9733
 david@wdavidheller.com
 www.wdavidheller.com



PROJECT
ENERCON TECHNICAL CENTER



N120 W19349
 Freistadt Road
 Germantown, WI

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
8.10.21	FIRST ISSUE

Information contained herein is based on survey information, field inspection, and believed to be accurate.

SHEET TITLE
ENLARGED LANDSCAPE PLAN

PROJECT MANAGER	WDH
PROJECT NUMBER	21-058
DATE	08.10.21
SHEET NUMBER	

L 1.2

DIGGERS HOTLINE
 CALL DIGGERS HOTLINE
 811 or 1-800-242-8511
 MILW AREA 259-1181
 WI STATUTE 182.017(1974)
 REQUIRES MIN. 3 WORK DAYS
 NOTICE BEFORE YOU EXCAVATE

ENLARGED LANDSCAPE PLAN
 Scale: 1" = 20'0"
 NORTH



- Contractor responsible for contacting Diggers Hotline (811 or 800-242-8511) to have site marked prior to excavation or planting.
- Contractor to verify all plant quantities shown on Plant & Material List and landscape planting symbols and report any discrepancies to Landscape Architect or General Contractor.
- All plantings shall comply with standards as described in American Standard of Nursery Stock - 260.1 ANSI (latest version). Landscape Architect reserves the right to inspect, and potentially reject any plants that are inferior, compromised, undressed, disassembled, improperly transported, installed incorrectly or damaged. No sub-standard "B Grade" or "Park Grade" plant material shall be accepted. Plant material shall originate from nursery(ies) with a similar climate as the planting site.
- Any potential plant substitutions must be approved by Landscape Architect or Owner. All plants must be installed as per sizes indicated on Plant & Material Schedule, unless approved by Landscape Architect. Any changes to sizes shown on plan must be submitted in writing to the Landscape Architect prior to installation.
- Topsoil in Parking Lot Islands (if applicable): All parking lot islands to be backfilled with topsoil to a minimum depth of 12" to insure long-term plant health. Topsoil should be placed within 3" of finish grade by General Contractor / Excavation Contractor during rough grading operations/activity. The landscape contractor shall be responsible for the fine grading of all disturbed areas, planting beds, and lawn areas. Crown all parking lot islands a minimum of 6" to provide proper drainage, unless otherwise specified.
- Tree Planting: Plant all trees slightly higher than finished grade at the root flare. Remove excess soil from the top of the root ball, if needed. Remove and discard non-biodegradable ball wrapping and support wire. Removed biodegradable burlap and wire cage (if present) from the top of the rootball and carefully bend remaining wire down to the bottom of the hole. Once the tree has been placed into the hole and will no longer be moved, secure the remaining 3/4 of the burlap and remove the twine. Provide three slow release fertilizer for each tree planted.
- Tree Planting: Backfill tree planting holes 80% existing soils removed from excavation and 20% plant starter mix. Avoid air pockets and do not tamp soil down. Discard any gravel, rocks, heavy clay, or concrete pieces. When hole is 3/4 full, trees shall be watered thoroughly, and water left to soak in before proceeding to fill the remainder of the hole. Water again to full soak in the new planting. Each tree shall receive a 3" deep, 4-5 diameter (see planting details or planting plan) shredded hardwood bark mulch ring around all trees planted in lawn areas. Do not build up any mulch onto the trunk of any tree. Trees that are installed incorrectly will be replaced at the time and expense of the Landscape Contractor.
- Shrub Planting: All shrubs to be planted in groupings as indicated on the Landscape Plan. Install with the planting of shrubs a 3/8" mix of plant starter with topsoil. Install topsoil into all plant beds as needed to achieve proper grade and displace undesirable soil (see planting detail). Remove all excessive gravel, clay and stones from plant beds prior to planting. When hole(s) are 3/4 full, shrubs shall be watered thoroughly, and water left to soak in before proceeding. Provide slow-release fertilizer packets at the rate of 1 per 24" height/diameter of shrub at planting.
- Mulching: All tree and shrub planting beds to receive a 3" deep layer of high quality shredded hardwood bark mulch (not pigment dyed or enviro-mulch). All perennial planting areas (groupings) shall receive a 2" layer of shredded hardwood bark mulch, and groundcover areas a 1-2" layer of the same mulch. Do not mulch annual flower beds (if applicable). Do not allow mulch to contact plant stems and tree trunks.
- Edging: All planting beds shall be edged with a 4" deep spade edge using a flat landscape spade or a mechanical edger. Bedlines are to be cut crisp, smooth as per plan. A clean definition between landscape beds and lawn is required. Pack mulch against lawn edge to hold in place.

11. Plant bed preparation/Soil Amendment composition: All perennial, groundcover and annual areas (if applicable) are required to receive a blend of organic soil (Soil Amendments) amending prior to installation. Rotate the following materials at the following ratio into existing soil beds or installed topsoil beds to a depth of approximately 8"-10". Containerized and balled & burlapped plant material should be back-filled with amended soil:

Per 100 SF of bed area (Soil Amendment composition):
 1/2 CY Peat Moss or Mushroom Compost
 1/4 CY blended/pulverized Topsoil
 1/4 CY composted manure

In robo-filled beds only, also include in above mixture:
 2 lbs Starter Fertilizer

- Lawn Installation for all sodded turfgrass areas: Contractor to furnish and prepare blended topsoil (2" minimum) and sod bed, removing all debris and stones 3/2" and larger. Apply a 10-10-10 starter lawn fertilizer uniformly throughout areas prior to laying sod. Use only premium sod blend according to TPI (revised 1995) and ASPA Standards. Install sod uniformly with staggered joints, laid tightly end to end and side to side. Roll sod with a walk behind roller and water immediately upon installation to a 3" depth. Stake any sod installed on slopes steeper than 1:3, and in all swale applications. Contractor is responsible to provide a smooth, uniform, healthy turf, and is responsible for the first two mowings of the newly installed turf, and is also responsible for watering during this period.
- Installation preparation for all seeded areas: remove/kill off any existing unwanted vegetation prior to seeding. Prepare the topsoil (if adequate or provide as in item #6 above) and seed bed by removing all surface stones 1" or larger. Apply a starter fertilizer and specified seed uniformly at the specified rate, and provide mulch covering suitable to germinate and establish turf. Provide seed and fertilizer specifications to Landscape Architect and Owner prior to installation. Erosion control measures are to be used in swales and on slopes in excess of 1:3 and where applicable (see Civil Engineering Drawings). Methods of installation may vary at the discretion of the Landscape Contractor on his/her responsibility to establish and guarantee a smooth, uniform, quality turf. A minimum of 2" of blended, prepared and non-compacted topsoil is required for all lawn areas. If straw mulch is used as a mulch covering, a tackifier may be necessary to avoid wind dispersal of mulch covering. Marsh hay containing reed canary grass is NOT acceptable as a mulch covering.

An acceptable quality seed installation is defined as having:
 No bare spots larger than one (1) square foot
 No more than 10% of the total area with bare areas larger than one (1) square foot
 A uniform coverage through all turf areas

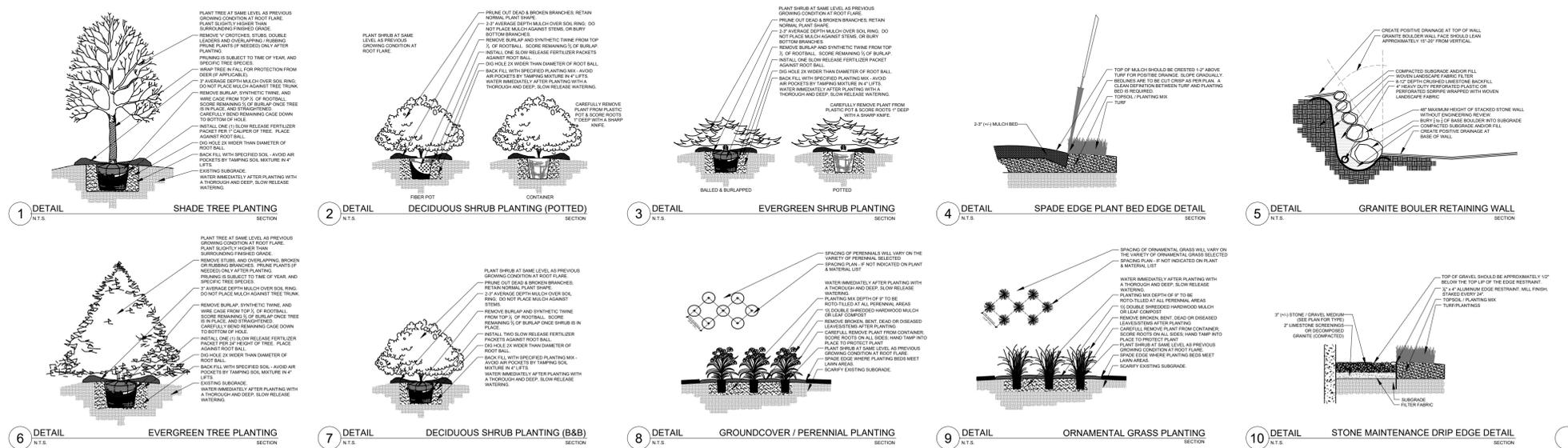
- No-Mow seed areas: "No-Mow" fine fescue seed mix with annual rye nurse crop (available at Reinders Landscape Supply 800-785-3301, Prairie Nursery 800-476-0453) or approved equivalent mix from a reputable seed mix provider. Apply at rates recommended by supplier. Prepare seed bed and soil as specified in item #13 above.
- Native Prairie Seed Mix / Stormwater Seed Mix / Infiltration Swale Seed Mix: Native seed mix(es) as listed on the Plant and Material List or other schedules outlined on the landscape plan set. Seed mixes available from Agrico Native Seed & Plant Nursery 608-223-3571 or Prairie Nursery 800-476-0453 or approved equivalent mix from a reputable seed mix provider. Apply at rates specified herein, or per supplier recommendation. Prepare soil and seed bed as in item #13 above.

- Warranty and Replacements: All plantings are to be watered thoroughly at the time of planting, through construction and upon completion of project as required. Trees, Evergreens, and Shrubs (deciduous and evergreen) shall be guaranteed (100% replacement) for a minimum of one (1) year from the date of project completion. Perennials, groundcovers, and ornamental grasses shall be guaranteed for a minimum of one (1) growing season. Perennials, groundcovers, and ornamental grasses planted after September 15th shall be guaranteed through May 31st of the following year. Only one replacement per plant will be required during the warranty period, except for losses or replacements due to failure to comply with specified requirements. Watering and general ongoing maintenance instructions are to be supplied by the Landscape Contractor to the Owner upon completion of the project.

17. The Landscape Contractor is responsible for the watering and maintenance of all landscape areas for a period of 45 days after the substantial completion of the landscape installation. This shall include all trees, shrubs, evergreens, perennials, ornamental grasses, turf grass, no-mow seed mix, native prairie seed mix, stormwater seed mix, and other native seed mixes. Work also includes weeding, edging, mulching (only if required), fertilizing, trimming, sweeping up grass clippings, pruning and deadheading.

18. Project Completion: Landscape Contractor is responsible to conduct a final review of the project, upon completion, with the Landscape Architect, Client or Owner / Client Representative, and the General Contractor to answer questions, provide written care instructions for new plantings and turf, and insure that all specifications have been met.

LANDSCAPE GENERAL NOTES



PLANTING & HARDSCAPE DETAILS

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CAULP/HEIGHT SIZE	ROOT	SPECIFICATION / NOTES	PLANT SPACING
Proposed Landscape Materials							
SHADE TREES (DECIDUOUS)							
AFM	6	Acer xfreemani 'Autumn Fantasy'	Autumn Fantasy Maple	2.5'	88B	Straight central leader, full and even crown. Prune only after planting	
PPH	8	Celtis occidentalis 'Prairie Pride'	Prairie Pride Hackberry	2.5'	88B	Straight central leader, full and even crown. Prune only after planting	
SHL	4	Gleditsia triacanthos 'Skyline'	Skyline Honeylocust	2.5'	88B	Straight central leader, full and even crown. Prune only after planting	
AGG	2	Ginkgo biloba 'Autumn Gold'	Autumn Gold Maidenhair	2.5'	88B	Straight central leader, full and even crown. Prune only after planting	
SWO	2	Quercus bicolor	Swamp White Oak	2.5'	88B	Straight central leader, full and even crown. Prune only after planting	
NRO	4	Quercus rubra	Northern Red Oak	2.5'	88B	Straight central leader, full and even crown. Prune only after planting	
BC	1	Taxodium distichum	Bald Cypress	2.5'	88B	Straight central leader, full and even crown. Prune only after planting	
AE	2	Ulmus 'Morton'	Academy Elm	2.5'	88B	Straight central leader, full and even crown. Prune only after planting	

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CAULP/HEIGHT SIZE	ROOT	SPECIFICATION / NOTES	PLANT SPACING
ORNAMENTAL TREES (DECIDUOUS)							
AFC	3	Malus x 'Adams'	Adams Flowering Crabapple	7.8'H	88B	Well balanced multi-stemmed tree with minimum four canes, and full appearance	
JTL	4	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	7.8'H	88B	Well balanced multi-stemmed tree with minimum four canes, and full appearance	

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	HEIGHT SIZE	ROOT	SPECIFICATION / NOTES	PLANT SPACING
EVERGREEN TREES							
FVJ	17	Juniperus scopulorum 'Fairview'	Fairview Upright Juniper (upright)	5'-6'	88B	Evenly shaped tree with branching to the ground	60"
NS	15	Picea abies	Norway Spruce	10-12'	88B	Evenly shaped tree with branching to the ground	17'
BHS	5	Picea glauca 'densata'	Black Hills Spruce	7-8'	88B	Evenly shaped tree with branching to the ground	15'

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	SHRUB SIZE (HEIGHT)	ROOT/CONT.	SPECIFICATION / NOTES	PLANT SPACING
EVERGREEN SHRUBS							
SGJ	27	Juniperus chinensis 'Sea Green'	Sea Green Juniper	#5/18"	Cont.	Full rounded well branched shrub	54"

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	SHRUB SIZE (HEIGHT)	ROOT/CONT.	SPECIFICATION / NOTES	PLANT SPACING
DECIDUOUS SHRUBS							
CRD	26	Cornus sericea 'Cardinal'	Cardinal Redtwig Dogwood	36"	Cont.	Full, well rooted plant, evenly shaped	48"
UH	9	Hydrangea paniculata 'Unique'	Unique Hydrangea	36"	Cont.	Full, well rooted plant, evenly shaped	60"
GLS	70	Rhus aromatica 'Gro-Low'	Gro Low Fragrant Sumac	#3	Cont.	Full, well rooted plant, evenly shaped	42"
GMS	13	Spiraea xkumalda 'Goldmound'	Goldmound Spirea	24"	Cont.	Full, well rooted plant, evenly shaped	36"
MKL	7	Syringa patula 'Miss Kim'	Miss Kim Dwarf Lilac	24"	Cont.	Full, well rooted plant, evenly shaped	60"
AIJV	48	Viburnum dentatum 'Autumn Jazz'	Autumn Jazz Arrowwood Viburnum	48"	Cont.	Full, well rooted plant, evenly shaped	60"
MB	13	Viburnum lantana 'Mohican'	Mohican Viburnum	48"	88B	Full, well rounded plant with moist rootball and healthy appearance	60"
SBW	28	Weigela florida 'Sonic Bloom'	Sonic Bloom Weigela	24"	Cont.	Full, well rooted plant, evenly shaped	42"
WRW	14	Weigela florida 'Wine & Roses'	Wine & Roses Compact Weigela	24"	Cont.	Full, well rooted plant, evenly shaped	42"

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CONTAINER SIZE		SPECIFICATION / NOTES	PLANT SPACING
ORNAMENTAL GRASSES							
KFRG	88	Calamagrostis acutiflora 'Carl Foerster'	Karl Foerster Feather Reed Grass	#1	Cont.	Full, well rooted plant	15-18"
SVMG	12	Miscanthus sinensis 'Morning Light'	Variiegated Maidengrass	#1	Cont.	Full, well rooted plant	42"

PLAN KEY	QUANTITY	PLANT MATERIAL PROPOSED SPECIFIED SEED MIX / SOD	CONTAINER SIZE		SPECIFICATION / NOTES	PLANT SPACING
LAWN						
	47655	Lawn Establishment Area / Grading Area		SF	Reinder's Deluxe 50 Seed Mix (800-785-3301)	
	73470	Erosion Matting for sloped seeded areas		SF	EroTex D575 Erosion Control Blanket (or approved equal)	
	19305	Infiltrative Prairie Seed Mix		SF	Agrico, LLC (608-223-3571)	
	4510	Infiltration Basin Seed Mix		SF	Agrico, LLC (608-223-3571)	

Hardscape Materials						
	740	Concrete Employee Patio			SF	
	20	Granite Boulders Retaining Wall	On-Site Boulders	30-42"	EA	On-Site Placement
	15	Granite Boulders Retaining Wall	see plan for location	24-36"	EA	Supplement Existing On-Site Boulders to construct retaining wall
	21	Heritage River Gravel Mulch	Area: 1,530 SF		TN	2" depth
	6	Decomposed Granite Surface (Rust/Brown)	Area: 435 SF		TN	2" depth
	635	Aluminum Edge Restraint (gravel areas)	Permaloc ProSlide 3/16"x5.5" Black Duraflex Finish		LF	
	1955	Landscape Fabric			SF	
	70	Shredded Hardwood Mulch (3" depth)	Area: 7,600 SF		CY	Bark Mulch; apply Preemerge after installation of mulch
	47	Soil Amendments (2" depth)	Area: 7,600 SF		CY	
	220	Pulverized Topsoil (Lawn Area)	Area: 29,305 SF		CY	
	47	Pulverized Topsoil (2" over bed areas)	Area: 7,600 SF		CY	

*Landscape counts & quantities are provided as a service to the Landscape Contractor. Landscape Contractor is responsible for verifying these counts and quantities in order to provide a complete landscape installation as outlined on this Landscape Master Plan. In the event that a discrepancy occurs between this schedule and the Landscape Master Plan, the Landscape Master Plan including the graphics and notations depicted therein shall govern.

Seed Compositions:
 Reinder's Deluxe 50 Seed Mix (800-785-3301):
 20% Kentucky Bluegrass (Sod Quality)
 15% Newport Kentucky Bluegrass
 15% Kent Blue Kentucky Bluegrass
 25% Creeping Red Fescue
 15% Quebec Perennial Ryegrass
 10% Fiesta II Perennial Ryegrass

Seed at rate of 150-200# per acre



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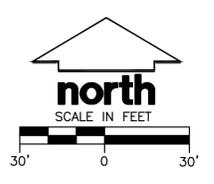
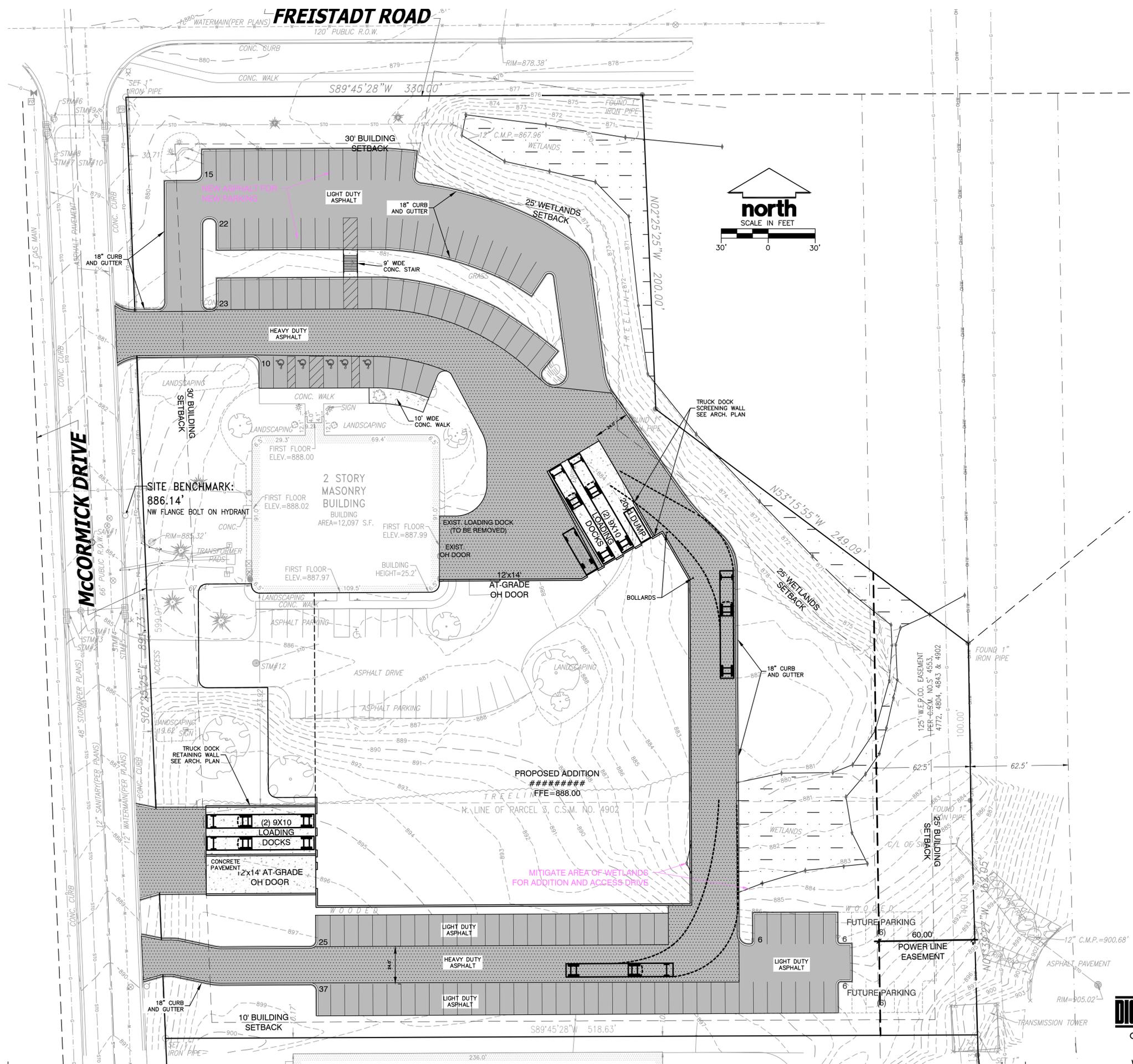
ISSUANCE AND REVISIONS	
DATE	DESCRIPTION
8.10.21	FIRST ISSUE

Information contained herein is based on survey information, field inspection, and believed to be accurate.

SHEET TITLE LANDSCAPE DETAILS, NOTES, & SCHEDULES

PROJECT MANAGER	WDH
PROJECT NUMBER	21-058
DATE	08.10.21

SHEET NUMBER L 1.3



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State Submittal / Permit:	
As-Built:	
REVISIONS:	
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PROJECT ADDRESS:
 PROJECT NAME
 Enercon Technical Center - Addition
 STREET ADDRESS
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ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect: BGK
 Engineer: xxx
 Reviewed By: BGK

Sheet Title:
SITE PAVE ID PLAN

Sheet Number:
C-102
 Project Number: P12364

P12364



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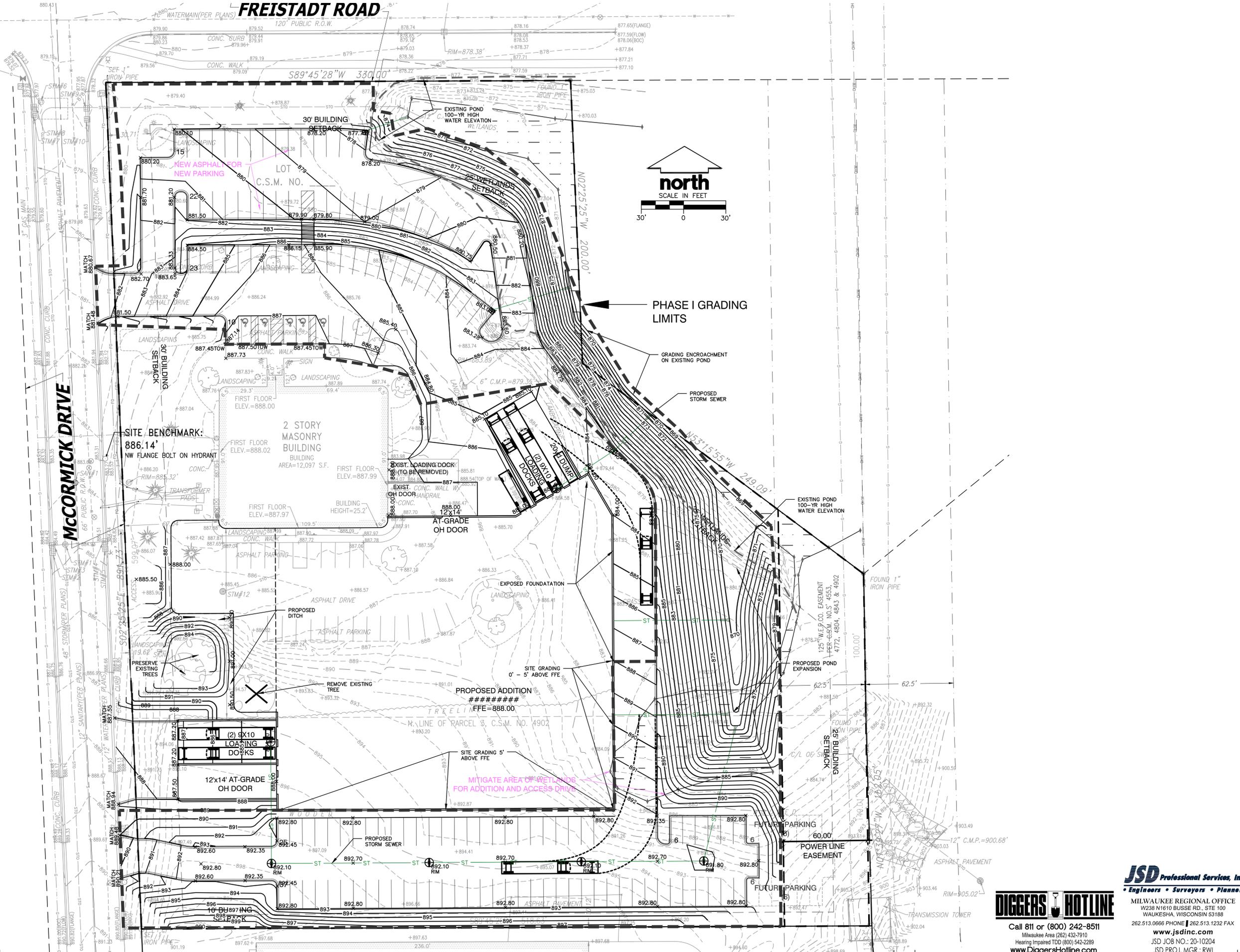
SITE PAVE ID PLAN 1" = 30'-0"

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS



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Architect: BGK
 Engineer: xxx
 Reviewed By: BGK

Sheet Title:
SITE GRADING & DRAINAGE PLAN
 Sheet Number:
C-103
 Project Number: P12364
P12364

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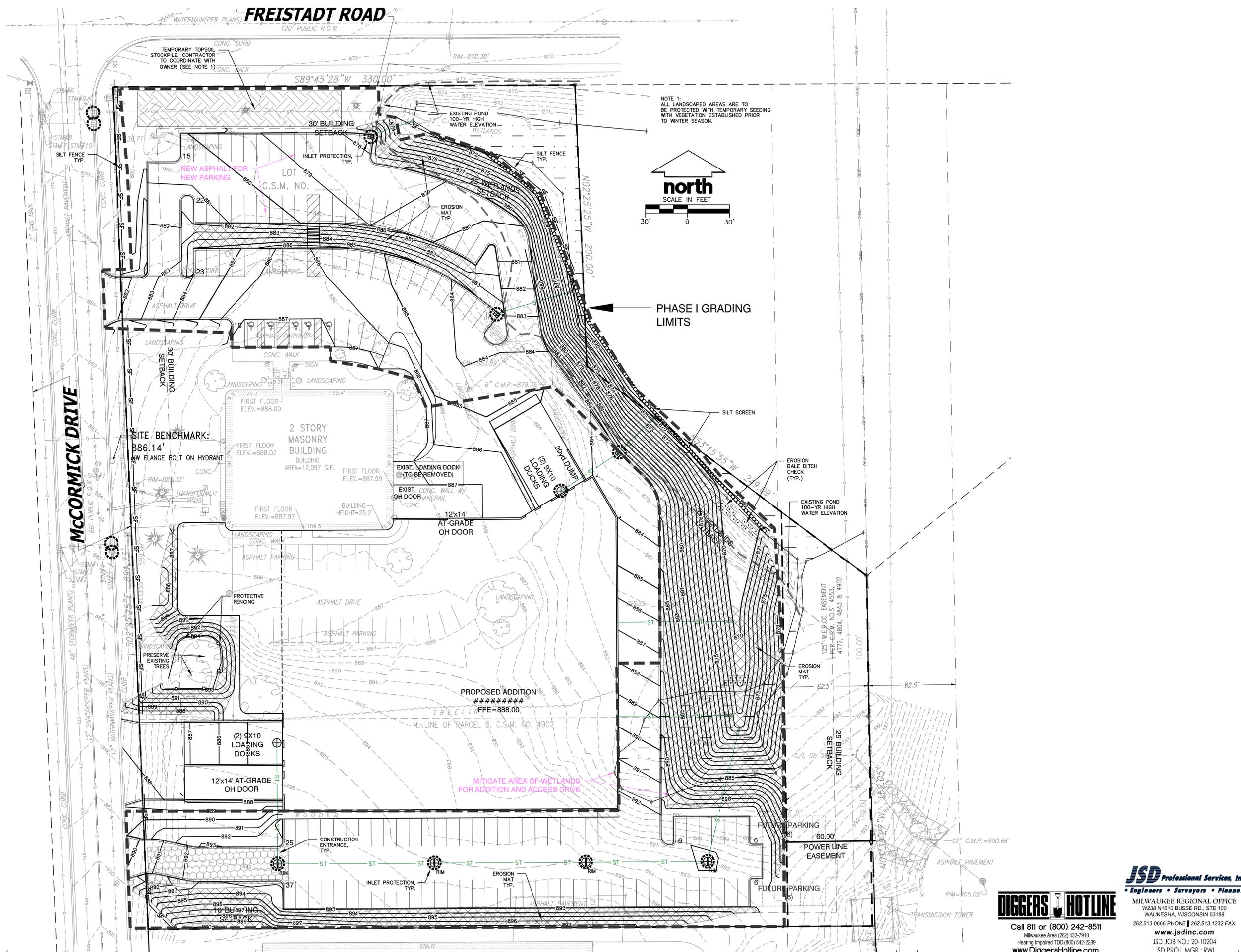
SITE GRADING & DRAINAGE PLAN 1" = 30'-0"

MANAGERS

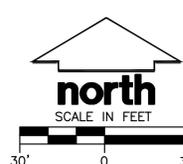
ENGINEERS

CONTRACTORS

ARCHITECTS



NOTE 1:
ALL LANDSCAPED AREAS ARE TO BE PROTECTED WITH TEMPORARY SEEDING WITH VEGETATION ESTABLISHED PRIOR TO WINTER SEASON.



PHASE I GRADING LIMITS



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Architect: BGK
Engineer: xxx
Reviewed By: BGK

Sheet Title:
SITE EROSION CONTROL PLAN
Sheet Number:
C-104
Project Number: P12364
P12364



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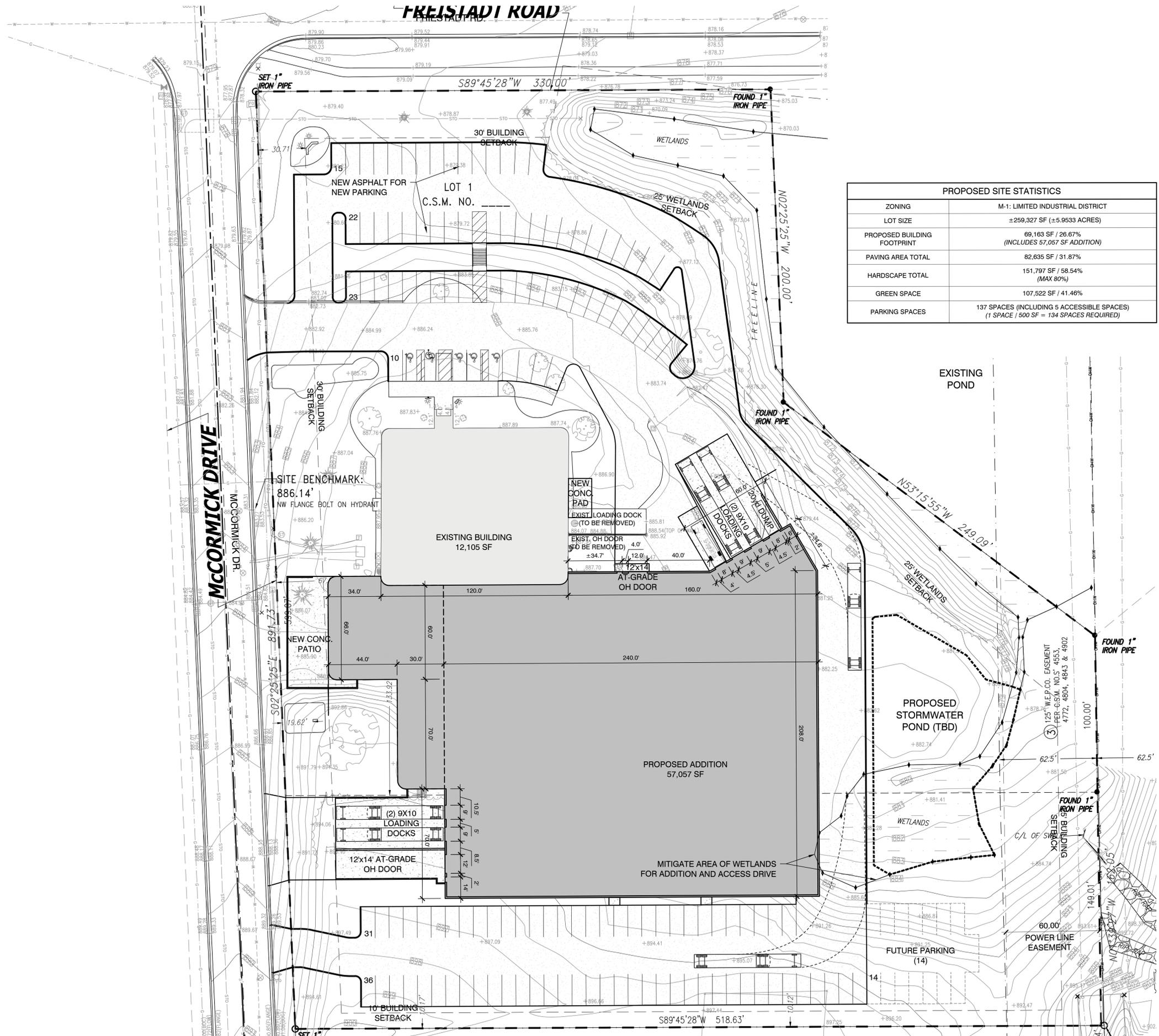
SITE EROSION CONTROL PLAN 1" = 30'-0"

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS



PROPOSED SITE STATISTICS	
ZONING	M-1: LIMITED INDUSTRIAL DISTRICT
LOT SIZE	±259,327 SF (±5.9533 ACRES)
PROPOSED BUILDING FOOTPRINT	69,163 SF / 26.67% (INCLUDES 57,057 SF ADDITION)
PAVING AREA TOTAL	82,635 SF / 31.87%
HARDSCAPE TOTAL	151,797 SF / 58.54% (MAX 60%)
GREEN SPACE	107,522 SF / 41.46%
PARKING SPACES	137 SPACES (INCLUDING 5 ACCESSIBLE SPACES) (1 SPACE / 500 SF = 134 SPACES REQUIRED)

SITE PLAN - OPTION 6 (57,000 SF) 1" = 30'-0"



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Plan Commission Revision: 9.09.2021

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Architect: BGK Engineer: xxx Reviewed By: BGK

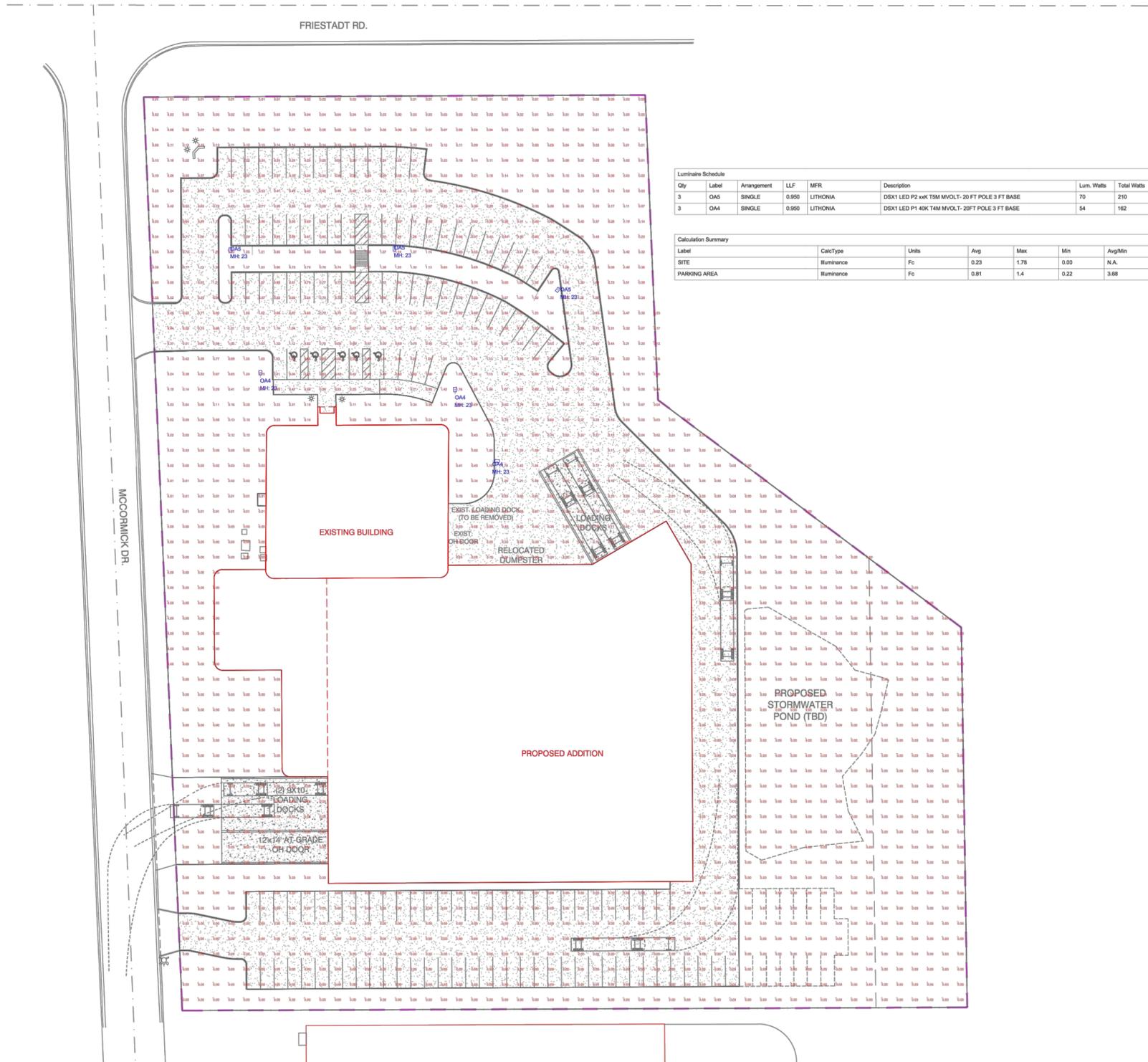
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SITE PLAN
OPTION 6 (57,000 SF)
Sheet Number:
C-101.6
Project Number: P12364
P12364

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ENGINEERS

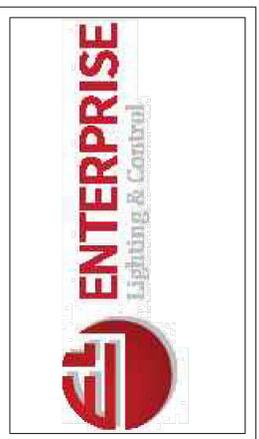
CONTRACTORS

ARCHITECTS



Luminaire Schedule								
Qty	Label	Arrangement	LLF	MFR	Description	Lum. Watts	Total Watts	Lum. Lumens
3	OAS	SINGLE	0.950	LITHONIA	DSX1 LED P2 xkxT4M MVOLT- 20 FT POLE 3 FT BASE	70	210	9234
3	OAA	SINGLE	0.950	LITHONIA	DSX1 LED P1 40xT4M MVOLT- 20FT POLE 3 FT BASE	54	162	6816

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	
SITE	Illuminance	Fc	0.23	1.78	0.00	N.A.	N.A.	
PARKING AREA	Illuminance	Fc	0.81	1.4	0.22	3.68	6.36	



#	DATE	COMMENTS
REVISIONS		

DRAWN BY : AD
 DATE : JULY 30, 2021
 SCALE : 1" = 40'- 0"

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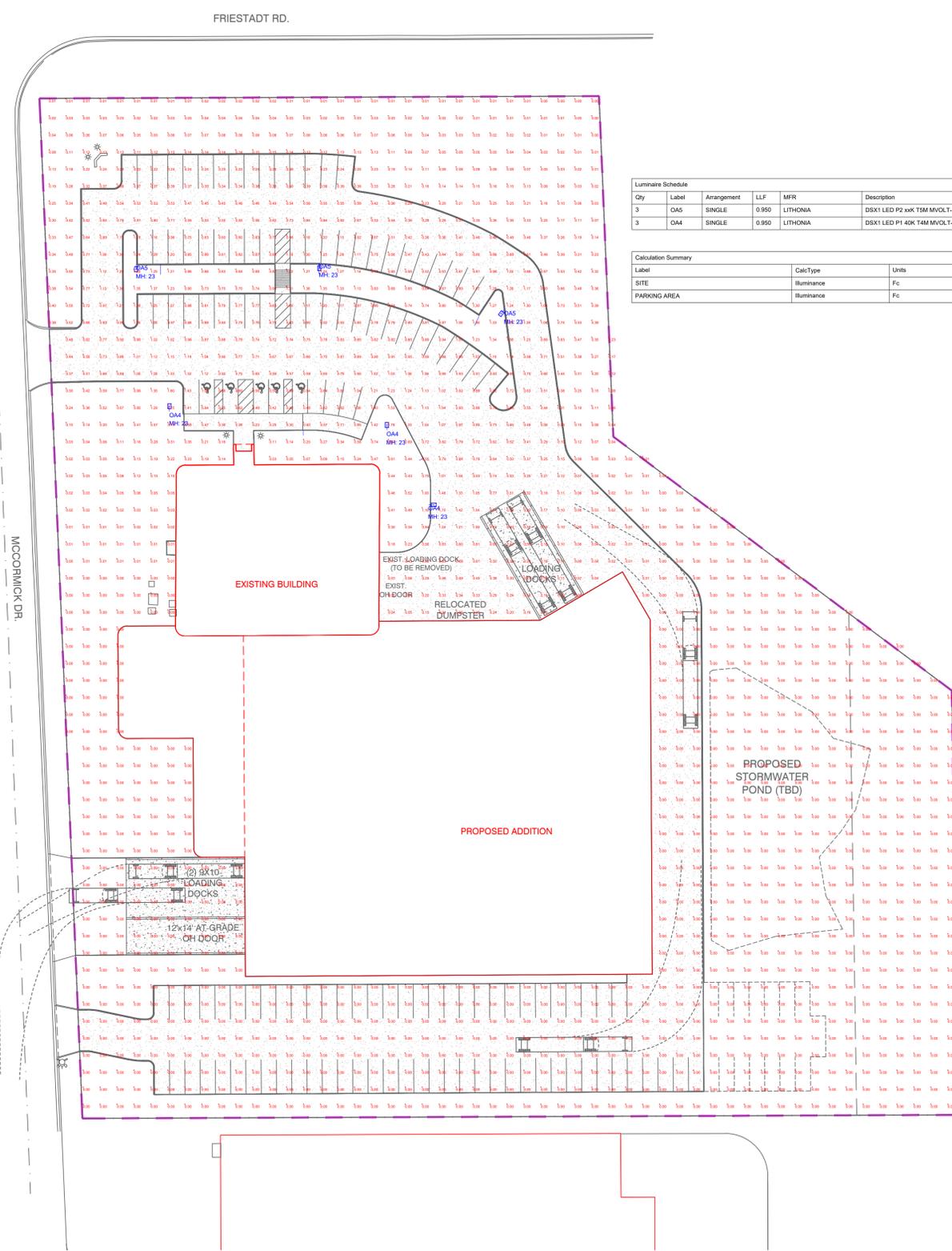
Architect: BGK Engineer: xxx Reviewed By: BGK

Sheet Title:
SITE PHOTOMETRIC PLAN

Sheet Number:
C-106

Project Number: P12364

P12364



Luminaire Schedule								
Qty	Label	Arrangement	LLF	MFR	Description	Lum. Watts	Total Watts	Lum. Lumens
3	OAS	SINGLE	0.950	LITHONIA	DSX1 LED P2 xxK TSM MVOLT-20 FT POLE 3 FT BASE	70	210	9234
3	OAA	SINGLE	0.950	LITHONIA	DSX1 LED P1 40K T4M MVOLT-20FT POLE 3 FT BASE	54	162	6816

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
SITE	Illuminance	Fc	0.23	1.78	0.00	N.A.	N.A.
PARKING AREA	Illuminance	Fc	0.81	1.4	0.22	3.68	6.36

#	DATE	COMMENTS

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D-Series Size 1 LED Area Luminaire

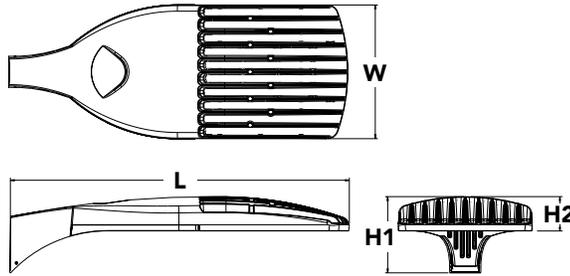


Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	1.01 ft ² (0.09 m ²)
Length:	33" (83.8 cm)
Width:	13" (33.0 cm)
Height H1:	7-1/2" (19.0 cm)
Height H2:	3-1/2"
Weight (max):	27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

Series	LEDs	Color temperature	Distribution	Voltage	Mounting	
DSX1 LED	Forward optics P1 P4 ¹ P7 ¹ P2 P5 ¹ P8 P3 P6 ¹ P9 ¹ Rotated optics P10 ² P12 ² P11 ² P13 ^{1,2}	30K 3000 K 40K 4000 K 50K 5000 K	T1S Type I short (Automotive) T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium	T5VS Type V very short ³ T5S Type V short ³ T5M Type V medium³ T5W Type V wide ³ BLC Backlight control ⁴ LCCO Left corner cutoff ⁴ RCCO Right corner cutoff ⁴	MVOLT⁵ XVOLT (277V-480V) ^{6,7,8} 120 ⁹ 208 ⁹ 240 ⁹ 277 ⁹ 347 ⁹ 480 ⁹	Shipped included SPA Square pole mounting RPA Round pole mounting ¹⁰ WBA Wall bracket ³ SPUMBA Square pole universal mounting adaptor ¹¹ RPUMBA Round pole universal mounting adaptor ⁹ Shipped separately KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) ¹²

Control options	Other options	Finish (required)
Shipped installed NLTAIR2 nLight AIR generation 2 enabled ¹³ PIRHN Network, high/low motion/ambient sensor ¹⁴ PER NEMA twist-lock receptacle only (controls ordered separate) ¹⁵ PER5 Five-pin receptacle only (controls ordered separate) ^{15,16} PER7 Seven-pin receptacle only (controls ordered separate) ^{15,16} DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) ¹⁷ DS Dual switching ^{18,19,20}	PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc ^{20,21} PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc ^{20,21} PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc ^{20,21} PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc ^{20,21} FAO Field adjustable output ^{20,21}	Shipped installed HS House-side shield ²³ SF Single fuse (120, 277, 347V) ⁹ DF Double fuse (208, 240, 480V) ⁹ L90 Left rotated optics ² R90 Right rotated optics ² HA 50°C ambient operations ¹ BAA Buy America(n) Act Compliant Shipped separately BS Bird spikes ²⁴ EGS External glare shield
		DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white



Ordering Information

Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) ²⁵
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) ²⁵
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) ²⁵
DSHORT SBK U	Shorting cap ²⁵
DSX1HS 30C U	House-side shield for P1, P2, P3, P4 and P5 ²³
DSX1HS 40C U	House-side shield for P6 and P7 ²³
DSX1HS 60C U	House-side shield for P8, P9, P10, P11 and P12 ²³
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish) ²⁵
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) ¹²
DSX1EGS (FINISH) U	External glare shield

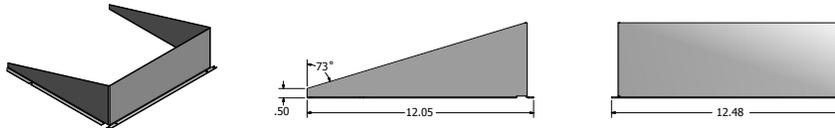
For more control options, visit [DTL](#) and [ROAM](#) online.

NOTES

- 1 HA not available with P4, P5, P6, P7, P9 and P13.
- 2 P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.
- 3 Any Type 5 distribution with photocell, is not available with WBA.
- 4 Not available with HS.
- 5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- 6 XVOLT only suitable for use with P3, P5, P6, P7, P9 and P13.
- 7 XVOLT works with any voltage between 277V and 480V.
- 8 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V.
- 9 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).
- 10 Suitable for mounting to round poles between 3.5" and 12" diameter.
- 11 Universal mounting brackets intended for retrofit on existing, pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8.
- 12 Must order fixture with SPA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" diameter mast arm (not included).
- 13 Must be ordered with PIRHN. Sensor cover available only in dark bronze, black, white and natural aluminum colors.
- 14 Must be ordered with NLTAR2. For more information on nLight Air 2 visit [this link](#).
- 15 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting cap included.
- 16 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Node with integral dimming.
- 17 DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
- 18 Provides 50/50 fixture operation via (2) independent drivers. Not available with PER, PER5, PER7, PIR or PIRH. Not available P1, P2, P3, P4 or P5.
- 19 Requires (2) separately switched circuits with isolated neutral.
- 20 Reference Controls Option Default settings table on page 4.
- 21 Reference Motion Sensor table on page 4 to see functionality.
- 22 Not available with other dimming controls options.
- 23 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
- 24 Must be ordered with fixture for factory pre-drilling.
- 25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Control Option Table on page 4.
- 26 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8.

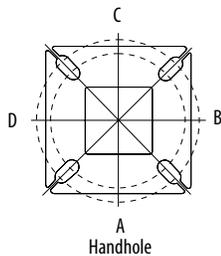
Options

EGS - External Glare Shield



Drilling

HANDHOLE ORIENTATION



Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

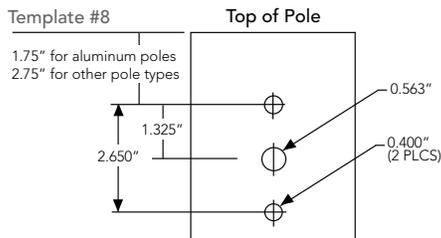
Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS

DSX1 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX1 LED	1.013	2.025	1.945	3.038	2.850	3.749

	Drilling Template	Minimum Acceptable Outside Pole Dimension					
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"	3.5"	4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"



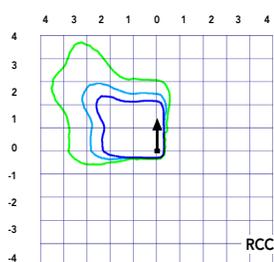
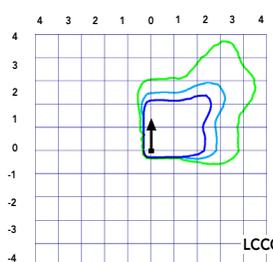
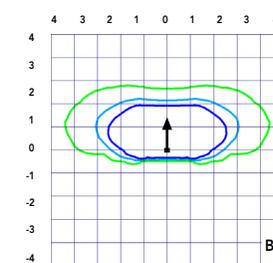
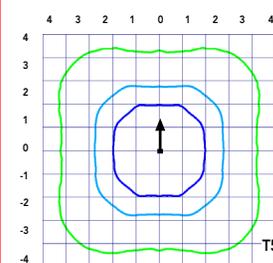
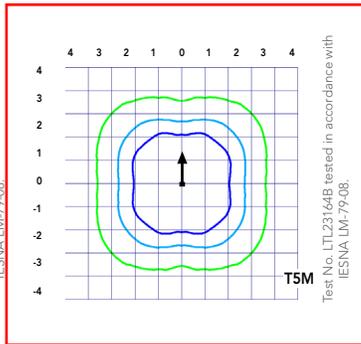
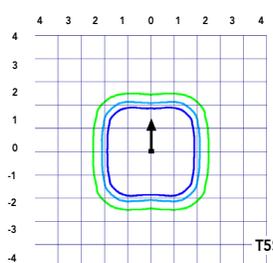
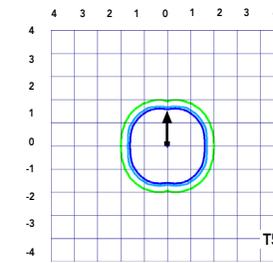
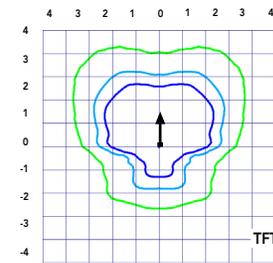
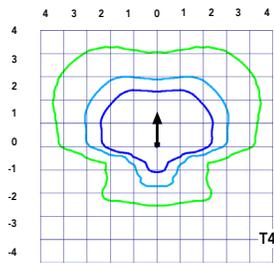
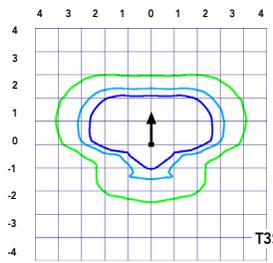
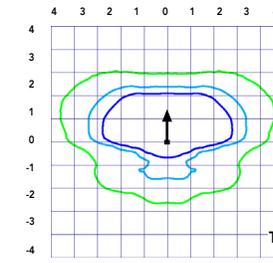
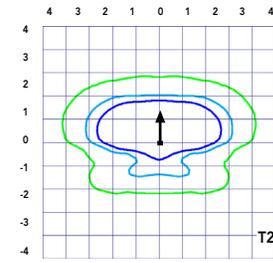
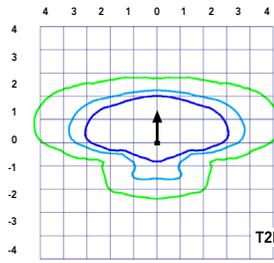
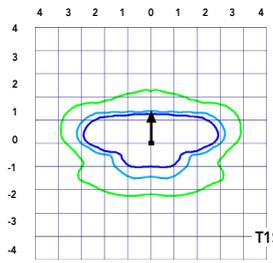
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [D-Series Area Size 1 homepage](#).

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (25').

LEGEND

- 0.1 fc
- 0.5 fc
- 1.0 fc



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.96
50,000	0.92
100,000	0.85

Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min

*for use when motion sensor is used as dusk to dawn control.

Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A)					
					120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.12
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0.16
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0.22
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0.27
	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0.29
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0.34
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0.38
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	0.49
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0.51
Rotated Optics (Requires L90 or R90)	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0.27
	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0.32
	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0.46
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0.49

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FA0	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FA0 device	Cannot be used with other controls options that need the 0-10V leads
DS	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PERS or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire
PIR or PIRH	Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBGR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclipse.	nLight Air rSDGR	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts Contact factory for performance data on any configurations not shown here.

Forward Optics																			
LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30	530	P1	54W	T1S	6,457	2	0	2	120	6,956	2	0	2	129	7,044	2	0	2	130
				T2S	6,450	2	0	2	119	6,949	2	0	2	129	7,037	2	0	2	130
				T2M	6,483	1	0	1	120	6,984	2	0	2	129	7,073	2	0	2	131
				T3S	6,279	2	0	2	116	6,764	2	0	2	125	6,850	2	0	2	127
				T3M	6,468	1	0	2	120	6,967	1	0	2	129	7,056	1	0	2	131
				T4M	6,327	1	0	2	117	6,816	1	0	2	126	6,902	1	0	2	128
				TFTM	6,464	1	0	2	120	6,963	1	0	2	129	7,051	1	0	2	131
				TSVS	6,722	2	0	0	124	7,242	3	0	0	134	7,334	3	0	0	136
				T5S	6,728	2	0	1	125	7,248	2	0	1	134	7,340	2	0	1	136
				T5M	6,711	3	0	1	124	7,229	3	0	1	134	7,321	3	0	2	136
				TSW	6,667	3	0	2	123	7,182	3	0	2	133	7,273	3	0	2	135
				BLC	5,299	1	0	1	98	5,709	1	0	2	106	5,781	1	0	2	107
				LCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
				RCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
30	700	P2	70W	T1S	8,249	2	0	2	118	8,886	2	0	2	127	8,999	2	0	2	129
				T2S	8,240	2	0	2	118	8,877	2	0	2	127	8,989	2	0	2	128
				T2M	8,283	2	0	2	118	8,923	2	0	2	127	9,036	2	0	2	129
				T3S	8,021	2	0	2	115	8,641	2	0	2	123	8,751	2	0	2	125
				T3M	8,263	2	0	2	118	8,901	2	0	2	127	9,014	2	0	2	129
				T4M	8,083	2	0	2	115	8,708	2	0	2	124	8,818	2	0	2	126
				TFTM	8,257	2	0	2	118	8,896	2	0	2	127	9,008	2	0	2	129
				TSVS	8,588	3	0	0	123	9,252	3	0	0	132	9,369	3	0	0	134
				T5S	8,595	3	0	1	123	9,259	3	0	1	132	9,376	3	0	1	134
				T5M	8,573	3	0	2	122	9,236	3	0	2	132	9,353	3	0	2	134
				TSW	8,517	3	0	2	122	9,175	4	0	2	131	9,291	4	0	2	133
				BLC	6,770	1	0	2	97	7,293	1	0	2	104	7,386	1	0	2	106
				LCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
				RCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
30	1050	P3	102W	T1S	11,661	2	0	2	114	12,562	3	0	3	123	12,721	3	0	3	125
				T2S	11,648	2	0	2	114	12,548	3	0	3	123	12,707	3	0	3	125
				T2M	11,708	2	0	2	115	12,613	2	0	2	124	12,773	2	0	2	125
				T3S	11,339	2	0	2	111	12,215	3	0	3	120	12,370	3	0	3	121
				T3M	11,680	2	0	2	115	12,582	2	0	2	123	12,742	2	0	2	125
				T4M	11,426	2	0	3	112	12,309	2	0	3	121	12,465	2	0	3	122
				TFTM	11,673	2	0	2	114	12,575	2	0	3	123	12,734	2	0	3	125
				TSVS	12,140	3	0	1	119	13,078	3	0	1	128	13,244	3	0	1	130
				T5S	12,150	3	0	1	119	13,089	3	0	1	128	13,254	3	0	1	130
				T5M	12,119	4	0	2	119	13,056	4	0	2	128	13,221	4	0	2	130
				TSW	12,040	4	0	3	118	12,970	4	0	3	127	13,134	4	0	3	129
				BLC	9,570	1	0	2	94	10,310	1	0	2	101	10,440	1	0	2	102
				LCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
				RCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
30	1250	P4	125W	T1S	13,435	3	0	3	107	14,473	3	0	3	116	14,657	3	0	3	117
				T2S	13,421	3	0	3	107	14,458	3	0	3	116	14,641	3	0	3	117
				T2M	13,490	2	0	2	108	14,532	3	0	3	116	14,716	3	0	3	118
				T3S	13,064	3	0	3	105	14,074	3	0	3	113	14,252	3	0	3	114
				T3M	13,457	2	0	2	108	14,497	2	0	2	116	14,681	2	0	2	117
				T4M	13,165	2	0	3	105	14,182	2	0	3	113	14,362	2	0	3	115
				TFTM	13,449	2	0	3	108	14,488	2	0	3	116	14,672	2	0	3	117
				TSVS	13,987	4	0	1	112	15,068	4	0	1	121	15,259	4	0	1	122
				T5S	13,999	3	0	1	112	15,080	3	0	1	121	15,271	3	0	1	122
				T5M	13,963	4	0	2	112	15,042	4	0	2	120	15,233	4	0	2	122
				TSW	13,872	4	0	3	111	14,944	4	0	3	120	15,133	4	0	3	121
				BLC	11,027	1	0	2	88	11,879	1	0	2	95	12,029	1	0	2	96
				LCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
				RCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
30	1400	P5	138W	T1S	14,679	3	0	3	106	15,814	3	0	3	115	16,014	3	0	3	116
				T2S	14,664	3	0	3	106	15,797	3	0	3	114	15,997	3	0	3	116
				T2M	14,739	3	0	3	107	15,878	3	0	3	115	16,079	3	0	3	117
				T3S	14,274	3	0	3	103	15,377	3	0	3	111	15,572	3	0	3	113
				T3M	14,704	2	0	3	107	15,840	3	0	3	115	16,040	3	0	3	116
				T4M	14,384	2	0	3	104	15,496	3	0	3	112	15,692	3	0	3	114
				TFTM	14,695	2	0	3	106	15,830	3	0	3	115	16,030	3	0	3	116
				TSVS	15,283	4	0	1	111	16,464	4	0	1	119	16,672	4	0	1	121
				T5S	15,295	3	0	1	111	16,477	4	0	1	119	16,686	4	0	1	121
				T5M	15,257	4	0	2	111	16,435	4	0	2	119	16,644	4	0	2	121
				TSW	15,157	4	0	3	110	16,328	4	0	3	118	16,534	4	0	3	120
				BLC	12,048	1	0	2	87	12,979	1	0	2	94	13,143	1	0	2	95
				LCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71
				RCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71



Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Forward Optics																			
LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40	1250	P6	163W	T1S	17,654	3	0	3	108	19,018	3	0	3	117	19,259	3	0	3	118
				T2S	17,635	3	0	3	108	18,998	3	0	3	117	19,238	3	0	3	118
				T2M	17,726	3	0	3	109	19,096	3	0	3	117	19,337	3	0	3	119
				T3S	17,167	3	0	3	105	18,493	3	0	3	113	18,727	3	0	3	115
				T3M	17,683	3	0	3	108	19,049	3	0	3	117	19,290	3	0	3	118
				T4M	17,299	3	0	3	106	18,635	3	0	4	114	18,871	3	0	4	116
				TFTM	17,672	3	0	3	108	19,038	3	0	4	117	19,279	3	0	4	118
				TSVS	18,379	4	0	1	113	19,800	4	0	1	121	20,050	4	0	1	123
				T5S	18,394	4	0	2	113	19,816	4	0	2	122	20,066	4	0	2	123
				T5M	18,348	4	0	2	113	19,766	4	0	2	121	20,016	4	0	2	123
				TSW	18,228	5	0	3	112	19,636	5	0	3	120	19,885	5	0	3	122
				BLC	14,489	2	0	2	89	15,609	2	0	3	96	15,806	2	0	3	97
				LCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
				RCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
40	1400	P7	183W	T1S	19,227	3	0	3	105	20,712	3	0	3	113	20,975	3	0	3	115
				T2S	19,206	3	0	3	105	20,690	3	0	3	113	20,952	3	0	3	114
				T2M	19,305	3	0	3	105	20,797	3	0	3	114	21,060	3	0	3	115
				T3S	18,696	3	0	3	102	20,141	3	0	3	110	20,396	3	0	4	111
				T3M	19,258	3	0	3	105	20,746	3	0	3	113	21,009	3	0	3	115
				T4M	18,840	3	0	4	103	20,296	3	0	4	111	20,553	3	0	4	112
				TFTM	19,246	3	0	4	105	20,734	3	0	4	113	20,996	3	0	4	115
				TSVS	20,017	4	0	1	109	21,564	4	0	1	118	21,837	4	0	1	119
				T5S	20,033	4	0	2	109	21,581	4	0	2	118	21,854	4	0	2	119
				T5M	19,983	4	0	2	109	21,527	5	0	3	118	21,799	5	0	3	119
				TSW	19,852	5	0	3	108	21,386	5	0	3	117	21,656	5	0	3	118
				BLC	15,780	2	0	3	86	16,999	2	0	3	93	17,214	2	0	3	94
				LCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
				RCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
60	1050	P8	207W	T1S	22,490	3	0	3	109	24,228	3	0	3	117	24,535	3	0	3	119
				T2S	22,466	3	0	4	109	24,202	3	0	4	117	24,509	3	0	4	118
				T2M	22,582	3	0	3	109	24,327	3	0	3	118	24,635	3	0	3	119
				T3S	21,870	3	0	4	106	23,560	3	0	4	114	23,858	3	0	4	115
				T3M	22,527	3	0	4	109	24,268	3	0	4	117	24,575	3	0	4	119
				T4M	22,038	3	0	4	106	23,741	3	0	4	115	24,041	3	0	4	116
				TFTM	22,513	3	0	4	109	24,253	3	0	4	117	24,560	3	0	4	119
				TSVS	23,415	5	0	1	113	25,224	5	0	1	122	25,543	5	0	1	123
				T5S	23,434	4	0	2	113	25,244	4	0	2	122	25,564	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				TSW	23,221	5	0	4	112	25,016	5	0	4	121	25,332	5	0	4	122
				BLC	18,458	2	0	3	89	19,885	2	0	3	96	20,136	2	0	3	97
				LCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
60	1250	P9	241W	T1S	25,575	3	0	3	106	27,551	3	0	3	114	27,900	3	0	3	116
				T2S	25,548	3	0	4	106	27,522	3	0	4	114	27,871	3	0	4	116
				T2M	25,680	3	0	3	107	27,664	3	0	3	115	28,014	3	0	3	116
				T3S	24,870	3	0	4	103	26,791	3	0	4	111	27,130	3	0	4	113
				T3M	25,617	3	0	4	106	27,597	3	0	4	115	27,946	3	0	4	116
				T4M	25,061	3	0	4	104	26,997	3	0	4	112	27,339	3	0	4	113
				TFTM	25,602	3	0	4	106	27,580	3	0	4	114	27,929	3	0	4	116
				TSVS	26,626	5	0	1	110	28,684	5	0	1	119	29,047	5	0	1	121
				T5S	26,648	4	0	2	111	28,707	5	0	2	119	29,070	5	0	2	121
				T5M	26,581	5	0	3	110	28,635	5	0	3	119	28,997	5	0	3	120
				TSW	26,406	5	0	4	110	28,447	5	0	4	118	28,807	5	0	4	120
				BLC	20,990	2	0	3	87	22,612	2	0	3	94	22,898	2	0	3	95
				LCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71
				RCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Rotated Optics																			
LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60	530	P10	106W	T1S	13,042	3	0	3	123	14,050	3	0	3	133	14,228	3	0	3	134
				T2S	12,967	4	0	4	122	13,969	4	0	4	132	14,146	4	0	4	133
				T2M	13,201	3	0	3	125	14,221	3	0	3	134	14,401	3	0	3	136
				T3S	12,766	4	0	4	120	13,752	4	0	4	130	13,926	4	0	4	131
				T3M	13,193	4	0	4	124	14,213	4	0	4	134	14,393	4	0	4	136
				T4M	12,944	4	0	4	122	13,945	4	0	4	132	14,121	4	0	4	133
				TFTM	13,279	4	0	4	125	14,305	4	0	4	135	14,486	4	0	4	137
				TSVS	13,372	3	0	1	126	14,405	4	0	1	136	14,588	4	0	1	138
				T5S	13,260	3	0	1	125	14,284	3	0	1	135	14,465	3	0	1	136
				T5M	13,256	4	0	2	125	14,281	4	0	2	135	14,462	4	0	2	136
				TSW	13,137	4	0	3	124	14,153	4	0	3	134	14,332	4	0	3	135
				BLC	10,906	3	0	3	103	11,749	3	0	3	111	11,898	3	0	3	112
				LCCO	7,789	1	0	3	73	8,391	1	0	3	79	8,497	1	0	3	80
				RCCO	7,779	4	0	4	73	8,380	4	0	4	79	8,486	4	0	4	80
60	700	P11	137W	T1S	16,556	3	0	3	121	17,835	3	0	3	130	18,061	4	0	4	132
				T2S	16,461	4	0	4	120	17,733	4	0	4	129	17,957	4	0	4	131
				T2M	16,758	4	0	4	122	18,053	4	0	4	132	18,281	4	0	4	133
				T3S	16,205	4	0	4	118	17,457	4	0	4	127	17,678	4	0	4	129
				T3M	16,748	4	0	4	122	18,042	4	0	4	132	18,271	4	0	4	133
				T4M	16,432	4	0	4	120	17,702	4	0	4	129	17,926	4	0	4	131
				TFTM	16,857	4	0	4	123	18,159	4	0	4	133	18,389	4	0	4	134
				TSVS	16,975	4	0	1	124	18,287	4	0	1	133	18,518	4	0	1	135
				T5S	16,832	4	0	1	123	18,133	4	0	2	132	18,362	4	0	2	134
				T5M	16,828	4	0	2	123	18,128	4	0	2	132	18,358	4	0	2	134
				TSW	16,677	4	0	3	122	17,966	5	0	3	131	18,193	5	0	3	133
				BLC	13,845	3	0	3	101	14,915	3	0	3	109	15,103	3	0	3	110
				LCCO	9,888	1	0	3	72	10,652	2	0	3	78	10,787	2	0	3	79
				RCCO	9,875	4	0	4	72	10,638	4	0	4	78	10,773	4	0	4	79
60	1050	P12	207W	T1S	22,996	4	0	4	111	24,773	4	0	4	120	25,087	4	0	4	121
				T2S	22,864	4	0	4	110	24,631	5	0	5	119	24,943	5	0	5	120
				T2M	23,277	4	0	4	112	25,075	4	0	4	121	25,393	4	0	4	123
				T3S	22,509	4	0	4	109	24,248	5	0	5	117	24,555	5	0	5	119
				T3M	23,263	4	0	4	112	25,061	4	0	4	121	25,378	4	0	4	123
				T4M	22,824	5	0	5	110	24,588	5	0	5	119	24,899	5	0	5	120
				TFTM	23,414	5	0	5	113	25,223	5	0	5	122	25,543	5	0	5	123
				TSVS	23,579	5	0	1	114	25,401	5	0	1	123	25,722	5	0	1	124
				T5S	23,380	4	0	2	113	25,187	4	0	2	122	25,506	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				TSW	23,165	5	0	4	112	24,955	5	0	4	121	25,271	5	0	4	122
				BLC	19,231	4	0	4	93	20,717	4	0	4	100	20,979	4	0	4	101
				LCCO	13,734	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,716	4	0	4	66	14,776	4	0	4	71	14,963	4	0	4	72
60	1250	P13	231W	T1S	25,400	4	0	4	110	27,363	4	0	4	118	27,709	4	0	4	120
				T2S	25,254	5	0	5	109	27,205	5	0	5	118	27,550	5	0	5	119
				T2M	25,710	4	0	4	111	27,696	4	0	4	120	28,047	4	0	4	121
				T3S	24,862	5	0	5	108	26,783	5	0	5	116	27,122	5	0	5	117
				T3M	25,695	5	0	5	111	27,680	5	0	5	120	28,031	5	0	5	121
				T4M	25,210	5	0	5	109	27,158	5	0	5	118	27,502	5	0	5	119
				TFTM	25,861	5	0	5	112	27,860	5	0	5	121	28,212	5	0	5	122
				TSVS	26,043	5	0	1	113	28,056	5	0	1	121	28,411	5	0	1	123
				T5S	25,824	4	0	2	112	27,819	5	0	2	120	28,172	5	0	2	122
				T5M	25,818	5	0	3	112	27,813	5	0	3	120	28,165	5	0	3	122
				TSW	25,586	5	0	4	111	27,563	5	0	4	119	27,912	5	0	4	121
				BLC	21,241	4	0	4	92	22,882	4	0	4	99	23,172	4	0	4	100
				LCCO	15,170	2	0	4	66	16,342	2	0	4	71	16,549	2	0	4	72
				RCCO	15,150	5	0	5	66	16,321	5	0	5	71	16,527	5	0	5	72

FEATURES & SPECIFICATIONS

INTENDED USE

The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 ft²) for optimized pole wind loading.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS

Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) configurations. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The DSX1 LED area luminaire has a number of control options. DSX Size 1, comes standard with 0-10V dimming drivers. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensors with on-board photocells feature field-adjustable programming and are suitable for mounting heights up to 30 feet.

nLIGHT AIR CONTROLS

The DSX1 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found here.

INSTALLATION

Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). NEMA photocontrol receptacle are also available.

LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.



ALTA/NSPS LAND TITLE SURVEY (WITH TOPOGRAPHY)

CLIENT
MSI General

SITE ADDRESS
N120 W19349 Friestadt Rd., Germantown, Wisconsin.

LEGAL DESCRIPTION
Parcel 3 of Certified Survey Map 4902, recorded on October 30, 1997, in Volume 33 of Certified Survey Maps, on Page 298, as Document No. 760859, being a subdivision of Parcel 1, Certified Survey Map No. 4843, being a part of the Northeast 1/4 and the Northwest 1/4 of the Northeast 1/4 of Section 20, Town 9 North, Range 20 East, in the Village of Germantown, County of Washington, State of Wisconsin.

BASIS OF BEARINGS
Bearings are referenced to the Wisconsin State Plane Coordinate System (South Zone), in which the North line of the NE 1/4 bears N89°45'28"E.
Horizontal Datum is based on NAVD-1983/2011
Vertical Datum is based on NAVD-1988(12)

TITLE COMMITMENT
This survey was prepared based on Chicago Title Insurance Company Commitment No. CO-4184, effective date of February 29, 2016 which lists the following easements and/or restrictions from schedule B-II:

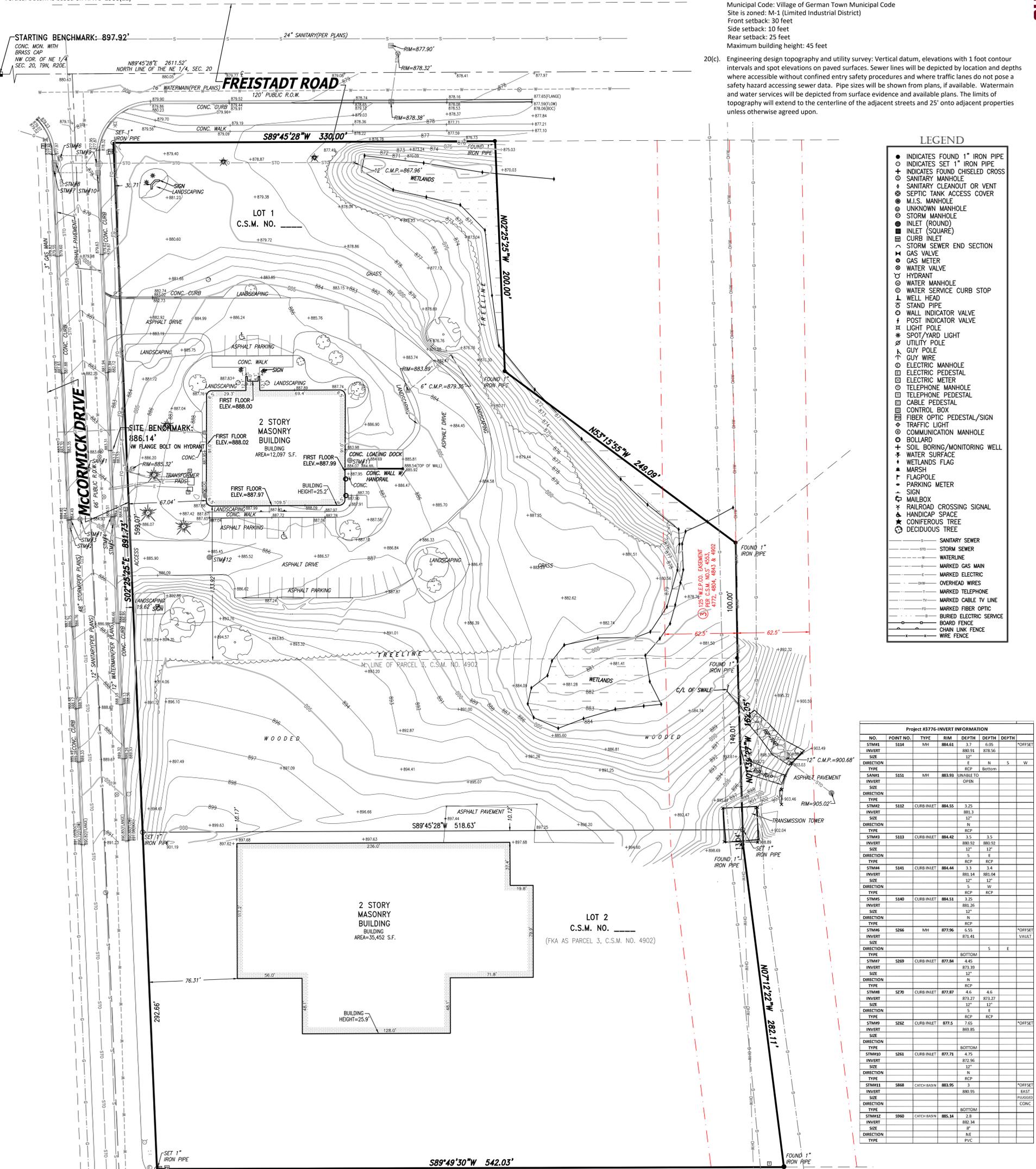
- 1, 5, 6, 7, 8 & 9 not survey related.
2. Easements for the purposes and rights incidental thereto, as granted in a document, granted to Wisconsin Electric Power Company, for utility purposes, recorded on August 12, 1964 as Document No. 275309, as assigned by Easement Assignment, recorded on January 2, 2001 as Document No. 873216. **No documents provided.**
3. One hundred twenty five foot W.E.P.CO. Easement as set forth on Certified Survey Map No. 4553, recorded on August 22, 1995 as Document No. 698154, as also set forth on Certified Survey Map No. 4772, recorded on December 18, 1996 as Document No. 735655, as also set forth on Certified Survey Map No. 4804, recorded on April 4, 1997 as Document No. 742584, as also set forth on Certified Survey Map No. 4843, recorded on July 3, 1997 as Document No. 750668, as also set forth on Certified Survey Map No. 4902, recorded on October 30, 1997 as Document No. 760859. **Affects property by location, shown.**
4. Easements for the purposes and rights incidental thereto, as granted in a Distribution Easement Underground Joint, granted to Wisconsin Electric Power Company and Ameritech- Wisconsin, for utility purposes, recorded on February 23, 1999, as Document No. 815505. **No Documents provided.**

TABLE "A" ITEMS

3. According to the flood insurance rate map of the County of Washington, Community Panel No. 55131C0357D, effective date of November 20, 2013, this site falls in Zone X (Area of minimal flood hazard).
4. The Land Area of the subject property is 414,554 square feet or 9.5168 acres.
- 6(b). A zoning report has not been provided.
9. There are 29 regular parking spaces and 2 handicap spaces on this site.
- 11(a). Evidence of underground utilities existing on or serving the surveyed property as determined by plans and/or reports provided by client. Plans were provided.
16. There is no visible evidence of earth moving, building construction or building additions within recent months.
17. There are no changes in street right of way lines either completed or proposed, and available from the controlling jurisdiction. Observable evidence of recent street or sidewalk construction or repairs if any, is shown.
- 20(a). Location of utilities existing on or serving the surveyed property as determined by markings requested by the surveyor pursuant to a Diggers Hotline One-call center utility location. Ticket Number 20211619642. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. Client understands only utility lines with imbedded electric tracer wires or utilities made of materials capable of electric connectivity can be marked at the surface and located. Depth of utilities may prohibit their location even with electric connectivity.
- 20(b). The zoning information noted below is taken from the municipal code ordinance. It does not reflect all zoning restrictions that may apply. It is not intended to be used in lieu of a comprehensive zoning report as stated in ALTA Table A item 6(a) nor to be relied on for site development purposes.

Municipal Code: Village of German Town Municipal Code
Site is zoned: M-1 (Limited Industrial District)
Front setback: 30 feet
Side setback: 10 feet
Rear setback: 25 feet
Maximum building height: 45 feet

- 20(c). Engineering design topography and utility survey: Vertical datum, elevations with 1 foot contour intervals and spot elevations on paved surfaces. Sewer lines will be depicted by location and depths where accessible without confined entry safety procedures and where traffic lanes do not pose a safety hazard accessing sewer data. Pipe sizes will be shown from plans, if available. Watermain and water services will be depicted from surface evidence and available plans. The limits of topography will extend to the centerline of the adjacent streets and 25' onto adjacent properties unless otherwise agreed upon.



LEGEND

- INDICATES FOUND 1" IRON PIPE
- INDICATES SET 1" IRON PIPE
- ⊕ INDICATES FOUND CHISELED CROSS
- ⊙ SANITARY MANHOLE
- ⊕ SANITARY CLEANOUT OR VENT
- ⊙ SEPTIC TANK ACCESS COVER
- ⊙ M.I.S. MANHOLE
- ⊙ UNKNOWN MANHOLE
- ⊙ STORM MANHOLE
- ⊙ INLET (ROUND)
- ⊙ INLET (SQUARE)
- ⊙ CURB INLET
- ⊙ STORM SEWER END SECTION
- ⊙ GAS VALVE
- ⊙ GAS METER
- ⊙ WATER VALVE
- ⊙ HYDRANT
- ⊙ WATER MANHOLE
- ⊙ WATER SERVICE CURB STOP
- ⊙ WELL HEAD
- ⊙ STAND PIPE
- ⊙ WALL INDICATOR VALVE
- ⊙ POST INDICATOR VALVE
- ⊙ LIGHT POLE
- ⊙ SPOT/YARD LIGHT
- ⊙ UTILITY POLE
- ⊙ GUY POLE
- ⊙ GUY WIRE
- ⊙ ELECTRIC MANHOLE
- ⊙ ELECTRIC PEDESTAL
- ⊙ ELECTRIC METER
- ⊙ TELEPHONE MANHOLE
- ⊙ TELEPHONE PEDESTAL
- ⊙ CABLE PEDESTAL
- ⊙ CONTROL BOX
- ⊙ FIBER OPTIC PEDESTAL/SIGN
- ⊙ TRAFFIC LIGHT
- ⊙ COMMUNICATION MANHOLE
- ⊙ BOLLARD
- ⊙ SOIL BORING/MONITORING WELL
- ⊙ WATER SURFACE
- ⊙ WETLANDS FLAG
- ⊙ MARSH
- ⊙ FLAGPOLE
- ⊙ PARKING METER
- ⊙ SIGN
- ⊙ MAILBOX
- ⊙ RAILROAD CROSSING SIGNAL
- ⊙ HANDICAP SPACE
- ⊙ CONIFEROUS TREE
- ⊙ DECIDUOUS TREE

Project #3776-INVERT INFORMATION

NO.	POINT NO.	TYPE	RIM	DEPTH	DEPTH	DEPTH
INVERT	5114	MH	884.61	3.7	6.05	*OFFSET
INVERT				880.91	878.56	
TYPE				12"		
SIZE				12"	N	S W
DIRECTION				RCP	Bottom	
TYPE	5151	MH	883.93	UNABLE TO		
SIZE				6"		
DIRECTION						
TYPE	5112	CURB INLET	884.55	3.25		
INVERT				881.3		
SIZE				12"		
DIRECTION				N		
TYPE	5113	CURB INLET	884.42	3.5	3.5	
INVERT				880.92	880.92	
SIZE				12"	12"	
DIRECTION				S	E	
TYPE	5114	CURB INLET	884.44	3.3	3.4	
INVERT				881.14	881.04	
SIZE				12"	12"	
DIRECTION				S	W	
TYPE	5115	CURB INLET	884.51	3.25		
INVERT				881.26		
SIZE				12"		
DIRECTION				N		
TYPE	5266	MH	877.96	RCP		*OFFSET
INVERT				878.41		VASSET
SIZE						
DIRECTION					S	E
TYPE	5269	CURB INLET	877.84	4.45		
INVERT				873.39		
SIZE				12"		
DIRECTION				N		
TYPE	5270	CURB INLET	877.87	4.6	4.6	
INVERT				873.27	873.27	
SIZE				12"	12"	
DIRECTION				S	W	
TYPE	5282	CURB INLET	877.5	7.65		*OFFSET
INVERT				869.85		
SIZE						
DIRECTION						
TYPE	5261	CURB INLET	877.71	4.75		
INVERT				872.96		
SIZE				12"		
DIRECTION				N		
TYPE	5868	CATCH BASIN	883.95	3		*OFFSET
INVERT				880.95		EAST
SIZE						PHOTOGR
DIRECTION						CONC.
TYPE	5900	CATCH BASIN	885.34	2.8		
INVERT				882.54		
SIZE				8"		
DIRECTION				NE		
TYPE				PVC		

TO: Bunsen Realty LLC, a Wisconsin limited liability company
Chicago Title Insurance Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 3, 4, 7(a), 7(b)(1), 7(c), 8, 9, 11(a), 19, 20(a), 20(b) and 20(c) of Table A thereof. The field work was completed on May 13, 2021.



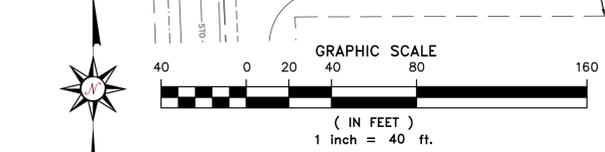
Date of Map: May 17, 2021

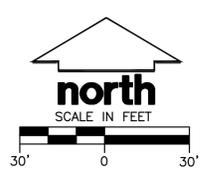
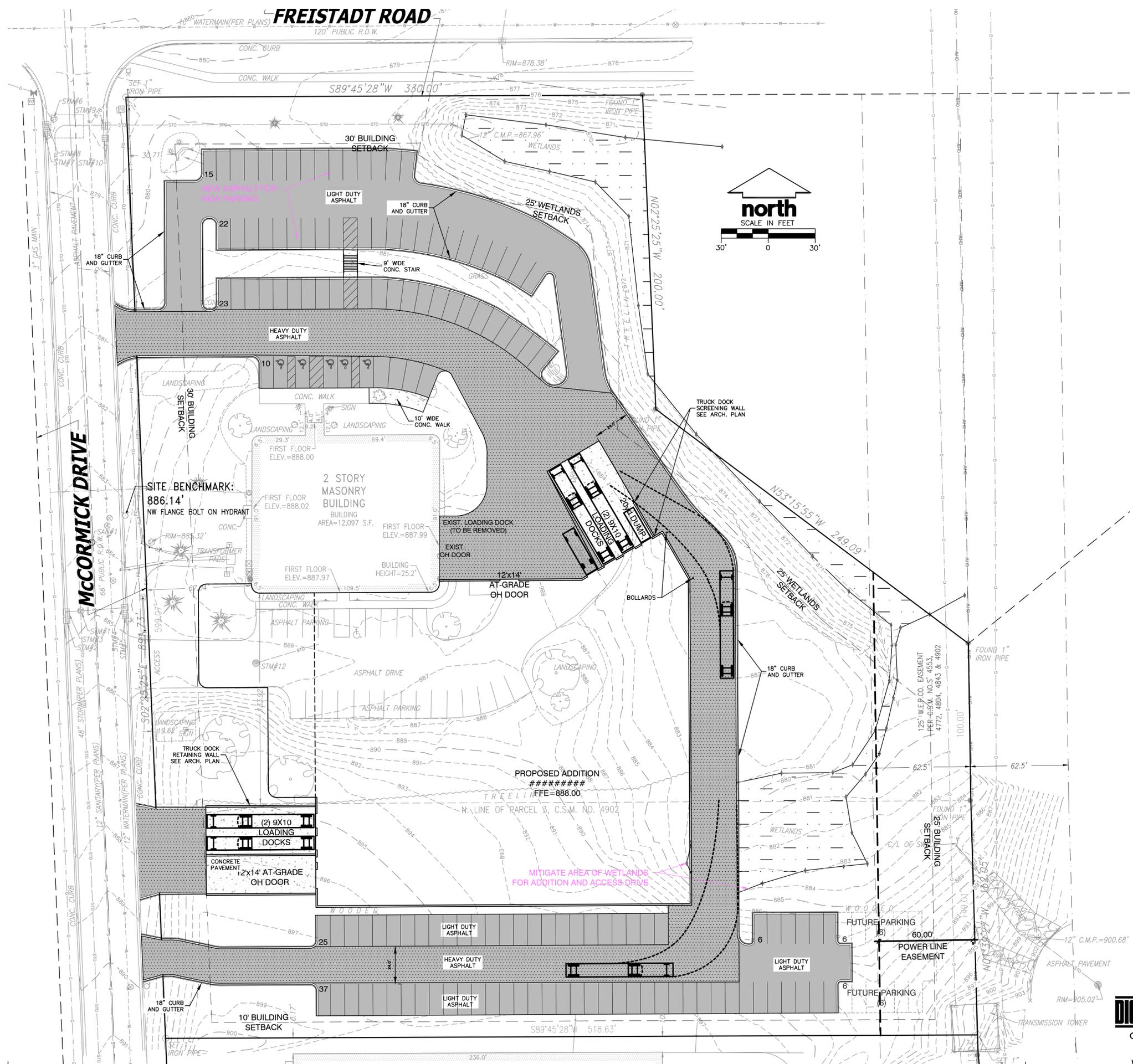
Daniel Bednar
Professional Land Surveyor
Registration Number S-2812

Date	Revision description

CHAPUT LAND SURVEYS
234 W. Florida Street Milwaukee, WI 53204 414-224-8068 www.chaputlandsurveys.com

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Drawing No. 3776-dmb





MSI GENERAL CORPORATION
 P.O. BOX 7
 OCONOMOWOC, WI 53066
 PHONE: 262-367-3661

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ISSUE DATES:

Owner Review:	11.03.2020
Property Acquisition Review:	2.09.2021
Owner Review:	6.09.2021
Bid Set:	
State Submittal / Permit:	
As-Built:	
REVISIONS:	
1 -	



PROJECT ADDRESS:
 PROJECT NAME
 Enercon Technical Center - Addition
 STREET ADDRESS
 N120 W19349 Freistadt Rd.
 CITY/ STATE / ZIP
 Germantown, WI 35022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect: BGK
 Engineer: xxx
 Reviewed By: BGK

Sheet Title:
SITE PAVE ID PLAN

Sheet Number:
C-102
 Project Number: P12364

P12364

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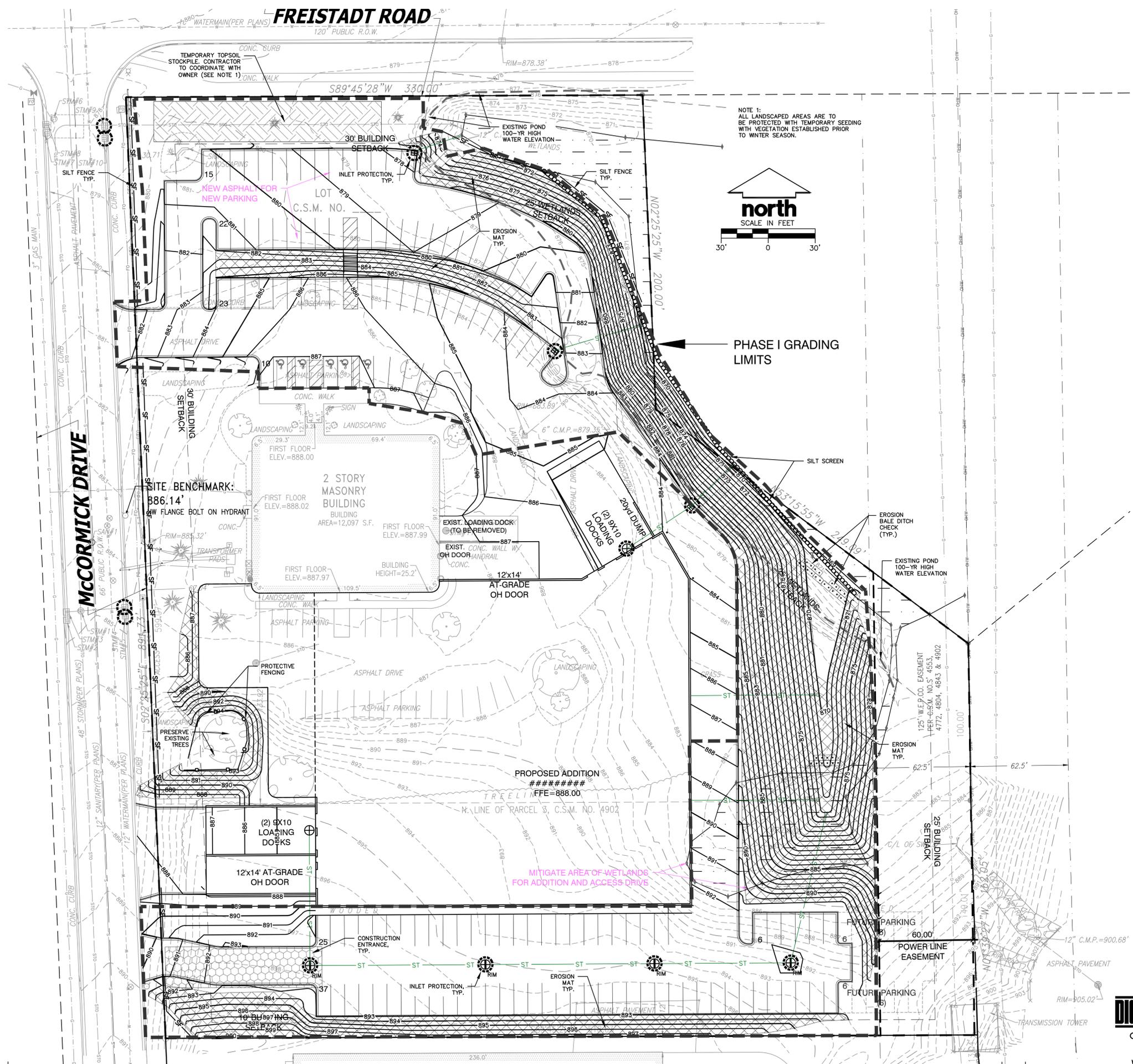
SITE PAVE ID PLAN 1" = 30'-0"

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS



MSI GENERAL CORPORATION
 P.O. BOX 7
 OCONOMOWOC, WI 53066
 PHONE: 262-367-3661

WWW.MSIGENERAL.COM
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ISSUE DATES:

Owner Review:	11.03.2020
Property Acquisition Review:	2.09.2021
Owner Review:	6.09.2021
Bid Set:	
State Submittal / Permit:	
As-Built:	
REVISIONS:	
1 -	



PROJECT ADDRESS:
 PROJECT NAME
 Enercon Technical Center - Addition
 STREET ADDRESS
 N120 W19349 Freistadt Rd.
 CITY/ STATE / ZIP
 Germantown, WI 35022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect: BGK
 Engineer: xxx
 Reviewed By: BGK

Sheet Title:
SITE EROSION CONTROL PLAN
 Sheet Number:
C-104
 Project Number: P12364
P12364



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SITE EROSION CONTROL PLAN 1" = 30'-0"

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS

ALTA/NSPS LAND TITLE SURVEY (WITH TOPOGRAPHY)

CLIENT
MSI General

SITE ADDRESS
N120 W19349 Friestadt Rd., Germantown, Wisconsin.

LEGAL DESCRIPTION
Parcel 3 of Certified Survey Map 4902, recorded on October 30, 1997, in Volume 33 of Certified Survey Maps, on Page 298, as Document No. 760859, being a subdivision of Parcel 1, Certified Survey Map No. 4843, being a part of the Northeast 1/4 and the Northwest 1/4 of the Northeast 1/4 of Section 20, Town 9 North, Range 20 East, in the Village of Germantown, County of Washington, State of Wisconsin.

BASIS OF BEARINGS
Bearings are referenced to the Wisconsin State Plane Coordinate System (South Zone), in which the North line of the NE 1/4 bears N89°45'28"E.
Horizontal Datum is based on NAVD-1983/2011
Vertical Datum is based on NAVD-1988(12)

TITLE COMMITMENT
This survey was prepared based on Chicago Title Insurance Company Commitment No. CO-4184, effective date of February 29, 2016 which lists the following easements and/or restrictions from schedule B-II:

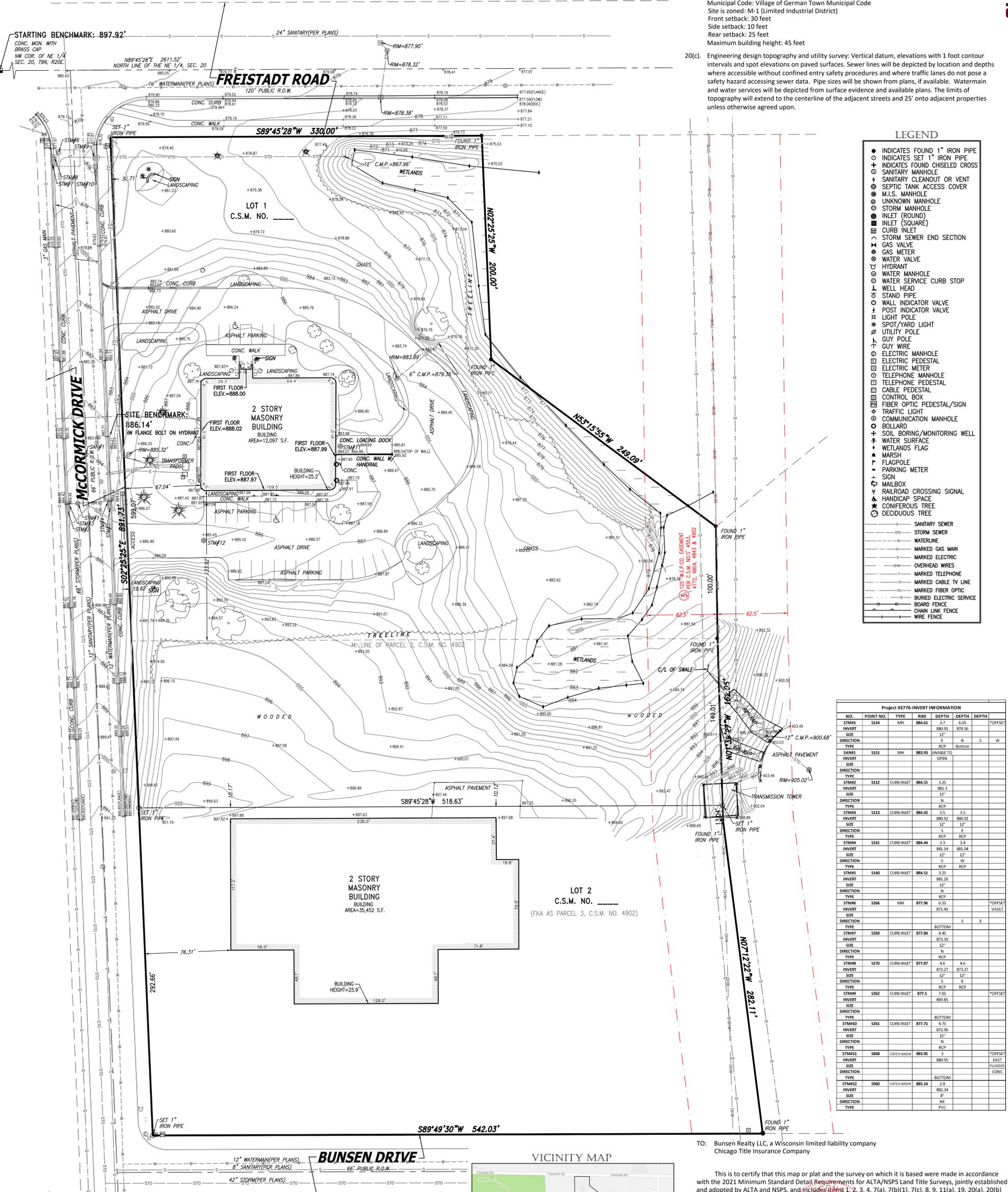
- 1, 5, 6, 7, 8 & 9 not survey related.
2. Easements for the purposes and rights incidental thereto, as granted in a document, granted to Wisconsin Electric Power Company, for utility purposes, recorded on August 12, 1964 as Document No. 275309, as assigned by Easement Assignment, recorded on January 2, 2001 as Document No. 873216. **No documents provided.**
3. One hundred twenty five foot W.E.P.CO. Easement as set forth on Certified Survey Map No. 4553, recorded on August 22, 1995 as Document No. 698154, as also set forth on Certified Survey Map No. 4772, recorded on December 18, 1996 as Document No. 735655, as also set forth on Certified Survey Map No. 4804, recorded on April 4, 1997 as Document No. 742584, as also set forth on Certified Survey Map No. 4843, recorded on July 3, 1997 as Document No. 750668, as also set forth on Certified Survey Map No. 4902, recorded on October 30, 1997 as Document No. 760859. **Affects property by location, shown.**
4. Easements for the purposes and rights incidental thereto, as granted in a Distribution Easement Underground Joint, granted to Wisconsin Electric Power Company and Ameritech- Wisconsin, for utility purposes, recorded on February 23, 1999, as Document No. 815505. **No Documents provided.**

TABLE "A" ITEMS

3. According to the flood insurance rate map of the County of Washington, Community Panel No. 55131C0357D, effective date of November 20, 2013, this site falls in Zone X (Area of minimal flood hazard).
4. The Land Area of the subject property is 414,554 square feet or 9.5168 acres.
- 6(b). A zoning report has not been provided.
9. There are 29 regular parking spaces and 2 handicap spaces on this site.
- 11(a). Evidence of underground utilities existing on or serving the surveyed property as determined by plans and/or reports provided by client. Plans were provided.
16. There is no visible evidence of earth moving, building construction or building additions within recent months.
17. There are no changes in street right of way lines either completed or proposed, and available from the controlling jurisdiction. Observable evidence of recent street or sidewalk construction or repairs if any, is shown.
- 20(a). Location of utilities existing on or serving the surveyed property as determined by markings requested by the surveyor pursuant to a Diggers Hotline One-call center utility location. Ticket Number 20211619642. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. Client understands only utility lines with imbedded electric tracer wires or utilities made of materials capable of electric connectivity can be marked at the surface and located. Depth of utilities may prohibit their location even with electric connectivity.
- 20(b). The zoning information noted below is taken from the municipal code ordinance. It does not reflect all zoning restrictions that may apply. It is not intended to be used in lieu of a comprehensive zoning report as stated in ALTA Table A item 6(a) nor to be relied on for site development purposes.

Municipal Code: Village of German Town Municipal Code
Site is zoned: M-1 (Limited Industrial District)
Front setback: 30 feet
Side setback: 10 feet
Rear setback: 25 feet
Maximum building height: 45 feet

- 20(c). Engineering design topography and utility survey: Vertical datum, elevations with 1 foot contour intervals and spot elevations on paved surfaces. Sewer lines will be depicted by location and depths where accessible without confined entry safety procedures and where traffic lanes do not pose a safety hazard accessing sewer data. Pipe sizes will be shown from plans, if available. Watermain and water services will be depicted from surface evidence and available plans. The limits of topography will extend to the centerline of the adjacent streets and 25' onto adjacent properties unless otherwise agreed upon.



LEGEND

- INDICATES FOUND 1" IRON PIPE
- + INDICATES SET 1" IRON PIPE
- ⊕ SANITARY MANHOLE
- ⊕ SANITARY CLEANOUT OR VENT
- ⊕ SEPTIC TANK ACCESS COVER
- ⊕ M.I.S. MANHOLE
- ⊕ UNKNOWN MANHOLE
- ⊕ STORM MANHOLE
- ⊕ INLET (ROUND)
- ⊕ INLET (SQUARE)
- ⊕ CURB INLET
- ⊕ STORM SEWER END SECTION
- ⊕ GAS VALVE
- ⊕ GAS METER
- ⊕ WATER VALVE
- ⊕ HYDRANT
- ⊕ WATER MANHOLE
- ⊕ WATER SERVICE CURB STOP
- ⊕ WELL HEAD
- ⊕ STAND PIPE
- ⊕ WALL INDICATOR VALVE
- ⊕ POST INDICATOR VALVE
- ⊕ TRAFFIC LIGHT
- ⊕ SPOT/YARD LIGHT
- ⊕ UTILITY POLE
- ⊕ GUY POLE
- ⊕ GUY WIRE
- ⊕ ELECTRIC MANHOLE
- ⊕ ELECTRIC PEDESTAL
- ⊕ ELECTRIC METER
- ⊕ TELEPHONE MANHOLE
- ⊕ TELEPHONE PEDESTAL
- ⊕ CABLE PEDESTAL
- ⊕ CONTROL BOX
- ⊕ FIBER OPTIC PEDESTAL/SIGN
- ⊕ COMMUNICATION MANHOLE
- ⊕ BOLLARD
- ⊕ SOIL BORING/MONITORING WELL
- ⊕ WATER SURFACE
- ⊕ WETLANDS FLAG
- ⊕ MARSH
- ⊕ FLAGPOLE
- ⊕ PARKING METER
- ⊕ SIGN
- ⊕ MAILBOX
- ⊕ RAILROAD CROSSING SIGNAL
- ⊕ HANDICAP SPACE
- ⊕ CONIFEROUS TREE
- ⊕ DECIDUOUS TREE

Project #3776-INVERT INFORMATION

NO.	POINT NO.	TYPE	RIM	DEPTH	DEPTH	DEPTH
STM1	5314	MH	884.61	3.7	6.05	"OFFSET"
INVERT					880.91	878.56
SIZE					12"	
DIRECTION					N	S W
TYPE					RCP	Bottom
STM1	5151	MH	883.93	UNABLE TO		
SIZE					60.00"	
DIRECTION						
TYPE						
STM2	5312	CURB INLET	884.55	3.25		
INVERT					881.3	
SIZE					12"	
DIRECTION					N	
TYPE					RCP	
STM3	5313	CURB INLET	884.42	3.5	3.5	
INVERT					880.92	880.92
SIZE					12"	12"
DIRECTION					S	E
TYPE					RCP	
STM4	5341	CURB INLET	884.44	3.3	3.4	
INVERT					881.14	881.04
SIZE					12"	12"
DIRECTION					S	W
TYPE					RCP	
STM5	5140	CURB INLET	884.51	3.25		
INVERT					881.26	
SIZE					12"	
DIRECTION					N	
TYPE					RCP	
STM6	5266	MH	877.96	4.6	5.5	"OFFSET"
INVERT					873.41	
SIZE					12"	
DIRECTION					S	E
TYPE					BOTTOM	
STM7	5269	CURB INLET	877.84	4.45		
INVERT					873.39	
SIZE					12"	
DIRECTION					N	
TYPE					RCP	
STM8	5270	CURB INLET	877.87	4.6	4.6	
INVERT					873.27	873.27
SIZE					12"	12"
DIRECTION					S	W
TYPE					RCP	RCP
STM9	5282	CURB INLET	877.5	7.65		"OFFSET"
INVERT					869.85	
SIZE					12"	
DIRECTION					BOTTOM	
STM10	5261	CURB INLET	877.71	4.75		
INVERT					872.96	
SIZE					12"	
DIRECTION					N	
TYPE					RCP	
STM11	5868	CATCH BASIN	883.95	3		"OFFSET"
INVERT					880.95	
SIZE					12"	
DIRECTION					EAST	
TYPE					PROVIDED	
STM12	5960	CATCH BASIN	885.14	2.8		
INVERT					882.34	
SIZE					8"	
DIRECTION					NE	
TYPE					PVC	

TO: Bunsen Realty LLC, a Wisconsin limited liability company
Chicago Title Insurance Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 3, 4, 7(a), 7(b)(1), 7(c), 8, 9, 11(a), 19, 20(a), 20(b) and 20(c) of Table A thereof. The field work was completed on May 13, 2021.



Date of Map: May 17, 2021

Daniel Bednar
Professional Land Surveyor
Registration Number S-2812

Date	Revision description

CHAPUT LAND SURVEYS
234 W. Florida Street Milwaukee, WI 53204 414-224-8068 www.chaputlandsurveys.com

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Drawing No. 3776-dmb

