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VILLAGE OF GERMANTOWN
N112 W17001 MEQUON ROAD
GERMANTOWN, WI 53022

MEETING:	**PLAN COMMISSION**
DATE AND TIME:	**MONDAY, JUNE 25, 2018 6:30 p.m.**
LOCATION:	**Germantown Village Hall Board Room**

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

II. **ROLL CALL**

III. **PUBLIC INPUT/PUBLIC APPEARANCE:** Please be advised per §19.84(2) that information will be received from the public, however, no action will be taken at this time.

IV. **APPROVAL OF MINUTES**: June 11, 2018

V. **NEW BUSINESS**

A. Ryan Companies US. Inc., Agent and Property Owner, N102 W19300 Willow Creek Way (Lot 3 Willow Creek Business Park). Site Plan Review for a 186,830 sqft Industrial Warehouse Building.

B. Kubala Washatko Architects, Agent for J.W. Speaker Corporation & Phylmack LLC, Property Owners, N120 W19434 Freistadt Road. Site Plan Review for a 56,890 sqft Office/Light Industrial Assembly Facility and (2) Certified Survey Map (CSM) Lot Combination Applications.

C. Stacy Cooke, Agent for Gehl Foods, LLC, Property Owner, N116 W16076 Main Street & N116 W16060 Main Street. Consultation for Possible Rezoning and Creation of a Planned Development District (PDD) for the Gehl Foods Main Street Campus.

VI. **ANNOUNCEMENTS**:

VII. **ADJOURNMENT**:

The next Plan Commission Meeting will be on July 9, 2018 at 6:30 p.m.

UPON REASONABLE NOTICE, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service please contact the Village Clerk at (262)250-4740 at least 2 days prior to the meeting. Notice is given that a majority of the Village Board may attend this meeting to gather information about an item over which they have decision making responsibility. This may constitute a meeting of the Village Board per State ex rel. Badke v. Greendale Village Board, even though the Village Board will not take formal action at this meeting.

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PLAN COMMISSION MINUTES
June 11, 2018

CALL TO ORDER: Chairman Wolter called the meeting to order at 6:31 p.m.

ROLL CALL: Chairman Dean Wolter, Trustee Rep. David Baum, Commissioners William Shadid, Tony Laszewski, Bob Williams and Matt Kimmler were present. Commissioner Peter Nilles arrived at 6:36. Also present were Community Development Director/Village Planner Jeff Retzlaff and Planning Assistant Lori Johnson.

PUBLIC INPUT: None

APPROVAL OF MINUTES: ***MOTION Baum second Laszewski to Approve the minutes from 5-14-18. MOTION carried unanimously.***

Public Hearing: Public Hearing regarding the Proposed Project Plan, Boundaries and Creation of Tax Incremental District No. 8. Phil Cosson, Ehlers, summarized the project plan, proposed boundaries, use and phases. He explained the project costs that include various public improvements including the extension of sewer and water to the site, reconstructing part of Holy Hill Road and a road extension into the site. He said Washington County is looking to provide a $1,000,000 incentive to Briggs & Stratton that is job based and reviewed the cashflow, increment and overall feasibility for the TID.

Chairman Wolter called the Public Hearing open at 7:00 p.m.
No one spoke. The Public Hearing was closed.

Consideration and Action on a Resolution Designating the Proposed Boundaries and Recommending Approval of the Project Plan for Tax Incremental District No. 8.

MOTION Baum second Shadid to Approve the Resolution designating proposed boundaries and approving a Project Plan for Tax Incremental District No. 8.

Discussion followed. Planner Retzlaff said the residents that attended the Informational Meeting on June 6th had a number of concerns with the proposed TID. They included increased traffic in the area, concern with the Goldendale Road and Holy Hill Road intersection, noise, lights, impacts to agriculture and the quiet rural area to the north, east and southeast. Chairman Wolter cited the need for blasting was a concern for several residents to the north, well concerns and the possibility of needing to connect to water and sewer.

Discussion continued on the cost estimates for the proposal. Trustee Baum said he would support the financial portion of the TID and feels other development will come. Commissioner Laszewski asked how the projected costs were calculated. Planner Retzlaff said they reflect the current estimates of what the numbers would be. Phil Cosson. Ehlers stated the estimate is conservative and will change by the time the TID builds out. He said if costs go up we will need to see more development. Planner Retzlaff explained staff recommended the additional 73 plus acres be included in the TID boundary due ongoing discussion with a local business and the likelihood of it relocating their business there.

Commissioner Kimmler asked about the $1,000,000 incentive from Washington County based on job creation, will that amount be based on the number of jobs brought to the area and will the loan have interest on it as well. Phil Cosson explained the details are being worked through, but the interest rate

will be 3.56 percent to be paid back. He said the loan is for the end user who commits to the jobs which is Briggs & Stratton. Commissioner Nilles said he understood 30 jobs would be created and questioned how that equals $1,000,000. Deb Reinbold, Washington County, said they typically lend $20,000 per job created over 3 years, but they will be asking the County Board to increase that amount to $33,333 for these jobs knowing that it's a catalyst for the site.

Commissioner Kimmler asked if there were any concerns that a deep well will have negative impacts on the residents' private wells in the area or if it will lower the water levels in the Germantown aquafer. Planner Retzlaff said it would be a concern of the Village if that were the case, but there is no specific location at this time for the well. It is not required to be within the TID boundary. The Village has those concerns as they further their investigation into the well and its location and depth and those types of impacts. Chairman Wolter said Village is looking at a well to support the entire water system. The 2 acres reserved for Village use is for something that will benefit Village and could be a water tower, a well to support the full water system, a pumping station or lands used on the sanitary side for a lift. It hasn't been designated yet but whatever goes there will benefit something that is needed by the Village.

Commissioner Kimmler asked how the TID will improve the lives of the residents and what are the benefits to the Village. Planner Retzlaff answered by citing job creation, other new development, and the increase in tax base when the TID closes. Chairman Wolter said the interstate area had been designated for proposed development on the Land Use Plan map, including a possible mixed-use area. He said more residential areas are possible with the extension of sewer and water to the area and it would be impossible to bring commercial to the area without the road enhancements and sewer and water improvements.

MOTION carried 6-1 (Kimmler)

Zilber Property Group, Agent for Towne Realty, Inc., Brian & Kevin Kazmierczak, Richard & Mary Stephan and Frank & Mary Wiedmeyer, property owners of 151.3 acres north of Holy Hill Road, West of Goldendale Road, South of Rockfield Road and East of US41/45. Request is for approval of amendments to the Village's 2020 Future Land Use Plan Map for 224.8 acres and a rezoning application for 151.3 acres located east of US41, west of Goldendale Road, north of Holy Hill road and south of Rockfield Road. Planner Retzlaff summarized the proposal.

MOTION Baum second Shadid to Approve the proposed 2020 Land Use Plan (LUP) map amendments to change approximately 287 acres classified as "Mixed Use" to "Industrial/Office" (Exhibit A); and to expand the 2020 Sanitary Sewer Service Area (SSA) boundary to include the 151.3 acres owned by the Property Owners and additional land contiguous to the existing SSA recommended by Village staff (Exhibit B).

Trustee Baum was concerned with how fast the proposal is moving forward and how drastic the change is to the community. Planner Retzlaff said as we proceed with updates to the 2050 Land Use Plan we will look at other land use changes that may be necessary in this area and the surrounding area. Chairman Wolter said the Village has been given an opportunity and has been presented with a development with a client that wants to be here and will put a substantial investment in that area. He said there was always some type of mixed use plan for this interchange area and that residential development can still be proposed for the surrounding area. Trustee Baum said he understood this

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development is one of the few things that will draw sewer and water to that area and Zilber can help to bring the infrastructure to the area. We know some type of use was already planned for this area.

MOTION carried 6-1 (Baum)

MOTION Baum second Shadid to Approve the proposed rezoning of approximately 151.3 acres from A-1: Agricultural, A-2: Agricultural, Rs-1: Single-Family and Rs-2: Single-Family to M-1: Limited Industrial subject to the following:

1. ***Rezoning the properties totaling 151.3 acres is subject to approval of the proposed LUP Map Amendments and creation of the proposed Tax Incremental District No. 8.***

MOTION carried 5-2 (Baum, Kimmler)

MOTION Baum second Shadid to go to Item F on the Agenda.
MOTION carried unanimously.

Straight Line Collision – W154 N11412 Fond du Lac Avenue. Sheila and Daniel Cook, agents for Thomas Solomon, property owner, are requesting approval for a new wall sign and replacement monument sign for the new business formerly known as Dick's Body Shop. Planner Retzlaff summarized the proposal.

MOTION Baum second Shadid to Approve the proposed wall and monument signs for Straight Line Collision located at W154 N11412 Fond du Lac Avenue subject to the following conditions:

1. ***An electrical permit shall be obtained from Inspection Services prior to installation of any/all electrical components.***
2. ***No structural replacements or modifications are permitted to the existing sign. Any new or replacement sign must comply with current sign regulations and be reviewed and approved by the Plan Commission.***

MOTION carried unanimously.

MOTION Wolter second Baum to take a 5-minute recess 8:00 p.m.
MOTION carried unanimously. Meeting reconvened at 8:07 p.m.

Wacker Neuson – W180 N11691 River Lane. Pinnacle Engineering, agent for Wacker Neuson Logistics Americas LLC, property owner, are seeking approval of site development and building plans for a 107,910 sqft outdoor storage area, a 6,000 sqft canopy-covered storage area, truck loading area and site improvements for the existing facility. Planner Retzlaff summarized the proposal.

MOTION Baum second Shadid to Approve the site development & building plans for the 107,910 sqft outdoor storage yard, 6,000 sqft canopy-covered storage area and site improvements for the existing facility located W180 N11691 River Lane in the Germantown Industrial Park subject to the following conditions:

1. ***This approval is subject to all the conditions and requirements set forth herein and adopted by the Plan Commission. Approval is granted for the site development and building plans with a revision date May 10, 2018 unless superseded by subsequent plan***

sheets approved by the Village Planner pursuant to revisions required herein and/or by the Plan Commission.

2. ***All landscaping, screening, grading, and paving improvements shown on the approved site plans shall be installed as proposed prior to issuance of an occupancy permit unless a cash bond or letter of credit in an amount equal to 120 percent of the estimated installation and material costs reviewed and approved by the Village is submitted to the Village as necessary to ensure that installation of the proposed features and improvements will be completed within one (1) year after issuance of the occupancy permit.***
3. ***State approved plans and a $20,000 occupancy bond are required by the Building Inspection Department as part of the building permit application.***

Discussion followed. Planner Retzlaff explained outdoor storage is allowed in the M-1 Zoning District but is required to be screened from view. He said staff is satisfied with the fencing as proposed and supplemental street trees that will be provided. Kristine Zehren, Wacker Neuson, stated skid-steer loaders that are under 6 feet tall and manufactured at the Menomonee Falls facility, would be stored in the area. She assured the Commission the fencing will be property maintained.

MOTION carried unanimously.

Armour Coatings, Inc. – N113 W18950 Carnegie Drive. Keller, Inc., agent for Armour Equipment Leasing LLC, property owner is seeking approval of site development and building plans for a 1,665 sqft building addition, loading dock addition and access and parking lot improvements for the existing facility. Planner Retzlaff summarized the proposal.

MOTION Baum second Shadid to Approve the site development & building plans for the 1,665 sqft building addition, loading dock and site improvements to the existing Armour Coatings Inc. facility located at N113 W18950 Carnegie Drive in the Germantown Industrial Park subject to the following conditions:

1. ***This approval is subject to all the conditions and requirements set forth herein and adopted by the Plan Commission. Approval is granted for the site development and building plans dated April 10, 2018 (architectural plans) and June 5, 2018 (engineering) unless superseded by subsequent plan sheets approved by the Village Planner pursuant to revisions required herein and/or by the Plan Commission.***
2. ***All landscaping, screening, grading, and paving improvements shown on the approved site plans shall be installed as proposed prior to issuance of an occupancy permit unless a cash bond or letter of credit in an amount equal to 120 percent of the estimated installation and material costs reviewed and approved by the Village is submitted to the Village as necessary to ensure that installation of the proposed features and improvements will be completed within one (1) year after issuance of the occupancy permit.***
3. ***All exterior doors shall be clearly marked with reflective 5" or larger letters/numbers to aid emergency personnel access as required by the Police Department.***
4. ***All issues identified by the Village Engineer in the June 7, 2018 review memo shall be addressed prior to issuance of a building permit.***
5. ***State approved plans and a $20,000 occupancy bond are required by the Building***

Inspection Department as part of the building permit application.

6. ***Installation of a fire sprinkler system is required. Owner shall coordinate the plan review, installation and inspection with the Fire Department and Inspection Services.***

MOTION carried unanimously.

Gehl Foods – N116 W15970 Main Street. AGNL Dairy, LLC, property owner and Gehl Foods is seeking approval of site development and building plans to construct a small building addition and install replacement ammonia condenser and receiver units onto the existing production facility. Planner Retzlaff summarized the proposal.

MOTION Baum second Laszewski to Approve the site development & building plans for a building addition and installation of replacement ammonia condenser/receiver units and equipment to the existing Gehl Foods production facility located at N116 W15970 Main Street subject to the following conditions:

1. ***This approval is subject to all the conditions and requirements set forth herein and adopted by the Plan Commission. Approval is granted for the site development and building plans dated April 6, 2018 unless superseded by subsequent plan sheets approved by the Village Planner pursuant to revisions required herein and/or by the Plan Commission.***
2. ***All exterior doors shall be clearly marked with reflective 5" or larger letters/numbers to aid emergency personnel access as required by the Police Department.***
3. ***State approved plans and a $20,000 occupancy bond are required by the Building Inspection Department as part of the building permit application.***

Stacy Cooke, Gehl Foods, said they had met with fire department to address any concerns and said this is the first step to help eliminate the chillers.

MOTION carried unanimously.

ANNOUNCEMENTS: Commissioner Shadid announced his resignation stating this would be his last meeting due to conflicting schedules. He said it was an honor to have worked with such a professional staff and board. Chairman Wolter thanked him for his volunteerism and appreciated his time. He also announced the Kiwanis Art Pavilion ribbon cutting ceremony is scheduled for June 20th. Planner Retzlaff said Plan Commission would meet on June 25th.

ADJOURNMENT: There being no further business, the meeting was adjourned at 8:37 p.m.

Respectfully submitted,

Lori Johnson
Planning Assistant

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SITE PLAN REVIEW

6/25/18 Plan Commission Meeting

Ryan Companies US Inc.

Village Planner Report **Germantown, Wisconsin**

Summary

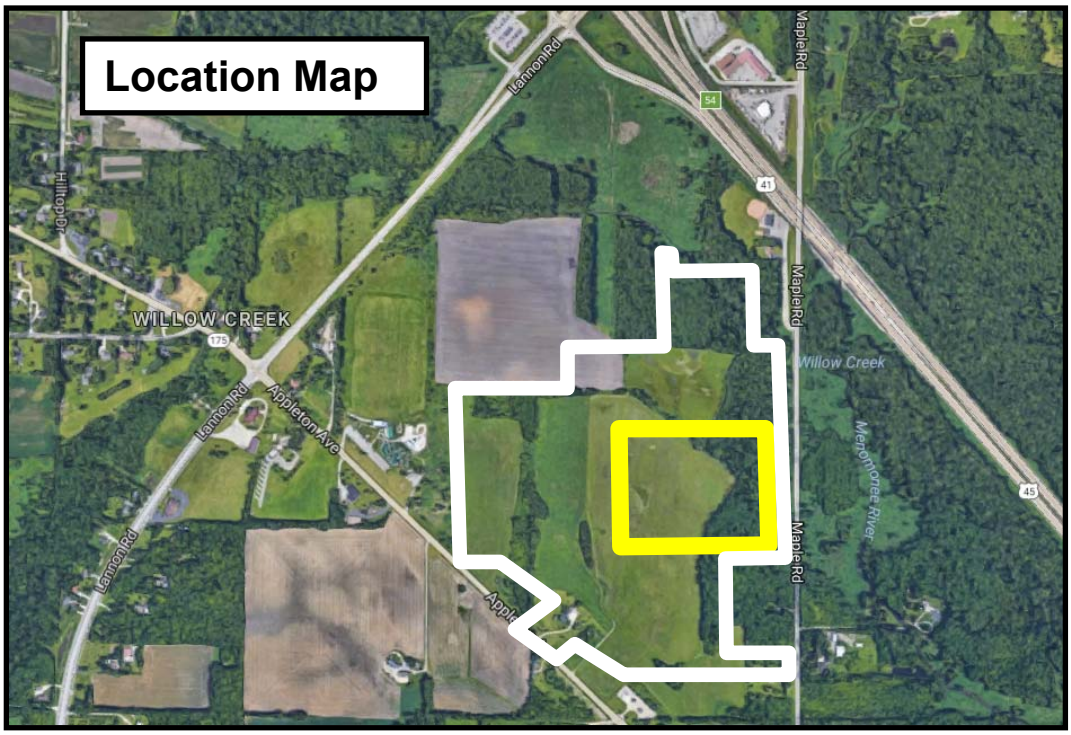
Ryan Marks, agent for Ryan Companies US Inc., property owner, is seeking approval of site development and building plans for an 186,830 sqft industrial building located on Lot 3 in Germantown's Willow Creek Business Park.

Location: N102 W19300 Willow Creek Way

Applicant/
Property Owner: Ryan Marks, Managing Director
Ryan Companies US Inc.
309 N. Water Street
Milwaukee, WI

Current Zoning: M-1: Limited Industrial

Adjacent Land Uses		Zoning
North	Institutional	I
South	Industrial	M-1
East	Agricultural	A-1
West	Industrial	M-1



Proposal

Ryan Marks, agent for Ryan Companies US Inc., property owner, is seeking approval of site development and building plans for an 186,830 sqft speculative industrial building located in Germantown's Willow Creek Business Park with the following features:

- 186,830 sqft one-story (30' clear height), multi-tenant warehouse
- 2 end-cap & 2 interior entrances (west side) for leasing flexibility
- 18 elevated loading docks (east side) & truck/trailer parking and staging
- Warehouse exterior: Painted pre-cast tilt-up concrete wall panels (8' or 12' width and 35' max height) articulated w/ multiple reveals and painted in gray tones
- Accent panels painted green w/ pre-cast "fin" features at end entrances
- aluminum storefront glass entrances, grey tinted windows and clerestories
- Warehouse, fabrication and manufacturing uses consistent with the M-1: Limited Industrial Zoning District
- 70-100 employees

Access & Parking. The development will be served by one (1) driveway onto Willow Creek Way. A total of (119) vehicle parking stalls are proposed along the west side and (36) truck/trailer stalls along the east side (186 total stalls recommended under Village guidelines). Access to the loading/dock area on the east side of the building is provided by access drives/fire lanes that encircle the building.

Storm Water Management. A total of 359,360 sqft (37.2%) of impervious surfaces are proposed for the 22.16-acre site leaving 62.8% in open space. The site is served by a regional storm water basin located north of the site. However, the developer is proposing to possibly construct an additional basin east of the building to serve portions of the site (as shown on the site plan). The regional basin was constructed to serve development on the site at an assumed elevation based on the pre-approved master grading and storm water management plans. Compliance with those plans would require additional fill on the site. However, because the proposed building elevation is lower than the assumed elevation, no additional fill will be required, but the regional basin will have to be made deeper, or, an additional basin east of the building will have to be constructed to allow the developer to construct the building and parking areas at the lower (proposed) elevation. If constructed, both basins will accommodate water from the site. Roof drains and on-site storm sewer will be installed to convey run-off from the site to the regional basin to the north and additional basin to the east (if constructed).

Landscaping. An extensive landscaping plan is proposed consistent with the overall landscaping requirements of the Willow Creek covenants. Landscaping is comprised of deciduous shade and ornamental trees, evergreen trees, and deciduous and evergreen shrubs, and ornamental grasses. No street trees are proposed given the narrow frontage at the Willow Creek Way cul-de-sac. The west parking area is heavily landscaped with additional landscaping along the south perimeter of the site and foundations plantings along the south and west building elevations. The site is not easily visible from Appleton Avenue given its location and has a significant "back drop" of the heavily wooded wetland area associated with Willow Creek as it meanders from north to south across the east side of the property. No wetlands or wetland setback areas are impacted by the proposed development.

Lighting. Exterior lighting of the building and site will include:

- (2) 163W LED 4000K “neutral white” cut-off fixtures mounted at a height of 30’ on exterior poles along the driveway area;
- (20) 163W LED 4000K “neutral white” cut-off fixtures mounted on all building elevations at a height of 30 feet.

Signage. The developer anticipates installing a monument sign and wall-mounted signage consistent with the Willow Creek Business Park covenants and Village regulations. However, no specific signage is proposed at this time.

Staff Comments

Planning & Zoning

The site is located adjacent to and east of overlapping 100’ wide ANR pipeline and 125’ Wisconsin Power easements that run north-south through the business park. Development within the easements is prohibited (except for the access driveway from the cul-de-sac to the parking area) with a 200’ blast-free development zone on both sides of the pipeline easement. A letter is on file from TransCanada, the agency responsible for operation and maintenance of the ANR Pipeline, indicating their approval of initial site investigation and pre-development activates that require crossing the easement with heavy equipment. However, TransCanada has indicated that the proposed driveway located within the pipeline easement doesn’t provide adequate ground cover over the pipeline and will need to be modified. The Applicant should be responsible for revising the site plan and providing a final approval letter or other documentation from TransCanada approving the site development plan prior to issuance of a building permit.

The site also contains a large wetland and floodplain complex (approximately 11.2 acres) located on the east side of the site. While no development is proposed within the wetland or 25’ wetland setback, the type and amount of development in this relative location will require a DNR Chapter 30 permit.

The Village’s lighting guidelines limit the maximum height of exterior light fixtures to 25 feet. Therefore, the proposed fixture height of 30 feet for the pole and building-mounted fixtures should be reduced to not exceed 25 feet. Specific signage, including monument and wall-mounted signs will require separate Plan Commission review and approval.

Inspection Services

Inspection Services has indicated that the submission of state-approved plans will be required prior to issuing a building permit along with the required $20,000 occupancy bond.

Engineering

The Village Engineer and Public Works Department staff have identified several technical issues and plan corrections (see June 7, 2018 Village Engineer memo) pertaining to storm water management and utilities that will need to be addressed prior to issuance of a building permit. In a separate memo (dated June 22, 2018), the Village Engineer is recommending that, because the developer is considering installing a separate on-site storm water basin in addition to the regional off-site basin constructed by the Village, the developer will be responsible for obtaining DNR and MMSD approval of a revised master storm water master plan for the Willow Creek Business Park prior to commencing building construction. The Engineer is also recommending that, if constructed, the developer should be responsible for perpetual maintenance of the on-site storm water basin (vs. the Village who is responsible for all regional storm water basins in the business park).

Fire & Police Departments

The Fire Department has the following comments and requirements:

1. State approved fire sprinkler and fire alarm systems are required to be installed in compliance with the requirements for each specific tenant occupancy class; and
2. Locations of all water distribution system and hydrants shall be determined in cooperation with the Germantown Fire Department and utility standards.

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

VILLAGE PLANNER RECOMMENDATION

APPROVE the site development and building plans submitted by Ryan Companies for the proposed 186,830 sqft warehouse located on Lot 3 in the Willow Creek Business Park subject to the following conditions:

1. This approval is subject to all the conditions and requirements set forth herein and adopted by the Plan Commission. Approval is granted for the architectural & engineering plan sheets dated 5-7-18, the landscaping plan sheets dated 5-4-18, and the electrical plans dated 5-3-18 unless said plan sheets are revised pursuant to revisions required under the specific conditions of approval included by the Plan Commission.
2. All landscaping, screening, grading, and paving improvements shown on the approved site plans shall be installed as proposed prior to issuance of an occupancy permit unless a cash bond or letter of credit in an amount equal to 120 percent of the estimated installation and material costs reviewed and approved by the Village is submitted to the Village as necessary to ensure that installation of the proposed features and improvements will be completed within one (1) year after issuance of the occupancy permit.
3. The following items shall be provided as required by the Village Fire Department: (a) State approved fire sprinkler and fire alarm systems are required to be installed in compliance with the requirements for each specific tenant occupancy class; and (b) Locations of all water distribution system and hydrants shall be determined in cooperation with the Germantown Fire Department and utility standards.
4. All exterior doors (except primary entrance) shall be clearly marked with reflective 5” or larger letters/numbers to aid emergency personnel access as required by the Police Department.
5. All technical issues and plan corrections identified by the Village Engineer and Public Works Department staff (see June 7 and June 22, 2018 Village Engineer memos) shall be addressed and reflected in revised plans and/or supplemental information reviewed and approved by Village staff prior to issuance of a building permit.
6. The Property Owner/Developer shall be responsible for obtaining DNR and MMSD approval of a revised master storm water master plan that incorporates the additional on-site storm water basin and/or modifications to the existing regional basin prior to issuance of a building permit and prior to commencing any early start construction activities on the site.
7. The Property Owner/Developer shall be responsible for perpetual maintenance of the on-site storm water basin (if constructed).
8. The Property Owner/Developer shall be responsible for revising the site plan as necessary to accommodate TransCanada’s ANR Pipeline easement requirements and providing the Village a final approval letter or other documentation from TransCanada prior to issuance of a building permit.
9. All proposed exterior signage, including monument and wall-mounted signs, shall be reviewed and approved under a separate application by the Plan Commission.
10. State approved plans and a $20,000 occupancy bond are required by the Building Inspection Department as part of the building permit application.

Engineering Department Memorandum

To : Larry Ratayczak, Public Works Director

From : Eric Nitschke, Village Engineer

Date : June 22, 2018

Re :Development Review for June 11 Plan Commission

Larry,

Included you will find the review comments pertaining to the Plan Commission Agenda on June 25, 2018 from myself and staff for the Ryan Companies, Lot 3 Willow Creek Way Site Review.

Please note that these comments only address updates to the June 7, 2018 Engineering Comments, and do not supersede the Sanitary, Water or Highway comments in that memo.

Ryan Companies, Lot 3 Willow Creek Way – Site Review

1. Sanitary comments (remain the same from June 7, 2018)
    a. Move sanitary sample MH 101.0 upstream of sanitary MH 100.
    b. Easements should reflect location of sanitary main to MH 100.
    c. The Village detail of a sanitary sampling manhole is to be added to the plans.

2. Water comments for the site plan-See attached PDF with comments on Utility Plan sheet C-5 of C-6 and comments below (remain the same from June 7, 2018)
    a) Show hydrant gate valves to scale so staff can find them off this print for future locating.
    b) 10" fire protection line needs to have its own isolation gate valve, so the entire building can be kept on water if the fire protection line has to be shut off. The fire line is not clearly shown where the connection fitting is located.
    c) Label the easement "20' public fire protection easement".
    d) Label "10" PVC" not a call out line but in the line segment itself (or whatever size it ends up to be).
    e) Move the match-line verbiage so the hydrant on the west side can be seen.
    f) Change note to “All underground water utility work shall conform to Village of Germantown standards”.
    g) In the legal description/land owner agreement for this parcel it will be required to reference that all future repair costs will be billed back to the owner.

h) Since the profile view has not been submitted, construction cannot take place until it has been submitted and approved by the village.
i) Install two concrete bollards at east hydrant

3. Highway comments (remain the same from June 7)
    a. There will be limited cover over the proposed 12" Reinforced Concrete Pipe at the driveway access point off of Willow Creek Way. It appears there will be approximately one foot of cover at finished grade. Cover may be less during construction. Inspection of the pipe, prior to installing curb and gutter and/or paving will be required.
    b. Additionally, with the extension occurring directly under the proposed driveway care should be taken with extension. Joints and seating of pipe should be properly connected and back fill material compacted.

4. Engineering comments
    a. After discussing the Willow Creek Business Park Storm Water Management Plan (SWMP) with the design engineer, they have agreed to provide an updated management plan. The updated SWMP will either include modifications to the existing pond and outlet structure, the addition of a second pond or a combination of both alternatives. The updated SWMP must meet WisDNR, MMSD and Village requirements. All necessary approvals must be made in writing prior to start of construction.
    b. No erosion control plan was provided. Please provide an erosion control plan for review.
    c. No details were provided for catch basins or other storm water structures. Please provide these details.
    d. Provide details of the designed overland flow routes for storm water.
    e. The proposed sewer and water laterals are required to connect with Village services at the property line. Please refer to the plat of survey that shows a 20 foot easement for the sewer and water laterals to be connected to through Willow Creek Lot 4. Plans should reference this easement and connection point.
    f. Based on the proposed elevation of the building, a grinder pump system will be required to service the proposed building.
    g. Please provide written verification that approvals have been obtained from ATC and other utilities, for the grading that is being proposed in their easements.

Engineering Department Memorandum

To : Larry Ratayczak, Public Works Director

From : Eric Nitschke, Village Engineer

Date : June 7, 2018

Re :Development Review for June 11 Plan Commission

Larry,

Included you will find the review comments pertaining to the Plan Commission Agenda on June 11, 2018 from myself and staff for the following:

Ryan Companies, Lot 3 Willow Creek Way – Site Review

1. Sanitary comments
    a. Move sanitary sample MH 101.0 upstream of sanitary MH 100.
    b. Easements should reflect location of sanitary main to MH 100.
    c. The Village detail of a sanitary sampling manhole is to be added to the plans.

2. Water comments for the site plan-See attached PDF with comments on Utility Plan sheet C-5 of C-6 and comments below:
    a) Show hydrant gate valves to scale so staff can find them off this print for future locating.
    b) 10" fire protection line needs to have its own isolation gate valve, so the entire building can be kept on water if the fire protection line has to be shut off. The fire line is not clearly shown where the connection fitting is located.
    c) Label the easement "20' public fire protection easement".
    d) Label "10" PVC" not a call out line but in the line segment itself (or whatever size it ends up to be).
    e) Move the match-line verbiage so the hydrant on the west side can be seen.
    f) Change note to “All underground water utility work shall conform to Village of Germantown standards”.
    g) In the legal description/land owner agreement for this parcel it will be required to reference that all future repair costs will be billed back to the owner.
    h) Since the profile view has not been submitted, construction cannot take place until it has been submitted and approved by the village.
    i) Install two concrete bollards at east hydrant

3. Highway comments
    a. There will be limited cover over the proposed 12" Reinforced Concrete Pipe at the driveway access point off of Willow Creek Way. It appears there will be approximately one foot of cover at finished grade. Cover may be less during construction. Inspection of the pipe, prior to installing curb and gutter and/or paving will be required.
    b. Additionally, with the extension occurring directly under the proposed driveway care should be taken with extension. Joints and seating of pipe should be properly connected and back fill material compacted.

4. Engineering comments
    a. It does not appear the Willow Creek Business Park Storm Water Management Plan (SWMP) was consulted during this portion of the design. As an example, the existing pond referenced as Pond 1 in the SWMP was created to serve 16.89 acres with an impervious area of 81.68%. On sheet C-3, the site data describes the overall impervious area as 13.92 acres. If compared to the SWMP, 13.92 acres of impervious area would account for a total impervious area of 82.42%. There is also a portion of Pond 1 and a drainage swale that is proposed to be filled in for an access drive. Finally, a second pond is proposed. The proposal of the second pond would require new approvals from WisDNR and MMSD. While these are not insurmountable challenges, they must be addressed prior to any work starting onsite. Staff requests a meeting with the design engineer to work through these issues.
    b. No erosion control plan was provided. Please provide an erosion control plan for review.
    c. No details were provided for catch basins or other storm water structures. Please provide these details.
    d. Provide details of the designed overland flow routes for storm water.
    e. The proposed sewer and water laterals are required to connect with Village services at the property line. Since there is no easement for water and sewer to run through Willow Creek Lot 4, services will need to extend up the access drive to Willow Creek Way. It is anticipated that the Village is to provide laterals from the sewer and water mains, in Willow Creek Way, to the property line at the edge of ROW.
    f. Based on the proposed elevation of the building, along with the invert of the sanitary manhole SA-321-005 in Willow Creek Way, a grinder pump system will be required to service the proposed building.
    g. Please provide written verification that approvals have been obtained from ATC and other utilities, for the grading that is being proposed in their easements.

Village of Germantown ...Willkommen

Fee must accompany application

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

PAID_____ DATE_____

SITE PLAN REVIEW APPLICATION

Pursuant to Section 17.43 of the Municipal Code

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

1

APPLICANT OR AGENT

Ryan Companies US, Inc.
Attn: Ryan Marks - Managing Director
309 N. Water St. Suite 415
Milwaukee, WI 53202

Phone (414) 918-6508
E-Mail ryan.marks@ryancompanies.com

PROPERTY OWNER

Ryan Companies US, Inc.
533 South Third St. Suite 100
Minneapolis, MN 55415
Attn: Ryan Marks

Phone (414) 918-6508
E-Mail ryan.marks@ryancompanies.com

2

PROPERTY ADDRESS

Tax ID: GTNV_ 321972 - CSM 6782 LOT 3
Willow Creek Way

3

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

North	South	East	West
Village of Germantown Environmental corridor	Willow Creek Industrial-Land-MLG-Germantown	Mill Rd. Enviromental corridor / residential	Discount Ramps-Industrial

4

READ AND INITIAL THE FOLLOWING:

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

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

✓ 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!

Ryan Marks 5-1-2018
Applicant Date

Ryan Marks 5-1-2018
Owner Date

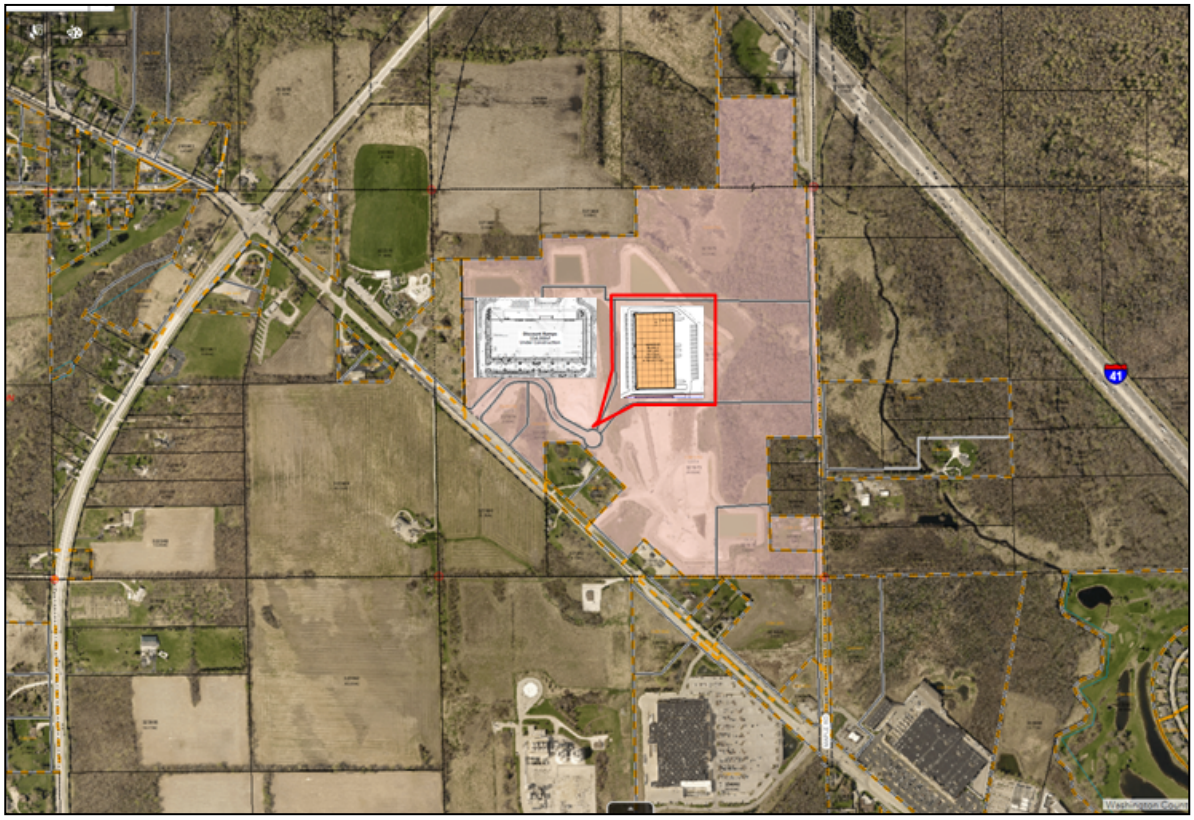
Willow Creek Way
Speculative Industrial Building

Germantown, Wisconsin

PROJECT NARRATIVE

May 7th, 2018

Project Location
The proposed project is located in the newly created Willow Creek Industrial Park on Willow Creek Way just off of Appleton Avenue. Environmental Corridor land owned by the Village of Germantown borders the site to the north, vacant industrial park land lies to the south, Mill Road and additional environmental corridor land and residential lie to the east and the Discount Ramps industrial project is currently under construction to the west. The site is currently a vacant parcel.



Project Details
Ryan is proposing to construct a single-story, 186,000 rentable square foot speculative industrial building along with parking to provide 0.65 spaces per 1,000 square feet of net building area. Ryan is proposing to start construction in 2018 with completion of the building in early 2019.

Additional Data

Existing Zoning	M-1 Limited Industrial
Acreage of Site	22.16 acres gross / 10.96 acres net
Building Square Footage	186,000 RSF
Developer / Owner	Ryan Companies US, Inc 309 N. Water St. Suite 415 Milwaukee, WI 53202
Designer	Stephen Perry Smith Architects 215 N. Water St. Suite 250 Milwaukee, WI 53202

Utilities
Sanitary sewer, storm sewer, and water service are all available in Willow Creek Way adjacent to the site. Stormwater detention is provided off-site in an existing, regional basin north of the site as well as an addition detention basin to be located to the east of the building.

Architecture
The building will consist of a one-story multi-tenant warehouse building with a 30 foot clear height. As currently proposed, the building will feature two end cap entrances and two interior entrances for leasing flexibility at the west side with multiple loading docks at the rear in accordance with the documents provided. The building will consist predominantly of painted precast tilt-up panels 8' or 12' in width, punctuated with aluminum framed storefront glass entrances, windows and clerestories articulated with multiple reveals and painted in tones of grey with an accent precast "fin" element at each end entrance that can be ultimately painted green to provide identity and visual vibrancy. Accent panels of green bring additional interest to the front of the building and these design elements are carried around the sides and back of the building to create four-sided architecture.

Signage
Proposed signage is in accordance with both the Zoning Code and the Park Covenants. A monument sign is proposed along Willow Creek Way, and wall signage is proposed on the west facade of the building. Please see the included exhibits for reference.

Tenant Operation
The building design and permits currently include core & shell work only. Tenant interior design and detailed operations will be completed as tenants are identified for the space. It is not expected that any tenant operations will require conditional uses. Existing M-1 Industrial District zoning provides for warehousing, manufacturing and fabrication operations. At this time we expect this facility will likely house 70 – 100 employees.

Conclusion
Ryan Companies US, Inc. is pleased to present this speculative industrial building to the Village of Germantown. This project will provide companies the space needed to grow their business in the Germantown community. The project is of the highest quality and use for this property and takes a large step towards completing development in the Willow Creek Park. Ryan looks forward to working with the Village throughout the construction and opening of the project in the coming months.

PROJECT:

WILLOW CREEK WAY INDUSTRIAL BLDG.

WILLOW CREEK BUSINESS PARK

GERMANTOWN, WISCONSIN

STEPHEN PERRY SMITH ARCHITECTS, INC.

215 N. WATER STREET, SUITE 250
MILWAUKEE, WISCONSIN 53202
T 414.277.9700 | F 414.277.9705
spsarchitects.com

PROJECT

PROPOSED BUILDING
WILLOW CREEK WAY
INDUSTRIAL BUILDING

OWNER

RYAN®
BUILDING LASTING RELATIONSHIPS

REVISIONS

NO.	DESCRIPTION	DATE

ISSUED FOR: **MUNICIPAL REVIEW**

ARCHITECT:

STEPHEN PERRY SMITH ARCHITECTS, INC.
MILWAUKEE, WISCONSIN

SHEET INDEX

G000	TITLE PAGE
C-1	CIVIL COVER SHEET
C-2	EXISTING CONDITIONS PLAN
C-3	SITE DIMENSIONAL & PAVING PLAN
C-4	GRADING PLAN
C-5	UTILITY PLAN
C-6	SITE STABILIZATION PLAN
L-1-L-4	LANDSCAPE PLAN
A050	ARCHITECTURAL SITE PLAN
A100	FACILITY PLAN
A401	BUILDING ELEVATIONS
R001	RENDERINGS
E1	ELECTRICAL SITE PLAN
E2	PHOTOMETRIC SITE PLAN
E3	FIXTURE SCHEDULE/CUT SHEETS

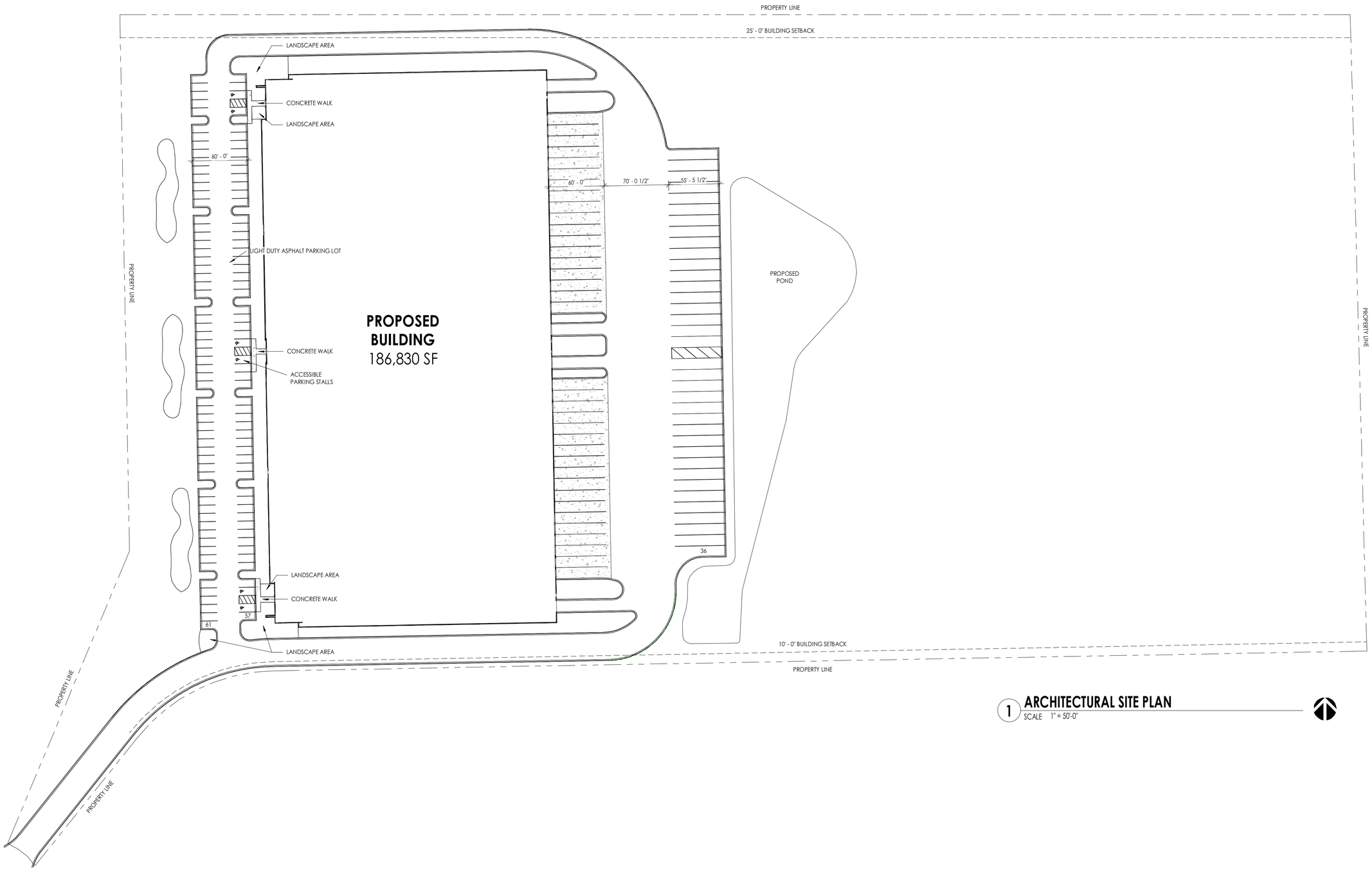
INFORMATION

PROJECT ARCHITECT	SPS
PROJECT MANAGER	MAM
PROJECT NUMBER	TRC-17-
ISSUED FOR	MUNICIPAL REVIEW
DATE	MAY 7, 2018

SHEET

TITLE PAGE

G000



1 **ARCHITECTURAL SITE PLAN**
SCALE 1" = 50'-0"

STEPHEN PERRY SMITH ARCHITECTS, INC.
215 N. WATER STREET, SUITE 250
MILWAUKEE, WISCONSIN 53202
T 414.277.9700 | F 414.277.9705
spsarchitects.com

PROJECT

PROPOSED BUILDING
WILLOW CREEK WAY
INDUSTRIAL BUILDING

OWNER

RYAN®
BUILDING LASTING RELATIONSHIPS

REVISIONS

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PROJECT ARCHITECT	SPS
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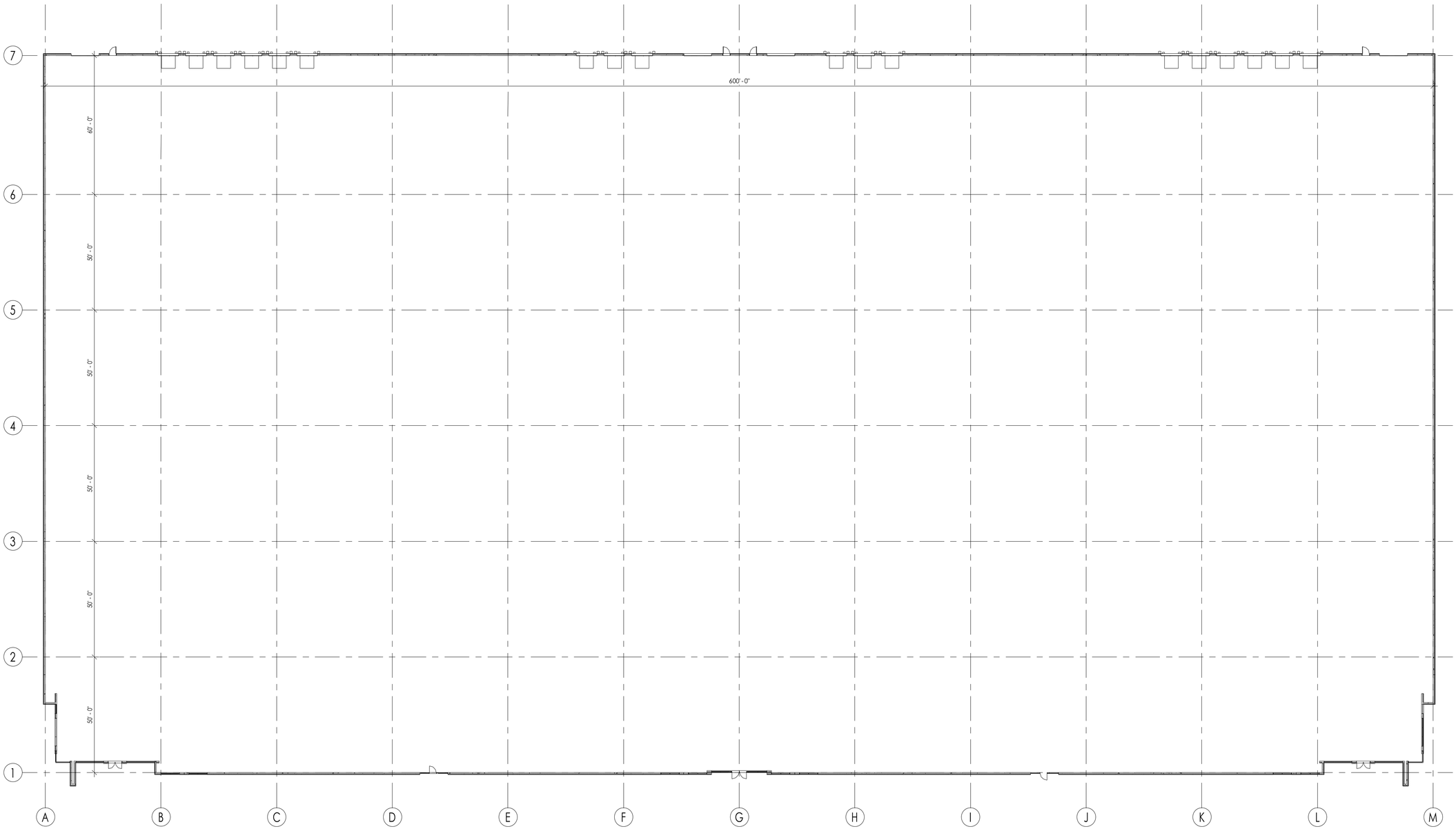
SHEET

ARCHITECTURAL SITE PLAN

A050



1 **FACILITY PLAN**
SCALE 3/64" = 1'-0"

STEPHEN PERRY SMITH ARCHITECTS, INC.

215 N. WATER STREET, SUITE 250
MILWAUKEE, WISCONSIN 53202
T 414.277.9700 | F 414.277.9705
spsarchitects.com

PROJECT

PROPOSED BUILDING
WILLOW CREEK WAY
INDUSTRIAL BUILDING

OWNER

RYAN®
BUILDING LASTING RELATIONSHIPS

REVISIONS

NO.	DESCRIPTION	DATE

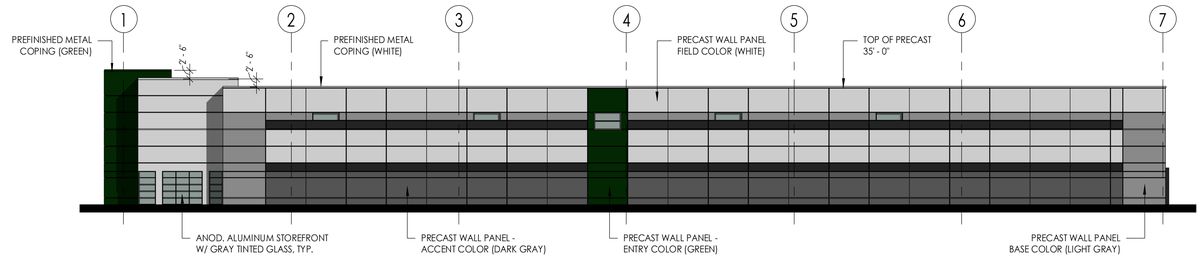
INFORMATION

PROJECT ARCHITECT	SPS
PROJECT MANAGER	MAM
PROJECT NUMBER	TRC-17-
ISSUED FOR	MUNICIPAL REVIEW
DATE	MAY 7, 2018

SHEET

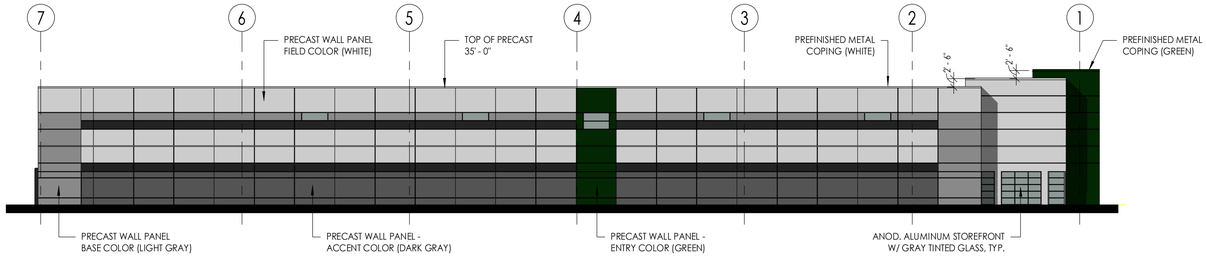
FACILITY PLAN

A100



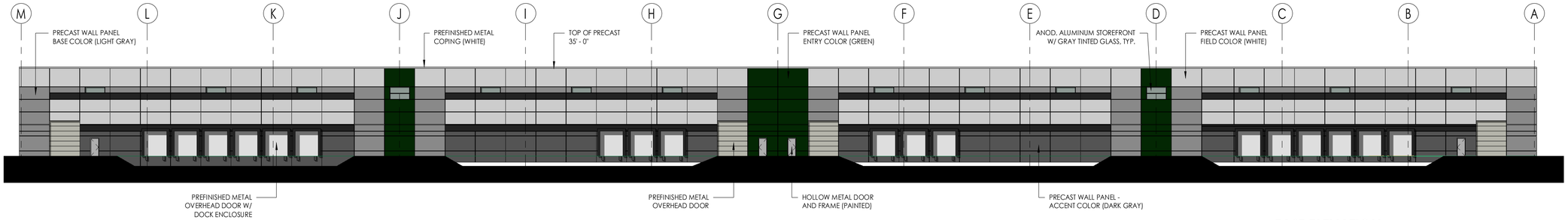
4 SOUTH ELEVATION

SCALE 3/64" = 1'-0"



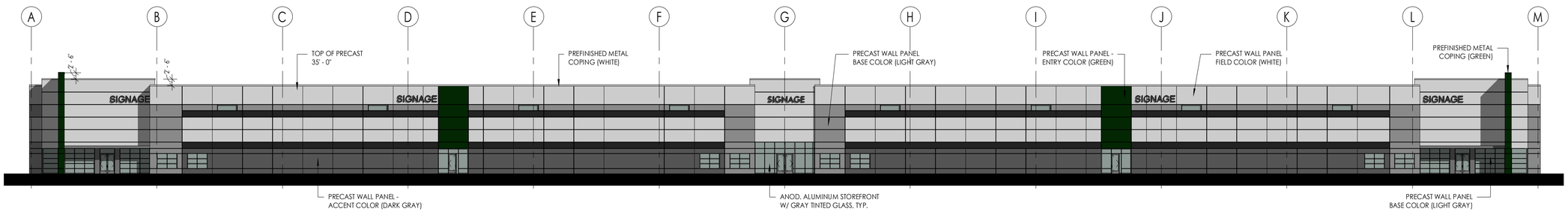
3 NORTH ELEVATION

SCALE 3/64" = 1'-0"



2 EAST ELEVATION

SCALE 3/64" = 1'-0"



1 WEST ELEVATION

SCALE 3/64" = 1'-0"

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spsarchitects.com

PROJECT

PROPOSED BUILDING

WILLOW CREEK WAY INDUSTRIAL BUILDING

OWNER

RYAN®
BUILDING LASTING RELATIONSHIPS

REVISIONS

NO.	DESCRIPTION	DATE

INFORMATION

PROJECT ARCHITECT	SPS
PROJECT MANAGER	MAM
PROJECT NUMBER	TRC-17-
ISSUED FOR	MUNICIPAL REVIEW
DATE	MAY 7, 2018

SHEET

BUILDING ELEVATIONS

A401

STEPHEN PERRY SMITH ARCHITECTS, INC.

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spsarchitects.com

PROJECT

PROPOSED BUILDING
WILLOW CREEK WAY
INDUSTRIAL BUILDING

OWNER

RYAN®
BUILDING LASTING RELATIONSHIPS

REVISIONS

NO.	DESCRIPTION	DATE

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PROJECT MANAGER	MAM
PROJECT NUMBER	TRC-17-
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DATE	MAY 7, 2018

SHEET

BUILDING RENDERINGS

R001

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ONSITE CIVIL ENGINEERING INFRASTRUCTURE PLANS

FOR

WILLOW CREEK WAY INDUSTRIAL BUILDING

GERMANTOWN, WI

PLANS PREPARED FOR

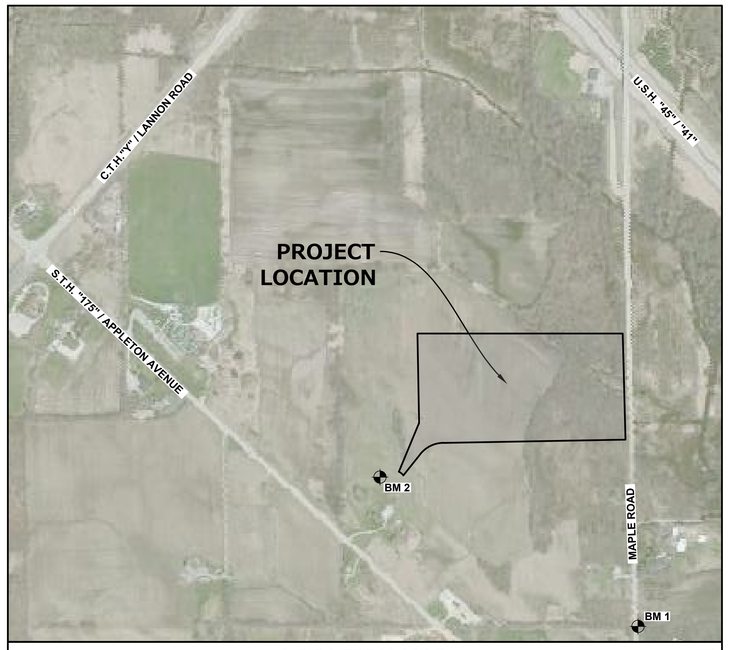
RYAN

LEGEND

	EXISTING	PROPOSED
SANITARY SEWER MANHOLE		
STORM SEWER MANHOLE		
STORM SEWER AREA DRAIN		
STORM SEWER INLET (ROUND CASTING)		
STORM SEWER INLET (RECTANGULAR CASTING)		
PRECAST FLARED END SECTION		
CONCRETE HEADWALL		
AIR RELEASE ASSEMBLY		
VALVE BOX		
FIRE HYDRANT		
BUFFALO BOX		
CLEANOUT		
SANITARY SEWER		
FORCE MAIN		
STORM SEWER		
DRAIN TILE		
WATER MAIN	W	W
UTILITY CROSSING		
LIGHTING		
ELECTRICAL CABLE	E	E
OVERHEAD WIRES	OHW	OHW
CAUTION EXISTING UTILITIES NEARBY		CAUTION
ELECTRICAL TRANSFORMER OR PEDESTAL	E	
POWER POLE		
POWER POLE WITH LIGHT		
STREET SIGN		
GAS MAIN	G	G
TELEPHONE LINE	T	T
CONTOUR	749	749
SPOT ELEVATION	×(750.00)	×750.00
WETLANDS		
FLOODWAY		
FLOODPLAIN		
HIGH WATER LEVEL (HWL)		
NORMAL WATER LEVEL (NWL)		
DIRECTION OF SURFACE FLOW		FLOW
DITCH OR SWALE		FLOW
DIVERSION SWALE		
OVERFLOW RELIEF ROUTING		
TREE WITH TRUNK SIZE	6"	6"
SOIL BORING	B-6	B-1
TOPSOIL PROBE	P-8	P-1
FENCE LINE, TEMPORARY SILT	SF	SF
FENCE LINE, WIRE		
FENCE LINE, CHAIN LINK OR IRON		
FENCE LINE, WOOD OR PLASTIC		
CONCRETE SIDEWALK		
CURB AND GUTTER		
DEPRESSED CURB		
REVERSE PITCH CURB & GUTTER		
EASEMENT LINE		

ABBREVIATIONS

BL	BASE LINE	NWL	NORMAL WATER LEVEL
C	LONG CHORD OF CURVE	PC	POINT OF CURVATURE
C & G	CURB AND GUTTER	PT	POINT OF TANGENCY
CB	CATCH BASIN	PVI	POINT OF VERTICAL INTERSECTION
CL	CENTERLINE	R	RADIUS
D	DEGREE OF CURVE	ROW	RIGHT-OF-WAY
EP	EDGE OF PAVEMENT	SAN	SANITARY SEWER
FF	FINISHED FLOOR	ST	STORM SEWER
FG	FINISHED GRADE	T	TANGENCY OF CURVE
FL	FLOW LINE	TB	TOP OF BANK
FP	FLOODPLAIN	TC	TOP OF CURB
FR	FRAME	TF	TOP OF FOUNDATION
FW	FLOODWAY	TP	TOP OF PIPE
HWL	HIGH WATER LEVEL	TS	TOP OF SIDEWALK
INV	INVERT	TW	TOP OF WALK
L	LENGTH OF CURVE	WM	WATER MAIN
MH	MANHOLE	Δ	INTERSECTION ANGLE



LOCATION MAP
SCALE: 1" = 400'

NORTH

GENERAL NOTES

1. [illegible]

2. [illegible]

3. [illegible]

4. [illegible]

5. [illegible]

6. [illegible]

7. [illegible]

8. [illegible]

9. [illegible]

10. [illegible]

11. [illegible]

12. [illegible]

13. [illegible]

14. [illegible]

PROJECT TEAM CONTACTS

CIVIL ENGINEER:
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SURVEYOR:
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APPLICANT:
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RYAN COMPANIES US, INC.
309 NORTH WATER STREET, SUITE 415
MILWAUKEE, WI 53202
(414) 918-6506

BENCHMARKS

VERTICAL DATUM: NGVD 29
HORIZONTAL DATUM: NAD 1927

BM 1: CONCRETE MONUMENT WITH BRASS CAP AT THE SOUTHEAST CORNER OF THE NORTHEAST ¼ SECTION 32, TOWN 9 NORTH, RANGE 20 EAST, ELEVATION = 845.15.

BM 2: NW FLANGE BOLT ARROW ON HYDRANT, ELEVATION = 864.62

INDEX OF SHEETS

C-1	COVER SHEET
C-2	EXISTING CONDITIONS PLAN
C-3	SITE DIMENSIONAL & PAVING PLAN
C-4	GRADING PLAN
C-5	UTILITY PLAN
C-6	SITE STABILIZATION PLAN
L-1 - L-4	LANDSCAPE PLANS

REQUIRED SUBMITTALS FOR APPROVAL

1. **HOT MIX ASPHALT** - MIX DESIGN
2. **CONCRETE PAVEMENTS (EXTERIOR)** - MIX DESIGN & JOINT PLAN
3. **PAVEMENT STONE BASE COURSE** - GRADATION
4. **PIPE BEDDING & TRENCH BACKFILL** - GRADATION
5. **MANHOLE BACKFILL** - GRADATION
6. **PAVEMENT MARKING PAINT**

REQUIRED SUBMITTALS FOR RECORDS

1. **WATER MAIN PIPES, VALVES, HYDRANTS & FITTINGS**
2. **SANITARY SEWER PIPE & FITTINGS**
3. **STORM SEWER PIPE, STRUCTURES, & FITTINGS**
4. **TRACER WIRE**
5. **UNDERGROUND UTILITY LOCATION RECORD DRAWINGS**
6. **ADA SIGN & TRUNCATED DOMES, PAINT & STENCILS**
7. **CHEMICAL SOIL STABILIZATION MIX DESIGN (IF APPLICABLE)**

DIGGERS HOTLINE
Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.Diggers-Hotline.com

EXPIRATION DATE: JULY 31, 2018

PINNACLE ENGINEERING GROUP, LLC - ENGINEER'S LIMITATION

PINNACLE ENGINEERING GROUP, LLC AND THEIR CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE DELIVERABLES HEREIN BEYOND A REASONABLE DILIGENCE. IF ANY MISTAKES, OMISSIONS, OR DISCREPANCIES ARE FOUND TO EXIST WITHIN THE DELIVERABLES, THE ENGINEER SHALL BE PROMPTLY NOTIFIED PRIOR TO BID SO THAT HE MAY HAVE THE OPPORTUNITY TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHALL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH FAILURE. ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT TO THE ENGINEER, OR IN CONTRADICTION TO THE ENGINEER'S DELIVERABLES OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER BUT OF THE PARTIES RESPONSIBLE FOR TAKING SUCH ACTION.

FURTHERMORE, PINNACLE ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY OR THE MEANS AND METHODS OF CONSTRUCTION.

www.pinnacle-engr.com

FOR REVIEW ONLY

COVER SHEET

REVIEWED: AAA
DESIGNED: AJS
DRAFTED: EP

PLAN | DESIGN | DELIVER
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PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING
WISCONSIN OFFICE:
15850 W. BLUEMOUND ROAD
BROOKFIELD, WI 53005
(262) 754-8888
CHICAGO | MILWAUKEE · NATIONWIDE

WILLOW CREEK WAY INDUSTRIAL BUILDING
GERMANTOWN, WI

COVER SHEET

REVISIONS

PEG JOB No. 376.00A-WI
PEG PM AAA
SAVE DATE 5/4/18
SCALE N.T.S.

SHEET C-1 OF C-6

Z:\PROJECTS\2014\376.00A-WI\CAD\SHEETS\376.00A-WI COVER SHEET.DWG

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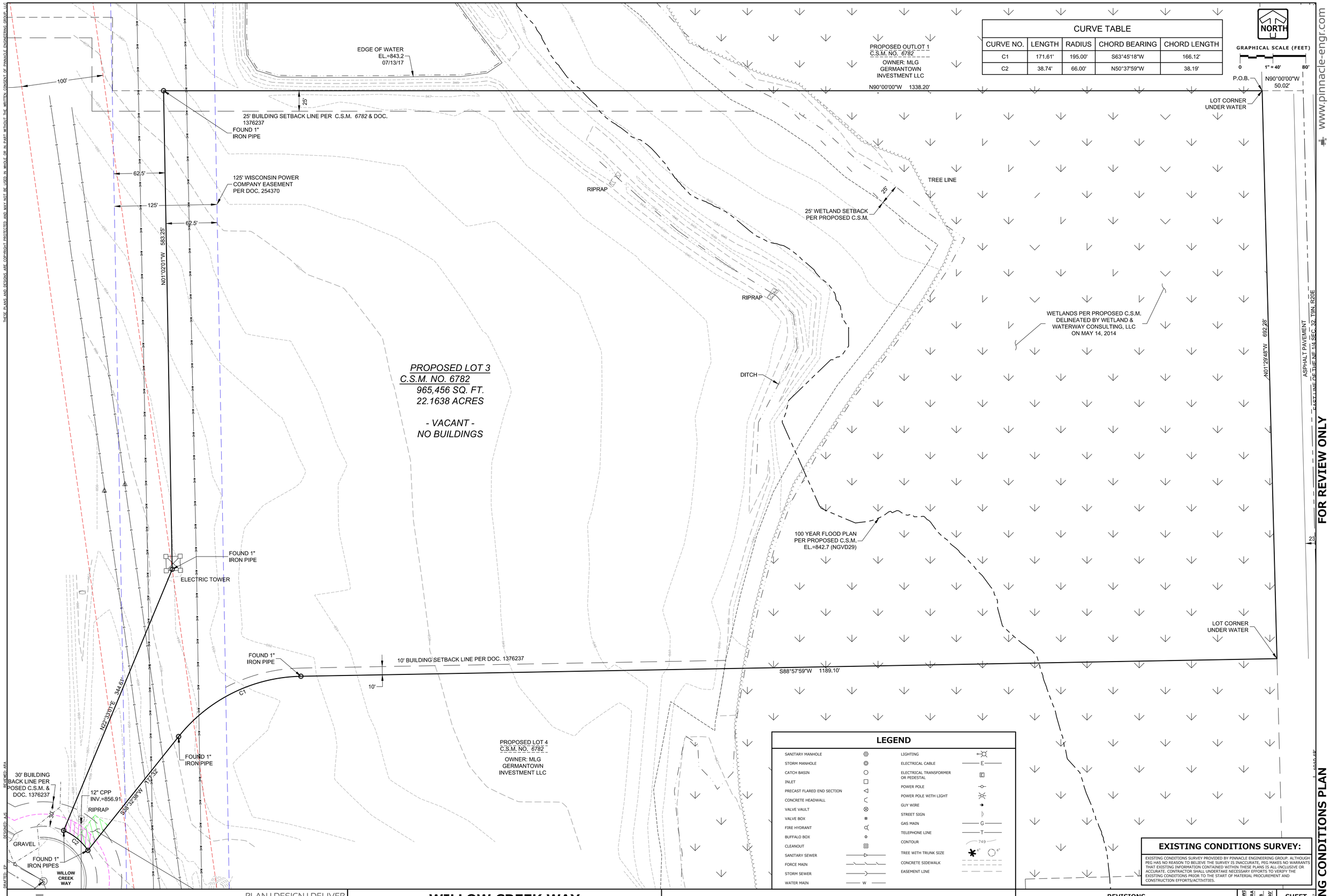

EXISTING CONDITIONS SURVEY:

EXISTING CONDITIONS SURVEY PROVIDED BY PINNACLE ENGINEERING GROUP. ALTHOUGH PEG HAS NO REASON TO BELIEVE THE SURVEY IS INACCURATE, PEG MAKES NO WARRANTS THAT EXISTING INFORMATION CONTAINED WITHIN THESE PLANS IS ALL-INCLUSIVE OR ACCURATE. CONTRACTOR SHALL UNDERTAKE NECESSARY EFFORTS TO VERIFY THE EXISTING CONDITIONS PRIOR TO THE START OF MATERIAL PROCUREMENT AND CONSTRUCTION EFFORTS/ACTIVITIES.

PLAN I DESIGN I DELIVER
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PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
15850 W. BLUEMOUND ROAD
BROOKFIELD, WI 53005
(262) 754-8888
CHICAGO I MILWAUKEE: NATIONWIDE

WILLOW CREEK WAY INDUSTRIAL BUILDING
GERMANTOWN, WI

EXISTING CONDITIONS PLAN

REVISIONS

PEG JOB No.	376.00A-WI
PEG PM	ABA
SAVE DATE	5/3/18
SCALE	1" = 40'

SHEET
C-2
OF
C-6

FOR REVIEW ONLY

EXISTING CONDITIONS PLAN

© PINNACLE ENGINEERING GROUP, LLC 2017

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REVIEWED: ABA
DESIGNED: AJS
DRAFTED: EP

Z:\PROJECTS\2014\376.00A-WI\CAD\SHEETS\376.00A-WI EXISTING CONDITIONS PLAN.DWG

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LEGEND

LIGHT DUTY PAVEMENT
- 8" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
- 3 1/2" ASPHALTIC CONC. (1 LIFT) (SMT 58-28 S)

HEAVY DUTY PAVEMENT
- 12" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
- 5" ASPHALTIC CONC. (2 LIFTS)
  3.0" LOWER LAYER (SMT 58-28 S)
  2.0" UPPER LAYER (SMT 58-28 S)

CONCRETE PAVEMENT (DUMPSTER AREA)
- 6" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
- 7" PCC (4000 PSI AIR ENTRAINED CONCRETE WITH 6x6x6 GAUGE STEEL MESH)

CONCRETE SIDEWALK
- 6" CRUSHED AGGREGATE BASE COURSE (1-1/2" DENSE GRADED LIMESTONE)
- 4" PCC (4000 PSI AIR ENTRAINED CONCRETE WITH 6x6 WELDED WIRE FABRIC PER ACI 315-92)

(A) **4" SOLID WHITE STRIPE**
(B) **4" DIAGONAL AT 45° SPACED 2' O.C.**
(C) **ADA PARKING STALL SIGNAGE (SEE DETAIL)**
(D) **18" CURB & GUTTER (SEE DETAIL)**
(E) **18" REVERSE CURB & GUTTER (SEE DETAIL)**
(F) **TAPER CURB HEAD (SEE DETAIL)**
(G) **BUILDING DOOR SLAB (2% MAX SLOPE WITHIN 5-FT OF DRIVE IN OR MAN DOOR)**
(H) **ADA STALL INSIGNIA**
(I) **WISDOT CURB RAMP TYPE 4B1 (SEE DETAIL)**
(◇) **PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)**
MAN DOOR
D.I.D **OVERHEAD DOOR**

SITE DATA

SITE AREA:	**965,515 S.F./22.17 AC**
ZONING CLASSIFICATION:	**T.B.D**
BUILDING FOOTPRINT AREA:	**186,830 S.F.**
FLOOR AREA RATIO:	**19.35%**
GREEN SPACE	**606,153 S.F./13.92 AC**
PARKING PROVIDED (9'x18')	**119 (6 ADA)**
PARKING RATIO TO FLOOR AREA	**0.6 SPACES PER 1000 S.F.**

EXISTING CONDITIONS SURVEY:

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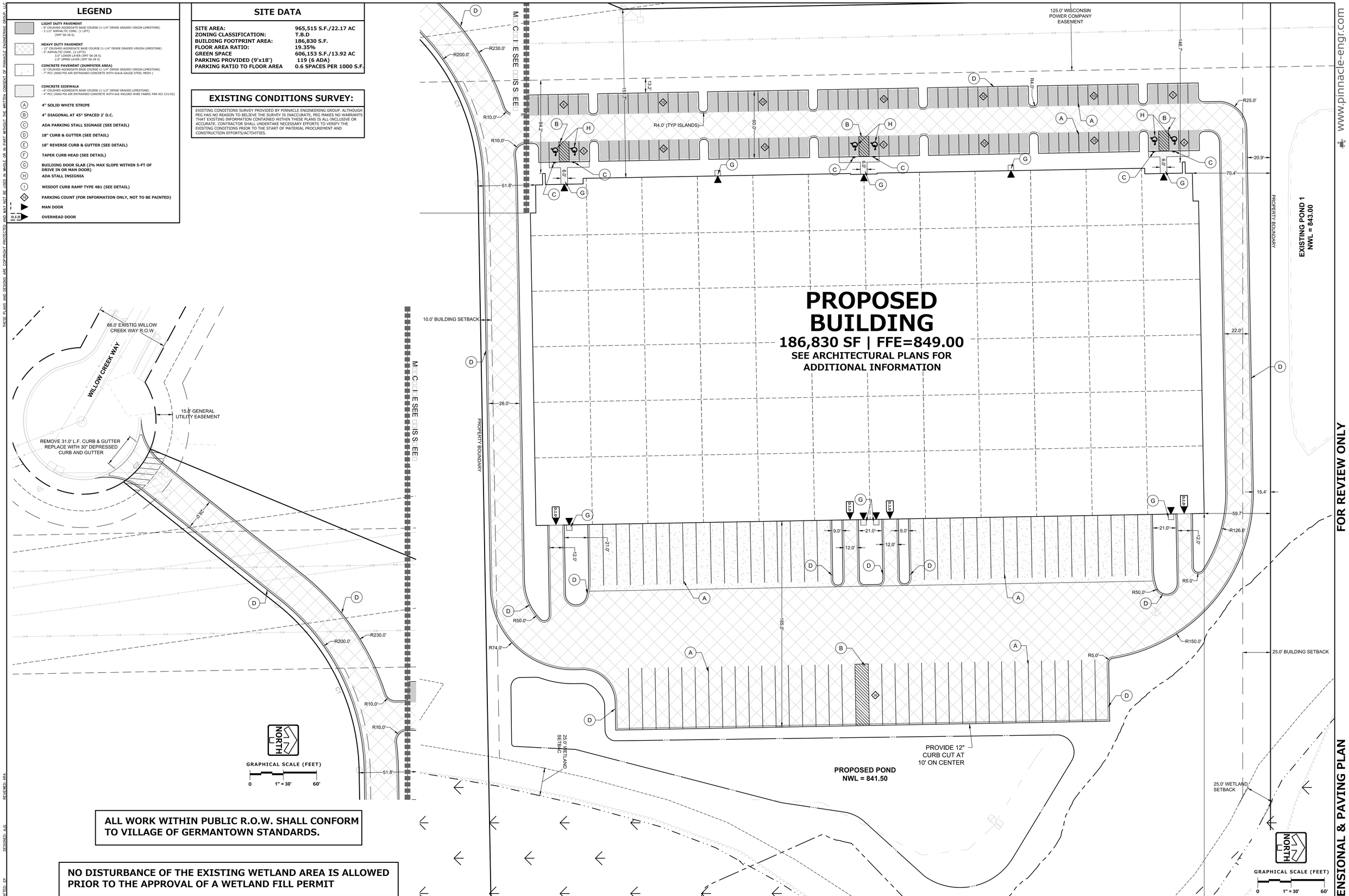

ALL WORK WITHIN PUBLIC R.O.W. SHALL CONFORM TO VILLAGE OF GERMANTOWN STANDARDS.

NO DISTURBANCE OF THE EXISTING WETLAND AREA IS ALLOWED PRIOR TO THE APPROVAL OF A WETLAND FILL PERMIT

DRAFTED: EP
DESIGNED: AJS
REVIEWED: ABA

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(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

WILLOW CREEK WAY INDUSTRIAL BUILDING
GERMANTOWN, WI

SITE DIMENSIONAL & PAVING PLAN

REVISIONS

PEG JOB No. 376.00A-WI
PEG PM: ABA
SAVE DATE: 5/7/18
SCALE: 1" = 30'

SHEET C-3 OF C-6

SITE DIMENSIONAL & PAVING PLAN

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Z:\PROJECTS\2014\376.00A-WI\CAD\SHEETS\376.00A-WI SITE DIMENSIONAL & PAVING PLAN.DWG

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LEGEND

	SANITARY MANHOLE		DITCH OR SWALE
	STORM CATCH BASIN		FLOODPLAIN
	CURB CATCH BASIN		OVERFLOW RELIEF ROUTING
749	CONTOUR		CONCRETE SIDEWALK
750.00	SPOT ELEVATION		CURB AND GUTTER
	DIRECTION OF SURFACE FLOW		REVERSE PITCH CURB & GUTTER

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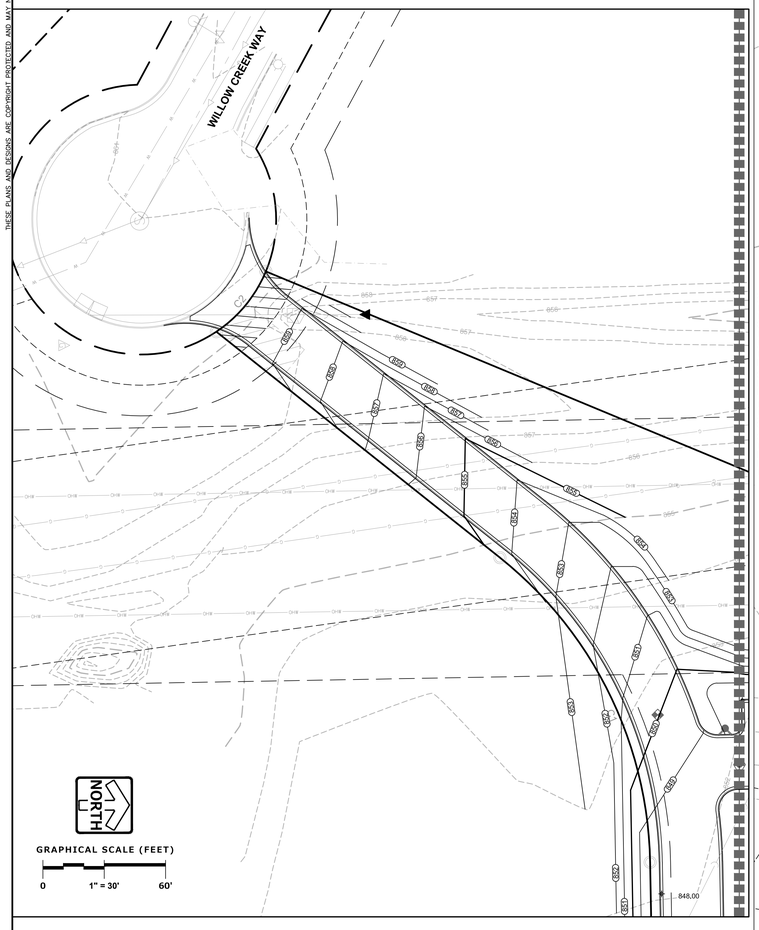

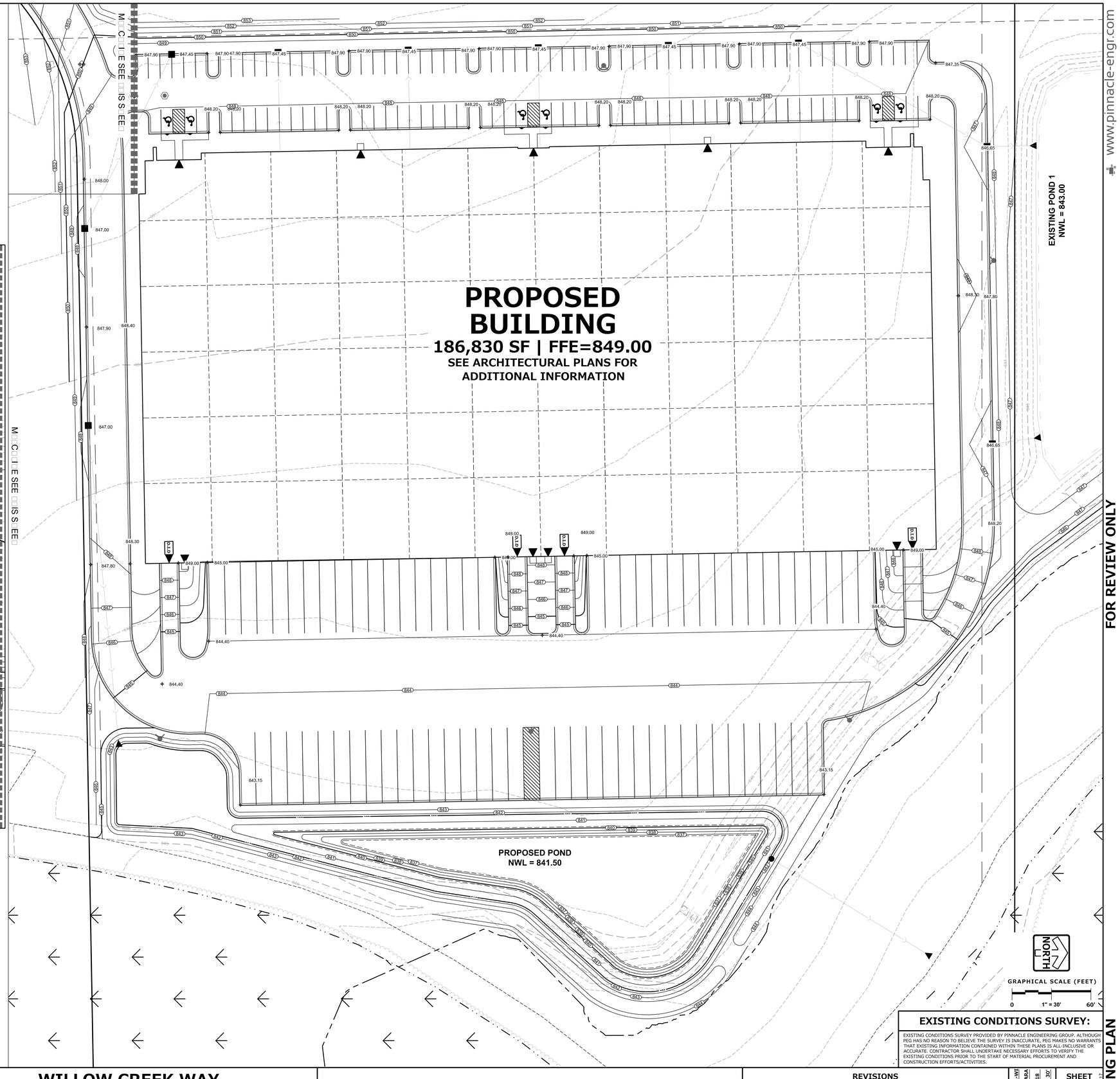

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WILLOW CREEK WAY INDUSTRIAL BUILDING
GERMANTOWN, WI

GRADING PLAN

REVISIONS

PEG JOB No. 376.00A-WI
PEG PM AJA
SAVE DATE 5/7/18
SCALE 1" = 30'

SHEET C-4 OF C-6

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GRADING PLAN

REVIEWED: ABA
DESIGNED: AJS
DRAFTED: EP

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LOOP AND FIRE DEPARTMENT CONNECTION SHOWN FOR CONCEPTUAL HYDRANT SPACING ONLY. THIS PLAN SHALL NOT BE USED FOR FIRE PROTECTION SYSTEM AND SYSTEM CONSTRUCTION. FINAL DESIGN AND SIZING SHALL BE BY FIRE PROTECTION ENGINEER.

CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXITSING UTILITIES PRIOR TO INSTALLATION OF PROPOSED UTILITIES.

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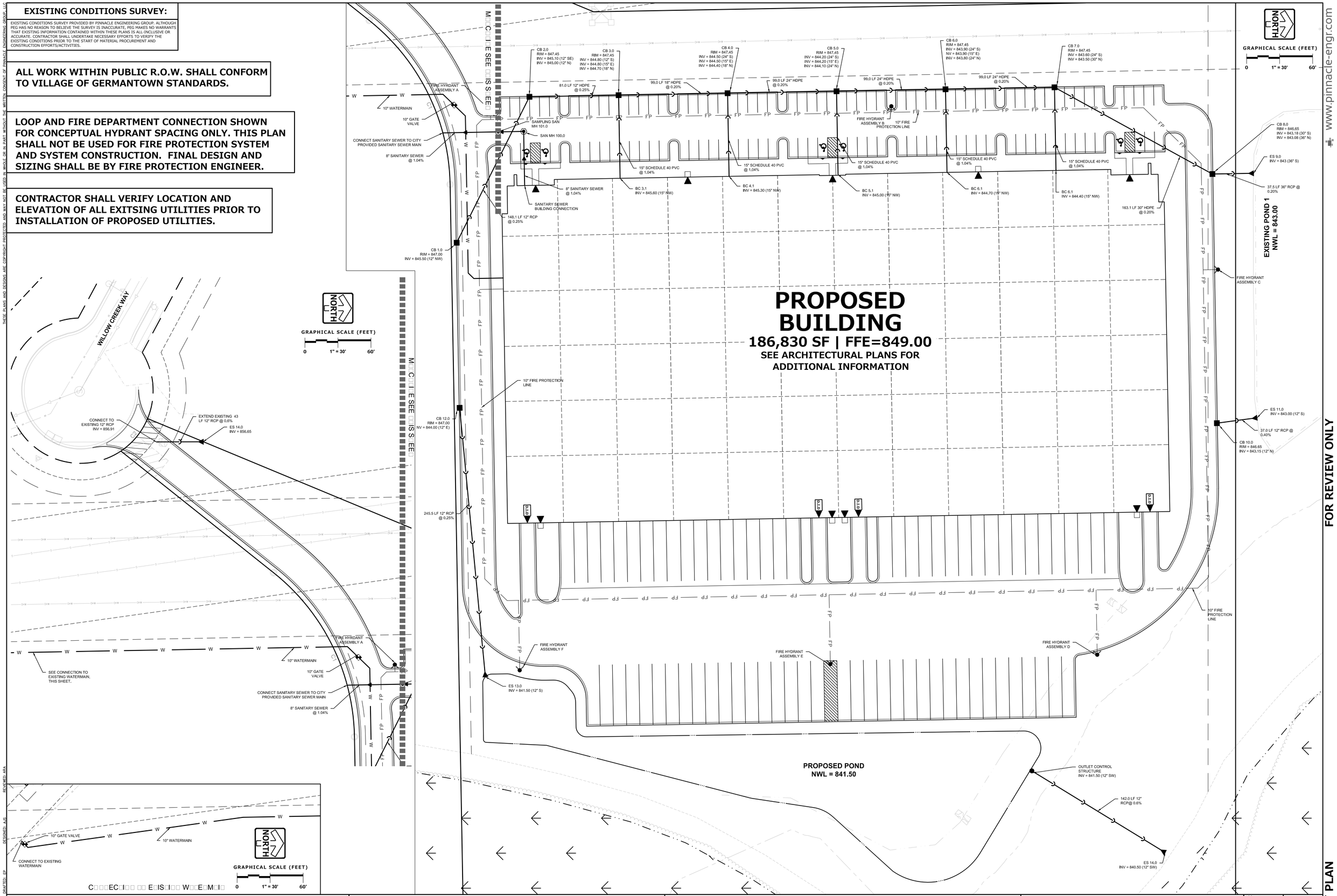

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UTILITY PLAN

REVIEWED: ARA
DESIGNED: AJS
DRAFTED: EP

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GERMANTOWN, WI

UTILITY PLAN

REVISIONS

PEG JOB No. 376.00A-WI
PEG PM ARA
SAVE DATE 5/17/19
SCALE 1" = 30'

SHEET C-5 OF C-6

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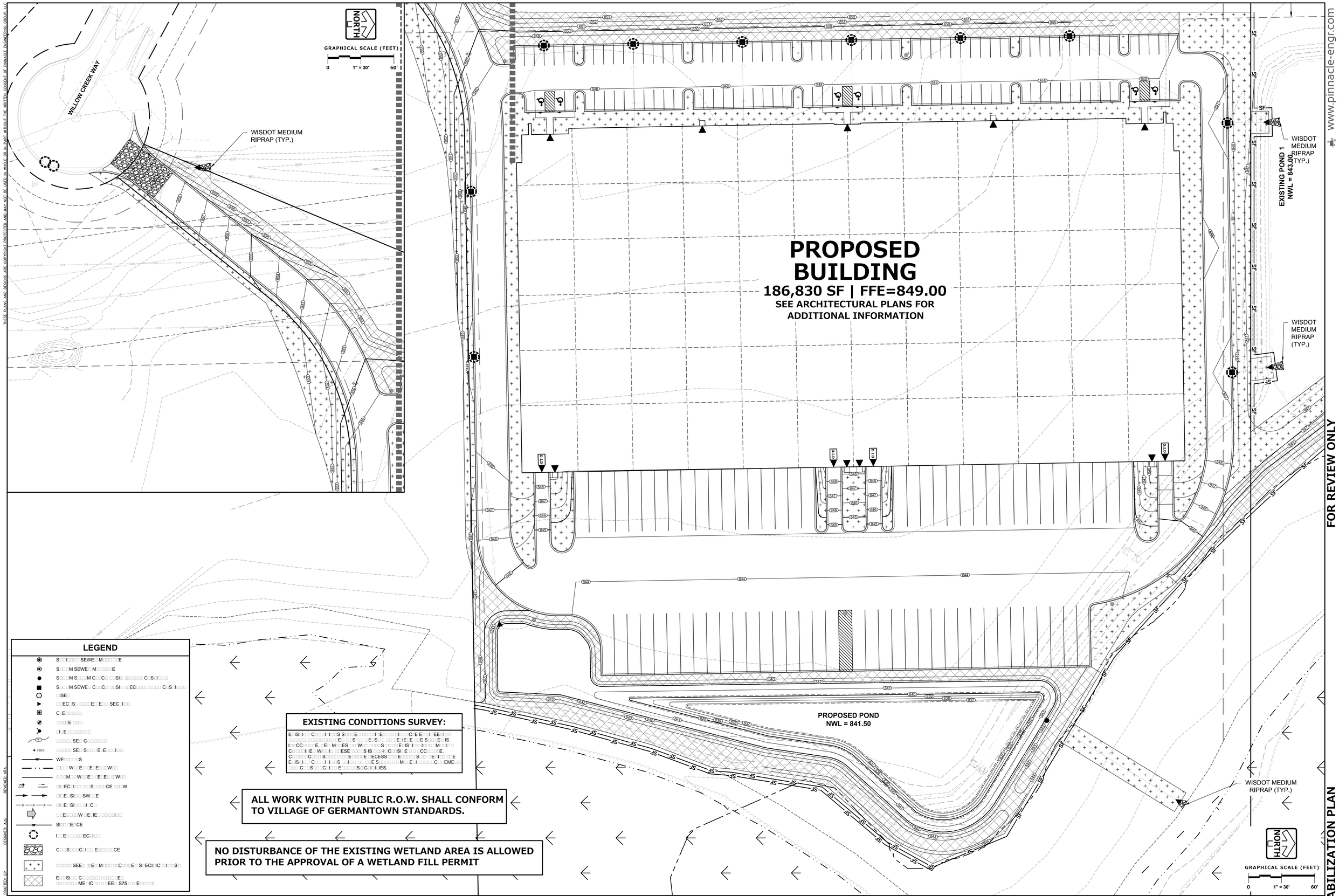

LEGEND

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EXISTING CONDITIONS SURVEY:

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SITE STABILIZATION PLAN

REVISIONS

PEG JOB No: 376.00A-WI
PEG PM: AKA
SAVE DATE: 5/7/18
SCALE: 1" = 30'

SHEET
C-6
OF
C-6

REVIEWED: AKA
DESIGNED: A.S.
DRAFTED: EP

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SITE STABILIZATION PLAN

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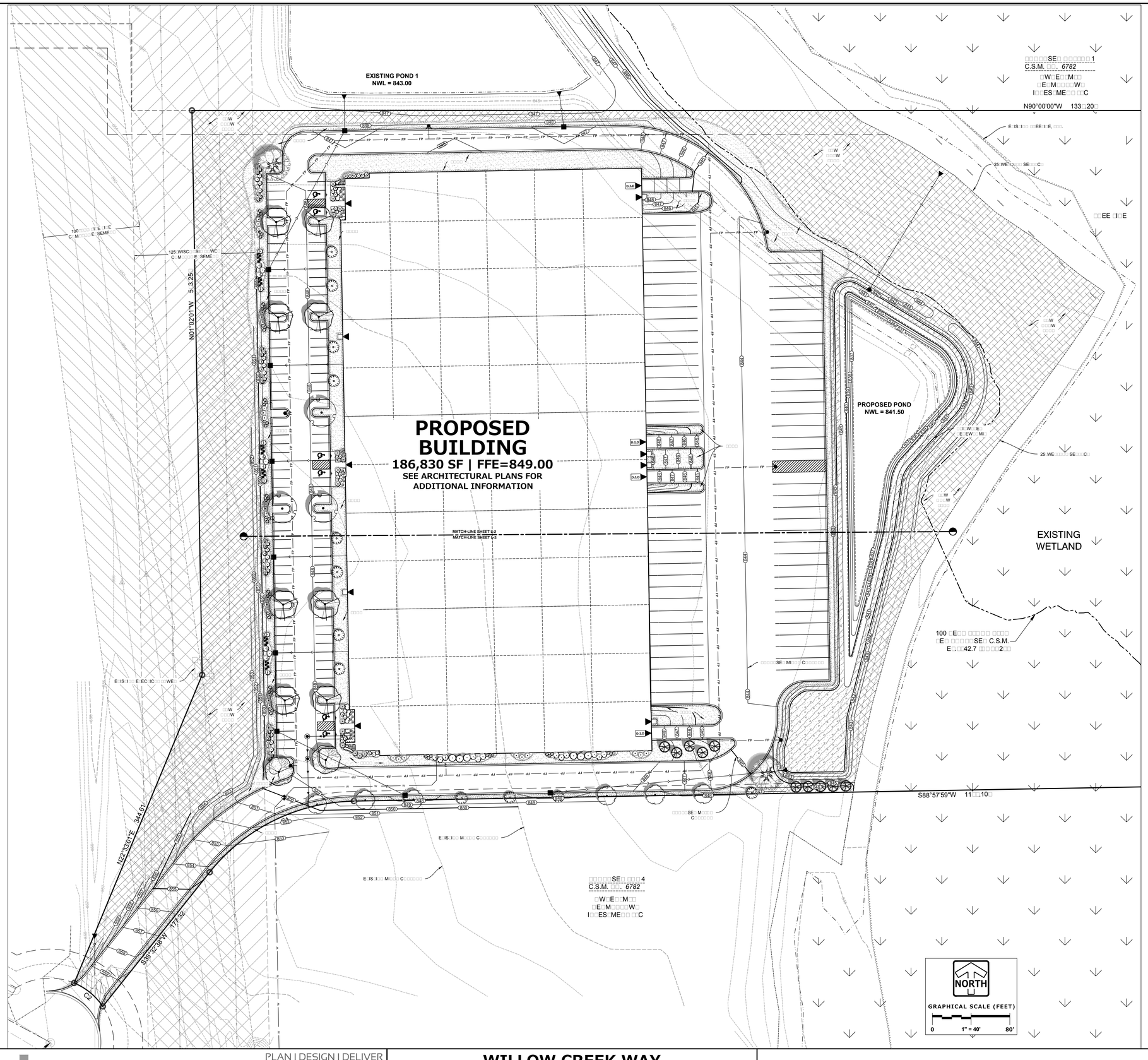

SHEET INDEX

SHEET	DESCRIPTION
L-1	OVERALL TREE & SEEDING PLAN
L-2	ENLARGED PLANTING PLAN - NORTH
L-3	ENLARGED PLANTING PLAN - SOUTH
L-4	PLANTING DETAILS & NOTES

PLANT KEY

DECIDUOUS TREES	BOTANICAL NAME	COMMON NAME
	Celtis occidentalis `Prairie Pride`	Prairie Pride Hackberry
	Gymnocladus dioica	Kentucky Coffee Tree
	Tilia americana `Redmond`	Redmond American Linden
	Ulmus americana `New Horizon`	New Horizon American Elm

EVERGREEN TREES	BOTANICAL NAME	COMMON NAME
	Picea glauca `Densata`	Black Hills Spruce
	Thuja occidentalis `Techny`	Techny Arborvitae

ORNAMENTAL TREES	BOTANICAL NAME	COMMON NAME
	Amelanchier x grandiflora	Apple Serviceberry
	Prunus sargentii 'JFS-KW58'	Sargent Cherry 'Pink Flair'

GROUND COVERS	COMMON NAME
	AGRECOL RAINWATER RENEWAL MIX
	Turf Seed
	Turf Seed Low Grow Mix

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OVERALL TREE & SEEDING PLAN

REVIEWED: ARA
DESIGNED: DJB
DRAFTED: DJB

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OVERALL TREE & SEEDING PLAN

REVISIONS

PEG JOB No: 376.00A-WI
PEG PM: ARA
SAVE DATE: 5/4/18
SCALE: 1" =40'

SHEET L-1 OF L-4

Z:\PROJECTS\2014\376.00A-WI\CAD\SHEETS\376.00A-WI LANDSCAPE PLAN.DWG

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PLANT KEY

DECIDUOUS SHRUBS	BOTANICAL NAME	COMMON NAME
	Aronia arbutifolia `Brilliantissima`	Brilliant Red Chokeberry/Red Chokeberry
	Aronia melanocarpa `Iroquois Beauty` TM	Black Chokeberry
	Potentilla fruticosa `McKay`s White`	McKay`s White Bush Cinquefoil
	Viburnum dentatum `Blue Muffin`	Southern Arrowwood

EVERGREEN SHRUBS	BOTANICAL NAME	COMMON NAME
	Juniperus chinensis `Maneyi`	Maney Juniper
	Juniperus horizontalis `Youngstown`	Creeping Juniper
	Pinus mugo pumilio	Dwarf Mugo Pine
	Taxus x media `Tauntonii`	Tauton Yew

ORNAMENTAL GRASSES	BOTANICAL NAME	COMMON NAME
	Calamagrostis x acutiflora `Karl Foerster`	Feather Reed Grass
	Panicum virgatum `Heavy Metal`	Blue Switch Grass

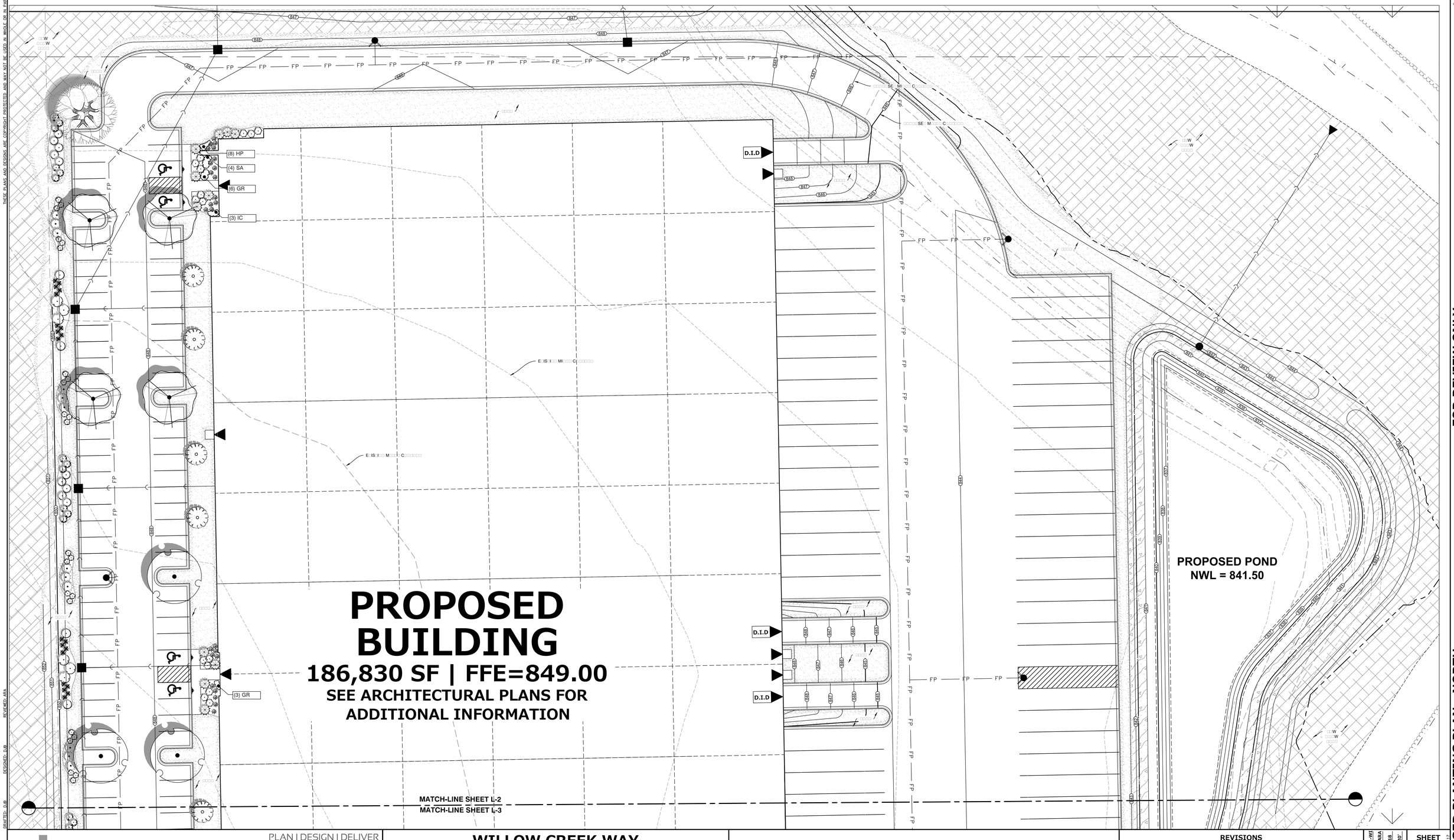
PERENNIALS	BOTANICAL NAME	COMMON NAME
GR	Geranium x `Rozanne` TM	Hybrid Cranesbill
HP	Hemerocallis X `Pardon Me`	Pardon me daylily
IC	Iris sibirica `Caesar`s Brother`	Caesar`s Brother Siberian Iris
NW	Nepeta x faassenii `Walkers Low`	Walkers Low Catmint
SA	Sedum x `Autumn Joy`	Autumn Joy Sedum

GROUND COVERS	COMMON NAME
	AGRECOL RAINWATER RENEWAL MIX
	Turf Seed
	Turf Seed Low Grow Mix

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'



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ENLARGED PLANTING PLAN - NORTH

DRAFTED: DJB
DESIGNED: DJB
REVIEWED: AKA

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GERMANTOWN, WI

ENLARGED PLANTING PLAN - NORTH

REVISIONS

PEG JOB No. 376.00A-WI
PEG PM AKA
SAVE DATE 5/3/18
SCALE 1" = 20'

SHEET
L-2
OF
L-4

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PLANT KEY

DECIDUOUS SHRUBS	BOTANICAL NAME	COMMON NAME
	Aronia arbutifolia `Brilliantissima`	Brilliant Red Chokeberry/Red Chokeberry
	Aronia melanocarpa `Iroquois Beauty` TM	Black Chokeberry
	Potentilla fruticosa `McKay`s White`	McKay`s White Bush Cinquefoil
	Viburnum dentatum `Blue Muffin`	Southern Arrowwood

EVERGREEN SHRUBS	BOTANICAL NAME	COMMON NAME
	Juniperus chinensis `Maneyi`	Maney Juniper
	Juniperus horizontalis `Youngstown`	Creeping Juniper
	Pinus mugo pumilio	Dwarf Mugo Pine
	Taxus x media `Tauntonii`	Tauton Yew

ORNAMENTAL GRASSES	BOTANICAL NAME	COMMON NAME
	Calamagrostis x acutiflora `Karl Foerster`	Feather Reed Grass
	Panicum virgatum `Heavy Metal`	Blue Switch Grass

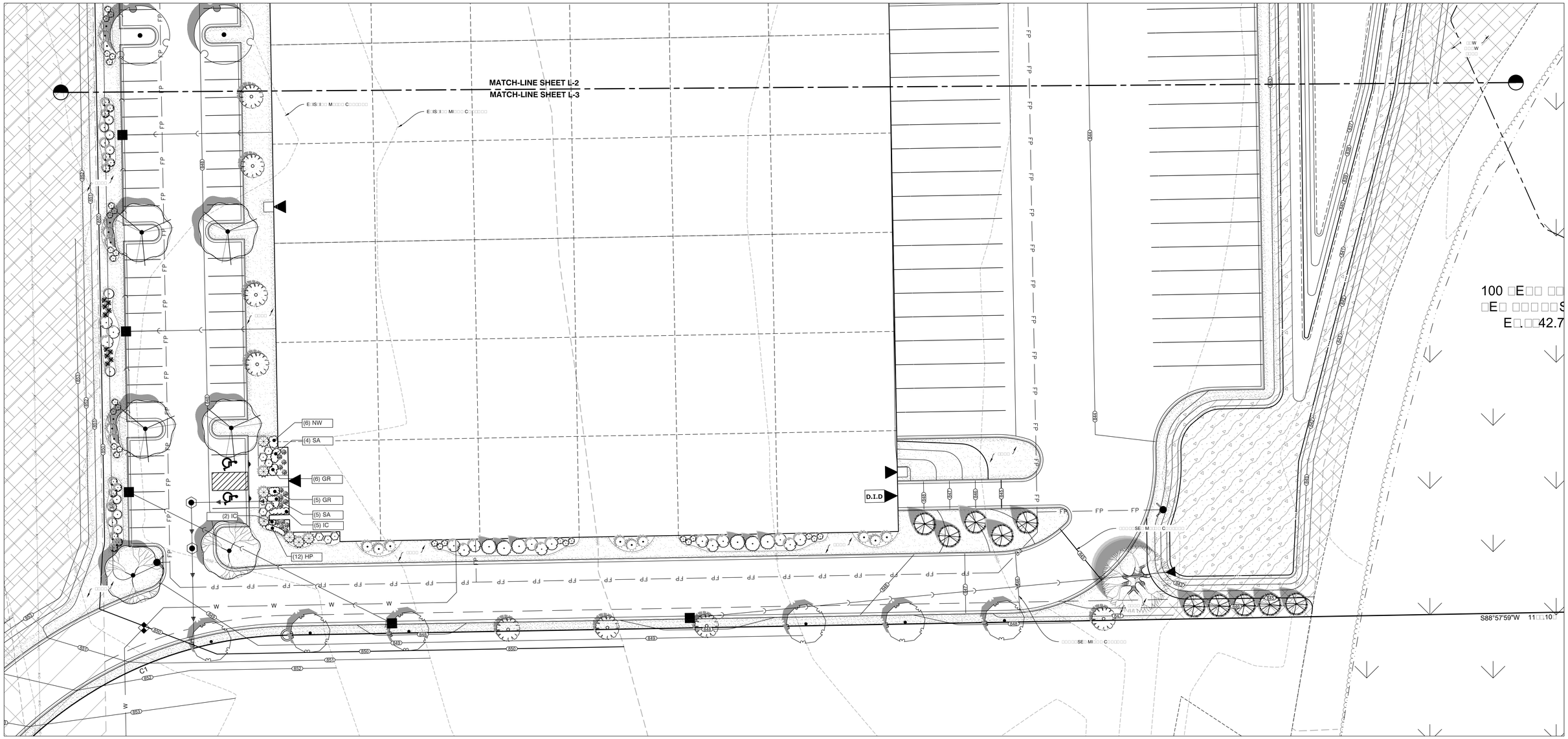
PERENNIALS	BOTANICAL NAME	COMMON NAME
GR	Geranium x `Rozanne` TM	Hybrid Cranesbill
HP	Hemerocallis X `Pardon Me`	Pardon me daylily
IC	Iris sibirica `Caesar`s Brother`	Caesar`s Brother Siberian Iris
NW	Nepeta x faassenii `Walkers Low`	Walkers Low Catmint
SA	Sedum x `Autumn Joy`	Autumn Joy Sedum

GROUND COVERS	COMMON NAME
	AGRECOL RAINWATER RENEWAL MIX
	Turf Seed
	Turf Seed Low Grow Mix

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'



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ENLARGED PLANTING PLAN - SOUTH

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DESIGNED: DJB

DRAFTED: DJB

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ENLARGED PLANTING PLAN - SOUTH

REVISIONS

PEG Job No. 376.00A-WI
PEG PM ABA
SAVE DATE 5/4/18
SCALE 1"=20'

SHEET
L-3
of
L-4

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PLANT SCHEDULE

DECIDUOUS TREES	COMMON NAME	SIZE	QTY
Celtis occidentalis `Prairie Pride`	Prairie Pride Hackberry	2.5" Cal.	2
Gymnocladus dioica	Kentucky Coffee Tree	2.5" Cal.	2
Tilia americana `Redmond`	Redmond American Linden	2.5" Cal.	8
Ulmus americana `New Horizon`	New Horizon American Elm	2.5" Cal.	3
EVERGREEN TREES	**COMMON NAME**	**SIZE**	**QTY**
Picea glauca `Densata`	Black Hills Spruce	5` Tall	10
Thuja occidentalis `Techny`	Techny Arborvitae	5` Tall	6
ORNAMENTAL TREES	**COMMON NAME**	**SIZE**	**QTY**
Amelanchier x grandiflora	Apple Serviceberry	1.5" Cal.	6
Prunus sargentii 'JFS-KW58'	Sargent Cherry 'Pink Fl	1.5" Cal.	12
DECIDUOUS SHRUBS	**COMMON NAME**	**SIZE**	**QTY**
Aronia arbutifolia `Brilliantissima`	Brilliant Red Chokeberry/Red Chokeberry	2` Tall	24
Aronia melanocarpa `Iroquois Beauty` TM	Black Chokeberry	2` Tall & Wide	24
Potentilla fruticosa `McKay`s White`	McKay`s White Bush Cinquefoil	2` Tall & Wide	48
Viburnum dentatum `Blue Muffin`	Southern Arrowwood	2` Tall & Wide	21
EVERGREEN SHRUBS	**COMMON NAME**	**SIZE**	**QTY**
Juniperus chinensis `Maneyi`	Maney Juniper	2` Tall & Wide	20
Juniperus horizontalis `Youngstown`	Creeping Juniper	2` Wide	18
Pinus mugo pumilio	Dwarf Mugo Pine	2` Tall & Wide	6
Taxus x media `Tauntonii`	Tauton Yew	2` Tall & Wide	27
ORNAMENTAL GRASSES	**COMMON NAME**	**SIZE**	**QTY**
Calamagrostis x acutiflora `Karl Foerster`	Feather Reed Grass	1 gal.	40
Panicum virgatum `Heavy Metal`	Blue Switch Grass	1 gal.	30

PERENNIALS	COMMON NAME	SIZE	SPACING	QTY
Geranium x `Rozanne` tm	Hybrid Cranesbill	4.5" CONT.	24" O.C.	20
Hemerocallis x `Pardon Me`	Pardon Me Daylily	4.5" Cont.	18" o.c.	20
Iris sibirica `Caesar`s Brother`	Caesar`s Brother Siberian Iris	1 GAL.	30" O.C.	10
Nepeta x faassenii `Walkers Low`	Walkers Low Catmint	4.5" CONT.	24" O.C.	6
Sedum x `autumn joy`	Autumn Joy Sedum	4.5" CONT.	30" O.C.	13

GROUND COVERS	QTY
Agrecol Rainwater Renewal Mix	16,786 sf
Turf Seed	55,338 sf
Turf Seed Low Grow Mix	121,010 sf

SOIL PLACEMENT NOTES

1. □□□SE□ S□□□□□□E □□ □ MI□IM□M □E□□□ I□□IC□□E□ I□ □□□□□□I□□ □□□ES □SI□□ □ C□□□I-M□□C□E□ □□ SIMI□□□ E□□I□ME□□, □□□ □EM□□E S□□□ES ME□S□□I□□ □□E□ 1-1□2 I□C□ES I□ □□□ □IME□SI□□, S□IC□S, □□□□ISI □□□ □□□□E□ E□□□□□□E□□S M□□□E□. I□E□□□□□□□□□□ IS□□□□S S□□□□ □E □□□SE□E□ □□ □ □E□□□ □□ 30".
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3. □□EE □□□ S□□□□ □□□ES S□□□□ □E □I□□E□ WI□□ □ □□E□□□E□ □□□□□□I□□ MI□□□□E □□ 1 □□□□ □□□S□I□, 2 □□□□S □□□□□□I□□ S□I□MI□.
4. S□□E□□ S□I□ □□□ S□I□ □ME□□ME□□S □□ □E□□□ I□□IC□□E□ □□ □□□WI□□S, □□□ □□□ □ESS □□□□ □E□□I□E□ □□ MEE□ □I□IS□ □□□□ES □□□E□ □□□□□□□□SE□□□EME□□. □I□IS□ □□□□E □□ □□□□□□I□□ □E□S S□□□□ □E 3" □E□□W □□□ □□□□CE□□ S□□□□CES. □I□IS□ □□□□E □□ □□□□SEE□I□□ □□E□S S□□□□ □E 1" □E□□W □□□ □□□□CE□□ □□□□ S□□□□CES, W□□□S, □□□ C□□□S.□
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6. □□ □□□ S□□E□□ I□ □□□□□□I□□ S□I□ □□ S□□□□□□E IS □□□□□E□, M□□□□, □□ E□CESSI□E□□ WE□.
7. □I□IS□ □□□□I□□□□□□□E S□I□ □□ □ SM□□□□, □□I□□□M S□□□□CE □□□□E WI□□ □ □□□SE, □□I□□□M□□ □I□E □E□□□□E.
□. □□□□□□□ □□□E, □EM□□E □I□□ES, □□□ □I□□ □E□□ESSI□□S □□ MEE□ □I□IS□ □□□□□ES.
□. □ES□□□E □□□□□□I□□ □E□S I□E□□□□E□ □□ □□□□E□WISE □IS□□□□□E□ □□□E□ □I□IS□ □□□□□I□□ □□□ □E□□□E □□□□□□I□□.

GENERAL PLANTING NOTES

1. □□E □□□□□□ □□ □□□ □□□□□□□I□□ □E□S □□□ I□□I□I□□□□ □□EES □□□ S□□□□S S□□□□ □E S□□□E□ □□ □□E C□□□□□C□□□ I□ □□□□□CE □□ I□S□□□□□□□□. □□□□□□I□□, S□□□ES, □□ □□I□□M□□ □E □SE□ □□ □E□I□E□□E □□C□□I□□S □S SC□□E□ □□□M □□E □□□□S. □□ □□□□□□□E□ □E□□ESE□□□□I□E WI□□ □E□IEW □□ESE □□C□□I□□S WI□□ □□E C□□□□□C□□□ □□□ M□□E MI□□□ □□□□S□ME□□S □S □ECESS□□□. □E□ □□□□□□ S□□□□ □□S□ I□C□□□E □E□E□□I□□ □□□□□□I□□S □□ S□ECIES.
2. □□E C□□□□□C□□□ IS □ES□□□SI□□E □□□ I□□E□E□□E□□□□ □E□E□MI□I□□ □□E □□□□□ M□□E□I□□ □□□□□I□IES □E□□I□E□ □□ □□E □□□□SC□□E □□□□S. □E□□□□ □□□ □ISC□E□□□CIES □□ □□E □□□□SC□□E □□C□I□EC□.
3. □□□ □□□□□ M□□E□I□□ S□□□□ C□M□□□ WI□□ S□□□□□□□S □ESC□I□E□ I□ □ME□IC□□ S□□□□□□ □□ □□□SE□□ S□□C□ - □60.1 □□SI. □□□□SC□□E □□C□I□EC□ □□ □W□E□S □□□□□□□I□E□ □E□□ESE□□□□I□E □ESE□□ES □□E □I□□□ □□ I□S□EC□ □□□ □□□E□□I□□□ □E□EC□ □□□ □□□□□ M□□E□I□□ □EEME□ □□ □□□ MEE□ □□E □E□□I□E□ S□□□□□□□S.
4. □□ □□□□□ M□□E□I□□ □□ □□□□□ SI□E S□□S□I□□□I□□S WI□□ □E □CCE□□E□ □□□ESS □□□□□□□□□ □□ □□E □□□□SC□□E □□C□I□EC□. □□□ C□□□□□ES S□□□□ □E S□□MI□□E□ □□ □□E □□□□SC□□E □□C□I□EC□ I□ W□I□I□□ □□I□□ □□ I□S□□□□□□I□□.
5. □□□ □□□□□ M□□E□I□□ □□□ SEE□ S□□□□ □E □□□□□I□E□ □□□M □ □□□SE□□ □WI□□I□ 200 MI□ES□WI□□ □ SIMI□□□ □□□□□ □□□□I□ESS □□□E □S □□□□EC□ □□C□□I□□. E□IS□I□□ S□I□ S□□□□ □E □ME□□E□ □E□ S□I□ □□□□□SIS □E□□□□ □□ E□S□□E □ □□□□□E□ □□□WI□□ ME□I□M IS □C□IE□E□.
6. □□□ □□□□□ M□□E□I□□ S□□□□ □E I□S□□□□E□ I□ □CC□□□□□CE WI□□ □□□□□I□□ □E□□I□S.
7. W□I□E □□□□□□I□□ □□EES □□□ S□□□□S, □□C□□I□□ ⅔ □□ □□□□□□I□□ □□□E □□□ W□□E□ □□EE □□□□□□□□□□□ □E□□□E I□S□□□□I□□ □□E □EM□I□□E□ □□ S□I□MI□□□□E. □□□E□ □□□S□I□□□S □EE□ □□□CE□ I□□□ □□E □□□□□□I□□ □□□E W□□E□ □□□□□□□□□□□ □□□I□.
□. C□□□□□C□□□ M□S□ □□□E□ □□□ □□EES WI□□ □□E C□MM□□ □□□ □□□□□IC□□ □□MES □□I□□ □□ □I□□□I□S□EC□I□□.
□. □□□ □□□□□□I□□ □E□S S□□□□ □E M□□C□E□ WI□□ 3" □EE□ S□□E□□E□ □□□□W□□□ M□□C□, □□□ □□□ □□EES □□□□□□E□ I□ □□□□ □□E□S S□□□□ □ECEI□E □ 3" □EE□ S□□E□□E□ □□□□W□□□ M□□C□E□ □I□□ □S S□□W□ I□ □□□□□□I□□ □E□□I□S.
10. C□□□□□C□□□ S□□□□E□S□□E □□□□ S□I□ C□□□I□I□□S □□□ C□M□□C□I□□ □□E □□E□□□□E □□ □□□□W □□□ □□□□□E□ □□□I□□□E □□□□□□ □□E C□□S□□□C□I□□ SI□E. □□□ESI□□□□E C□□□I□I□□S S□□□□ □E □□□□□□□□ □□ □□E □□□E□□I□□ □□ □□E □□□□SC□□E □□C□I□EC□ □□I□□ □□ □E□I□□I□□ □□ W□□□. I□ S□□□□ □E □□E C□□□□□C□□□S □ES□□□SI□I□I□□ □□ E□S□□E □□□□□E□ S□□□□CE □□□ S□□S□□□□CE □□□I□□□E I□ □□□ □□E□S
11. □□□ □□□□ SEE□ □□E□S S□□□□ □ECEI□E □ MI□IM□M □□ 3" □E□□□ □□ □□□S□I□. WI□□ □□□□□□□□□, E□IS□I□□ S□I□ M□□ □E □□I□I□E□ □□□□I□E□ □□E □□□□□E□ S□I□ □ME□□ME□□S □□E □I□□E□ □□□□□□□□□□□ I□□□ □□E □□□ 6" □□ S□I□□S I□□IC□□E□ I□ □□E S□I□ □□□CEME□□ □□□ES. □E□□I□E□ □ME□□ME□□S S□□□□ □E □E□E□MI□E□ □□SE□ □□ □ S□I□ □□□□□SIS □□ □E □E□□□□ME□. □□□ □□□S□I□ □ME□□ME□□S S□□□□ □E □□E□ WEE□ □□EE M□□□□E □□ C□□SS 1 □□□□□IC M□□□E□.
12. □□□ □□□□□□I□□ □E□S □□□ □□EE □I□□S S□□□□ □□□E □ 4" □EE□ □□E□C□E□ □E□ E□□E C□E□□E□ □□ EI□□E□ □ □□□□ □□□□SC□□E S□□□E □□ MEC□□□IC□□E□□E□. □E□ E□□ES □□E □□ □E C□□ C□E□□ □□□ SM□□□□ □S S□□W□ □□ □□□□SC□□E □□□□S WI□□ □ C□E□□ □E□I□I□I□□ □E□WEE□ □□□□ □□□ □□□□□□I□□ □□E□S.
13. □□□ □□W□ SEE□I□□, □□□□□ □ S□□□□E□ □E□I□I□E□ □□□ SEE□ □□I□□□M□□ □□ □□E □□□E □E□□MME□□E□ □□ M□□□□□□C□□□E□, □□□ □□□□□I□E □ M□□C□ C□□E□I□□ □□□□ IS S□I□□□□E □□ □□□M□□E SEE□ □E□MI□□□I□□ □□□ □□□□□ES□□□□ISME□□. C□□□□□C□□□ □□ □□□□□I□E □E□□I□I□E□, SEE□, □□□ M□□C□ S□ECI□IC□□I□□S □□ □□E □□□□SC□□E □□C□I□EC□ □□□ □□□□□□□□□I□□ □□ I□S□□□□□□I□□. E□□SI□□ C□□□□□□ME□S□□ES □□E □□ □E I□S□□□□E□ I□ □□□SE □□E□S □E□□I□I□□ S□□□I□I□□□I□□ □SW□□ES, S□□ □ES E□CEE□I□□ 1□3, □□□ □□□SE □□C□□I□□S I□□IC□□E□ I□ CI□I□ □□□WI□□S.
14. C□□□□□C□□□ □□ E□S□□E □ SM□□□□, □□I□□□M □□□□I□□ □□□□□ IS □C□IE□E□ WI□□ □□ □□□□E S□□□S □□□□□E□ □□□□ 6" □ 6". □□□ □□□□E S□□□S □□□□□E□ □□□□ 6" □6" □□ □□E E□□ □□ES□□□□ISME□□ □E□I□□ S□□□□ □E □ESEE□E□ □□ □□E C□□□□□C□□□S E□□E□SE □□ □□□□□I□ □ □E□SE, □□I□□□M □□W□.
15. □□□ □□□□□□I□□ □E□S S□□□□ □□□E □ MI□IM□M 10" □E□□□ □□ □□E□□□□E□ S□I□. WI□□ □□□□□□□□□, E□IS□I□□ S□I□ M□□ □E □□I□I□E□ □□□□I□E□ □□E □□□□□E□ S□I□ □ME□□ME□□S □□E □I□□E□ □□□□□□□□□□□ I□□□ □□E □□□ 10" □□ S□I□. □E□E□ □□ S□I□ □□□CEME□□ □□□ES.
16. □□□ □I□IS□ □□□□□I□□ □□□ □□W□ □□E□S □□ □E I□S□□□□E□ □□ □□□□SC□□E C□□□□□C□□□.
17. □□□ □IS□□□□E□ □□E□S WI□□I□ □□E □□□□EC□ S□□□□ □E □ES□□□E□ □□ □□I□I□□□□ □□ □E□□E□ C□□□I□I□□.
1□. □□□ □IS□□□□E□ □□E□S □□□SI□E □□E □IMI□S □□ W□□□ S□□□□ □E □ES□□□E□ □□ □□I□I□□□□ □□ □E□□E□ C□□□I□I□□ □□ □□ □□□I□I□□□□ C□S□ □□ □□E □W□E□.
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RAINWATER RENEWAL PRAIRIE PLANTING

Specificatio□s for □a□d □roadcasti□g□

Seedi□g shall □e co□ducted i□ late fall □Septem□er 1- Soil □ree□e□so that seeds ma□ lie dorma□t duri□g the wi□ter, allowi□g for stratificatio□, or spri□g □March 1-□u□e 1□to allow a complete growi□g seaso□ to □ecome esta□lished.

□. □reparatio□ of Soil □rior to Seedi□g

1. I□corporate soil additi□es co□sisti□g of two i□ches of compost mi□ed i□to two i□ches of topsoil. the soil mi□ should □e i□corporated i□to the soil usi□g a rotar□ de□ice with capa□ilit□ of reachi□g to 12" □elow the surface. Compost shall meet W□□□ specificatio□ S100 - Compost.
2. □ll foreig□ materials larger tha□ 1-i□ch shall □e remo□ed from the soil prior to seedi□g or pla□ti□g.
3. □rea should □e free from u□sightl□ □ariatio□s, ridges, a□d depressio□s.
4. □□oid dri□i□g o□er the specified area with machi□er□.

□. Co□er Crop

1. □□□ual r□e shall □e spread at a de□sit□ of 20 pou□ds per acre duri□g the pla□ti□g or seedi□g of the □ati□e pla□t species to sta□ili□e the soil a□d reduce the growth of u□wa□ted □egetatio□. □his a□□ual grass grows rapidl□ without competi□g with the wildflowers a□d grasses that are pla□ted i□ the target areas.
2. Wi□ter wheat or pere□□ial r□e shall □ot □e used as a co□er crop. □hese grasses ma□ out compete prairie seedli□gs, leadi□g to a reductio□ i□ the success of the pla□ti□gs.
3. □ll seedi□g shall □e co□ered with 1-i□ch of clea□, □o□-i□□asi□e straw □□o marsh ha□, or reed ca□ar□grass□ without seeds, withi□ se□e□ da□s. Wheat, r□e, oats, or □arle□ are accepta□le forms of straw. □hose areas of slopes steeper tha□ □□1 □eight feet hori□o□tal to o□e foot □ertical□ shall □e pla□ted □o later tha□ □cto□er 1 a□d staked with a□ erosio□ co□trol □la□ket to pre□e□t erosio□.

C. Seed Mi□

Mi□ all prairie seed with □ermiculite accordi□g to □grecol recomme□datio□s.

1. □roadcast half the seed o□er the e□tire site or target area.
2. □roadcast the other half of seed perpe□dicular to the directio□ that the first half of the seed was □roadcast.
3. Co□er seed with ¼-i□ch to ½-i□ch of soil □use a□□e□cess soil from the site□ with rake or drag.
4. □oll site to e□sure firm seed-to-grou□d co□tact.
5. □eep seed co□sta□tl□ wet through germi□atio□ period. □e□erall□ 3 weeks.

□ll seedi□g shall □e co□ered with 1-i□ch of clea□, □o□-i□□asi□e straw □□o marsh ha□, or reed ca□ar□grass□ without seeds, withi□ se□e□ da□s. Wheat, r□e, oats, or □arle□ are accepta□le forms of straw. □hose areas of slopes steeper tha□ □□1 □eight feet hori□o□tal to o□e foot □ertical□ shall □e pla□ted □o later tha□ □cto□er 1 a□d staked with a□ erosio□ co□trol □la□ket to pre□e□t erosio□.

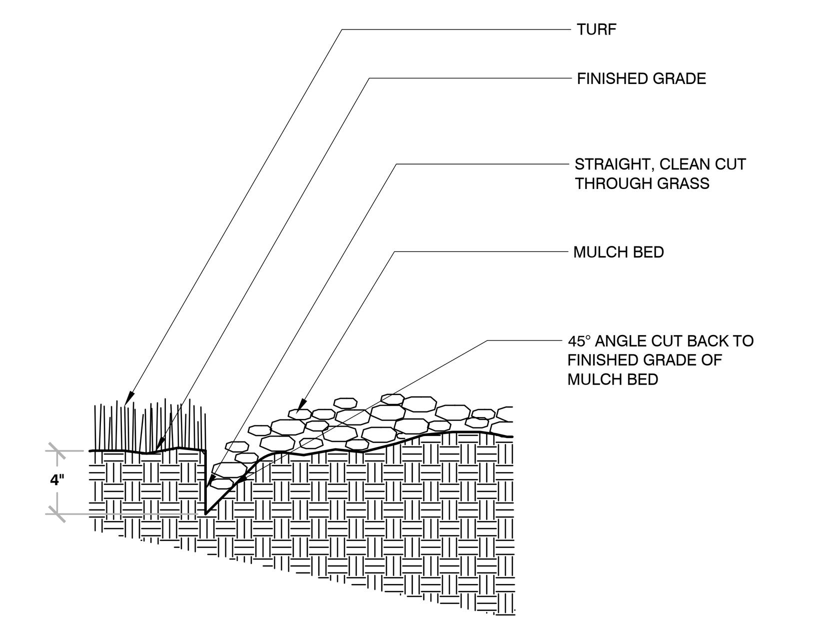
Weed Suppressio□ Measures□

□irst □ear - □erform spot spra□ with her□icide to suppress weeds. □his should occur appro□imatel□ e□er□ mo□th of the growi□g seaso□ after i□filtratio□ □asi□s ha□e □ee□ rough graded.

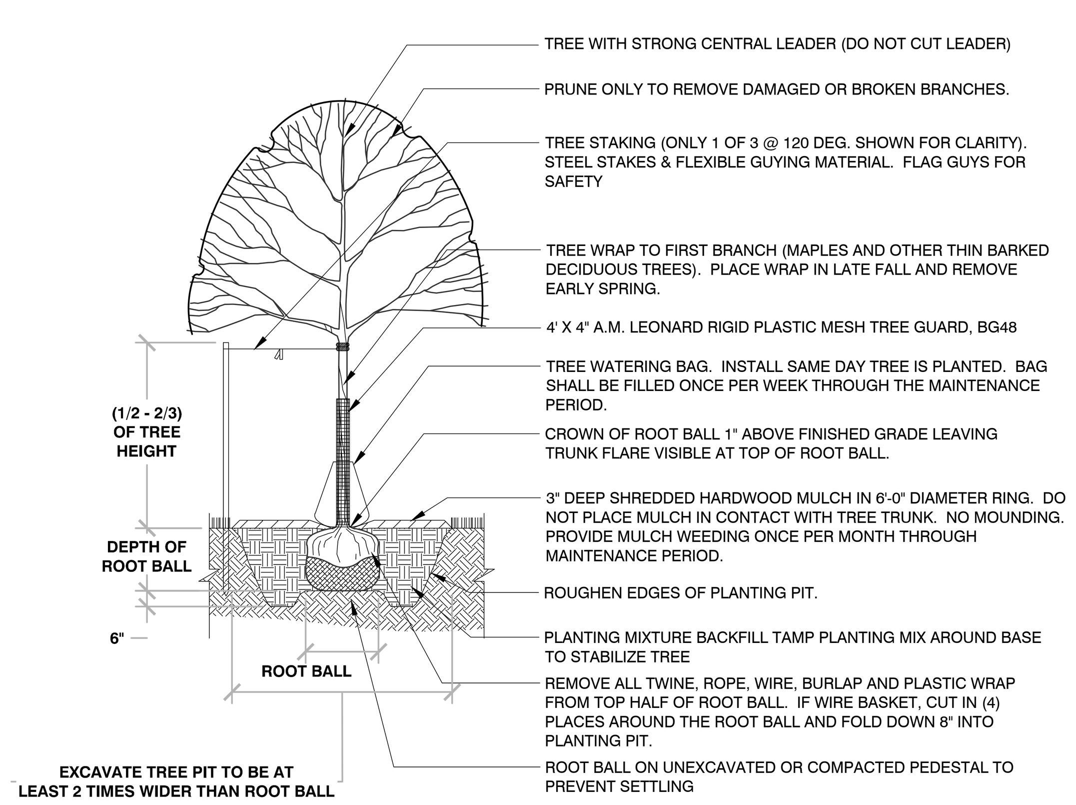
Seco□d □ear - I□ Ma□□u□e mow □asi□s at 6-i□ch height to suppress weeds. □erform spot spra□ with her□icide to suppress weeds. □a□e □ualified professio□al assess pla□ti□gs. □epeat mowi□g □asi□s a□d spot-spra□i□ earl□ □ul□.

□hird □ear - I□ Ma□□u□e mow □asi□s at 6-i□ch height to suppress weeds. □erform spot spra□ with her□icide to suppress weeds.

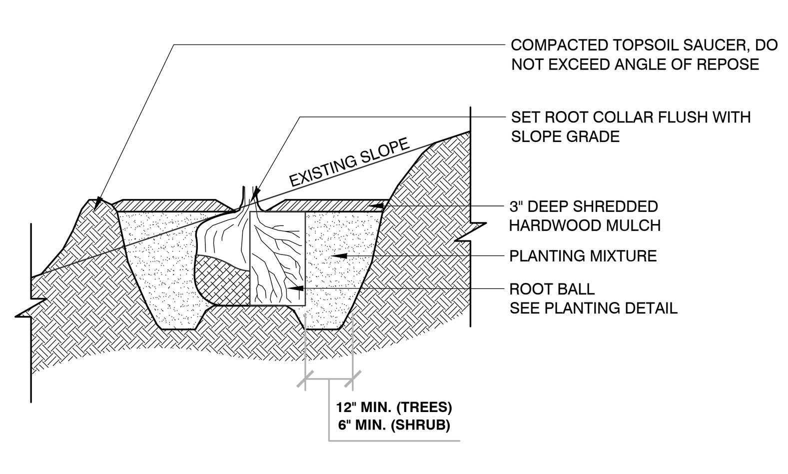
□ourth □ear - I□ Ma□ perform a prescri□ed □ur□. I□ □u□e ha□e □ualified professio□al assess pla□ti□gs.



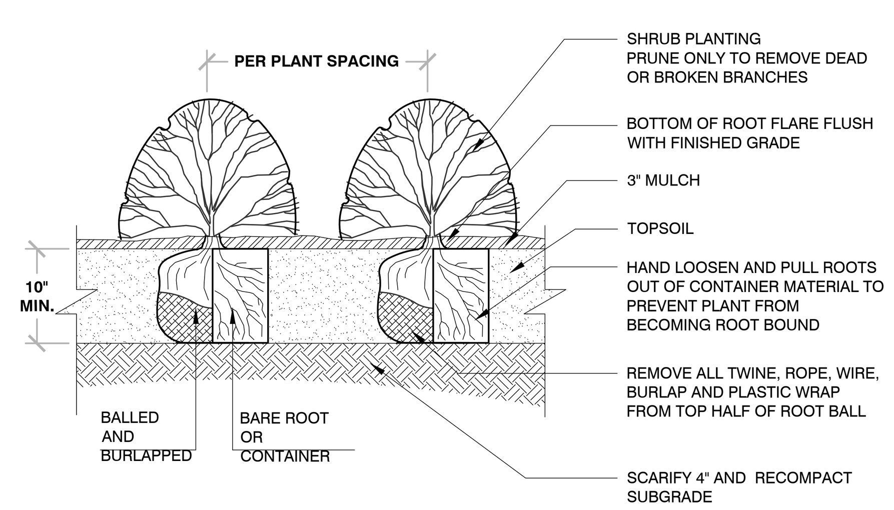
6 TRENCHED BED EDGE
3/4" = 1'-0" 3293-03



1 TREE PLANTING
1/4" = 1'-0" 329343-01



2 TREE PLANTING ON SLOPE
3/8" = 1'-0" 329343-02



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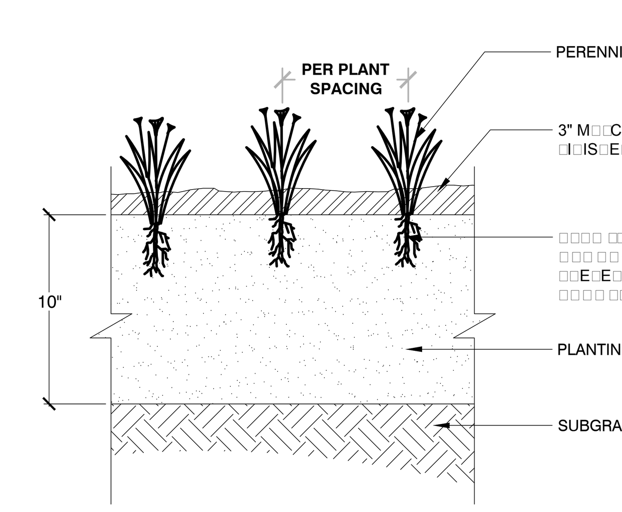
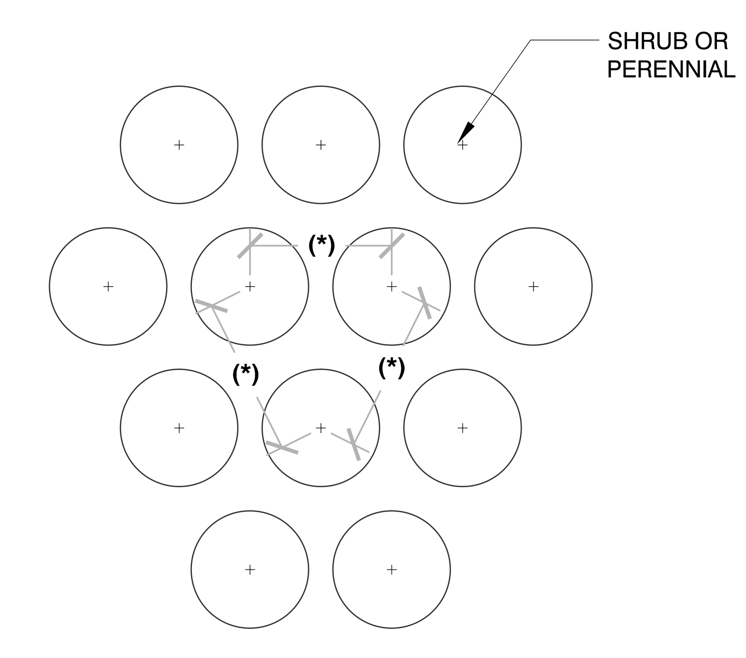
3 SHRUB PLANTING
1/2" = 1'-0" 329333-02



4 PERENNIAL PLANTING
1" = 1'-0" 3293-01



(*) = SPECIFIED PLANT SPACING PER PLANTING LIST

5 PLANT SPACING
3/4" = 1'-0" 3293-02

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CHICAGO I MILWAUKEE : NATIONWIDE

WILLOW CREEK WAY INDUSTRIAL BUILDING
GERMANTOWN, WI

PLANTING DETAILS & NOTES

REVISIONS

PEG JOB No 376.00A-WI
PEG PM ARA
SAVE DATE 5/4/18
SCALE NTS

SHEET L-4 OF L-4

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FOR REVIEW ONLY

PLANTING DETAILS & NOTES

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REVIEWED: ARA DESIGNED: DJB DRAFTED: DJB

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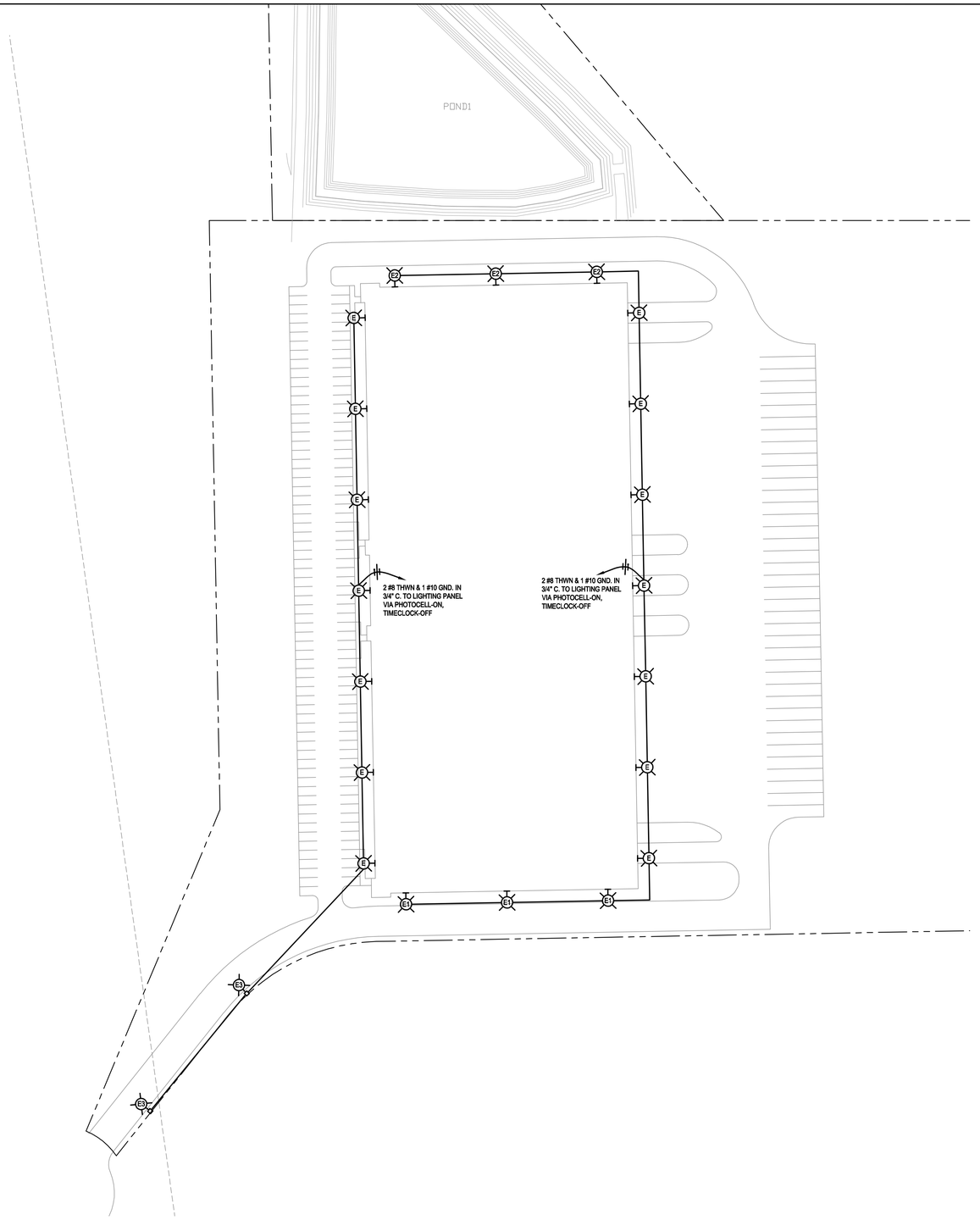
18056



ELECTRICAL SITE PLAN

SCALE: 1"=60'-0"

NOTES:

1. GENERAL: LIGHTS TO BE TURNED OFF A MAXIMUM OF 2 HOURS AFTER THE END OF OPERATION.

SYMBOLS / ABBREVIATIONS

	WALL BRACKET/WALL SCONCE FIXTURE - SEE FIXTURE SCHEDULE
	POLE & LUMINAIRE(S) FIXTURE - SEE FIXTURE SCHEDULE
	RECESSED DOWNLIGHT FIXTURE - SEE FIXTURE SCHEDULE
	POLE & LUMINAIRE(S) FIXTURE - SEE FIXTURE SCHEDULE
———	SWITCHED CIRCUIT
– – –	BRANCH CIRCUIT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFI	ARC FAULT INTERRUPTER
AMP	AMPERES/AMPERAGE
BFC	BELOW FINISHED CEILING
BOL	BUILT-IN OVERLOAD
BRKR	BREAKER
BWE	BAKED WHITE ENAMEL
CBA	COLOR BY ARCHITECT
CRCT	CIRCUIT
CTL	CONTROL
DCP	DOCK EQUIPMENT CONTROL PANEL
DISC	DISCONNECT
EC	ELECTRICAL CONTRACTOR
EM	EMERGENCY
ER	EXISTING RELOCATED
EXR	EXISTING TO BE REMOVED/RELOCATED
EX	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPS
FLSW	FLOAT SWITCH
FPC	FIRE PROTECTION CONTRACTOR
FURN	FURNISHED
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
HOA	HAND-OFF-AUTOMATIC SWITCH
HP	HORSEPOWER
HVAC	HEATING AND VENTILATING CONTRACTOR
IG	ISOLATED GROUND
INT	INTEGRAL
IR	IN ROOM
IU	IN UNIT
JB	JUNCTION BOX
KW	KILOWATTS
LOC	LOCATION
LT	LOW TEMPERATURE
LTSW	LIGHT SWITCH
LVT	LOW VOLTAGE THERMOSTAT
MAG	MAGNETIC STARTER
MAN	MANUAL STARTER
MCA	MINIMUM CIRCUIT AMPS
MSPL	MANUAL STARTER WITH PILOT LIGHT
NL	NIGHT LIGHT
NU	NEAR UNIT
OHP	OVERHEAT PROTECTION
OS	OCCUPANCY SENSOR
OU	ON UNIT
PB	PUSH BUTTON
PC	PLUMBING CONTRACTOR
PESW	PNEUMATIC ELECTRIC SWITCH
PW	PREWIRED
RC	REFRIGERATION CONTRACTOR
RCC	REFRIGERATION CONTROL CONTRACTOR
RECEPT	RECEPTACLE
SBA	SELECTED BY ARCHITECT
SC	SEPARATE CIRCUIT
SPSW	SPEED SWITCH
SS	SOFT START
SW	SWITCH
T	LINE VOLTAGE THERMOSTAT
TBD	TO BE DETERMINED
TC	TIME CLOCK
TCC	TEMPERATURE CONTROL CONTRACTOR
TCP	TEMPERATURE CONTROL PANEL
UM	UNIT MANUFACTURER
UNO	UNLESS NOTED OTHERWISE
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS
WP	WEATHER PROOF
XFMR	TRANSFORMER

WISCONSIN
DAVID B. KORNACKI
E-33120-006
NEW BERLIN, WI
PROFESSIONAL ENGINEER

Date: 05/03/18

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VILLAGE OF GERMANTOWN
WASHINGTON COUNTY, WISCONSIN

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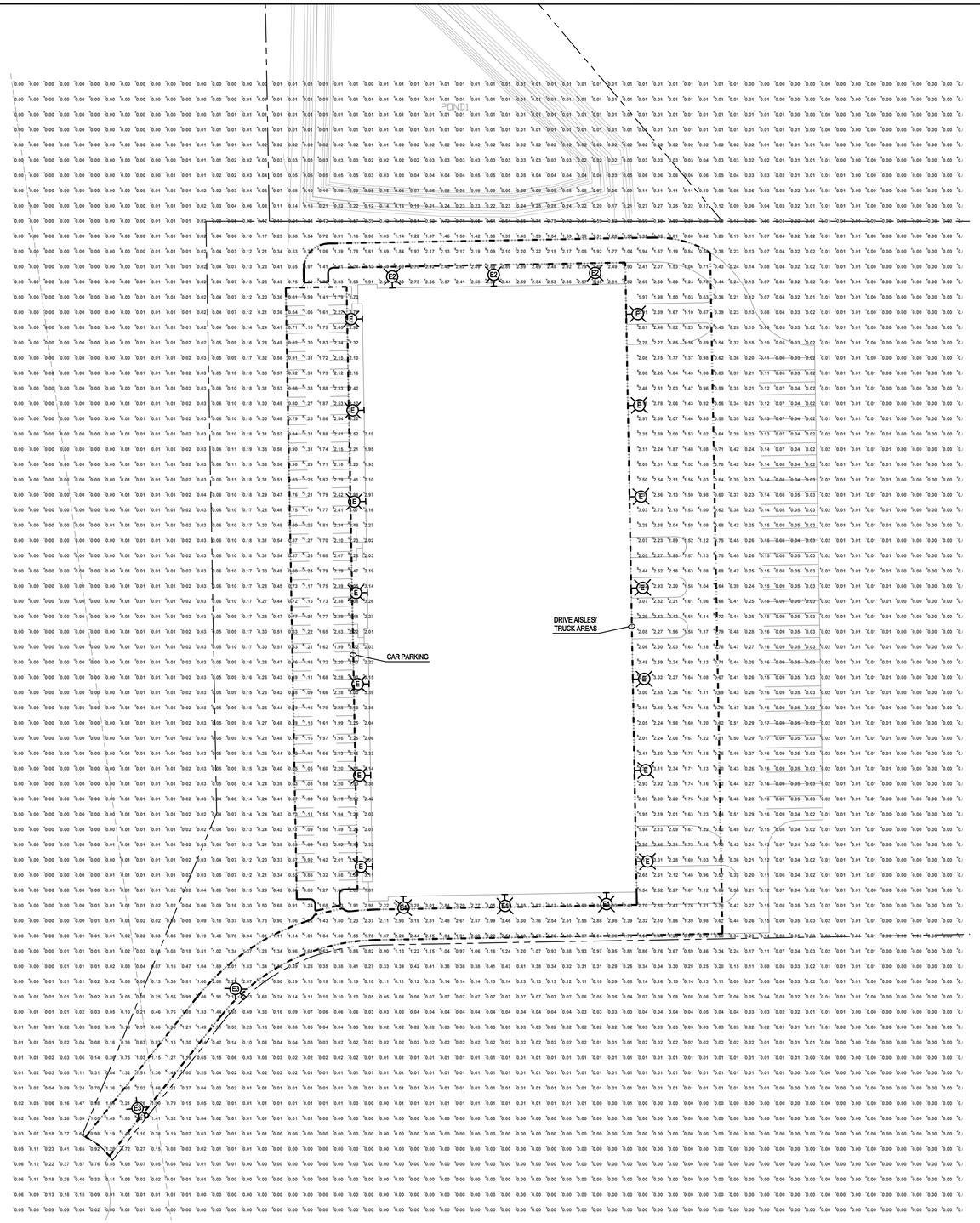
REVISIONS

JB No. 18056
M. D.B.K.
DATE 05/03/18
SCALE AS NOTED

SHEET E1 OF 3



PHOTOMETRIC SITE PLAN

SCALE: 1"=60'-0"

LIGHTING ANALYSIS NOTES:
(CITY REQUIREMENTS)

1. AVERAGE FOOTCANDLES: > 1.0
2. MINIMUM FOOTCANDLES: NA
3. MAXIMUM FOOTCANDLES: NA
4. AVERAGE/MINIMUM RATIO: < 4:1
5. MAXIMUM/MINIMUM RATIO: < 15:1

LIGHTING ANALYSIS NOTES:
(CAR PARKING)

1. AVERAGE FOOTCANDLES: 1.83
2. MINIMUM FOOTCANDLES: 0.61
3. MAXIMUM FOOTCANDLES: 3.22
4. AVERAGE/MINIMUM RATIO: 3.0:1
5. MAXIMUM/MINIMUM RATIO: 5.3:1

LIGHTING ANALYSIS NOTES:
(DRIVE AISLES/TRUCK AREAS)

1. AVERAGE FOOTCANDLES: 1.81
2. MINIMUM FOOTCANDLES: 0.45
3. MAXIMUM FOOTCANDLES: 3.50
4. AVERAGE/MINIMUM RATIO: 4.0:1
5. MAXIMUM/MINIMUM RATIO: 7.8:1

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Date: 05/03/18

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SHEET E2 OF 3

FIXTURE SCHEDULE

18056

TYPE	INPUT WATTS	LAMPS NO.	LAMPS MANUFACTURER CATALOG NO.	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLTS	SHIELDING	FINISH	MOUNTING	REMARKS
E	163	LED	WITH FIXTURE	EXTERIOR WALL BRACKET	LITHONIA	DSX1 LED-P6-40K-T4M-MVOLT-WBA	277	-	SELECTED BY ARCHITECT	WALL	
E1	163	LED	WITH FIXTURE	EXTERIOR WALL BRACKET	LITHONIA	DSX1 LED-P6-40K-T2M-MVOLT-WBA	277	-	SELECTED BY ARCHITECT	WALL	
E2	163	LED	WITH FIXTURE	EXTERIOR WALL BRACKET	LITHONIA	DSX1 LED-P6-40K-T3M-MVOLT-WBA	277	-	SELECTED BY ARCHITECT	WALL	
E3	163	LED	WITH FIXTURE	POLE & LUMINAIRE	LITHONIA	DSX1 LED-P6-40K-T2M-MVOLT-SPA-HS	277	-	SELECTED BY ARCHITECT	POLE - SEE DETAIL 1/E3	

D-Series Size 1

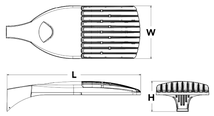
LED Area Luminaire

Catalog Number

Notes

Type **E, E1, E2 & E3**

Specifications



EPA:	1.01 ft² (0.09 m²)
Length:	33" (83.8 cm)
Width:	13" (33.0 cm)
Height:	7-1/2" (19.0 cm)
Weight (max):	27 lbs (12.2 kg)

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA DDBXD

DSX1LED

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX1 LED	**Forward optics** P1 P4 P7 P2 P5 P8 P3 P6 P9 **Rotated optics** P10[1] P12[1] P11[1] P13[1]	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted[2]	T1S Type I short 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 T5S Type V short T5M Type V medium T5W Type V wide BLC Backlight control[2,3] LCCO Left corner cutoff[2,3] RCCO Right corner cutoff[2,3]	MVOLT[4,5] 120[4] 208[5,6] 240[5,6] 277[4] 347[5,6,7] 480[5,6,7]	**Shipped included** SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor[8] RPUMBA Round pole universal mounting adaptor[8] **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[8]

Control options		Other options	Finish (required)
Shipped installed NLTAIR2 nLight AIR generation 2 enabled[9] PER NEMA twist-lock receptacle only (controls ordered separate)[10] PER5 Five-wire receptacle only (controls ordered separate)[11,12] PER7 Seven-wire receptacle only (controls ordered separate)[11,12] DMG 0-10V dimming extend out back of housing for external control (leads exit fixture) DS Dual switching[13,14] PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[1,15,16] PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[1,15,16] PIRHN Network, Bi-Level motion/ambient sensor[17] PIR1FC3V Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[1,15,16] PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[1,15,16] BL30 Bi-level switched dimming, 30%[1,14,18] BL50 Bi-level switched dimming, 50%[1,14,18] PNMTD2D3 Part night, dim till dawn[1,19] PNMTD3D3 Part night, dim 5 hrs[1,19] PNMTG3D3 Part night, dim 6 hrs[1,19] PNMT7D3 Part night, dim 7 hrs[1,19] FAO Field adjustable output[20]	**Shipped installed** HS House-side shield[21] SF Single fuse (120, 277, 347V)[5] DF Double fuse (208, 240, 480V)[5] L90 Left rotated optics[1] R90 Right rotated optics[1] **Shipped separately** BS Bird spikes[22] EGS External glare shield[22]	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

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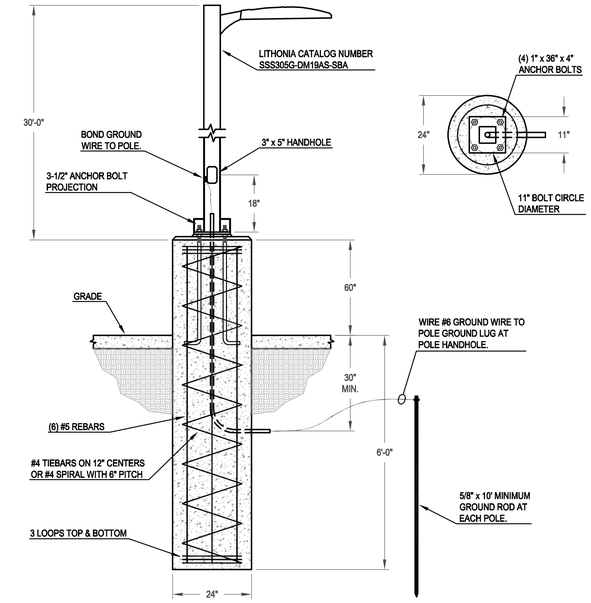


1 ELECTRICAL
FIXTURE TYPE 'E3' MOUNTING DETAIL
NOT TO SCALE

WISCONSIN
DAVID B. KORNACKI
E-33120-006
NEW BERLIN, WI
PROFESSIONAL ENGINEER

Date: 05/03/18

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
15850 W. BLUEMOUND ROAD
BROOKFIELD, WI 53005
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

WILLOW CREEK BUSINESS PARK
VILLAGE OF GERMANTOWN
WASHINGTON COUNTY, WISCONSIN

Corporation Registration #33120-6-1K10672
KORNACKI & ASSOCIATES, INC.
CONSULTING ELECTRICAL ENGINEERS
5420 SOUTH WESTRIDGE DRIVE
NEW BERLIN, WI 53151
(262) 784-3323 FAX:(262) 784-5014

REVISIONS

JB No. 18056
D.B.K.
DATE 05/03/18
SCALE AS NOTED

SHEET E3 OF 3

SITE PLAN, SIGN REVIEW & CERTIFIED SURVEY MAP (CSM) APPLICATION

6/25/18 Plan Commission Meeting

Kubala Washatko Architects / J.W. Speaker Corp.

Village Planner Report **Germantown, Wisconsin**

Summary

Paul Rushing, Kubala Washatko Architects, agent for the J.W. Speaker Corporation, is requesting approval of site development and building plans for a 56,890 sqft office/assembly facility located on a 54.8-acre parcel within the 144-acre Speaker Corporation campus on Freistadt Road, and, two (2) Certified Survey Maps (CSM) to combine parcels.

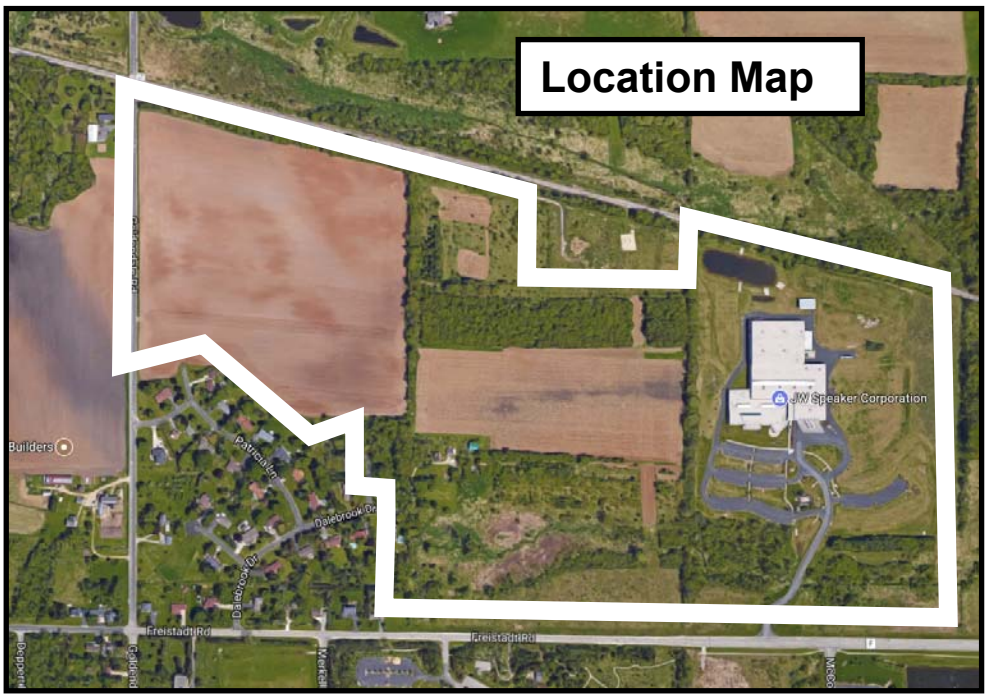
Location: East of Goldendale Road, north of the Neuland Subdivision and south of the Wisconsin & Southern (WSOR) Railroad

Agent/ Property Owner:

Paul Rushing	Jamie Speaker, Co-President
TKWA Architects	J.W. Speaker Corporation
W61 N617 Mequon Ave	N120 W19434 Freistadt Road
Cedarburg, WI	Germantown, WI

Current Zoning: M-1: Limited Industrial/PDD (J.W. Speaker Corporation PDD)

Adjacent Land Uses		**Zoning**
North	Agricultural/Residential	A-1/Rs-1
South	Agricultural/Institutional	A-1/I
East	Industrial	M-1
West	Agricultural	A-1



Background

On October 9, the Village Board Plan approved the creation of the J.W. Speaker Corporation Planned Development District (PDD) for purposes of guiding all development within the 144-acre Speaker Corporation campus. The General Development Plan (GDP) that was adopted for the PDD (copy attached) established the general size, location, and phasing of Speaker Corporation buildings proposed within the PDD, including the location of a new east-west driveway through the Speaker campus, location of the Surface Mount Technology (SMT) facility, Design Center, corporate retreat center, existing manufacturing facility, storm water management facility and perimeter landscaping and buffering all within the PDD. The Village also created a new Tax Incremental Financing District (TID#7) for purposes of extending sewer and water utilities along Goldendale Road to serve development within the PDD. Currently, the Village is in the process of bidding out contracts for construction of the sewer and water utilities expected to commence later this summer.

Proposal: Site Development & Building Plans

At this time, the Speaker Corporation has submitted detailed site development and building plans for review and approval of the following Phase 1 site and facility improvements, including the SMT facility, storm water management and landscaping as shown in the current GDP (recently revised to include an additional 3.0 acres of land at the end of Dalebrook Drive and relocate the Design Center south of the driveway):

Phase 1: Site Improvements

- Construct 30’ wide east-west access driveway from Goldendale Road to the existing Speaker facility parking lot (partial re-configuration required to tie into existing parking lot);
- Install water & sanitary sewer facilities from Goldendale Road to the existing Speaker facility;
- Construct two (2) parking areas along east-west driveway with a total of 203 parking stalls to serve the SMT and future Design Center facilities;
- Construct/install two (2) storm water management basins w/ bioretention ponds and associated swales and on-site storm sewer sized to accommodate run-off from the proposed driveway, parking areas and SMT facility, as well as, the future Design Center and Phase 4 development (northwest area of the campus);
- Install perimeter and internal landscaping & earthen berms for visual buffering along east-west driveway and between the Neuland residential subdivision to the west.

Phase 1: Building Improvements (Surface Mount Technology Building)

- 56,890 sqft one-story (w/ an additional 10,385 sqft for future assembly/production and shipping/receiving expansion)
    - 14,890 sqft office
    - 34,000 sqft production/assembly
    - 8,000 sqft shipping/receiving
- Painted pre-cast concrete wall panels and “fin” columns (23’ and 30’ max wall height); west elevation has a pre-finished corrugated metal siding expansion wall
- aluminum storefront windows w/ sun louver accent features above
- 2 elevated loading docks & 2 overhead door docks
- Roof-mounted mechanicals w/ pre-finished corrugated metal roof screen wall

Current electronic circuit board assembly operations, including office, storage and shipping functions, will be relocated from the existing manufacturing facility into the SMT facility upon completion. Hours of operation in the SMT facility are expected to be the same 11:00pm Sunday through 11:00pm Friday in three shifts. The number of employees is expected to start at 46 with an increase to 119 employees (spread over the three shifts) over a 5-year time period. The primary "SMT" process involves the assembly of electronic circuit boards by an automated process of mounting transistors and diodes to printed circuit boards that are eventually installed in various finished products elsewhere. The process does not produce external noise, smoke, dust, vibration or other by-products. [For more information about the SMT process visit: http://www.radio-electronics.com/info/data/smt/what-is-surface-mount-technology-tutorial.php].

Access & Parking. Access to the SMT facility will be provided by the new east-west driveway being constructed from Goldendale Road to a connection into the existing parking area south of the existing manufacturing facility. Employees, visitors and deliveries destined to/from the SMT facility will have access to both Goldendale Road and Freistadt Road. A total of 203 parking stalls will be constructed (98 stalls recommended under the Village's guidelines) to serve both the SMT and future Design Center facilities.

Storm Water Management. A total of 206,480 sqft of impervious surfaces are proposed as part of the SMT development or 8.6% of the total 54.8-acre parcel site leaving 91.4% in open/green space and storm water basins. The SMT facility, Design Center and east-west driveway will be served by two (2) storm water basins. One basin is located west of the SMT facility (east of the Neuland subdivision) and the second basin locate east of the SMT facility between the SMT and Design Center buildings. On-site storm sewer and swales will be used to divert run-off into the two basins.

Landscaping & Buffering. A signicant amount of landscaping is proposed in and around the entire Phase 1 development area that includes the SMT facility, east-west driveway, parking areas, storm water basins and perimeter areas adjacent to the Neuland residential subdivision.

The earthen berms that are proposed are different in shape and number than what was originally envisioned under the GDP, but the overall impact in terms of visual buffering and naturally-appearing plantings and other landscaping features. Rather than install a series of smaller, unnatural looking "moguls", larger berms are to be installed along both sides of the east-west driveway and closer to the perimeter of the property adjacent to the Neuland residential area where the view from those residential lots not already obscured by the existing wooded area would be most affected (i.e. buffered).
The creation of a glacial moraine type feature using 1'-3' diameter boulders found on-site running through the site near the Goldendale Road driveway entrance and pollinator prairie habitats throughout the site and around the SMT facility will result in a more natural appearing and environmentally compatible landscape.

Overall, the plantings consist of deciduous shade and ornamental trees, evergreen trees and evergreen shrubs, woodland and prairie perennial plantings and grasses. A total of 393 trees are proposed to be planted; 173 deciduous and 220 evergreen trees (see Sheet C1.10).

The impact of the berms and landscaping on the view from vantage points south of the east-west driveway are presented in Sheet C1.12.

Lighting. Exterior lighting of the site and SMT building will include:

- (23) 55W LED 4000K "neutral white" fixtures mounted on a 14'9" pole and 3' base (17'9" height) along the entire length of driveway;
- (8) 44W LED 4000K "neutral white" cut-off fixtures mounted on a 20' pole and 3' base (23' fixture height) within the parking areas;
- (4) 53W LED 4' high column fixture mounted on an 8' tall pole located at the pedestrian crossing on the driveway between the SMT facility and north parking area.

Signage. A monument sign like that which is installed at the Freistadt Road driveway entrance will be installed at the Goldendale Road driveway entrance. The sign is comprised of a 4' x 17' (68 sqft per side; 136 sqft total) double-sided aluminum sign box w/ 3-D lettering/logo mounted on an 8' high (11' total height above ground elevation) corrugated concrete base w/ 4" address coordinates and LED ground-mounted external lighting.

Proposal: Certified Survey Maps

In addition, Phase 1 development approvals include re-platting property lines for the Speaker Campus. As discussed during the process of creating the J.W. Speaker PDD, the three parcels that comprise the overall PDD area, including the Mayer/Neu and Roskopf parcels that were acquired by the Speaker Corporation are proposed to be combined and re-platted into two (2) parcels using two Certified Survey Maps (CSM's).

CSM No. 1 combines the existing "original" 57.2-acre Speaker parcel with the 47.4-acre "Roskopf" parcel and recently acquire 1.8-acre parcel at the end of Dalebrook Drive for a total parcel size of 106.4 acres. CSM No. 2 includes the 39.3 acre Mayer/Neu parcel acquired last year and creates a separate, unbuildable 5.1-acre outlot north of the WSOR railroad.

Staff Comments

Planning & Zoning

The detailed site development and building plans are consistent with the adopted GDP for the Speaker PDD (dated May 8, 2018). Although the number, size and shape of the landscaped berms are different, staff agrees that the visual effect created by the berms shown in the site plans are likely to be equal or more effective in terms of visually buffering the view of the driveway and expected vehicle traffic.

The Speaker property contains a 75' wide ANR pipeline easement running north-south across the property east of the future Design Center location (see proposed CSM No. 1 and Sheet C1.1). Although site planning has been coordinated with TransCanada, the agency responsible for operation and maintenance of the ANR Pipeline, the Speaker should be responsible for providing a final approval letter or other documentation from TransCanada approving the site development plan prior to issuance of a building permit.

Staff is concerned with the Type "A" and Type "B" light fixtures proposed for the driveway and pedestrian crossing. From the details provided, it appears that fixture "A" includes a reflective panel fastened at a 30 degree angle upon which LED-lighting is projected and, in turn, reflected outward toward the road. The Type "B" fixture appears to be a sort of light stick on the end of an 8' tall pole. Neither of these fixture types appears to conform to the Village's guidelines for using cut-off type fixtures to eliminate glare view of the light source. Arguably, the Type "A" fixture might be able to meet this standard given that the LED light source is contained within the pole and the light projected upward, but the glare of the light cast upon the reflective panel is brightest on the panel itself, and, given that the panel is on a 30 degree tilted plane and located on the north side of the driveway, the brightly lit panel will likely be visible to the south where the viewer will see the light before it is reflected down to the ground (vs. only seeing the lit surface from a distance). Similarly, while the Type "B" fixture also has the LED source imbedded inside the pole, it doesn't really appear to be any different than attaching a light bulb on the end of a stick and mounting it 8' above the ground.

Ordinarily, the LED fixtures we approve are mounted so that the LED's are parallel to the ground (not tilted) with back and/or side shields when necessary to reduce direct visibility of the LED's from any locations not needing to be lit or not wanting to see the light source. Cut-off type fixtures tend to cast the light down with only the surface being lit visible from a distance and not the light source itself.

Without any further evidence to the contrary regarding the operation of the Type "A" and Type "B" fixtures, Staff recommends that these fixtures be replaced with an actual cut-off fixture type that hides the light source to reduce the impact on its visibility while casting light directly and only onto the feature or areas needing to be made visible by the light.

Because of the relative location of the existing and proposed buildings across the Speaker campus and the east-west driveway that is intended to serve the development, cross-access easements and storm water management easements need to be created and recorded (and ideally shown on the CSM's) to facilitate the legal and free crossing of traffic, storm water, etc. from one parcel to the next across the Speaker campus. Also, the various building, parking and other setbacks specifically created for the Speaker PDD need to be shown on the CSM's.

<u>Inspection Services</u>
Inspection Services has indicated that the submission of state-approved plans will be required prior to issuing a building permit along with the required $20,000 occupancy bond.

<u>Engineering</u>
The Village Engineer and Public Works Department staff have identified several technical issues and plan corrections (see May 24, 2018 Village Engineer memo) pertaining to the driveway, sewer & water utility plans, storm water management, erosion control, etc. that will need to be addressed prior to issuance of a building permit.

VILLAGE PLANNER RECOMMENDATION:

Site Development & Building Plans

APPROVE the site development and building plans for a 56,890 sqft office/assembly facility located within the 144-acre Speaker Corporation PDD, and, the Goldendale Road driveway monument sign subject to the following conditions:

1. This approval is subject to all the conditions and requirements set forth herein and adopted by the Plan Commission. Approval is granted for the architectural and engineering plans dated May 18 and May 21, 2018, and the landscaping and lighting plans dated May 21 and June 19, 2018, unless superseded by subsequent plan sheets approved by the Village Planner or Engineer pursuant to revisions required herein and/or by the Plan Commission.
2. All landscaping, screening, grading, and paving improvements shown on the approved site plans shall be installed as proposed prior to issuance of an occupancy permit unless a cash bond or letter of credit in an amount equal to 120 percent of the estimated installation and material costs reviewed and approved by the Village is submitted to the Village as necessary to ensure that installation of the proposed features and improvements will be completed within one (1) year after issuance of the occupancy permit.
3. The following items shall be provided as required by the Village Fire Department: (a) State approved fire sprinkler and fire alarm systems are required; and (b) Locations of all water distribution system and hydrants shall be determined in cooperation with the Germantown Fire Department and utility standards.
4. All exterior doors (except primary entrance) shall be clearly marked with reflective 5” or larger letters/numbers to aid emergency personnel access as required by the Police Department.
5. The Type “A” and Type “B” exterior light fixtures shall be replaced with a cut-off fixture that hides the light source to reduce the impact of its visibility while casting light directly and only onto the feature or areas needing to be made visible by the light. Detail specifications for said cut-off fixtures shall be submitted to the Village Plan Commission for review and approval prior to issuance of a building/electrical permit for installation of the street and parking lot lighting.
6. The Speaker Corp shall be responsible for providing a final approval letter or other documentation from TransCanada approving the site development plan as it affects the pipeline easement prior to issuance of a building permit.
7. All technical issues and plan corrections identified by the Village Engineer and Public Works Department staff (see May 24, 2018 Village Engineer memo) shall be addressed and reflected in revised plans and/or supplemental information reviewed and approved by Village staff prior to issuance of a building permit (excluding “early start” site clearing and footing/foundation work approved by the Village and/or WI DSPS).
8. State approved plans and a $20,000 occupancy bond are required by the Building Inspection Department as part of the building permit application.

VILLAGE PLANNER RECOMMENDATION:

Certified Survey Map (CSM)

APPROVE the two (2) Certified Survey Maps (CSM) to combine parcels for the Speaker campus subject to the following conditions:

1. The CSM's shall be revised to contain and/or refer to appropriate cross-access and storm water management easements to be recorded prior to or concurrent with recording the CSM's.
2. The CSM's shall be revised to show the parking, building and other setbacks specifically created for the Speaker PDD.

Engineering Department Memorandum

To : Jeffrey W. Retzlaff, AICP, Planning Director/Zoning Administrator

From : Eric Nitschke,, P.E., Village Engineer

Date : May 24, 2018

Re : JW Speaker N120 W19434 Freistadt Road: Site Plan & Stormwater Review

---

Items Reviewed:

1. Civil Plan Set (Driveway & Infrastructure) (C0 – C20) Dated: 01-25-18
2. Civil Plan Set (SMT Civil Plans) (C1 – C6) Dated: 05-18-18
3. Stormwater Management Report/Calcs Dated: 05-18-18

General Comments:

1. Please respond to each item below. **A written response addressing each item shall be included in your submittal**. **No written response was provided; please provide a written response with the next submittal.**
2. The submitted plans have been reviewed for general conformance with State and Village design guidelines. 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 likely require DSPS (State site plumbing review and permitting). Please submit a copy of the approved permit prior to final approval.
4. As-builts prepared to Village standards shall be prepared and provided to the Village post-construction (for all applicable items).
5. A professional engineer's original seal is to be affixed, signed and dated on the final set of construction plans.
6. Contact Frank Rosecky, 262-250-4722 for a utility permit.
7. Contact Bob Beilfuss, 262-250-4721 for a driveway permit.
8. 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.

Driveway and Infastructure Plans:

C-1 Existing Conditions Plan

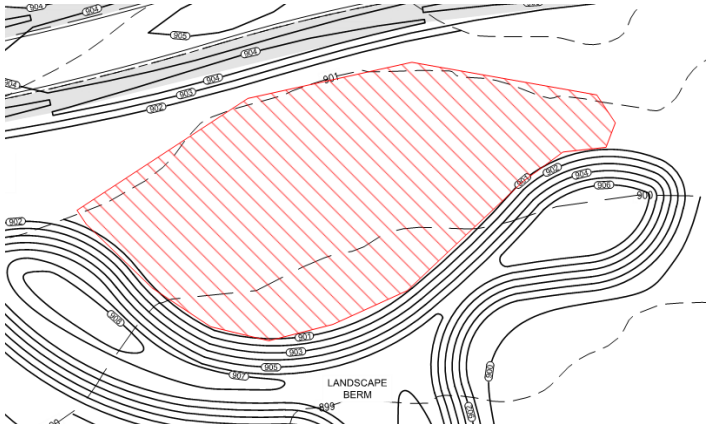
1. Clearly show and label property boundary.

General Comments Sheets C-3- C-5

1. Show erosion matting for all areas of 4:1 or greater slopes. Show areas requiring concentrated flow erosion mat.
2. Label size of Rip-Rap
3. *How wide is the public Utility and Access easement? Appears that only the north side is shown.*
4. *Show emergency / overland flow routes.*
5. *Show locations of temporary swales as needed to direct runoff to sediment basins during construction.*
6. Provide general erosion control notes. Construction dates, sequence, stabilization, etc. **Revise final note in the Construction Sequencing to require the contractor to install the sediment basins before mass grading the site. After the basin is installed contractor can adjust sequence if needed.**
7. Show Village of Germantown Wetland Setbacks on the plans and associated mitigation plan if applicable per Chapter 24 of the Village Zoning Code. **Setback is now shown for the large wetland on the southwest portion of the site, however the pond outlet pipe, level spreader, and a portion of the berm are within the setback. Adjust the plans to remove these items from the setback or provide a mitigation plan. Show the 25' setback for the small wetland area on the northeast side of the project. Adjust grading to be outside the setback or provide a mitigation plan for this area.**
8. Show and label property boundary.

C-3 Grading and Erosion Control Plan

1. Swale from FES 1.0 to pond appears very flat. Adjust slope to be at least 1%. **Slope is still less than 1%, revise swale to have a minimum slope of 1%.**
2. Area north of the landscape berm does not appear to drain. Adjust grading to ensure no pocketed areas. **A swale has been added to drain this area, but the swale is at less than 1% slope. Adjust swale to provide a minimum of 1% slope.**

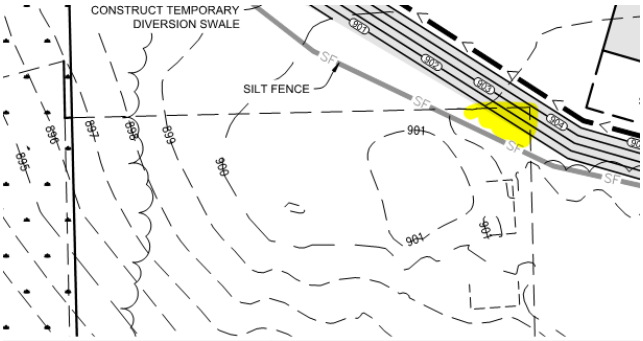


3. Install a level spreader at the outfall from the pond. Provide a detail for the level spreader. **Level spreader is within the 25' wetland setback. Adjust to move level spreader out of the setback.**
4. Label FES invert elevations.

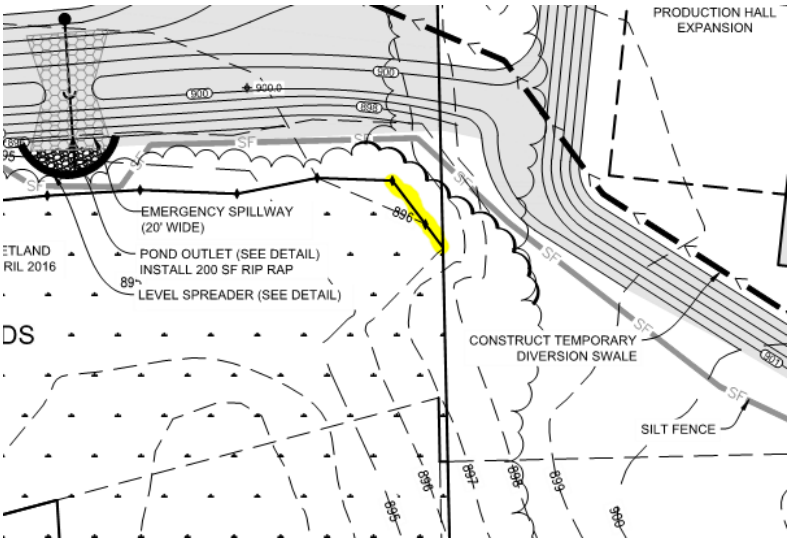
5. Add inlet protection at the culvert under the driveway at CTH Y.
6. Add spot elevations for the top of the pond berm and overflow elevations.

C-4 Grading and Erosion Control Plan

1. *Adjust slopes at SMT site on North side of the road to be 3:1 max.*
2. *Show interim grading with positive drainage for future building pad on the south side of the site.*
3. Is this dashed line a property line? Please label. If it is a property line, adjust grading and silt fence to be outside of this property.



4. Wetland boundary ends at what appears to be a section line. Where do the limits of the wetland go from here?



5. Label FES invert elevations.
6. It's difficult to tell what work is being done as a part of these plans and what work is done as a part of the SMT plans. Please clarify. Boundaries, different linetypes, or gray scaling items would help clarify.
7. Add spot elevations for the top of berm and overflow for the retention pond and bioretention basin.
8. Add erosion protection to the overflow from the bioretention basin.
9. Show and label overflow routes.

10. Future design center building has a note to grade pad to 907.50. If this area will be graded as a
    part of this project provide contours showing how it will be graded and how positive drainage will be achieved.

C-5 Grading and Erosion Control Plan

1. *Provide details on the storm sewer shown on the SMT site on the south side of the road.*

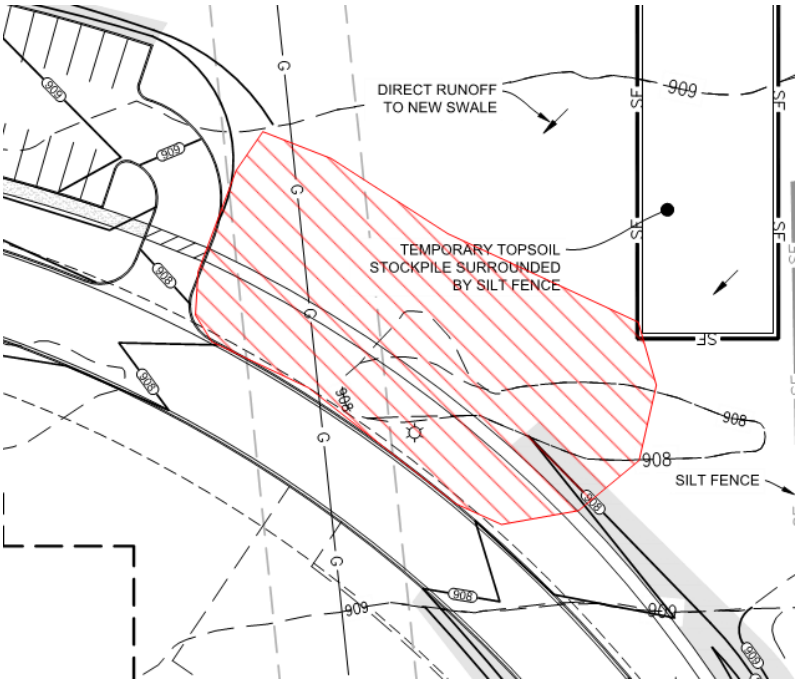
2. Show rim elevations and FES invert elevations for all storm sewer structures.

3. *Culvert crossing at the connection to the existing parking lot calls for a vertical bend. Install a manhole on this line if a grade / pipe slope change is required.*

4. Is any work being proposed for the existing parking lot on the east side of the site?

5. Show rip rap or other means of outlet protection at the storm sewer outlet where the proposed driveway meets the existing parking lot.

6 How does this area drain? Provide additional grade information showing positive drainage.



General Comments Sheets C-6 – C-7 Sanitary Plan and Profile

1. *Label separation distance between watermain and sanitary sewer.*
   1) **Label sampling manhole to SMT Bidg and to Future Bldg.**
   2) **Correct label of 8" sanitary stub to Future Bldg from "SMT" to "Future Building"**
   3) **Sanitary sewer to Future bldg labeled 305.3 lf-8" PVC/ on site plans for SMT Bldg same labeled as 232.8 lf-8" PVC (which is correct?)**

General Comments Sheets C-8 – C-11 Watermain Plan and Profile

1. *Label separation distance between watermain and sanitary sewer.*

1) Indicate future sanitary sewer & water main by Village as 24" sanitary and 16" water
2) Recommend install future 8" water to future Retreat Bldg at time of Phase 1 construction, this would eliminate additional mechanical joints in the water main and eliminate a road crossing patch. (only recommendation)
3) Connection to existing main by Live Tap only, change cut-in connection to existing 12" PVC water main using Live Tap (pressure tap)

2. *Plans show two lines for the watermain, please cleanup the plan to show only one watermain.*

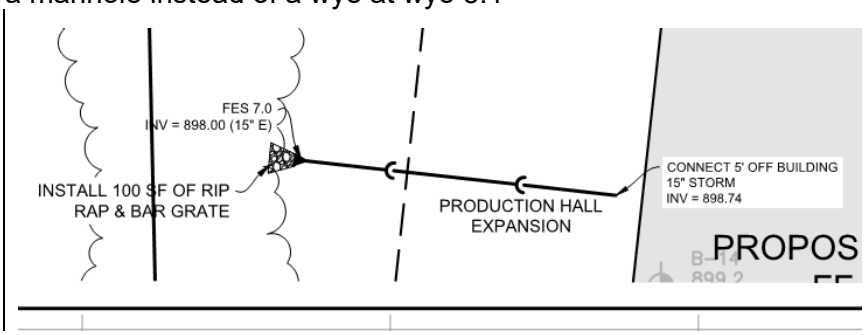
3. *Show hydrants and gate valves in profile view as plans advance.*

4. *Adjust hydrant spacing to not exceed the WDNR 600' maximum.*

Sheet C-13 Storm Sewer Plan and Profile

1. State plumbing code requires a manhole at changes in direction or pipe size for all pipes 6" or larger in diameter. Provide a manhole instead of a wye at wye 3.1

2 Label length, slope and material for storm sewer coming west out of the proposed building.



Sheet C-15 Storm Sewer Plan and Profile

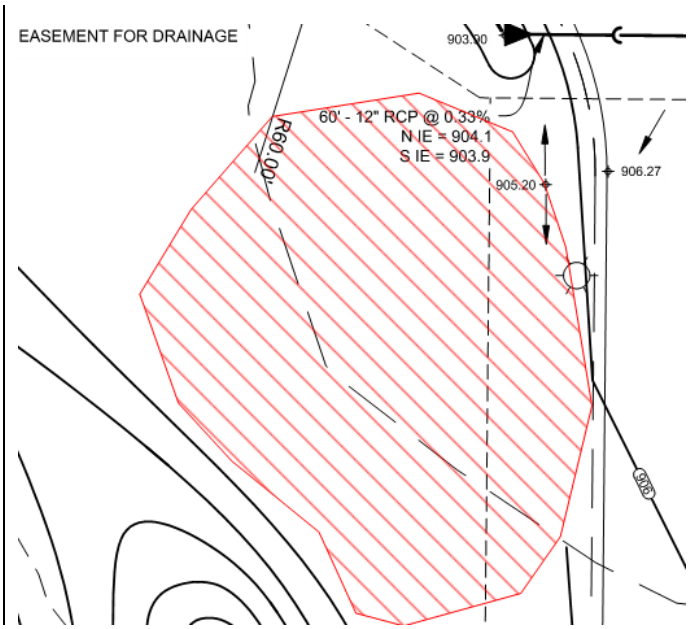
1. FES 5.0 has a note to regrade the ditch to the south. Show any required grading on the plans.

Sheet C-14 Intersection Detail

1. Adjust grading for swale to have a minimum slope of 1%. **Swale on the southeast side of the intersection is less than 1%**

2. *Provide information showing that CMP pipe used for the culvert can support truck loading with only 1.40' of cover.*

3. Adjust this area to have a minimum of 1% slope.



Sheet C-18 Details

1. *Watermain depression, remove notes referring to IEPA.* **Revise to require a minimum of 18" of separation per WDNR requirements.**
2. *PVC hydrant branch detail is not legible. Please adjust.*
3. Level Spreader Detail. Label length either on this detail or on the plans.
4. Level Spreader Detail. Label Rip Rap size and show pipe outlet pipe on the detail.

5)Remove STORZ NOZZLE from hydrant detail

Sheet C-17 Details

1. *Pond Cross Section – Further clarify the note about the safety shelf being varied from 10'-30' the plan does not reflect this.* **Detail shows a 1:10 slope for the safety shelf but the plans show a 1' drop across the 20' safety shelf.**
2. Pond Outlet Detail – Clarify the trash rack. Is it open on top and bottom as shown on the detail?
3. Pond Outlet Detail – Shows a NWL of 896 but the pond detail shows 895, please clarify.
4. Rain Garden detail – Revise to match WDNR Bio-Retention Technical Standard.

Sheet C-20 Details

1. Erosion Matting Notes. Call out where these different matting types should be used on the plan. More specifically, show where urban matting is needed verses regular Class I matting. Show areas requiring Class II Matting. For the Channel Erosion Matting remove Class 1 type A as it is not for channel applications. Call off which swales require Class II Type A, B or C and which swales require Class III type A, B or C.

<u>SMT Civil Plans:</u>

Sheet C1.0 General Notes

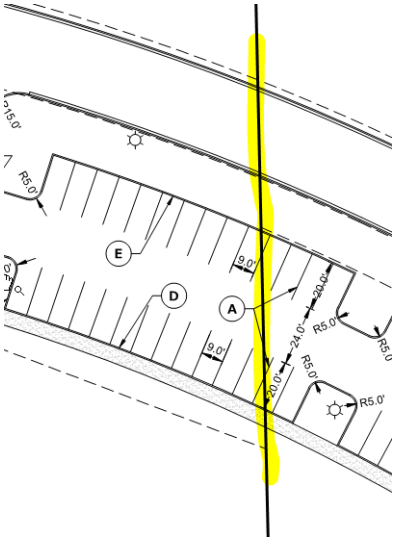
1) **Correct water main details to reflect revised Section #6 (Water Distribution System Requirements) of the Design, Drafting & Construction Standards & Specifications. The revised Sections #6 is attached to this review.**

Sheet C1.1 Overall Site Plan

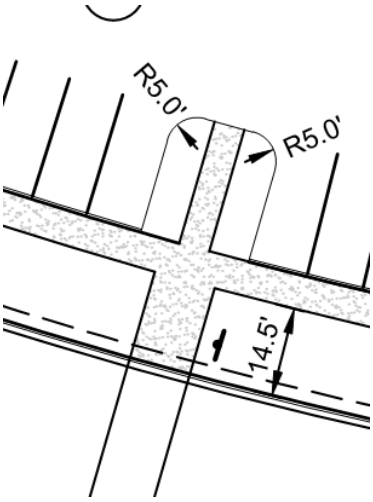
1. Clearly show what work is proposed with this plan set verse what is proposed as a part of the Infrastructure plan set.
2. Clearly show and label property boundaries. It's not clear what property is owned by JW speaker and what property is not. Specifically for the area directly south of the proposed building.

Sheet C2.0 Site Plan

1. Show curb ramp and truncated dome locations.
2. Show parking counts. (Legend shows a parking count symbol but none are shown on the plans)
3. Is this a property line? Please label.

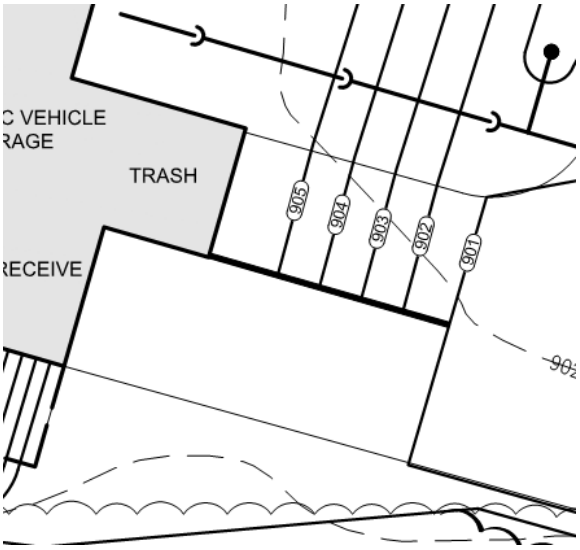


4 It's not clear what is proposed for this island? It doesn't appear to have curb around it, but all the other islands appear to be curbed. Please clarify.



Sheet C3.0 Grading Plan

1. Site plan calls for a retaining wall here with a note to see the grading plans however the grading plan provides no additional details.



2 Provide spot elevations detailing proposed grading plan.

3. Show storm sewer rim elevations.

4. Show and label overland flow routes.

5. Provide an erosion control plan.

Sheet C4.0 Paving Plan

1. Plan shows no information for proposed paving for the parking lots.

Sheet C5.0 Utility Plan

1. Clarify what work is proposed with these plans and what work is proposed with the infrastructure plans. Different line types or bold and grayscale would help clarify the plans.

2. Storm sewer connections of 6" or larger require a manhole. Remove the wye and add a manhole.
3. Adjust the watermain and storm sewer to provide a minimum of 8' of separation between the storm sewer and watermain (near the hydrant).
4. Provide storm sewer calculations.
   5)Label sampling manhole to "FUTURE BUILDING"
   6)Labeled length of 8" sanitary to Future Building (232.8 lf) does not match length labeled on the Site Plan sheet C-7 (305.3 lf); correct to match between plans.

Sheet C6.0 Construction Details

1. Provide a field inlet detail.
   2)Correct hydrant detail to delete STORZ NOZZLE"

<u>Storm Sewer Calcs</u>

1. *Update to use Atlas 14 rainfall values as required by Germantown code. (10 min tc would be 5.27 in/hr)*
2. Provide inlet capacity calcs. **Inlet capacity calcs were not provided.**
3. Exhibit is hard to read. Update to include labels for the storm sewer structures. Where is culvert 1 and culvert 2? **Updated exhibit was not provided.**

<u>Storm Sewer /SWM Calcs</u>

1. Update the proposed drainage map to show accurate boundaries. The north, west and south portions of the 'area to south pond' do not match the contours.
2. *Include the disturbed areas on the south west corner of the site in the calcs.* **Clarify limits of undetained area on the west side of the site, the drainage exhibit is not clear.**
3. Clearly show and label on the drainage maps what is included in the model for the future buildings and parking. MMSD has been rejecting plans that have future impervious accounted for if it is not clearly shown**. Drainage maps have labels for future development area and phase 3 building. Either remove those labels or show in detail what is included in the plan for future development.**
4. *Adjust drainage boundary in this area to match contours, or show how runoff from this area will make it into the basin.*
5. Recommend either providing detailed design data for the north basin or removing that entirely from the report. Any future proposed work on the north site would require detailed engineering and SWM review and including it in this report without detailed information just creates confusion.
6. *Water quality section references a chamber system. Where is that proposed for?*

7. Details for the south rain garden do not match between the plans, hydroCAD model and SLAMM model. Update the rain garden to match WDNR Technical Standards for Bio-retention and update the models to match.

8. Update the proposed conditions to reflect actual Tc times. It's understood 6 minutes was used as that is the most conservative; however Tc times will affect the timing of the volume and should reflect the actual site conditions. **6 Minutes is still being used for the undetained area. Please update to a more appropriate Tc time. Revise the drainage exhibit labels to match the revised Tc times.**

9 Please clarify how the volumes are calculated. The Existing Drainage Data and Proposed Drainage data tables, are the volumes listed the total volume or volume during the critical time? Volumes listed on this table do not match volumes in the tables in Appendix 3.

10 Adjust the volume tables in Appendix 3 to start at 11.75 hours as required by MMSD and to end at 21.25 hours.

11. *Update the SLAMM model to run for the entire year with winter season dates.*

12. *Update the SLAMM model pond outlet structure to match the plans.*

13. Include the pavement being added to the existing parking lot islands in the SLAMM model.

14. Land covers in the SLAMM model do not match HydroCAD. Area to south pond shows 3.5 acres of pavement in HydroCAD and 6.1 acres in SLAMM. Roof areas do not match, and no water surface area is in the SLAMM model.

15 Provide information supporting an infiltration rate of 0.50 in/hr for the bio-retention basin in the SLAMM model. No soil boring logs were provided and the nearest infiltration test appears to be near B-17 and that showed a rate of 0.25 in/hr.

16. Bioretention broad crested weir dimension do not match between the plans and the model. Adjust to match.

TABLE 1.0: GOVERNING AGENCIES AND APPLICABLE CODES/GUIDELINES/REGULATIONS (Most stringent shall apply)	
Wisconsin State Statutes & Administrative Code	• Chapter NR 811 • Chapter SPS 382 • PSC
State of Wisconsin Department of Transportation (WisDOT)	• WisDOT Standard Specifications for Highway and Structure Construction • WisDOT Facility Development Manual (FDM)
Village of Germantown	• Municipal Code • Design, Drafting & Construction Standards & Specifications (Sec. 1-9) • Village Board and Committee actions • DPW Director, Village Engineer and Water Utility Superintendent
Other	• Standard Specifications for Sewer & Water Construction in Wisconsin (Standard Specifications) • AWWA • Southeast Wisconsin Regional Planning Commission (SEWRPC) • Manufacturer specifications • PPI-Plastic pipe institute • ASTM's

TABLE 2.0: DESIGN CRITERIA-USA materials only no imports or foreign fittings.	
General	• Residual Pressure = 20 psi min.; Static Pressure = 35 psi min. at proposed final ground surface • Main Dia.-8" min.; Lateral Dia.-1½" min. • Cover above Mainlines/Laterals-6' min. depth from proposed final ground surface to pipe crown (or Engineer-approved depth); depths < 5' require polystyrene board insulation conforming to Standard Specifications Ch. 4.17.0 and 8.50.2 • Live Taps required • Insulation: Polystyrene board. Required when cover < 5' or within 2' of an underground structure. Required over hydrant leads beneath roadside ditches. • Hydrant Locations: Intersections; Far end of cul-de-sac at lot line extended; Mid-block at lot line extended • Hydrant Spacing: Residential = 350' max.; Commercial/Industrial = 500' max. • Valve Locations: Intersections; Mid-block at lot line extended; Hydrant branches; 4 valves per Cross; 3 valves per Tee • Air Vent Locations: Temporary ends; High points where there is no hydrant • Connections shall be made under pressure. • Buttresses: Concrete required. Conform to Standard Specifications 4.3.13 and File No. 43 thru 46.

TABLE 3.0: PIPE MATERIAL, FITTINGS AND APPURTENANCES	
High Density Polyethylene (HDPE)	• USA-manufactured products only. • Material = PE 3408 conforming to ASTM D 3350 cell classification 345464C. List material in PPI TR-4. Standard grade HDB rating = 1600 psi at 73°F. Conform to cell classification 345464E. Approved for potable water per NSF Standard 61. Conform to ASTM F714 for DIPS and AWWA C906 with a SDR of 11. • Stripes-Equally-spaced blue longitudinal stripes co-extruded into pipe's outside surface • Molded Fittings: Manufactured & tested conforming to ASTM D3261 and AWWA C906, and fully pressure rated to same internal rating as mating pipe. • Fabricated fittings: Manufactured by heat fusion joining specially machined shapes cut from pipe, polyethylene sheet stock, or molded fittings. Prohibited: Non-pressure or low-pressure rated fabricated fittings. • HDPE MJ Adapters-International Piping Products. Required for connections to mechanical joint pipe, fittings, valves, and other appurtenances. Conform to AWWA C111/ANSI A21.11. • HDPE Flange Adapters: Possess sufficient bore length to be clamped in butt fusion-joining machine w/o stub-end holder. Serrate sealing surface to promote gasketless sealing. Fit w/ back-up rings having pressure-rating equal to pipes. Chamfer or radius adapters. Flange bolts and nuts = Grade 3 or higher stainless steel. • HDPE Connection to Existing Gasketed-joint Water Main: Use anchoring fitting and concrete cast-in-place thrust anchor (or Engineer-approved method). • Water Services-Dia. 1 ½" Min. Branch tap connections by electrofusion welded for corporation saddle. • Joints: Plain pipe ends and fittings-Butt fusion. Main and branch fittings-Butt fusion or electrofusion. Internal and external beads shall not be removed.
Polyvinyl Chloride (PVC)	• USA-manufactured products only. • 4"-16" • Pipe-AWWA C-900, Class 235-DR18, push-on joints.

Fusible PVC C-900	• USA-manufactured products only. • Conform to AWWA C-905 • Provide Data logging of welds to owner before pressure test. • Document heat plate temp at 12, 3, 6 and 9 o'clock positions at times and intervals per the engineer/inspector.
Tracer wire	• Open cut-Tracer wire will be Copperhead #1230-HS. • Directional drilling/boring-Copperhead SoloShot#1245-EHS • Pipe bursting-Copperhead SoloShot Extreme-7x7 stranded • Terminate wire at the back side of each hydrant inside 3" x 4' PVC pipe with a threaded cap if no hydrant is available install wire/s inside a separate Tyler top section set on brick #6860 road box location field verified. All wires will have a minimum of 2' slack. • All mainline tracer wires must be interconnected in intersections, at mainline tees and mainline crosses • Tracer wire splicing and connecting to existing tracer wires will use a Copperhead lockable water proof connector for direct bury. And or at the hydrant lead us a "Service lateral lug" connector. • At the termination points install ground rod Copperhead #ANO-12. Connect the red wire to the blue tracer wire inside the 3" tube with a wire nut to accommodate this wire size. • If no hydrant is available install wire inside a separate Tyler top section set on brick #6860 road box location field verified • Install tracer wire from main to the building using "Copperhead" 1230-HS-Blue wire connect the new tracer wire to existing wire at the main using a Copperhead lockable water proof connector for direct bury. • Service Laterals-Terminate tracer wire by building using Copperhead ANO-12 termination rod, connect the red termination wire to the blue tracer wire using a standard wire nut sized for this wire and install the two wires in a 3" X 4' long PCV tube with thread cap. The exposed end needs to be a minimum of 6"-12" visible after finished grade. • If tracer wire does not exist at the main, install the wire with the service and terminate wire at the main using a Copperhead ANO-12 termination rod. Splice the red wire with the blue wire using a Copperhead lockable water proof connector for direct bury. • Proper stripping of HDPE coating will be made using an approved electrical stripping tool, NOT a pocket knife. • Service Lateral private property-Connect the red wire from the grounding rod and the blue tracer wire using a Copperhead water proof connector-no ANO-12 termination is needed at the building. • Install tracer wire in a 3" X 4' long PVC tube with thread cap. . The exposed end needs to be a minimum of 6"-12" visible after finished grade. • Testing-All new tracer wire installation shall be located using a low frequency line tracing equipment, witnessed by the inspector/owner/engineer. This

Tracer Wire	verification shall be performed after rough grading and before finished grade and asphalt.
Chlorination	• Calcium hypochlorite tablets affixed to inside top of pipe w/ approved adhesive (Permatex No. 1) in the line at the time of installation. Conform to AWWA C651 and Standard Specifications Ch. 4.3.12
Road paving adjustments-valve boxes	• Valve box top section will by Tyler #6860, lids will be 5 ¼" MWW. If top sections are cracked or broken replace with new #6860. Adjustment to road boxes can be made using, slip type, screw insert type and or slip rings to accommodate a 5 ¼" lid. Smaller than 5 ¼" will not be allowed.

TABLE 4.0: BEDDING, COVER AND BACKFILL	
Bedding	• Class "B" conforming to Standard Specifications Ch. 3.2.6(b) and File No. 4, Part IX • 3/8" crushed stone chips. Conform to Standard Specifications Ch. 8.43.2, Table 32 • Conform to Standard Specifications Ch. 4.3.3 • Prohibited: Sand; gravel
Cover	• 3/8" crushed stone chips conforming to Standard Specifications Ch. 8.43.2, Table 32, File No. 4, and Ch. 8.43.3 • 12" above the top of pipe • Prohibited: Sand; gravel
Backfill	• Aggregate slurry under Village-owned pavements: Required at top 3' depth. Conform to Standard Specification Ch. 8.43.8. • Granular where specified: Crushed gravel. Conform to Standard Specification Ch. 8.43.4, Table 39 Graded Aggregates, 1½" Graded Crushed Stone. • Spoil not under pavements: Spoil material. Conform to Standard Specifications Ch. 8.43.5 • Consolidation: Mechanical compaction. Conform to Standard Specification Ch. 2.6.14(b). Conform to 95% Standard Proctor Density tested at Contractor's expense. • Initial Lift-2 ft. max.; Subsequent Lifts-1½ ft. max. • Prohibited: Debris; frozen material; large clods or stones; organic material; blast rock; stones larger than 6" sand. Contractor shall haul away and dispose of these materials at Contractor's expense.

TABLE 5.0: VALVES	

General	• USA-manufactured only
	• 6"-16" Dia. will be AWWA RS (resilient wedge), NRS (non-rising stem), C509-250psi epoxy coated, all stainless steel fasteners.
	  • Mueller
	  • Kennedy
	  • Clow
	
	• Valves shall open left
	• T-Bolts and nuts will be Cor-Blue™
	• Gate valve boxes will be Tyler pipe only, three piece cast iron, #6860 with a 5 ¼ "MWW drop in lid installed with a #6 Base from Adaptor, Inc.
	• When the depth of the valve nut is such that when using a 8' gate valve wrench the T-handle will be below our required wrench height of 2 ½' to 3 ½' from the road surface install a stainless steel gate valve rod extension.
	• Turning Valves & Hydrants: Only Village personnel are authorized to turn village's valves and hydrants. Contractors can operate new installed valves and hydrants.

TABLE 6.0: HYDRANTS	

General	• USA-manufactured only
	  • Clow Medallion UL/FM
	  • Kennedy Guardian K-81 UL/FM
	  • Color is to be factory painted Red
	  • Open left
	  • (2) 2 ½" hose nozzles
	  • 5 1/4 " valve opening
	  • Install 5' red/white with spring hydrant marker
	• Pumper Nozzle Elevation-18"-30" above top of curb or grade
	• All fasteners will be stainless steel on all valves and hydrants and on all mj fittings will be, Cor-Blue™ T-bolts Birmingham Fastener or equal.
	• Access Ramp-Where a hydrant lead crosses a road-side ditch, an access ramp with the appropriate size culvert will be installed. Width-6' min. Extend 2' beyond the hydrant. Materials-6" crushed stone base and 3" of asphalt surface course
	• Turning Valves & Hydrants-Only Village personnel are authorized to turn Village's valves and hydrants. Contractors can operate new installed valves and hydrants.

Connections	• USA-manufactured only • Anchor-T • Tapping saddle will be an all stainless steel Smith Blair 663 with a stainless steel mj outlet or Romac SST-MJ stainless steel mj outlet or equal use core-10 blue bolts. Poly wrap fittings, valves • Valve box-Tyler only-#6860/MWW lid, Adaptor Inc. #6 base adaptor
Easements	• Required for public hydrants/hydrant leads.
Painting	• Color -Safety Red • Preparation-Sandblast to 100% clean white metal from ground level up to top of hydrant. Dispose of spent materials. Fully enclose hydrant during blasting, priming, and painting. Air dryer must be used to prevent moisture in the air supply. • Primer-Devoe 224 high build epoxy primer (or Engineer-approved equal) to a thickness of 4-8 mils (1 mil=25.4 millimeters). • Topcoat -Devoe 379UVA urethane epoxy (or Engineer-approved equal) with a minimum thickness of 4 mils All hydrants must be fully enclosed during blasting, priming, and painting

TABLE 7.0: WATER SERVICES & METER SETTING	
Pipe	• USA-manufactured product only • 1 ½"- 2" Poly-CTS (copper tube size), DR9-200 psi tubing. • Laterals 4" and larger pipe material will be C-900 PVC
Taps	• USA-manufactured products only • Corp and Curb stop will be a quick joint, full port ball valve used for Poly-CTS utilizing stainless steel stiffeners. • Couplings quick joint • Poly wrap all exposed brass. • At the Tap for 1 ½"-2" laterals, install Romac SS1 or Smith-Blair 264, stainless steel full circumference 360 degree repair clamp with CC tap, minimum 12" in width.
Curb box	• Curb box will be a "Minneapolis" style. Place curb stop on top of hardwood/blocking. Poly wrap the box and all exposed brass. Any curb stop valve that cannot be keyed with a standard 8' curb stop wrench will be required to install a stainless steel curb stop rod extension, so an 8' curb stop key can be used.
Meter setting	• At the meter setting 1"-2" valves will be all brass USA made only, full port ball valves and brass nipples. • All gate valves used for branch piping at the meter setting inlet, outlet and bypass piping 3"and greater will be AWWA resilient wedge epoxy coated, C509, NRS (non-rising stem). MJ connection and flanged face at the meter, all stainless steel bolts and washers- Flange bolts can be standard at the meter setting.
Abandonments	• ¾" to 2" water laterals, remove corp, saddle and all associated fittings at the main. Also, if needed any damaged portion of the main where the tap was made. Install a Smith Blair 261 stainless steel repair clamp or Romac SS1, minimum 12" in width. Remove existing curb stop 3' below finished grade. • Abandonment of 4" and larger water laterals. Cut existing lateral at the connection point with the Village's water main, fill abandoned portion with cement. Install a MJ cap or inside Mj plug on existing T. Buttress. If any portion of the existing water main or fittings are leaking or damaged, cut and remove T-connection installing a new section of C-900 water main and two Hymax or Romac couplers. Baggy wrap installation.
General	• Extend to right-of-way • Cap at right-of-way. Water-proof, leak-proof. • Marker board-2" x 4". Length from bottom of pipe to3' above proposed final ground surface. Top 1' painted blue. • Tracer Wire-Copperhead #1230-HS.to be wrapped around outside of curb stop box for future connection outside building.

TABLE 8.0: SAMPLING STATION	
General	• USA-manufactured products only • Manufacturer- Kupferle Foundry Company, Eclipse Model No. 88 (freeze-proof). • Install for easy access. • Station shall be provided with an aluminum cover that locks. • The station shall have an unthreaded nozzle, ¾" FIP inlet, an o-ring valve design, and all brass waterway

TABLE 9.0: INSPECTION AND TESTING	
Scheduling	• Contact Engineering Dept. (262) 250-4721 two business days before construction to schedule inspection(s).
General	• Keep trenches dry during pipe installation. • Temporary Plugs: Required at end-of-day, during breaks, and any other time pipe is unattended. • Defect Inspection: Inspect each pipe length and all appurtenances for defects. Remove or discard defective materials. • Flushing: Conform to Standard Specifications Ch. 4.16.2. In areas serviced by sanitary sewer, obtain authorization from Wastewater Utility to direct flushed water into the nearest sanitary sewer manhole.

Testing	• A Village representative shall be present to witness all forms of testing.
	• Contractor shall perform all testing, sampling and analyses.
	• Hydrostatic Testing: Test all new water main and appurtenances under the supervision of Village personnel. A successful test is requisite to acceptance by the Village Public Works & Highway Committee.
	  o HDPE Pipe: Fill w/ water, increase to test pressure, and allow stabilization. The test pressure shall be 1.5 times the operating pressure at the lowest point in the system. The pipe shall pass if the final pressure is within 5% of the test pressure for 1 hour. Conform to ASTM Sec. 9.8. For safety reasons, only hydrostatic pressure will be used. Conform to ASTM F2164.
	  o Test Duration for HDPE Pipe: Less than 8 hrs. If testing is not completed for any reason, de-pressurize and allow to "relax" for 8 hours before resuming test.
	  o PVC Pipe: Conform to Standard Specifications Ch. 4.15.0.
	  o Water service may be tested as part of the water main hydrostatic test or they may be tested individually as a live tap to the pressurized main. All fittings and connections shall be carefully inspected for any visible water leakage in accordance with Standard Specifications Ch. 5.5.18.
	• Bacteriological Testing: Conform to Standard Specifications Ch. 4.16.0 and NR 811.07. Contractor shall provide analysis results to Village Engineering

	Dept. If the bacteriological test fails, conform to Standard Specifications Ch. 4.16.3 to re-chlorinate the main. • Tracer Wire Connectivity-All new tracer wire installation shall be located using a low frequency line tracing equipment, witnessed by the inspector/owner/engineer. This verification shall be performed after rough grading and before finished grade and asphalt.

TABLE 10.0: SUBMITTAL REQUIREMENTS	
Construction Drawings & As-Builts	• Plan and Profile on D-sized paper prepared, sealed and signed by Wisconsin P.E. • Datum: Local NVGD 1929 datum required • Submit both paper and electronic copies to Village Engineer • Preparation and submittal of construction drawings and as-builts shall be at the Engineering Consultant's expense.
Plan Review	• Engineering Consultant shall prepare the entire WDNR Water Main Extension Plan Review Package • If applicable, Engineering Consultant shall prepare the entire Dept. of Safety & Professional Services (formerly Commerce) Plumbing Plan Review package for "private" water services • Submit 1 original paper and 1 electronic copy of all documents to the Village Engineer for review • Village Engineer will provide Engineering Consultant an Owner Letter once the documents are accepted by the Village • Engineering Consultant shall submit the entire package to the WDNR with the Owner Letter • If applicable, Engineering Consultant shall submit the entire Dept. of Safety & Professional Services (formerly Commerce) Plumbing Plan Review package for "private" water services with the Owner Letter • Preparation and submittal of plan review packages shall be at the Engineering Consultant's expense.
Street Excavation in ROW Permit	• Contractor to prepare and submit with fee to Village Engineering Dept.
Erosion Control Permit	• Contractor to prepare and submit with fee to Village Inspection Services (Building Inspection) Dept.
Building Permit	• Plans, reports and permits shall be reviewed and accepted by the WDNR, Dept. of Safety & Professional Services (formerly Commerce), and Village Engineer before the Village will issue a building permit
Occupancy Permit	• As-Builts shall be reviewed and accepted by the Village Engineer before the Village will issue an occupancy permit

TABLE 11.0: LIST OF VILLAGE STANDARD DETAILS	
	• HDPE Hydrant Branch • Standard Hydrant Bollard • Relocate Water Main HDPE Pipe • Relocated Existing Water Main PVC Pipe Only • HDPE Joint Restraint • Water Main Reconnection • Water Main Service Lateral Schematic

TABLE 12.0: OTHER REQUIREMENTS	
	• Contractor shall be responsible for Digger's Hotline locates, site safety, resident access, traffic control, erosion & sediment control, and protection of existing facilities, features and structures at all times • At end of each day and during breaks, Contractor shall install water-proof, leak-proof plugs • At end of each day, open excavations shall not exceed 25 ft. in length. • All lateral trenches shall be backfilled at end of day. • At end of each day, contractor shall erect barricades with flashers and snow fencing surrounding excavations. • Mainline Installation: Conform to Standard Specifications Ch. 4.3.0 • Sawcut Exist Pavements: Wheel-mounting saw required. Sawcut full-depth.

Village of Germantown ...Willkommen

Fee must accompany application

- ☐ $700 Minor Addition
- ☐ $1,240 Construction <10,000 SF
- ☐ $2,095 Construction 10,000 SF to 50,000
- ☒ $3,460 Industrial Construction >50,000 SF
- ☐ $3,460 Commercial Construction >50,000
- ☐ $200 Plan Commission Consultation
- ☒ $125 Fire Department Plan Review
- ☒ $1960 CSM

PAID ____ DATE 5-22-18

$5,545

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

PAUL RUSHING
THE KUBALA WASH-
ATKO ARCHITECTS
W61N617 MEQUON AV.
CEDARBURG, WI 53012
Phone (262) 377-6039
E-Mail prushing@tkwa.com

PROPERTY OWNER

J.W. SPEAKER CORP.
N120W19434 FREISTADT RD.
GERMANTOWN WI
53022
JAMIE SPEAKER
Phone (262) 251-6666
E-Mail speakerje@jwspeaker.com

2

PROPERTY ADDRESS

N120W19434 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
RES	RES	M-1	AGRI.

4

READ AND INITIAL THE FOLLOWING:

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

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

✓ 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!

Applicant 5/21/18 Date

Owner 5-21-18 Date

Village of
Germantown
...Willkommen

Fee must accompany application
☐ $2,900 with public improvements
☒ $1,960 no public improvements

Paid ✓ Date 5-22-18

CERTIFIED SURVEY MAP APPLICATION

Pursuant to Section 18.06 of the Municipal Code

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

1 APPLICANT OR AGENT

Mr. Jamie Speaker
J.W. Speaker Corporation
N120 W19434 Freistadt Rd.
Germantown, WI 53022
Phone (262) 532-2104
Fax ( )
E-Mail speakerje@jwspeaker.com

PROPERTY OWNER

same as applicant

Phone ( )

2

PROPERTY ADDRESS OR GENERAL LOCATION	TAX KEY NUMBER
N120 W19434 Freistadt Rd.	173992-3 173032-3 173987 173989 174985

3 PURPOSE OF LAND SPLIT

TO COMBINE SMALLER RESIENTAIL PARCELS INTO THE LARGER CAMPUS PARCELS	Will the land split require rezoning? NO - APREADY COMPLETED	
	From	To

4 READ AND INITIAL THE FOLLOWING:

JS I understand that the Certified Survey Map is not valid until recorded at the Washington County Register of Deeds. The Village will record the document and charge the applicant all applicable recording fees.

JS I understand that the Map will not be placed on the Village Board agenda until all the technical corrections to the CSM are made, the payment of any outstanding impact fees are paid to the Village Clerk's Department, and the original signed and stamped copy of the Map is submitted on the proper paper.

JS I understand that parcels created outside the Sewer Service Area will require a soil test. I also understand that all properties abutting a State Highway will require DOT approval and I will be responsible for securing such approval prior to recording.

JS I understand all delinquent property taxes on any of the properties involved shall be paid prior to recording.

5 SIGNATURES -- ALL APPLICATIONS MUST BE SIGNED BY OWNER!

Applicant Date

Owner 5-18-18
Date

Addendum to Application for Site Plan Review, J.W.Speaker Corporation, May 21, 2018

STATEMENT OF DESIGN INTENT AND PROJECT RATIONALE

The J.W.Speaker Corporation, is a growing Light Manufacturing Company and needs to expand office and production facilities to respond to increased demand. J.W.Speaker also desires to remain in the Village of Germantown.

Speaker Corporation produces innovative, high-performance vehicular lighting equipment for the original equipment market and for aftermarket customers around the world specializing in LED & other emerging lighting technologies. The design, manufacture & assembly J.W.Speaker products occurs entirely in Germantown, Wisconsin.

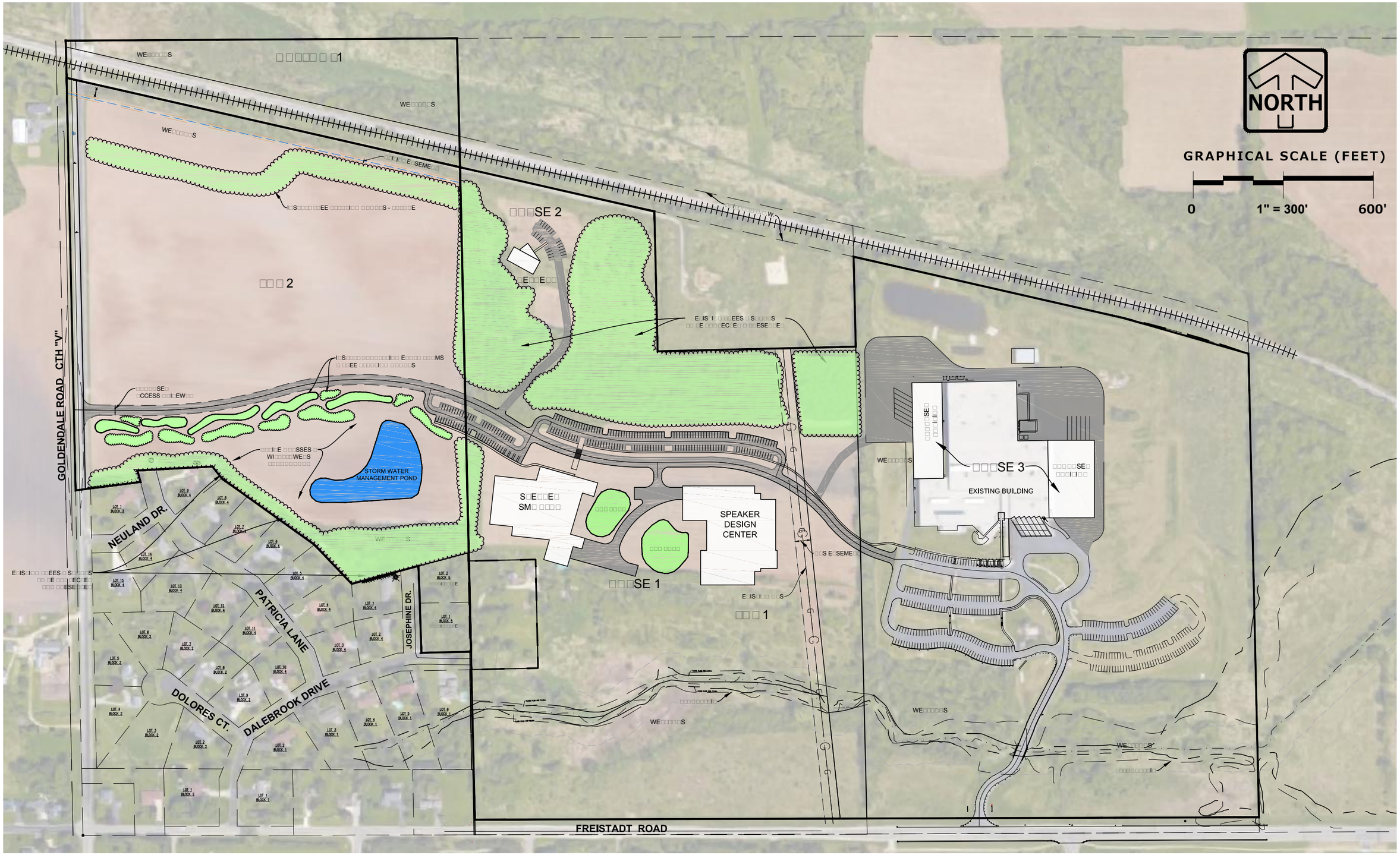
The current J.W.Speaker Office & Manufacturing Headquarters is located at N120W19434 Freistadt Rd. Commissioned in 2008, the capacity of the facility recently has been reached. Anticipating the need for expansion, in 2016 Speaker management purchased adjacent vacant land to the west of the Speaker 2008 facility and has since requested and received required zoning changes to move ahead to Site Plan Approval.

The number of jobs provided by the J.W.Speaker Corporation currently stands at approximately 500 and with the proposed expansion, this number will increase by approximately 100 jobs.

The current request for approval includes development of the properties purchased in 2016 and 2017 for use as Light Manufacturing and Office functions. The design intent is to develop a landscaped 'Corporate Campus' of a number of buildings of similar character to the Speaker 2008 Facility.

The first building proposed to be built in this phase will be the Speaker Surface Mount Technology (SMT) Building, (this application) a one-story manufacturing structure, with related surface parking. The building and particularly the parking will be screened from all nearby residential uses.

A Private Driveway is proposed to extend from the Speaker 2008 Facility all of the way west to Goldendale Road, screened from view of nearby residential uses to the south.



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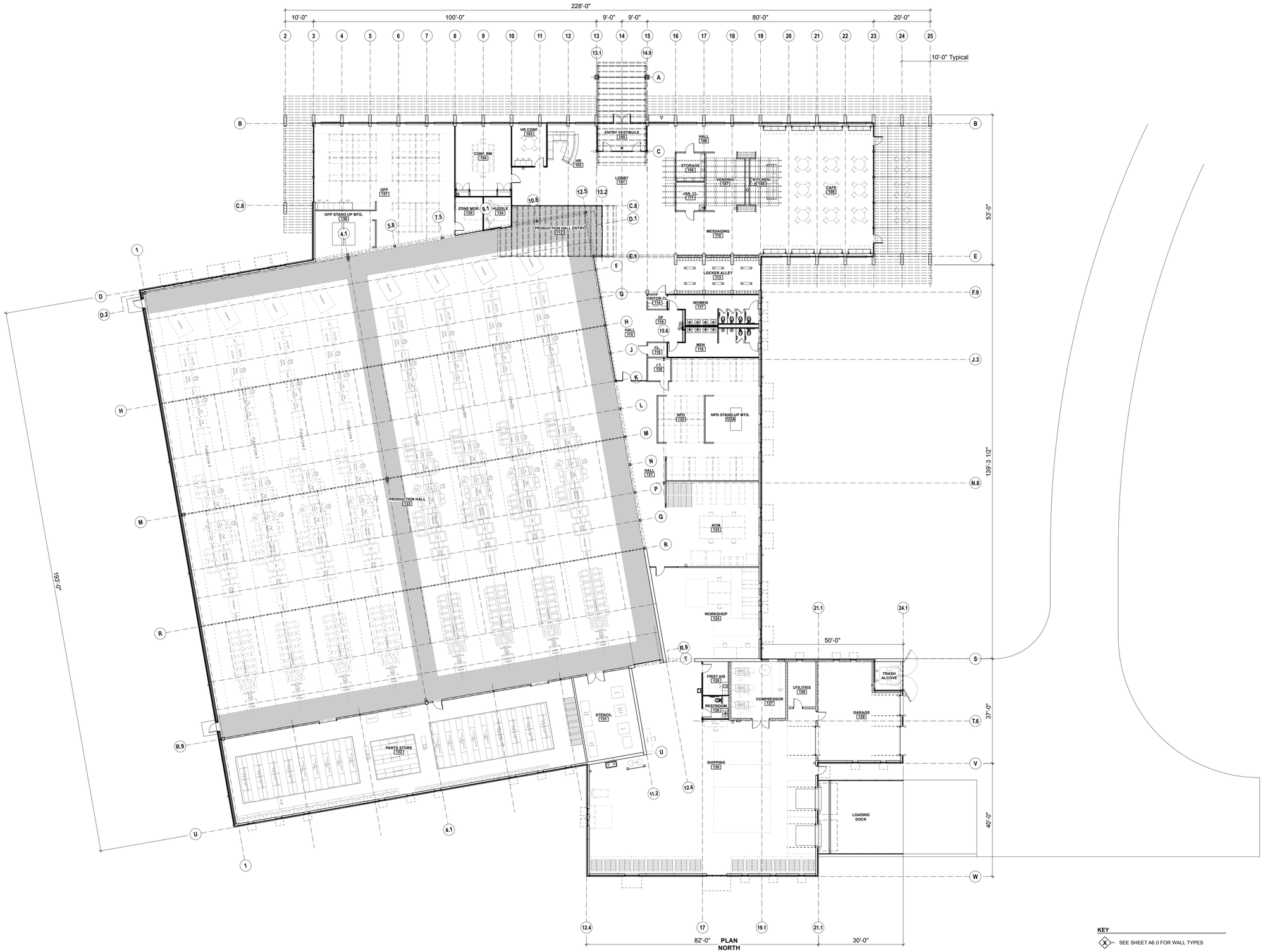

1 A1.0 **GROUND FLOOR PLAN**
Scale: 1/16" = 1'-0"

KEY

- X — SEE SHEET A6.0 FOR WALL TYPES
- XX.X — SEE SHEET A8.0 FOR DOOR SCHEDULE
- X — SEE SHEET A8.1 FOR WINDOW SCHEDULE

The Kubala Washatko Architects, Inc.
W61 N617 Mequon Avenue
Cedarburg, WI 53012
p: 262.377.6039 | f: 262.377.2954

PROJECT

J.W. SPEAKER
Surface Mount Technology Building
N120 W19801 Freistadt Rd.
Germantown, WI 53022

OWNER

J.W. SPEAKER — Engineered. Lighting. Solutions.
N120 W19434 Freistadt Rd.
Germantown, WI 53022
p: 262.251.6660

CONSTRUCTION MANAGER

C.D. SMITH CONSTRUCTION, INC.
889 W. Johnson St., P.O. Box 1006
Fond du Lac, WI 53935-1006
p: 920.924.2900

STRUCTURAL ENGINEER

SPIRE ENGINEERING, INC
600 W. Virginia St., Suite 102
Milwaukee, WI 53204
p: 414.278.9200

CIVIL ENGINEER

PINNACLE ENGINEERING GROUP
15850 W. Bluemound Road, Suite 210
Brookfield, WI 53005
p: 262.754.8888

HVAC ENGINEER

PLUMBING ENGINEER

ELECTRICAL ENGINEER

REVISIONS

01	ADDENDUM #1	05/16/2018

DATE
April 26, 2018

TKWA PROJECT NUMBER
219417.01

SHEET TITLE

Ground Floor Plan

SHEET NUMBER

A1.0

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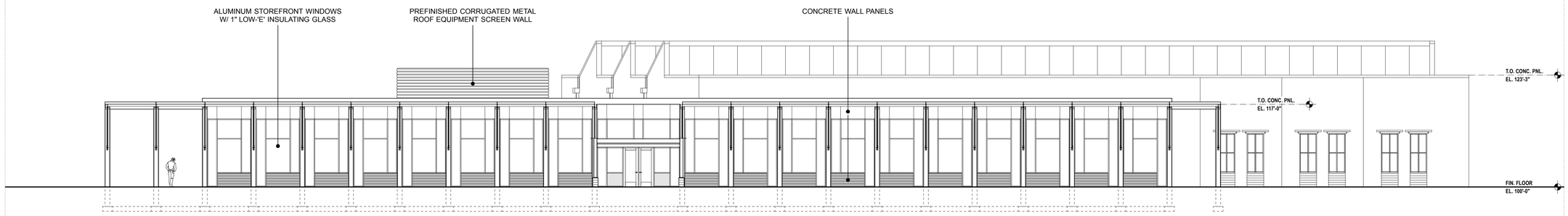
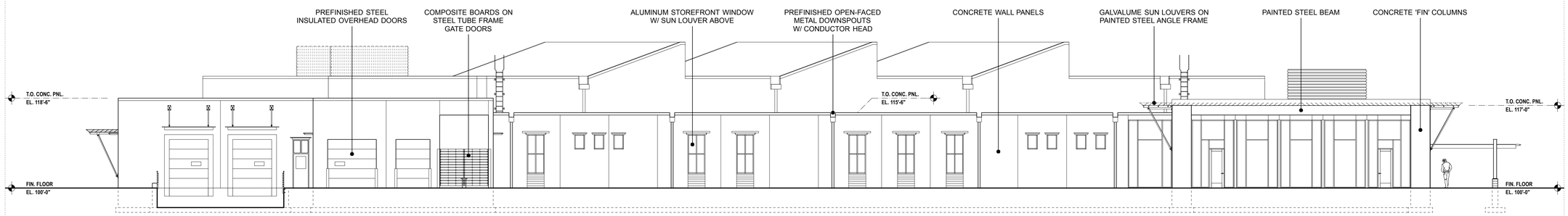
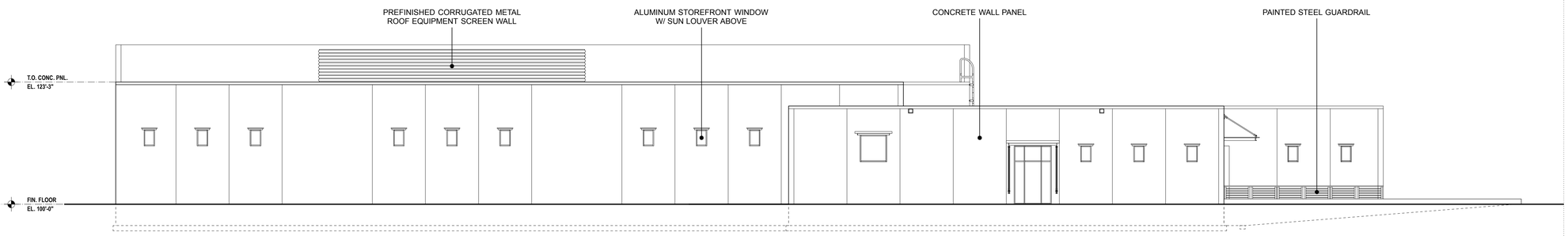


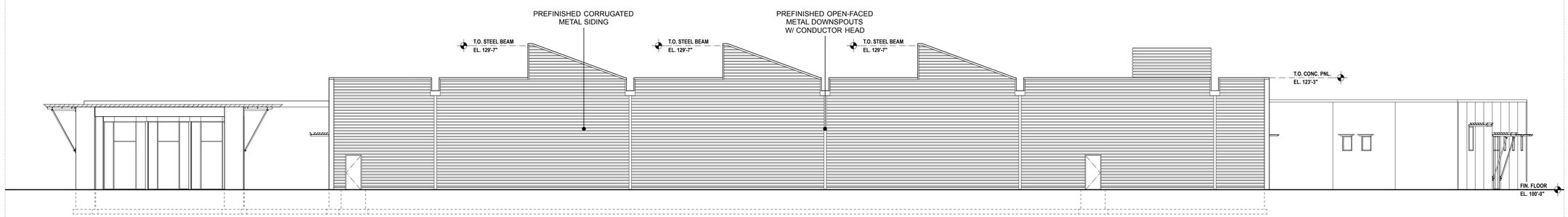
1 A3.0 **NORTH ELEVATION**
Scale: 3/32" = 1'-0"



2 A3.0 **EAST ELEVATION**
Scale: 3/32" = 1'-0"



3 A3.0 **SOUTH ELEVATION**
Scale: 3/32" = 1'-0"



4 A3.0 **WEST ELEVATION**
Scale: 3/32" = 1'-0"

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PROJECT

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Surface Mount
Technology Building
N120 W19801 Freistadt Rd.
Germantown, WI 53022

OWNER

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Engineered. Lighting. Solutions.
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p: 262.754.8888

HVAC ENGINEER

PLUMBING ENGINEER

ELECTRICAL ENGINEER

REVISIONS

DATE
May 21, 2018

TKWA PROJECT NUMBER
219417.01

SHEET TITLE

Exterior Elevations

SHEET NUMBER
A3.0

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NORTHEAST ELEVATION

EAST ELEVATION

NORTHWEST ELEVATION

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PROJECT

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HVAC ENGINEER

PLUMBING ENGINEER

ELECTRICAL ENGINEER

REVISIONS

DATE
May 21, 2018

TKWA PROJECT NUMBER
219417.01

SHEET TITLE

Exterior Renderings

SHEET NUMBER

A3.1

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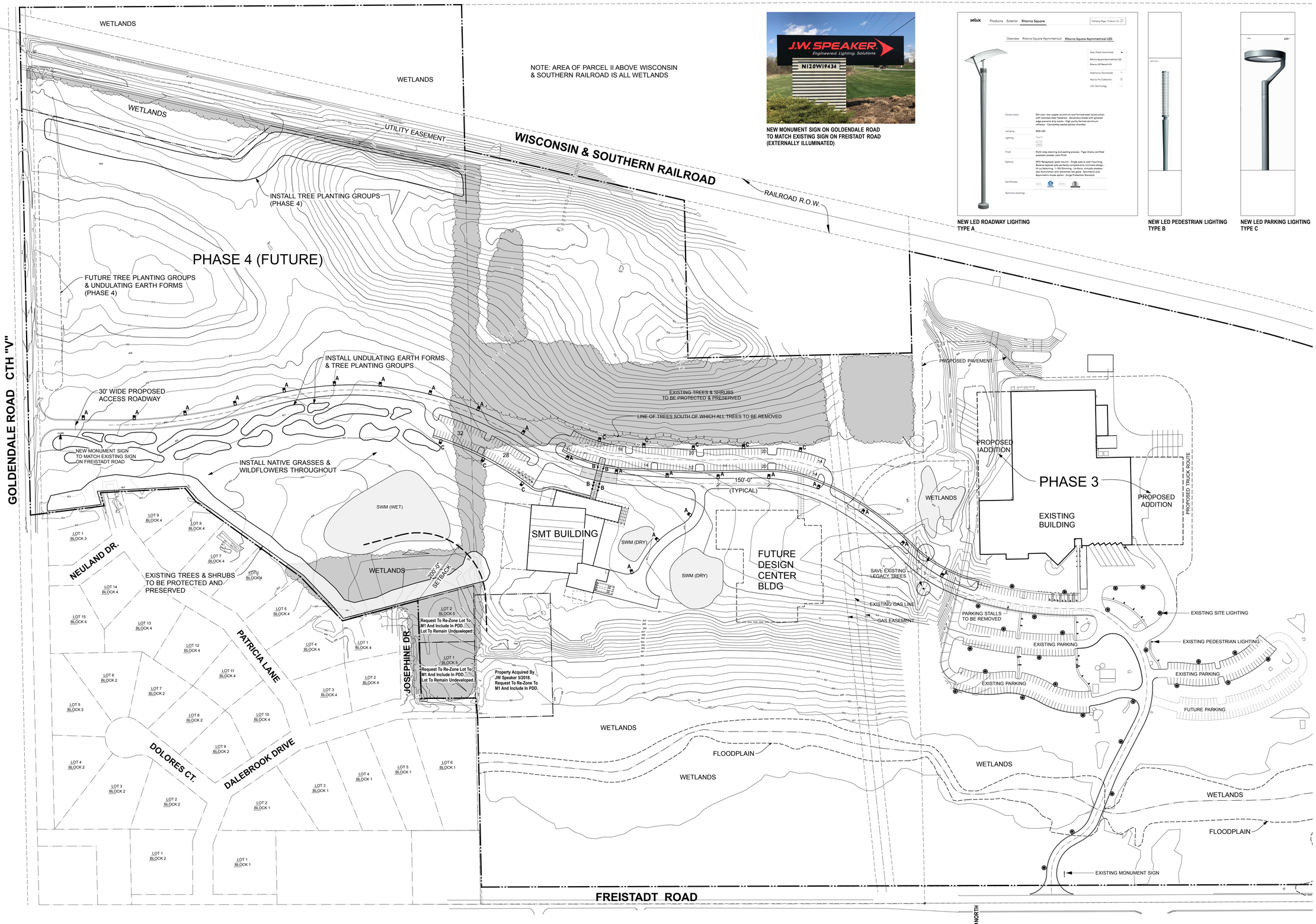

NEW MONUMENT SIGN ON GOLDENDALE ROAD TO MATCH EXISTING SIGN ON FREISTADT ROAD (EXTERNALLY ILLUMINATED)

NEW LED ROADWAY LIGHTING TYPE A

NEW LED PEDESTRIAN LIGHTING TYPE B

NEW LED PARKING LIGHTING TYPE C

1 / C1.8 **SITE LIGHTING PLAN**
Scale: 1" = 125'

TKWA

The Kubala Washatko Architects, Inc.
W61 N617 Mequon Avenue
Cedarburg, WI 53012
p: 262.377.6039 | f: 262.377.2954

PROJECT

J.W. SPEAKER
Campus Plan

N120 W19801 Freistadt Rd.
Germantown, WI 53022

OWNER

J.W. SPEAKER Engineered. Lighting. Solutions.

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CIVIL ENGINEER

PINNACLE ENGINEERING GROUP

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Brookfield, WI 53005
p: 262.754.8888

LANDSCAPE DESIGN

sparrow Native Landscaping
www.sparrowlandplanning.com

W8181 County Road E
Oxford, WI 53952
p: 608.697.3169

REVISIONS

DATE
May 21, 2018

TKWA PROJECT NUMBER
219417

SHEET TITLE

Site Lighting Plan

SHEET NUMBER

C1.8

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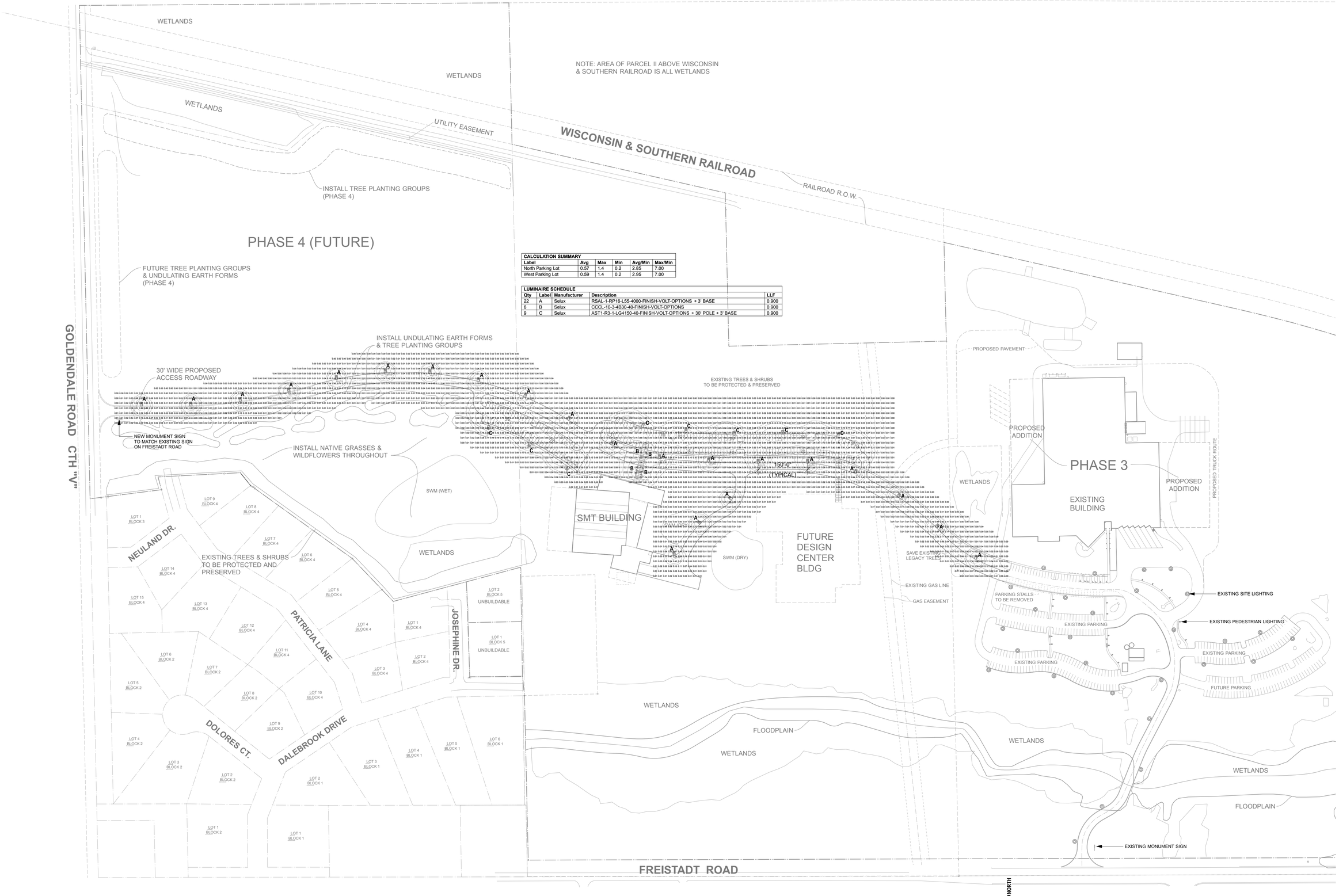

CALCULATION SUMMARY					
Label	Avg	Max	Min	Avg/Min	Max/Min
North Parking Lot	0.57	1.4	0.2	2.85	7.00
West Parking Lot	0.59	1.4	0.2	2.95	7.00

LUMINAIRE SCHEDULE				
Qty	Label	Manufacturer	Description	LLF
22	A	Selux	RSAL-1-RP16-L55-4000-FINISH-VOLT-OPTIONS + 3' BASE	0.900
6	B	Selux	CCCL-10-3-4B30-40-FINISH-VOLT-OPTIONS	0.900
9	C	Selux	AST1-R3-1-LG4150-40-FINISH-VOLT-OPTIONS + 30' POLE + 3' BASE	0.900

1 / C1.9 **SITE LIGHTING CALCULATIONS**
Scale: 1" = 125'

The Kubala Washatko Architects, Inc.
W61 N617 Mequon Avenue
Cedarburg, WI 53012
p: 262.377.6039 | f: 262.377.2954

PROJECT

J.W. SPEAKER
Campus Plan

N120 W19801 Freistadt Rd.
Germantown, WI 53022

OWNER

J.W. SPEAKER Engineered. Lighting. Solutions.
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Germantown, WI 53022
p: 262.251.6660

CIVIL ENGINEER

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LANDSCAPE DESIGN

sparrow Native Landscaping
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REVISIONS

DATE
May 21, 2018

TKWA PROJECT NUMBER
219417

SHEET TITLE

Site Lighting Calculations

SHEET NUMBER

C1.9

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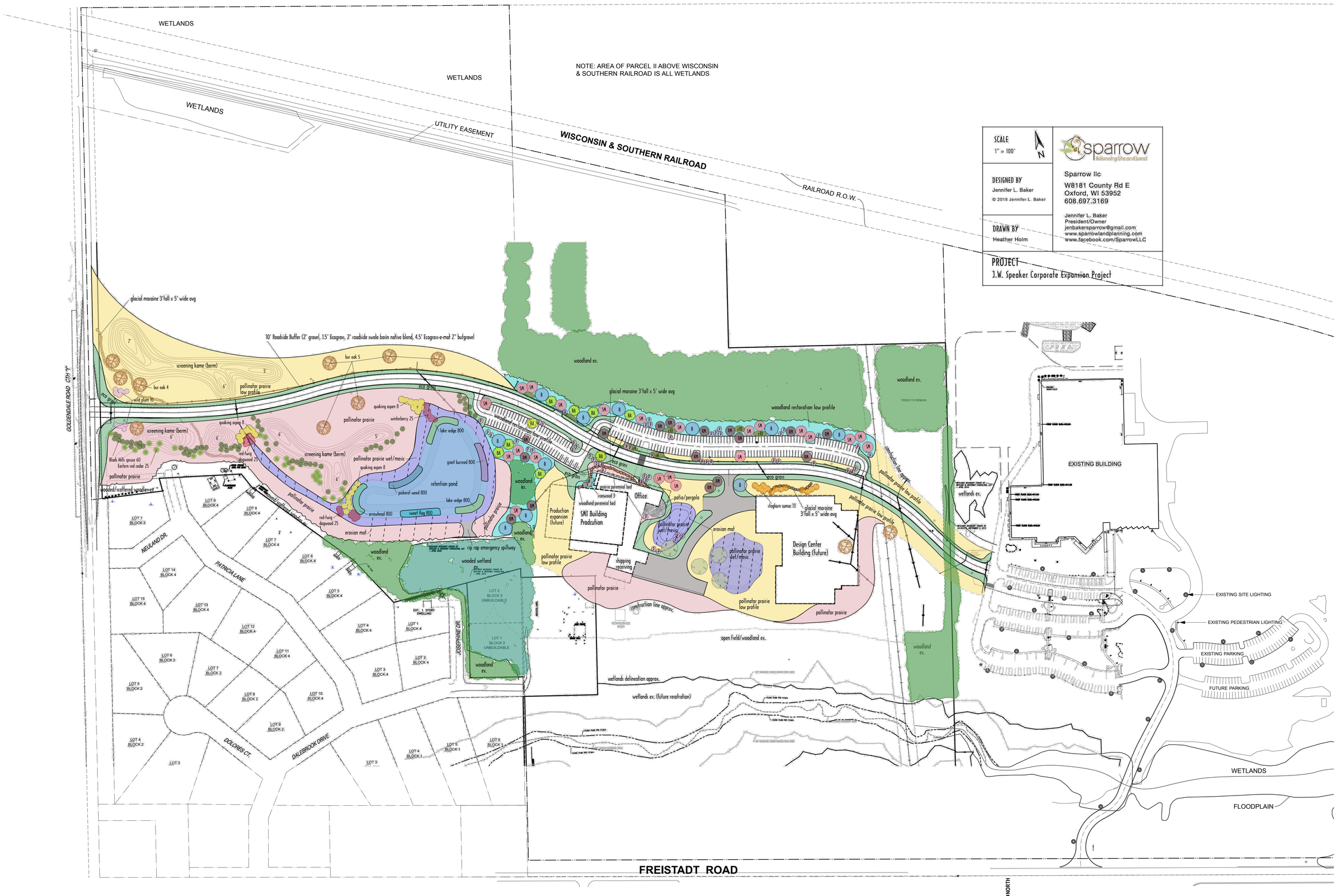

1 C1.10 **SITE LANDSCAPING PLAN**
Scale: 1" = 125'

TKWA

The Kubala Washatko Architects, Inc.
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Cedarburg, WI 53012
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PROJECT

J.W. SPEAKER
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LANDSCAPE DESIGN

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www.sparrowlandplanning.com

W8181 County Road E
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REVISIONS

DATE
May 21, 2018

TKWA PROJECT NUMBER
219417

SHEET TITLE

Site Landscaping Plan

SHEET NUMBER

C1.10

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J.W. Speaker Corporate Expansion Project

Landscape Design Construction Notes

		Detail	Amt	Unit
Prep				
wetland restoration (invasive tree & shrub removal, dumped organic/inorganic fill removal/off-site disposal)			11.00	acres
cultivate proposed seeding areas as needed			23.00	acres
SMT perennial beds		cultivation (7") to break up compaction prior to topsoil spread	6,310	sq. ft.
Materials				
Glacial Moraines, 820' longx3' ave. ht.x5'ave. width				
	local fieldstone	4' boulders (9)	440	tons
		3' boulders (8)	172	tons
		2' boulders (7)	55	tons
SMT flagstone patio, 2,000 sq. ft.				
	Sandy Creek or approved equal	1"-2"x24"-36" sorted	27	tons
	pergola	15'x20', cedar	1	each
SMT aggregate buffer, per 1,000 sq. ft.				
	crushed gravel w/fines	size 3/4" to 2" depth as base	8	tons
	Merrimac	even blend 1/2" & 1" rounded stone to a 2" depth as topdress	8	tons
Seed Blends				
	roadside swale basins, per acre			
	Carex annectens	Small Yellow Fox Sedge	16.00	oz
	Carex scoparia	Lance-fruited Oval Sedge	16.00	oz
	Carex vulpinoidea	Fox Sedge	40.00	oz
	Juncus balticus	Baltic Rush	16.00	oz
	Juncus canadensis	Canada Rush	8.00	oz
	Juncus dudleyi	Dudley's Rush	8.00	oz
	Juncus effusus	Common Rush	8.00	oz
	nurse crop: *Echinochloa crusgalli*	barnyard grass	1	lbs
	pollinator prairie, wet mesic, per acre			
	Anemone canadensis	Canada Anemone	2.00	oz
	Asclepias incarnata	Red Milkweed	3.00	oz
	Doellingeria umbellatus	Flat-topped Aster	2.00	oz
	Helenium flexuosum	Purple-headed Sneezeweed	1.00	oz
	Heliopsis helianthoides	Ox-Eye Sunflower	4.00	oz
	Hibiscus laevis	Rose Mallow	1.75	oz
	Iris versicolor	Northern Blue Flag	5.00	oz
	Iris virginica var. shrevei	Southern Blue Flag	5.00	oz
	Liatris pycnostachya	Prairie Blazingstar	5.00	oz
	Lobelia siphilitica	Great Blue Lobelia	1.75	oz
	Monarda fistulosa	Wild Bergamot	1.75	oz
	Parthenium integrifolium	Wild Quinine	1.75	oz
	Physostegia virginiana	Obedient Plant	1.75	oz
	Pycnanthemum virginianum	Mountain Mint	1.00	oz
	Rudbeckia hirta	Black-Eyed Susan	1.75	oz
	Rudbeckia subtomentosa	Sweet Black-Eyed Susan	1.75	oz
	Silphium integrifolium	Rosinweed	5.00	oz
	Silphium terebinthenaceum	Prairie Dock	5.00	oz
	Solidago ohioensis	Ohio Goldenrod	1.75	oz
	Solidago rigida	Stiff Goldenrod	1.75	oz
	Symphyotrichum novae-angliae	New England Aster	3.00	oz
	Teucrium canadense	Germander	1.75	oz
	Tradescantia ohiensis	Spiderwort	1.75	oz
	Zizia aurea	Golden Alexanders	1.75	oz
	Calamagrostis canadensis	Bluejoint Grass	3.00	oz
	Carex annectens	Small Yellow Fox Sedge	4.25	oz
	Carex bicknellii	Copper Shouldered Oval Sedge	8.50	oz
	Carex scoparia	Lance-fruited Oval Sedge	8.25	oz
	Carex vulpinoidea	Fox Sedge	7.00	oz
	Glyceria canadensis	Rattlesnake Grass	8.25	oz
	Juncus balticus	Baltic Rush	5.00	oz
	Juncus canadensis	Canada Rush	2.50	oz
	Juncus dudleyi	Dudley's Rush	1.75	oz
	Juncus effusus	Common Rush	2.50	oz
	Juncus torreyi	Torrey's Rush	2.50	oz
	nurse crop: *Echinochloa crusgalli*	barnyard grass	1.00	lbs
	pollinator prairie, per acre			
	Allium cernuum	Nodding Pink Onion	2.25	oz
	Asclepias syriaca	Common Milkweed	2.25	oz
	Asclepias tuberosa	Butterflyweed	4.50	oz
	Dalea purpurea	Purple Prairie Clover	5.00	oz
	Echinacea pallida	Pale Purple Coneflower	3.50	oz
	Echinacea purpurea	Purple Coneflower	3.50	oz
	Gentiana flavida	Cream Gentian	1.50	oz
	Heliopsis helianthoides	Early Sunflower	1.50	oz
	Liatris pycnostachya	Prairie Blazingstar	4.50	oz
	Monarda fistulosa	Bergamot	1.50	oz
	Parthenium integrifolium	Wild Quinine	2.25	oz
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.50	oz
	Ratibida pinnata	Yellow Coneflower	1.50	oz
	Rudbeckia hirta	Black-Eyed Susan	1.50	oz
	Rudbeckia subtomentosa	Sweet Black-Eyed Susan	1.50	oz
	Silphium laciniatum	Compassplant	2.00	oz
	Silphium terebinthinaceum	Prairie Dock	2.00	oz
	Solidago rigida	Stiff Goldenrod	1.50	oz
	Symphyotrichum laeve	Smooth Blue Aster	1.50	oz
	Symphyotrichum novae-angliae	New England Aster	1.50	oz
	Tradescantia ohiensis	Spiderwort	2.25	oz
	Carex annectens	Small Yellow Fox Sedge	2.00	oz
	Carex bicknellii	Copper Shouldered Oval Sedge	8.00	oz
	Carex vulpinoidea	Fox Sedge	2.00	oz
	Bouteloua curtipendula	Sideoats Grama	35.00	oz
	Sorghastrum nutans	Indiangrass	9.00	oz
	Sporobolus heterolepis	Prairie Dropseed	7.00	oz
	nurse crop: *triticum aestivum* (fall)/*avena sativa* (spring)	winter wheat/oats	35/25	lbs
	pollinator prairie, low profile, per acre			
	Allium cernuum	Nodding Pink Onion	3.00	oz
	Asclepias syriaca	Common Milkweed	3.00	oz
	Asclepias tuberosa	Butterflyweed	5.50	oz
	Dalea purpurea	Purple Prairie Clover	5.50	oz
	Echinacea pallida	Pale Purple Coneflower	4.00	oz
	Echinacea purpurea	Purple Coneflower	4.00	oz
	Gentiana flavida	Cream Gentian	2.00	oz
	Heliopsis helianthoides	Early Sunflower	2.00	oz
	Monarda fistulosa	Bergamot	1.50	oz
	Parthenium integrifolium	Wild Quinine	3.00	oz
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.50	oz
	Rudbeckia hirta	Black-Eyed Susan	1.50	oz
	Rudbeckia subtomentosa	Sweet Black-Eyed Susan	2.00	oz
	Symphyotrichum laeve	Smooth Blue Aster	4.00	oz
	Tradescantia ohiensis	Spiderwort	3.00	oz
	Carex annectens	Small Yellow Fox Sedge	2.00	oz
	Carex bicknellii	Copper Shouldered Oval Sedge	8.00	oz
	Carex vulpinoidea	Fox Sedge	2.00	oz
	Bouteloua curtipendula	Sideoats Grama	54.00	oz
	Sporobolus heterolepis	Prairie Dropseed	8.00	oz
	nurse crop: *triticum aestivum* (fall)/*avena sativa* (spring)	winter wheat/oats	35/25	lbs

	woodland restoration, low profile, per acre			
	Delphium exaltatum	Tall Larkspur	16.50	oz
	Dodecatheon meadia	Midland Shooting Star	16.50	oz
	Polygonatum biflorum	Solomon's Seal	30.00	oz
	Penstemon hirsutus	Hairy Beardtongue	30.00	oz
	Polemonium reptans	Jacob's Ladder	22.00	oz
	Rudbeckia triloba	Brown-Eyed Susan	22.00	oz
	Smilicina racemosa	Solomon's Plume	11.00	oz
	Solidago ulmifolia	Elm-leaved Goldenrod	11.00	oz
	Symphyotrichum cordifolium	Heart-leaved Aster	8.25	oz
	Carex brevior	Plains Oval Sedge	16.50	oz
	Carex gravida	Long-awned Bracted Sedge	2.75	oz
	Carex molesta	Field Oval Sedge	1.25	oz
	Carex shortiana	Short's Sedge	11.00	oz
	Diarrhena obovata	American Beak Grass	22.00	oz
	nurse crop: *triticum aestivum* (fall)/*avena sativa* (spring)	winter wheat/oats	35/25	lbs
	turfgrass, per acre	Eco-Grass fescue blend	260	lbs
	nurse crop	winter wheat/oats	35/25	lbs
woodland perennial bed, 1,585 sq. ft.				
	steel edging	16'x4"x1/8" sections	96	feet
	topsoil	screened, 2" to augment topsoil as	10.00	yards
	activated garden soil	50/50 topsoil/Purple Cow Activated	10.00	yards
gt	Bowman's Root, *Gillenia trifoliata*	quart, 3' o.c.	67	each
aco	Heart-Leaved Aster, *Aster cordifolius*	quart, 1.5' o.c.	114	each
pr	Jacob's Ladder, *Polemonium reptans*	quart, 1.5' o.c.	114	each
mdi	Red Beebalm, *Monarda didyma*	quart, 1.5' o.c.	114	each
c-rad	Straight-Styled Wood Sedge, *Carex radiata*	quart, 1.5' o.c.	114	each
ppi	Wild Blue Phlox, *Phlox divaricata*	quart, 1.5' o.c.	114	each
sf	ZigZag Goldenrod, *Solidago flexicaulis*	quart, 1.5' o.c.	114	each
	hardwood mulch	twice shredded, 1" depth	5.00	yards
Prairie perennial bed, 4,725 square feet				
	steel edging	16'x4"x1/8" sections	250	feet
	topsoil	screened, 2" to augment topsoil as	30.00	yards
	activated garden soil	50/50 topsoil/Purple Cow Activated organic composted leaf mulch as 2" topdress	30.00	yards
ag	Big Bluestem, *Andropogon gerardii*	2' o.c., quart	80	each
al	Bluebird Smooth Aster, *Aster laevis* 'Bluebird'	1.5' o.c., quart	80	each
ana	Purple Dome Aster, *Aster novae-angliae* 'Purple Dome'	1.5' o.c., quart	80	each
at	Butterflyweed, *Asclepias tuberosa*	1.5' o.c.	80	each
cp	Prairie Coreopsis, *Coreopsis palmata*	1.0' o.c., quart	80	each
dm	Shooting Star, *Dodecatheon meadia*	plug	302	each
epu-ft	Flame Thrower Coneflower, *Echinacea purpurea* 'Flame Thrower'	quart, 1.5' o.c.	80	each
epu-wb	Wild Berry Purple Coneflower, *Echinacea purpurea* 'PowWow Wild Berry'	1' o.c., quart	80	each
gt	Prairie Smoke, *Geum triflorum*	1' o.c., plug	213	each
hh	Prairie Sunset Sunflower, *Heliopsis helianthoides* 'Prairie Sunset'	1.5' o.c., gallon	57	each
ll	Meadow Blazingstar, *Liatris ligulistylus*	0.25' o.c., plug	851	each
mdi	Gardenview Scarlet Bee Balm, *Monarda didyma* 'Gardenview Scarlet'	1.5' o.c., quart	80	each
pp	Early Start Pink Phlox, *Phlox paniculata* 'Early Start Light Pink'	1' o.c., gallon	80	each
pyv	Virginia Mountain Mint, *Pycnanthemum virginianum*	1.5' o.c., quart	80	each
rf	Early Bird Gold Rudbeckia, *Rudbeckia fulgida* 'Early Bird Gold'	1.5' o.c., gallon	132	each
scs	Little Bluestem, *Schizachyrium scoparium*	1.5' o.c., quart	397	each
sh	Prairie Dropseed, *Sporobolus heterolepis*	2' o.c., gallon	198	each
sl	Compassplant, *Silphium laciniatum*	2' o.c., quart	85	each
so	Ohio Goldenrod, *Solidago ohioensis*	1.5' o.c., quart	80	each
	hardwood mulch	twice shredded, 1" depth	15.00	yards
trees & shrubs				
b	American Beech, *Fagus grandiflora*	#10	11	each
	American Filbert, *Corylus americana*	#5, 5' o.c.	60	each
ba	Basswood, *Tilia americana*	2" BB	9	each
	American Cranberry, *Viburnum trilobum*	#5	0	each
	Black Hills Spruce, *Picea glauca 'Densata'*	7' BB, 12' o.c.	60	each
	Black Chokeberry, *Aronia melanocarpa*	#5	0	each
bo	Bur Oak, *Quercus macrocarpa*	2" BB	13	each
	Buttonbush, *Cephalanthus occidentalis*	#5	0	each
	Elderberry, *Sambucus canadensis*	#5	0	each
	Meadowsweet, *Spiraea alba*	#5	0	each
	Nannyberry, *Viburnum lentago*	#5	0	each
	Eastern Red Cedar, *Juniperus virginiana*	#10	25	each
	Ironwood, *Carpinus caroliniana*	2.5" BB	3	each
	Quaking Aspen, *Populus tremuloides*	2" BB, 15' o.c.	24	each
rm	Red Maple, *Acer rubrum*	2.5" BB	16	each
	Speckled Alder, *Alnus rugosa*	#10	0	each
	Red-Twig Dogwood, *Cornus sericea*	#5, 5' o.c.	50	each
	Staghorn Sumac, Rhus typhina	72' potted	13	each
	Swamp Rose, *Rosa palustris*	#5	0	each
sm	Sugar Maple, *Acer saccharum*	2.5" BB	22	each
	Tamarack, *Larix laricina*	#15	0	each
p	Wild Plum, *Prunus americana*	#10	62	each
	Winterberry, *Ilex verticillata*	#5, 5' o.c.	25	each
	tree guards (deciduous trees)	3'x36", white	173	each
	Treegator (deciduous trees)		173	each
	hardwood mulch	twice shredded, 1.5' radius & 2" depth	17.18	yards
emergents (phase II install, 2019 growing season)				
	Common Arrowhead, *Sagittaria latifolia*	3" pot, 2' o.c.	800	each
	Giant Bur Reed, *Sparganium eurycarpum*	3" pot, 2' o.c.	800	each
	Lake Sedge, *Carex lacustris*	3" pot, 2' o.c.	1,600	each
	Pickerelweed, *Pontederia cordata*	bare root, 2' o.c.	800	each
	Sweet Flag, *Acorus americanus*	3" pot, 2' o.c.	800	each
Straw Mulch (all seeded areas not covered by E-mat), per acre				
		winter wheat, 2 tons/acre, weed free	100	bales
Erosion Fabric, 3:1 and steeper slopes, per acre		Curlex I, 100 yard rolls	48	rolls
		4" metal	20	boxes

SCALE
1" = 100'
N

DESIGNED BY
Jennifer L. Baker
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DRAWN BY
Heather Holm

sparrow
Balancing Life and Land

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REVISIONS

DATE
May 21, 2018

TKWA PROJECT NUMBER
219417

SHEET TITLE
Site Landscaping Notes

SHEET NUMBER
C1.11

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CIVIL ENGINEERING PLANS

FOR

J.W. SPEAKER CAMPUS DRIVEWAY AND INFRASTRUCTURE

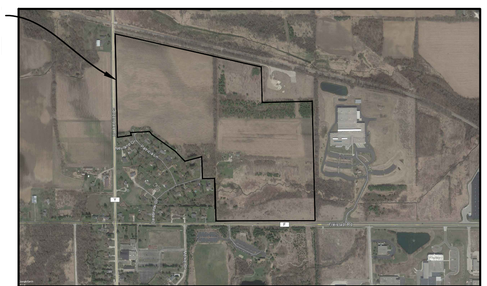
GERMANTOWN, WI

PLANS PREPARED FOR

J.W. SPEAKER. Engineered. Lighting. Solutions.

N120W19434 FREISTADT ROAD
GERMANTOWN, WI 53022

PROJECT LOCATION



LOCATION MAP
SCALE: NTS

NORTH

LEGEND

	EXISTING	PROPOSED
SANITARY SEWER MANHOLE	S	
STORM SEWER MANHOLE		
STORM SEWER CATCH BASIN (ROUND CASTING)		
STORM SEWER CATCH BASIN (RECTANGULAR CASTING)		
PRECAST FLARED END SECTION		
CONCRETE HEADWALL		
AIR RELEASE ASSEMBLY		
VALVE BOX		
FIRE HYDRANT		
BUFFALO BOX		
CLEANOUT		
SANITARY SEWER		
FORCE MAIN		
STORM SEWER		
DRAIN TILE		
WATER MAIN	W	W
FIRE PROTECTION	FP	FP
UTILITY CROSSING		X
GRANULAR TRENCH BACKFILL		
LIGHTING		
ELECTRICAL CABLE	E	E
OVERHEAD WIRES	OHW	OHW
GAS MAIN	G	G
TELEPHONE LINE	T	T
CAUTION EXISTING UTILITIES NEARBY		CAUTION
ELECTRICAL TRANSFORMER OR PEDESTAL	E	
POWER POLE		
POWER POLE WITH LIGHT		
GUY WIRE		
STREET SIGN		
CONTOUR	749	749
SPOT ELEVATION	×(750.00)	+750.00
WETLANDS	WET	
PRIMARY ENVIRONMENTAL CORRIDOR	PEC	
FLOODWAY		
FLOODPLAIN		
HIGH WATER LEVEL (HWL)		
NORMAL WATER LEVEL (NWL)		
DIRECTION OF SURFACE FLOW		GRADE / PAVEMENT
DITCH OR SWALE		
DIVERSION SWALE		
OVERFLOW RELIEF ROUTING		
TREE WITH TRUNK SIZE	6" 6"	
SOIL BORING	B-3	B-1
TOPSOIL PROBE	B-2	B-1
FENCE LINE, TEMPORARY SILT	SF	SF
FENCE LINE, WIRE		
FENCE LINE, CHAIN LINK OR IRON		
FENCE LINE, WOOD OR PLASTIC		
CONCRETE SIDEWALK		
CURB AND GUTTER		
DEPRESSED CURB		
REVERSE PITCH CURB & GUTTER		
EASEMENT LINE		

ABBREVIATIONS

BL	BASE LINE	NWL	NORMAL WATER LEVEL
C	LONG CHORD OF CURVE	PC	POINT OF CURVATURE
C & G	CURB AND GUTTER	PT	POINT OF TANGENCY
CB	CATCH BASIN	PVI	POINT OF VERTICAL INTERSECTION
CL	CENTERLINE	R	RADIUS
D	DEGREE OF CURVE	ROW	RIGHT-OF-WAY
EP	EDGE OF PAVEMENT	SAN	SANITARY SEWER
FF	FINISHED FLOOR	ST	STORM SEWER
FG	FINISHED GRADE	T	TANGENCY OF CURVE
FL	FLOW LINE	TB	TOP OF BANK
FP	FLOODPLAIN	TC	TOP OF CURB
FR	FRAME	TF	TOP OF FOUNDATION
FW	FLOODWAY	TP	TOP OF PIPE
HWL	HIGH WATER LEVEL	TS	TOP OF SIDEWALK
INV	INVERT	TW	TOP OF WALK
L	LENGTH OF CURVE	WM	WATER MAIN
MH	MANHOLE	△	INTERSECTION ANGLE

INDEX OF SHEETS

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C-16 - C-17	INTERSECTION IMPROVEMENT PLAN
C-18 - C-20	CONSTRUCTION DETAILS & SPECIFICATIONS

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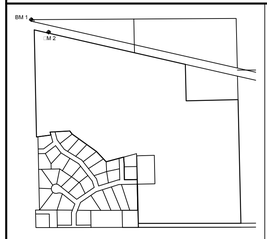

BM 1: CONCRETE MONUMENT WITH BRASS CAP AT THE NORTHWEST CORNER OF THE SOUTHWEST 1/4 SECTION 17, TOWN 9 NORTH, RANGE 20 EAST, ELEVATION = 906.02

BM 2: NGS MONUMENT G-86 CONCRETE MONUMENT WITH BRASS CAP APPROXIMATELY 220' E OF THE CENTERLINE GOLDENDALE ROAD SOUTH SIDE OF WISCONSIN & SOUTHERN RAILROAD TRACKS. ELEVATION = 902.588

GENERAL NOTES

1. [illegible]

2. [illegible]

3. [illegible]

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15. [illegible]

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J.W. SPEAKER CAMPUS DRIVEWAY AND INFRASTRUCTURE
GERMANTOWN, WI

COVER SHEET

REVISIONS

PEG JOB No. 1111.00-WI
PEG PM AEK
START DATE 01/25/18
SCALE

SHEET
C-0
C-20

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COVER SHEET

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GERMANTOWN, WI

EXISTING CONDITIONS

REVISIONS

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START DATE 01/25/18
SCALE 1"=100'

SHEET
C-1
C-20

EXISTING CONDITIONS

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J.W. SPEAKER CAMPUS DRIVEWAY AND INFRASTRUCTURE

GERMANTOWN, WI

MASTER GRADING PLAN

REVISIONS

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PEG PM AEK
START DATE 01/25/18
SCALE 1"=100'

SHEET
C-2
C-20

MASTER GRADING PLAN

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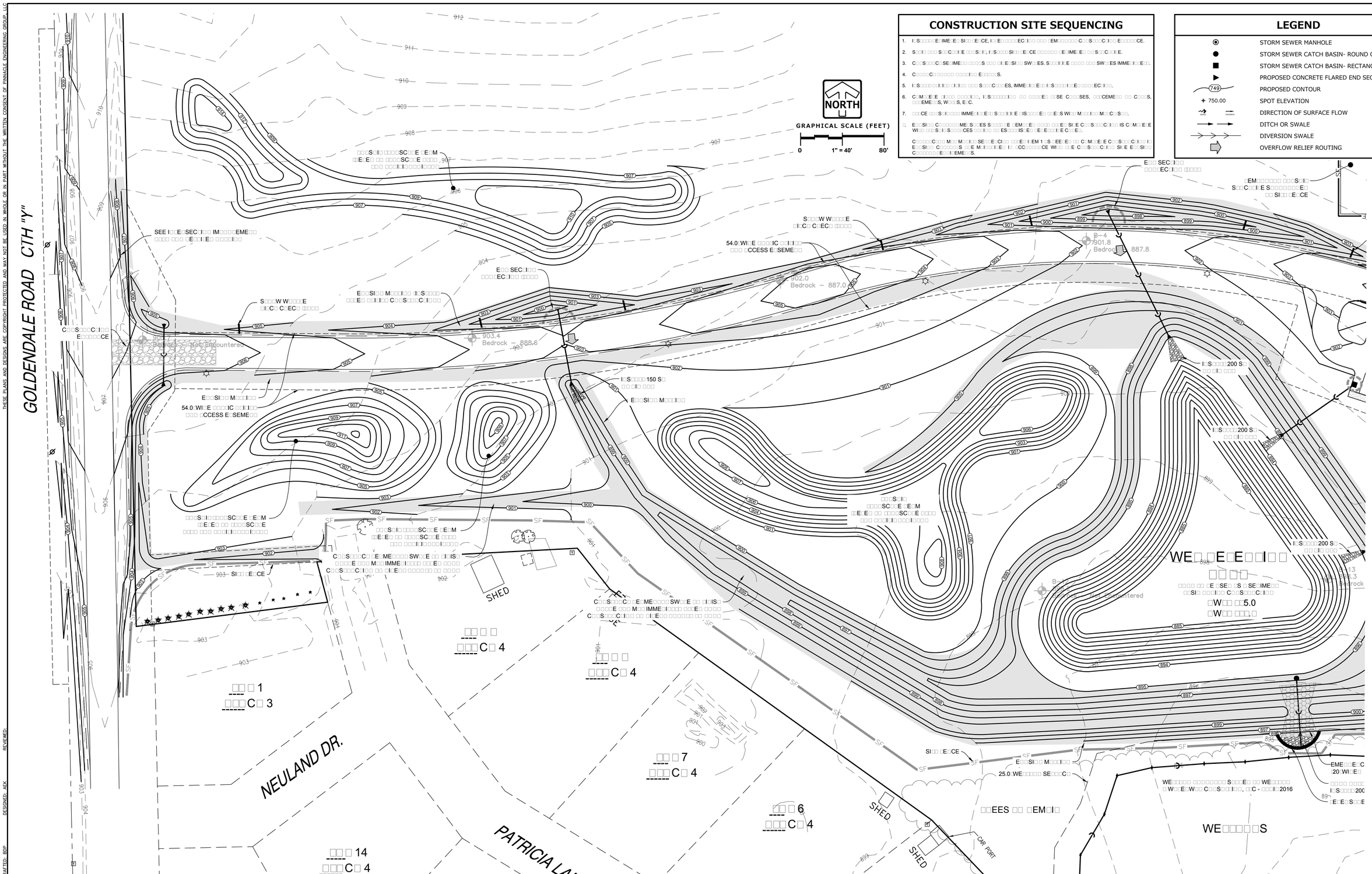

CONSTRUCTION SITE SEQUENCING

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LEGEND

- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN- ROUND CASTING
- STORM SEWER CATCH BASIN- RECTANGULAR CASTING
- PROPOSED CONCRETE FLARED END SECTION
- 749 — PROPOSED CONTOUR
- 750.00 — SPOT ELEVATION
- DIRECTION OF SURFACE FLOW
- DITCH OR SWALE
- DIVERSION SWALE
- OVERFLOW RELIEF ROUTING

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GERMANTOWN, WI

GRADING & EROSION CONTROL PLAN

REVISIONS

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START DATE 01/25/18
SCALE 1"=40'

SHEET C-3 C-20

GRADING & EROSION CONTROL PLAN

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CONSTRUCTION SITE SEQUENCING

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8. [illegible]

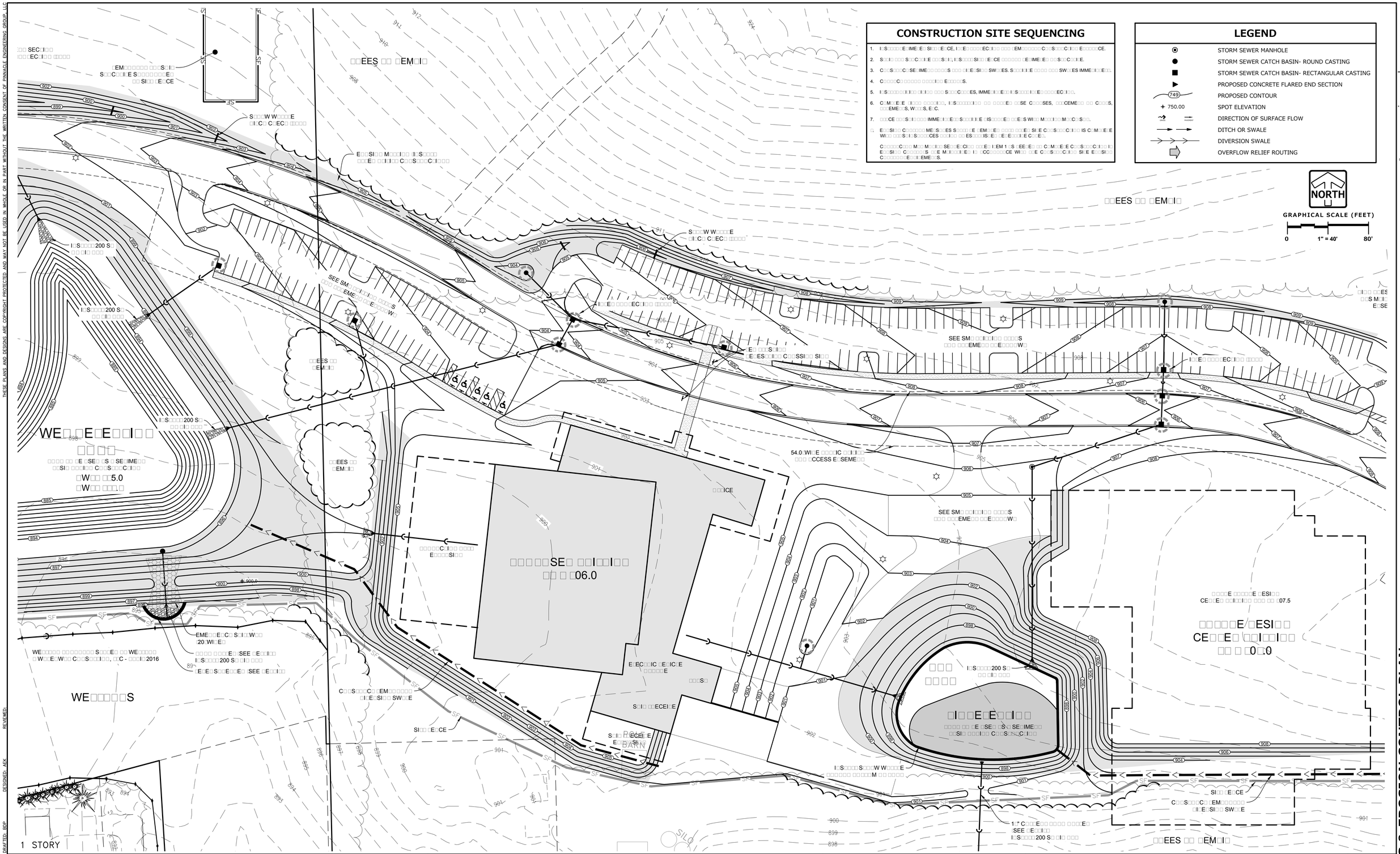
LEGEND

- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN- ROUND CASTING
- STORM SEWER CATCH BASIN- RECTANGULAR CASTING
- PROPOSED CONCRETE FLARED END SECTION
- 749 — PROPOSED CONTOUR
- ✦ 750.00 — SPOT ELEVATION
- DIRECTION OF SURFACE FLOW
- DITCH OR SWALE
- DIVERSION SWALE
- OVERFLOW RELIEF ROUTING

NORTH

GRAPHICAL SCALE (FEET)

0 — 1" = 40' — 80'



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J.W. SPEAKER CAMPUS DRIVEWAY AND INFRASTRUCTURE

GERMANTOWN, WI

GRADING & EROSION CONTROL PLAN

REVISIONS

PEG JOB No. 1111.00-WI
PEG PM: ASK
START DATE: 01/25/18
SCALE: 1"=40'

SHEET C-4 / C-20

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CONSTRUCTION SITE SEQUENCING

LEGEND

Symbol	Description
⊙	STORM SEWER MANHOLE
●	STORM SEWER CATCH BASIN- ROUND CASTING
■	STORM SEWER CATCH BASIN- RECTANGULAR CASTING
▶	PROPOSED CONCRETE FLARED END SECTION
749	PROPOSED CONTOUR
750.00	SPOT ELEVATION
GRASS / PAVEMENT	DIRECTION OF SURFACE FLOW
	DITCH OR SWALE
	DIVERSION SWALE
	OVERFLOW RELIEF ROUTING

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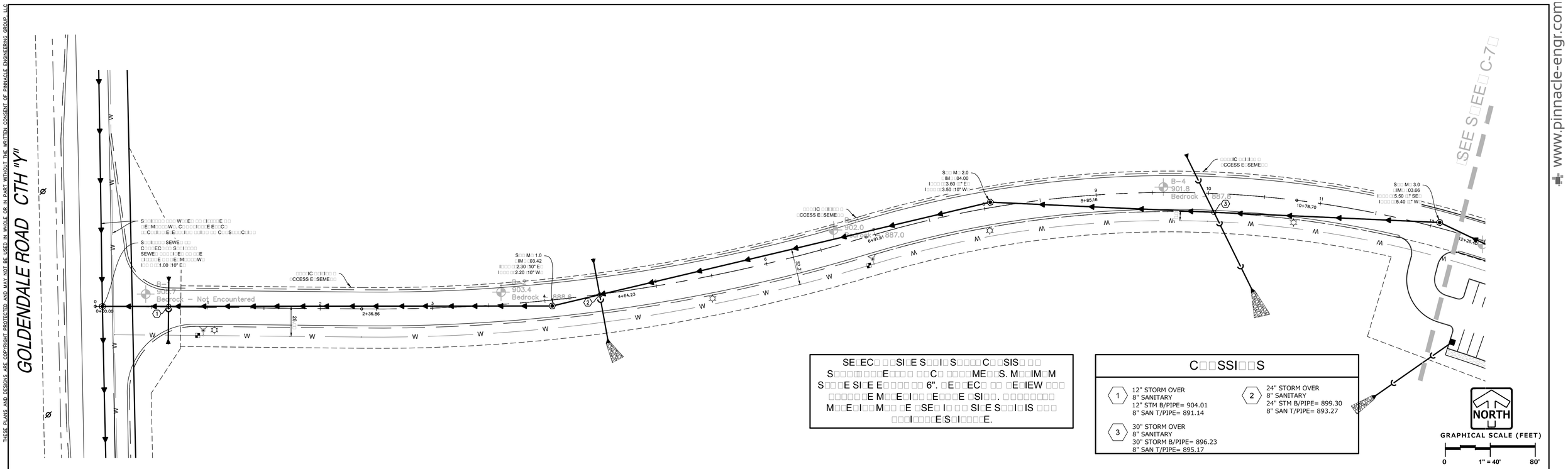

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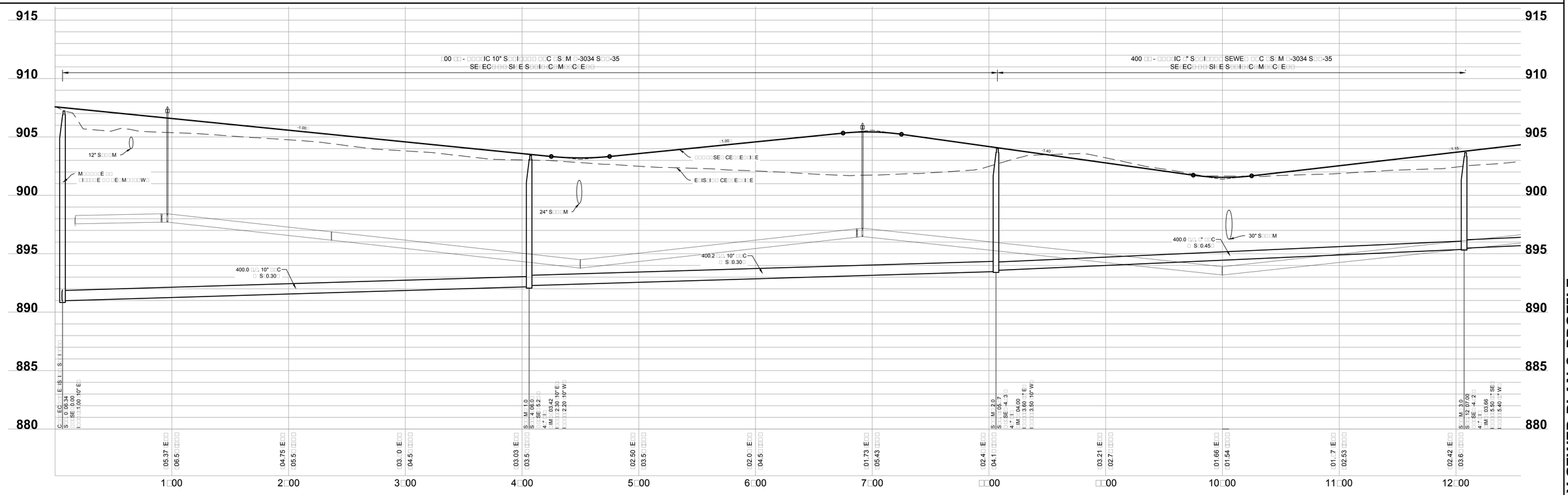
C□□SSI□□S

1. 12" STORM OVER
   8" SANITARY
   12" STM B/PIPE= 904.01
   8" SAN T/PIPE= 891.14
2. 24" STORM OVER
   8" SANITARY
   24" STM B/PIPE= 899.30
   8" SAN T/PIPE= 893.27
3. 30" STORM OVER
   8" SANITARY
   30" STORM B/PIPE= 896.23
   8" SAN T/PIPE= 895.17



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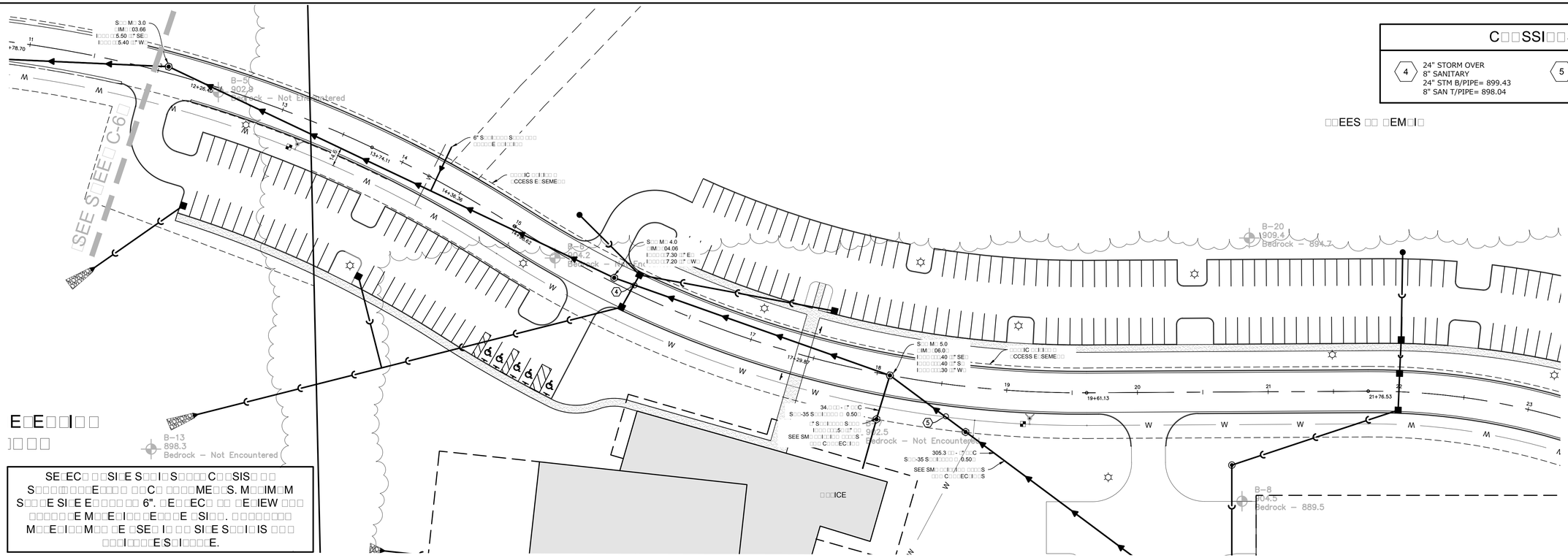

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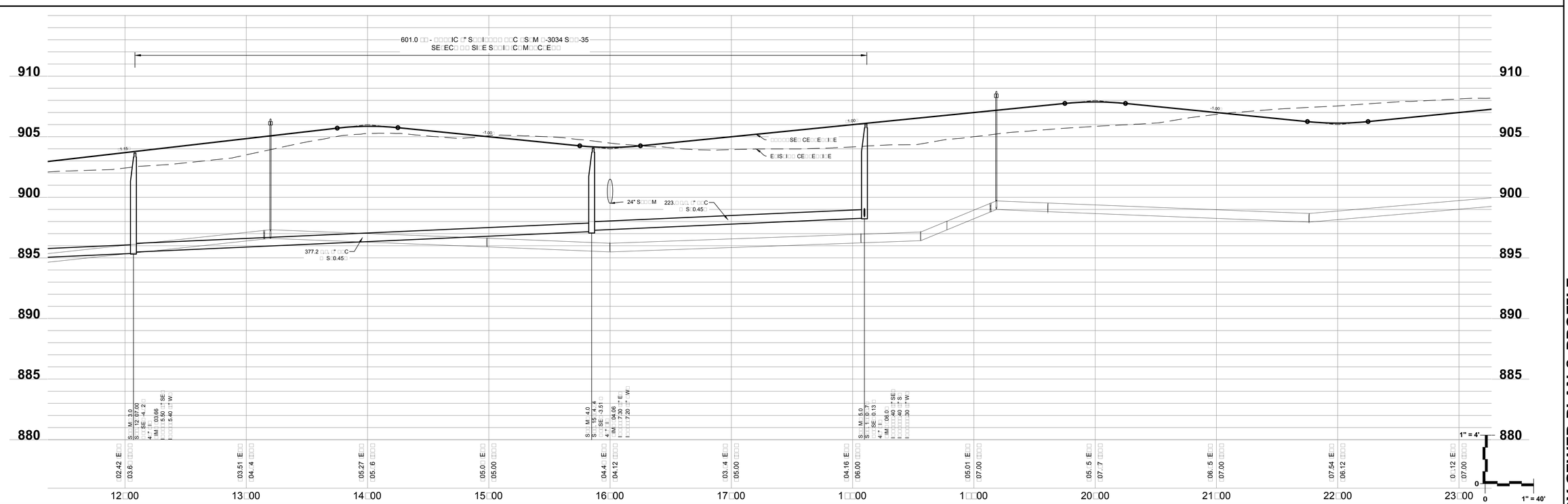

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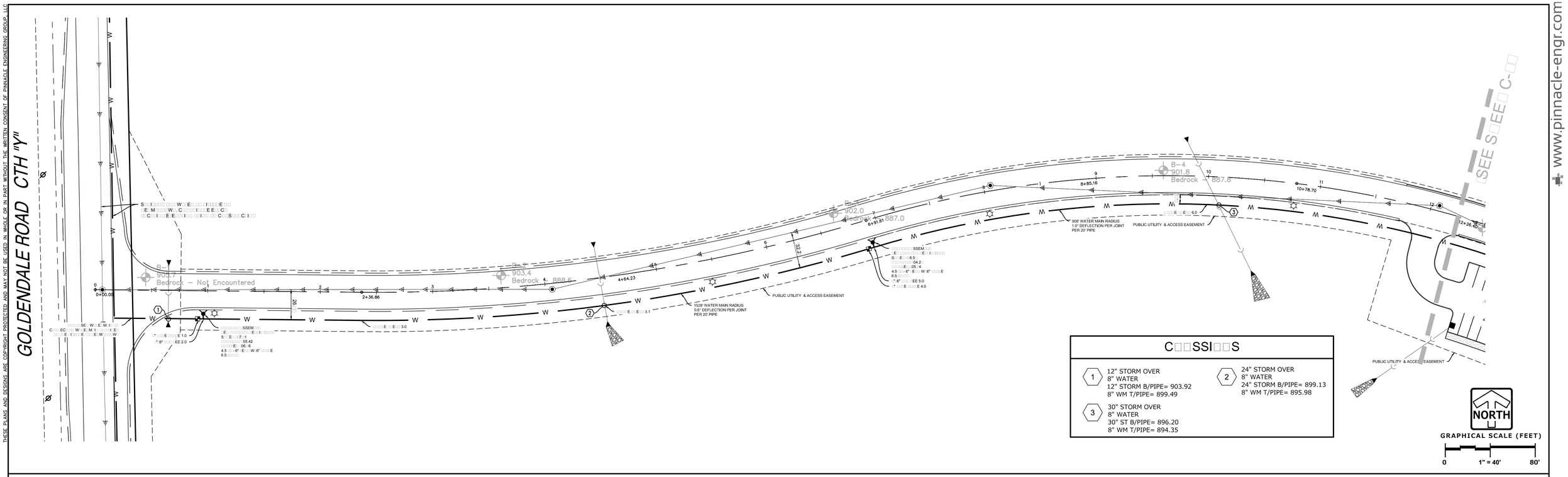

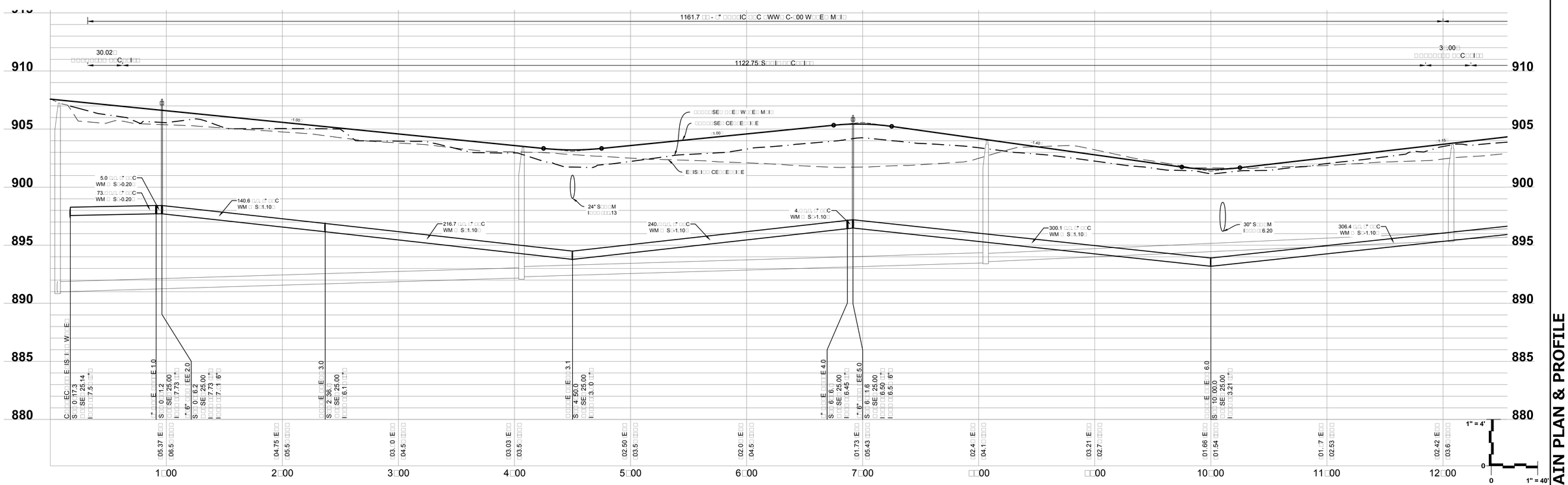

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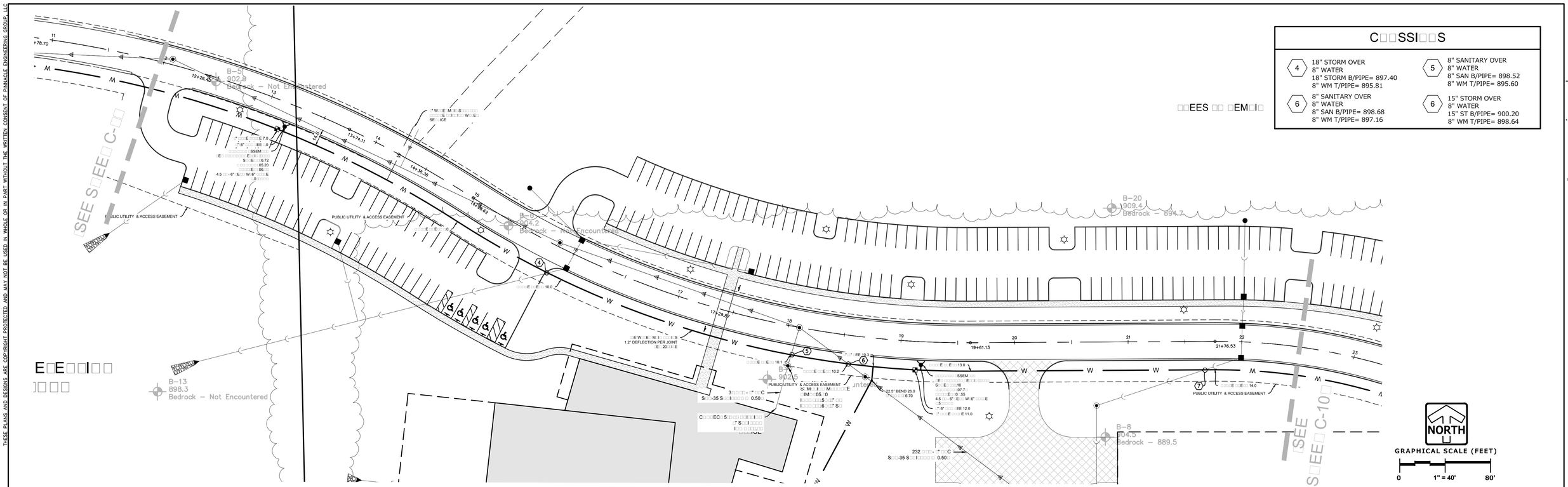

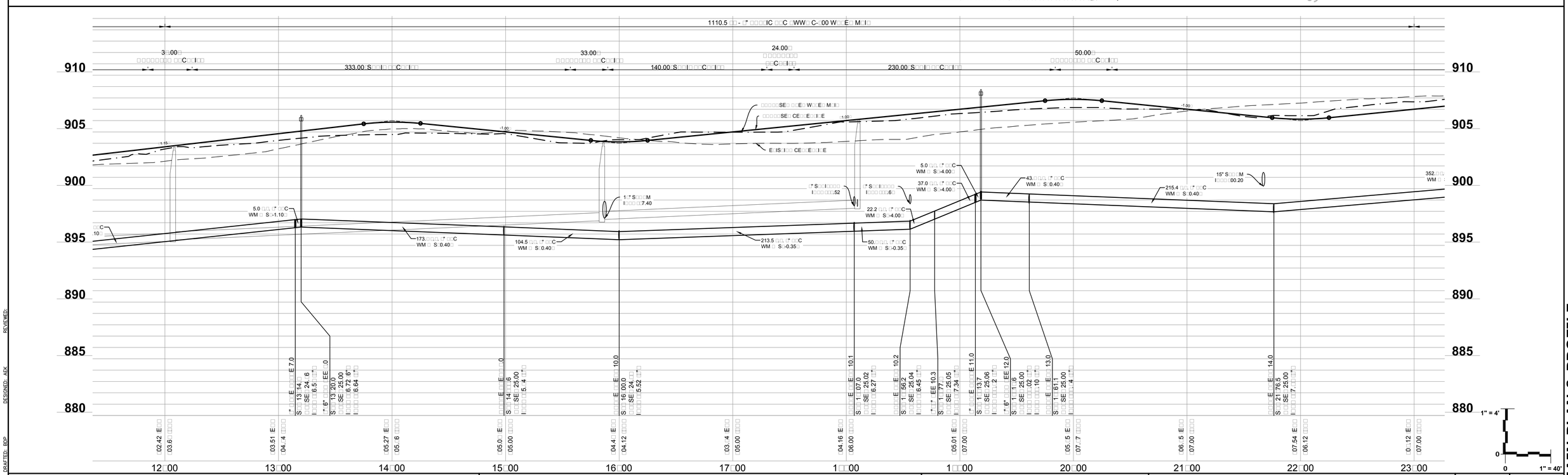

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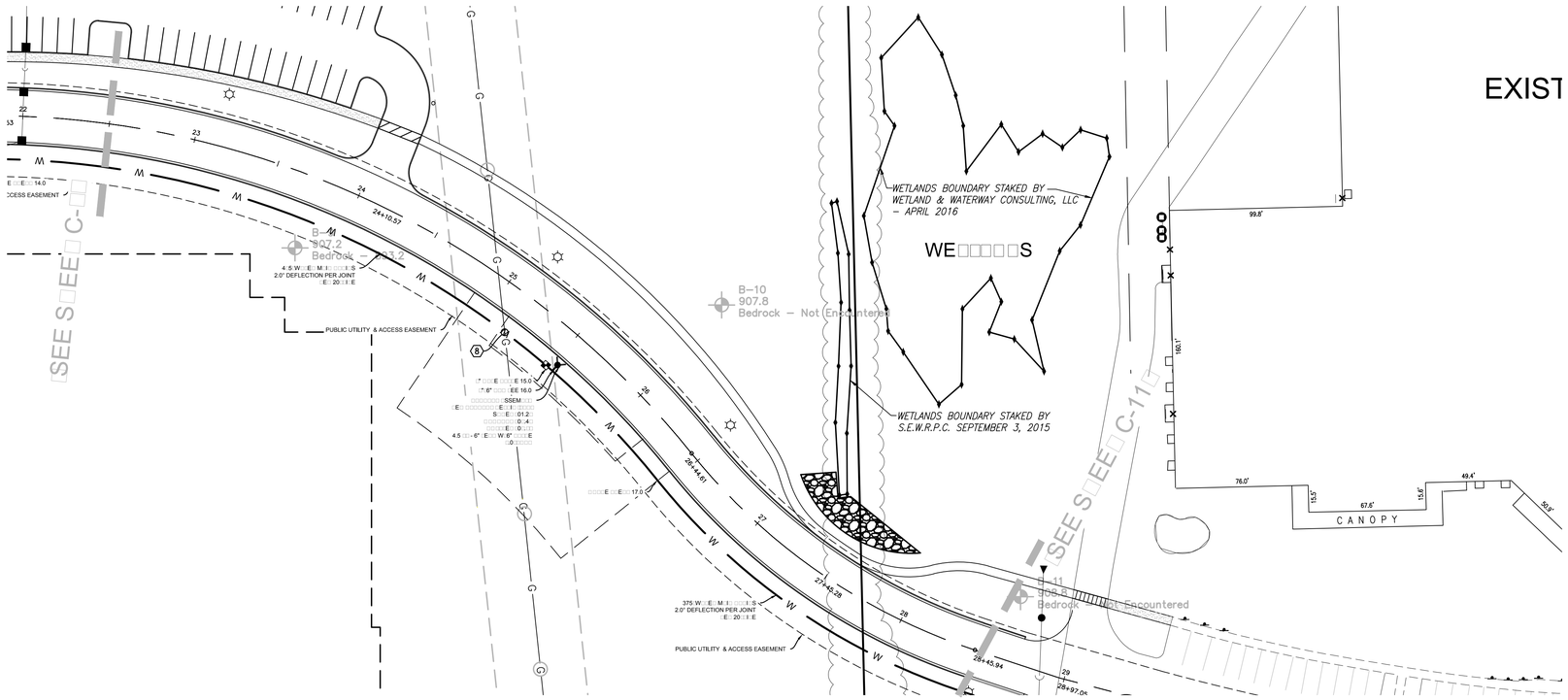

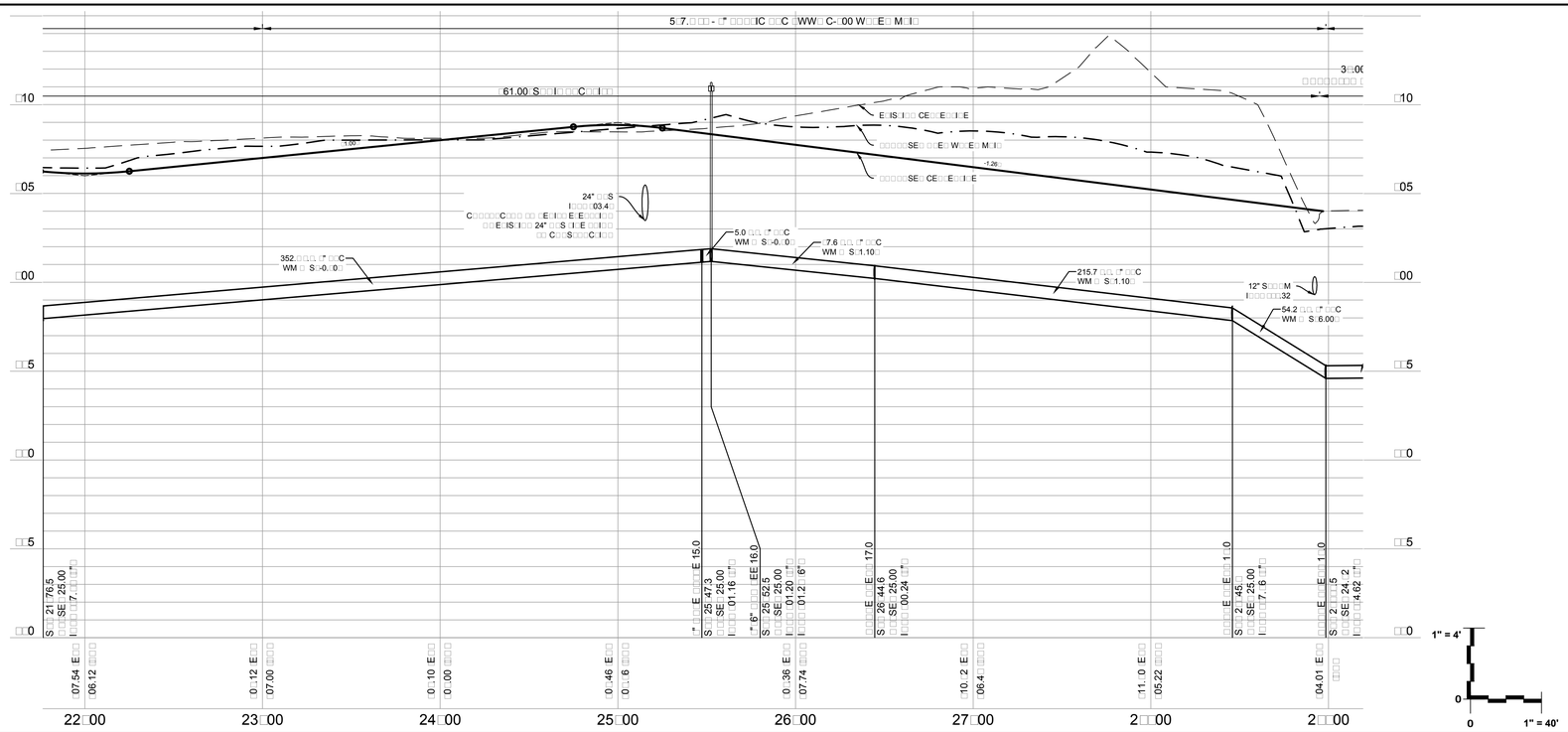

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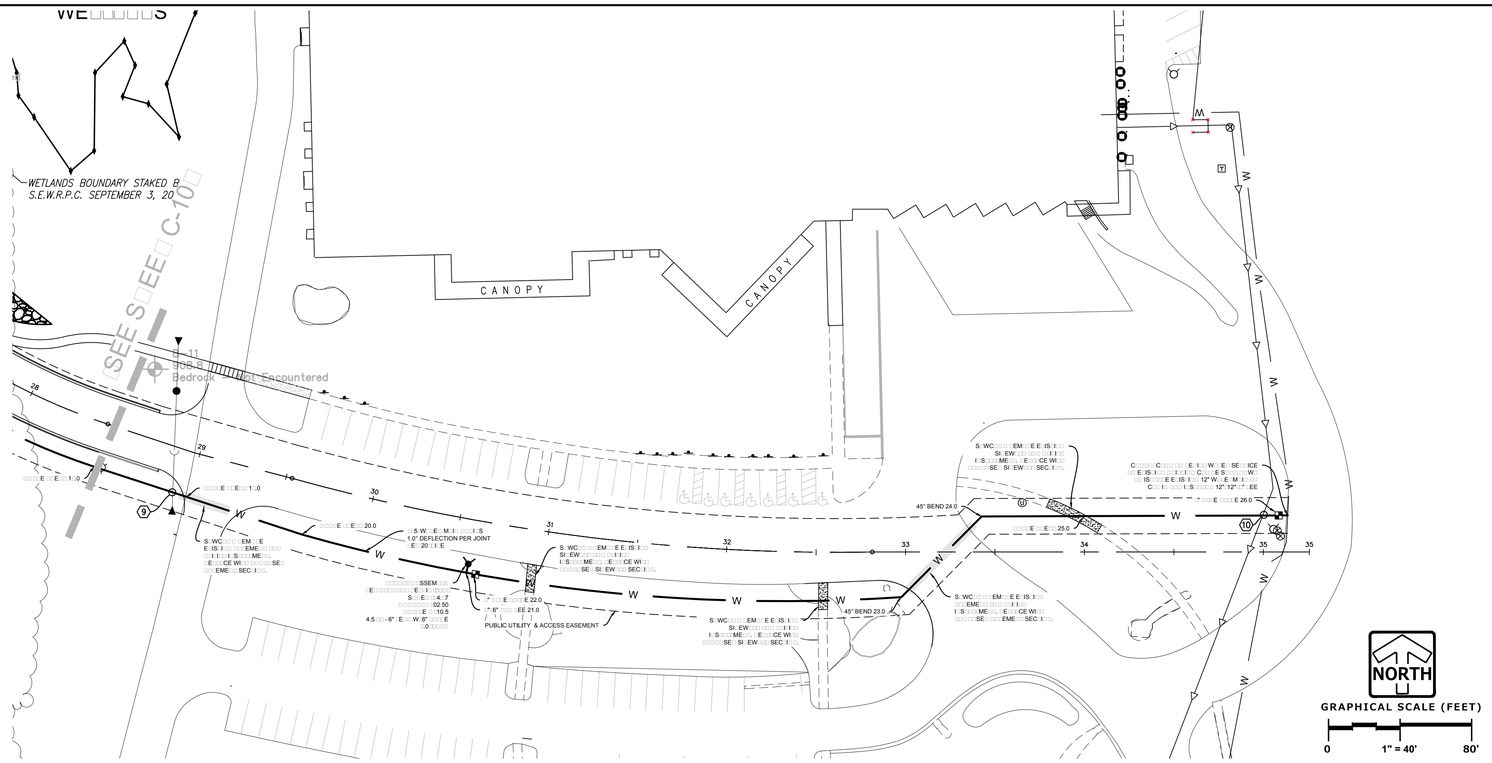
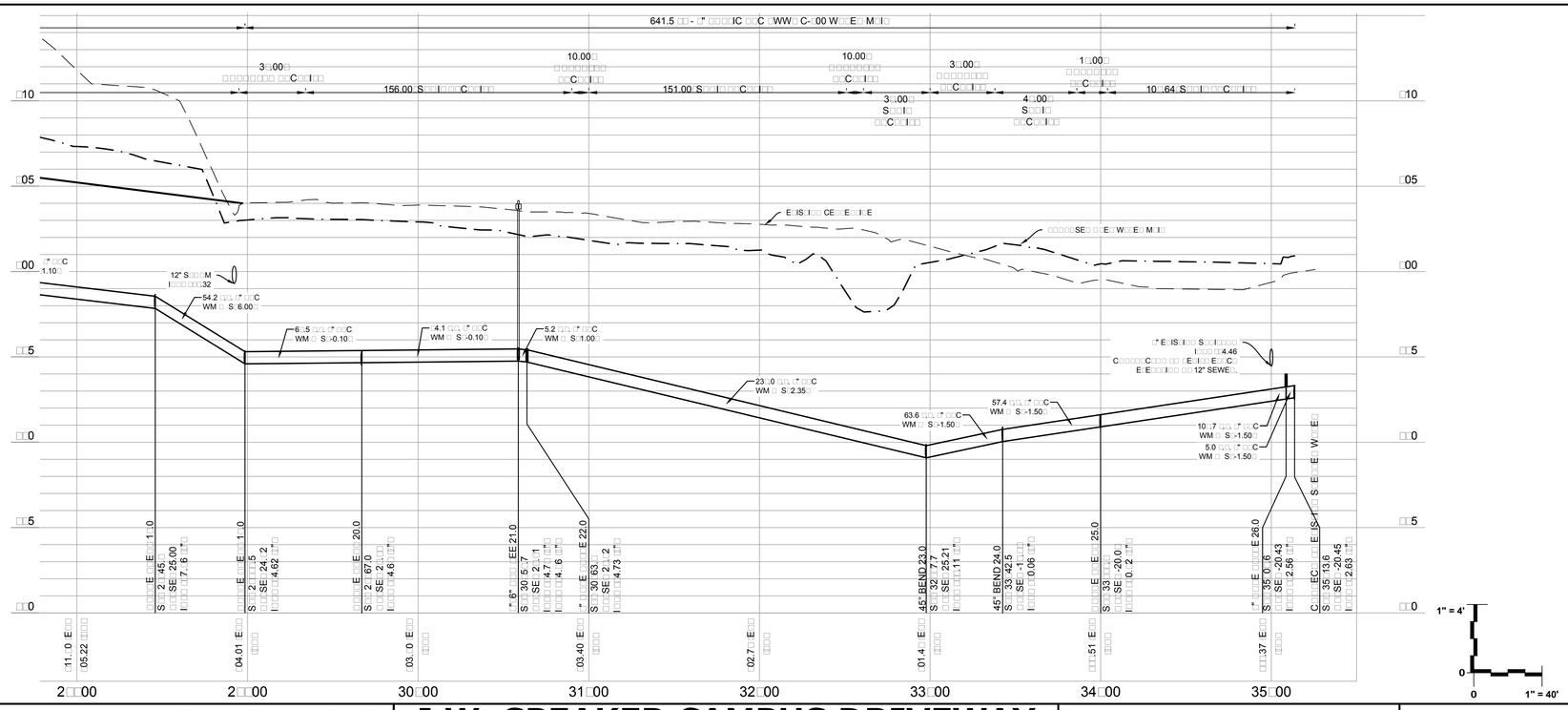


C SSI S

12" STORM OVER 8" WATER 12" STORM B/PIPE= 899.32 8" WM T/PIPE= 896.52	10 — 12" SANITARY OVER 8" WATER 12" SAN B/PIPE= 893.56 8" WM T/PIPE= 891.86



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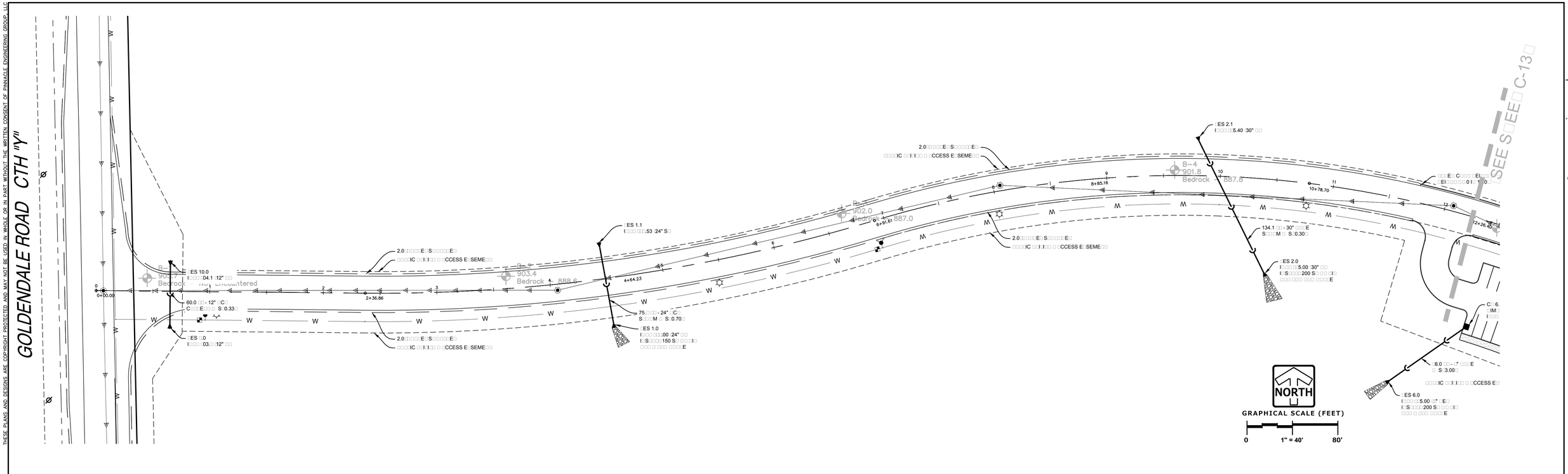

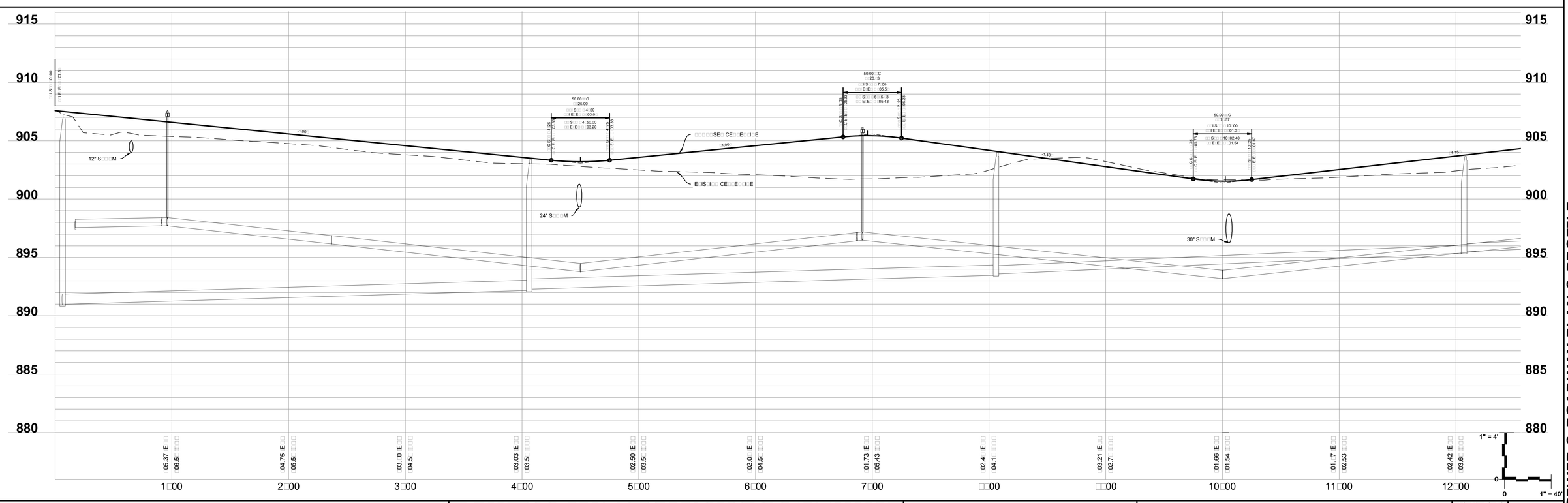

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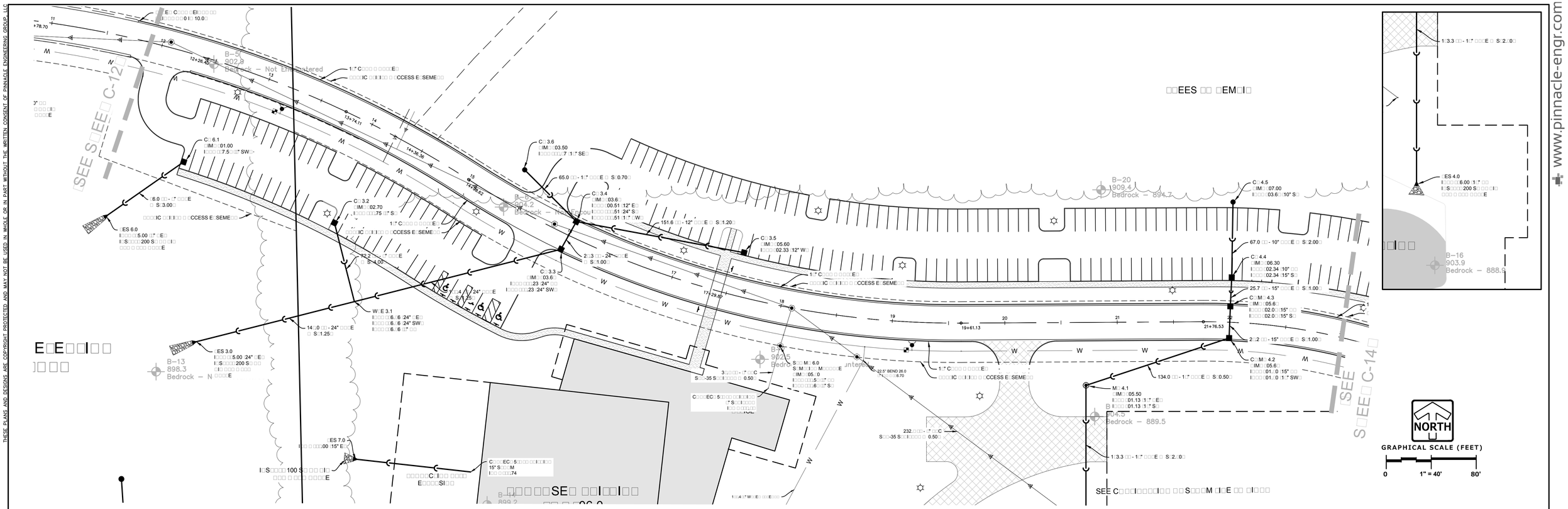

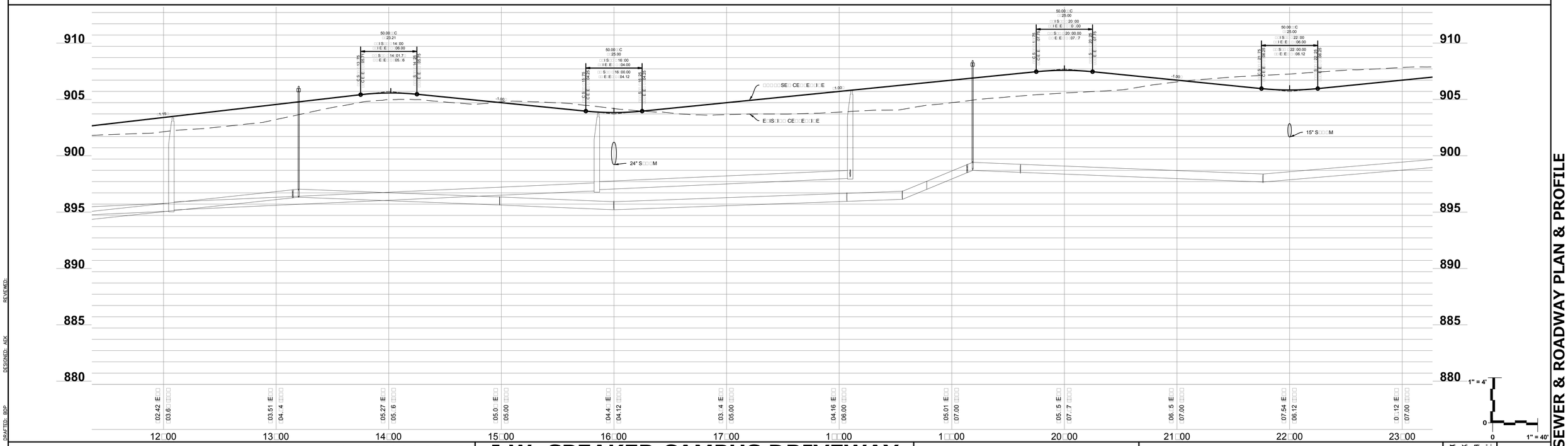

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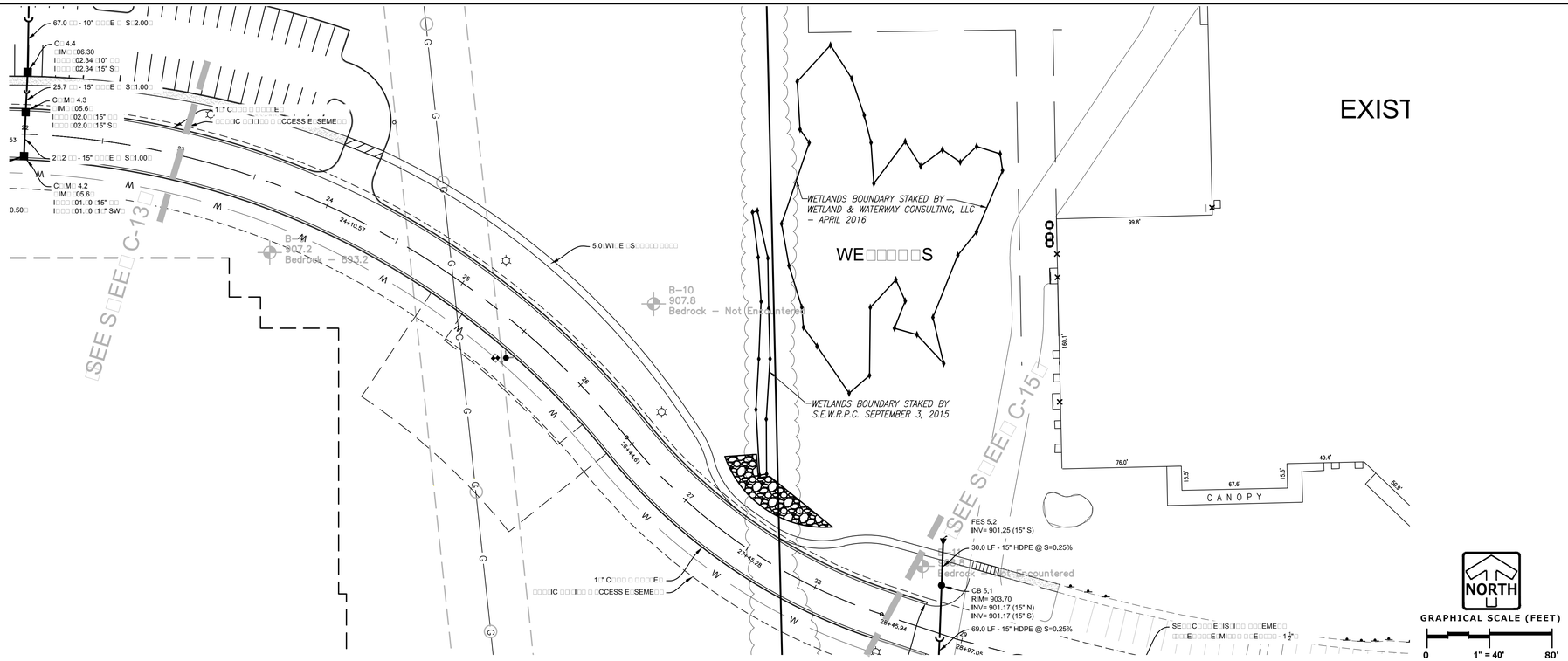

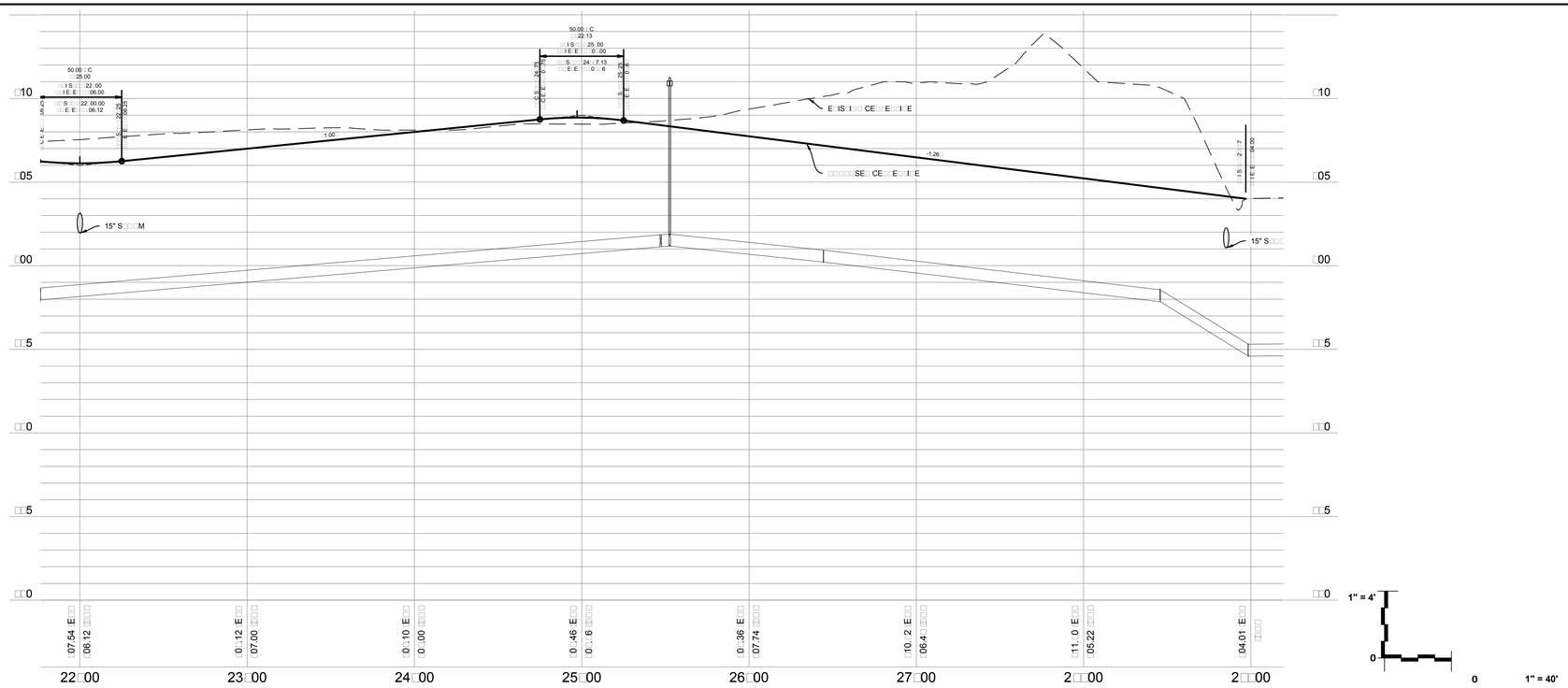

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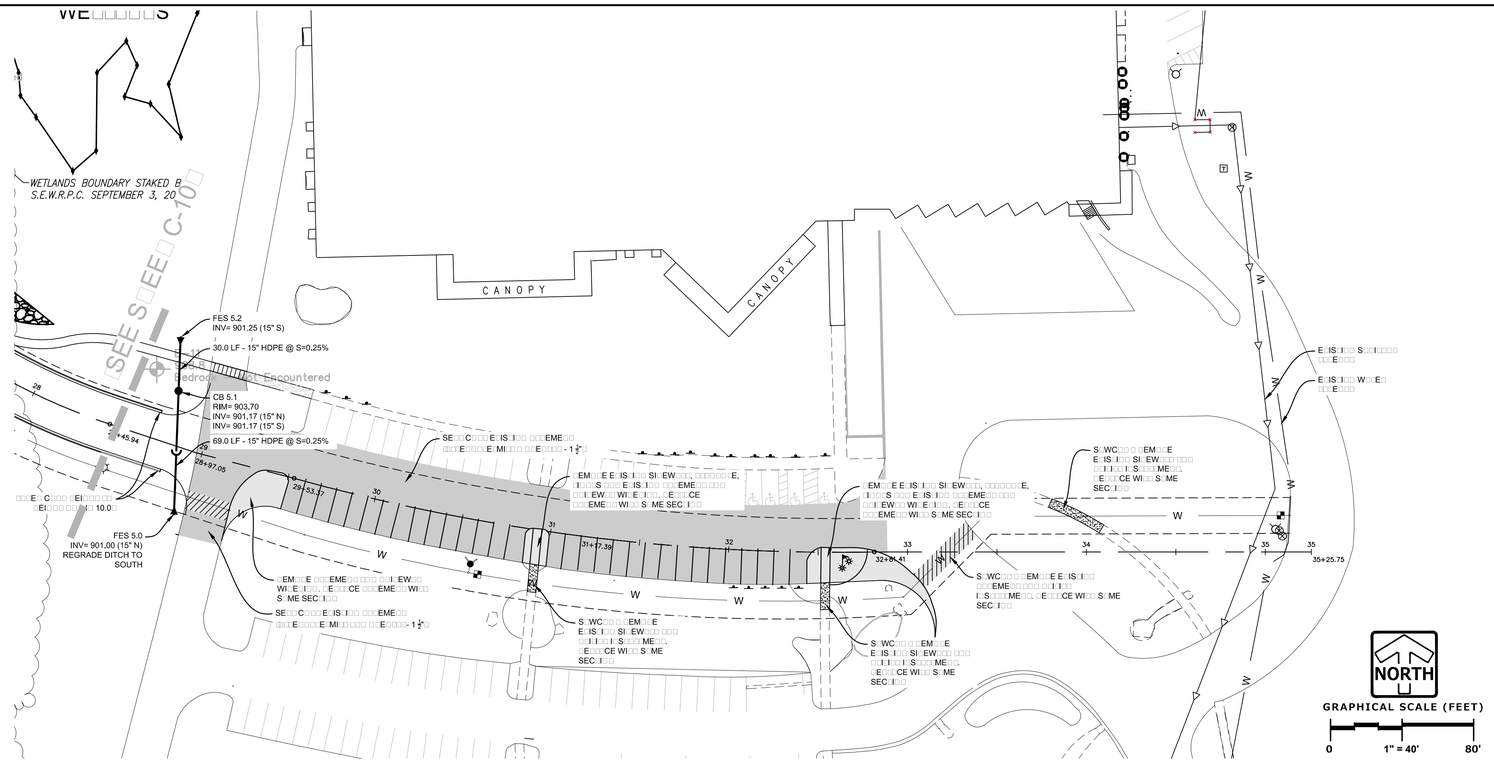

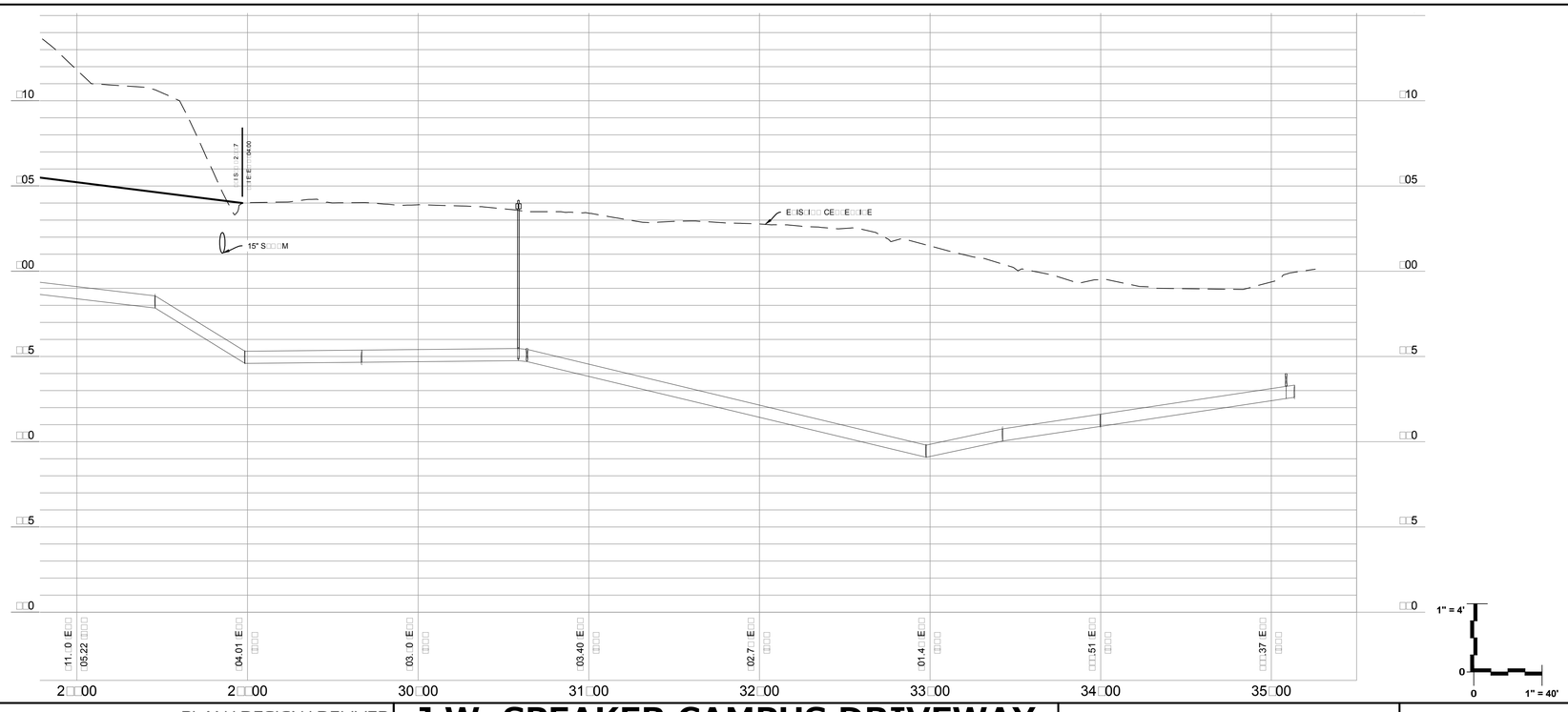

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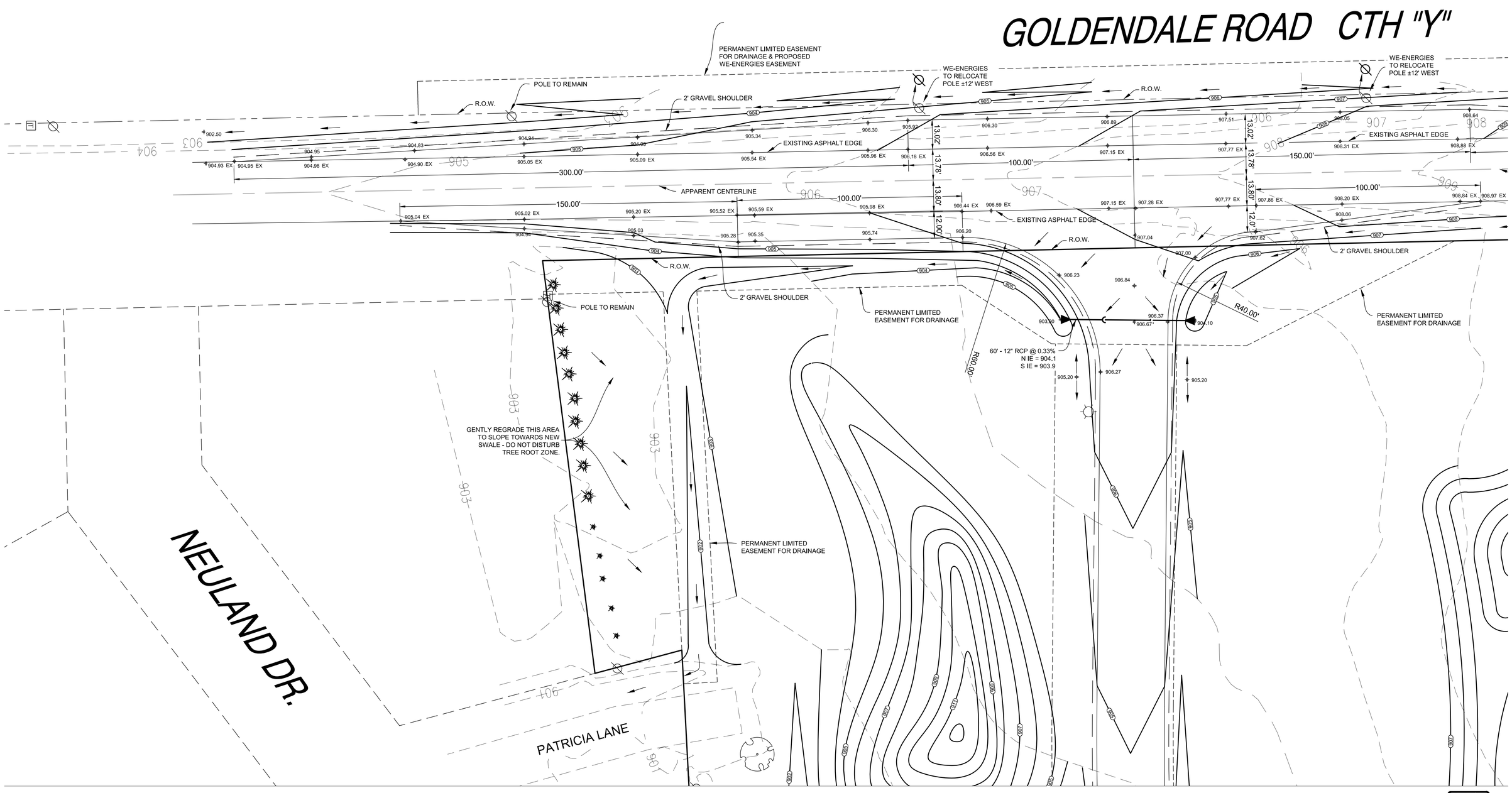

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INTERSECTION IMPROVEMENT PLAN

DRAFTED: BDP DESIGNED: AEK REVIEWED:

PLAN I DESIGN I DELIVER
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BROOKFIELD, WI 53005
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

J.W. SPEAKER CAMPUS DRIVEWAY AND INFRASTRUCTURE

GERMANTOWN, WI

INTERSECTION IMPROVEMENT PLAN

REVISIONS

PEG JOB No. 1111.00-WI
PEG PM AEK
START DATE 01/25/18
SCALE 1"=20'

SHEET
C-16
C-20

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Z:\PROJECTS\2017\1111.00-WI\CAD\SHEETS\C-17 INTERSECTION IMPROVEMENT PLAN.DWG

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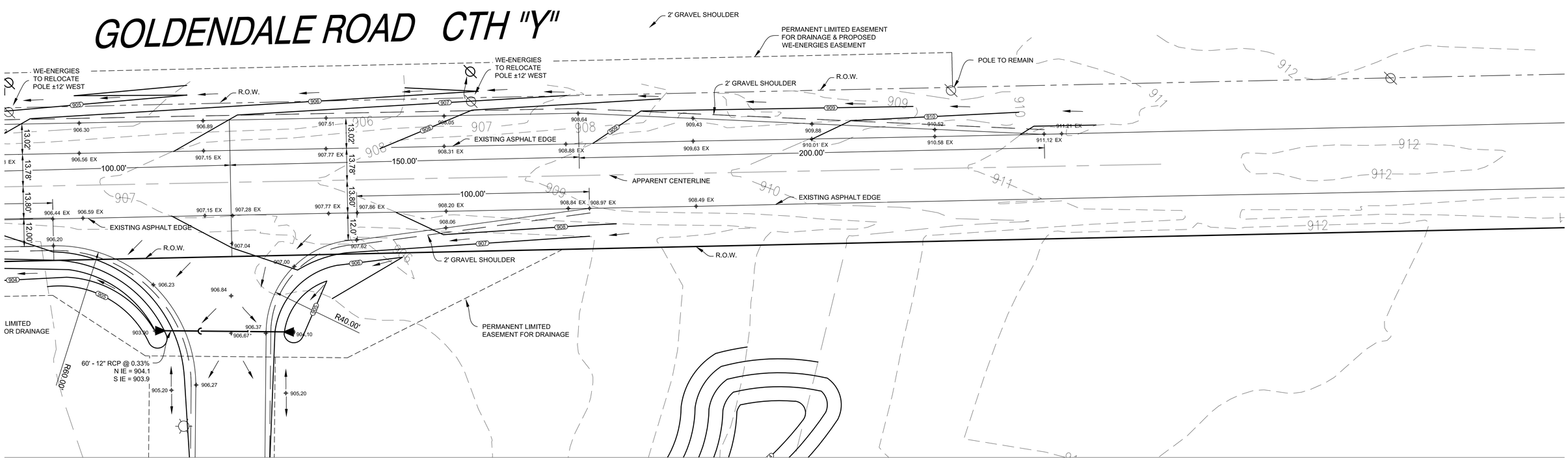

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

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1

PEG JOB No. 1111.00-WI
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SHEET
C-17
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INTERSECTION IMPROVEMENT PLAN

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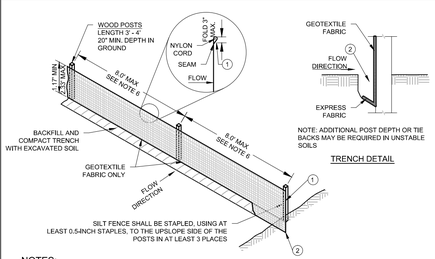


NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

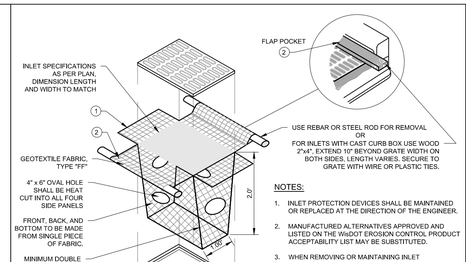
TRENCH DETAIL

NOTES:

1. ALL SILT FENCE MATERIALS AND INSTALLATION SHALL BE IN CONFORMANCE WITH WI DNR TECHNICAL STANDARD 1056.
2. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS I WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
3. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8-INCHES OF FABRIC IN A 4-INCH WIDE AND 6-INCH DEEP TRENCH OR 6-INCH DEEP V-TRENCH ON THE UPSLOPE SIDE OF THE FENCE. TRENCHES SHALL NOT BE EXCAVATED WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.
4. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
5. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1.125-INCHES x 1.125-INCHES OF DRIED OAK OR HICKORY.
6. SILT FENCE TO EXTEND ABOVE THE TOP OF PIPE, WHERE APPLICABLE.
7. POST SPACING SHALL BE SELECTED BASED ON GEOTEXTILE FABRIC (6-FEET FOR WOVEN AND 3-FEET FOR NON-WOVEN).

SILT FENCE

#150-01 05/26/15



NOTES:

1. INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.
2. MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE WisDOT EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.
3. 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.

(1) FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

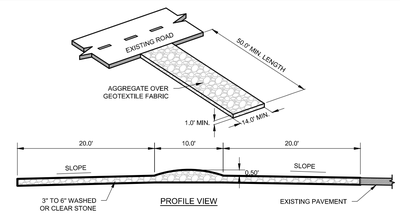
(2) FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2 INCH X 4 INCH.

INSTALLATION NOTES:

1. DO NOT INSTALL INLET PROTECTION TYPE "D" IN INLETS SHALLOWER THAN 30 INCHES, MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.
2. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.
3. THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3 INCHES. WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3 INCHES CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4 INCHES FROM THE BOTTOM OF THE BAG.

INLET PROTECTION

#100 06-20-14

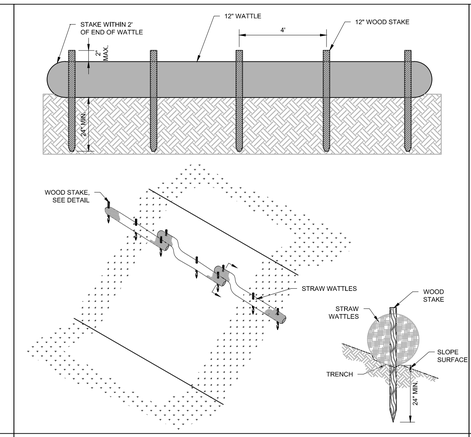


NOTES:

1. ALL TRACKING PAD MATERIALS AND INSTALLATION SHALL BE IN CONFORMANCE WITH WI DNR TECHNICAL STANDARD 1057.
2. TRACKING PADS SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE SITE. CONTRACTOR SHALL VERIFY LOCATION WITH OWNER.
3. THE AGGREGATE FOR TRACKING PADS SHALL BE 3 TO 6 INCH CLEAR OR WASHED STONE. ALL MATERIALS TO BE RETAINED ON A 3-INCH SIEVE
4. THE AGGREGATE SHALL BE PLACED IN A LAYER AT LEAST 12-INCHES THICK. ON SITES WHERE SATURATED CONDITIONS ARE EXPECTED DURING THE LIFE OF THE PAD, THE PAD SHALL BE UNDERLAIN WITH GEOTEXTILE FABRIC WHICH MEETS MATERIAL SPECIFICATION 592 GEOTEXTILE, TABLE 1 OR 2, CLASS I, II OR IV, TO PREVENT MIGRATION OF UNDERLYING SOILS INTO THE STONE LAYER.
5. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT. MINIMUM WIDTH IS 14 FEET FOR ONE-WAY TRAFFIC AND 20 FEET FOR TWO-WAY TRAFFIC, WITH AN ADDITIONAL INCREASE OF 4 FEET FOR TRAILER TRAFFIC. THE TRACKING PAD SHALL BE A MINIMUM 50-FEET LONG.
6. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, AT THE END OF EACH WORKING DAY.
7. 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.
8. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.

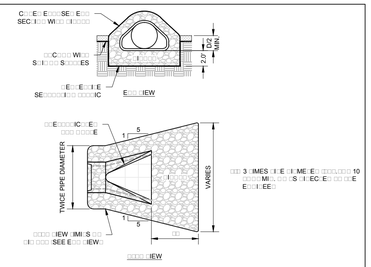
CONSTRUCTION ENTRANCE

#1005B 10-20-14



STRAW WATTLE

#137 06/01/15

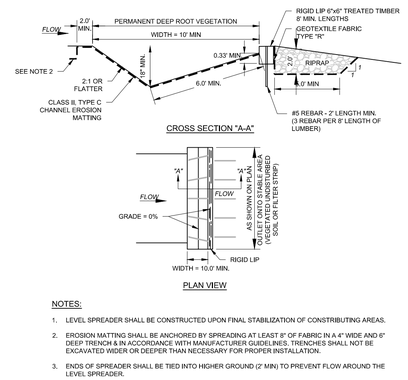


NOTES:

1. [illegible]

[illegible]

[illegible] 04 12-06-13



CROSS SECTION "A-A"

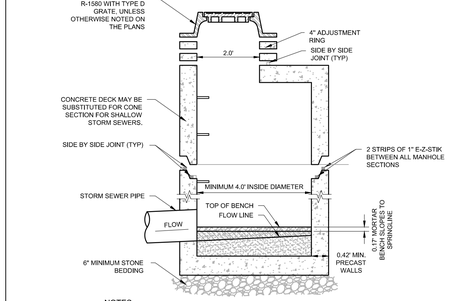
PLAN VIEW

NOTES:

1. LEVEL SPREADER SHALL BE CONSTRUCTED UPON FINAL STABILIZATION OF CONSTRIBUTING AREAS.
2. EROSION MATTING SHALL BE ANCHORED BY SPREADING AT LEAST 8" OF FABRIC IN A 4" WIDE AND 6" DEEP TRENCH & IN ACCORDANCE WITH MANUFACTURER GUIDELINES. TRENCHES SHALL NOT BE EXCAVATED WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.
3. ENDS OF SPREADER SHALL BE TIED INTO HIGHER GROUND (2' MIN) TO PREVENT FLOW AROUND THE LEVEL SPREADER.
4. OWNER OR CONTRACTOR MUST CONSULT LANDSCAPE ARCHITECT OR ECOLOGICAL PLANNING AGENCY FOR APPROPRIATE PLANTS AND PLANTING CONFIGURATIONS.

LEVEL SPREADER

#726 12/08

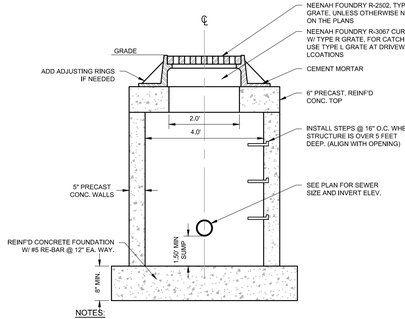


NOTES:

1. CLEAN UNDERSIDE OF ADJUSTING RING OR CAST IRON FRAME AND SET IN PLACE.
2. TUCK POINT MORTAR INTO ANNULAR CRACK AND BACKPLASTERED INSIDE AND OUTSIDE OF ALL JOINTS.
3. THE FLAT TOP MAY BE USED IN LIEU OF THE TAPERED TOP WHEN FIELD CONDITIONS PROHIBIT THE USE OF A FLAT TAPERED TOP.
4. MANHOLE CONSTRUCTION TO MEET REQUIREMENTS OF ASTM C478.
5. ECCENTRIC CONE SECTION OF MANHOLE TO BE SET OUTSIDE OF VEHICULAR WHEEL PATH NEAR ℄ OF ROADWAY.

STORM SEWER MANHOLE

#407 04/08/11

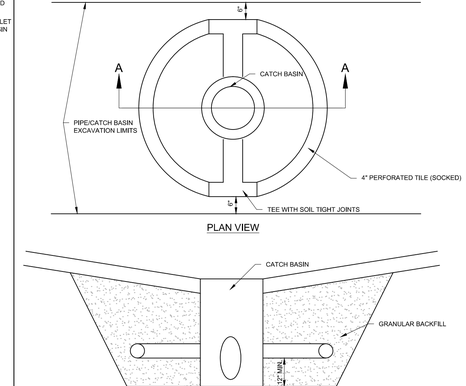


NOTES:

1. EASY STICK, RUBBER GASKET OR APPROVED EQUIVALENT SHALL BE PLACED AT ALL JOINTS BETWEEN ADJUSTING RINGS FOR STORM CATCH BASINS.
2. THE FLAT TOP MAY BE USED IN LIEU OF THE TAPERED TOP WHEN FIELD CONDITIONS PROHIBIT USE OF A TAPERED TOP.
3. STRUCTURE TO BE 4.0' DIA. OR AS INDICATED ON THE PLANS.

CATCH BASIN

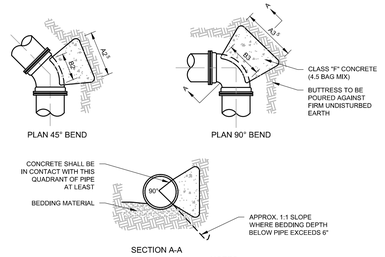
#406 04/08/11



SECTION A-A

CATCH BASIN - UNDERDRAIN

DETAIL NUMBER AND REVISION DATE



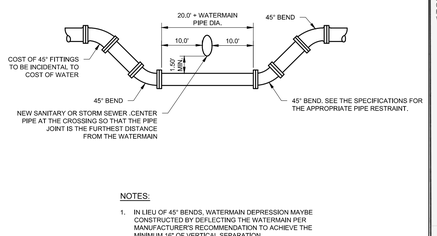
PIPE	22 1/2° BENDS		45° BENDS		90° BENDS	
SIZE	A1	B1	A2	B2	A3	B3
6"	1'-10"	1'-10"	1'-10"	1'-10"	1'-4"	1'-2"
8"	1'-0"	1'-0"	1'-4"	1'-2"	1'-10"	1'-6"
12"	1'-4"	1'-4"	1'-10"	1'-10"	2'-8"	2'-3"
16"	1'-10"	1'-8"	2'-6"	2'-4"	3'-10"	2'-10"
20"	2'-4"	2'-0"	3'-3"	2'-10"	5'-0"	3'-4"
24"	2'-10"	2'-4"	4'-0"	3'-3"	6'-4"	3'-10"
30"	3'-6"	3'-0"	5'-4"	3'-10"	8'-0"	4'-8"

NOTES:

1. PROVIDE THRUST BLOCKING TO PREVENT MOVEMENT OF LINES UNDER PRESSURE AT BENDS, TEES, CAPS, VALVES, HYDRANTS, AND AT POINTS SPECIFIED BY THE ENGINEER
2. ALL BLOCKING SHALL BE WITH POURED CLASS SI CONCRETE AGAINST UNDISTURBED VERTICAL EARTH SURFACE
3. THRUST BLOCKS TO BE AT ALL BENDS 11¼" OR GREATER
4. THE COST OF INSTALLING THE THRUST BLOCK SHALL BE INCIDENTAL TO THE CONSTRUCTION OF THE WATER
5. DIMENSION A2 & A3 SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH M.J BOLTS

THRUST BLOCK

#900 10-20-14

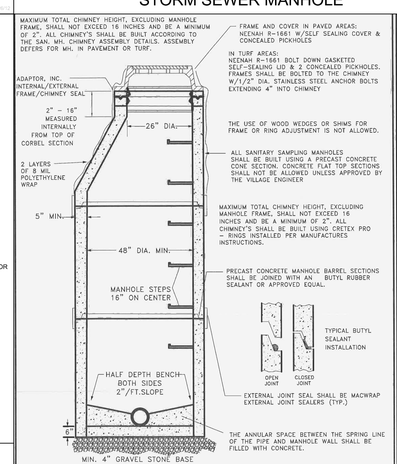


NOTES:

1. IN LIEU OF 45° BENDS, WATERMAIN DEPRESSION MAYBE CONSTRUCTED BY DEFLECTING THE WATERMAIN PER MANUFACTURER'S RECOMMENDATION TO ACHIEVE THE MINIMUM 18" OF VERTICAL SEPARATION.

WATER MAIN DEPRESSION

#908 10-20-14



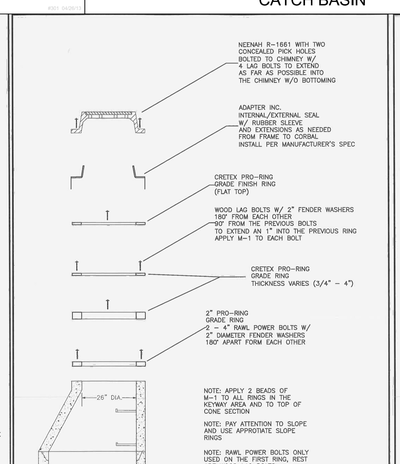
SPRAY EPOXY COATINGS — WH EXTERIOR: 2 COATS (BLACK) OF AMERON INTERNATIONAL, AMERCOAT 78 HB AT 8-10 MILS EA. WH INTERIOR: 2 COATS (WHITE) OF PERMATE PCS-9043 TYPE II PERMOX PIPE GLAZE AT 20 MILS EA. COATINGS SHALL BE APPLIED BY SUPPLIERS AT THE PLANT.

REVISED DATE: 3/10/2017 ETB

ENGINEERING DEPARTMENT Village of Germantown ...Willkommen

STANDARD SANITARY MANHOLE DETAIL

NOT TO SCALE

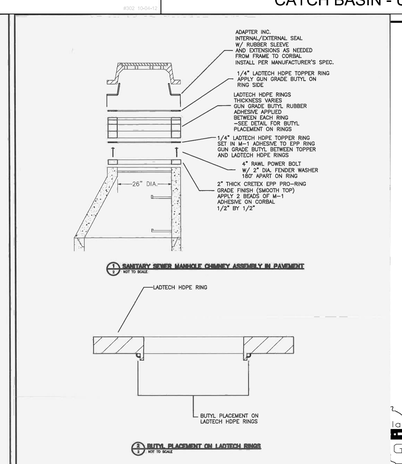


REVISED DATE: JUNE 2016

ENGINEERING DEPARTMENT Village of Germantown ...Willkommen

SANITARY MANHOLE CHIMNEY ASSEMBLY DETAIL IN TURF

NOT TO SCALE

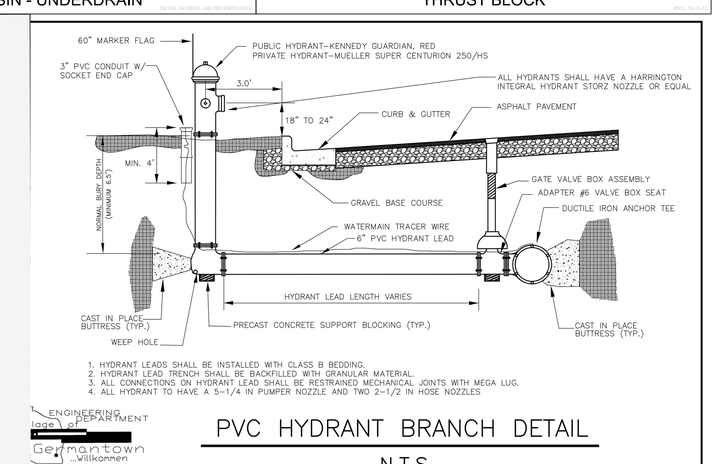


REVISED DATE: JUNE 2016

ENGINEERING DEPARTMENT Village of Germantown ...Willkommen

SANITARY MANHOLE CHIMNEY ASSEMBLY DETAIL IN PAVEMENT

NOT TO SCALE



1. HYDRANT LEADS SHALL BE INSTALLED WITH CLASS B BEDDING.
2. HYDRANT LEAD TRENCH SHALL BE BACKFILLED WITH GRANULAR MATERIAL.
3. ALL CONNECTIONS ON HYDRANT LEAD SHALL BE RESTRAINED MECHANICAL JOINTS WITH MEGA LUG.
4. ALL HYDRANT TO HAVE A 5-1/4 IN PUMPER NOZZLE AND TWO 2-1/2 IN HOSE NOZZLES

ENGINEERING DEPARTMENT Village of Germantown ...Willkommen

PVC HYDRANT BRANCH DETAIL

N.T.S.

REV. 05/5/2016

REVIEWED:
DESIGNED: AEK
DRAFTED: BDP

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GERMANTOWN, WI

CONSTRUCTION DETAILS & SPECIFICATIONS

REVISIONS
1 _____

PEG JOB No 111.00-WI
PEG PM AEK
START DATE 01/25/18
SCALE

SHEET
C-18
C-20

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CONSTRUCTION DETAILS & SPECIFICATIONS

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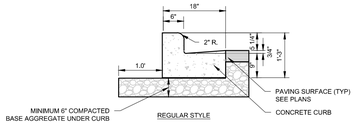
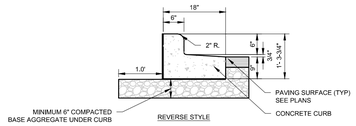
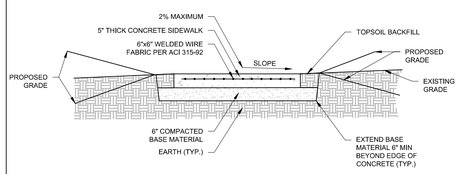




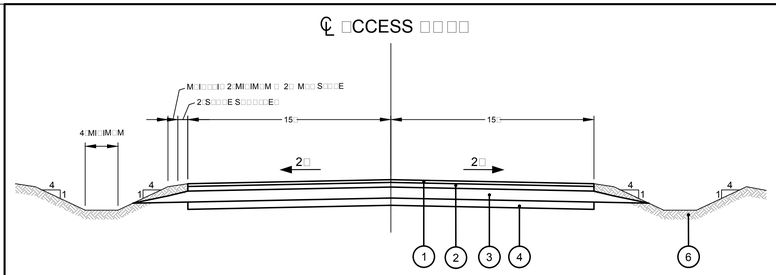
NOTES:

1. LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 10 FEET NOR LESS THAN 6 FEET. THE JOINTS SHALL BE A MINIMUM OF 3 INCHES IN DEPTH.
2. EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT ALL PT'S AND PC'S. 3 FEET EITHER SIDE OF THE CATCH BASINS IN THE CURB LINE, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER OF RECORD. THE EXPANSION JOINTS FILLER SHALL BE A ONE PIECE FIBERBOARD OR THE APPROVED EQUIVALENT MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 0.5 INCH THICK.
3. IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE.
4. REVERSE STYLE CURB LOCATIONS ARE NOTED ON THE PLANS.

18" VERTICAL FACE CURB



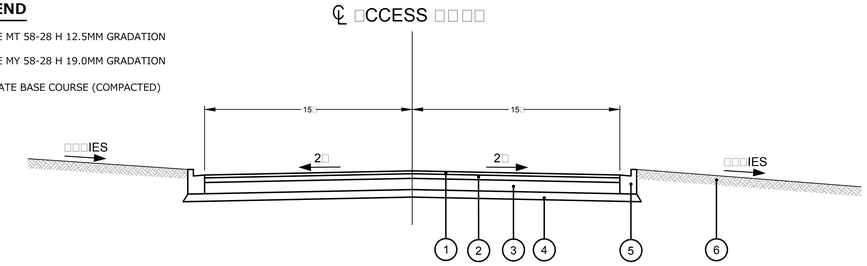
CONCRETE SIDEWALK



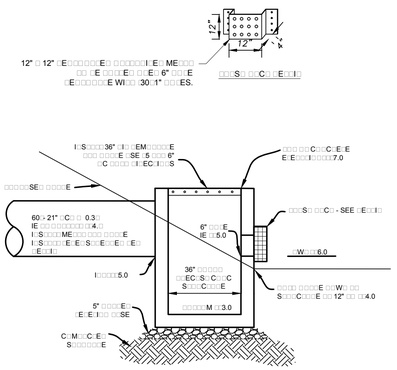
PROPOSED TYPICAL SECTION
ACCESS ROAD WITH ROADSIDE DITCHES

PROPOSED LEGEND

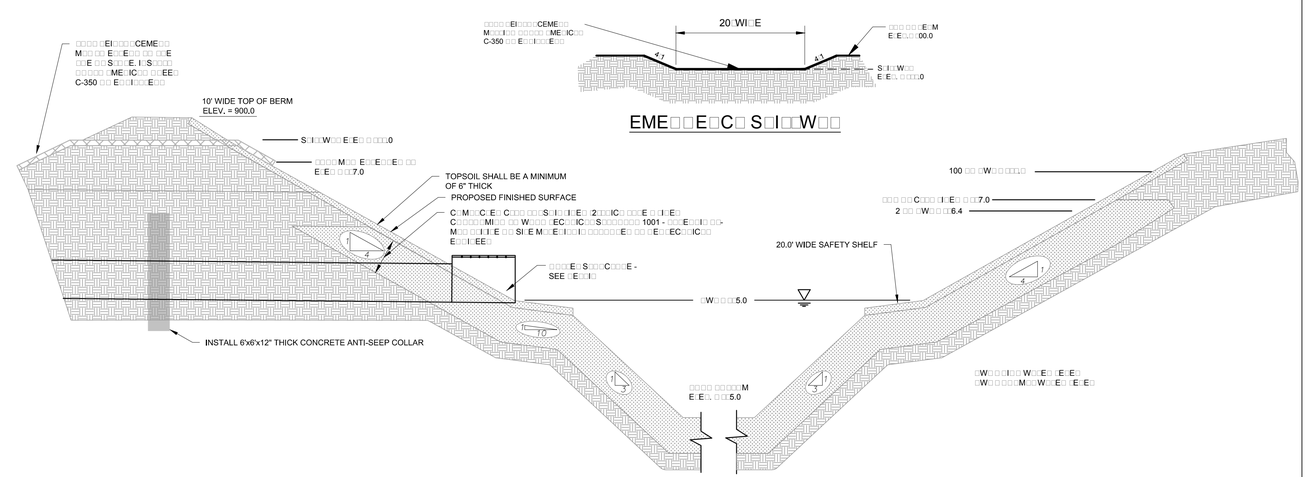
1. HOT-MIX 2" ASPHALT SURFACE COURSE MT 58-28 H 12.5MM GRADATION
2. HOT-MIX 3" ASPHALT SURFACE COURSE MY 58-28 H 19.0MM GRADATION
3. 10" CRUSHED 1 ¼" LIMESTONE AGGREGATE BASE COURSE (COMPACTED)
4. COMPACTED SUBGRADE
5. 18" VERTICAL FACE CURB
6. TOPSOIL RESPREAD



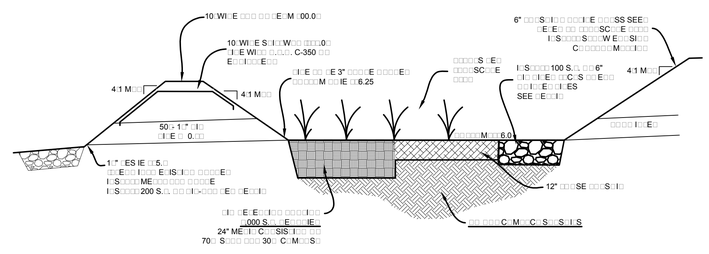
PROPOSED TYPICAL SECTION
ACCESS ROAD WITH CURB & GUTTER



WEIR DETAILS



EMERGENCY SPILLWAY



RAIN GARDEN SPECIFICATIONS:

1. BASIN MAY BE USED AS SEDIMENT CONTROL DEVICE DURING CONSTRUCTION.
2. DO NOT USE HEAVY EQUIPMENT IN THE BASIN.
3. BASIN SHALL BE EXCAVATE TO 1 FOOT ABOVE THE FINISH GRADE, AND LEAVE THE FINAL 1 FOOT TO BE CUT LATER.
4. DO NOT PLACE TOPSOIL, MEDIA, MULCH, OR PLANTS UNTIL AFTER THE PAVING OPERATION IS COMPLETE AND THE SITE IS STABILIZED.
5. PRIOR TO COMPLETING THE GARDEN, REMOVE ANY SEDIMENT THAT HAS ACCUMULATED AND REMOVE FINAL FOOT AND LOOSEN BOTTOM SOIL PRIOR TO PLACEMENT OF ANY FINISH MATERIALS.
6. ONCE THE ENGINEERED SOIL OR TOPSOIL IS PLACED, THE SURFACE SHALL BE COVERED WITH A VARIOUS AREAS OF PLANTINGS AND/OR SEEDING AS SPECIFIED ON THE LANDSCAPE PLAN. HARDWOOD MULCH MAY NOT BE USED WITHIN 10' OF THE INLET PIPES TO AVOID WASHOUTS. DECORATIVE 6" STONE SHALL BE USED INSTEAD.
7. CONTRACTOR TO PROVIDE A COPY OF ALL GEOTECHNICAL REPORTS AND DATA PERTAINING TO THE PONDS TO THE ENGINEER FOR APPROVAL. ENGINEER SHALL SUBMIT COPIES TO THE VILLAGE FOR APPROVAL ALONG WITH THE RECORD DRAWINGS.

RAIN GARDEN DETAILS

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DRAFTED: BDP DESIGNED: AEK REVIEWED:

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J.W. SPEAKER CAMPUS DRIVEWAY AND INFRASTRUCTURE
GERMANTOWN, WI

CONSTRUCTION DETAILS & SPECIFICATIONS

REVISIONS

PEG JOB No. 111.00-WI
PEG PM AEK
START DATE 01/25/18
SCALE

SHEET
C-19
C-20

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CONSTRUCTION DETAILS & SPECIFICATIONS

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11. □□E □W□E□ S□□□□ □□□E □□E □I□□□ □□ □□□□E □□□M□□E□I□□S □SE□ I□ C□□S□□□C□I□□ □ES□E□ □□□ C□M□□I□□CE WI□□ □□ESE S□ECI□IC□□I□□S.

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3. SI□E S□□□□ □E C□E□□E□ □□ □□E □IMI□S S□□W□ □□ □□E □□□□S. □EM□□E □E□E□□□I□□ □□□M □□E SI□E. □□□□I□□ IS □□□ □E□MI□□E□. □□□□EC□ □□EES □□□ □□□□E□ □E□□□□ES □□□M □□M□□E WI□□ □E□CI□□. S□□C□□I□ES S□□□□ □□□ □E □□C□□E□ C□□SE□ □□□□ 25□□□ □ □□□I□□□E S□□□C□□□E □□ □E□□□□E □□□ S□□□□ □E S□□□□□□□□E□ WI□□ SI□□ □E□CE.
4. □□E □E□□EC□□IC□□ E□□I□EE□ IS □ES□□□SI□□E □□□ □E□I□I□□ C□M□□C□I□□ □□□ □I□□ □□□CEME□□ I□ □□E □IE□□. □□E □E□□EC□□IC□□ E□□I□EE□ M□□ S□□E□CE□E □□ESE S□ECI□IC□□I□□S I□ □□E□E IS □□□□ C□□SE □□ □□ S□. □□ E□□□□□□□□I□□ M□S□ □E S□□MI□□E□ □□ □□E E□□I□EE□ I□ WI□□I□□ □E□□□E □□□ □E□I□I□□S □□E M□□E.
5. I□ □□ □E□□EC□□IC□□ □EC□MME□□□□I□□ IS □□□I□□□□E, □□E□ □□E □□□□□WI□□ S□ECI□IC□□I□□S S□□□□ □□□□□□. □□□ □I□□S□□□□ □E C□□SI□E□E□ S□□□C□□□□□ □I□□ □□□ S□□□□ □E □□□CE□ I□ □CC□□□□□□CE WI□□ □□E □□□□□WI□□ □□□E C□M□□C□E□ □I□□ S□□□□□□E S□□□C□□SIS□ □□ □□□□ S□□□□ □E □□□E□□□I□ □□ S□I□□□□E □E□□I□□ M□□E□I□□S, □□EE □□ □□□□□□□IC, □□□□E□ □□ □□□□E□ □E□E□E□I□□□S M□□E□I□□ □□□ I□S□EC□E□ □□□ □□□□□□□E□ □□ □□E □ESI□□E□ □E□□EC□□IC□□ E□□I□EE□. □□E□□□□□□□ □□ □□E S□□□□□□E, □□□E□ S□□I□□□□, S□□□□ C□□SIS□ □□ □□□□□□-□□□□□□ □□ □E□EC□ □□S□□□□E □□E□S □□□□□ MI□□□□ □E □□□□E□C□□, □□□ C□M□□C□I□□ □□E SC□□I□IE□ S□□□□CE □□ □□E S□ME MI□IM□M □E□SI□□ I□□IC□□E□ □E□□W. □□E C□M□□C□E□ □I□□ M□□E□I□□S S□□□□ □E □□EE □□ □□□□ □E□E□E□I□□S, □□□□□□IC □□ □□□□□E□ M□□□E□ □□□ S□□□□ □□□E □ M□□IM□M □I□□I□ □IMI□ (□S□M □-423) □□□□ □□□S□ICI□□ I□□E□ (□S□M □-424) I□ 30 □□□ 10 □ES□EC□I□E□□□, □□□ESS S□ECI□IC□□□□ □ESI□□E□ □□□ □□□□□□ □□ □□□□E □□W E□□□□SI□E □□□□□E□□IES □□□ □□□□□□□E□ □□ □□ E□□E□IE□CE□ S□I□S E□□I□EE□. □□E □□□ □WE□□E 12" I□C□ES □□ C□M□□C□E□ □I□□ S□□□□□ □□□E □ M□□IM□M □□□□EE □3" I□C□ □□□□IC□E □I□ME□E□ □□□ □□□□□□E□□I□□ C□M□□C□E□ □I□□ □ M□□IM□M SI□ □6" I□C□ □□□□IC□E □I□ME□E□ □□□□ESS S□ECI□IC□□□□ □□□□□□□E□ □□ □□ E□□E□IE□CE□ S□I□S E□□I□EE□. □□□ □I□□ M□□E□I□□ M□S□ □E □ES□E□ □□□ □□□□□□□E□ □□□□E□ □□E □I□EC□I□□ □□□ S□□E□□ISI□□ □□ □□ E□□E□IE□CE□ S□I□S E□□I□EE□ □□I□□ □□ □□□CEME□□, I□ □□E □I□□ IS □□ □□□□□□E □□□-□□□□S□ S□SCE□□I□□E C□□□□C□E□IS□ICS, I□ M□S□ □E C□□SSI□IE□ □S □ C□E□□ □W, □□, SW, □□ S□ □E□ □□I□IE□ S□I□ C□□SSI□IC□□I□□ S□S□EM (□S□M □-24□7□). □□□ S□□□C□□□□□ □I□□ □□E □E□SI□□ □□ □E S□□□C□□□□□□ C□M□□C□E□ □I□□ □□□ SC□□I□IE□ S□□□□□□E □□□ □□□□ES S□□□□ □□□ □E □ESS □□□□ □5 □E□CE□□ □□ □□E M□□IM□M □□□ □□□□C□□ (□S□M □-6□□□) WI□□ □□E E□CE□□I□□ □□ □□E □□□ 12 I□C□ES □□ □□□□EME□□ S□□□□□□E W□IC□ S□□□□ □ MI□IM□M I□-SI□□ □E□SI□□ □□ 100 □E□CE□□ □□ □□E M□□IM□M □□□ □E□SI□□, □□ 5 □E□CE□□ □I□□E□ □□□□ □□□E□□□I□□ □I□□ M□□E□I□□S. THE MOISTURE CONTENT OF COHESIVE SOIL SHALL NOT VARY BY MORE THAN -1 TO +3 PERCENT AND GRANULAR SOIL ±3 PERCENT OF OPTIMUM WHEN PLACED AND COMPACTED OR RECOMPACTED, UNLESS SPECIFICALLY APPROVED BY THE SOILS E□□I□EE□ □□□I□□ I□□□ C□□SI□E□□□I□□ □□E □□□E □□ M□□E□I□□S □□□ C□M□□C□I□□ E□□I□ME□□ □EI□□ □SE□. □□E C□M□□C□I□□ E□□I□ME□□ S□□□□□ C□□SIS□ □□ S□I□□□□E MEC□□□IC□□ E□□I□ME□□ S□ECI□IC□□□□ □ESI□□E□ □□□ S□I□ C□M□□C□I□□. □□□□□□□□E□S □□ SIMI□□□ □□□C□E□ □E□IC□ES □□E □□□□IC□□□□ □□□ S□I□□□□E □□□ C□M□□C□I□□. M□□E□I□□ □□□□ IS □□□ WE□ □□ □E□MI□ □□□□E□ C□M□□C□I□□ M□□ □E S□□E□□ □□ □□E □I□□ □□□ □E□MI□□E□ □□ □□□. □ISCI□□, □□□□□WI□□ □□ □□□□E□I□□ M□□ □E □ECESS□□□ □□ □E□□CE □□E M□IS□□□E C□□□E□□ □□ □ S□□IS□□C□□□ □□□□E, □□□E□ W□IC□ I□ S□□□□ □E C□M□□C□E□. □□E □I□IS□E□ S□□□□□□E □□E□S □□ □□E SI□E S□□□□ □E C□M□□C□E□ □□ 100 □E□CE□□ □□ □□E S□□□□□□□ □□□C□□ □□S□M □-3□□□ M□□IM□M □E□SI□□.
6. □□ □I□□ S□□□□ □E □□□CE□ □□ □ WE□ □□ S□□□ S□□□□□□E. □□E S□□□□□□E S□□□□ □E □□□□□-□□□□E□ □□□ I□S□EC□E□ □□ □□E □E□□EC□□IC□□ E□□I□EE□ □E□□□E □□□ M□□E□I□□ IS □□□□CE□.
7. S□□□□□□E □□□E□□□CES □□E □-1" □□□ □□□□SC□□E □□E□S □□□ □-½" □□□ □□□ □□□□EME□□ □□□ □□□I□□ □□E□S.
□. TOPSOIL SHALL BE FREE OF DELETERIOUS MATERIALS, ROOTS, OLD VEGETATION, ROCKS OVER 2" DIAMETER AND SHALL NOT BE EXCESSIVELY CLAYEY IN NATURE. NO CLUMPS LARGER THAN 4" ARE ACCEPTABLE. TOPSOIL MAY BE AMENDED AS □EE□E□ WI□□ S□□□ □□ C□M□□S□ □□ □E □□□SE W□E□ S□□E□□.
□. □□E C□□□□□C□□□ S□□□□ M□□□□□I□ SI□E □□□I□□□E □□□□□□□□□□□ C□□S□□□C□I□□. □□IS M□□ I□C□□□E □□E E□C□□□□□I□□ □□ □EM□□□□□□ □I□C□ES □□ □□M□I□□ □□ □□□E□I□□E W□□E□ □□□□I□□. □□□ □EW□□E□I□□ S□□□□□ □□□ □□ □I□EC□□□ □□ S□□E□MS, C□EE□S, WE□□□□□S □□ □□□□E□ E□□I□□□ME□□□□□ SE□SI□I□E □□E□S WI□□□□□□ □EI□□ □□E□□E□ □I□S□. □ □I□□ □□□ □□ □□□□E□ □EW□□E□I□□ □□□E□□ME□□ □E□ICE M□□ □E □SE□ □□ C□□□□□□ SE□IME□□ □□□M □□E □□M□E□ W□□E□.
10. C□□□□□C□□□ IS □□□ISE□ □□□□ □□□M□□ □□□ □E□□IS M□S□ □□□□ □E □E□□SI□E□ □□□□ □□E □□□□CE□ □□ □□□□W□□S □E□ □□E □E□□I□EME□□ □□ □□E M□□ICI□□□I□□ □□ □□□□E□ □□□□□□□□□I□E □□□□E□□ME□□ □□E□CIES. I□ □□E E□E□□ □□IS □CC□□S, □□E □□□□W□□S S□□□□ □E □□WE□ SWE□□ IMME□I□□E□□ □□□ □□□SE□IME□□ □EM□□E□ □□□M □□W□S□□E□M □□CI□I□IES.

EROSION CONTROL SPECIFICATIONS & REQUIREMENTS

1. [Erosion control item; text largely rendered as missing glyphs — includes reference WI-S067□31-4]
2. [Item text largely rendered as missing glyphs — includes "24 □□□□S □□ □□□ 0.5-I□C□ □□ M□□E"]
3. – 12. [Items text largely rendered as missing glyphs]
12. ... E□□SI□□ C□□□□□□ □1067.
13. – 24. [Items text largely rendered as missing glyphs — references □1061, □1064, □1063, □1004, □1056, □1062, □1071]
25. – 34. [Items text largely rendered as missing glyphs — references □106□, □1052, □1053]

11. M□□□I□□ S□□□□ □E □S □□□□□WS□
   - □□□-C□□□□E□ E□□SI□□ M□□
     - C□□SS I□S□□□□ □E□M □□□□□□I□□ □MI□IM□M □□6 M□□□□S□
       1. □□□E □□□SE □□ E□□□I□□E S□□□ES 2.5□1 □□ □□□□□E□
       2. □□□E □□□□□□□E □E□□E□ □□□□□C□ □□ E□□□I□□E S□□□ES 2□1 □□ □□□□□E□
     - C□□SS I, □□□□□□S□□□□ □E□M □□□□□□I□□ □MI□. □□6 M□□□□S□, □I□□□ □□□□, □□□□□□IC E□□SI□□ C□□□□□□ M□□ □□□ □□E□S W□E□E M□WI□□ M□□ □E □CC□M□□IS□E□ WI□□I□ □□W WEE□S □□□E□ I□S□□□□□□I□□
       1. □□□□□, □□□E □□□SE □□ E□□□I□□E S□□□S WI□□ S□□□ES 4□1 □□ □□□□□E□
       2. □□□□□, □□□E □□□□□□□E □E□□E□ □□□□□C□ □□□ □SE □□ S□□□ES 2.5□1 □□ □□□□□E□
     - C□□SS II□□□□ □E□M □□□□□□I□□ □3 □E□□S □□ □□E□□E□, □□□□□□IC E□□SI□□ C□□□□□□ □E□E□E□□□I□E M□□
       1. □□□E □□□□S□E □I□E□ □□□□ □□□ □SE □□ S□□□ES 2□1 □□ □□□□□E□ □□□ S□□ □EI□□□□CEME□□
       2. □□□E □□□□□ □SE □□ S□□□ES 2□1 □□ □□E□□E□ M□□E WI□□ □□□S□IC □□ □I□□E□□□□□□□E □E□
       3. □□□E C□□ W□□E□ M□□ □□ 100□ □□□□□IC □I□E□S □□□ □SE □□ S□□□ES 2□1 □□ □□□□□E□ □□□ I□ E□□I□□□ME□□□□□ □□□ □I□□□□IC□□□ SE□SI□I□E □□E□S W□E□E □□□S□IC □E□□I□□ IS I□□□□□□□□□I□□E
     - C□□SS III□□E□M□□E□□ 100□ S□□□□E□IC EC□M □□ □□M, EI□□E□ □ S□I□ S□□□I□I□E□ □□□E □ □□ C□□SS I, □□□E □ □□ □ E□□SI□□ M□□ M□S□ □E □□□CE□ □□E□ □□E S□I□ □I□□E□ □□M
       1. □□□E □□EC□M □□□ □SE □□ S□□□ES 2□1 □□ □□□□□E□
       2. □□□E □ □□ C□□□M □□□ □SE □□ S□□□ES 2□1 □□ □□□□□E□
       3. □□□E □□□□M □□□ □SE □□ S□□□ES 1□1 □□ □□□□□E□
   - C□□□□E□ E□□SI□□ M□□
     - C□□SS I□S□□□□ □E□M □□□□□□I□□ □MI□IM□M □□6 M□□□□S□, □I□□□ □□□□, □□□□□□IC EC□M WI□□ □□□S□IC □□ □I□□E□□□□□□□E □E□□I□□
       1. □□□E □□□□□□□ S□I□□□□E □□□ S□□□E □□□□IC□□I□□S, □□□ C□□□□E□ □□□□IC□□I□□S
       2 TYPE B: DOUBLE NETTED PRODUCT FOR USE IN CHANNELS WHERE THE CALCULATED (DESIGN) SHEAR STRESSES IS 1.5 LBS/FT² OR LESS
     - C□□SS II□□□□ □E□M □□□□□□I□□ □3 □E□□S □□ □□E□□E□, □□□□□□IC EC□M
       1. □□□E □□□□□E □I□E□ □□□□ □□□ □SE I□ C□□□□E□S □□ □EI□□□□CE S□□
       2. TYPE B: FOR USE IN CHANNELS WHERE THE CALCULATED (DESIGN) SHEAR STRESS IS 2.0LBS/FT² OR LESS. MADE WITH PLASTIC OR BIODEGRADABLE MAT
       3. TYPE C: WOVEN MAT OF 100% ORGANIC MATERIAL FOR USE IN CHANNELS WHERE THE CALCULATED (DESIGN) SHEAR STRESS IS 2.0LBS/FT² OR LESS, APPLICABLE FOR USE IN ENVIRONMENTALLY SENSITIVE AREAS WHERE PLASTIC □E□□I□□ IS I□□□□□□□□□I□□E
     - C□□SS III□□E□M□□E□□ 100□ S□□□□E□IC EC□M □□ □□M, C□□SS I, □□□E □ E□□SI□□ M□□ □□ C□□SS II, □□□E □ □□ C E□□SI□□ M□□ M□S□ □E □□□CE□ □□E□ □ S□I□ □I□□E□ □□M
       1. TYPE A: ECRM FOR USE IN CHANNELS WHERE THE CALCULATED (DESIGN) SHEAR STRESS OF 2.0LB/FT² OR LESS
       2. TYPE B: TRM FOR USE IN CHANNELS WHERE THE CALCULATED (DESIGN) SHEAR STRESS OF 2.0LBS/FT² OR LESS.
       3. TYPE C: TRM FOR USE IN CHANNELS WHERE THE CALCULATED (DESIGN) SHEAR STRESS OF 3.5LBS/FT² OR LESS
       4. TYPE D: TRM FOR USE IN CHANNELS WHERE THE CALCULATED (DESIGN) SHEAR STRESS OF 5.0LBS/FT² OR LESS

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J.W. SPEAKER CAMPUS DRIVEWAY AND INFRASTRUCTURE
GERMANTOWN, WI

CONSTRUCTION DETAILS & SPECIFICATIONS

REVISIONS

1

PEG JOB No 1111.00-WI
PEG PM AEK
START DATE 01/25/18
SCALE
DRAFTED: BDP
DESIGNED: AEK
REVIEWED:

SHEET
C-20
C-20

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CONSTRUCTION DETAILS & SPECIFICATIONS

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EXISTING CONDITIONS SURVEY:

EXISTING CONDITIONS SURVEY PROVIDED BY CHAPUT LAND SURVEYS. ALTHOUGH PEG HAS NO REASON TO BELIEVE THE SURVEY IS INACCURATE, PEG MAKES NO WARRANTS THAT EXISTING INFORMATION CONTAINED WITHIN THESE PLANS IS ALL-INCLUSIVE OR ACCURATE. CONTRACTOR SHALL UNDERTAKE NECESSARY EFFORTS TO VERIFY THE EXISTING CONDITIONS PRIOR TO THE START OF MATERIAL PROCUREMENT AND CONSTRUCTION EFFORTS/ACTIVITIES.

CONTRACTOR RESPONSIBILITY:

THE INFORMATION SHOWN ON THIS DRAWING CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. IF ADDITIONAL UTILITIES ARE KNOWN TO EXIST IN THE PROPERTY, THE OWNER WILL PROVIDE EXISTING PLANS OF OTHER UTILITIES SERVING THE SITE AND THE BUILDING THAT OTHERWISE CANNOT BE LOCATED BY A VISUAL OBSERVATION OF THE PROPERTY OR OF WHICH THE SURVEYOR WOULD HAVE NO KNOWLEDGE.

DEMOLITION & CLEARING

1. CONTRACTOR WILL BE RESPONSIBLE FOR ENSURING THAT THE APPROPRIATE GOVERNMENTAL ENTITIES ARE NOTIFIED OF THE WORK AND NECESSARY PERMITS ARE OBTAINED.

2. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ITEMS/DEBRIS, CLASSIFICATION, AND PROPER DISPOSAL.(E.G. - ARRANGE FOR ADEQUATE COLLECTION, AND TRANSPORTATION TO DELIVER THE RECOVERED MATERIALS TO THE APPROVED RECYCLING CENTER OR PROCESSING FACILITY). CONTRACTOR SHALL MAINTAIN RECORDS ACCESSIBLE TO THE OWNER AND GOVERNMENT ENTITIES.

3. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS IN MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES.

4. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES DESIGNATED TO REMAIN.

5. PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION AS REQUIRED FOR SAFETY AND SECURITY.

6. PROVIDE BARRIERS AND APPROPRIATE SIGNS WHERE NECESSARY TO RESTRICT PEDESTRIANS FROM WANDERING INTO CONSTRUCTION AREAS. PROVIDE ACCEPTABLE TEMPORARY SECURITY BARRIERS WHERE PHYSICAL SECURITY OF BUILDINGS OR FENCES IS COMPROMISED DUE TO DEMOLITION WORK.

7. PROVIDE TEMPORARY WEATHER PROTECTION DURING INTERVAL BETWEEN DEMOLITION AND REMOVAL OF EXISTING CONSTRUCTION ON EXTERIOR SURFACES AND INSTALLATION OF NEW CONSTRUCTION TO ENSURE NO WATER LEAKAGE OR DAMAGE OCCURS TO STRUCTURE OR INTERIOR AREAS OF EXISTING BUILDING.

8. ERECT TEMPORARY ENCLOSURES AS NECESSARY TO LIMIT DUST. USE WATER AS NECESSARY TO LAY DUST WHEN CHIPPING, CORING, OR SAWING CONCRETE, MASONRY OR SIMILAR MATERIALS. WATER MUST BE CONTROLLED INSIDE BUILDINGS BY DAMMING, OR OTHER CONTAINMENT METHOD.

9. PROVIDE AND MAINTAIN INTERIOR AND EXTERIOR SHORING, BRACING OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF STRUCTURES AND ADJACENT FACILITIES THAT ARE NOT PART OF DEMOLITION.

10. PERFORM WORK IN SAFE AND SYSTEMATIC MANNER.

11. WEAR PROPER PERSONAL PROTECTIVE EQUIPMENT AT ALL TIMES.

12. COMPLETELY BACKFILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM UTILITY REMOVAL AND OTHER DEMOLITION WORK WITH CLOSE GRADED AGGREGATE OR COHESIVE STRUCTURAL FILL.

13. REPAIR DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED.

SITE AND DIMENSIONAL PLAN NOTES

1. ALL DIMENSIONS ARE EDGE OF PAVEMENT, FACE OF CURB, SHOULDER, OR CENTER OF LANE LINE UNLESS NOTED OTHERWISE. ALL UTILITY DIMENSIONS ARE TO OUTSIDE OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.

2. ALL PROPOSED CURB AND GUTTER SHALL BE 18" STANDARD CURB AND GUTTER (SEE DETAIL). UNLESS OTHERWISE NOTED. CURB AND GUTTER DRAINING AWAY FROM THE FACE OF CURB IS NOTED AS REVERSE CURB AND GUTTER.

3. BUILDING DIMENSIONS AND ADJACENT PARKING AND UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

4. THE CONTRACTOR SHALL CONTACT DIGGERS HOTLINE (1-800-242-8511) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.

5. IMPROVEMENTS ADJACENT TO BUILDING IF SHOWN SUCH AS TRUCK DOCK, RETAINING WALLS, SIDEWALKS, CURBING, FENCES, CANOPIES, RAMPS, HANDICAP ACCESS, PLANTERS, DUMPSTERS, AND TRANSFORMERS ETC. HAVE BEEN SHOWN FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS, SPECIFICATIONS, AND DETAILS.

6. REFER TO ELECTRICAL PLANS FOR LIGHTING LOCATIONS, SPECIFICATIONS, AND DETAILS.

7. SEE ADDITIONAL NOTES AND DETAILS ON SITE DIMENSIONAL PLANS AND CONSTRUCTION DETAILS.

8. ALL PAVING SHALL CONFORM TO STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION AND APPLICABLE VILLAGE OF GERMANTOWN ORDINANCES, AND SPECIFICATIONS CONTAINED WITHIN THIS PLAN SET.

9. CONTRACTOR SHALL CONSULT STRIPING COLOR WITH OWNER PRIOR TO CONSTRUCTION.

10. PROVIDE CONTRACTOR GRADE ACRYLIC, STRIPING PAINT FOR NEW ASPHALT OR COATED ASPHALT. APPLY MARKING PAINT AT A RATE OF ONE (1) GALLON PER THREE TO FOUR HUNDRED (300-400) LINEAL FEET OF FOUR (4) INCH WIDE STRIPES OR TO MANUFACTURER'S SPECIFICATION, WHICHEVER IS GREATER.

11. THOROUGHLY CLEAN SURFACES FREE OF DIRT, SAND, GRAVEL, OIL AND OTHER FOREIGN MATTER. CONTRACTOR RESPONSIBLE TO INSPECT EXISTING PAVEMENT SURFACES FOR CONDITIONS AND DEFECTS THAT WILL ADVERSELY AFFECT QUALITY OF WORK, AND WHICH CANNOT BE PUT INTO AN ACCEPTABLE CONDITION THROUGH NORMAL PREPARATORY WORK AS SPECIFIED.

12. 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.

13. 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.

14. PROTECT ADJACENT CURBS, WALKS, FENCES, AND OTHER ITEMS FROM RECEIVING PAINT.

15. BARRICADE MARKED AREAS DURING INSTALLATION AND UNTIL THE MARKING PAINT IS DRIED AND READY FOR TRAFFIC.

16. 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, LATEST EDITION. HEREAFTER, THIS PUBLICATION WILL BE REFERRED TO AS THE 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 OF MOISTURE. CONSTRUCT ASPHALTIC CONCRETE SURFACE COURSE WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40° (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.

    BINDER COURSE AGGREGATE: THE AGGREGATE FOR THE BINDER COURSE HALL 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.

17. TRAFFIC CONTROL SHALL BE PER M.U.T.C.D.

18. PUBLIC CURB & GUTTER REPLACEMENT SHALL BE TIED TO EXISTING CURB & GUTTER WITH #4 TIE BARS. PUBLIC CURB & GUTTER SHALL BE A 6-BAG MIX.

GRADING NOTES

1. CONTRACTOR SHALL VERIFY ALL GRADES, ENSURE ALL AREAS DRAIN PROPERLY AND REPORT ANY DISCREPANCIES TO PINNACLE ENGINEERING GROUP PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.

2. ALL EXISTING CONTOURS REPRESENT EXISTING SURFACE GRADES UNLESS OTHERWISE NOTED. ALL PROPOSED GRADES SHOWN ARE FINISH SURFACE GRADES UNLESS OTHERWISE NOTED.

3. SPOT ELEVATIONS REPRESENT THE GRADE ALONG THE CURB AND GUTTER FLOWLINE UNLESS OTHERWISE NOTED.

4. ALL EXCAVATIONS AND MATERIAL PLACEMENT SHALL BE COMPLETED TO DESIGN ELEVATIONS AS DEPICTED IN THE PLANS.

    CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATION(S) OF ALL GRADING QUANTITIES. WHILE PEG ATTEMPTS TO PROVIDE A COST EFFECTIVE APPROACH TO BALANCE EARTHWORK, GRADING DESIGN IS BASED ON MANY FACTORS, INCLUDING SAFETY, AESTHETICS, AND COMMON ENGINEERING STANDARD OF CARE, THEREFORE NO GUARANTEE CAN BE MADE FOR A BALANCED SITE.

    THE CONTRACTOR MAY SOLICIT APPROVAL FROM ENGINEER/OWNER TO ADJUST FINAL GRADES FROM DESIGN GRADES TO PROVIDE AN OVERALL SITE BALANCE AS A RESULT OF FIELD CONDITIONS.

5. GRADING ACTIVITIES SHALL BE IN A MANNER TO ALLOW POSITIVE DRAINAGE ACROSS DISTURBED SOILS, WHICH MAY INCLUDE EXCAVATION OF TEMPORARY DITCHES TO PREVENT PONDING, AND IF NECESSARY PUMPING TO ALLEVIATE PONDING. CONTRACTOR SHALL PREVENT SURFACE WATER FROM ENTERING INTO EXCAVATIONS. IN NO WAY SHALL OWNER BE RESPONSIBLE FOR REMEDIATION OF UNSUITABLE SOILS CREATED/ORIGINATED AS A RESULT OF IMPROPER SITE GRADING OR SEQUENCING. CONTRACTOR SHALL SEQUENCE GRADING ACTIVITIES TO LIMIT EXPOSURE OF DISTURBED SOILS DUE TO WEATHER.

6. THE CONTRACTOR IS RESPONSIBLE FOR MEETING MINIMUM COMPACTION STANDARDS. THE CONTRACTOR SHALL NOTIFY ENGINEER/OWNER IF PROPER COMPACTION CANNOT BE OBTAINED. THE PROJECT'S GEOTECHNICAL CONSULTANT SHALL DETERMINE WHICH IN-SITU SOILS ARE TO BE CONSIDERED UNSUITABLE SOILS. THE ENGINEER/OWNER AND GEOTECHNICAL TESTING CONSULTANT WILL DETERMINE IF REMEDIAL MEASURES WILL BE NECESSARY.

7. IN THE EVENT THAT ANY MOISTURE-DENSITY TEST(S) FAIL TO MEET SPECIFICATION REQUIREMENTS, THE CONTRACTOR SHALL PERFORM CORRECTIVE WORK AS NECESSARY TO BRING THE MATERIAL INTO COMPLIANCE AND RETEST THE FAILED AREA AT NO COST TO THE OWNER.

8. WITH THE AUTHORIZATION OF THE ENGINEER/OWNER, MATERIAL THAT IS TOO WET TO PERMIT PROPER COMPACTION MAY BE SPREAD ON FILL AREAS IN AN EFFORT TO DRY. CONTRACTOR SHALL CLEARLY FIELD MARK THE EXTERIOR LIMITS OF SPREAD MATERIAL WITH PAINTED LATH AND SUBMIT A PLAN TO THE ENGINEER/OWNER THAT IDENTIFIES THE LIMITS. UNDER NO CONDITION SHALL THE SPREAD MATERIAL DEPTH EXCEED THE MOST RESTRICTIVE OF: THE EFFECTIVE TREATMENT DEPTH OF MACHINERY THAT WILL BE USED TO TURNOVER THE SPREAD MATERIAL; OR THE MAXIMUM COMPACTION LIFT DEPTH.

9. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER/OWNER IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION.

10. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ADEQUATE AND SAFE TEMPORARY SHORING, BRACING, RETENTION STRUCTURES, AND EXCAVATIONS.

11. THE SITE SHALL BE COMPLETED TO WITHIN 0.10-FT (+/-) OF THE PROPOSED GRADES AS INDICATED WITHIN THE PLANS PRIOR TO PLACEMENT OF TOPSOIL OR STONE. CONTRACTOR IS ENCOURAGED TO SEQUENCE CONSTRUCTION SUCH THAT THE SITE IS DIVIDED INTO SMALLER AREAS TO ALLOW STABILIZATION OF DISTURBED SOILS IMMEDIATELY UPON COMPLETION OF INDIVIDUAL SMALLER AREAS.

12. CONTRACTOR SHALL CONTACT "DIGGER'S HOTLINE" FOR LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES AND SHALL BE RESPONSIBLE FOR PROTECTING SAID UTILITIES FROM ANY DAMAGE DURING CONSTRUCTION.

13. CONTRACTOR SHALL PROTECT INLETS AND ADJACENT PROPERTIES WITH SILT FENCING OR APPROVED EROSION CONTROL METHODS UNTIL CONSTRUCTION IS COMPLETED. CONTRACTOR SHALL PLACE SILT FENCING AT DOWN SLOPE SIDE OF GRADING LIMITS.

14. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING FACILITIES OR UTILITIES. ANY DAMAGE SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE EXPENSE OF THE CONTRACTOR.

15. WORK WITHIN ANY ROADWAY RIGHT-OF-WAY SHALL BE COORDINATED WITH THE APPROPRIATE MUNICIPAL OFFICIAL PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FEES. GRADING WITHIN RIGHT-OF-WAY IS SUBJECT TO APPROVAL BY SAID OFFICIALS. RESTORATION OF RIGHT-OF-WAY IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF GRADING. RESTORATION SHALL INCLUDE ALL ITEMS NECESSARY TO RESTORE RIGHT-OF-WAY IN-KIND INCLUDING LANDSCAPING.

16. CONTRACTOR SHALL COMPLY WITH ALL VILLAGE OF GERMANTOWN CONSTRUCTION STANDARDS/ORDINANCES.

17. LANDSCAPE AND TURF AREAS SHALL HAVE A MINIMUM OF 4-INCH TOPSOIL REPLACEMENT.

18. TOPSOIL BERMING SHALL ACHIEVE 90% STANDARD PROCTOR DENSITY AT 3%(±) OPTIMUM MOISTURE CONTENT.

19. SURVEY BENCHMARKS AND MAPPING HAS BEEN PROVIDED BY PINNACLE ENGINEERING GROUP. IN NO WAY DOES PEG WARRANT THE BASEMAP IS ALL INCLUSIVE OR REPRESENTATIVE OF ACTUAL CONDITIONS. CONTRACTOR SHALL PROVIDE CHECKS AS NECESSARY TO VERIFY THE BASEMAP CONTENT AND ACCURACY.

UTILITY NOTES

1. 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.

2. 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 CONTRACTORS RESPONSIBILITY TO DETERMINE WHICH SPECIFICATIONS AND CODES APPLY, AND TO COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE LOCAL AND STATE AUTHORITIES.

3. UTILITY CONSTRUCTION AND SPECIFICATIONS SHALL COMPLY WITH THE VILLAGE OF GERMANTOWN SPECIAL PROVISIONS AND WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES COMM 82.

4. 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.

5. 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.

6. 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 AND NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS.

7. ALL NEW ON-SITE SANITARY, STORM AND WATER UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE PROPERTY OWNER.

8. THE CONTRACTOR SHALL CONTACT THE VILLAGE OF GERMANTOWN PUBLIC WORKS DEPARTMENT 48-HOURS IN ADVANCE OF SANITARY, WATER AND STORM CONNECTIONS TO THE VILLAGE-OWNED SYSTEM TO SCHEDULE INSPECTIONS.

9. ROUTING OF GAS, ELECTRIC AND TELEPHONE SERVICES ARE SHOWN ON THE ARCHITECTURAL PLANS AND SUBJECT TO CHANGE BASED UPON FINAL REVIEW AND APPROVAL BY RESPECTIVE UTILITY COMPANIES AND OWNER. CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY AND COORDINATE FINAL LOCATIONS FOR ALL UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.

10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROPER AUTHORITIES FOR ANY REQUIRED PERMITS, AUTHORIZATIONS, TRAFFIC CONTROL AND ANY PERMIT FEES REQUIRED.

11. 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.

12. THE CONTRACTOR IS RESPONSIBLE FOR THE SIZE, TYPE AND NUMBER OF WATER MAIN BENDS, HORIZONTAL AND VERTICAL, REQUIRED TO COMPLETE CONSTRUCTION. COST FOR BENDS, HORIZONTAL AND VERTICAL, SHALL BE INCIDENTAL AND INCLUDED IN THE OVERALL COST OF THE CONTRACT.

13. STORM SEWER SPECIFICATIONS -

    PIPE - REINFORCED CONCRETE PIPE (RCP) SHALL MEET THE REQUIREMENTS OF ASTM CLASS C-76 WITH RUBBER GASKET JOINTS CONFORMING TO ASTM C-443. STRENGTH CLASSIFICATIONS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

HEIGHT OF COVER (FEET):	0-2	2-3	3-6	6-15	15-25	25+
MINIMUM CONCRETE PIPE CLASSIFICATION:	IV	III	II	III	IV	ENGINEER TO SPECIFY

    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 M278, AS NOTED. IF HDPE PIPE IS USED FOR POND OUTFALLS, A MINIMUM OF THREE (3) SECTIONS (2 STRAPS) SHALL BE STRAPPED TOGETHER.

    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 NEENAH R-2502 WITH TYPE D GRATE, OR EQUAL. CURB FRAME & GRATE SHALL BE NEENAH R-3067, OR EQUAL. THE SUMP DEPTH (VERTICAL DISTANCE FROM THE BASE OF THE STRUCTURE TO OUTFALL INVERT OF THE PIPE) SHALL BE 18" MIN. STRUCTURE SHOP DRAWINGS SHALL BE SUBMITTED TO PINNACLE ENGINEERING GROUP FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURING AND INSTALLATION.

    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. SLURRY BACK FILL UNDER PUBLIC ROAD PAVEMENT. SLURRY LIMITS: FROM TOP OF COVER STONE TO PAVEMENT. SLURRY TO BE 1-BAG PORTLAND MIX. 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 NEENAH R-1642 WITH TYPE "B" SELF SEALING LIDS, NON-ROCKING OR EQUAL .

14. WATER MAIN SPECIFICATIONS -

    PIPE - WATER MAIN SHALL BE POLYVINYL CHLORIDE (PVC) PIPE MEETING THE REQUIREMENTS OF AWWA STANDARD C-900, CLASS 235, DR-18, WITH CAST IRON O.D. AND INTEGRAL ELASTOMERIC BELL AND SPIGOT JOINTS. VALVES AND VALVE BOXES - GATE VALVES SHALL BE AWWA GATE VALVES MEETING THE REQUIREMENTS OF AWWA C-500 AND CHAPTER 8.27.0 OF THE "STANDARD SPECIFICATIONS". GATE VALVES AND VALVE BOXES SHALL CONFORM TO LOCAL PLUMBING ORDINANCES.

    HYDRANTS - HYDRANTS SHALL CONFORM TO THE SPECIFICATIONS OF THE AND IN ACCORDANCE WITH FILE NO. 38 OF THE "STANDARD SPECIFICATIONS." THE DISTANCE FROM THE GROUND LINE TO THE CENTERLINE OF THE LOWEST NOZZLE AND THE LOWEST CONNECTION OF THE FIRE DEPARTMENT SHALL BE NO LESS THAN 18-INCHES AND NO GREATER THAN 24-INCHES. HYDRANT MANUFACTURE: MUELLER SUPER CENTURION 250 (RED). HYDRANT AND TAP VALES: MUELLER MODEL #2360.

    BEDDING AND COVER MATERIAL - PIPE BEDDING AND COVER MATERIAL SHALL BE SAND, CRUSHED STONE CHIPS OR CRUSHED STONE SCREENINGS CONFORMING TO CHAPTER 8.43.2 OF THE "STANDARD SPECIFICATIONS".

    BACKFILL - BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS". GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. SLURRY BACK FILL UNDER PUBLIC ROAD PAVEMENT. SLURRY LIMITS: FROM TOP OF COVER STONE TO PAVEMENT. SLURRY TO BE 1-BAG PORTLAND MIX. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS".

15. SANITARY SEWER SPECIFICATIONS -

    PIPE - SANITARY SEWER PIPE MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) MEETING REQUIREMENTS OF ASTM D 3034, SDR-35, WITH INTEGRAL BELL TYPE FLEXIBLE ELASTOMERIC JOINTS, MEETING THE REQUIREMENTS OF ASTM D-3212.

    BEDDING AND COVER MATERIAL - BEDDING AND COVER MATERIAL SHALL CONFORM TO THE APPROPRIATE SECTIONS OF THE "STANDARD SPECIFICATION" WITH THE FOLLOWING MODIFICATION: "COVER MATERIAL SHALL BE THE SAME AS USED FOR BEDDING AND SHALL CONFORM TO SECTION 8.43.2 (A). BEDDING AND COVER MATERIAL SHALL BE PLACED IN A MINIMUM OF THREE SEPARATE LIFTS, OR AS REQUIRED TO INSURE ADEQUATE COMPACTING OF THESE MATERIALS, WITH ONE LIFT OF BEDDING MATERIAL ENDING AT OR NEAR THE SPRINGLINE OF THE PIPE. THE CONTRACTOR SHALL TAKE CARE TO COMPLETELY WORK BEDDING MATERIAL UNDER THE HAUNCH OF THE PIPE TO PROVIDE ADEQUATE SIDE SUPPORT."

    BACKFILL - BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS." SLURRY BACK FILL UNDER PUBLIC ROAD PAVEMENT. SLURRY LIMITS: FROM TOP OF COVER STONE TO PAVEMENT. SLURRY TO BE 1-BAG PORTLAND MIX. GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS."

    MANHOLES - MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH FILE NOS. 12, 13 AND 15 OF THE "STANDARD SPECIFICATIONS" AND ALL SPECIAL PROVISIONS OF THE VILLAGE OF GERMANTOWN. STRUCTURE SHOP DRAWINGS SHALL BE SUBMITTED TO PINNACLE ENGINEERING GROUP FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURING AND INSTALLATION.

    MANHOLE FRAMES AND COVERS - MANHOLE FRAMES AND COVERS SHALL BE NEENAH R-1661

16. WATER MAIN AND SANITARY SEWER SHALL BE INSULATED WHEREVER THE DEPTH OF COVER IS LESS THAN 6 FEET. INSULATION AND PLACING OF INSULATION SHALL CONFORM TO CHAPTER 4.17.0 "INSULATION" OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN 6TH EDITION UPDATED WITH ITS LATEST ADDENDUM (TYP.).

17. TRACER WIRE SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THESE CODE SECTIONS AS PER 182.0715(2R) OF THE STATUTES. TRACER WIRE: COPPERHEAD TRACERWIRE #10 SOLID CCS SUPERFLEX (BLUE). WIRE CONNECTORS SHALL BE SNAKEBITE (BLUE) MADE BYCOPPERHEAD INDUSTRIES, LLC. THE TRACER WIRE FOR THE SANITARY SEWER LATERAL SHALL BE CONTINUOUS AND SHALL BE EXTENDED ABOVE GRADE VIA A 4-INCH PVC PIPE WITH SCREW-ON CAP ADJACENT TO THE PROPOSED TERMINATION POINT OF THE LATERAL FOR THE PROPOSED BUILDING.

18. SEE UTILITY PLANS AND CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN EPA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL TECHNICAL STANDARDS AND PROVISIONS IN EFFECT AT THE TIME OF CONSTRUCTION. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMP'S). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF, AND UNDERSTAND, THE BMP'S PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

2. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL CONTROL MEASURES AS DIRECTED BY OWNER/ENGINEER OR GOVERNING AGENCIES SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.

3. MODIFICATIONS TO THE APPROVED SWPPP IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMP'S. ALL MODIFICATIONS MUST BE APPROVED BY OWNER/ENGINEER/GOVERNING AGENCY PRIOR TO DEVIATION OF THE APPROVED PLAN.

4. INSTALL PERIMETER EROSION CONTROL MEASURES (SUCH AS CONSTRUCTION ENTRANCES, SILT FENCE AND EXISTING INLET PROTECTION) PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE COVER, AS SHOWN ON PLAN IN ORDER TO PROTECT ADJACENT PROPERTIES/STORM SEWER SYSTEMS FROM SEDIMENT TRANSPORT.

5. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL LOCATIONS OF VEHICLE INGRESS/EGRESS POINTS. CONTRACTOR IS RESPONSIBLE TO COORDINATE LOCATION(S) WITH THE PROPER AUTHORITIES, PROVIDE NECESSARY FEES AND OBTAIN ALL REQUIRED APPROVALS OR PERMITS. ADDITIONAL CONSTRUCTION ENTRANCES OTHER THAN AS SHOWN ON THE PLANS MUST BE APPROVED BY THE APPLICABLE GOVERNING AGENCIES PRIOR TO INSTALLATION.

6. PAVED SURFACES ADJACENT TO CONSTRUCTION ENTRANCES SHALL BE SWEPT AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST IMMEDIATELY AND AS REQUESTED BY THE GOVERNING AGENCIES.

7. ALL EXISTING STORM SEWER FACILITIES THAT WILL COLLECT RUNOFF FROM DISTURBED AREAS SHALL BE PROTECTED TO TO PREVENT SEDIMENT DEPOSITION WITHIN STORM SEWER SYSTEMS. INLET PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER AND SILT FENCE SHALL BE IMMEDIATELY FITTED AT ALL INSTALLED CULVERT INLETS . ALL INLETS, STRUCTURES, PIPES, AND SWALES SHALL BE KEPT CLEAN AND FREE OF SEDIMENTATION AND DEBRIS.

8. EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, WATER MAIN, ETC.) OUTSIDE OF THE PERIMETER CONTROLS SHALL INCORPORATE THE FOLLOWING:

    PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.

    BACKFILL, COMPACT AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.

    DISCHARGE TRENCH WATER INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH BMP'S PRIOR TO RELEASE INTO STORM SEWER OR DITCHES.

9. AT A MINIMUM, SEDIMENT BASINS AND NECESSARY TEMPORARY DRAINAGE PROVISIONS SHALL BE CONSTRUCTED AND OPERATIONAL BEFORE BEGINNING OF SIGNIFICANT MASS GRADING OPERATIONS TO PREVENT OFFSITE DISCHARGE OF UNTREATED RUNOFF.

10. ALL WATERCOURSES AND WETLANDS SHALL BE PROTECTED WITH SILT FENCE TO PREVENT ANY DIRECT DISCHARGE FROM DISTURBED SOILS.

11. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR INSPECTION AND REPAIR DURING CONSTRUCTION. THE OWNER WILL BE RESPONSIBLE IF EROSION CONTROL IS REQUIRED AFTER THE CONTRACTOR HAS COMPLETED THE PROJECT.

12. TOPSOIL STOCKPILES SHALL HAVE A BERM OR TRENCH AROUND THE CIRCUMFERENCE AND PERIMETER SILT FENCE TO CONTROL SILT. IF TOPSOIL STOCKPILE REMAINS UNDISTURBED FOR MORE THAN SEVEN (7) DAYS, TEMPORARY SEEDING AND STABILIZATION IS REQUIRED.

13. EROSION CONTROL MEASURES TEMPORARILY REMOVED FOR UNAVOIDABLE CONSTRUCTION ACTIVITIES SHALL BE IN WORKING ORDER IMMEDIATELY FOLLOWING COMPLETION OF SUCH ACTIVITIES OR PRIOR TO THE COMPLETION OF EACH WORK DAY, WHICH EVER OCCURS FIRST.

14. MAINTAIN SOIL EROSION CONTROL DEVICES THROUGH THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCES ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.

15. PUMPS MAY BE USED AS BYPASS DEVICES. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS. PUMP DISCHARGE SHALL BE DIRECTED INTO AN APPROVED FILTER BAG OR APPROVED SETTLING DEVICE.

16. GRADING EFFORTS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES. ALL DISTURBED AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF FOURTEEN (14) DAYS REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH TECHNICAL STANDARDS.

17. ALL DISTURBED SLOPES EXCEEDING 4:1, SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S75BN EROSION MATTING (OR APPROVED EQUAL) AND ALL CHANNELS SHALL BE STABILIZED WITH NORTH AMERICAN GREEN C125BN (OR APPROVED EQUAL) OR APPLICATION OF AN APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. EROSION MATTING AND/OR NETTING USED ONSITE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.

18. DURING PERIODS OF EXTENDED DRY WEATHER, THE CONTRACTOR SHALL KEEP A WATER TRUCK ON SITE FOR THE PURPOSE OF WATERING DOWN SOILS WHICH MAY OTHERWISE BECOME AIRBORNE.THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING WIND EROSION (DUST) DURING CONSTRUCTION AT HIS/HER EXPENSE.

19. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE VISUALLY INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM ON A DAILY BASIS.

20. QUALIFIED PERSONNEL (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5-INCH, OR MORE, PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERVAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH OF THE GENERAL PERMIT. CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.

21. SEE ADDITIONAL DETAILS AND NOTES ON SITE STABILIZATION AND CONSTRUCTION DETAILS.

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General Notes

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Overall Site Plan

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LEGEND

S — SANITARY SEWER	SANITARY MANHOLE	WATER MANHOLE	TELEPHONE PEDESTAL
STD — STORM SEWER	SANITARY CLEANOUT OR VENT	WATER SERVICE CURB STOP	CABLE PEDESTAL
W — WATERLINE	SEPTIC TANK ACCESS COVER	WELL HEAD	CONTROL BOX
G — MARKED GAS MAIN	M.I.S. MANHOLE	STAND PIPE	FO FIBER OPTIC SIGN
E — MARKED ELECTRIC	UNKNOWN MANHOLE	WALL INDICATOR VALVE	COMMUNICATION MANHOLE
OHW — OVERHEAD WIRES	STORM MANHOLE	POST INDICATOR VALVE	BOLLARD
T — MARKED TELEPHONE	INLET (ROUND)	LIGHT POLE	SOIL BORING/MONITORING WELL
TV — MARKED CABLE TV LINE	INLET (SQUARE)	UTILITY POLE	WETLANDS FLAG
FD — MARKED FIBER OPTIC	CURB INLET	GUY POLE	MARSH
X — FENCE	STORM SEWER END SECTION	GUY WIRE	FLAGPOLE
	GAS VALVE	ELECTRIC MANHOLE	SIGN
	GAS METER	ELECTRIC PEDESTAL	HANDICAP SPACE
	WATER VALVE	ELECTRIC METER	CONIFEROUS TREE
	HYDRANT	TELEPHONE MANHOLE	DECIDUOUS TREE

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 100' 200'

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Existing Conditions Plan

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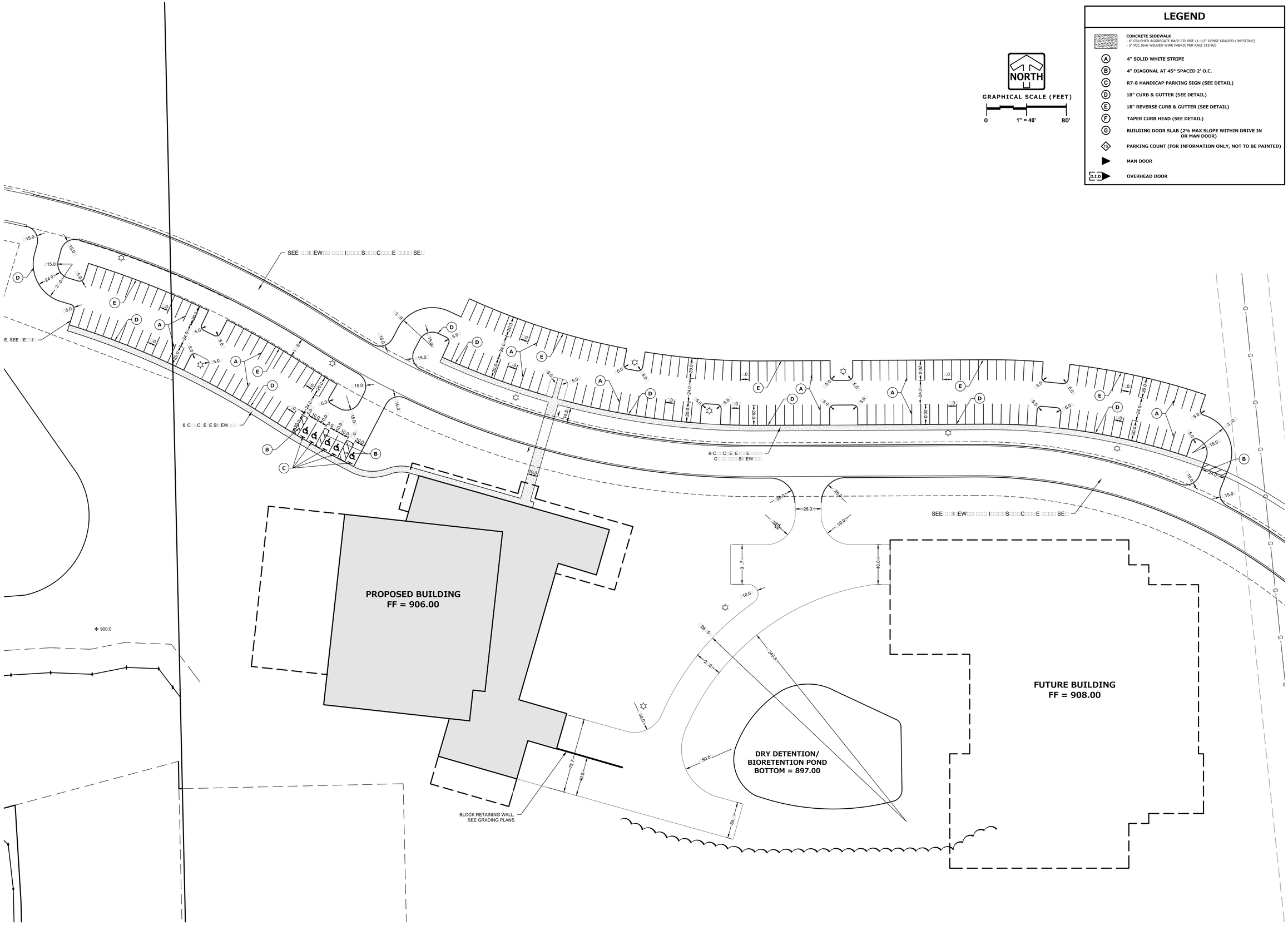

LEGEND

	CONCRETE SIDEWALK - 6" CRUSHED AGGREGATE BASE COURSE (1-1/2" DENSE GRADED LIMESTONE) - 5" PCC (6x6 WELDED WIRE FABRIC PER RACI 315-92)
A	4" SOLID WHITE STRIPE
B	4" DIAGONAL AT 45° SPACED 2' O.C.
C	R7-8 HANDICAP PARKING SIGN (SEE DETAIL)
D	18" CURB & GUTTER (SEE DETAIL)
E	18" REVERSE CURB & GUTTER (SEE DETAIL)
F	TAPER CURB HEAD (SEE DETAIL)
G	BUILDING DOOR SLAB (2% MAX SLOPE WITHIN DRIVE IN OR MAN DOOR)
16	PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)
	MAN DOOR
D.I.D	OVERHEAD DOOR

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Site Plan

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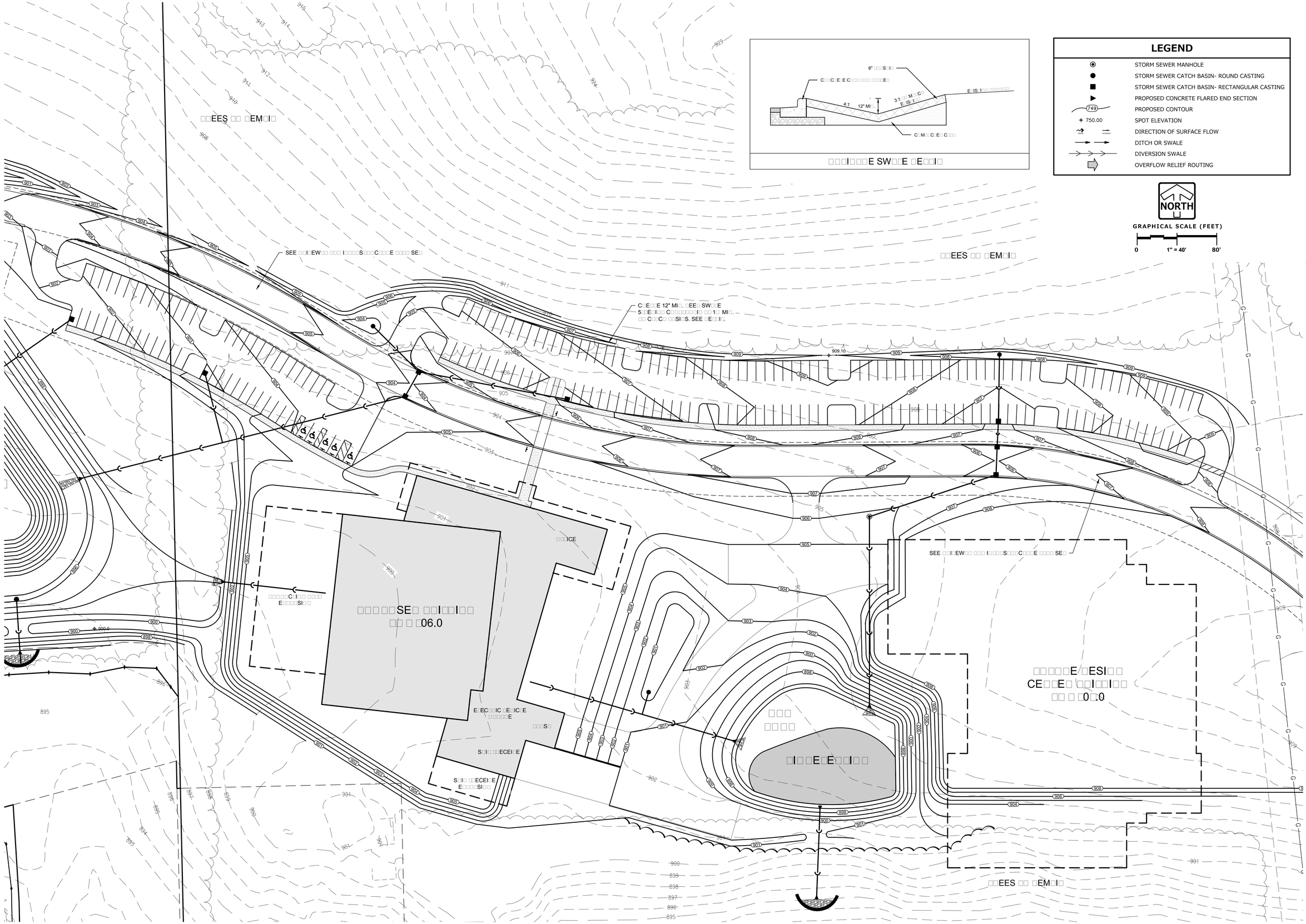

LEGEND

- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN- ROUND CASTING
- STORM SEWER CATCH BASIN- RECTANGULAR CASTING
- PROPOSED CONCRETE FLARED END SECTION
- 749 — PROPOSED CONTOUR
- 750.00 — SPOT ELEVATION
- DIRECTION OF SURFACE FLOW
- DITCH OR SWALE
- DIVERSION SWALE
- OVERFLOW RELIEF ROUTING

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Grading Plan

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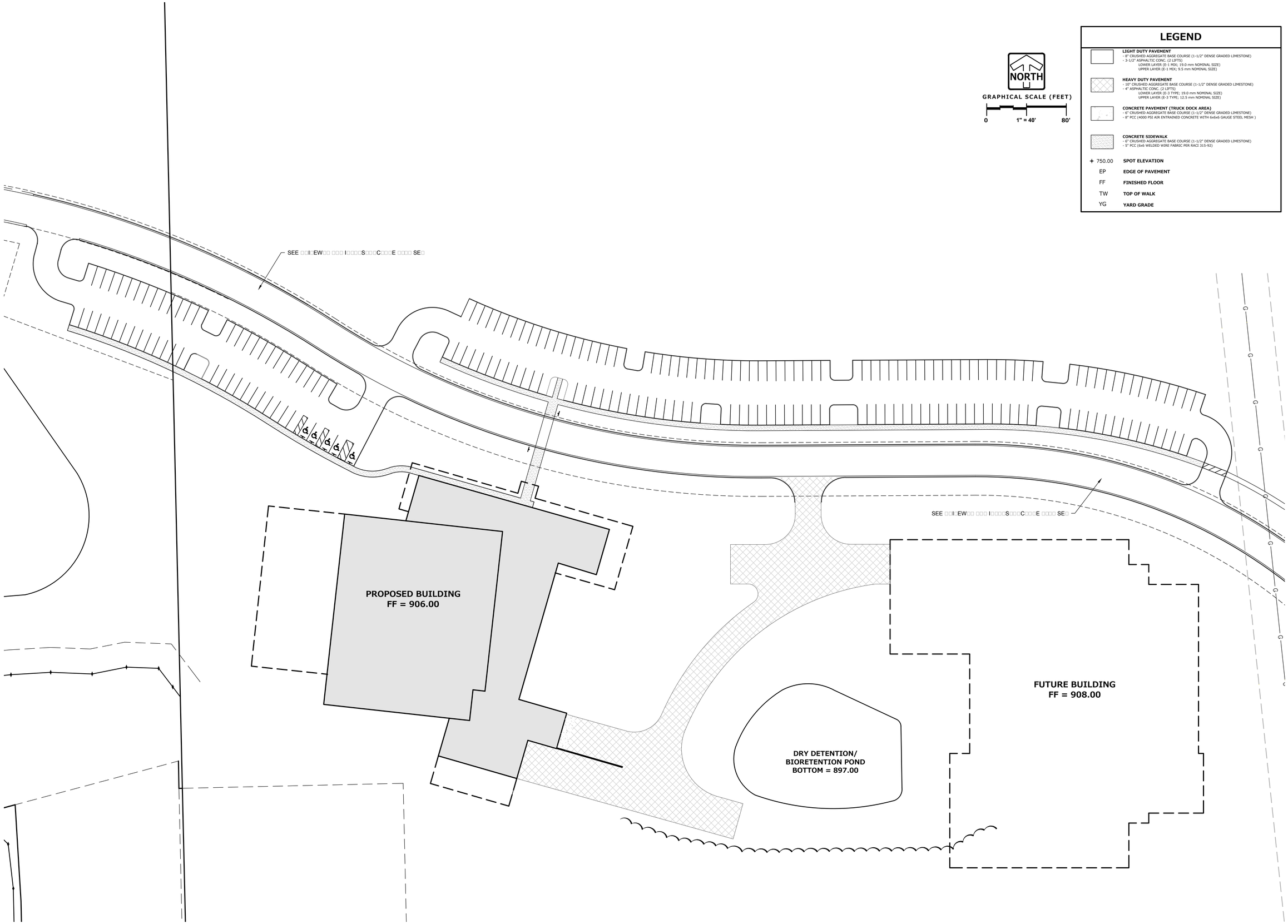

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 40' 80'

LEGEND

	LIGHT DUTY PAVEMENT - 8" CRUSHED AGGREGATE BASE COURSE (1-1/2" DENSE GRADED LIMESTONE) - 3-1/2" ASPHALTIC CONC. (2 LIFTS) LOWER LAYER (E-1 MIX; 19.0 mm NOMINAL SIZE) UPPER LAYER (E-1 MIX; 9.5 mm NOMINAL SIZE)
	HEAVY DUTY PAVEMENT - 10" CRUSHED AGGREGATE BASE COURSE (1-1/2" DENSE GRADED LIMESTONE) - 4" ASPHALTIC CONC. (2 LIFTS) LOWER LAYER (E-3 TYPE; 19.0 mm NOMINAL SIZE) UPPER LAYER (E-3 TYPE; 12.5 mm NOMINAL SIZE)
	CONCRETE PAVEMENT (TRUCK DOCK AREA) - 6" CRUSHED AGGREGATE BASE COURSE (1-1/2" DENSE GRADED LIMESTONE) - 8" PCC (4000 PSI AIR ENTRAINED CONCRETE WITH 6x6x6 GAUGE STEEL MESH)
	CONCRETE SIDEWALK - 6" CRUSHED AGGREGATE BASE COURSE (1-1/2" DENSE GRADED LIMESTONE) - 5" PCC (6x6 WELDED WIRE FABRIC PER RACI 315-92)
✦ 750.00	**SPOT ELEVATION**
EP	**EDGE OF PAVEMENT**
FF	**FINISHED FLOOR**
TW	**TOP OF WALK**
YG	**YARD GRADE**

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Paving Plan

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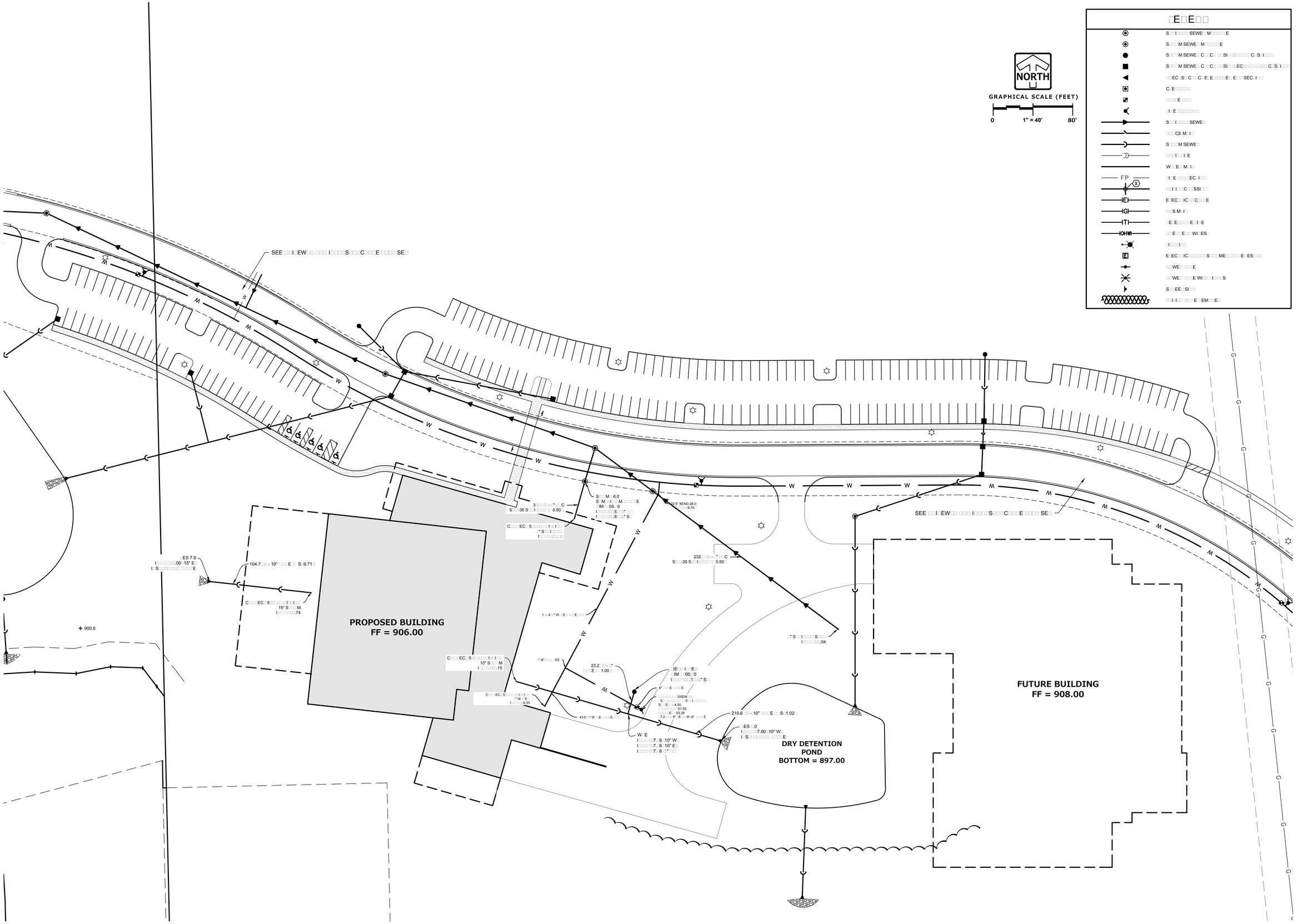

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Utility Plan

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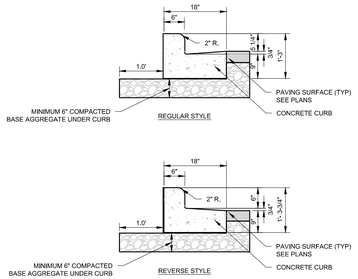
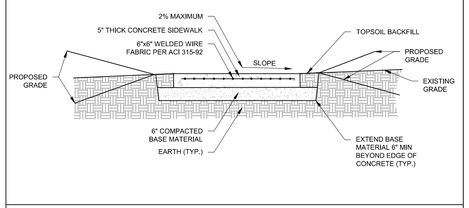


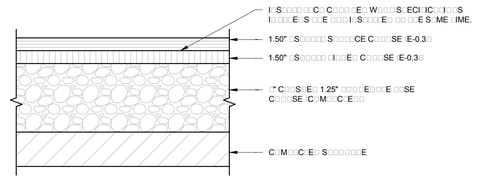
NOTES:

1. LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 10 FEET NOR LESS THAN 6 FEET. THE JOINTS SHALL BE A MINIMUM OF 3 INCHES IN DEPTH.
2. EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT ALL PT'S AND PC'S, 3 FEET EITHER SIDE OF THE CATCH BASINS IN THE CURB LINE, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER OF RECORD. THE EXPANSION JOINTS FILLER SHALL BE A ONE PIECE FIBERBOARD OR THE APPROVED EQUIVALENT MATERIAL, HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 0.5 INCH THICK.
3. IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE.
4. REVERSE STYLE CURB LOCATIONS ARE NOTED ON THE PLANS.

18" VERTICAL FACE CURB



CONCRETE SIDEWALK



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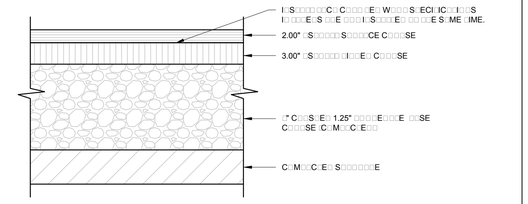

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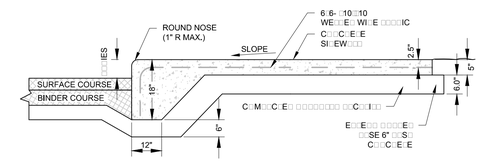

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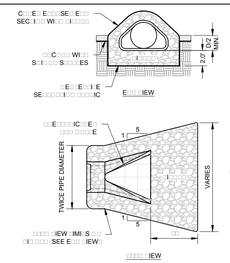
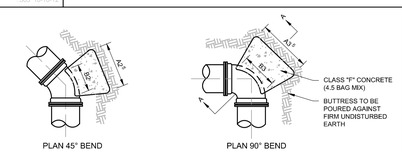


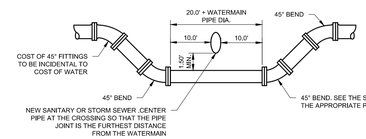


PIPE	22 1/2° BENDS		45° BENDS		90° BENDS	
SIZE	A1	B1	A2	B2	A3	B3
6"	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-2"
8"	1'-0"	1'-0"	1'-4"	1'-2"	1'-10"	1'-6"
12"	1'-4"	1'-4"	1'-10"	1'-10"	2'-8"	2'-3"
16"	1'-10"	1'-8"	2'-6"	2'-4"	3'-10"	2'-10"
20"	2'-4"	2'-0"	3'-3"	2'-10"	5'-0"	3'-4"
24"	2'-10"	2'-4"	4'-0"	3'-3"	6'-4"	3'-10"
30"	3'-4"	3'-0"	5'-4"	3'-10"	8'-0"	4'-8"

NOTES:

1. PROVIDE THRUST BLOCKING TO PREVENT MOVEMENT OF LINES UNDER PRESSURE AT BENDS, TEES, CAPS, VALVES, HYDRANTS, AND AT POINTS SPECIFIED BY THE ENGINEER
2. ALL BLOCKING SHALL BE WITH POURED CLASS SI CONCRETE AGAINST UNDISTURBED VERTICAL EARTH SURFACE
3. THRUST BLOCKS TO BE AT ALL BENDS 11¼° OR GREATER
4. THE COST OF INSTALLING THE THRUST BLOCK SHALL BE INCIDENTAL TO THE CONSTRUCTION OF THE WATER
5. DIMENSION A2 & A3 SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH M.J BOLTS

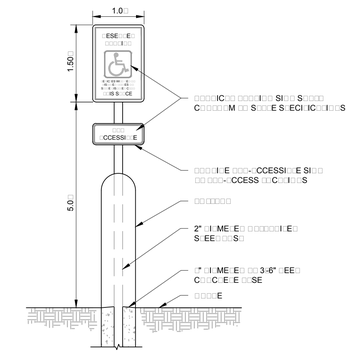
THRUST BLOCK



NOTES:

1. IN LIEU OF 45° BENDS, WATERMAIN DEPRESSION MAYBE CONSTRUCTED BY DEFLECTING THE WATERMAIN PER MANUFACTURER'S RECOMMENDATION TO ACHIEVE THE MINIMUM 18" OF VERTICAL SEPARATION.

WATER MAIN DEPRESSION



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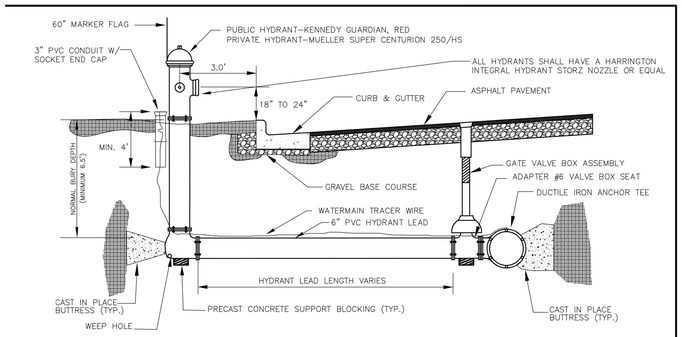


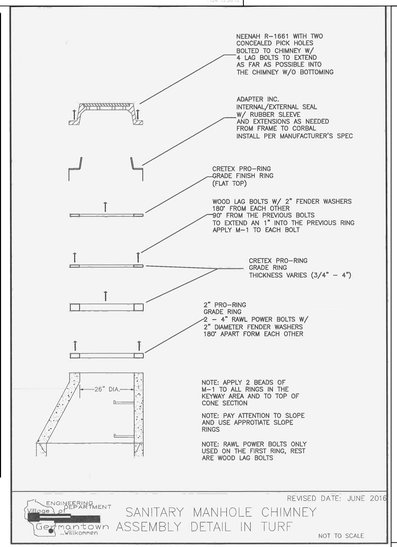
1. HYDRANT LEADS SHALL BE INSTALLED WITH CLASS B BEDDING.
2. HYDRANT LEAD TRENCH SHALL BE BACKFILLED WITH GRANULAR MATERIAL.
3. ALL CONNECTIONS ON HYDRANT LEAD SHALL BE RESTRAINED MECHANICAL JOINTS WITH MEGA LUG.
4. ALL HYDRANT TO HAVE A 5-1/4 IN PUMPER NOZZLE AND TWO 2-1/2 IN HOSE NOZZLES

ENGINEERING DEPARTMENT
Page 1 of [redacted]
Germantown ...Willkommen

PVC HYDRANT BRANCH DETAIL

N.T.S.

REV. 05/5/2016

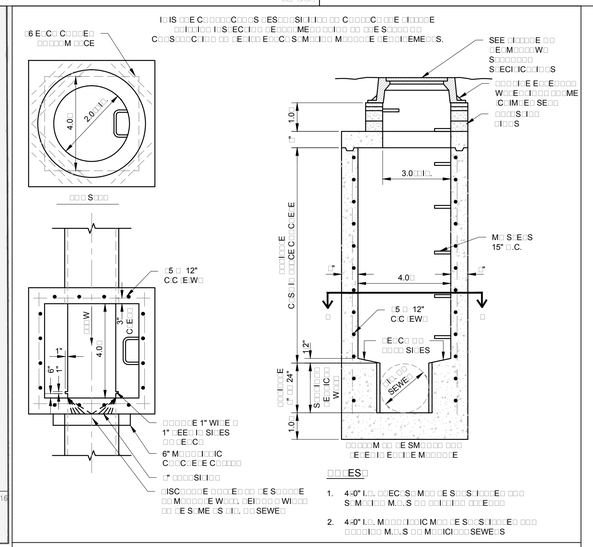


ENGINEERING DEPARTMENT
Page 1 of [redacted]
Germantown ...Willkommen

REVISED DATE: JUNE 2016

SANITARY MANHOLE CHIMNEY ASSEMBLY DETAIL IN TURF

NOT TO SCALE



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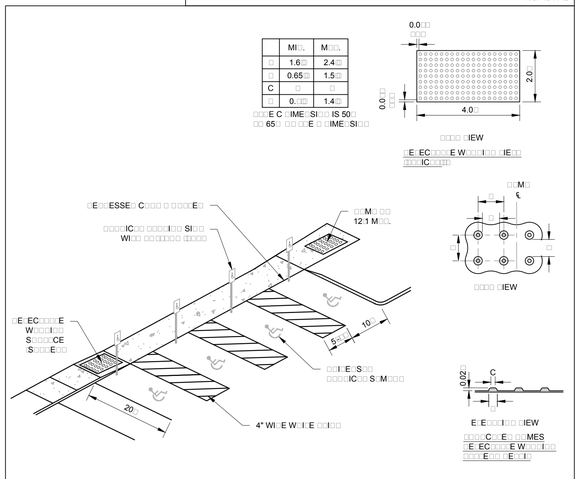

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p[illegible]60[illegible]6[illegible]7.316[illegible]

Ma[illegible]1[illegible], 201[illegible]

Construction Details

C6.0

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CERTIFIED SURVEY MAP NO._____

A redivision of Lot 1 and Lot 2 of Certified Survey Map No. 6702 and lands being part of the Northeast 1/4, Southeast 1/4 and Southwest 1/4 of the Southwest 1/4, and part of the Northwest 1/4 and Southwest 1/4 of the Southeast 1/4 all in Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin.

Subdivider: Phylmack LLC
P.O. Box 1011
Germantown, WI 53022

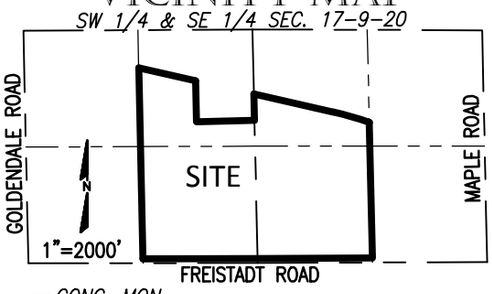
Note: See sheet 2 for Wetlands Boundary & Setback lines.
See sheet 3 for Easement and Apparent Burial Site information.

- ● Indicates found 1/2" rebar
- ● Indicates found 1" iron pipe.

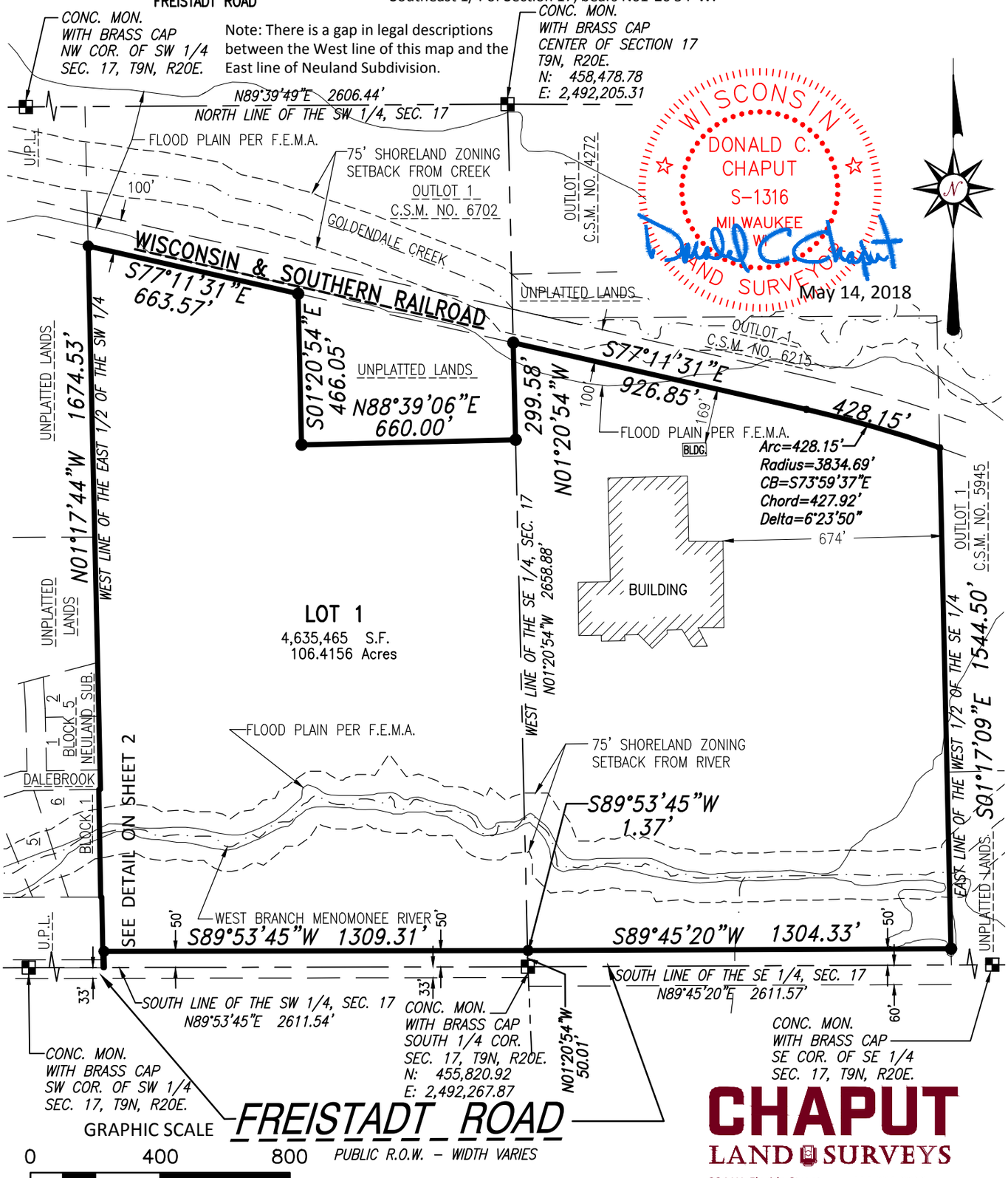
Bearings are referenced to grid North of the Wisconsin State Plane Coordinate System (South Zone) NAD 27, in which the West line of the Southeast 1/4 of Section 17, bears N01°20'54"W.

VICINITY MAP

SW 1/4 & SE 1/4 SEC. 17–9–20



Note: There is a gap in legal descriptions between the West line of this map and the East line of Neuland Subdivision.



WISCONSIN
DONALD C. CHAPUT
S-1316
MILWAUKEE
WI
LAND SURVEYOR

May 14, 2018

GRAPHIC SCALE
0 400 800
1" = 400'

This instrument was drafted by Donald C. Chaput
Professional Land Surveyor S-1316

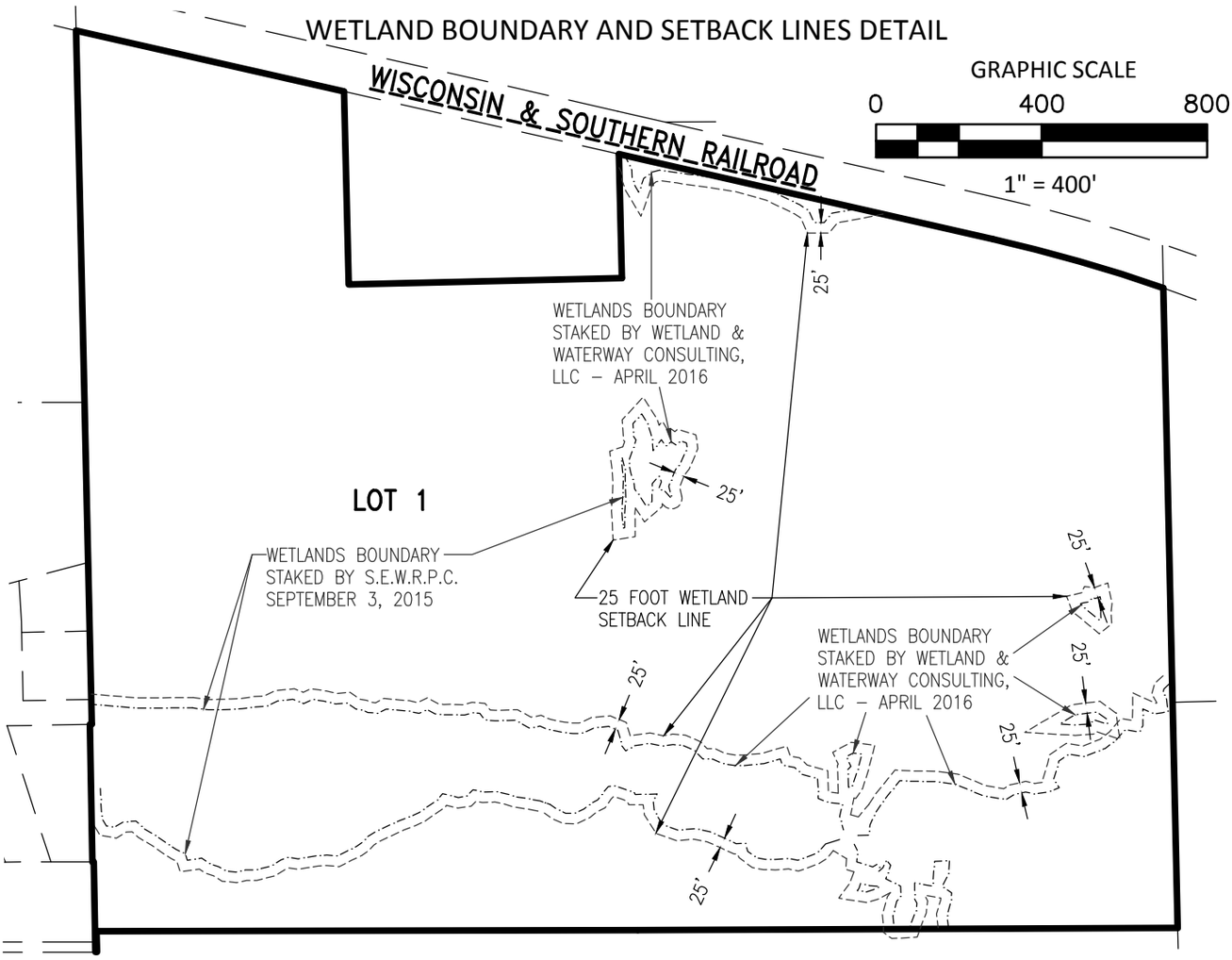
CHAPUT LAND SURVEYS
234 W. Florida Street
Milwaukee, WI 53204
414-224-8068
www.chaputlandsurveys.com

Drawing No. 2013-grb
Sheet 1 of 6 Sheets

CERTIFIED SURVEY MAP NO._____

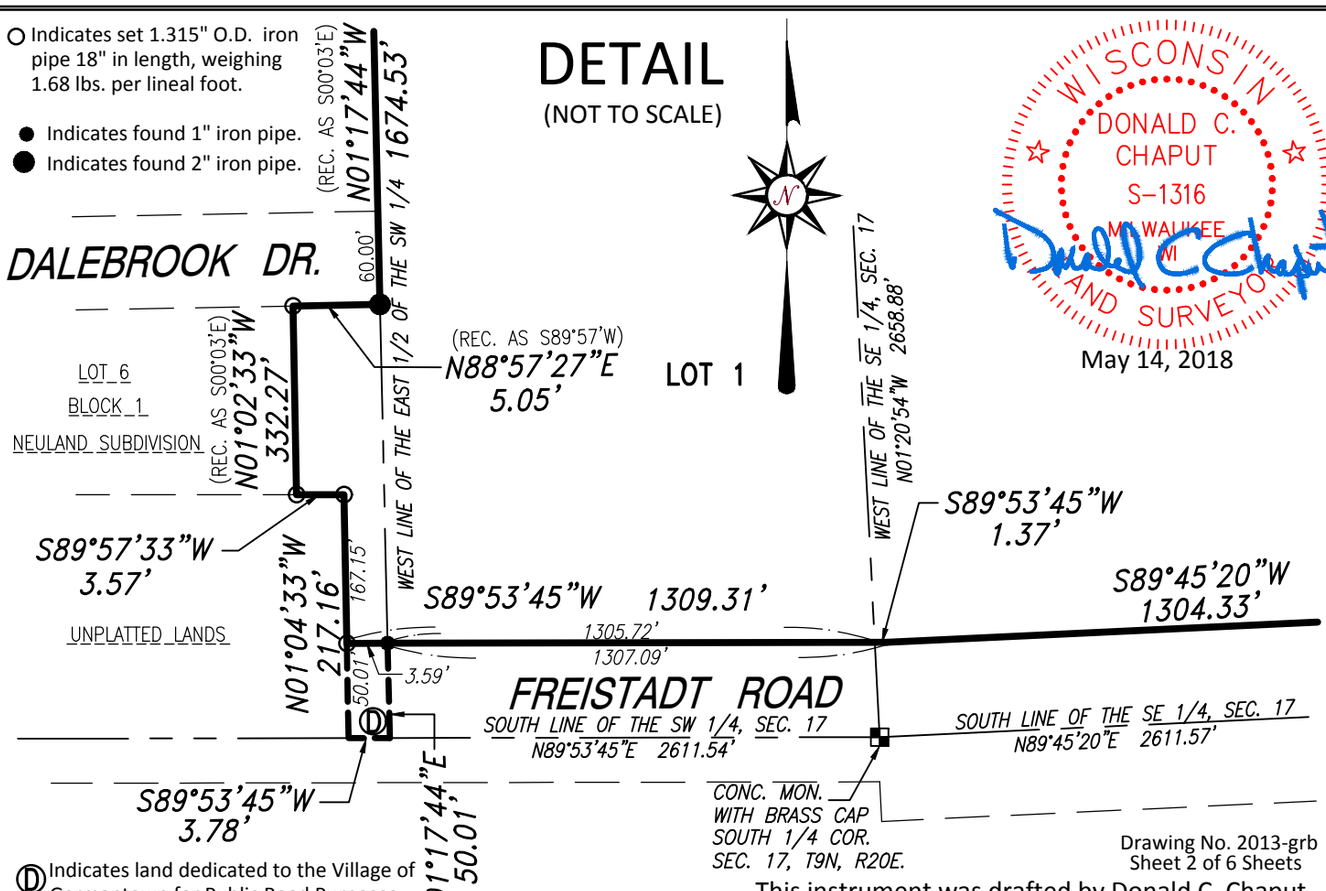
A redivision of Lot 1 and Lot 2 of Certified Survey Map No. 6702 and lands being part of the Northeast 1/4, Southeast 1/4 and Southwest 1/4 of the Southwest 1/4, and part of the Northwest 1/4 and Southwest 1/4 of the Southeast 1/4 all in Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin.

WETLAND BOUNDARY AND SETBACK LINES DETAIL



DETAIL

(NOT TO SCALE)



WISCONSIN
DONALD C. CHAPUT
S-1316
MILWAUKEE, WI
LAND SURVEYOR

Donald C. Chaput

May 14, 2018

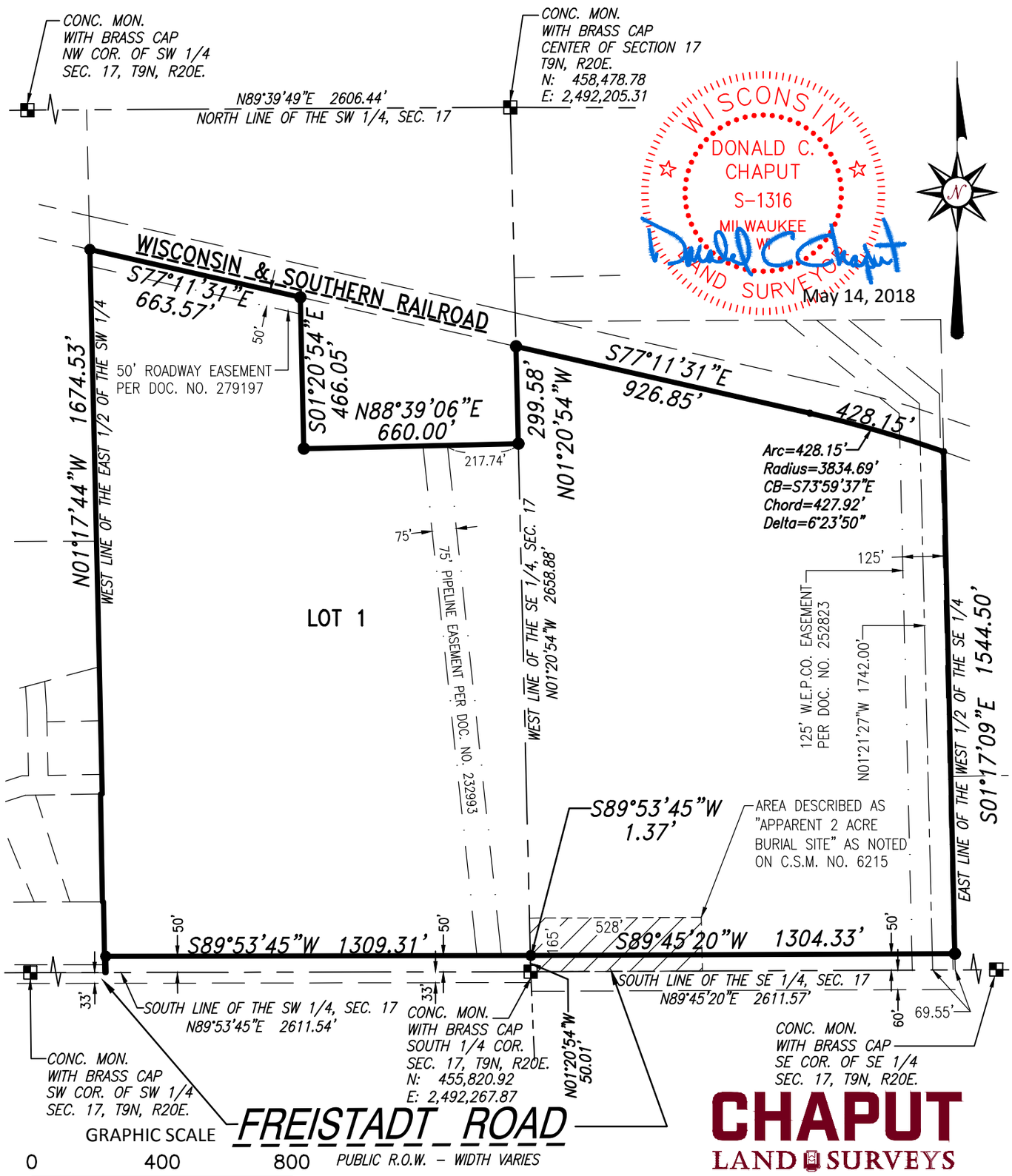
Drawing No. 2013-grb
Sheet 2 of 6 Sheets

This instrument was drafted by Donald C. Chaput
Professional Land Surveyor S-1316

CERTIFIED SURVEY MAP NO._____

A redivision of Lot 1 and Lot 2 of Certified Survey Map No. 6702 and lands being part of the Northeast 1/4, Southeast 1/4 and Southwest 1/4 of the Southwest 1/4, and part of the Northwest 1/4 and Southwest 1/4 of the Southeast 1/4 all in Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin.

EASEMENT AND APPARENT BURIAL SITE DETAIL



This instrument was drafted by Donald C. Chaput
Professional Land Surveyor S-1316

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Milwaukee, WI 53204
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Drawing No. 2013-grb
Sheet 3 of 6 Sheets

CERTIFIED SURVEY MAP NO._____

A redivision of Lot 1 and Lot 2 of Certified Survey Map No. 6702 and lands being part of the Northeast 1/4, Southeast 1/4 and Southwest 1/4 of the Southwest 1/4, and part of the Northwest 1/4 and Southwest 1/4 of the Southeast 1/4 all in Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin.

SURVEYOR'S CERTIFICATE

STATE OF WISCONSIN}
:SS
MILWAUKEE COUNTY}

I, DONALD C. CHAPUT, a Professional land surveyor, do hereby certify:

THAT I have survey, divided and mapped a redivision of Lot 1 and Lot 2 of Certified Survey Map No. 6702 and lands being part of the Northeast 1/4, Southeast 1/4 and Southwest 1/4 of the Southwest 1/4, and part of the Northwest 1/4 and Southwest 1/4 of the Southeast 1/4 all in Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin, bounded and described as follows:

COMMENCING at the South 1/4 corner of said Section; thence North 01°20'54" West along the West line of the Southeast 1/4 of Section 17 a distance of 50.01 feet to a point on the North line of Freistadt Road and the point of beginning of the lands hereinafter described; thence South 89°53'45" West along said North line 1305.72 feet to a point on the West line of the East 1/2 of the Southwest 1/4 of Section 17; thence South 01°17'44" East along said West line 50.01 feet to a point on the South line of the Southwest 1/4; thence South 89°53'45" West along said South line 3.78 feet to a point; thence North 01°04'33" West 217.16 feet to a point; thence South 89°57'33" West 3.57 feet to a point on the East line of Lot 6, Block 1 of Neuland Subdivision; thence North 01°02'33" West along said East line 332.27 feet to a point on the South line of Dalebrook Drive; thence North 88°57'27" East along said South line 5.05 feet to a point on the West line of the East 1/2 of the Southwest 1/4 of Section 17; thence North 01°17'44" West along said West line 1674.53 feet to a point on the South line of the Wisconsin & Southern Railroad lands; thence South 77°11'31" East along said South line 663.57 feet to a point; thence South 01°20'54" East 466.05 feet to a point; thence North 88°39'06" East 660.00 feet to a point on the West line of the Southeast 1/4 Section; thence North 01°20'54" West along said West line 299.58 feet to a point on the South line of the Wisconsin & Southern Railroad lands; thence South 77°11'31" East along said South line 926.85 feet to a point; thence Southeasterly 428.15 feet along said South line and arc of a curve, whose center lies to the Southwest, whose radius is 3834.69 feet and whose chord bears South 73°59'37" East 427.92 feet to a point on the East line of the West 1/2 of the Southeast 1/4 of Section 17; thence South 01°17'09" East along said East line 1544.50 feet to a point on the North line of Freistadt Road; thence South 89°45'20" West along said North line 1304.33 feet to a point; thence South 89°53'45" West along said North line 1.37 feet to the point of beginning.

Containing 4,635,649 square feet or 106.4199 acres of land.

THAT such map is a correct representation of all the exterior boundaries of the land surveyed and the land division thereof made.

THAT I have fully complied with the provisions of Section 236.34 of the Wisconsin Statutes, the Land Division Ordinance of the Village of Germantown in surveying, dividing and mapping the same.

WISCONSIN
DONALD C. CHAPUT
S-1316
MILWAUKEE WI
LAND SURVEYOR

DATE: May 14, 2018

Donald C Chaput
DONALD C. CHAPUT
PROFESSIONAL LAND SURVEYOR S-1316

This instrument was drafted by Donald C. Chaput
Professional Land Surveyor S-1316

CERTIFIED SURVEY MAP NO._____

A redivision of Lot 1 and Lot 2 of Certified Survey Map No. 6702 and lands being part of the Northeast 1/4, Southeast 1/4 and Southwest 1/4 of the Southwest 1/4, and part of the Northwest 1/4 and Southwest 1/4 of the Southeast 1/4 all in Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin.

OWNER'S CERTIFICATE

Phylmack LLC, a Wisconsin limited liability company duly organized and existing under and by virtue of the laws of the State of Wisconsin, as owner, certifies that said company caused the land described on this map to be surveyed, divided, mapped and dedicated as represented on this map in accordance with the provisions of Section 236.34 of the Wisconsin Statutes, the Land Division Ordinance of the Village of Germantown in surveying, dividing and mapping the same. As owner, I hereby dedicate that part of Freistadt Road to the Village of Germantown for public road purposes as represented on sheets 1 and 2 of 5 sheets of this Certified Survey Map.

IN WITNESS WHEREOF, the said Phylmack LLC has caused these presents to be signed by _____, its _____, at Germantown, Washington County, Wisconsin, and its corporate seal to be hereunto affixed on this _____day of _____, 2018.

In the presence of: Phylmack LLC

_____
James Speaker, Member

STATE OF WISCONSIN}
:SS
WASHINGTON COUNTY}

Personally came before me this __ day of _____,2018, the above named _____ , to me known as the person who executed the foregoing instrument and acknowledged the same.

_____,
Notary Public, State of Wisconsin
My commission expires._____
My commission is permanent.

VILLAGE OF GERMANTOWN PLANNING COMMISSION APPROVAL

This Certified Survey Map is hereby approved by the Planning Commission of the Village of Germantown on this _____ day of _____ , 2018.

_____ _____
Dean Wolter, Chairperson Date

_____ _____
Laura A. Johnson, Secretary Date

WISCONSIN
DONALD C. CHAPUT
S-1316
MILWAUKEE
WI
LAND SURVEYOR

May 14, 2018

This instrument was drafted by Donald C. Chaput
Professional Land Surveyor S-1316

Drawing No. 2013-grb
Sheet 5 of 6 Sheets

CERTIFIED SURVEY MAP NO._____

A redivision of Lot 1 and Lot 2 of Certified Survey Map No. 6702 and lands being part of the Northeast 1/4, Southeast 1/4 and Southwest 1/4 of the Southwest 1/4, and part of the Northwest 1/4 and Southwest 1/4 of the Southeast 1/4 all in Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin.

VILLAGE BOARD APPROVAL

This Certified Survey Map, being a division of part of the Northeast 1/4, Southeast 1/4 and Southwest 1/4 of the Southwest 1/4, and part of the Northwest 1/4 and Southwest 1/4 of the Southeast 1/4 all in Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin is approved and the dedication of that part of Freistadt Road for public road purposes as shown on sheets 1 and 2 of 5 sheets is hereby accepted by the Village Board of Trustees of the Village of Germantown on this ___ day of _____ , 2018.

_____ _____

Dean Wolter, Village President Date

_____ _____

Deanna Boldrey, Village Clerk Date

WISCONSIN
DONALD C.
CHAPUT
S-1316
MILWAUKEE
WI
LAND SURVEYOR

May 14, 2018

This instrument was drafted by Donald C. Chaput
Professional Land Surveyor S-1316

Drawing No. 2013-grb
Sheet 6 of 6 Sheets

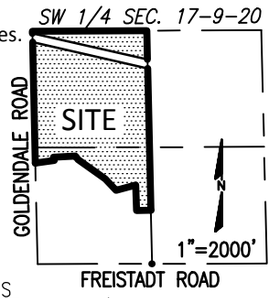
CERTIFIED SURVEY MAP NO._____

A redivision of Lot 1 and Lot 2, Block 5 of Neuland Subdivision and lands being part of the Northwest 1/4 and Southwest 1/4 of the Southwest 1/4 of Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin.

Subdivider: Speaker Properties, LLC
N120 W19434 Freistadt Rd.
Germantown, WI 53022

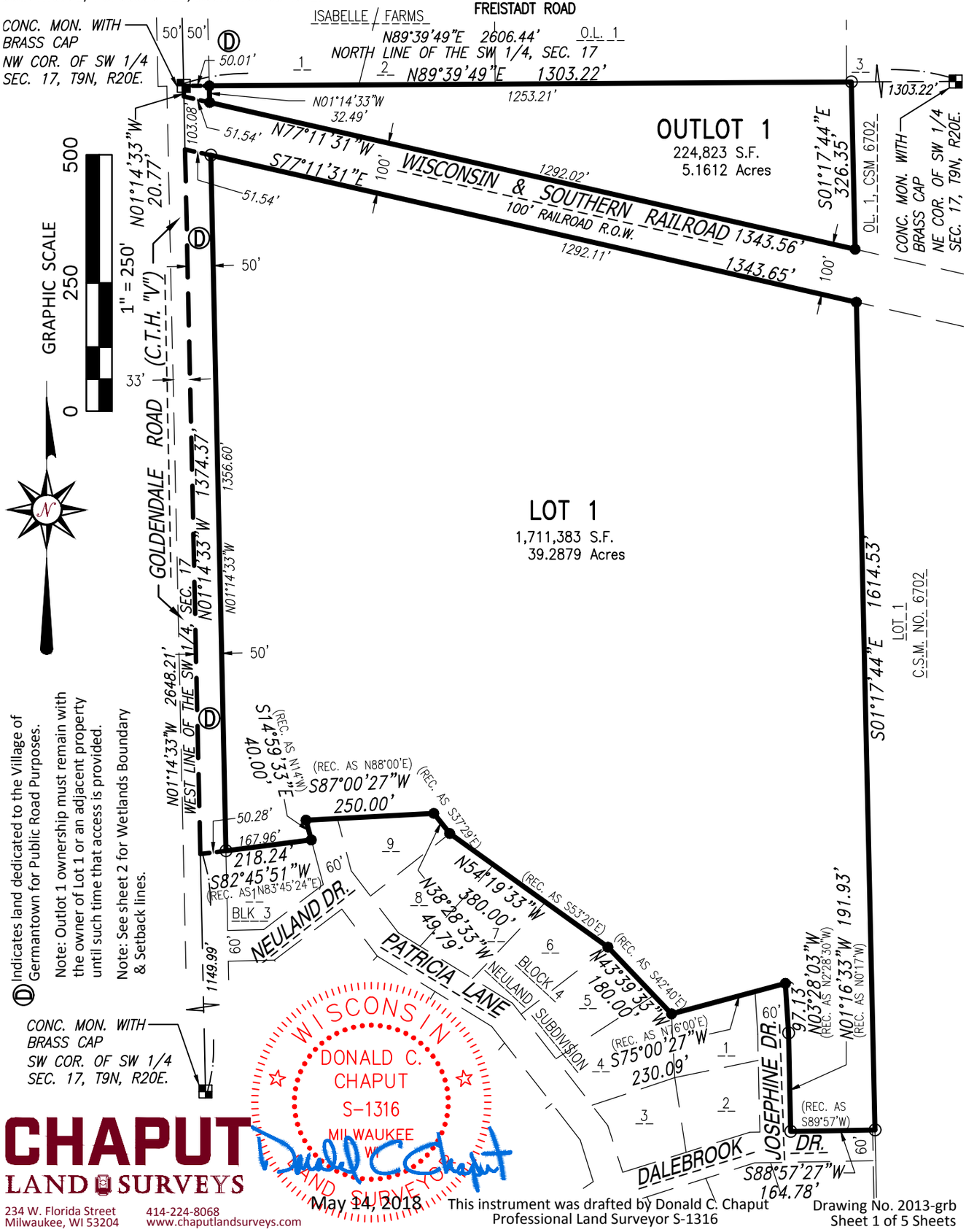
Note: See sheet 2 for Wetlands Boundary & Zoning Setback lines.

VICINITY MAP



● Indicates found 1" iron pipe.
○ Indicates set 1.315" O.D. iron pipe 18" in length, weighing 1.68 lbs. per lineal foot.

Bearings are referenced to grid North of the Wisconsin State Plane Coordinate System (South Zone) NAD 27, in which the North line of the Southwest 1/4 of Section 17, bears N89°39'49"E.



Indicates land dedicated to the Village of Germantown for Public Road Purposes.

Note: Outlot 1 ownership must remain with the owner of Lot 1 or an adjacent property until such time that access is provided.

Note: See sheet 2 for Wetlands Boundary & Setback lines.

WISCONSIN
DONALD C. CHAPUT
S-1316
MILWAUKEE
WI
LAND SURVEYOR

Donald C. Chaput

May 14, 2018

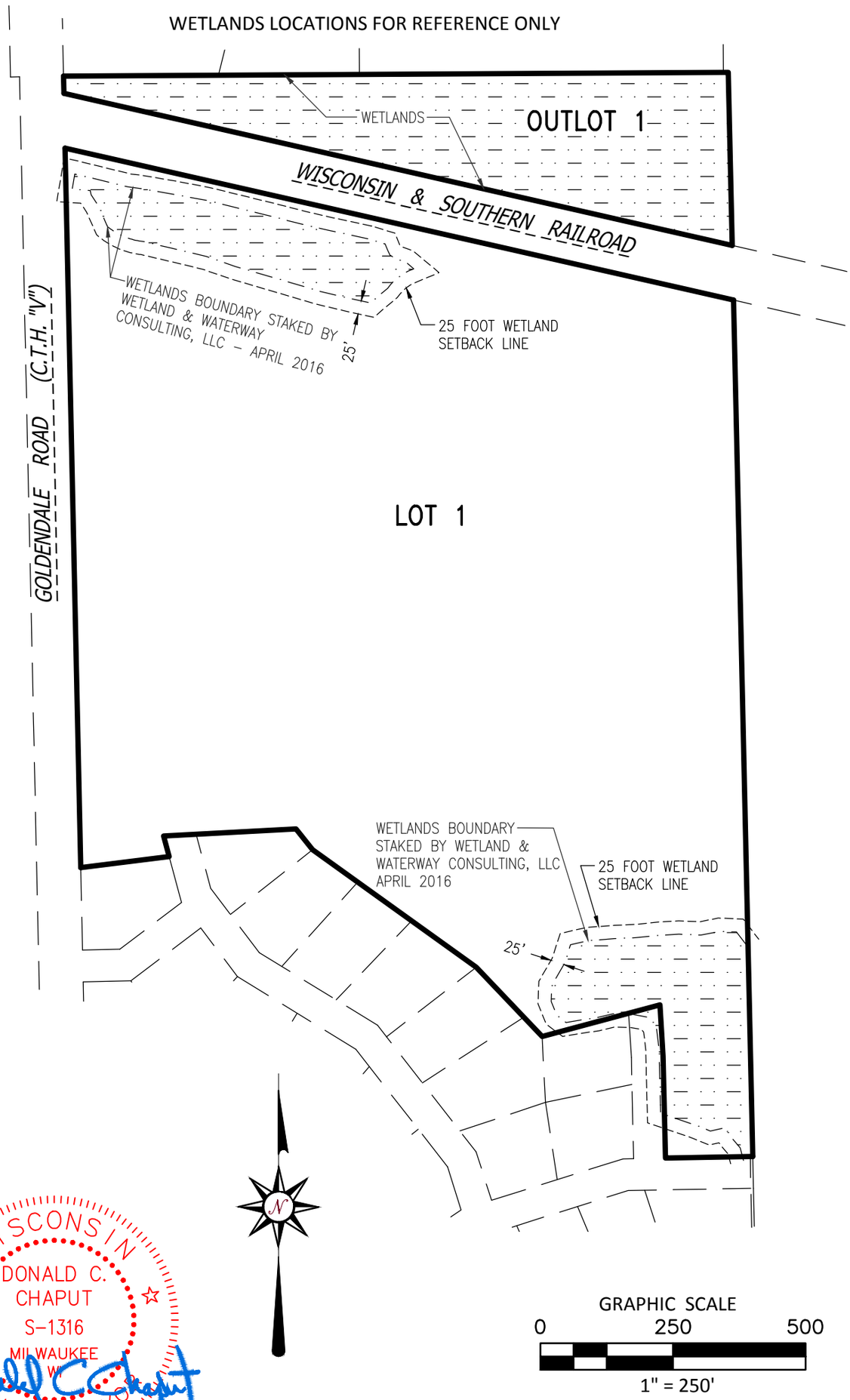
This instrument was drafted by Donald C. Chaput
Professional Land Surveyor S-1316

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

Drawing No. 2013-grb
Sheet 1 of 5 Sheets

CERTIFIED SURVEY MAP NO._____

A redivision of Lot 1 and Lot 2, Block 5 of Neuland Subdivision and lands being part of the Northwest 1/4 and Southwest 1/4 of the Southwest 1/4 of Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin.



WISCONSIN
DONALD C. CHAPUT
S-1316
MILWAUKEE
LAND SURVEYOR

May 14, 2018

This instrument was drafted by Donald C. Chaput
Professional Land Surveyor S-1316

Drawing No. 2013-grb
Sheet 2 of 5 Sheets

CERTIFIED SURVEY MAP NO._____

A redivision of Lot 1 and Lot 2, Block 5 of Neuland Subdivision and lands being part of the Northwest 1/4 and Southwest 1/4 of the Southwest 1/4 of Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin.

SURVEYOR'S CERTIFICATE

STATE OF WISCONSIN}
:SS
MILWAUKEE COUNTY}

I, DONALD C. CHAPUT, a Professional land surveyor, do hereby certify:

THAT I have survey, divided and mapped a redivision of Lot 1 and Lot 2, Block 5 of Neuland Subdivision and lands being part of the Northwest 1/4 and Southwest 1/4 of the Southwest 1/4 of Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin, bounded and described as follows:

BEGINNING at the Northwest corner of the Southwest 1/4 of Section 17; thence North 89°39'49" East along the North line of said Southwest 1/4 a distance of 1303.22 feet to a point on the West line of Outlot 1 of Certified Survey Map No. 6702; thence South 01°17'44" East along said West line 326.35 feet to a point on the North line of the Wisconsin & Southern Railroad lands; thence North 77°11'31" West along said North line 1343.56 feet to a point on the West line of said Southwest 1/4; thence North 01°14'33" West along said West line 20.77 feet to the point of beginning.

TOGETHER WITH:

COMMENCING at the Northwest corner of the Southwest 1/4 of Section 17; thence South 01°20'54" East along the West line of the Southeast 1/4 of Section 17 a distance of 123.85 feet to a point on the South line of the Wisconsin & Southern Railroad lands and the point of beginning of the lands hereinafter described; thence South 77°11'31" East along said South line 1343.65 feet to a point on the West line of Lot 1 of Certified Survey Map No. 6702; thence South 01°17'44" East along said West line 1614.53 feet to a point on the North line of Dalebrook Drive; thence South 88°57'27" West along said North line 164.78 feet to a point on the East line of Josephine Drive; thence North 01°16'33" West along said East line 191.93 feet to a point; thence North 03°28'03" West along said East line 97.13 feet to a point on the North line of Josephine Drive; thence South 75°00'27" West along said North line and North line of Block 4 of Neuland Subdivision 230.09 feet to a point; thence North 43°39'33" West along said North line 180.00 feet to a point; thence North 54°19'33" West along said North line 380.00 feet to a point; thence North 38°28'33" West along said North line 49.79 feet to a point; thence South 87°00'27" West along said North line 250.00 feet to a point on the West line of Patricia Lane; thence South 14°59'33" East along said West line 40.00 feet to a point on the North line of Lot 1, Block 3 of Neuland Subdivision; thence South 82°45'51" West along said North line and its extention 218.24 feet to a point on the West line of the Southeast 1/4 of Section 17; thence North 01°14'33" West along said West line 1374.37 feet to the point of beginning.

Containing 2,005,812 square feet or 46.0471 acres of land.

THAT such map is a correct representation of all the exterior boundaries of the land surveyed and the land division thereof made.

THAT I have fully complied with the provisions of Section 236.34 of the Wisconsin Statutes, the Land Division Ordinance of the Village of Germantown in surveying, dividing and mapping the same.

WISCONSIN
DONALD C. CHAPUT
S-1316
MILWAUKEE WI
LAND SURVEYOR

DATE: May 14, 2018

Donald C Chaput
DONALD C. CHAPUT
PROFFESIONAL LAND SURVEYOR S-1316

This instrument was drafted by Donald C. Chaput
Professional Land Surveyor S-1316

Drawing No. 2013-grb
Sheet 3 of 5 Sheets

CERTIFIED SURVEY MAP NO._____

A redivision of Lot 1 and Lot 2, Block 5 of Neuland Subdivision and lands being part of the Northwest 1/4 and Southwest 1/4 of the Southwest 1/4 of Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin.

VILLAGE OF GERMANTOWN PLANNING COMMISSION APPROVAL

This Certified Survey Map is hereby approved by the Planning Commission of the Village of Germantown on this _____ day of _____ , 2018.

_____ _____

Dean Wolter, Chairperson Date

_____ _____

Laura A. Johnson, Secretary Date

VILLAGE BOARD APPROVAL

This Certified Survey Map, being a redivision of Lot 1 and Lot 2, Block 5 of Neuland Subdivision and lands being part of the Northwest 1/4 and Southwest 1/4 of the Southwest 1/4 of Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin is approved and the dedication of that part of Goldendale Road for public road purposes as shown on sheet 1 of 5 hereby accepted by the Village Board of Trustees of the Village of Germantown on this ___ day of _____ , 2018.

_____ _____

Dean Wolter, Village President Date

_____ _____

Deanna Boldrey, Village Clerk Date

WISCONSIN
DONALD C.
CHAPUT
S-1316
MILWAUKEE
WI
LAND SURVEYOR

May 14, 2018

This instrument was drafted by Donald C. Chaput
Professional Land Surveyor S-1316

Drawing No. 2013-grb
Sheet 5 of 5 Sheets

CERTIFIED SURVEY MAP NO._____

A redivision of Lot 1 and Lot 2, Block 5 of Neuland Subdivision and lands being part of the Northwest 1/4 and Southwest 1/4 of the Southwest 1/4 of Section 17, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin.

OWNER'S CERTIFICATE

Speaker Properties, LLC, a Wisconsin limited liability company duly organized and existing under and by virtue of the laws of the State of Wisconsin, as owner, certifies that said company caused the land described on this map to be surveyed, divided, mapped and dedicated as represented on this map in accordance with the provisions of Section 236.34 of the Wisconsin Statutes, the Land Division Ordinance of the Village of Germantown in surveying, dividing and mapping the same. As owner, I hereby dedicate that part of Goldendale Road to the Village of Germantown for public road purposes as represented on sheet 1 of 5 of this Certified Survey Map..

IN WITNESS WHEREOF, the said Speaker Properties, LLC has caused these presents to be signed by _____, its _____, at Germantown, Washington County, Wisconsin, and its corporate seal to be hereunto affixed on this _____day of _____, 2018.

In the presence of: Speaker Properties, LLC

_____
James Speaker, Member

STATE OF WISCONSIN}
:SS
WASHINGTON COUNTY}

Personally came before me this __ day of _____,2018, the above named _____ , to me known as the person who executed the foregoing instrument and acknowledged the same.

_____,
Notary Public, State of Wisconsin
My commission expires._____
My commission is permanent.

WISCONSIN
DONALD C. CHAPUT
S-1316
MILWAUKEE WI
LAND SURVEYOR

May 14, 2018

This instrument was drafted by Donald C. Chaput
Professional Land Surveyor S-1316

Drawing No. 2013-grb
Sheet 4 of 5 Sheets

Village of Germantown
...Willkommen

Community Development Department
Jeffrey W. Retzlaff, AICP, Director
Village Planner & Zoning Administrator
N112 W17001 Mequon Road P.O. Box 337
Germantown, WI 53022-0337
Telephone: (262) 250-4735 Website: www.village.germantown.wi.us
FAX: (262) 253-8255 E-mail: jretzlaff@village.germantown.wi.us

June 5, 2018

Paul Rushing
Kubala Washatko Architects
W61 N617 Mequon Ave
Cedarburg, WI 53012

RE: Speaker Corp Expansion; Site Plan & Certified Survey Map (CSM);
Staff Review Comments

Mr. Rushing:

Village Staff has reviewed the site plan and CSM submittals and has identified the following outstanding items/issues that need to be addressed before we schedule your application for Plan Commission review. Please provide the requested information, corrections, revisions, etc., or document how the issue(s) discussed will be addressed as part of your application(s).

RESPONSES, 6-19-19 IN RED

Community Development Department

1. We will need a materials board and color rendering.

   There will be a physical materials and colors board presented at the time of the Plan Commission meeting. Three descriptive perspective views of the building are included in the current submittal package.

2. Do you have written documentation from the pipeline company approving the planned driveway and other developed features within their easement?

   J.W. Speaker and Pinnacle Engineering have been communicating with the real estate division of ANR Pipeline Company and all have settled on the acceptable parameters of the crossing of the ANR Pipeline easement by the J.W.Speaker driveway, the documentation for which is forthcoming.

3. With the proposed metal-sided expansion wall on the west elevation, how long before the remaining building expansion is anticipated? Is the west elevation visible from the west?

   Timing of the expansion of the SMT Building is yet to be precisely determined, but in earlier meetings, 5 years is the timeframe that was discussed with J.W.Speaker. The west elevation is visible from the west, obscured approximately 40% by new and existing trees roughly 80' west of the SMT Building.

4. Can you provide more detail about the operational characteristics of the SMT operation? Hours of operation, # of employees, # of shifts, # daily truck/delivery trips, activities conducted, outside storage, materials used, products made, by-products, any noise, smoke, vibration associated with the operation that might be felt on or off-site? Website reference?

   The processes and work to be completed within the proposed Speaker SMT Building are not new processes. SMT refers to Surface Mount Technology, a method for producing electronic circuit board assemblies in which components (transistors/ diodes) are mounted onto a printed circuit board through an automated assembly line. The finished product is then used in J.W. Speaker lights.

   The main J.W. Speaker Freistadt Road 2008 manufacturing building has had these functions and processes operating in a single production line for at least five years. The new Electronics/SMT building will be a stand-alone facility for the purpose of expanding current SMT Electronics Department production capacity. Such SMT operations will cease in the main J.W. Speaker Freistadt Road 2008 facility after construction of the proposed SMT Building.

   No external noise, smoke, vibration or by-products are produced by the SMT processes.

   Please see the link below for a more detailed description of the SMT process:

   http://www.radio-electronics.com/info/data/smt/what-is-surface-mount-technology-tutorial.php

   Normal hours of operation are from Sunday at 11:00 p.m. through Friday at 11:15 p.m. Overtime hours on occasion could extend through the weekend.

   The expected number of employees at opening is 46; Planned 5-year increase is up to 119 employees total across three shifts.

   Number of shifts: Will remain at three shifts, as is the current practice.

   Number of daily truck deliveries: 2-3 per day; UPS, Fed-Ex 'small cube' trucks or Semi-Tractor trailer supply trucks.

   Outside storage is expected to be intermittent and minimal, such as empty wood skids in approximately 48" high stacks.

5. Will any of the road, utility grading or landscaping improvements shown in the have a phased construction schedule?

   The driveway, utility grading and landscape improvements will be constructed in one continuous phase beginning in July 2018.

6. The exterior driveway lighting plans (Sheet C1.8 & C1.9) indicate that the "C" type fixtures proposed in the parking areas are proposed at a height of 30 feet on top of a 3' high base. The Village's requirements are that the maximum fixture height allowed is 25 feet including any base. Please adjust the plan for these fixtures/poles accordingly. Also, there is no fixture height indicated for the Type "A" poles/fixtures proposed along the driveway. If shown on Sheet C1.8 I cannot read it.

   See attached Sheets C1.8 & C1.9 revised to show fixture heights and lighting distribution comforming to VOG requirements.

7. Also, the first exterior pole-mounted fixture closest to the driveway intersection on Goldendale Road is about 125 feet east of the intersection (Sheet C1.8). Knowing that the Village does not provide street lighting along Goldendale Road, you should consider adding/relocating a pole-mounted light fixture closer to the intersection to provide more/ better lighting at the intersection.

   See attached Sheets C1.8 & C1.9 revised to show fixture heights and lighting distribution comforming to VOG requirements.

8. Understanding that the same sign will be installed along Goldendale Road as is already installed along Freistadt Road, can you provide the specifications, dimensions, details on lighting (if any), and the require site plan showing setbacks to property lines and required landscaping around the base. How will you handle installing address coordinates for the various buildings?

   See attached Sheet C1.8a Site Sign Drawing showing proposed signage configuration, sign size, precise sign location and sign lighting. The address coordinates of each building will be permanently mounted near the front door close to the FDC in the case of the SMT Building and be of size and contrast to be legible from the adjacent driveway.

9. The overall site plan (Sheet C1.1) shows proposed grading across the entire site but the detail on Sheet C3.0 only shows a portion of the entire site. It's impossible to see what the proposed grades are for the proposed berms along the driveway (necessary to determine effectiveness and compliance with the berm requirements under Zoning Code Section 17.57 as required under the PDD). Can you provide more detail sheets?

   Grading for the berms is included in the Driveway and Infrastructure Civil plan set.

Similarly, the landscaping plan is not related to the grading plan or even existing topography. It's difficult to determine effectiveness of the landscaping, too.

The topographic grading is shown on the plans to study and compare to the proposed landscaping. As designed, the landscaping will be an effective visual screen in the time frame discussed at the time of the zoning change, that is 5-10 years. See attached landscape illustration C1.12.

10. Explain how the proposed berm immediately west of the storm water pond compares to the previously proposed undulating earth forms as depicted on the General Development Plan (GDP) adopted as part of the PDD? Knowing that the original intended function of the earth forms was to effectively hide the driveway and truck traffic from the residents in the Neuland Subdivision, I'm not sure what is proposed is sufficient. The 3-wing berm west of the pond has a maximum height of 6' but only in two small areas with the remaining berm having undulating components that rise 1-4 feet with an average of about 3 feet. How effective will this be? How does the height of the proposed berm (both maximum and average) compare to the topography of the residential lots to the west? Is the subdivision higher, lower or at the same elevation as the base of the berms?

    The existing grades for the adjacent lots are shown on the plans to study and compare to berm heights. As designed, the berms (the actual piling up of earth) are effective visual screening devices by themselves made even more effective with the proposed landscaping. See attached elevation scale drawing (C1.12 attached) of the proposed berm features to be immediately west of the storm water pond.

11. What is the glacial moraine feature… 3'x 5' boulders? Some sort of continuous path?

    A moraine is any glacially formed accumulation of unconsolidated glacial debris, such as boulders, that occurs in glaciated regions such as the proposed Speaker site. In the case of the SMT Building and greater Speaker site development, from experience we know that excavation will produce many boulders 1' to 3' in diameter. Instead of hauling them offsite and disposing, the plan is to incorporate the boulders as natural 3' tall by 5' wide mixed-stone glacial morraine rock walls approximately 2'-3' above mean grade, set into the pollinator prairie as an artful native land feature.

12. The minimum planted size for trees is 2.5" dia for deciduous and 8' height evergreen.

    See revised Landscape Construction Notes, attached, with revised tree sizes (2.5" diameter for deciduous and 8' evergreen height) highlighted in red.

13. Provide a legend//key for the landscaped areas coded or shown as "SM", "RM", "B", "BA", "P" etc. in/around the parking areas.

    See revised Construction Notes, attached, with revised 'Codes' highlighted in red.

14. What wetland restoration is being done and where? Have DNR permits been obtained? It's possible a Village permit may be required.

    There is no impact on the wetlands with this construction nor is there any grading within 25' of the wetlands.

15. What about the vacant area north of the driveway closest to Goldendale Road (north side of the Meyer/Neu property)? Will this area be rented and tilled for crops? Planted and maintained by Speaker?

    It is undetermined at this time whether the area will be rented as crop land and farmed. After construction of the driveway, if the area is determined to be suitable for crop land it is a possibility that it will be rented. If not, it will be maintained as a pollinator prairie at the same level as the rest of the un-built J.W. Speaker property.

16. Is the proposed storm water pond large enough to accommodate additional development that may occur on the north side of the driveway? If not, is there sufficient area to expand the proposed pond to the size needed without disturbing the plantings around it?

    The proposed stormwater pond was designed for the full build.

17. Have the plans been revised to show the Fire Department requirements for the FDC on the north side of the building, and, the two fire hydrants along the driveway and in the loading area? (see May 14 email from Paul Rushing)

    The FDC (Fire Department Connection) is directly adjacent to the north main entry of the SMT Building as is the Fire Department Key Access Box (Knox Box), as discussed with Fire Chief Delain. There will be a fire hydrant located along the driveway within 300' of the FDC and a fire hydrant in the truck dock area near the SE corner of the SMT Building as requested by Chief Delain.

18. Can you generally show or otherwise indicate on both CSM's that there is/will be cross-access easement rights for vehicles, pedestrians, drainage, etc.) assigned to the owner of each property in the vicinity of the proposed SMT facility and east-west driveway? Said easement documents will need to be prepared and recorded along with recording the CSM's.

    Yes, such easement rights will be assigned, indicated and recorded on the CSM's.

19. The adopted building and other setbacks found in the PDD conditions & restrictions resolution will need to be shown on the CSM.

Yes, such setbacks will be indicated and recorded on the CSM's.

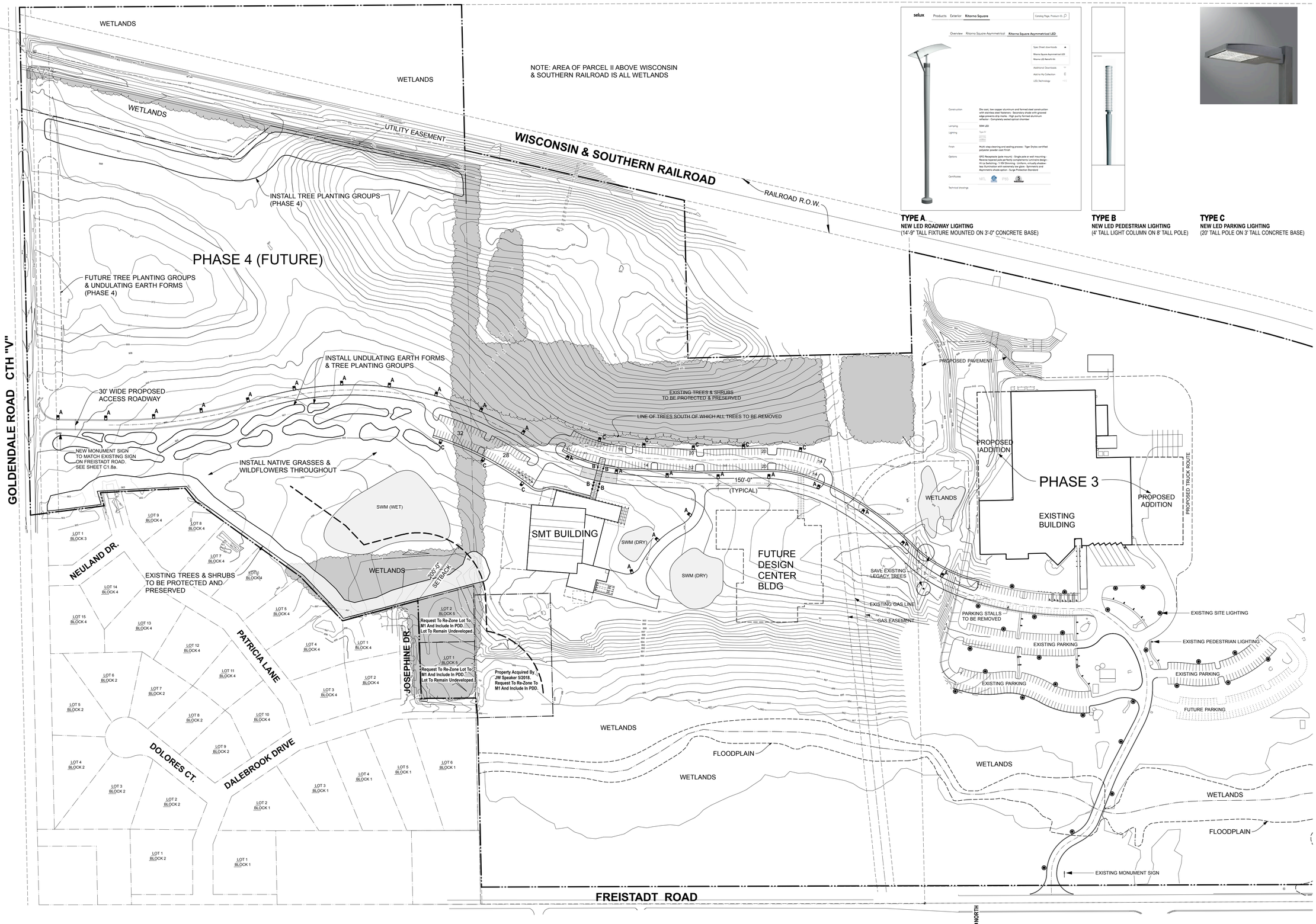
Engineering Department
Review comments are forthcoming.

Fire Department
Review comments addressed separately between applicant's architect and engineer; need to verify that Fire Department requirements have been addressed in revised plans.

When submitting you plans and additional information, please submit (1) digital plan set and fifteen (15) full-size and (2) reduced-size plan sets to the Planning Department. Complete responses and/or information, plan revisions, etc. to the items/issues listed above will help avoid delay in the review and processing of your application.

Respectfully,

Jeffrey W. Retzlaff, AICP
Village Planner & Zoning Administrator



1 / C1.8 **SITE LIGHTING PLAN**
Scale: 1" = 125'

TYPE A
NEW LED ROADWAY LIGHTING
(14'-9" TALL FIXTURE MOUNTED ON 3'-0" CONCRETE BASE)

TYPE B
NEW LED PEDESTRIAN LIGHTING
(4' TALL LIGHT COLUMN ON 8' TALL POLE)

TYPE C
NEW LED PARKING LIGHTING
(20' TALL POLE ON 3' TALL CONCRETE BASE)

TKWA

The Kubala Washatko Architects, Inc.
W61 N617 Mequon Avenue
Cedarburg, WI 53012
p: 262.377.6039 | f: 262.377.2954

PROJECT

J.W. SPEAKER
Campus Plan

N120 W19801 Freistadt Rd.
Germantown, WI 53022

OWNER

J.W. SPEAKER
Engineered. Lighting. Solutions.

N120 W19434 Freistadt Rd.
Germantown, WI 53022
p: 262.251.6660

CIVIL ENGINEER

PINNACLE ENGINEERING GROUP

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Brookfield, WI 53005
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LANDSCAPE DESIGN

sparrow Native Landscaping
www.sparrowlandplanning.com

W8181 County Road E
Oxford, WI 53952
p: 608.697.3169

REVISIONS

June 19, 2018 - Respond to VOG Review Comments

DATE

June 8, 2018

TKWA PROJECT NUMBER

219417

SHEET TITLE

Site Lighting Plan

SHEET NUMBER

C1.8

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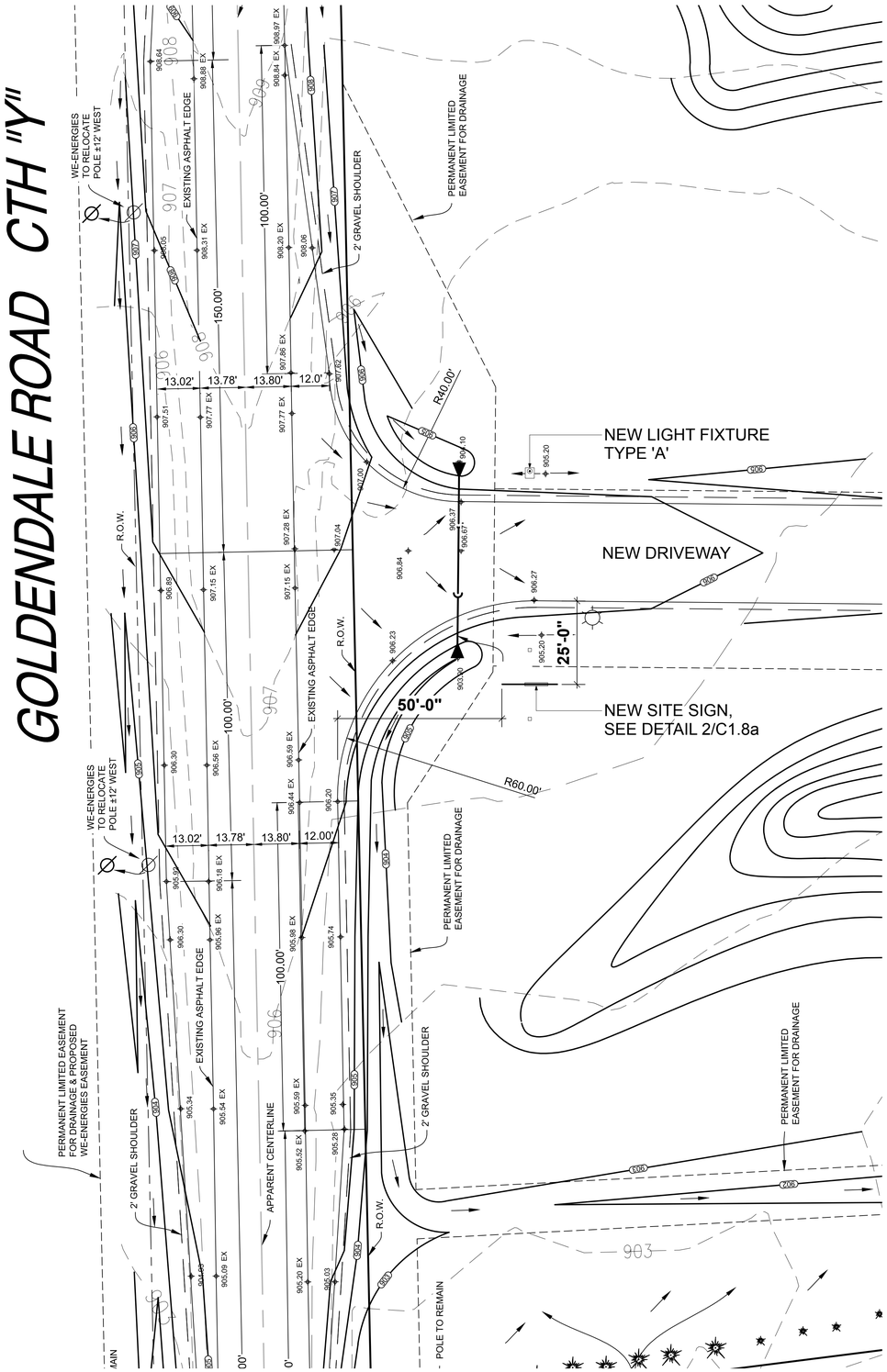
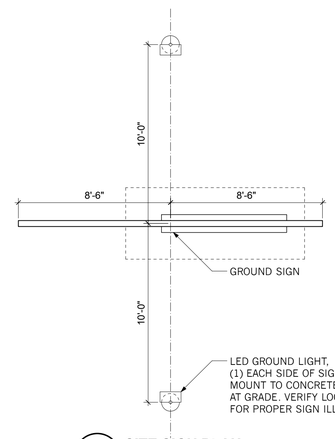


1 PARTIAL SITE PLAN
C1.8a Scale: 1" = 20'

NEW MONUMENT SIGN ON GOLDENDALE ROAD TO MATCH EXISTING SIGN ON FREISTADT ROAD (EXTERNALLY ILLUMINATED)



3 SITE SIGN PLAN
C1.8a Scale: 1/4" = 1'-0"

DESCRIPTION

The cylindrical form of the Vision Flood Small LED luminaire blends effortlessly to architectural and landscape environments. The Vision Flood Small LED luminaire offers optical, energy and maintenance solutions for the full breadth of floodlighting applications.

INVUE® energy solutions

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
HOUSING: One-piece, die-cast aluminum housing maintains a nominal .125" thickness to endure the toughest environments while maintaining precise tolerance control. DOOR: Die-cast aluminum door maintains a nominal .125" thickness and features concealed hinging to the housing. Door is secured with four tamper-resistant recessed stainless steel allen head fasteners. Door frame features an integral accessory channel for the mounting of optional light control accessories. Doorframe seals to housing with a continuous extruded silicone gasket. Lens is impact-resistant .180" thick tempered clear flat glass, seated to the door with a one-piece silicone gasket. IP66 rated.

Optics
DISTRIBUTION: State-of-the-art optical designs offer the choice of high efficiency floodlighting optical distributions including symmetric round, symmetric rectangular, asymmetric rectangular and tight spot beam patterns. Optic module is injection molded thermo plastic with highly reflective, metalized specular finish. LEDs: High output LEDs, 60,000+ hours life at >80% lumen maintenance per IESNA TM-21 Standards, offered standard in 4000K (+/- 275K) and nominal 70 CRI.

Electrical
DRIVER: LED drivers feature electronic universal voltage 120-277V (50/60Hz), 347V (60Hz) or 480V (60Hz) > 0.9 power factor, < 20% harmonic distortion. Features ambient temperature rating range of +40°C (104°F) down to minimum starting temperature of -40°C (-40°F). Shipped standard with our proprietary circuit module designed to withstand 10kV of transient line surge. LEDs and drivers mounted to assembly trays and equipped with quick disconnects for ease of maintenance.

Mounting
KNUCKLE: Heavy-duty die-cast aluminum knuckle utilizes a taper-lock adjustment mechanism for both solid engagement and infinite aiming adjustment. Knuckle adjustment is made via one captive stainless steel allen head fastener consistent with doorframe fasteners. Tested to sustain 2G of vibration without loosing aiming position. VFS knuckle features a 3/4" NPT nipple on bottom surface for rigid attachment to available mounting accessories. Optional slipfitter mount available for VFS.

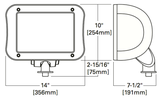
Finish
Housing is finished in five-stage, super premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult Outdoor Architectural Colors brochure for a complete selection.

Warranty
Five-year warranty.

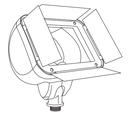
VFS
VISION FLOOD SMALL LED

ARCHITECTURAL FLOOD LUMINAIRE

DIMENSIONS



ACCESSORIES



BARN DOORS (VFS-BD)
Four independently mounted and adjustable doors control cutoff angles in all directions, allowing custom distribution control for any application. Compatible with all distributions.

CERTIFICATION DATA
40°C Ambient Temperature Rating
UL and cUL Listed
ISO 9001
IP66 Luminaire
LM79 / LM80 Compliant
2G Vibration Tested
DesignLights Consortium® Qualified*

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz, 347V/60Hz, 480V/60Hz
-40°C Minimum Temperature

EPA
Effective Projected Area:
1.19 Sq. Ft.

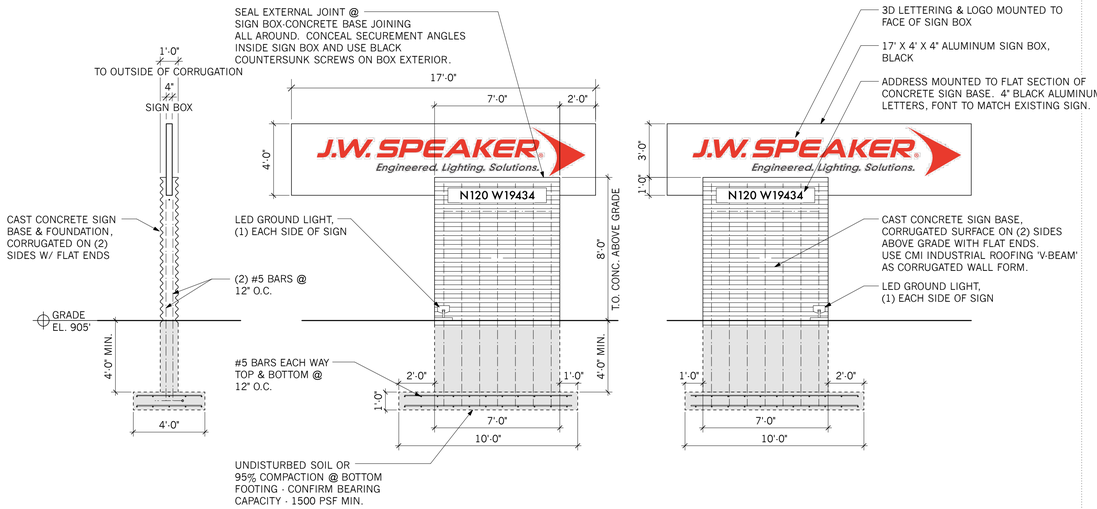
SHIPPING DATA
Approximate Net Weight: 18 lbs. (8 kgs)

Cooper Lighting by EATON

*www.designlights.org

AVU101240
2014-07-24 09:02:41

GROUND MOUNTED LED SIGN LIGHT W/ BARN DOORS



END ELEVATION | **SOUTH ELEVATION** | **NORTH ELEVATION**

2 SITE SIGN ELEVATIONS AND DETAIL
C1.8a Scale: 1/4" = 1'-0"

TKWA

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PROJECT

J.W. SPEAKER
Campus Plan

N120 W19801 Freistadt Rd.
Germantown, WI 53022

OWNER

J.W. SPEAKER Engineered. Lighting. Solutions.
N120 W19434 Freistadt Rd.
Germantown, WI 53022
p: 262.251.6660

CIVIL ENGINEER

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SHEET TITLE

Site Sign Plan & Details

SHEET NUMBER

C1.8a

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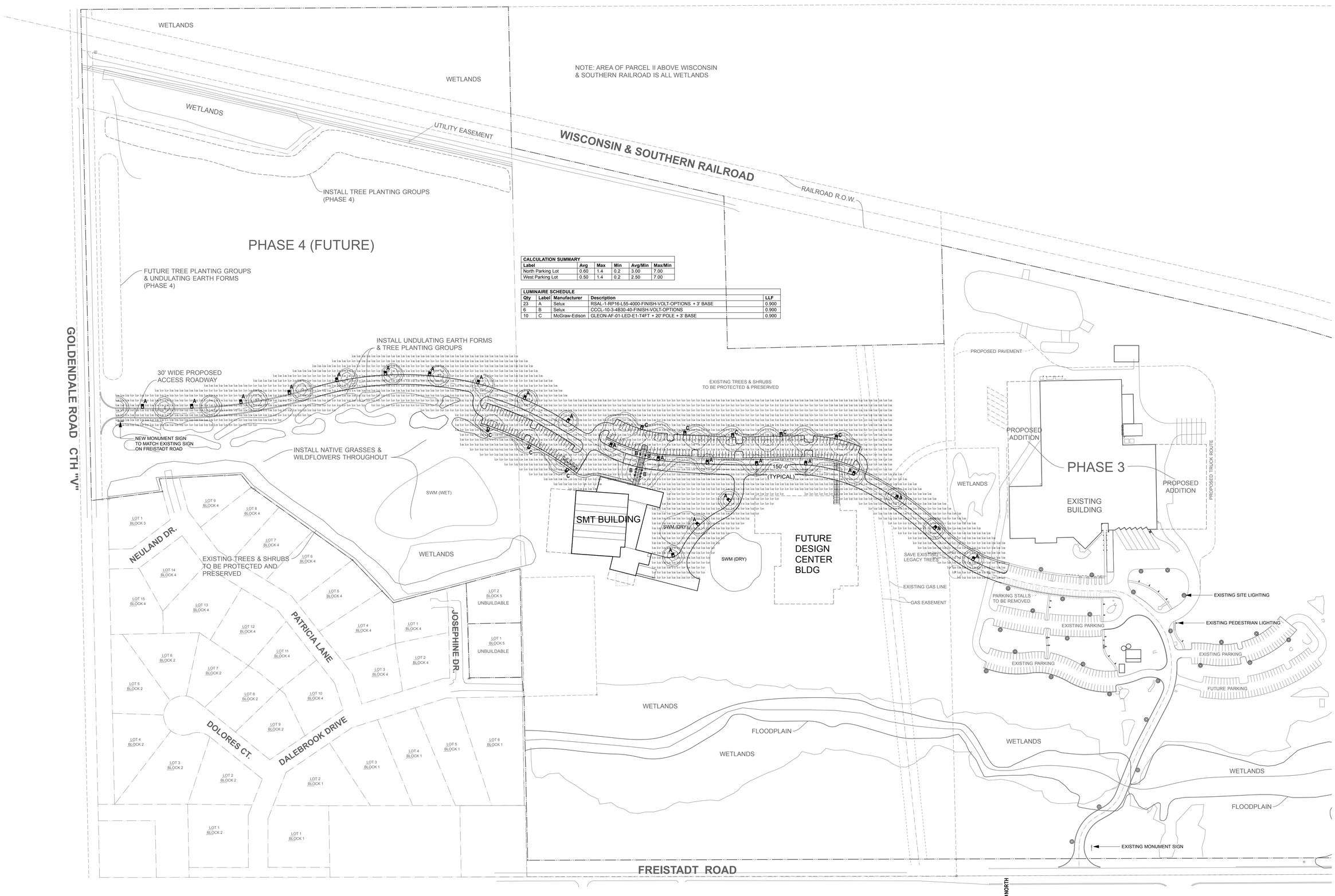

CALCULATION SUMMARY					
Label	Avg	Max	Min	Avg/Min	Max/Min
North Parking Lot	0.60	1.4	0.2	3.00	7.00
West Parking Lot	0.50	1.4	0.2	2.50	7.00

LUMINAIRE SCHEDULE				
Qty	Label	Manufacturer	Description	LLF
23	A	Selux	RSAL-1-RP16-L55-4000-FINISH-VOLT-OPTIONS + 3' BASE	0.900
6	B	Selux	CCCL-10-3-4B30-40-FINISH-VOLT-OPTIONS	0.900
10	C	McGraw-Edison	GLEON-AF-01-LED-E1-T4FT + 20' POLE + 3' BASE	0.900

1 / C1.9 **SITE LIGHTING CALCULATIONS**
Scale: 1" = 125'

TKWA

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PROJECT

J.W. SPEAKER
Campus Plan

N120 W19801 Freistadt Rd.
Germantown, WI 53022

OWNER

J.W. SPEAKER Engineered. Lighting. Solutions.

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LANDSCAPE DESIGN

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SHEET TITLE

Site Lighting Calculations

SHEET NUMBER

C1.9

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J.W. Speaker Corporate Expansion Project

Landscape Design Construction Notes

		Detail	Amt	Unit
Prep				
wetland restoration (invasive tree & shrub removal, dumped organic/inorganic fill removal/off-site disposal)			11.00	acres
cultivate proposed seeding areas as needed			23.00	acres
SMT perennial beds		cultivation (7") to break up compaction prior to topsoil spread	6,310	sq. ft.
Materials				
Glacial Moraines, 820' longx3' ave. ht.x5'ave. width				
	local fieldstone	4' boulders (9)	440	tons
		3' boulders (8)	172	tons
		2' boulders (7)	55	tons
SMT flagstone patio, 2,000 sq. ft.				
	Sandy Creek or approved equal	1"-2"x24"-36" sorted	27	tons
	pergola	15'x20', cedar	1	each
SMT aggregate buffer, per 1,000 sq. ft.				
	crushed gravel w/fines	size 3/4" to 2" depth as base	8	tons
	Merrimac	even blend 1/2" & 1" rounded stone to a 2" depth as topdress	8	tons
Seed Blends				
	roadside swale basins, per acre			
	Carex annectens	Small Yellow Fox Sedge	16.00	oz
	Carex scoparia	Lance-fruited Oval Sedge	16.00	oz
	Carex vulpinoidea	Fox Sedge	40.00	oz
	Juncus balticus	Baltic Rush	16.00	oz
	Juncus canadensis	Canada Rush	8.00	oz
	Juncus dudleyi	Dudley's Rush	8.00	oz
	Juncus effusus	Common Rush	8.00	oz
	nurse crop: *Echinochloa crusgalli*	barnyard grass	1	lbs
	pollinator prairie, wet mesic, per acre			
	Anemone canadensis	Canada Anemone	2.00	oz
	Asclepias incarnata	Red Milkweed	3.00	oz
	Doellingeria umbellatus	Flat-topped Aster	2.00	oz
	Helenium flexuosum	Purple-headed Sneezeweed	1.00	oz
	Heliopsis helianthoides	Ox-Eye Sunflower	4.00	oz
	Hibiscus laevis	Rose Mallow	1.75	oz
	Iris versicolor	Northern Blue Flag	5.00	oz
	Iris virginica var. shrevei	Southern Blue Flag	5.00	oz
	Liatris pycnostachya	Prairie Blazingstar	5.00	oz
	Lobelia siphilitica	Great Blue Lobelia	1.75	oz
	Monarda fistulosa	Wild Bergamot	1.75	oz
	Parthenium integrifolium	Wild Quinine	1.75	oz
	Physostegia virginiana	Obedient Plant	1.75	oz
	Pycnanthemum virginianum	Mountain Mint	1.00	oz
	Rudbeckia hirta	Black-Eyed Susan	1.75	oz
	Rudbeckia subtomentosa	Sweet Black-Eyed Susan	1.75	oz
	Silphium integrifolium	Rosinweed	5.00	oz
	Silphium terebinthenaceum	Prairie Dock	5.00	oz
	Solidago ohioensis	Ohio Goldenrod	1.75	oz
	Solidago rigida	Stiff Goldenrod	1.75	oz
	Symphyotrichum novae-angliae	New England Aster	3.00	oz
	Teucrium canadense	Germander	1.75	oz
	Tradescantia ohiensis	Spiderwort	1.75	oz
	Zizia aurea	Golden Alexanders	1.75	oz
	Calamagrostis canadensis	Bluejoint Grass	3.00	oz
	Carex annectens	Small Yellow Fox Sedge	4.25	oz
	Carex bicknellii	Copper Shouldered Oval Sedge	8.50	oz
	Carex scoparia	Lance-fruited Oval Sedge	8.25	oz
	Carex vulpinoidea	Fox Sedge	7.00	oz
	Glyceria canadensis	Rattlesnake Grass	8.25	oz
	Juncus balticus	Baltic Rush	5.00	oz
	Juncus canadensis	Canada Rush	2.50	oz
	Juncus dudleyi	Dudley's Rush	1.75	oz
	Juncus effusus	Common Rush	2.50	oz
	Juncus torreyi	Torrey's Rush	2.50	oz
	nurse crop: *Echinochloa crusgalli*	barnyard grass	1.00	lbs
	pollinator prairie, per acre			
	Allium cernuum	Nodding Pink Onion	2.25	oz
	Asclepias syriaca	Common Milkweed	2.25	oz
	Asclepias tuberosa	Butterflyweed	4.50	oz
	Dalea purpurea	Purple Prairie Clover	5.00	oz
	Echinacea pallida	Pale Purple Coneflower	3.50	oz
	Echinacea purpurea	Purple Coneflower	3.50	oz
	Gentiana flavida	Cream Gentian	1.50	oz
	Heliopsis helianthoides	Early Sunflower	1.50	oz
	Liatris pycnostachya	Prairie Blazingstar	4.50	oz
	Monarda fistulosa	Bergamot	1.50	oz
	Parthenium integrifolium	Wild Quinine	2.25	oz
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.50	oz
	Ratibida pinnata	Yellow Coneflower	1.50	oz
	Rudbeckia hirta	Black-Eyed Susan	1.50	oz
	Rudbeckia subtomentosa	Sweet Black-Eyed Susan	1.50	oz
	Silphium laciniatum	Compassplant	2.00	oz
	Silphium terebinthinaceum	Prairie Dock	2.00	oz
	Solidago rigida	Stiff Goldenrod	1.50	oz
	Symphyotrichum laeve	Smooth Blue Aster	1.50	oz
	Symphyotrichum novae-angliae	New England Aster	1.50	oz
	Tradescantia ohiensis	Spiderwort	2.25	oz
	Carex annectens	Small Yellow Fox Sedge	2.00	oz
	Carex bicknellii	Copper Shouldered Oval Sedge	8.00	oz
	Carex vulpinoidea	Fox Sedge	2.00	oz
	Bouteloua curtipendula	Sideoats Grama	35.00	oz
	Sorghastrum nutans	Indiangrass	9.00	oz
	Sporobolus heterolepis	Prairie Dropseed	7.00	oz
	nurse crop: *triticum aestivum* (fall)/*avena sativa* (spring)	winter wheat/oats	35/25	lbs
	pollinator prairie, low profile, per acre			
	Allium cernuum	Nodding Pink Onion	3.00	oz
	Asclepias syriaca	Common Milkweed	3.00	oz
	Asclepias tuberosa	Butterflyweed	5.50	oz
	Dalea purpurea	Purple Prairie Clover	5.50	oz
	Echinacea pallida	Pale Purple Coneflower	4.00	oz
	Echinacea purpurea	Purple Coneflower	4.00	oz
	Gentiana flavida	Cream Gentian	2.00	oz
	Heliopsis helianthoides	Early Sunflower	2.00	oz
	Monarda fistulosa	Bergamot	1.50	oz
	Parthenium integrifolium	Wild Quinine	3.00	oz
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.50	oz
	Rudbeckia hirta	Black-Eyed Susan	1.50	oz
	Rudbeckia subtomentosa	Sweet Black-Eyed Susan	2.00	oz
	Symphyotrichum laeve	Smooth Blue Aster	4.00	oz
	Tradescantia ohiensis	Spiderwort	3.00	oz
	Carex annectens	Small Yellow Fox Sedge	2.00	oz
	Carex bicknellii	Copper Shouldered Oval Sedge	8.00	oz
	Carex vulpinoidea	Fox Sedge	2.00	oz
	Bouteloua curtipendula	Sideoats Grama	54.00	oz
	Sporobolus heterolepis	Prairie Dropseed	8.00	oz
	nurse crop: *triticum aestivum* (fall)/*avena sativa* (spring)	winter wheat/oats	35/25	lbs

	woodland restoration, low profile, per acre			
	Delphium exaltatum	Tall Larkspur	16.50	oz
	Dodecatheon meadia	Midland Shooting Star	16.50	oz
	Polygonatum biflorum	Solomon's Seal	30.00	oz
	Penstemon hirsutus	Hairy Beardtongue	30.00	oz
	Polemonium reptans	Jacob's Ladder	22.00	oz
	Rudbeckia triloba	Brown-Eyed Susan	22.00	oz
	Smilicina racemosa	Solomon's Plume	11.00	oz
	Solidago ulmifolia	Elm-leaved Goldenrod	11.00	oz
	Symphyotrichum cordifolium	Heart-leaved Aster	8.25	oz
	Carex brevior	Plains Oval Sedge	16.50	oz
	Carex gravida	Long-awned Bracted Sedge	2.75	oz
	Carex molesta	Field Oval Sedge	1.25	oz
	Carex shortiana	Short's Sedge	11.00	oz
	Diarrhena obovata	American Beak Grass	22.00	oz
	nurse crop: *triticum aestivum* (fall)/*avena sativa* (spring)	winter wheat/oats	35/25	lbs
	turfgrass, per acre	Eco-Grass fescue blend	260	lbs
	nurse crop	winter wheat/oats	35/25	lbs
woodland perennial bed, 1,585 sq. ft.				
	steel edging	16'x4"x1/8" sections	96	feet
	topsoil	screened, 2" to augment topsoil as	10.00	yards
	activated garden soil	50/50 topsoil/Purple Cow Activated	10.00	yards
gt	Bowman's Root, *Gillenia trifoliata*	quart, 3' o.c.	67	each
aco	Heart-Leaved Aster, *Aster cordifolius*	quart, 1.5' o.c.	114	each
pr	Jacob's Ladder, *Polemonium reptans*	quart, 1.5' o.c.	114	each
mdi	Red Beebalm, *Monarda didyma*	quart, 1.5' o.c.	114	each
c-rad	Straight-Styled Wood Sedge, *Carex radiata*	quart, 1.5' o.c.	114	each
ppi	Wild Blue Phlox, *Phlox divaricata*	quart, 1.5' o.c.	114	each
sf	ZigZag Goldenrod, *Solidago flexicaulis*	quart, 1.5' o.c.	114	each
	hardwood mulch	twice shredded, 1" depth	5.00	yards
Prairie perennial bed, 4,725 square feet				
	steel edging	16'x4"x1/8" sections	250	feet
	topsoil	screened, 2" to augment topsoil as	30.00	yards
	activated garden soil	50/50 topsoil/Purple Cow Activated organic composted leaf mulch as 2" topdress	30.00	yards
ag	Big Bluestem, *Andropogon gerardii*	2' o.c., quart	80	each
al	Bluebird Smooth Aster, *Aster laevis* 'Bluebird'	1.5' o.c., quart	80	each
ana	Purple Dome Aster, *Aster novae-angliae* 'Purple Dome'	1.5' o.c., quart	80	each
at	Butterflyweed, *Asclepias tuberosa*	1.5' o.c.	80	each
cp	Prairie Coreopsis, *Coreopsis palmata*	1.0' o.c., quart	80	each
dm	Shooting Star, *Dodecatheon meadia*	plug	302	each
epu-ft	Flame Thrower Coneflower, *Echinacea purpurea* 'Flame Thrower'	quart, 1.5' o.c.	80	each
epu-wb	Wild Berry Purple Coneflower, *Echinacea purpurea* 'PowWow Wild Berry'	1' o.c., quart	80	each
gt	Prairie Smoke, *Geum triflorum*	1' o.c., plug	213	each
hh	Prairie Sunset Sunflower, *Heliopsis helianthoides* 'Prairie Sunset'	1.5' o.c., gallon	57	each
ll	Meadow Blazingstar, *Liatris ligulistylus*	0.25' o.c., plug	851	each
mdi	Gardenview Scarlet Bee Balm, *Monarda didyma* 'Gardenview Scarlet'	1.5' o.c., quart	80	each
pp	Early Start Pink Phlox, *Phlox paniculata* 'Early Start Light Pink'	1' o.c., gallon	80	each
pyv	Virginia Mountain Mint, *Pycnanthemum virginianum*	1.5' o.c., quart	80	each
rf	Early Bird Gold Rudbeckia, *Rudbeckia fulgida* 'Early Bird Gold'	1.5' o.c., gallon	132	each
scs	Little Bluestem, *Schizachyrium scoparium*	1.5' o.c., quart	397	each
sh	Prairie Dropseed, *Sporobolus heterolepis*	2' o.c., gallon	198	each
sl	Compassplant, *Silphium laciniatum*	2' o.c., quart	85	each
so	Ohio Goldenrod, *Solidago ohioensis*	1.5' o.c., quart	80	each
	hardwood mulch	twice shredded, 1" depth	15.00	yards
trees & shrubs (VOID)				
b	American Beech, *Fagus grandiflora*	#10	11	each
	American Filbert, *Corylus americana*	#5, 5' o.c.	60	each
ba	Basswood, *Tilia americana*	2" BB	9	each
	American Cranberry, *Viburnum trilobum*	#5	0	each
	Black Hills Spruce, *Picea glauca* 'Densata'	7' BB, 12' o.c.	60	each
	Black Chokeberry, *Aronia melanocarpa*	#5	0	each
bo	Bur Oak, *Quercus macrocarpa*	2" BB	13	each
	Buttonbush, *Cephalanthus occidentalis*	#5	0	each
	Elderberry, *Sambucus canadensis*	#5	0	each
	Meadowsweet, *Spiraea alba*	#5	0	each
	Nannyberry, *Viburnum lentago*	#5	0	each
	Eastern Red Cedar, *Juniperus virginiana*	#10	25	each
	Ironwood, *Carpinus caroliniana*	2.5" BB	3	each
	Quaking Aspen, *Populus tremuloides*	2" BB, 15' o.c.	24	each
rm	Red Maple, *Acer rubrum*	2.5" BB	16	each
	Speckled Alder, *Alnus rugosa*	#10	0	each
	Red-Twig Dogwood, *Cornus sericea*	#5, 5' o.c.	50	each
	Staghorn Sumac, Rhus typhina	72" potted	13	each
	Swamp Rose, *Rosa palustris*	#5	0	each
sm	Sugar Maple, *Acer saccharum*	2.5" BB	22	each
	Tamarack, *Larix laricina*	#15	0	each
p	Wild Plum, *Prunus americana*	#10	62	each
	Winterberry, *Ilex verticillata*	#5, 5' o.c.	25	each
	tree guards (deciduous trees)	3"x36", white	173	each
	Treegator (deciduous trees)		173	each
	hardwood mulch	twice shredded, 1.5' radius & 2" depth	17.18	yards
emergents (phase II install, 2019 growing season)				
	Common Arrowhead, *Sagittaria latifolia*	3" pot, 2' o.c.	800	each
	Giant Bur Reed, *Sparganium eurycarpum*	3" pot, 2' o.c.	800	each
	Lake Sedge, *Carex lacustris*	3" pot, 2' o.c.	1,600	each
	Pickerelweed, *Pontederia cordata*	bare root, 2' o.c.	800	each
	Sweet Flag, *Acorus americanus*	3" pot, 2' o.c.	800	each
Straw Mulch (all seeded areas not covered by E-mat), per acre				
		winter wheat, 2 tons/acre, weed free	100	bales
Erosion Fabric, 3:1 and steeper slopes, per acre		Curlex I, 100 yard rolls	48	rolls
		4" metal	20	boxes

SCALE 1" = 100'

N

Sparrow Balancing Life and Land

DESIGNED BY Jennifer L. Baker

© 2018 Jennifer L. Baker

DRAWN BY Heather Holm

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Oxford, WI 53952
608.697.3169

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President/Owner
jenbakersparrow@gmail.com
www.sparrowlandplanning.com
www.facebook.com/SparrowLLC

PROJECT
J.W. Speaker Corporate Expansion Project

trees & shrubs				
code				
b	American Beech, *Fagus grandiflora*	2.5" BB	11	each
	American Filbert, *Corylus americana*	#5, 5' o.c.	60	each
ba	Basswood, *Tilia americana*	2.5"BB	9	each
	Black Hills Spruce, *Picea glauca* 'Densata'	8' BB, 12' o.c.	60	each
bo	Bur Oak, *Quercus macrocarpa*	2.5" BB	13	each
	Eastern Red Cedar, *Juniperus virginiana*	8' BB	25	each
	Ironwood, *Carpinus caroliniana*	2.5" BB	3	each
	Quaking Aspen, *Populus tremuloides*	2.5" BB, 15' o.c.	24	each
rm	Red Maple, *Acer rubrum*	2.5" BB	16	each
	Red-Twig Dogwood, *Cornus sericea*	#5, 5' o.c.	50	each
	Staghorn Sumac, Rhus typhina	72" potted	13	each
sm	Sugar Maple, Acer saccharum	2.5" BB	22	each
p	Wild Plum, *Prunus americana*	2.5" BB	62	each
	Winterberry, *Ilex verticillata*	#5, 5' o.c.	25	each
	tree guards (deciduous trees)	3"x36", white	173	each
	Treegator (deciduous trees)		173	each
	hardwood mulch	twice shredded, 1.5' radius & 2" depth	17.18	yards

The Kubala Washatko Architects, Inc.
W61 N617 Mequon Avenue
Cedarburg, WI 53012
p: 262.377.6039 | f: 262.377.2954

PROJECT

J.W. SPEAKER
Campus Plan

N120 W19801 Freistadt Rd.
Germantown, WI 53022

OWNER

J.W. SPEAKER Engineered. Lighting. Solutions.

N120 W19434 Freistadt Rd.
Germantown, WI 53022
p: 262.251.6660

CIVIL ENGINEER

PINNACLE ENGINEERING GROUP

15850 W. Bluemound Road, Suite 210
Brookfield, WI 53005
p: 262.754.8888

LANDSCAPE DESIGN

sparrow Native Landscaping
www.sparrowlandplanning.com

W8181 County Road E
Oxford, WI 53952
p: 608.697.3169

REVISIONS

June 19, 2018 - Respond to VOG Review Comments

DATE

June 8, 2018

TKWA PROJECT NUMBER

219417

SHEET TITLE

Site Landscaping Notes

SHEET NUMBER

C1.11

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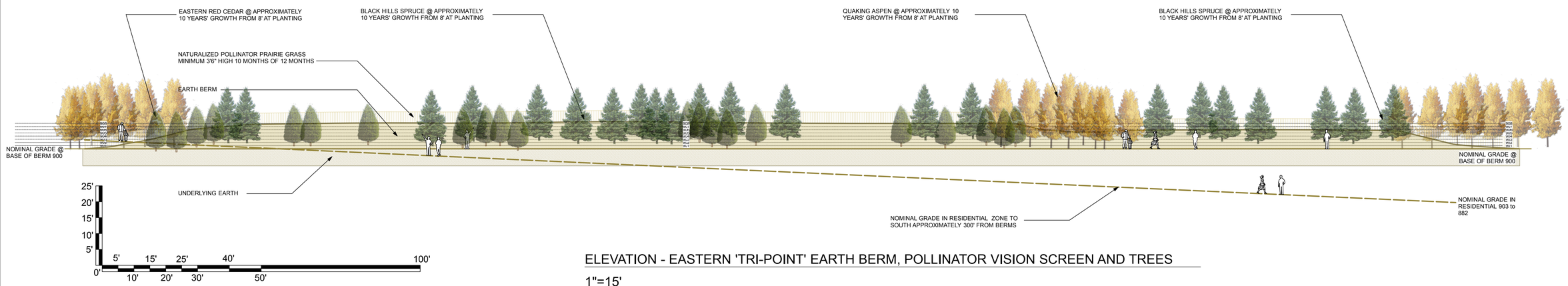
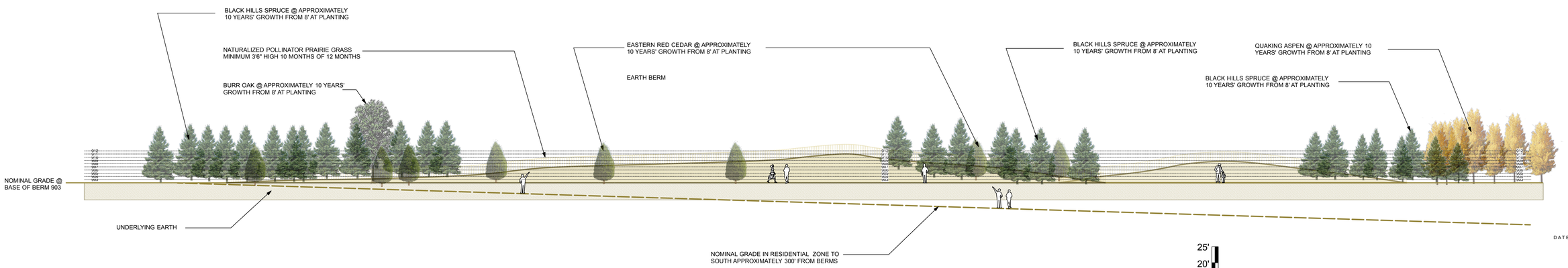
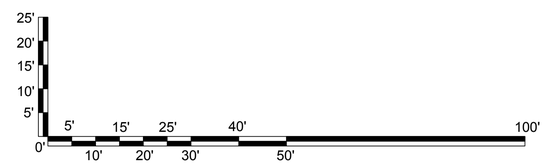


ELEVATION - EASTERN 'TRI-POINT' EARTH BERM, POLLINATOR VISION SCREEN AND TREES

1"=15'





ELEVATION - WESTERN DOUBLE EARTH BERM, POLLINATOR VISION SCREEN AND TREES

1"=15'

TKWA

The Kubala Washatko Architects, Inc.
W61 N617 Mequon Avenue
Cedarburg, WI 53012
p: 262.377.6039 | f: 262.377.2954

PROJECT

J.W. SPEAKER
Campus Plan

N120 W19801 Freistadt Rd.
Germantown, WI 53022

OWNER

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Germantown, WI 53022
p: 262.251.6660

CIVIL ENGINEER

PINNACLE ENGINEERING GROUP

15850 W. Bluemound Road, Suite 210
Brookfield, WI 53005
p: 262.754.8888

LANDSCAPE DESIGN

sparrow Native Landscaping
www.sparrowlandplanning.com

W8181 County Road E
Oxford, WI 53952
p: 608.697.3169

REVISIONS

DATE

June 11, 2018

TKWA PROJECT NUMBER

219417

SHEET TITLE

Landscaped Berms South of Driveway

SHEET NUMBER

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Village of Germantown ...Willkommen

FEES MUST BE PAID AT TIME OF APPLICATION

- [x] $200 Plan Commission Consultation
- [ ] $1,085 Rezoning
- [ ] $1,240 PDD < 5 acres
- [ ] $2,095 PDD 5-20 acre site
- [ ] $3,460 PDD > 20 acre site

Date Paid 6-11-18 Received by: [illegible]

REZONING & PDD APPLICATION

Pursuant to Section 17.51 of the Municipal Code

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

1 APPLICANT OR AGENT

Gehl Foods, LLC
Stacy Cooke, Project Engineer
N116 W15970 Main Street
Germantown, WI 53022
Phone (262) 735-7441
Fax ( )
E-Mail scooke@gehlfoods.com

PROPERTY OWNER

Gehl Foods, LLC
Tim Preuninger, CFO
W185 N11300 Whitney Drive
Germantown, WI 53022
Phone (262) 735-7184

2 PROPERTY ADDRESS OR GENERAL LOCATION / TAX KEY NUMBER

PROPERTY ADDRESS OR GENERAL LOCATION	TAX KEY NUMBER
N116 W16076 Main Street	221056
N116 W16060 main street	221057

3 REZONING REQUEST

FROM	TO
B3	M1

4 METES AND BOUNDS LEGAL DESCRIPTION OF PROPERTY – REQUIRED

Attach pages as necessary

See Attached

5

PURPOSE OF REZONING REQUEST

Briefly describe why the applicant is rezoning the property. Include a description of the proposed use, including any new construction and number of employees, if applicable.

See Attached

6 SUPPORTING DOCUMENTATION:

- [x] Plat of Survey (1:100)
- [x] Site Plan and elevations for new construction (can be conceptual)
- [ ] _____
- [ ] _____

7 READ AND INITIAL THE FOLLOWING:

SC I understand that the Village is under no obligation to rezone property and that density and lot coverages provided in the Zoning Code are maximums. Actual build out will depend on myriad factors including topography and other natural conditions, surrounding neighborhood context and the detailed design of a project.

SC I understand that Village Staff, Plan Commission and/or Village Board may request additional information to properly evaluate this request and failure to provide such information may in itself by sufficient cause to deny the petition.

SC I am aware that this rezoning shall go into effect immediately upon the final approval of the Village Board and its execution of the rezoning ordinance.

8 SIGNATURES – ALL APPLICATIONS MUST BE SIGNED BY OWNER!

Stacy Cooke 6/11/18
Applicant Date

6/11/18
Owner Date

Jeffrey W. Retzlaff
Village Planner and
Zoning Administrator

Mr. Retzlaff,

Gehl Foods is requesting a consultation with the Planning Commission in July to receive comments and answer questions regarding the proposed rezoning and Planned Development District. It is anticipated that a Rezoning & PDD Application will be submitted for the August 2018 meeting. We will be requesting the following:

1. Rezoning Tax ID #221056 from B3 to M1
2. Rezoning Tax ID #221075 from B3 to M1
3. Planned Development District.

Metes and Bounds Descriptions:

Metes and Bounds Description of N116W16076 Main Street (Tax ID 221056):

Out Lot No. 19 of ASSESSOR'S PLAT, in the Southwest 1/4 of the Northeast 1/4 of Section 22, Township 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin.

Metes and Bounds Description of N116W16060 Main Street (Tax ID 221057):

Out Lot 20 in ASSESSOR'S PLAT, Village of Germantown, Southwest 1/4 of Northeast ¼, Section 22, Township 9 North of Range 20 East, Washington County, Wisconsin.

Rezoning two properties from B3 to M1

Gehl Foods, LLC owns two parcels of land adjacent to existing Lot 1 (CSM #6802, Lot 1, Tax ID #221964), which contains the manufacturing facility. As part of this rezoning request, Gehl Foods, LLC is requesting a Planned Development District within the Village of Germantown that incorporates the Main Street facility, Crusader Court Warehouse, and the Bank Building. We are working with the existing Property Owners, of Lot 1, to accomplish both the rezoning and the Planned Development District.

Planned Development District

During preliminary meetings with the Village, the Village identified that a planned development district may be the best solution for Gehl Foods to grow. As part of the Planned Development District, Gehl Foods will work with the Village of Germantown in what they envision for this area as well as provide Gehl Foods with the opportunity for growth. Attached are two drawings that indicate the existing site conditions and the proposed site conditions within the proposed Planned Development District (Park Avenue

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to Crusader Court Facility)

As part of the Planned Development District, Gehl Foods, LLC, in association with AGNL Dairy, LLC, will be requesting leniency on the following zoning ordinances for M-1 Limited Industrial District:

1. Percentage of Coverage, including parking and loading
2. Building Height
3. Parking Requirements near residential districts and landscape requirements

Thank you for your time and consideration. Please contact me with any questions.

Sincerely,

Stacy Cooke

Stacy Cooke
Project Engineer

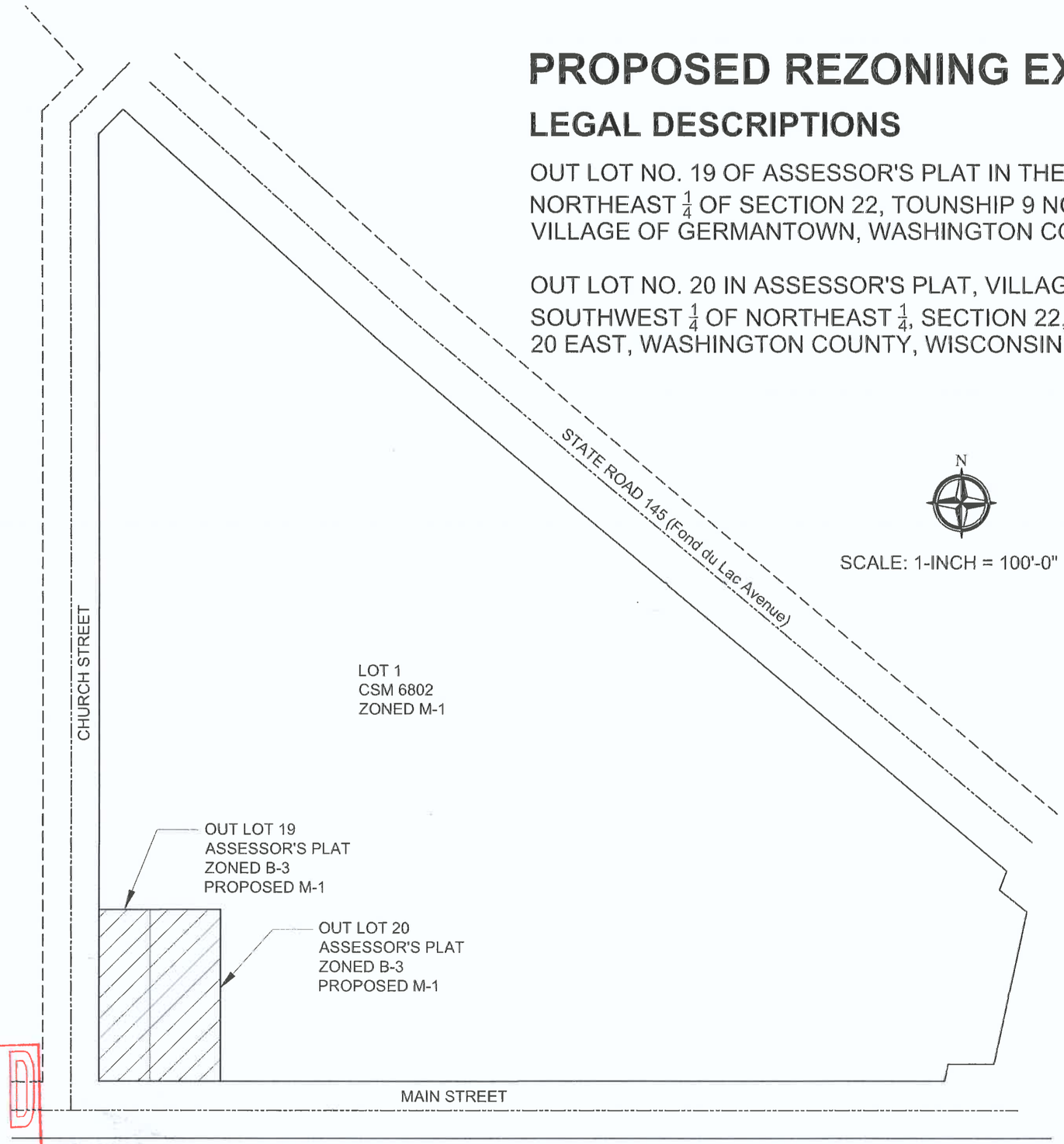
W185 N11300 Whitney Dr., Germantown, WI 53022
262.251.8570 www.gehls.com

PROPOSED REZONING EXHIBIT

LEGAL DESCRIPTIONS

OUT LOT NO. 19 OF ASSESSOR'S PLAT IN THE SOUTHWEST $\frac{1}{4}$ OF THE NORTHEAST $\frac{1}{4}$ OF SECTION 22, TOUNSHIP 9 NORTH, RANGE 20 EAST, IN THE VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN

OUT LOT NO. 20 IN ASSESSOR'S PLAT, VILLAGE OF GERMANTOWN, SOUTHWEST $\frac{1}{4}$ OF NORTHEAST $\frac{1}{4}$, SECTION 22, TOWNSHIP 9 NORTH OF RANGE 20 EAST, WASHINGTON COUNTY, WISCONSIN



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VILLAGE OF GERMANTOWN

GehlFoods
N116 W15970 Main Street
Germantown, WI 53022
262.251.8570

Author: SCOOKE
Edited By:
Date Created: 06.11.2018
Type: DRAW
Notes:

Sheet Title: PROPOSED REZONING EXHIBIT
Project: REZONING OUT LOTS 19 AND 20
Description:
1
Datastream ID:
Datastream Description:

Edit Date:
Edit Time:
Version Author:
Version Editor:
Drawing No.

1 SITE MASTERPLAN

1/128" = 1'-0"

SHA
Schroeder & Holt Architects

311 East Chicago Street
Suite 310
Milwaukee, WI 53202

p. 414-276-1760
f. 414-276-1764
www.sha-a2k.com

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GEHL FOODS MASTERPLAN

N116 W15970 MAIN STREET
GERMANTOWN, WI 53022

NO.	DATE	DESCRIPTION

PROJECT #: 3878

DATE: JUNE 11, 2018

1 SITE DEMO PLAN

1" = 40'-0"

DEMOLITION KEYNOTES

- REMOVE EXISTING STRUCTURE
- REMOVE ASPHALT/CONCRETE

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GEHL FOODS MASTERPLAN

N116 W15970 MAIN STREET
GERMANTOWN, WI 53022

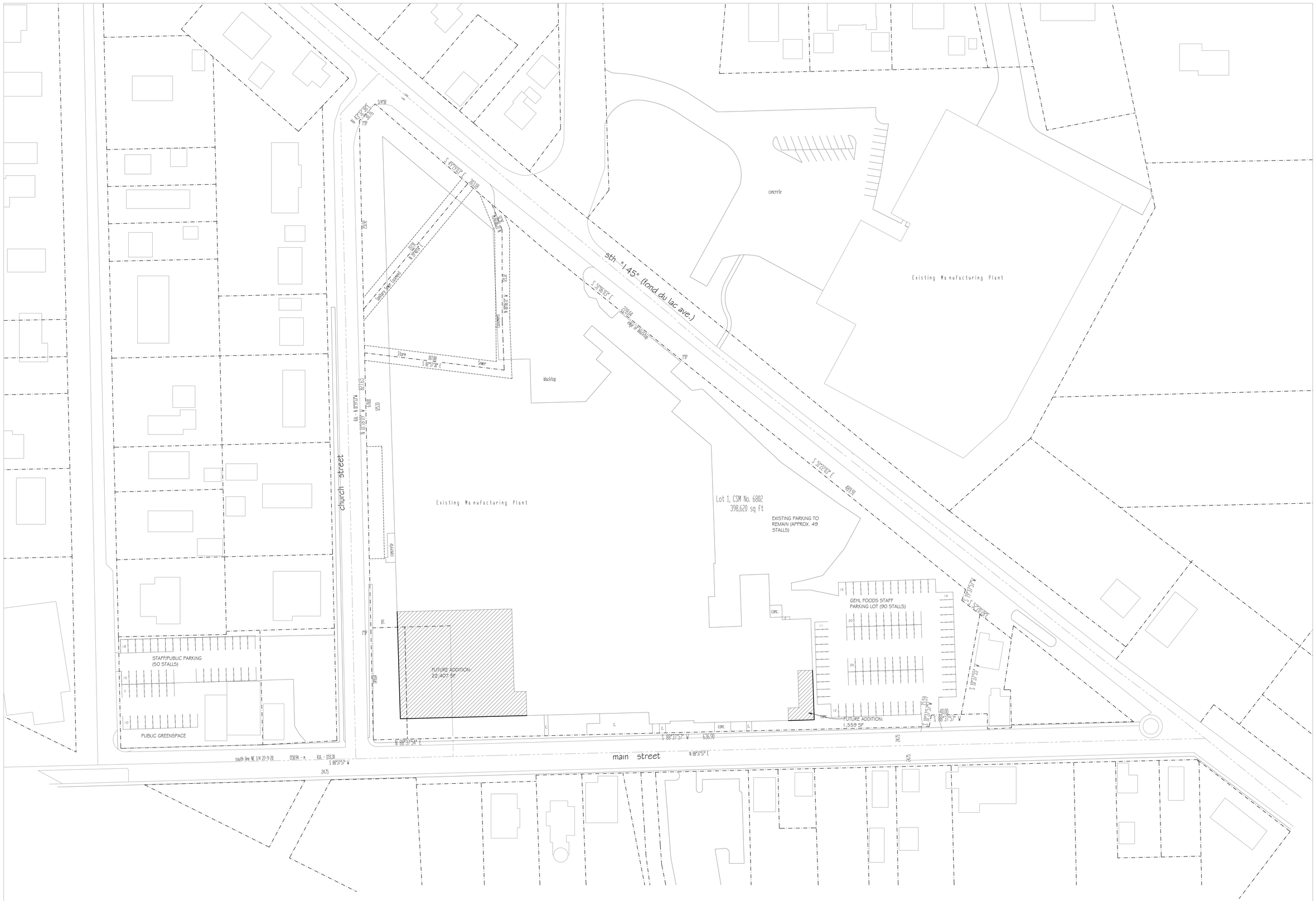
NO.	DATE	DESCRIPTION
	6/11/18	PLAN COMMISSION

PROJECT #: 3878

DATE: JUNE 11, 2018

DEMO SITE PLAN

SP1.0



1 SITE MASTERPLAN

1" = 40'-0"

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GERMANTOWN, WI 53022

NO.	DATE	DESCRIPTION
	6/11/18	PLAN COMMISSION

PROJECT #: 3878

DATE: JUNE 11, 2018

SITE MASTERPLAN

SP1.1