

VILLAGE OF GERMANTOWN
N112 W17001 MEQUON ROAD, GERMANTOWN, WI 53022

MEETING:	PLAN COMMISSION
DATE AND TIME:	MONDAY, September 9, 2019 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** August 12, 2019
- V. **NEW BUSINESS**
 - A. Jim Marriott, Owner/Operator of Stonecast Products, and Agent for SPI Real Estate LLC, Property Owner - N112 W14343 Mequon Road. Application to Create an M-1: Limited industrial Planned Development District (PDD) and Rezone 10.6 acres from the M-1: Limited industrial District into the newly created M-1/PDD **[PUBLIC HEARING & ACTION]**
 - B. Mark Brooks, Agent for Renee Martin and Doctors LLC, Property Owner - W201 N10466 Appleton Avenue. Conditional Use Permit (CUP) and Site Plan Application for a 12-stall Off-Site Parking Area **[PUBLIC HEARING & ACTION]**.
 - C. Gehl Foods, LLC, Agent for AGNL Dairy LLC, Property Owner of N116 W15970, N116 W16060, N116 W16076 & N116 W16150 Main Street & W160 N11736 Crusader Court. Rezoning Application to Create a Planned Development District (PDD) and Rezone 17.36 acres from the B-3: General Business & M-1: Limited Industrial District into the Planned Development District (PDD); a Certified Survey Map (CSM) Application to combine parcels; and a Site Plan Application for a 22,500 sqft Addition and Parking Lot Expansion to the Production Facility at N116 W15970 Main Street **[ACTION]**
 - D. Briohn Design Group, LLC, Agent for the Illing Company and the Central Land Company III LLC and GGWW LLC, Property Owner of 45-Acres W204 N12839 Goldendale Road. 2-Lot Certified Survey Map (CSM) Application, and, a Site Plan Application for a 210,522 sqft Industrial Building (Lot 1) and a 130,324 sqft Multi-Tenant Industrial Building (Lot 2) **[ACTION]**
 - E. Tarr Group, LLC, Agent for Compass Properties Germantown LLC - Lot #3 N112 W16200 Mequon Road (Germantown Marketplace Retail Center). Site Plan Application for a 4,325 sqft Dental Office Building **[ACTION]**
 - F. MSI General Corporation, Agent for North Shore Bank and Gtown Properties, Property Owner - N112 W15800 Mequon Road. Site Plan Application for a 2,250 sqft Bank **[ACTION]**
 - G. American Architectural Group, Agent for Krenz & Company Inc. & Petersen Global, LLC, Property Owner - W132 N10940 Eisenhower Drive. Site Plan Application for a 24,000 sqft Industrial Building Addition **[ACTION]**
 - H. CQM, Inc., Agent for Waste MGT of WI Inc., Property Owner - N96 W13840, W13600 & W13640 County Line Road. Certified Survey Map (CSM) to Combine Parcels **[ACTION]**
 - I. Shaffer Development, LLC Agent for John B. Kohl Survivors Trust, Property Owner - 42-Acres North of Freistadt Road, West of Hwy 41/45. Plan Commission Consultation for "The Farm" a 240-unit Multi-Family, Mixed-Use Agricultural Neighborhood Development.
- VI. **ANNOUNCEMENTS**
- VII. **ADJOURNMENT**

UPON REASONABLE NOTICE, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service please contact the Village Clerk at (262)250-4740 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.

PLAN COMMISSION MINUTES
August 12, 2019

CALL TO ORDER: Chairman Wolter called the meeting to order at 6:30 pm.

ROLL CALL: Chairman Dean Wolter, Trustee David Baum, Commissioners Peter Nilles, Bill Shadid, Matt Kimmler and Bob Williams were present. Commissioner Tony Laszewski was absent and excused. Also present were Community Development Director/Village Planner Jeff Retzlaff, Administrator Steve Kreklow, Attorney Brian Sajdak and Planning Assistant Lori Johnson.

PUBLIC INPUT: Trustee Wing asked the people who came to the meeting for the Veridian proposal stay and listen to the Gehl Foods proposal because it affects the downtown area of Germantown.

APPROVAL OF MINUTES: *MOTION Baum second Nilles to Approve the minutes from 7-8-19. MOTION carried unanimously.*

PUBLIC HEARING & ACTION

Veridian Homes LLC, Agent for the Germantown School District, Property Owner. N104

W14942 Donges Bay Road. Application to Rezone 14.7 acres from A-2:Agricultural to Rs-5: Single-Family Residential Zoning District for a 24-lot residential development. Planner Retzlaff summarized the proposal.

Chairman Wolter opened the Public Hearing at 6:40 pm. The following residents spoke against the proposal:

*Terry Tschetter-W144 N10451 Wilson Drive, the proposal is not consistent with the surrounding subdivisions including lot size and setbacks.

*Kristine Huber-N103 W14960 Windsong Circle E, the proposal is inconsistent with the surrounding neighborhoods.

*Jan Miller-W151 N10297 Windsong Circle W., agrees with others, likes the wetlands on the property.

*Phil Hudson-W150 N10214 Windsong Circle W., the development should match the surrounding developments and does not meet the criteria of low density residential, water basins are included in the lot sizes.

*Brian Dolk- PO Box 44, Germantown, stated a complaint was filed with the State of Wisconsin and Washington County District Attorney against Veridian Homes and the Germantown School District. Said it's not prudent for the Plan Commission to proceed while there is an open investigation and should wait until it's completed.

Speaking in favor of the proposal:

*Bob Sodeberg-W144 N9723 Elmwood Drive, School Board President, represents the taxpayers from all the communities of the Germantown School District and supports the proposal because it is the right thing to do for the community, the taxpayers and kids.

The Public Hearing was closed at 7:07 pm.

MOTION Baum second Shadid to Approve the proposed rezoning of approximately 14.7 acres owned by the Germantown School District from the A-2: Agricultural to the Rs-5: Single-Family District and the proposed 24-lot concept plan dated June 14, 2019 subject to the following conditions:

- 1. The Developer shall install a visual landscaped buffer along the north property line on or adjacent to Lots #1 to #7. The Developer should work cooperatively with the Village to determine said landscaping buffer can be installed within the adjacent drainage easement and/or on the lots. If installed on the lots, said landscape buffer shall be installed within a landscape easement on such lots with a restriction that the landscape***

buffer shall be maintained and/or restored if removed due to regular and necessary maintenance.

- 2. In addition to all required street trees, additional landscaping comprised of berms and/or plantings shall be installed along the back (south) side of Lots #12 through #16 either within or adjacent to the 50' gas line easement; and within the lots and open space outlot abutting both Preserve Parkway and Donges Bay Road. The Developer should work cooperatively with WE Energies to determine if the gas line easement could be enhanced with said additional landscaping.***
- 3. A detailed landscaping & buffer plan shall be prepared and submitted to the Plan Commission for review and approval prior to or concurrent with submittal of a preliminary subdivision plat. Said landscaping & buffer plan shall include the requirements set forth under Conditions #1 & #2 above.***

Planner Retzlaff explained, as stated in the staff report, the potential stormwater basins shown on the concept plan will need to be relocated on outlots and not on individual lots per Village design standards. When the preliminary plat is submitted, stormwater management details will be required that could affect the size, number and layout of the lots. He also said the intention of low density residential is being misstated. The minimum lot size is an average of 20,000, not an absolute minimum and could include some lots larger and some smaller. Discussion followed.

Trustee Baum asked for clarification on building setback requirements and what dictates the setback. Planner Retzlaff said the zoning dictates the setback requirement, but a developer can establish their own minimums that are more stringent. Trustee Baum asked if the Windsong Subdivision requires a 40-foot setback, does the Village recognize that. Planner Retzlaff stated the Village cannot establish a more stringent setbacks on a case by case unless a PDD is created. Trustee Baum also asked if building materials and repetition of the same model is addressed by the Village. Planner Retzlaff said the Village does not set a specific standard for those items and leaves those decisions to the home builder to decide. Trustee Baum said he's gotten input from the residents that aluminum and/or vinyl sided houses are not acceptable to them. Matt Cudney, Veridian Homes, stated vinyl siding will be used on the homes and that Veridian institutes a rule of seven which means the same floor plan cannot have the same elevation or color combination used within 7 homes of each other. Discussion continued.

Commissioner Shadid said he thinks an average lot size of 20,000 square feet is appropriate, but he is having trouble with what people really want for this area. Chairman Wolter said Plan Commission should consider the zoning request and give a recommendation to the Village Board. The possibility of a park is not part of the application proposal being considered. Attorney Sajdak stated the merits of this application should be considered on its own as it is presented before you, not what some other applicant could do with this property. Discussion continued.

Commissioner Williams stated the average lot size in low density residential is estimated to be 20,000 sqft and we're now at 19,191 sqft, and the required lot size in Rs-5 is 15,000 sqft and we're at a minimum of 15,000 sqft. But once the stormwater basins get moved around it's possible the average could drop below the 19,191 square feet, but the smallest lot size cannot drop below 15,000 square feet? He questioned if it's possible the average lot size could be at an average of 17,500 square feet as long as the lots don't drop below the 15,000 square feet minimum? Planner Retzlaff confirmed that was correct. Trustee Baum said the main issues he's heard from residents are pertaining to lot size and is the Rs-5 zoning compatible with the surrounding area zoning. He continued by stating Heritage Hills North has Rs-4 zoning with a PDD and includes some lots that are Rs-6 and Rs-5. Seventy percent of the lots there do not meet the standards for Rs-4, but this subdivision was given

special consideration. He said he is having a problem with whether this zoning is compatible with the surrounding area. Commissioner Shadid agreed but said after hearing the requirements for Rs-5 zoning, there is nothing wrong with what the developer wants to do, and he is having trouble supporting an objection. He added the Village doesn't require a 40-foot setback in the Rs-5 zoning district. Planner Retzlaff indicated the Rs-4 district requires a 40-foot setback and is also consistent with the low-density residential classification. Commissioner Williams said he was struggling with why we identify low density residential as 20,000 sqft but it doesn't fit in with Rs-5 zoning which is acceptable for low density residential. So it's not complying with low density residential but complying with the requirements for Rs-5 zoning. Planner Retzlaff explained the land use plan was adopted after many of these subdivisions were already developed under a variety of zoning districts and are all classified as low density residential. The language in the plan talks about averaging and approximate, which he believes, is intended to address an overall average to account for the differences in subdivisions with different zoning districts in relation to the plan. Discussion continued.

Chairman Wolter said this development is moving in the proper direction from what we first saw and is now closer to reflecting the surrounding area. But he would like to see some changes including larger lot sizes against the park, and when the plat is proposed review the roads, retention ponds and lot configuration when the plat is submitted for review. He said it's starting to fit and he finds it hard to reject it based on the way it's starting to move in a direction of matching the surrounding neighborhoods. He stated we've heard a lot of things tonight and during the public hearing the request to table because of an ongoing investigation is not a correct statement. A complaint was filed but no one has come forward to say there will be an investigation. He said he is looking to consider this matter on the basis as it is presented for zoning on the surrounding neighborhood making it hard to vote against it at Plan Commission. He is open to moving it forward to the Village Board for full discussion and another public hearing so that there can be further input. The Board can consider how it fits with the surrounding neighborhoods and how they'd like to see it changed if possible as the next step.

Trustee Baum said some residents had reached out to him regarding the properties along Kinderberg Park being larger. He said he would be willing to work with the developer to get larger lots along Kinderberg Park.

MOTION carried 4-2 (Nilles, Williams)

PUBLIC HEARING & ACTION

Gehl Foods LLC – N116 W15970, N116 W16060, N116 W16076 & N116 W16150 Main Street & W160 N11736 Crusader Court. Request for a rezoning application to create a Planned Development District (PDD) and Rezone 17.36 acres from the B-3: General Business & M-1: Limited Industrial District into the Planned Development District (PDD); a Certified Survey Map (CSM) application to combine parcels and a Site Plan Application for a 22,500 sqft addition and parking lot expansion to the production facility at N116 W15970 Main Street. Planner Retzlaff summarized the proposal.

Chairman Wolter opened the Public Hearing at 7:56 pm.

*Paula Heupel, W156 N11953 Pilgrim Road, said she is passionate about old homes, doesn't think more industrial is congruent with the land use plan, has noise concerns will increase with production.

*Dan Wing, Village Trustee, one of the 4 houses to be razed is his childhood home. Said Gehl's claims they are respectful to neighbors, but said bushes are untrimmed, weeds, junk around property, porch rails scraped and not painted, silos have rust spots. He said there are negative affects of the

smells, 5 more lines will mean more steam and smell. He wants to keep the historic element of Main Street and save the houses by expanding behind them.

*Steven Green, N116 W16033 Main Street, said Gehl's cuts the grass around the old houses but doesn't trim the bushes, taking down the houses will be an improvement over looking at 4 abandoned houses. Paving the parking lot will be an improvement over the stone there now. Some of the smells are good.

*Elizabeth Green, Gehl's has been a very good neighbor, is a good company, families are provided for that work there and is excited about the German design.

*Alisha Mir-Marwood, W162 N11717 Park Avenue, was part of the connectivity plan for Main Street and this expansion was not part of that plan. Should think about plan for Main Street and not add additional industrial. Should think about what we want moving forward, cannot walk on sidewalk from Park to Fond du Lac Avenue on the north side of the street, expanded parking lot on Park and Main extends into the only grassy area left on Main Street, all trees behind houses will be removed.

*Julie Reichert, W156 N11580 Pilgrim Road, the plan for Gehl's is awful, expand plant on Freistadt Road.

*Christine Stuetgen, W162 N11654 Park Avenue, said there is humming all the time, it's so noisy, agrees with Trustee Wing.

*Stephanie Kaiser, N116 W16009 Main Street, just moved in, excited about downtown being revitalized, but plan for Gehl's not what she envisioned for the future.

*Jan Miller, W151 N10297 Windsong Circle, likes the downtown area, doesn't like factory in downtown area, smell is disruptive, Gehl's should be in an industrial area, agrees with Trustee Wing and wants a downtown area with warm, retail and restaurants/

*Ted Maris, W161 N11695 Church Street, noise from silos is very loud, safety is an issue with trucks coming down Church Street.

The Public Hearing was closed at 8:36 pm.

Trustee Baum said at the last Plan Commission meeting Gehl's was told to come back with an inspired design that will make Main Street spectacular. But the plan presented is lacking, bland and troublesome. He is opposed to combining the parcels and feels it would set a precedent for Gehl's to buy more land to expand. He added the houses are run down and falling apart and the smells have been around for many years. He said he won't support the request. Discussion continued.

Commissioner Kimmler said he was part of the connectivity plan that came up with some exciting ideas for Main Street. He asked when will Gehl's stop expanding. It takes away from the potential of what Main Street could be and doesn't fit in with the zoning in the area.

Chairman Wolter said Gehl's has made some efforts to come forward and fix issues including noise complaints in the past. He stated Gehl's is the biggest customer of the Village and largest employer. He said they will not be adding a steam line with the expansion. They have a heavy investment in automation at his plant and they are here and not going away. He is always willing to discuss options to vitalize the downtown area and it's nice to hear about the new businesses in the area. But Gehl's is a strong part of the community and the only area to grow on Main Street is on the opposite side of the street. He added Gehl's brings a lot to the community in tax base and sewer and water fees and as an employer. He said these are facts and not his opinion.

MOTION Baum second Shadid to Table action until all the outstanding items and issues identified are addressed.

MOTION carried 5-1 (Wolter).

PUBLIC HEARING & ACTION

Matthew & Michelle Stephan - Rockfield Road ½ Mile West of Goldendale Road. The property owners are seeking approval to rezone the property from the A-2 Agricultural District and the Rs-1 Single Family Residential District back to the A-1 Agricultural District. The Stephan's have decided to construct a single-family dwelling on the entire 19.8-acre parcel rather than divide the property as previously approved. Planner Retzlaff summarized the proposal.

Chairman Wolter opened the public hearing at 8:49 pm. No one spoke.
The public hearing was closed at 8:50 pm.

MOTION to Approve rezoning the 19.8-acre parcel from Rs-1 Single-Family Residential and A-2 Agricultural to the A-1 Agricultural District as proposed.

MOTION carried unanimously.

KinderCare Learning Center - ElG14T Development - N112 W17060 Mequon Road. The request is for approval of revised building plans for the 10,782 sqft childcare center. Planner Retzlaff summarized the proposal.

MOTION Baum second Nilles to Approve the window frame color change to "Desert Tan" as proposed.

MOTION carried unanimously.

Top Leaf Development LLC for Harvest Hills Subdivision & Alan & Lynda Luther - 107 acres south of Freistadt road, North of Elm Lane and West of Wasaukee Road. The request is for approval of the final subdivision plat for Harvest Hills, a 75-acre, 37-lot residential development. Planner Retzlaff summarized the proposal.

MOTION Baum second Shadid to Approve the final subdivision plat for the 37-lot Harvest Hills residential subdivision south of the Freistadt Road, north of Elm Lane, and ¼ mile west of Wasaukee Road subject to the following conditions:

- 1. To meet the criteria that a final plat shall "substantially conform" to an approved preliminary plat, the final plat shall be revised to include the entire 35.21 acre "Outlot 8" shown on the preliminary plat as either a lot or an outlot.***
- 2. The final plat shall reflect the correct dedication of right-of-way for Elm Lane (40 feet north of the ¼ section line) including along the 35.21-acre Outlot 8;***
- 3. A Letter of "no objection" from the WI Department of Administration (DOA) shall be submitted to the Village prior to recording the final plat.***
- 4. Final inspection and confirmation shall be received from the Public Works Department/Village Engineer that all road, storm water and other improvements in the subdivision are complete and developer requirements satisfied prior to recording the final plat.***

MOTION carried unanimously.

Ryan Companies US Inc. - N102 W19200 Willow Creek Way. The request is for approval of site development and building plans for a 243,419 square foot industrial building located on Lot 4 in the Willow Creek Business Park. Planner Retzlaff summarized the proposal.

MOTION Baum second Williams to Approve the site development and building plans submitted by Ryan Companies for the proposed 243,419-square-foot warehouse located on Lot 4 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 6-19-19 unless said plan sheets are revised pursuant to revisions required under the specific conditions of approval included by the Plan Commission.**
- 2. An Access Easement must be recorded for the shared access drive located on Lot 3 of the Willow Creek Business Park within 90 days of the site plan approval by the Plan Commission.**
- 3. Ryan Companies shall coordinate with the Village Public Works and Fire Department to design and install a secondary access driveway for emergency vehicle access within the 30' wide public sanitary & water main easement from the Willow Creek Way cul-de-sac to the west parking lot. In the event said emergency access driveway is not installed within one (1) year after issuance of the first occupancy permit, or, not allowed as planned within the ATC-WE Energies 125' power line easement and/or the ANR-TransCanada 100' pipeline easement, Ryan Companies shall cooperate with the Village to identify a mutually acceptable location and design for the required emergency access driveway to Appleton Avenue, Maple Road or other location. Once details on the final location and design for the emergency drive have been determined, Ryan Companies shall prepare and submit a revised site plan indicating how the emergency drive will interface with the parking lot to the Village Fire and Public Works Departments for review and approval.**
- 4. 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.**
- 5. 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.**
- 6. The Developer shall provide a detailed plan or set of specifications for what type, i.e. design, materials, color, etc. of roof-mounted mechanical screening will be installed in the event that screening is required at the time one or more tenants apply for building permits and occupancy from the Village, and, submit said specifications to the Village Planner for review and approval prior to issuance of an occupancy permit for multi-tenant industrial building.**
- 7. A supplemental site plan showing proposed dumpster enclosures, which meets the Village's design guidelines shall be submitted and approved by Village staff prior to the issuance of a building permit.**
- 8. The height of the proposed light fixtures shall not exceed 25'. The proposed height should be reduced from 30' to 25'.**
- 9. 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.**
- 10. All technical issues and plan corrections identified by the Village Engineer and Public Works Department staff (see July 25, 2019 memo from the Public Works Director)**

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.

- 11. All proposed exterior signage, including monument and wall-mounted signs shall be reviewed and approved under a separate application by the Plan Commission.*
- 12. State approved plans and a \$20,000 occupancy bond are required by the Building Inspection Department as part of the building permit application.*

MOTION to Amend Baum second Shadid to add Condition #13 that the exit doors on the north side of the building have sidewalks if required by State code.

MOTION to Amend carried unanimously.

MOTION to Approve as Amended carried unanimously.

Ryan Companies - N102 W19300 & W19200 Willow Creek Way. Request of approval for a monument ground sign to serve both the existing multi-tenant industrial building on Lot 3 and the proposed multi-tenant industrial building located on Lot 4 to the south in the Willow Creek Business Park. Planner Retzlaff summarized the proposal.

MOTION Baum second Nilles to Approve the proposed ground sign for the Ryan Companies properties subject to the following conditions:

- 1. Electrical permits shall be obtained from Inspection Services prior to installation of any/all electrical components.*
- 2. Landscaping must extend at least 3 feet from all sides of the proposed ground sign.*
- 3. The ground sign shall be located at least 5 feet from the property line to the northwest.*
- 4. Address coordinates for the building(s) to be served shall be installed on the sign base and be a minimum of 5" height.*
- 5. The background for all sign panels displayed in the proposed sign cabinet shall have an opaque or dark background panel to prevent glare.*

MOTION carried unanimously.

Motis Brands (formerly Discount Ramps) - N102 W19400 Willow Creek Way. The request is for approval of a wall sign. Planner Retzlaff summarized the proposal.

MOTION Baum second Shadid to Approve the proposed wall sign for the Motis Brands (formerly Discount Ramps) property subject to the following conditions:

- 1. Electrical permits shall be obtained from Inspection Services prior to installation of any/all electrical components.*

MOTION carried unanimously.

ANNOUNCEMENTS: None

ADJOURNMENT: There being no further business, the meeting was adjourned at 9:17 pm.

Respectfully submitted,

Lori Johnson
Planning Assistant

**PLANNED DEVELOPMENT DISTRICT (PDD)
REZONING APPLICATION**
9/9/19 Plan Commission Meeting

Stonecast Products Inc.

Village Planner Report

Germantown, Wisconsin

Summary

Jim Marriott, President of Stonecast Products Inc., and agent for SPI Real Estate LLC, property owner, is requesting approval to create a Planned Development District (PDD) for the 10.6-acre facility located at N112 W14343 Mequon Road.

Location: N112 W14343 Mequon Road

Applicant/

Property Owner: Jim Marriott, President
Stonecast Products Inc.
N112 W14343 Mequon Road
Germantown, WI 53022

Current Zoning: M-1: Limited Industrial

Adjacent Land Uses		Zoning
North	Industrial	M-2
South	Agricultural	A-2
East	Residential	Rs-1 & Rs-3
West	Industrial/Agricultural	M-1/A-2



Background/Proposal

Stonecast Products is a leading producer of “architectural precast” concrete products for commercial and institutional developments throughout Wisconsin, Illinois and Michigan. Their products include precast wall panels, arches, sills and bands.

In 2014, Stonecast Products Inc. received approval of a Certified Survey Map (CSM), Rezoning, Conditional Use Permit, and Site Plan applications in order to fill wetlands and complete a 54,275 sqft outdoor storage area expansion within the 10.6-acre facility located on Mequon Road.

At this time, Jim Marriott, President of Stonecast Products Inc., and agent for SPI Real Estate LLC, property owner, is requesting approval to create a Planned Development District (PDD) for the 10.6-acre facility located at N112 W14343 Mequon Road. The property is currently zoned M-1: Limited Industrial.

Stonecast Products is planning to increase the size of the panels that they produce. In order to do so, they need a larger production facility than the existing panel production building provides. Stonecast wants/needs to expand this building with a 1,500 sqft addition (25'x60') on the south side to accommodate a larger crane and other internal changes necessary for loading panels onto semi-trailers from the south side of the building (see enclosed photos and site plan). The proposed building addition would move the building to a point approximately 11'-13' feet from the right-of-way (depending on which photo or plan you look at in the attached).

The Planned Development District (PDD) zoning designation creates the ability to relax the basic restrictions in the M-1 District (e.g. setbacks, lot coverage) and other applicable zoning code provisions (e.g. parking and signage). However, as presented in the application and supporting documentation, the proposed PDD is intended to only modify the current rear yard setback from 25 to 10 feet in order to accommodate the expansion of an existing panel production building located close to the adjacent railroad right-of-way. No other changes to the basic M-1 District regulations are proposed.

Staff Comment

The building addition and how to accommodate the resulting encroachment into the 25' rear yard setback has been discussed with Village staff for some time. The problem is that the existing building the owner wants to expand is already at the minimum 25' setback from the nearest corner of the building to the railroad right-of-way (see attached survey and site plan).

Other than making significant changes to the existing building or constructing an entirely new building that meets the current 25' setback, the other alternatives available require an amendment to the Zoning Code in one form or another:

1. Seek a variance from the Board of Zoning Appeals to reduce the minimum required rear yard building setback from 25' to 10' (would affect only this parcel);
2. Propose an amendment to the M-1 Zoning District regulations to reduce the minimum rear yard building setback from 25' to 10' (which affect all M-1 zoned property in the Village); or
3. Create a new planned development district (PDD) for the property and create setbacks that are favorable to the proposed building addition (would affect only this parcel)

Again, the only other alternative would be to make significant modifications to the existing building or construct a new building, all meeting the current 25' rear yard building setback.

It is not known why the owner chose to pursue this alternative over the others. Presumably, the stringent set of criteria needed to obtain a variance, including the burden of proving that the property could not reasonably be used without the variance, weighed in on the decision to not pursue a setback variance.

As shown in the attached photos, there is an existing gravel drive that goes around the existing building, parallel to the railroad and straddling the common property/right-of-way line. This gravel drive appears to encroach 15' to 20' into the railroad right-of-way and appears to be used regularly for driveway purposes. In fact, its not uncommon to find property owners who use a portion of an adjacent railroad right-of-way as if it was their own property either with or without any sort of agreement with the railroad or WisDOT. In fact, a view of other recent aerial photos clearly shows that other portions of the Stonecast operation encroaches into the railroad right-of-way.

Since the proposed setback reduction from 25' to 10' is needed for a relatively small amount of building addition, Staff will support the proposal IF the owner is unable to obtain a variance from the Board of Zoning Appeals, and, the owner obtains some sort of an agreement with the railroad and/or WisDOT to use a portion of said right-of-way for driveway access/circulation purposes (at a minimum; said agreement should also address the other operational encroachments that currently exist on the Stonecast property).

Also, while researching the property history in preparation for this report, Staff discovered that the certified survey map (CSM) that was required and approved in 2014 to combine two separate parcels owned by SPI Real Estate LLC was not recorded. That CSM will need to be revised accordingly and recorded.

Fire Department

There are concerns with Fire Department access to and within the property that would result from the proposal. Specifically, access around the building addition would be reduced to less than 10 feet between the building and the railroad ROW. Also, the west gated access driveway was closed as a result of the recent reconstruction of STH 167/Mequon Road in this vicinity. Finally, the closest existing fire hydrant is approximately 750 feet to the east past the railroad crossing.

The following improvements are recommended:

1. Connection to the Village's public water supply with new fire hydrants;
2. Two (2) fire hydrants approved by the Fire Department and Water Utility should be installed at the driveway entrance entry by the railroad and about 400 feet southwest of said entrance.

VILLAGE PLANNER RECOMMENDATION

APPROVE the request to create a M-1: Limited Industrial Planned Development District (PDD) for the 10.6-acre Stonecast property located at N112 W14343 Mequon Road subject to the following conditions:

1. The requested PDD shall be created if the Owner applies for and is denied a rear yard setback variance from the Board of Zoning Appeals, and, the Owner obtains an easement or other agreement with the railroad and/or WisDOT to use a portion of said right-of-way for driveway access/circulation purposes. At a minimum said agreement shall provide for emergency vehicle access and address other Stonecast Products encroachments into the railroad right-of-way.
2. The certified survey map (CSM) that was approved in 2014 to combine two separate parcels owned by SPI Real Estate LLC shall be revised and recorded.
3. Subject to Condition #1 above, if a PDD is created, the list of conditions & restrictions shall include only the rear yard setback reduction as set forth in the PDD application, and, include a provision that states building additions up to 5,000 sqft in area may be approved as a “minor” improvement requiring Zoning Permit approval by the Zoning Administrator pursuant to Section 17.43(9) of the Zoning Code.



Village of

Germantown
Willkommen

FEES MUST BE PAID AT TIME OF APPLICATION

- ☐ \$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: 7-15-19 Received by: [Signature]

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

Stonecast Products (Jim Marriott)

N112 W14343 Mequon Rd.

Germantown, WI 53022

Phone (262) 253-6600

Fax (262) 253-0500

E-Mail JMarriott@marriottconstruction.com

PROPERTY OWNER

SPI Real Estate, LLC.

N112 W14343 Mequon Rd

Germantown, WI 53022

Phone (262) 253-6600

2 PROPERTY ADDRESS OR GENERAL LOCATION

N112 W14343 Mequon Rd.

TAX KEY NUMBER

261-983

261-985

3 REZONING REQUEST

FROM M-1
25' Rear Yeard setback

TO M-1 PDD
10' Rear Yard Setback

4 METES AND BOUNDS LEGAL DESCRIPTION OF PROPERTY – REQUIRED

Attach pages as necessary

Parcel 2, CSM No. 2747 along the lands in the Northeast 1/4 of Section 26, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin, bounded as described as follows:

Commencing at the northwest corner of said 1/4 section, thence n 88 35'07" e 1156.55 feet along the north line of said 1/4 section to a point; thence n 88 35'07" e 65.00 feet to the point of beginning of lands to be described; thence n 88 35'07" e 467.78 feet; thence s 37 42'59" e 488.50 feet; thence southeast along the arc of a curve whose center lies to the northeast, whose radius is 4363.25 feet and whose chord bears s 40 42'52" e 456.71 feet; thence s 40 53'56" w 128.47 feet; thence n 63 28'04" w 1086.46 feet; thence n 01 24'52" w 332.95 feet to the point of beginning. Containing: 463,320 sq. ft. of 10.636 acres

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.

The purpose for the request is that Stonecast is looking into expanding/increasing their panel production by increasing their product size. By increasing their panel sizes, they need to increase the height on part of their existing facility for the larger crane and pump out the south end of the facility to accommodate their flow of loading panels to semi trailers (Same as what they are currently doing, just shifted south due to the larger production tables/beds).

The current layout with the bumped out enclosed canopy/loading area puts one corner of it over the 25' setback line (see attached site sketch/aerial photo), hence why Stonecast is submitting the Rezoning/PDD application, *to change from 25' to 10'.*

NO change in employees at this time.

6 SUPPORTING DOCUMENTATION:

- ☐ Plat of Survey (1:100)
- ☒ Site Plan and elevations for new construction (can be conceptual)
- ☒ Marked up aerial photo
- ☐ _____

7 READ AND INITIAL THE FOLLOWING:

mk 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.

mk 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 be sufficient cause to deny the petition.

mk 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!

JAMES B. MARRIOTT 7/15/19
Applicant Date

[Signature]
Owner

7/15/19
Date



CAPITOL SURVEY ENTERPRISES
837 NORTH CURTIS ROAD
MILWAUKEE, WI 53214
PH 414 757-7819
FAX 414 757-7818
WWW.CAPITOLSURVEY.COM

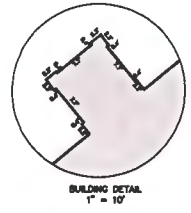
1/4 SECTION
1/4 SECTION
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1/4 SECTION

LEGAL DESCRIPTION:

LANDS IN THE NORTHEAST 1/4 OF SECTION 26, TOWN 9 NORTH, RANGE 20 EAST, IN THE VILLAGE OF GERMANTOWN, WASHINGTON COUNTY WISCONSIN, BOUNDED AND DESCRIBED AS FOLLOWS:
COMMENCING AT THE NORTHWEST CORNER OF SAID 1/4 SECTION, THENCE N 87°25'00" E 115.80 FEET TO THE NORTH LINE OF SAID 1/4 SECTION TO A POINT, THENCE S 0°00'00" E 65.00 FEET TO THE POINT OF BEGINNING OF LANDS TO BE DESCRIBED, THENCE N 87°25'00" E 467.78 FEET; THENCE S 37°25'00" E 485.50 FEET; THENCE SOUTHEAST ALONG THE ARC OF A CURVE WHOSE CENTER LIES TO THE NORTHEAST, WHOSE RADIUS IS 434.55 FEET AND WHOSE CHORD BEARS S 87°25'00" E 485.78 FEET; THENCE S 40°25'00" W 158.47 FEET; THENCE N 87°25'00" E 1088.46 FEET; THENCE N 0°00'00" E 333.80 FEET TO THE POINT OF BEGINNING.
CONTAINING 408.86 SQUARE FEET OR 0.3883 ACRES

NOTES

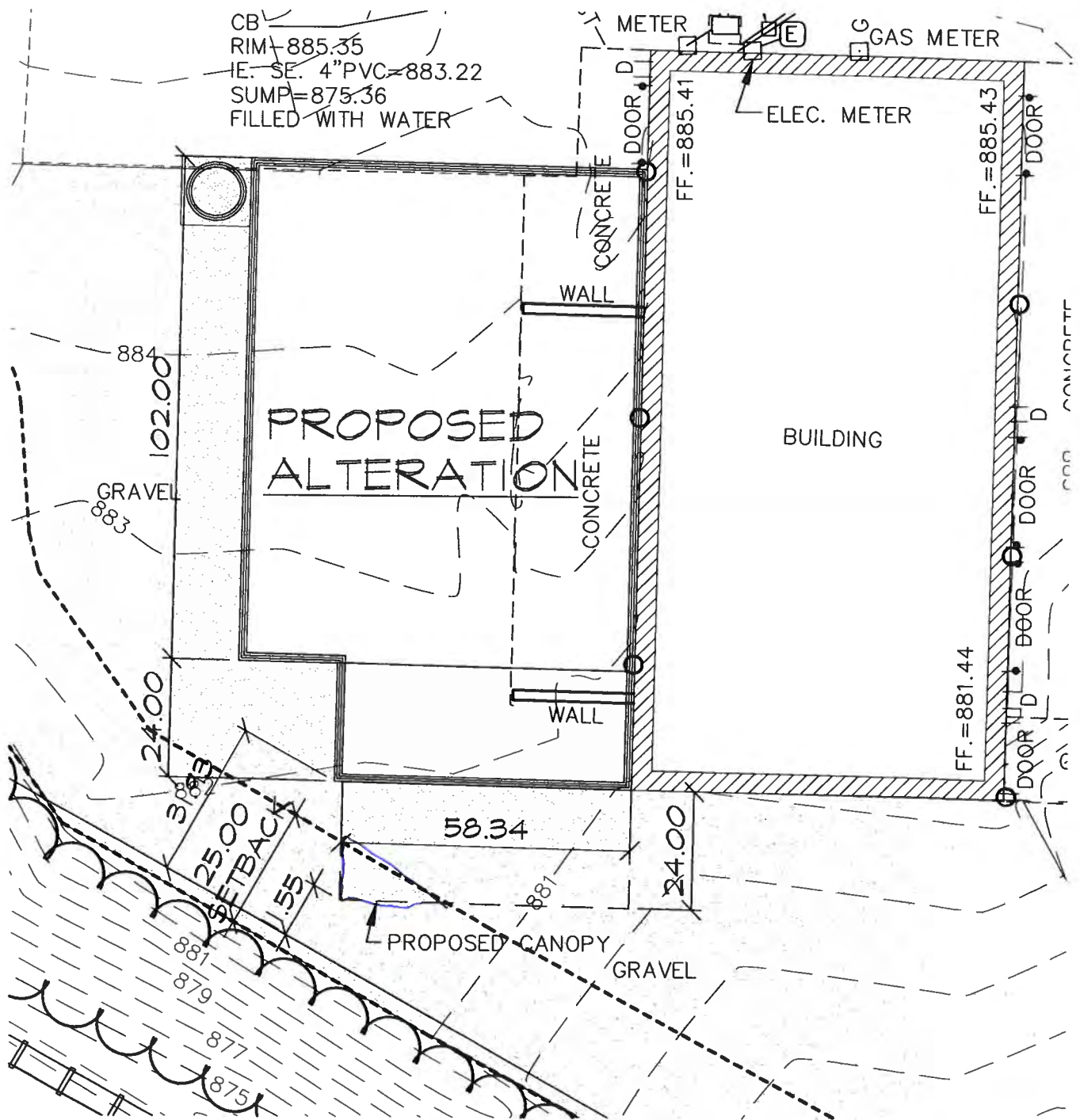
- LEGAL DESCRIPTION BASED ON INFORMATION PROVIDED BY CLIENT
- THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, ON INFORMATION FURNISHED BY THE UTILITY COMPANIES, DIGGERS HOTLINE AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.
- SUBJECT PROPERTY IS IN ZONE "C" AREAS OF LESS THAN 0.028 ANNUAL CHANCE FLOOD FOR FEDERAL INSURANCE RATE MAP NO. 5513C - 0370 WHICH HAS AN IDENTIFICATION DATE OF NOVEMBER 20, 2013 AND IS CONSIDERED TO BE IN THE VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WHICH IS THE COMMUNITY IN WHICH THE SUBJECT PROPERTY LIES.
- PROJECT BENCHMARK - FLOOR AT DOOR OF PATCH BUILDING CL. = 864.94.
- SITE BENCHMARK - 86 SPICE IN WEST FACE OF PP EAST OF MASONRY OFFICE BUILDING CL. = 876.53.
- ELEVATIONS BASED ON INFORMATION FROM PRELIMINARY SITE GRADING PLAN PROVIDED BY C.J. ENGINEERS.



Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 543-2268
www.DiggersHotline.com



LEGEND	
--- 30' ROP	--- 30' ROP
--- 12' ROP	--- 12' ROP
--- 6' ROP	--- 6' ROP
--- 3' ROP	--- 3' ROP
--- 1' ROP	--- 1' ROP
--- 0' ROP	--- 0' ROP
--- 1/2' ROP	--- 1/2' ROP
--- 1/4' ROP	--- 1/4' ROP
--- 1/8' ROP	--- 1/8' ROP
--- 1/16' ROP	--- 1/16' ROP
--- 1/32' ROP	--- 1/32' ROP
--- 1/64' ROP	--- 1/64' ROP
--- 1/128' ROP	--- 1/128' ROP
--- 1/256' ROP	--- 1/256' ROP
--- 1/512' ROP	--- 1/512' ROP
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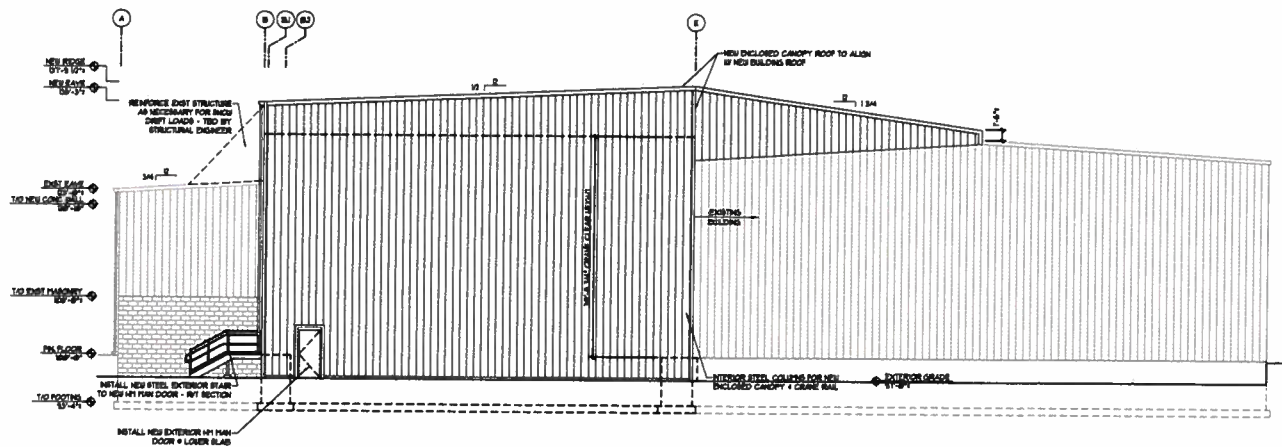


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 PERSPECTIVE DESIGN, INC. 11025 W. North Avenue Wauwatosa, WI 53226 Tel 414.302-1150 Fax 414.302-1151		A Building Alteration & Cleanup Addition for Stonecast Products Inc. 11212W4345 Mequon Rd Germantown, WI 53022	
Drawing Title: PROPOSED EXTERIOR ELEVATIONS		SHEET NO. 01 OF 12	
Drawn: 04/17/19		DATE: 04/17/19	
Scale: 1/8" = 1'-0"		BY: KBJ	
Drawn: 10-01		DATE: 10-01	
Job: 19-018		DATE: 10-01	
Sheet:		DATE: 10-01	

- PRELIMINARY -
FOR ESTIMATING AND REVIEW ONLY

NOT FOR CONSTRUCTION



PROPOSED SOUTH ELEVATION
SCALE 1/8" = 1'-0"

NOT USED	2
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FULL SIZE PRINT = 8 1/2" x 11" SHEET

[illegible]

 PERSPECTIVE DESIGN, INC. 1525 W. Lincoln Avenue Milwaukee, WI 53226 Tel (414) 392-1780 Fax (414) 392-1781	
PD	
Drawing Title PROPOSED EXTERIOR ELEVATIONS	
Date:	04/17/98
Scale:	1/8" = 1'-0"
Drawn:	KCB
Job:	18-018
Sheet:	A2.2

Project:
A Building Alteration & Canopy Addition for:
Stonecast Products
Inc.
N112W14343 Mequon Rd
Germantown, WI 53022



NO.	REV. DATE	DESCRIPTION	REV. BY
	07/18/75	75 REVEN	B.K
	07/29/75	BUD SET	B.K

- PRELIMINARY -
FOR ESTIMATING AND REVIEW ONLY

NOT FOR CONSTRUCTION

CUP # 14 - 14
Document No.

CONDITIONAL USE PERMIT
Document Title

VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN
CONDITIONAL USE ZONING PERMIT

Whereas the Applicant:

James Marriott, President, Stonecast Products Inc.

agrees to comply with applicable Codes and Ordinances of the Village of Germantown, Wisconsin, and further agrees that all work done pursuant to the permission granted herewith will conform with the applications and drawings filed with and approvals granted by officials of the Village for the purpose of obtaining this permit.

Now, therefore, this permit is issued to the Applicant to permit the to allow development within the 25' wetland setback areas as presented in the Wetland Mitigation Plan dated October 22, 2014, and exhibits contained in the application pursuant to Section 24.04 of the Shoreland-Wetland Zoning Code.

Name & Return Address:

**Village of Germantown
P.O. Box 337
Germantown, WI 53022**

Parcel Identification No:

GTNV 261-983 & 261-985

1389404



RECORDED

August 31, 2015 10:30 AM

SHARON A MARTIN

REGISTER OF DEEDS

WASHINGTON COUNTY, WI

Recording Fee Paid: \$30.00

On the following described property located in the Village of Germantown, Washington County, Wisconsin:

N112 W14343 Mequon Road; Tax Key No. 261-983 & 261-985

Parcel 2, CSM No. 2747 along with lands in the Northeast 1/4 of Section 26, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin, bounded and described as follows:

Commencing at the northwest corner of said 1/4 section, thence n 88°35'07" e 1156.55 feet along the north line of said 1/4 section to a point; thence s 01°24'59" e 65.00 feet to the point of beginning of lands to be described; thence n 88°35'07" e 467.78 feet; thence s 37°42'59" e 488.50 feet; thence southeast along the arc of a curve whose center lies to the northeast, whose radius is 4363.25 feet and whose chord bears s 40°42'52" e 456.71 feet; thence s 40°53'56" w 128.47 feet; thence n 63°28'04" w 1086.46 feet; thence n 01°24'52" w 332.95 feet to the point of beginning. Containing: 463,320 square feet or 10.636 acres.

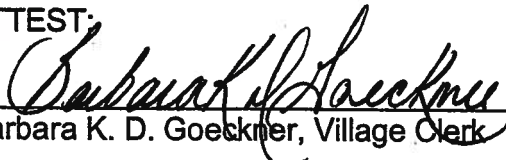
Pursuant to the following condition(s):

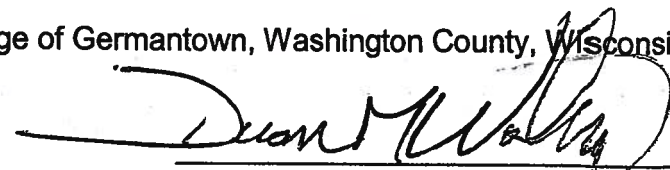
1. The owner shall prepare and submit an annual monitoring report to the Village and Local DNR staff concerning the various management activities proposed in the plan including the planting/restoration of native vegetation. Said report shall at a minimum detail the type and amount of plantings, all activities carried out in the previous year and the observed success of all previous activities, recommendations for new or different activities needed to ensure success of the mitigation measures and management activities to be carried out, and a list of planned activities for the upcoming year. Said report shall be submitted annually at the end of each year beginning in 2015 for a period of three (3) years.

Conditional Use Permit (CUP) # 14-14
James Marriott, President, Stonecast Products Inc.
Page 2 of 3

Granted by the Village Board of the Village of Germantown, Washington County, Wisconsin
on the 15th day of December, 2014.

ATTEST:


Barbara K. D. Goeckner, Village Clerk


Dean M. Wolter, Village President

STATE OF WISCONSIN) SS
WASHINGTON COUNTY)

Personally came before me this 30 day of July, 2015, the above named
Dean Wolter, Village President, and Barbara K. D. Goeckner, Village Clerk, to me known to be
the persons who executed the foregoing instrument and acknowledged the same.

Timmerly Tamborino
(type or print name of Notary on this line)
Timmerly Tamborino
(signature of Notary on this line)

Notary Public, State of Wisconsin
My Commission Expires: 3.20.16

ACCEPTANCE OF TERMS AND CONDITIONS BY PROPERTY OWNER

The following named person, who is authorized to represent Stonecast Products Inc., hereby accept the terms and conditions set forth in this Permit, and realize that non-adherence to the terms and conditions as stated hereon may result in the revocation of this Permit by the Village of Germantown.

Dated this 4th day of AUGUST, 2015.

JAMES R. MARIOTT
(type or print name on this line)
[Signature]
(signature on this line)
Agent for Stonecast Products Inc.

STATE OF WISCONSIN
Ozaukee COUNTY

Personally came before me this 4th day of August, 2015, being the above named Julie L. Ketterling, to me known to be the person who executed the foregoing instrument and acknowledged the same.

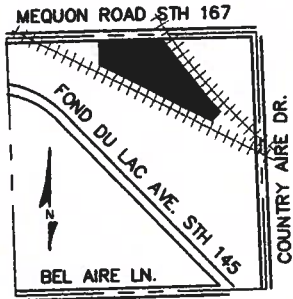
Julie L. Ketterling
Notary Public
State of Wisconsin
Ozaukee

Julie L. Ketterling
(type or print name of Notary on this line)
[Signature]
(signature of Notary on this line)

Notary Public, State of Wisconsin
My Commission Expires: June 30, 19

CERTIFIED SURVEY
MAP NO. _____

BEING A REDIVISION OF PARCEL 2, CSM 2747 ALONG WITH
LANDS IN THE NORTHEAST 1/4 OF SECTION 26, TOWN 9
NORTH, RANGE 20 EAST, IN THE VILLAGE OF GERMANTOWN,
WASHINGTON COUNTY WISCONSIN



VICINITY MAP
NE 1/4 OF SEC.
26-9-20
1" = 2000'

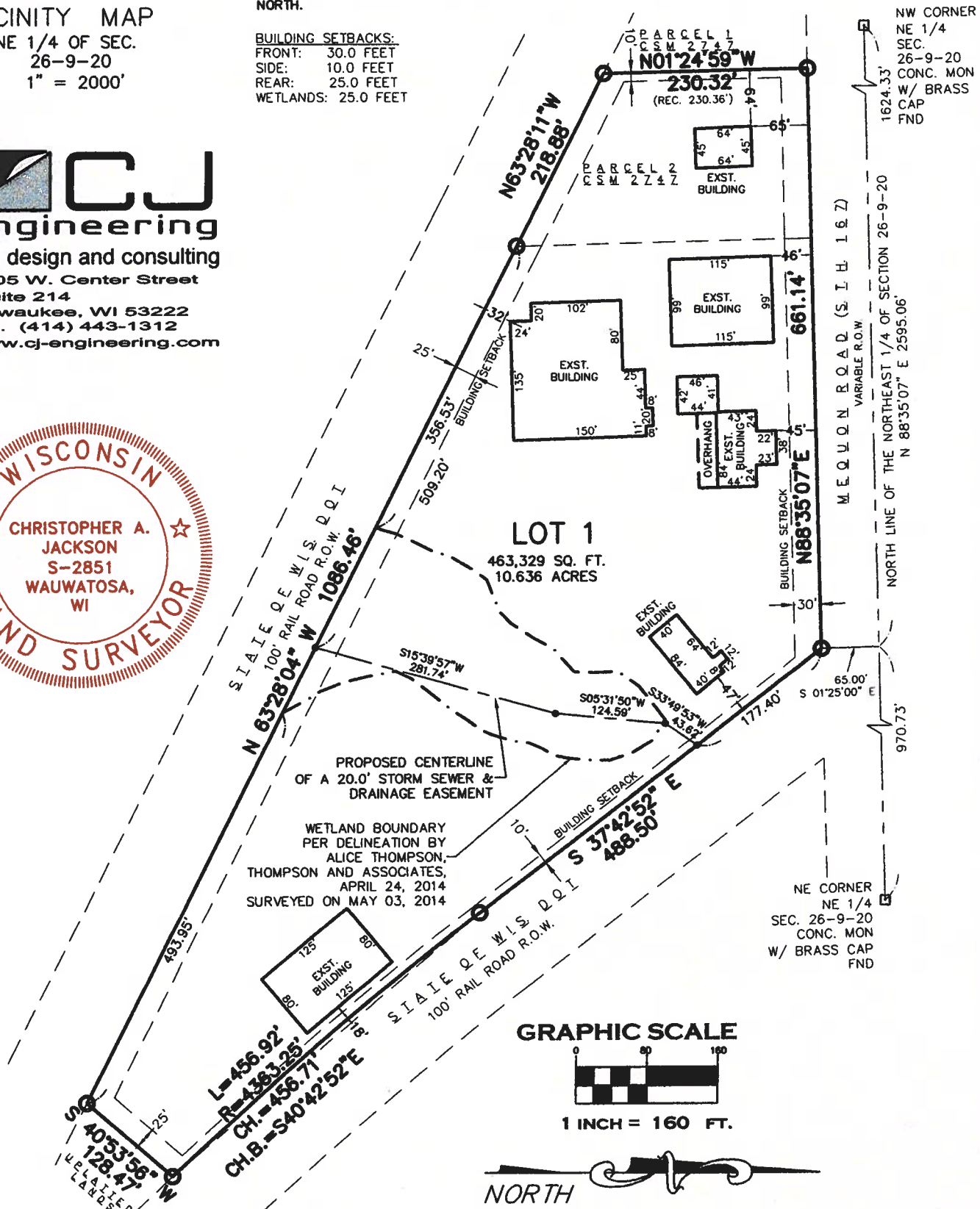
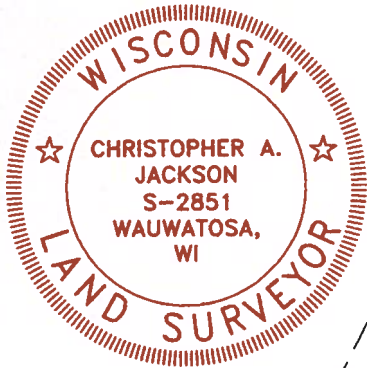
○ INDICATES IRON PIPE FOUND

ALL DIMENSIONS SHOWN ARE MEASURED TO THE NEAREST HUNDREDTH OF A FOOT.

ALL ANGLES ARE MEASURED TO THE NEAREST SECOND OF A DEGREE.

ALL BEARINGS SHOWN ARE REFERENCED TO NORTH LINE OF THE NE 1/4 OF SECTION 26, T9N, R20E, BEARING N 88°35'07" E, WISCONSIN STATE PLANE COORDINATE SYSTEM GRID, SOUTH ZONE, AND ALL BEARINGS ARE REFERENCED TO GRID NORTH.

BUILDING SETBACKS:
FRONT: 30.0 FEET
SIDE: 10.0 FEET
REAR: 25.0 FEET
WETLANDS: 25.0 FEET



CERTIFIED SURVEY MAP NO.

BEING A REDIVISION OF PARCEL 2, CSM 2747 ALONG WITH LANDS IN THE NORTHEAST 1/4 OF SECTION 26, TOWN 9 NORTH, RANGE 20 EAST, IN THE VILLAGE OF GERMANTOWN, WASHINGTON COUNTY WISCONSIN

SURVEYOR'S CERTIFICATE

STATE OF WISCONSIN) SS
RACINE COUNTY)

I, CHRISTOPHER JACKSON, A REGISTERED LAND SURVEYOR, HEREBY CERTIFY:

THAT I HAVE SURVEYED, MAPPED AND COMBINED LANDS LOCATED IN THE NORTHEAST 1/4 OF SECTION 26, TOWN 9 NORTH, RANGE 20 EAST, IN THE VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, STATE OF WISCONSIN, BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID 1/4 SECTION, THENCE N 88°35'07" E 1624.33 FEET ALONG THE NORTH LINE OF SAID 1/4 SECTION TO A POINT; THENCE S 01°25'00" E 65.00 FEET TO THE SOUTH LINE OF MEQUON ROAD (S.T.H. "167") AND THE POINT OF BEGINNING OF LANDS TO BE DESCRIBED; THENCE S 37°42'52" E 488.50 FEET; THENCE SOUTHEAST ALONG THE ARC OF A CURVE WHOSE CENTER LIES TO THE NORTHEAST, WHOSE RADIUS IS 4363.25 FEET AND WHOSE CHORD BEARS S 40°42'52" E 456.71 FEET; THENCE N 63°28'04" W 1086.46 FEET; THENCE N 63°28'11" W 218.88 FEET TO THE EAST LINE OF PARCEL 1 CSM 2747; THENCE N 01°24'59" W ALONG SAID EAST LINE, 230.32 FEET TO THE SOUTH LINE OF MEQUON ROAD (S.T.H. "167"); THENCE N 88°35'00" E ALONG SAID SOUTH LINE, 661.14 FEET TO THE POINT OF BEGINNING.

CONTAINING: 463,329 SQUARE FEET OR 10.636 ACRES

THAT I HAVE MADE SUCH SURVEY, MAP AND LAND COMBINATION BY THE DIRECTION OF SPI REAL ESTATE, LLC, OWNERS OF SAID LAND.

THAT SUCH MAP IS A CORRECT REPRESENTATION OF ALL EXTERIOR BOUNDARIES OF THE LAND SURVEYED AND THE COMBINATION THEREOF MADE.

THAT I HAVE FULLY COMPLIED WITH THE PROVISIONS OF CHAPTER 236 OF THE STATUTES OF THE STATE OF WISCONSIN AND THE REGULATIONS OF THE VILLAGE OF GERMANTOWN IN SURVEYING, MAPPING AND COMBINING THE SAME.

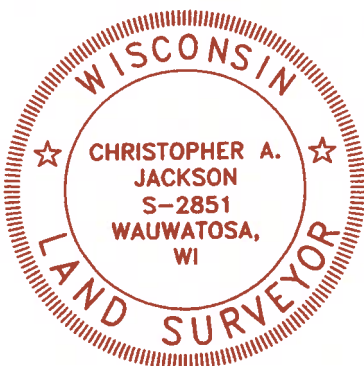
DATED THIS _____ DAY OF _____, 2014.


CHRISTOPHER A. JACKSON
REGISTERED LAND SURVEYOR, S-2851
STATE OF WISCONSIN

CORPORATE OWNER'S CERTIFICATE

SPI REAL ESTATE, LLC, A LIMITED LIABILITY COMPANY ORGANIZED UNDER THE LAWS OF THE STATE OF WISCONSIN AS OWNER, DOES HEREBY CERTIFY THAT SAID COMPANY CAUSED THE LAND DESCRIBED ON THIS MAP TO BE SURVEYED, DIVIDED AND MAPPED AS REPRESENTED ON THIS MAP.

IN WITNESS WHEREOF, SPI REAL ESTATE, LLC, HAS CAUSED THESE PRESENTS TO BE SIGNED BY JIM MARRIOTT, OWNER, AND ITS CORPORATE SEAL TO BE AFFIXED
THIS _____ DAY OF _____, 2014.



CERTIFIED SURVEY MAP NO.

BEING A REDIVISION OF PARCEL 2, CSM 2747 ALONG WITH LANDS IN THE NORTHEAST 1/4 OF SECTION 26, TOWN 9 NORTH, RANGE 20 EAST, IN THE VILLAGE OF GERMANTOWN, WASHINGTON COUNTY WISCONSIN

CONSENT OF MORTGAGEE CERTIFICATE

LAYTON STATE BANK, A CORPORATION DULY ORGANIZED AND EXISTING UNDER AND BY VIRTUE OF THE LAWS OF THE STATE OF WISCONSIN, MORTGAGEE OF THE ABOVE DESCRIBED LAND, DOES HEREBY CONSENT TO THE SURVEYING, MAPPING AND COMBINING OF THE LAND DESCRIBED ON THIS MAP AND DOES HEREBY CONSENT TO THE ABOVE CERTIFICATION OF OWNERS

IN WITNESS WHEREOF, THE SAID LAYTON STATE BANK, HAS CAUSED THESE PRESENTS TO BE SIGNED BY GARY SZPARA, SENIOR VICE PRESIDENT AT _____, WISCONSIN, THIS DAY OF _____, 2014.

BY: _____

NAME: GARY SZPARA

TITLE: SENIOR VICE PRESIDENT

STATE OF WISCONSIN)
WAUKESHA COUNTY) SS

PERSONALLY CAME BEFORE ME THIS _____ DAY OF _____, 2014,
THE ABOVE GARY SZPARA, TO ME KNOWN TO BE THE SENIOR VICE PRESIDENT OF LAYTON STATE BANK AND
THE PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THE SAME.

NOTARY PUBLIC, STATE OF WISCONSIN
MY COMMISSION EXPIRES _____, 2014

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 _____ 2014.

DEAN WOLTER, CHAIRMAN

DATE

LAURA A. JOHNSON, SECRETARY

DATE

VILLAGE OF GERMANTOWN BOARD APPROVAL

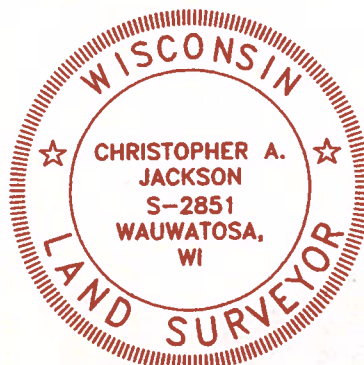
THIS CERTIFIED SURVEY MAP, BEING A DIVISION OF NE ¼ SECTION 26, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN, HAVING BEEN APPROVED BY THE PLANNING COMMISSION BEING THE SAME, IS HEREBY APPROVED AND ACCEPTED BY THE VILLAGE BOARD OF TRUSTEES OF THE VILLAGE OF GERMANTOWN ON THIS ____ DAY OF _____

DEAN WOLTER, VILLAGE PRESIDENT

DATE

BARBARA K.D. GOECKNER, VILLAGE CLERK

DATE





PROPERTY LINE

25' Rear Setback Line

13'

Apprx. 11.99'

24'

60'

25'



25'

60'

25' setback

13'

Property Line



25'

13'

← 25' setback

Property Line →

CONDITIONAL USE PERMIT & SITE PLAN REVIEW

9/9/19 Plan Commission Meeting

Mark Brooks / Doctors LLC

Village Planner Report

Germantown, Wisconsin

Summary

Mark Brooks, restaurant/bar operator and agent for Doctors LLC and Renee Martin, property owner, is seeking approval of a conditional use permit and site plan application to use an existing 15-stall "off-site" parking area located on a vacant 2.1-acre parcel adjacent to W201 N10466 Appleton Avenue.

Property Location: W201 N10466 Appleton Avenue

Applicant/

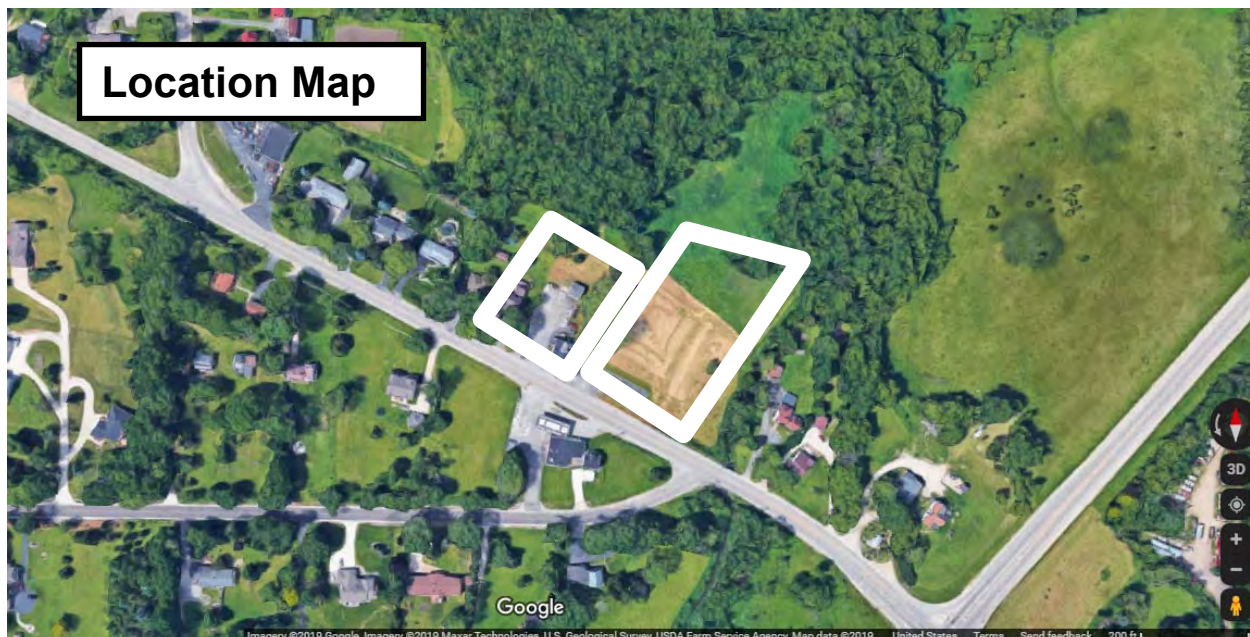
Property Owner:

Mark Brooks
Restaurant/Bar Operator
N52 W14018 Aberdeen Drive
Menomonee Falls, WI

Renee Martin
Doctors LLC
W206N10515 Appleton Av
Germantown, WI 53022

Current Zoning: B-3: General Business & B-1: Neighborhood Business

Adjacent Land Uses		Zoning
North	Agricultural	A-2
South	Commercial	B-3
East	Residential	Rs-4
West	Residential	Rs-4/Rd-2



Background/Proposal

Mark Brooks, agent for Doctors LLC and Renee Martin, property owner, is seeking approval of a conditional use permit and site plan application to use an existing 15-stall “off-site” parking area located on a vacant 2.1-acre parcel adjacent to W201 N10466 Appleton Avenue.

In May 2019, Mark Brooks was issued a Zoning Permit to re-open the former Doctors Pub (a.k.a. the Public House) on Appleton Avenue near the Willow Creek intersection. The existing building will be remodeled and is intended to operate as a new, upscale restaurant/bar. The owner/operator intends to utilize an existing paved area (approximately 4,800 sqft) on an adjacent undeveloped parcel for additional parking.

The paved parking has a separate legal driveway access to Appleton Avenue and is located very close to the existing building. This area has, historically, been used for parking purposes in the past for previous bar businesses. While both the restaurant/bar parcel (.9 acres and zoned B-3) and the adjacent parcel (2.1 acres and zoned B-1) are under the same ownership (Renee Martin, Doctors LLC), the owner does not want to combine the two parcels (and be able to use the existing paved area for parking without any further approval or permit). Brooks intends to sealcoat and mark the paved area for 12 parking stalls.

As shown in the site plan, approximately 15,900 sqft. of paved parking (41 total stalls) are proposed to be developed in the rear of this commercially-zoned (but residentially-used) 1-acre lot on Main Street. Access will be by way of a separate access driveway to/from Main Street on the west side of the lot.

Staff Comment

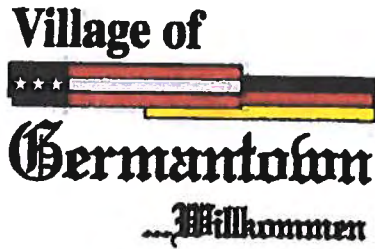
The proposal is generally consistent with the Zoning Code requirements for off-site parking areas, but the situation is complicated given that the existing pavement encroaches into the Appleton Avenue right-of-way. In fact, the front of the existing building is only 3-5 feet setback from the right-of-way. When the WisDOT re-constructed/repaved Appleton Ave in this vicinity as part of the larger round-about construction at Lannon Road, the existing paved area was effectively treated as a legal, non-conforming use. The existing driveway apron was replaced in the same location and width, and, direct access was allowed to continue. The only improvement was the addition of a landscaped “terrace” area in front of the building. Consequently, there is not sufficient space between the existing pavement and property line within which any landscaping or other improvement could be made that would further separate the parking area from the travel lanes.

A separate paved parking area exists on the north side of the building on the restaurant/bar parcel. Historically, the number of parking stalls available in both areas combined have been sufficient to meet the demand for previous bar businesses.

Village Planner Recommendation

APPROVE a conditional use permit and the proposed site plan for Mark Brooks and Doctors LLC for the proposed “off-site” parking area on the undeveloped 2.1-acre parcel located adjacent to the restaurant/bar parcel located at W201 N10466 Appleton Avenue subject to the following conditions:

1. This conditional use permit allows the continued use of the existing 4,800 sqft paved area for an off-site parking area as shown in the site plan July 11, 2019, subject to any further requirements and revisions set forth or required herein.
2. Improvements to the existing pavement shall be limited to general maintenance, including but not limited to sealcoating, crack-filling, striping. No expansion or additional off-site parking or other enhancements, e.g. additional lighting, signage, shall be made without obtaining Zoning Permit and/or Site Plan approval from the Village.
3. Expansion of the off-site parking area may be allowed subject to an amendment to this conditional use permit, and, will require re-construction and/or other modifications necessary to make the off-site parking area compliant with all setback, landscaping, and other applicable Zoning Code requirements in effect at that time.
4. The off-site parking area shall be used for parking by the patrons and employees of the restaurant/bar operation during normal business hours. The off-site parking area shall not be used for over-night storage (other than snow storage) of any materials or equipment and shall be kept clean and continuously maintained.
5. In the event that the 2.1-acre undeveloped parcel is developed, the existing paved parking area may be required to be removed or modified to comply with all current Zoning Code requirements in effect at that time. The continued or shared use of the off-site parking area with any development on the 2.1-acre parcel shall be addressed as an amendment to this conditional use permit.
6. Any signage displayed on the off-site parking area shall be reviewed and approved by the Village subject to applicable sign regulations.



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 7-11-19

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

Doctors LLC
Renee Martin - Member

Phone (262) 253-8133
E-Mail Rmartin48@wi.rr.com

PROPERTY OWNER

Doctors LLC
Renee Martin - Member

Phone (262) 253-8133
E-Mail Rmartin@wi.rr.com

2

PROPERTY ADDRESS

<u>W201 N10466 Appleton Ave</u> <u>Germantown, WI 53022</u>	<u>GTNV 293982 +</u> <u>GTNV 293983</u>
--	--

3

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

North	South	East	West
<u>Wooded Land</u>	<u>BP Station</u>		

4

READ AND INITIAL THE FOLLOWING:

- RM* I am aware of the Village of Germantown ordinance requiring fire sprinklers in most new construction.
- RM* I understand that all new development is subject to Impact and/or Connection Fees that must be paid before building permits will be issued.
- RM* 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!

RM Doctors LLC 7-10-19

Applicant

Date

RM Doctors LLC 7-10-19

Owner

Date



Village of
Germantown
Willkommen

Fee must accompany application

☐ \$1450 Paid _____ Date _____

CONDITIONAL USE PERMIT APPLICATION

Pursuant to Section 17.42 of the Municipal Code

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

1 APPLICANT OR AGENT

Member
Doctors LLC - Renee Martin

PROPERTY OWNER

Member
Doctors LLC - Renee Martin

Phone **(262) 253-8133**

Phone **(262) 253-8133**

Fax ()

E-Mail **RMartin48@wi.net**

2 TO WHOM SHOULD THE PERMIT BE ISSUED?

Doctors LLC

3 PROPERTY ADDRESS

**W 201 N 10466 Appleton Ave
Germantown, WI 53022**

TAX KEY NUMBER

**GTNV 293982
+ GTNV 293983**

4 DESCRIPTION OF EXISTING OPERATION

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

VACANT

5 DESCRIPTION OF PROPOSED OPERATION

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

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

A 114' x 42' asphalt parking area that will be Sealed & Striped to allow 12 additional Parking spots for the business to the east next door.

Please see attached Pages

SUPPORTING DOCUMENTATION:

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

READ AND INITIAL THE FOLLOWING:

- 8 ☒ I understand that the Village is under no obligation to issue a Conditional Use Permit and will do so only if the applicant successfully demonstrates that the proposed use is harmonious with the neighborhood and the long range goals of the Village.
- ☒ I will notify the Village if any aspect of the conditional use changes. I understand that failure to do so may result in the revocation of the CUP.
- ☒ I understand that a Conditional Use Permit is valid only if the conditions and restrictions of the permit are met. I understand that failure to comply with any aspect of the permit may result in revocation.

SIGNATURES — ALL APPLICATIONS MUST BE SIGNED BY OWNER!

9  7/10/19
Applicant Date

 7.10.19
Owner Date



John Graettinger <jagraettinger@gmail.com>

Last Deed

1 message

Eastlund, Donna <EastlundD@ctt.com>

Tue, Oct 16, 2018 at 10:58 AM

To: "Graettinger, John" <jagraettinger@gmail.com>

John,

Last deeds attached.

Thanks,

Donna Eastlund
Residential Examiner

CHICAGO TITLE

20825 SWENSON DR, SUITE 200 WAUKESHA, WI 53186

P: 262-796-3820

EMAIL: EastlundD@CTT.com

www.wisconsin.ctic.com | www.chicagoagent.com | www.etime.ws

**CHICAGO TITLE**

Chicago Title Company is a subsidiary of Fidelity National Financial, Inc. (NYSE: FNF), a Fortune 500 company

Your experience with Chicago Title is extremely important to us! Share feedback with my manager by clicking here.

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5 attachments**tax info.pdf**
93K**tax info 2.pdf**
92K**1115971 wd.pdf**
378K**1354595 qcd.pdf**
287K**1354596 qcd.pdf**
288K

Exhibit A

PARCEL I

That part of the Southwest Quarter of the Southwest Quarter (SW $\frac{1}{4}$ SW $\frac{1}{4}$) of Section Twenty-nine (29), Township Nine (9) North of Range Twenty (20) East, Village of Germantown, Washington County, Wisconsin, described as follows, viz:

Commencing at a point, 7.82 chains Northwest of the intersection of the center line of said Fond du Lac Road with the South line of Section 29, said point being the Southwest corner of a parcel of land conveyed by Joshua Gifford and wife to Thomas Nelson and recorded in Volume D of Deeds on page 574; thence North 26 degrees East along the Westerly line of said Nelson tract, 17.50 rods; thence North 64 degrees West, 9 rods; thence South 26 degrees West, 17.63 rods to the center of the Fond du Lac Road; thence South 54 degrees East, 9 rods to the place of beginning.

PARCEL II

That part of the Southwest Quarter of the Southwest Quarter (SW $\frac{1}{4}$ SW $\frac{1}{4}$) of Section Twenty-nine (29), Township Nine (9) North of Range Twenty (20) East, Village of Germantown, Washington County, Wisconsin, described as follows, viz:

Commencing at the Southwest corner of said Section 29; thence East, 1164.51 feet; thence North 63 degrees 38 minutes West along the centerline of State Trunk Highway No. 175, 195.30 feet to the place of beginning of this description; thence North 63 degrees 38 minutes West along said centerline, 276.05 feet; thence North 25 degrees 38 minutes East, 320.10 feet; thence South 82 degrees 50 minutes East, 296.20 feet; thence South 26 degrees 22 minutes West, 417.30 feet to the place of beginning of this description.

STATE BAR OF WISCONSIN FORM 1 - 1998
WARRANTY DEED

DOC# 1115971



Document Number

This Deed, made between PENNY S. GRENSAVITCH
A/K/A PENNY S. MATUSZEWSKI, Grantor, and DOCTORS LLC,
Grantee,

Grantor, for valuable consideration, conveys to Grantee the
following described real estate in WASHINGTON County, State of
Wisconsin (the "Property"):

SEE EXHIBIT A FOR DESCRIPTION

Recorded
JAN. 24, 2006 AT 11:50:00AM
SHARON A MARTIN, REGISTER OF DEEDS
WASHINGTON COUNTY, WISCONSIN

Fee Amount: \$113.00
Transfer Fee: \$985.10

Recording Area

Name and Return Address

DOCTORS LLC
13-2
13-2
13200 WISCONSIN Appleton Ave
German town, WI 53022

GTNV 293-983 (PARCEL II) & GTNV 293-982 (PARCEL I)

Parcel Identification Number (PIN)

This is not homestead property.

TRANSFER
\$ 905.10
FEE

Together with all appurtenant rights, title and interests.

Grantor warrants that the title to the Property is good, indefeasible in fee simple and free and clear of encumbrances and will warrant and defend the same, EXCEPT: municipal and zoning ordinances and agreements entered under them, recorded easements for the distribution of utility and municipal services, recorded building and use restrictions and covenants, general taxes levied in the year of closing.

Dated this 10th day of January, 2006.

Penny S. Grensavitch (SEAL)
PENNY S. GRENSAVITCH A/K/A PENNY S. MATUSZEWSKI

(SEAL)

(SEAL)

(SEAL)

AUTHENTICATION

Signature(s) _____

authenticated this _____ day of _____

ACKNOWLEDGMENT

State of Wisconsin)
WASHINGTON County,) ss.

Personally came before me this 10th day of

January, 2006, the above named PENNY S.

GRENSAVITCH A/K/A PENNY S. MATUSZEWSKI

to me known to be the person(s) who executed the foregoing
instrument and acknowledge the same.

Rebecca Heisdorf

Rebecca Heisdorf

TITLE: MEMBER OF STATE BAR OF WISCONSIN

(If not, _____)

authorized by ss. 706.08, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY

ATTY. JAMES MARLIN AS SCRIVENOR
MILWAUKEE WI

(Signatures may be authenticated or acknowledged. Both are not
necessary.)

*Names of persons signing in any capacity must be typed or printed below their signature

WARRANTY DEED

Notary Public, State of Wisconsin

My commission is permanent. (If not, state expiration date):

April 15, 2007

Quick Print From Examiners Program

(This is for internal office use only)

Germantown - Village — (Washington) — GTNV

File #:

10/16/2018

2017 Real Estate Tax Roll Information

Tax Key No.

GTNV 293983

Tax Roll Address

APPLETON AVE

Tax Roll Name

DOCTORS LLC

Land Use: **Commercial**

Land \$93,000

Improvement \$0

Total \$93,000

Market Value \$95,300

Tax Roll Mailing Address

DOCTORS LLC

W206N10515 APPLETON AVE

GERMANTOWN, WI 53022

<i>TAX BEFORE LOTTERY CREDIT</i>	1,523.39
<i>ASSMT, DELQ & MISC CHARGES</i>	0.00
<i>LOTTERY CREDIT</i>	0.00

Total Due:	1,523.39
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Payments:	1,523.39	Paid as of 7/6/2018
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Outstanding Balance:	\$0.00
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Legal Description

PT OF SW SW DOC 1115971 SEC 29-9-20 2.85 AC

*This print-out is the property of Chicago Title Insurance Company and is strictly for internal use only.
This print-out includes information which has not been searched, examined or verified by CTIC.*

(State Bar of Wisconsin Form 3 - 2003)
QUIT CLAIM DEED

Document Number

Document Name

THIS DEED, made between
John C. Kreuser and Helen M. Kreuser, Trustees or successor (trustees of the
Kreuser Trust dated February 11, 1998

("Grantor," whether one or more), and
Doctors LLC, a Wisconsin limited liability company

("Grantee," whether one or more).
Grantor quit claims to Grantee the following described real estate, together with the
rents, profits, fixtures and other appurtenant interests, in Washington
County, State of Wisconsin ("Property") (if more space is needed, please attach
addendum): See Attached Exhibit A.

To Correct The Lot Line.

1354595

RECORDED
February 11, 2014 2:50 PM
SHARON A MARTIN, REGISTER OF DEEDS
WASHINGTON COUNTY, WISCONSIN

Fee Amount: \$30.00
Exemption: 77.25(3)

Recording Area

Name and Return Address
Doctors LLC
W206N10545 Appleton Ave
Germantown, WI 53022

Part of GTNV293-981

Parcel Identification Number (PIN)

This is not homestead property.

Dated

2-6-2014

Helen M. Kreuser

(SEAL)

* Helen M. Kreuser, Trustee

John G. Kreuser

(SEAL)

* John G. Kreuser, Trustee

(SEAL)

(SEAL)

AUTHENTICATION

Signature(s)

authenticated on

TITLE: MEMBER STATE BAR OF WISCONSIN

(if not,

authorized by Wis. Stat. § 706.06)

THIS INSTRUMENT DRAFTED BY:

Mary Thom scrivener / WS700492L

Part Abstract & Title LLC



ACKNOWLEDGMENT

STATE OF WI

Washington

personally came before me on

the above-named John G. Kreuser, Trustee, Helen M. Kreuser,
Trustee

to me known to be the person(s) who executed the foregoing
instrument and acknowledged the same.

Celeste Thoma

Notary Public, State of

Wisconsin

My commission (is permanent)(expires:

12-17-14)

(Signatures may be authenticated or acknowledged. Both are not necessary.)

NOTE: THIS IS A STANDARD FORM. ANY MODIFICATION TO THIS FORM SHOULD BE CLEARLY IDENTIFIED

QUIT CLAIM DEED

*Type name below signatures.

©2003 STATE BAR OF WISCONSIN

FORM NO. 3-2003

Knights Barry Title Group • www.knightbarry.com

EXHIBIT A

Part of Parcel "E" in Map of SW1/4 SW 1/4, 29-9-20, recorded in the Washington County Registry, in Map Book 3 on Page 48 as Document No. 124184, being part of the SW 1/4 of the SW 1/4 all in Section 29, Township 9 North, Range 20 East, Village of Germantown, Washington County, Wisconsin, which is bounded and described as follows:

Commencing at the Southwest corner of said Section 29; thence N 00°28'07" W, along the west line of said SW 1/4, 579.37 feet to the centerline/reference line of S.T.H. "175"; thence S 63°44'13" E, along said centerline/reference line, 100.00 feet; thence S 63°50'37" E, continuing along said centerline/reference line, 576.67 feet to the point of beginning of lands herein described; thence N 25°49'16" E, 289.90 feet, to the monumented northeasterly line of said Parcel "E"; thence S 63°33'26" E, along said monumented northeasterly line of Parcel "E", 2.82 feet, to a 1.3 inch od Iron pipe found; thence S 25°24'40" W, along the monumented northwesterly line of lands described in the Washington County Registry as Document No. 1115971 of Deeds, 289.90 feet, to a point in said centerline/reference line of S.T.H. "175"; thence N 63°50'37" W, along said centerline/reference line, 4.89 feet to the point of beginning.

Quick Print From Examiners Program

(This is for internal office use only)

Germantown - Village -- (Washington) -- GTNV

File #:

10/16/2018

2017 Real Estate Tax Roll Information

Tax Key No.

Tax Roll Address

Tax Roll Name

GTNV 293982

W201N10466 APPLETON AVE

DOCTORS LLC

Land Use: **Commercial**

Land \$112,500

Improvement \$103,800

Total \$216,300

Market Value \$221,700

Tax Roll Mailing Address

DOCTORS LLC

W206N10515 APPLETON AVE

GERMANTOWN, WI 53022

TAX BEFORE LOTTERY CREDIT	3,482.56
ASSMT, DELQ & MISC CHARGES	0.00
LOTTERY CREDIT	0.00

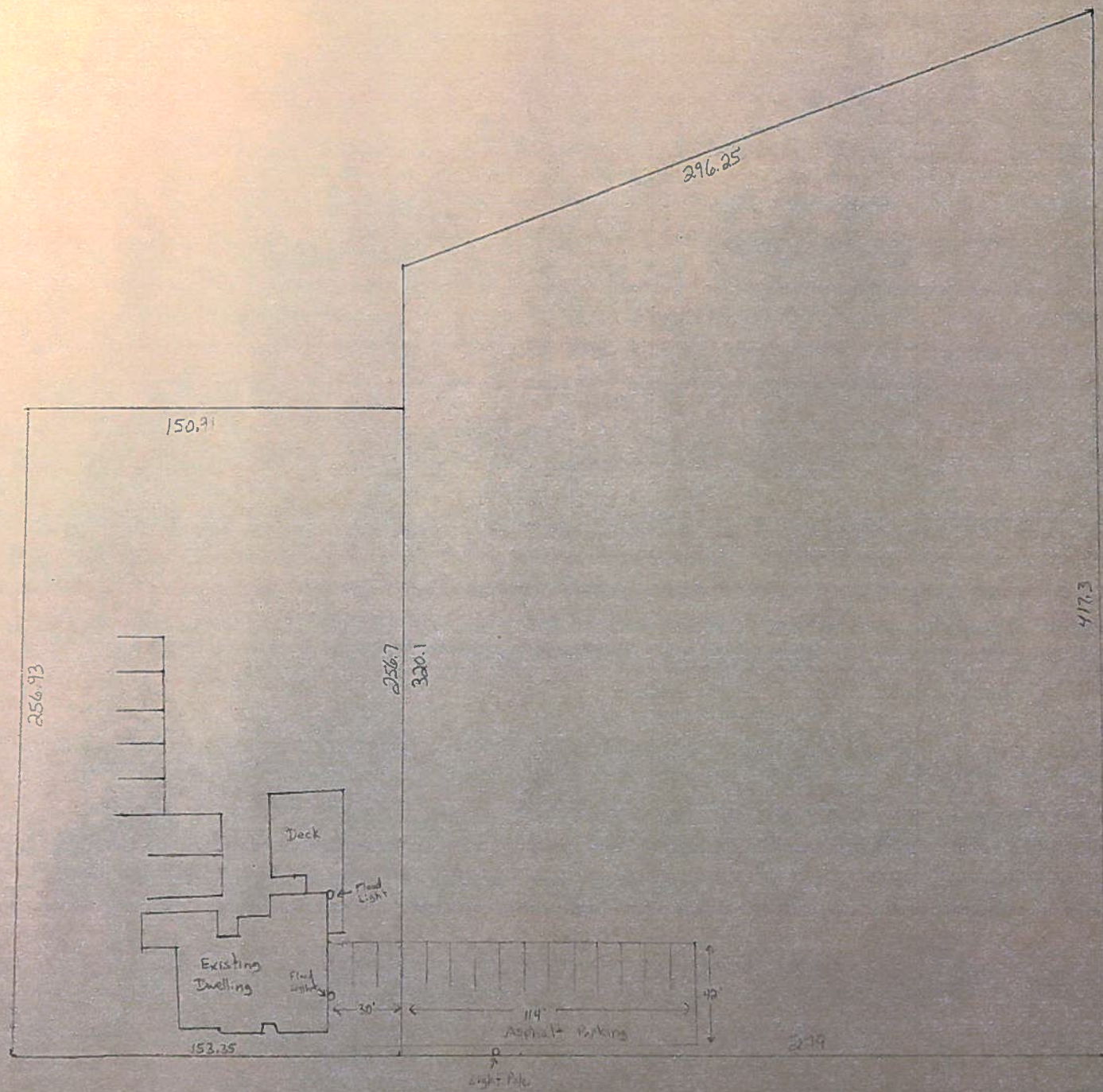
Total Due:	3,482.56
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Payments:	3,482.56	Paid as of 7/6/2018
-----------	----------	---------------------

Outstanding Balance:	\$0.00
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Legal Description

PRCL E - ASSRS PLAT SW SW DOC 1115971+1354595+1355136 SEC 29-9-20 1.00 AC





Aloha
Pictures



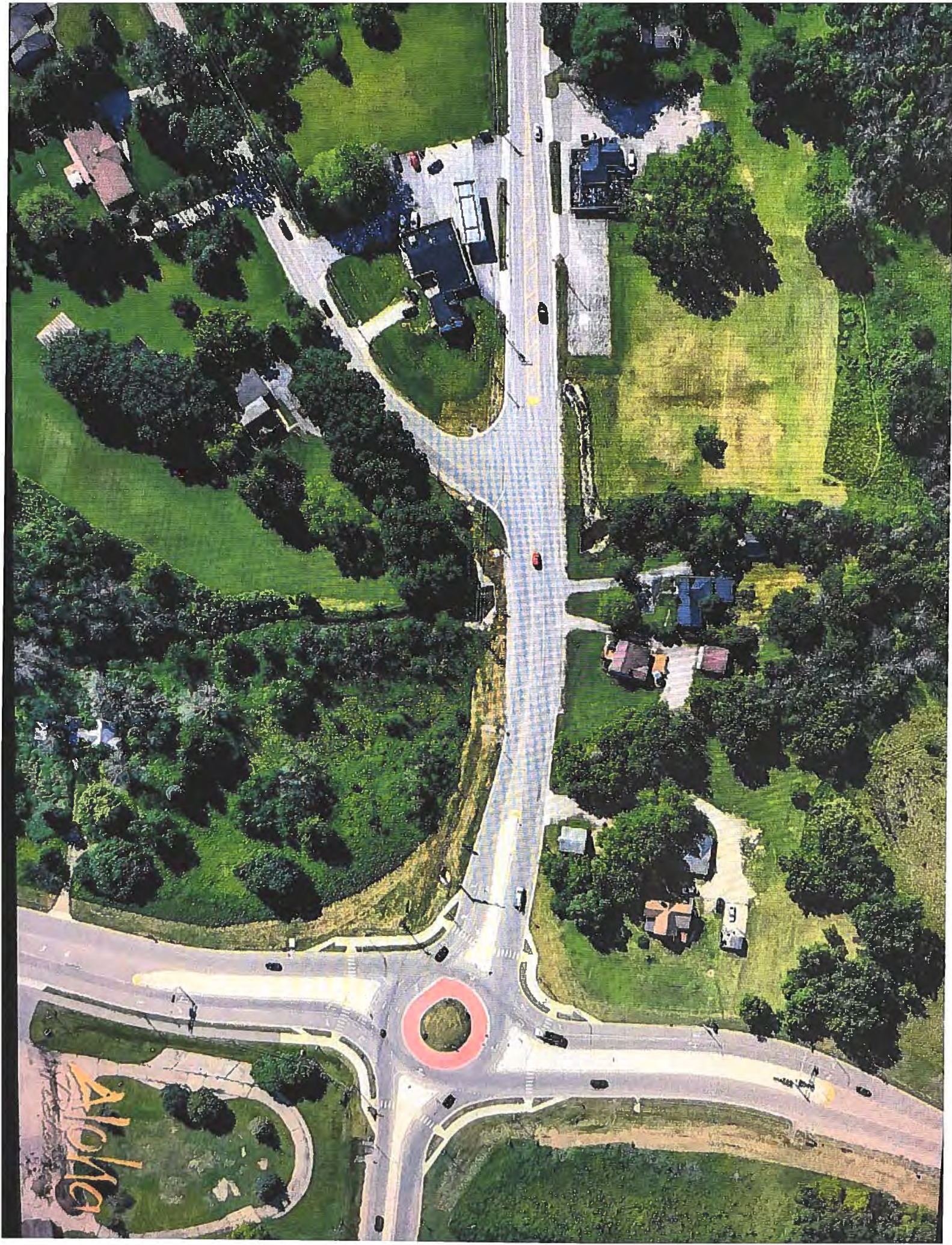




Aloha
Hawaii



Aloha
Pictures



PLANNED DEVELOPMENT DISTRICT (PDD) REZONING, CERTIFIED SURVEY MAP (CSM) & SITE PLAN APPLICATIONS

9/9/19 Plan Commission Meeting

Gehl Foods LLC / ANGL DAIRY LLC

Village Planner Report

Germantown, Wisconsin

Summary

Steve Schulz, agent for Gehl Foods LLC, and ANGL Dairy LLC, property owners, is seeking approval to create a "Gehl Foods Planned Development District" (PDD) and rezone three (3) properties into the PDD, a certified survey map (CSM) to combine three parcels and site development & building plans for a proposed 22,500 sqft building and 49-stall parking lot expansion to the food production facility located at N116 W15970 Main Street.

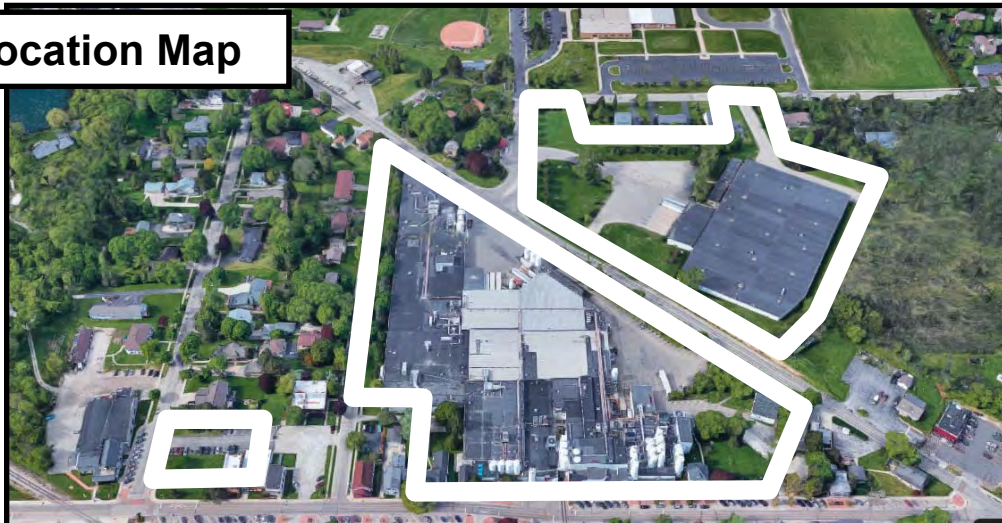
Property Location: N116 W15970 Main Street (Food Production Facility)
N116 W16150 Main Street (Office Building/Parking Lot)
W160 N11736 Crusader Court (Office/Warehouse Facility)

Property Owners: Gehl Foods LLC ANGL Dairy LLC
N116 W15970 Main Street 111 South Wacker Drive
Germantown, WI 53022 Chicago, IL 60606

Current Zoning: N116 W15970 Main Street: M-1: Limited Industrial
N116 W16150 Main Street: B-3: General Business
W160 N11736 Crusader Court: B-3: General Business w/ CUP

Adjacent Land Uses		Zoning
North	Business/Institutional	B-3/I
South	Business/Residential	B-3
East	Business/Residential	B-3
West	Business/Residential	B-3/Rs-6

Location Map



Background/Proposal

Steve Schulz, agent for Gehl Foods LLC, and ANGL Dairy LLC, property owners, is seeking approval to create a “Gehl Foods Planned Development District” (PDD) and rezone three (3) properties into the PDD, a certified survey map (CSM) to combine three parcels and site development & building plans for a proposed 22,500 sqft building and 49-stall parking lot expansion to the food production facility located at N116 W15970 Main Street and a 46-stall parking lot renovation for the proposed Gehl Foods headquarters building located at N116 W16150 Main Street.

As detailed in the narratives (dated June 4 and June 17), Gehl Foods states that market demand is driving the need to expand the Main Street production facility. The building addition will enable Gehl Foods to install two new “low acid aseptic” cartoning lines to increase capacity and allow redundancy with their California-based production facility. The addition will allow additional growth in the form of two more cartoning lines and technological and equipment upgrades.

The overall proposal requires the three applications submitted (PDD Rezoning, CSM & Site Plan) and includes the following actions:

1. Combine the last two (2) existing residential lots (B-3: General Business District) located in the northeast corner of the Church Street @ Main Street intersection with the adjacent production facility property to the east and north (M-1: Limited Industrial District); [see **Certified Survey Map (CSM)** detail below]
2. Create a new “Gehl Foods” Planned Development District (PDD) to include the three (3) Gehl Foods properties: [see **PDD/Rezoning** detail below]
 - a. N116 W15970 Main Street (Food Production Facility)
 - b. N116 W16150 Main Street (Office Building/Parking Lot)
 - c. W160 N11736 Crusader Court (Office/Warehouse Facility)
3. Raze the remaining four (4) residential/commercial structures located in the northeast corner of the Church @ Main Street intersection;
4. Construct a 22,500 sqft addition to the food production facility (expansion into the area where the 4 residential/commercial structures were removed); [see **Site Plan** detail below]
5. Improve/expand a 49-stall paved parking lot on the east side of the food production facility property (replaces an existing gravel drive and previously removed barn); [see **Site Plan** detail below]
6. Improve/expand a 46-stall parking lot on the Gehl Foods office building property; [see **Site Plan** detail below]

NOTE: This proposal or components thereof have been the topic of previous Plan Commission “consultation reviews” conducted back on June 25, 2018 and again last month, July 8, 2019. As stated in the meeting minutes for both consultations (see attached), the Plan Commission is/was concerned with razing the existing homes, in part due to previous commitments by Gehl Foods to not raze the homes, as well as, visual appearance of the expanded building and storage tanks without visual buffering and/or landscaping.

Certified Survey Map (CSM) Application

The purpose for the CSM is to combine three parcels owned by ANGL Dairy LLC and/or Gehl Foods LLC into one parcel. Two residential parcels located in the northeast corner of the Church @ Main Street intersection are proposed to be combined with the larger Gehl Foods parcel upon which the main production facility is located. Once combined, the existing residential/commercial structures on these two parcels will be razed to create the space needed for the proposed 22,500 sqft building addition. The other two residential structures to be razed are already owned by Gehl Foods and attached to the larger parcel as a result the CSM and rezoning applications that were approved by the Village in May 2017. At that time, Gehl Foods obtained approval to combine and rezone two other small parcels on the north side of Main street to accommodate a previously proposed plan to install up to ten (10) stainless steel storage silos (14' dia. by 42' tall) also in the southwest corner of the existing facility.

Planned Development District (PDD) Rezoning Application

Gehl Foods proposes to create a unique Planned Development District (PDD) for their three (3) properties in the Main Street area:

1. N116 W15970 Main Street (Food Production Facility)
2. N116 W16150 Main Street (Office Building/Parking Lot)
3. W160 N11736 Crusader Court (Office/Warehouse Facility)

The reason for wanting to create a new zoning district specifically for Gehl Foods is that the current production facility, including the building, parking, loading and other impervious areas on the 9.51 acre parcel already exceeds the maximum amount of impervious area allowed (80 percent of the total parcel area) in the current M-1: Limited Industrial Zoning District. Even with the combination of the two small residential parcels with the CSM, the amount of impervious area exceeds the maximum amount allowed. The PDD regulations provide the opportunity to do so.

The Planned Development District (PDD) zoning designation creates the ability to relax the basic restrictions in the underlying or base zoning districts (e.g. setbacks, lot coverage, building height) and other applicable zoning code provisions (e.g. parking stall size). As presented in the supporting documentation, the proposed PDD is intended to be applied as an overlay zoning district to all three properties to make necessary revisions to the underlying or base zoning district regulations that apply to each in order to make the building and site improvements proposed.

As indicated in the supporting documents, Gehl Foods is proposing to create a PDD with the following revisions to the underlying zoning districts that apply to the three properties:

Main Production Facility (N116 W15970 Main Street; M-1: Limited Industrial District)

- Increase the maximum impervious area coverage from 80 to 85 percent, provided total impervious area for all parcels does not exceed a maximum of 80 percent;

-
- Reduce minimum front/street yard building setback from 30 to 24 feet;
 - Increase maximum building height from 45 to 50 feet (or higher if required by Plan Commission for proposed clock tower; currently not proposed)

Office Building/Parking Lot (N116 W16150 Main Street; B-3: General Business District)

- Reduce minimum parking stall size from 180 to 162 sqft;
- Reduce minimum parking lot setback from a residential district from 50 to 2 feet;
- Decrease maximum impervious area coverage from 90 to 80 percent, provided the total impervious area for all parcels does not exceed a maximum of 80 percent;

Office/Warehouse Facility (W160 N11736 Crusader Ct; B-3: General Business District)

- Decrease maximum impervious area coverage from 90 to 80 percent, provided the total impervious area for both parcels does not exceed a maximum of 80 percent;

In effect, the most significant aspect of the proposed PDD is to establish both a parcel-specific and an overall or cumulative maximum impervious area requirement of 80 percent for all of the three Gehl Foods parcels. Put another way, the proposed PDD would allow more impervious area than allowed under the zoning on the Main Production Facility property in exchange for keeping the amount of impervious area lower than allowed on one or both of the other parcels.

As part of the proposed PDD, Gehl Foods has identified the following contributions and/or amenities directly and indirectly related to the overall improvements and facility expansion:

1. Dedication/donation of the corner parcel located at the Main Street @ Fond du Lac Avenue intersection to the Village for possible realignment of the Main Street intersection and/or use as a community green space (consistent with the recommendations in the Village's "Main Street-Saxony Village Connectivity" Plan);
2. Enhanced pedestrian-friendly sidewalk improvements along Main Street @ Church Street
3. Operational changes to reduce the noise associated with the current process for receiving nitrogen including potential \$600,000 in nitrogen generation improvements
4. Increases in Village property taxes, water consumption/sanitary flow & associated revenue
5. Increased employment opportunities (30-35 new positions expected)
6. Improved sight vision @ Church Street @ Main Street intersection
7. Possible public/shared use of the parking lot on the office building property (discussed on July 8 by Gehl Foods as a possible amenity, but not specifically stated in the supporting documents)
8. Continued involvement and collaboration with the Village and Main Street "stakeholders" regarding future enhancement and improvements to the Main Street area

Site Plan Application (Site Development & Building Plans)

Detailed site development & building plans (where necessary) have been prepared for proposed improvements on two of the three Gehl Foods parcels:

Main Production Facility (N116 W15970 Main Street)

Once the two residential parcels have been combined with the main property and the 4 residential buildings razed, Gehl Foods proposes to expand their production facility and expand/improve a parking lot on the east side of the site with the following characteristics:

Site Improvements

- Construct a 49-stall paved parking lot w/ standard 180 sqft stalls, curb & gutter; access to Main Street and internally to north side of property will not change;
- Construct a bioretention storm water management basin w/ a new storm sewer installed in the Main Street right-of-way connecting to an existing storm sewer inlet
- Remove/relocate an existing 5' wide sidewalk along the north side of Main Street w/ stamped concrete and street tree landscaping to match existing along Main Street
- Streetscape tree & building foundation landscaping along Main & Church Street, including installation of a community meeting place w/ stamped pavement, benches and landscaping

Building Improvements

- 22,500 sqft building addition to the production facility; including:
 - o five (5) storage silo alcove (12' dia x 44'6" height)
 - o pre-cast concrete walls w/ "old world Germanic" exposed timber appearance complimentary to existing Main Street structures
 - o plexiglass faux window features
 - o 14' dia. clock tower feature w/ stone & steeple-type roof

Office Building/Parking Lot (N116 W16150 Main Street; a.k.a. "*Insurance Building*")

Separate from the main production facility, Gehl Foods owns the old insurance building on the north side of Main Street west between Church Street and Park Avenue. Gehl Foods intends to restore the building for future office uses and expand & restore the existing paved parking lot with the following characteristics:

Site Improvements (preliminary)

- Construct a 46-stall paved parking lot w/ reduced size stalls (162 sqft), curb & gutter with direct access to Park Avenue only (replacement of curbing on the east side of the parking lot at the property line will prohibit cross-access to/from the parking lot serving the new "Precinct" and Barley Pop restaurants.
- Construct a bioretention storm water management basin w/ new storm sewer (if needed) connecting to an existing storm sewer inlet in the Main Street right-of-way;

-
- Construct new dumpster enclosure located within the parking lot

It should be noted that the Office Building parking lot improvements are preliminary at this point in time and NOT a part of the current Site Plan application. These preliminary plans are provided in support of the PDD application and to show what the requested parking lot setback reduction adjacent to the residential area might possibly look like (if approved as part of the PDD). It is understood that a separate Site Plan application will have to be submitted to the Village for review and approval when these improvements (or whatever may be allowed under the PDD restrictions that is approved) are ready to move forward.

Staff Comment*Community Development Department*

The desire/need to expand the Gehl Foods facility and make the proposed building and site improvements has been discussed with the Plan Commission in the past, including the July 8, 2019 PC meeting, in June 2018, and in May 2017, when Gehl Foods obtained approval to combine and rezone two small parcels on the north side of Main street to accommodate a previously proposed plan to install up to ten (10) stainless steel storage silos (14' dia. by 42' tall) also in the southwest corner of the existing facility (now shown as only five silos incorporated into the current 22,500 sqft addition (see attached elevation drawings and renderings).

In both previous discussions with the Plan Commission, the following issues were raised by staff and/or the Plan Commission that have not yet been adequately addressed nor resolved such that the current 22,500 sqft expansion can move forward:

1. The Village's desire to preserve the architectural appearance (if nothing else) of the remaining residential structures along Main Street;
2. The incremental "erosion of the residential and historic character" of Main Street resulting from previous Gehl Foods' property acquisitions and building & parking lot expansions;
3. The Village's current plan for Main Street to develop into a pedestrian-friendly retail and entertainment area (as discussed and planned for in the Village's 2020 Comprehensive plan);
4. The fact that existing development, including buildings, parking and accessory structures on the Gehl Foods properties already exceed the maximum amount of impervious area allowed under the general M-1: Limited Industrial Zoning District within which the facility is located;
5. Two remaining land parcels (and the two existing dwellings thereon) owned by Gehl Foods and located at the Church Street intersection where the plant expansion is proposed are separate from the existing facility property and currently zoned B-3: General Business and NOT in the M-1 District required for the plant expansion to move forward;

Since the July 8 PC and July 15 Village Board public hearings/meetings, Gehl Foods has been involved in an important effort to inform and educate the Main Street residents, businesses and other interested stakeholders by reaching out to and involving the Main Street community by inviting residents into their Main Street facility for a tour, discussing how far the company and products reach beyond Germantown, how important Gehl Foods has been to the community at large through their financial, charitable and volunteer contributions, functions, as well as, inviting the community to provide positive feedback on the design of the proposed building expansion and other site development amenities reflected in the latest set of plans.

At this point in time, Staff is recommending that the proposed CSM and PDD/Rezoning applications be approved subject to final review and approval by staff. If the Plan Commission agrees, a recommendation on the CSM and PDD/Rezoning applications should be prepared and forwarded to the Village Board for consideration and action (tentatively set for the September 16 meeting).

With regard to the detailed site development & building plans, Staff identified a number of outstanding issues and technical items that need to be address concerning the original set of Site Plans in the following review letters/memos:

- July 26, 2019 memo from Village Surveyor, Bob Beilfuss
- July 25, 2019 memo from Public Works Director, Larry Ratayczak
- August 9, 2019 memo from Public Works Director, Larry Ratayczak
- August 8, 2019 memo from Community Development Director, Jeff Retzlaff

Gehl Foods has submitted revised plans in response to the outstanding items and issues identified by staff, however staff has not had an opportunity to critically review and offer a recommendation on to the Plan Commission at this time. As a result, Staff is recommending that action on the detailed site development & building plans be TABLED until Staff has reviewed those plans and can offer a recommendation to the Plan Commission (tentatively set for a special PC meeting on September 23).

Fire Department

The Fire Department continues to raise the issue that there is a lack of adequate accessibility to and around the main production facility; specially in the areas along the north and east sides of the property. The Fire Department is requesting that an approved fire lane meeting applicable NFPA requirements be provided from Main Street through the site to the Crusader Court @ Fond du Lac Avenue intersection.

VILLAGE PLANNER RECOMMENDATION:**Certified Survey Map (CSM)**

APPROVE the proposed Gehl Foods Certified Survey Map (CSM) to combine the two (2) existing residential lots located in the northeast corner of the Church Street @ Main Street intersection with the adjacent production facility property subject to the following conditions:

1. All of the outstanding items and issues identified in the July 26, 2019 memo from the Village Surveyor shall be addressed in a revised CSM submitted to the Village prior to recording the CSM.

VILLAGE PLANNER RECOMMENDATION:***Rezoning/PDD Application***

APPROVE the proposal to create a new “Gehl Foods” Planned Development District (PDD) to include the three (3) Gehl Foods properties as listed herein and rezone these properties and the two additional residential lots to be combined by CSM with the following conditions:

1. The underlying zoning districts currently assigned to each of the three parcels (M-1 and B-3) shall not change. The specific changes to be made to the underlying district regulations/restrictions for each parcel shall be limited to those described herein.
2. A detailed list of the underlying zoning district changes shall be drafted and submitted prior to review and approval by the Village Board.



Village of
Germantown
Willkommen

FEES MUST BE PAID AT TIME OF APPLICATION

- ☐ \$200 Plan Commission Consultation
- ☐ \$1,085 Rezoning
- ☐ \$1,240 PDD < 5 acres
- ☒ \$2,095 PDD 5-20 acre site
- ☐ \$3,480 PDD > 20 acre site

Date Paid: 8 Received by: 6-17-19

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

Steve Schulz, PMP

c/o Gehl Foods, LLC

N116W15970 Main Street

Germantown, WI 53022

Phone (262) 735-7139

Fax ()

E-Mail sschulz@gehlfoods.com

PROPERTY OWNER

Gordon J. Whiting

Angelo Gordon

111 South Wacker Drive

Chicago, IL 60606

Phone (312) 763-5100

2 PROPERTY ADDRESS OR GENERAL LOCATION

N116W15970 Main Street, Germantown, WI 53022

TAX KEY NUMBER

221964001

3 REZONING REQUEST

FROM

B3 & M1

TO

PDD

4 METES AND BOUNDS LEGAL DESCRIPTION OF PROPERTY - REQUIRED

Attach pages as necessary

See attached

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.

To combine separate lots into a PDD for purposes of adding a building addition and parking and also bringing us back into compliance with green space requirements.

6 SUPPORTING DOCUMENTATION:

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

7 READ AND INITIAL THE FOLLOWING:

SLS 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.

SB 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 be sufficient cause to deny the petition.

SLS 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!

SLS 6-14-19
Applicant Date

T. O'S 6/14/19
Owner Date



- 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 6-17-19

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

Steve Schulz, PMP
c/o Gehl Foods, LLC
N116W15970 Main Street
Germantown, WI 53022

Phone (262) 735-7139
E-Mail sschulz@gehlfoods.com

PROPERTY OWNER

Gordon J. Whiting
Angelo Gordon
111 South Wacker Drive
Chicago, IL 60606

Phone (312) 763-5100
E-Mail

2 PROPERTY ADDRESS

N116W15970 Main Street, Germantown, WI 53022

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

North	South	East	West

4 READ AND INITIAL THE FOLLOWING:

- SUS I am aware of the Village of Germantown ordinance requiring fire sprinklers in most new construction.
- SUS I understand that all new development is subject to Impact and/or Connection Fees that must be paid before building permits will be issued.
- SUS 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!

SUS 6-13-19
Applicant Date

T-C 6/14/19
Owner Date



Village of
Germantown
Willkommen

Fee must accompany application

- ☐ \$2,900 with public improvements
☒ \$1,960 no public improvements

Paid Date 6-17-19

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
Steve Schulz, PMP

c/o Gehl Foods, LLC

N116W15970 Main Street

Germantown, WI 53022

Phone (262) 735-7139

Fax ()

E-Mail ssschulz@gehlfoods.com

PROPERTY OWNER

Gordon J. Whiting

Angelo Gordon

111 South Wacker Drive

Chicago, IL 60606

Phone (312) 763-5100

PROPERTY ADDRESS OR GENERAL LOCATION

TAX KEY NUMBER

2 N116W15970 Main Street, Germantown, WI

3 PURPOSE OF LAND SPLIT

To incorporate OL 19 & 20 on the northeast corner of Main Street and Church Street into the abutting Lot 1

Will the land split require rezoning?
Yes

From 83 & M1

To PDD

4 READ AND INITIAL THE FOLLOWING:

SUS 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.

SUS 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.

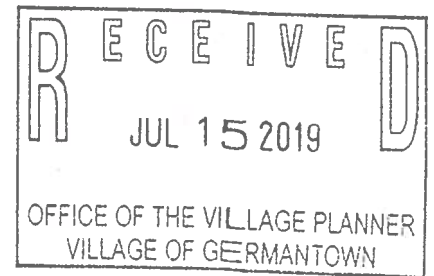
SUS I understand that parcels created outside the Sewer Service Area will require a soil test. I also understand that all properties abutting a State Highway will require DOT approval and I will be responsible for securing such approval prior to recording.

SUS 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!

SUS Applicant Date 6-14-19

J. Whiting Owner Date 6/14/19



June 4, 2019

Mr. Retzlaff

Gehl Foods, LLC is requesting a Plan Commission Consultation to discuss a proposed addition at our facility located at N116W15970 Main Street. Our goal is to submit a PDD application and the building addition application for approval at the August 12th Planning Commission meeting.

This requested consultation will be for design review of the building addition only.

Project Description:

Gehl's has a need to add production space to keep up to date on current marketing requirements. The proposed addition will give us the potential of adding five new production lines (while only removing one outdated line). The new increase in production will also increase employment by approx. 30 people for the four new lines. The fifth new line and the line being removed will balance out on employment.

The addition will be approx. 22,500 square feet which will square off our existing building to the southwest (the corner of Main & Church Streets). There will be four houses razed to make room for this addition. All four houses are currently owned by Gehl's or Angelo Gordon. Angelo Gordon will take possession of all the properties in the coming weeks.

July 19, 2019

Mr. Retzlaff

On Monday, July 15th, I submitted the missing engineering drawings from CJ engineering for the PDD application submitted on June 17th, 2019. One addition that we made was to relocate the sidewalk to the north and install the paver brick stamped concrete that was done in other areas on Main Street. Moving the sidewalk will allow people to walk side-by-side and not have to negotiate the utility poles and streetlamps. We also added the standard street trees to the paver brick area. Another benefit to the new addition will be better seating areas for the various Germantown parades. Lastly, this will drastically improve the vision triangle on Church Street and Main Street. Many drivers assume there is no one coming from the east on Main as they start turning west off of Church onto Main. I know I have been cut-off there many times over the years.

Today, July 19th, I delivered the revised design for the Gehl addition. The initial design was poorly received by the Plan Commission with a recommendation to come back with something



fabulous. The design I delivered today is my interpretation of fabulous. I realize this is way past the deadline for the August meeting, but it was my understanding from the June consult with the Plan Commission that the PDD would not be approved until a design was approved. Due to the PDD being on the agenda for August, I thought I had better show some design improvements on the addition. It is my hope that this new design can replace the old rejected design that was submitted for site plan approval on June 17.

If there are any questions or more information required, please feel free to contact me.

Thanks,

Steve Schulz, PMP | Sr. Project Leader

Office: 262.735.7139 | email: sschulz@gehlfoods.com

Gehl Foods, LLC | N116 W15970 Main Street, Germantown, WI 53022



www.gehlfoods.com

CJ Engineering, LLC
9205 W. Center Street, Suite 214
Milwaukee, WI 53222
Phone (414) 443-1312
randy@cj-engineering.com

Revision Memorandum

To: Jeffrey Retzlaff, Planning Director
CC: Lawrence Ratayczak, PE, Director of Public Work
From: Randall S. Bruckner, P.E. – CJ Engineering
Date: 8/29/2019
Re: Revisions to Gehl Food Addition. The following revisions are based on comments dated 07-15-2019 to the submitted plans:

General Comments:

- #1: Please accept this memo as the written response.
- #2: This comment is understood with respect to possible additional comments.
- #3: NOI will be applied for and submitted to the Village once obtained.
- #4: DSPS will be applied for and submitted to the Village once obtained.
- #5: Post construction asbuilt plans will be provided to the Village.
- #6: Final, approved set of plans will be stamped by PE.
- #7: Utility Permit will be obtained prior to construction.
- #8: Utility abandonment note added to sheet C2.0.
- #9: Guide to review comments understood.

C1.0 Site Plan:

- #1: Existing entrance to east parking lot has been dimensioned. There currently exists 'do not enter' signs that this is an exit only.
- #2: 2-handicap parking stalls have been shown and dimensioned on the site plan. Grading plan as indicated how this area is to be graded.
- #3 & #4: Additional notes have been added to the plans to indicate what surfaces currently exist and what is proposed.

- #5: Drive approach note added to C1.0 and detail added to sheet C2.2.
- #6: Per site visit on 08-28-2019, warning signs for rail spurs have been placed along Main Street, east and west.

C2.0 Grading, Utility and Erosion Control:

- #1: FFE has been added to the plant addition.
- #2: FFE has been added to the existing residence next to the bio-basin.
- #3: Public and private notes have been added to the plans.
- #4: Slurry backfill for ROWs has been added to the plans.
- #5: Existing and proposed spot elevations along Main St. plant addition have been added to the plans.
- #6: Existing spot elevations have been added along Church Street.
- #7: Construction sequences have for the plant addition and the parking lot have been added to the plans. For the bio-basin, it is proposed that the basin be constructed complete with outlet standpipe and outlet storm sewer, but without the gravel, engineered soil and drintile and be used as a sediment basin during construction. After the parking lot is stabilized, the contractor can complete the remaining items of the basin.
- #8: See comment #7 above. Erosion matting specs. have been added to the plans.
- #9: Erosion matting specs. have been added to the plans.
- #10: Portion of chainlink fence that is in conflict with the spillway is shown to be removed.
- #11: Construction Entrance shown on plan.
- #12: Storm sewer connection proposed and shown on plan.

C2.13 Construction Details:

- #1: Details added to either C2.1 or to C2.2.
- #2: Perforated PVC pipe is proposed to wrapped in a filter sock to prevent clogging.

Sand interface layer added to the detail.

Revised top layer of bio-basin to match WDNR technical standard for Bio-basins.

Storm Water Management Report:

- #1: Borings have been requested to be performed within the bio-basin area for soil analysis. Once these have been obtained, we will evaluate the findings and revise the design as necessary and include them in the final report that will be used for approval.
- #2: Green Infrastructure requirement revised per this comment. Additional pavement added for Emergency Access from STH 145 has been included in the revised report.
- #3: WinSLAMM model revised to include all areas draining to bio-basin.
- #4: Adjusted the side infiltration rate fraction to 0.01.
- #5: Revised infiltration rate of engineered soil to 3.6"/hr.
- #6: Winter season dates revised.
- #7: Wet pond maintenance was included in error and removed from the report.

Fire Department:

- #1: Per conversation with Fire Chief John Delain, a 24' wide fire access has been added from the proposed parking addition to the existing concrete drive at the northeast corner to provide emergency access from STH 145.

Certified Survey Map:

- #1: 3"x3" square provided on sheet 1.
- #2: Additional notary signature blocks added
- #3: Village's Clerk name has been updated
- #4: Section number in the Village Board Cert. corrected.

If you should have any additional questions or comments, please feel free to contact me directly.

Sincerely,

Randy Bruckner, P.E.

Community Development Department responses:

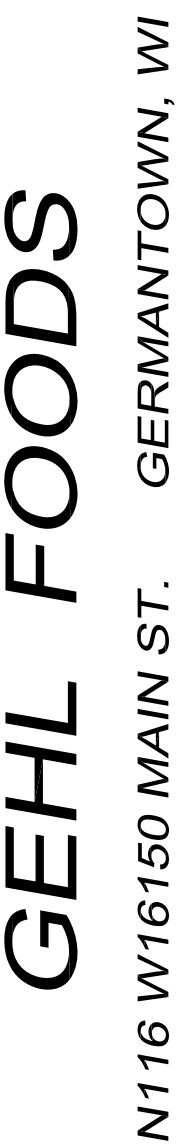
- #1: Village Clerk name on CSM corrected.
- #2: Note added to sheet 1 of the CSM.
- #3: This parcel is currently a separate distinct parcel from the Main Street Plant site and doesn't require a CSM for division. Parcel can be transferred to the Village via simple deed.
- #4: No action necessary. The Crusader Ct. property will remain B-3 w/ CUP.
- #5: Landscaping Plans will be finalized and included with the final design submissions following PDD approval.
- #6: The office building parcel site plan is included just for the overall PDD rezoning of the Gehl Foods development. There are no immediate plans for this site development. When Gehl Foods is ready to proceed with this parcel development a site plan submittal with all the required and requested details will be provided to the Village.
- #7: The office building parcel site plan is included just for the overall PDD rezoning of the Gehl Foods development. There are no immediate plans for this site development. When Gehl Foods is ready to proceed with this parcel development a site plan submittal with all the required and requested details will be provided to the Village.
- #8: Snow storage for the East parking lot will be in all the available open spaces.

The office building parcel site plan is included just for the overall PDD rezoning of the Gehl Foods development. There are no immediate plans for this site development. When Gehl Foods is ready to proceed with this parcel development a site plan submittal with all the required and requested details will be provided to the Village.
- #9: The office building parcel site plan is included just for the overall PDD rezoning of the Gehl Foods development. There are no immediate plans for this site development. When Gehl Foods is ready to proceed with this parcel development a site plan submittal with all the required and requested details will be provided to the Village.
- #10: Landscaping Plans will be finalized and included with the final design submissions following PDD approval.
- #11: Materials Board will be provided with the final design submissions.
- #12: Additional site area breakdowns have been added to the Site Plan C1.0.
- #13: Roof plan sheet will be provided with the final design submissions.

- #14: See updated renderings of proposed building addition and landscaping features. Updates were made following community involvement sessions including community members, local business owners and Village representatives.
- #15: No, this was not completed.
- #16: The office building parcel site plan is included just for the overall PDD rezoning of the Gehl Foods development. There are no immediate plans for this site development. When Gehl Foods is ready to proceed with this parcel development a site plan submittal with all the required and requested details will be provided to the Village.
- #17: Per conversation with Fire Chief John Delain, a 24' wide fire access has been added from the proposed parking addition to the existing concrete drive at the northeast corner to provide emergency access from STH 145.#4: Slurry backfill for ROWs has been added to the plans.
- #18 &19: Comments from the Public Works/Village Engineer/Village Surveyor have been reviewed and plans updated under separate cover.







C1.0

SHEET 1 OF 4





GEHL FOODS

N716 W16150 MAIN ST. GERMANTOWN, WI

CONCRETE BUILDING

LOT 1
CSM 6802

STH "145" (FOND DU LAC AVE.)
66' RIGHT-OF-WAY

CHURCH STREET
50' RIGHT-OF-WAY

PROPOSED
BUILDING ADDITION
F.F.E. 865.63

MAIN STREET
49.5' RIGHT-OF-WAY

**PLANT EXPANSION
CONSTRUCTION SCHEDULE**

1. OBTAIN PLAN APPROVAL AND OTHER APPLICABLE PERMITS.
2. FLAG THE WORK LIMIT AND BUFFER AREA FOR PROTECTION.
3. INSTALL INLET GRATE SCREENS IN EXISTING STORM INLETS.
4. DEMO EXISTING BUILDINGS.
5. INSTALL SILT FENCE.
6. ROUGH GRADE PLANT EXPANSION AREA.
7. BEGIN BUILDING CONSTRUCTION.
8. INSTALL BUILDING STORM SEWER. REMOVE AND REPLACE EXISTING CURB IN KIND.
9. PROVIDE IMMEDIATE TEMPORARY STABILIZATION OF ANY DISTURBED AREAS WHICH WILL REMAIN INACTIVE FOR A PERIOD EXCEEDING 7 DAYS.
10. FINAL GRADE SLOPES AND TOPSOIL CRITICAL SLOPES; VEGETATE AND MAT ALL DISTURBED AREAS FOR FINAL STABILIZATION.
11. ALL EROSION CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER RAINFALL, NEEDED REPAIRS WILL BE PERFORMED IMMEDIATELY.
12. AFTER SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND VEGETATE THE DISTURBED AREAS.
13. ESTIMATED TIME BEFORE FINAL STABILIZATION - 6 MONTHS.

**CONTRACTOR TO LOCATE AND VERIFY EXISTING STORM INLET AND MAKE CONNECTION WITH NEW 10" STORM. CONTACT ENGINEER WITH ANY DISCREPANCY.

EROSION MATTING

AFTER FINISH GRADING AND TOPSOILING AND FOR FINAL STABILIZATION, PROVIDE CLASS I, TYPE B EROSION MAT PER "WISDOT EROSION CONTROL PAL" (OR EQUAL) IN ALL ROADSIDE DITCHES, DEFINED SWALES, SIDE SLOPES, BERMS AND ALL OTHER SLOPES 4:1 OR GREATER. INSTALL PER MANUFACTURERS SPECIFICATIONS.

NOTES:

1. ALL EXISTING CONDITIONS ARE PER THE SURVEY BY ON TARGET SURVEYING.
2. AREAS:
WEST AREA:
DISTURBED AREA = 35,386 S.F. (0.81 ACRES)
NET INCREASE IN IMPERVIOUS AREA = 8,910 S.F. (0.20 ACRES)
EAST AREA:
DISTURBED AREA = 28,415 S.F. (0.65 ACRES)
NET INCREASE IN IMPERVIOUS AREA = 2,687 S.F. (0.06 ACRES)
3. SILT FENCE AND INLET GRATE SCREENS TO BE INSTALLED PRIOR TO ANY LAND DISTURBANCE.
4. ALL RAZED HOMES TO HAVE THE EXISTING WATER AND SANITARY LATERALS ABANDONED PER VILLAGE SPECIFICATIONS WHICH INCLUDE:
WATER LATERAL - ABANDONMENTS - 3/4" TO 2" WATER LATERALS, REMOVE CORP, SADDLE AND ALL ASSOCIATED FITTINGS AT THE MAIN. IT MAY BE REQUIRED TO REMOVE AND REPLACE ANY DAMAGED PORTION OF THE MAIN WHERE THE TAP WAS MADE. INSTALL A SMITH BLAIR 261 STAINLESS STEEL REPAIR CLAMP OR ROMAC SSI, MINIMUM 12" IN WIDTH. REMOVE EXISTING CURB STOP 3' BELOW FINISHED GRADE AND FILL WITH GRAVEL.
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". INSTALL 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.

**PARKING LOT
CONSTRUCTION SCHEDULE**

1. OBTAIN PLAN APPROVAL AND OTHER APPLICABLE PERMITS.
2. FLAG THE WORK LIMIT AND BUFFER AREA FOR PROTECTION.
3. SAW CUT ENTRANCE AS SHOWN AND REMOVE ASPHALT. INSTALL CONSTRUCTION EXIT.
4. INSTALL SILT FENCE.
5. STRIP TOPSOIL FROM BIORETENTION AREA THAT IS TO BE USED AS A TEMPORARY SEDIMENTATION BASIN AND STOCKPILE AT LOCATION SHOWN.
7. INSTALL TEMPORARY SEDIMENT BASIN (FUTURE BIORETENTION BASIN AREA):
A. THE AREA OF THE PERMANENT BIO-RETENTION BASIN WILL BE USED AS TEMPORARY SEDIMENTATION BASIN DURING CONSTRUCTION. DO NOT INSTALL DRAINILES, AGGREGATE OR ENGINEERED SOIL AT THIS STAGE.
B. ROUGH GRADE AND EXCAVATE BASIN TO BOTTOM ELEVATION 869.0.
C. PROVIDE TEMPORARY STABILIZATION FOR ALL SIDE SLOPES.
D. INSTALL COMPLETE STANDPIPE AND COMPLETE PRIVATE AND PUBLIC STORM SEWER FROM BASIN TO EXISTING INLET IN MAIN STREET.
E. INCLUDE RIP RAP ON FABRIC AT OUTFALL AFTER REMOVING SECTION OF FENCE.
8. ROUGH GRADE REMAINING SITE FOR PARKING LOT.

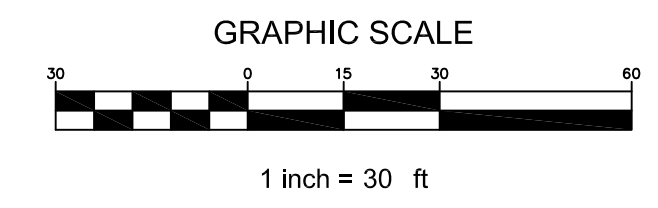
9. INSTALL GRAVEL BASE OF ROADWAY.
10. INSTALL FIRST LIFT OF ASPHALT.
11. REMOVE TEMPORARY SEDIMENT BASIN AND INSTALL PERMANENT BIORETENTION BASIN. DEWATER BASIN INTO DEWATERING BAG. INSTALL AGGREGATE, 6" DRAIN TILES AND OUTLET PIPES, ENGINEERED SOIL, AND PLANTINGS.
12. FINAL GRADE ALL REMAINING SLOPES AND TOPSOIL CRITICAL SLOPES; VEGETATE AND MAT ALL DISTURBED AREAS.
13. ALL EROSION CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER RAINFALL, NEEDED REPAIRS WILL BE PERFORMED IMMEDIATELY.
14. PROVIDE TEMPORARY SEEDING FOR ANY TEMPORARILY DISTURBED AREA LEFT UNDISTURBED FOR 7 DAYS OR MORE.
15. ESTIMATED TIME BEFORE FINAL STABILIZATION - 6 MONTHS.

LEGEND

- 864 --- EXISTING CONTOUR
- 863 --- PROPOSED CONTOUR
- x 862.5 PROPOSED ELEVATION
- ST --- PROPOSED STORM SEWER
- S --- PROPOSED SILT FENCE

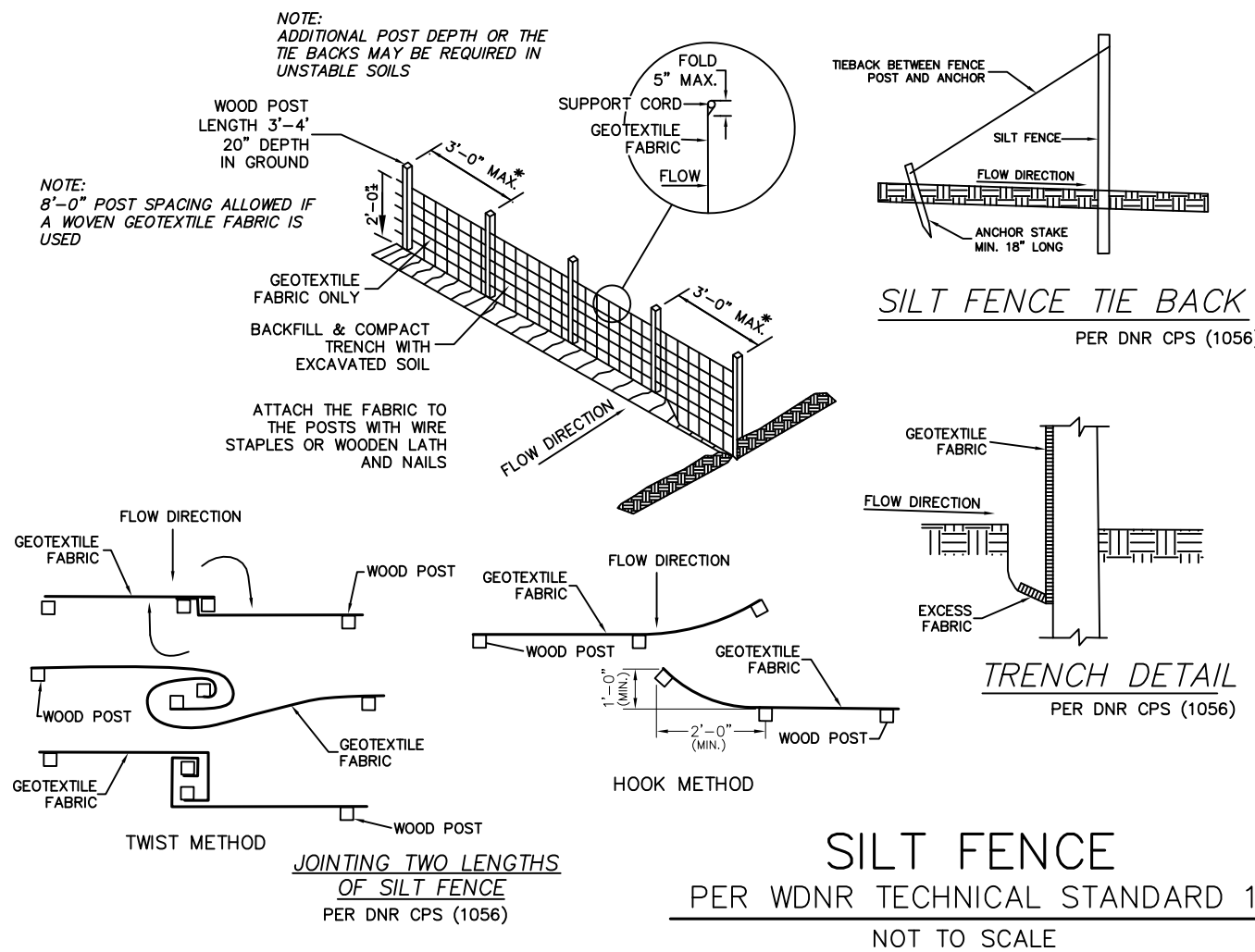
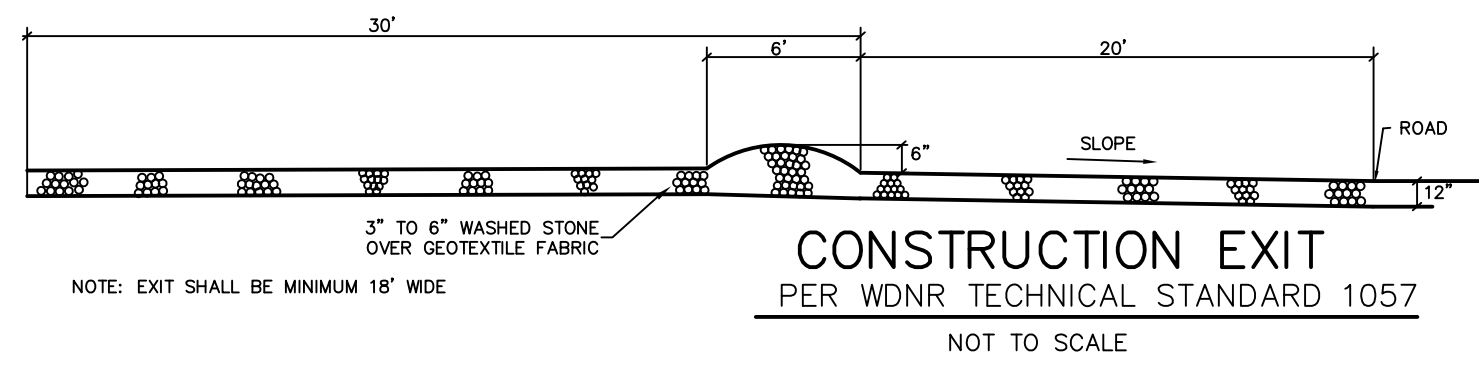


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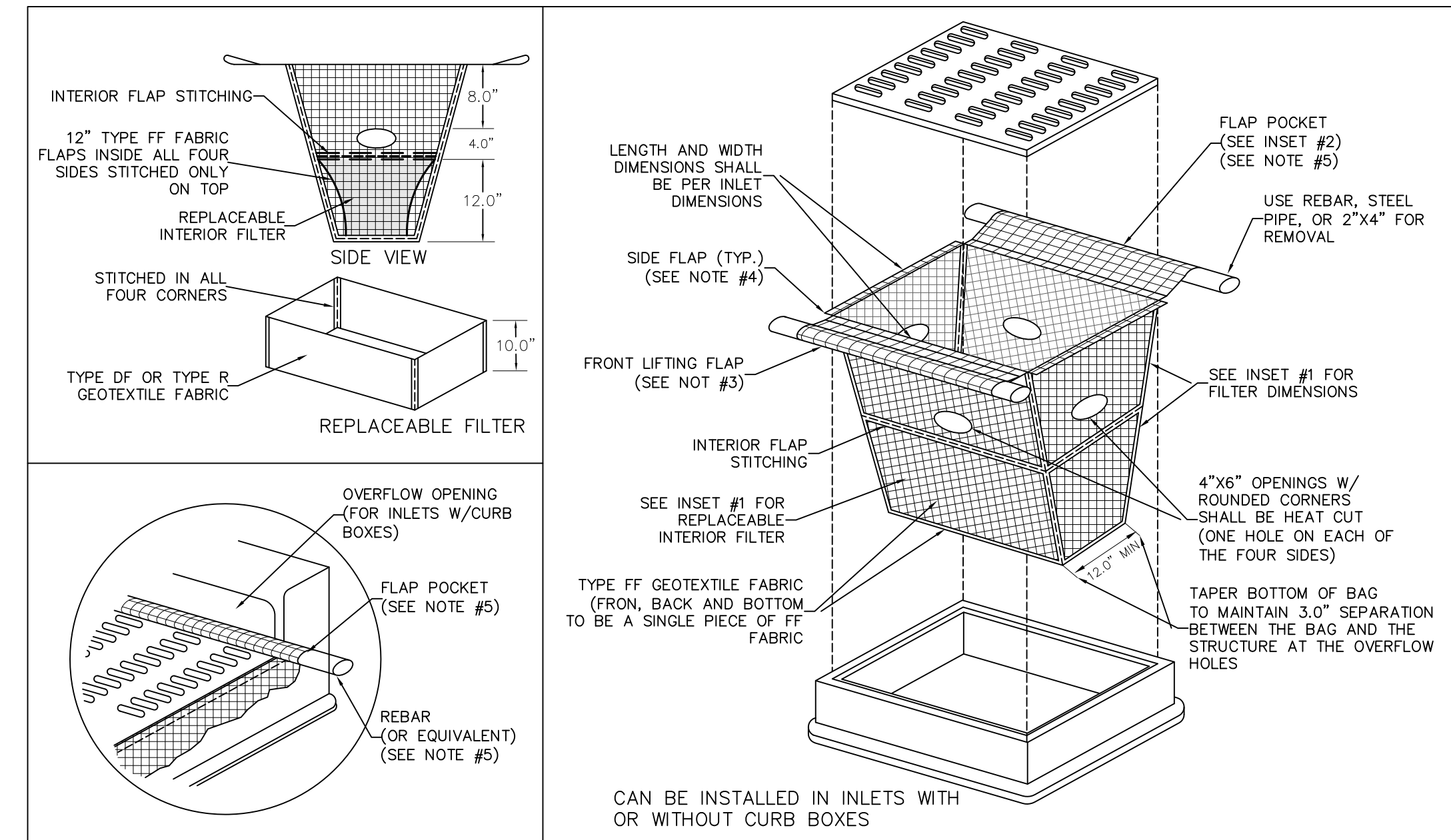


**SITE GRADING, UTILITY AND
EROSION CONTROL PLAN**

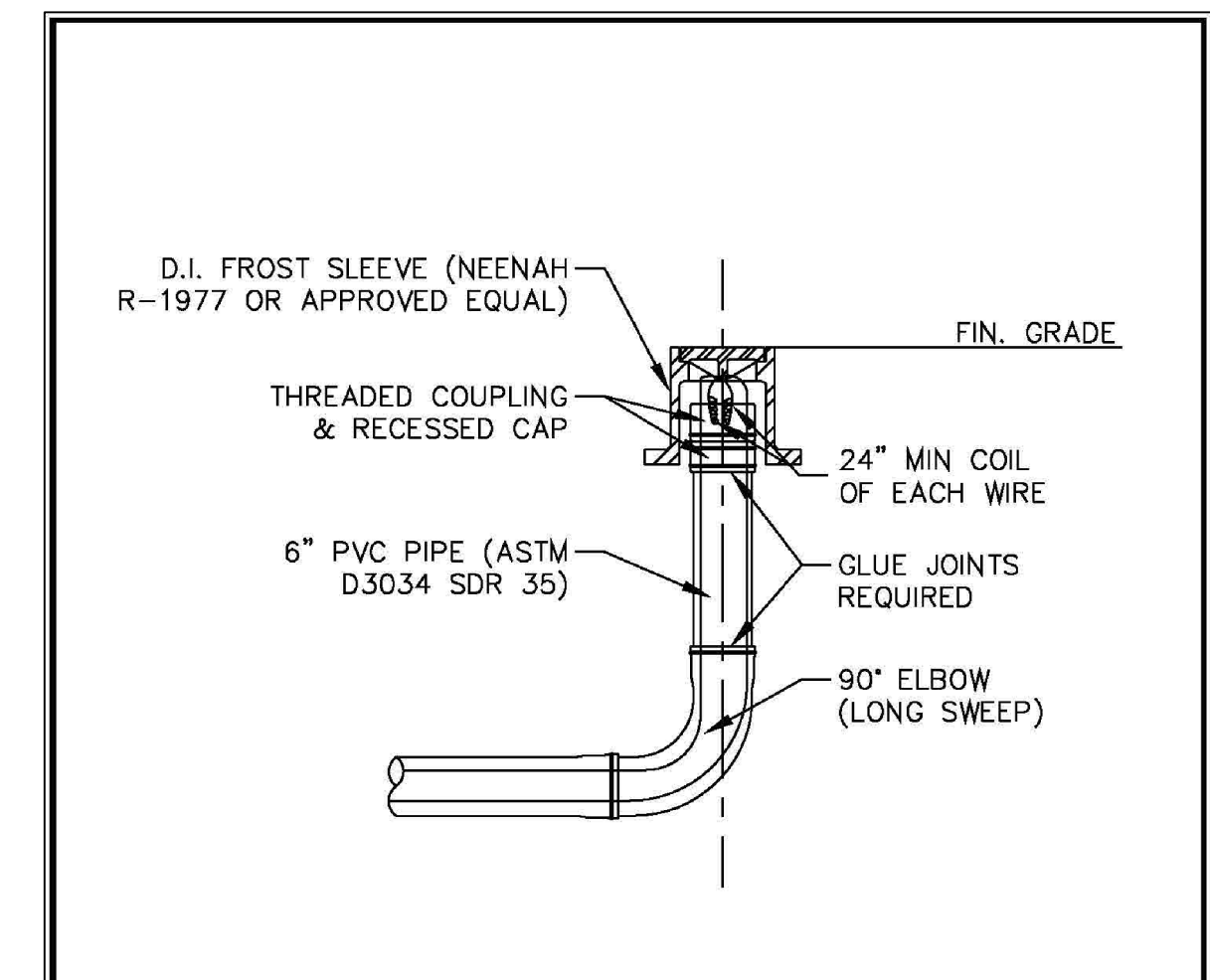
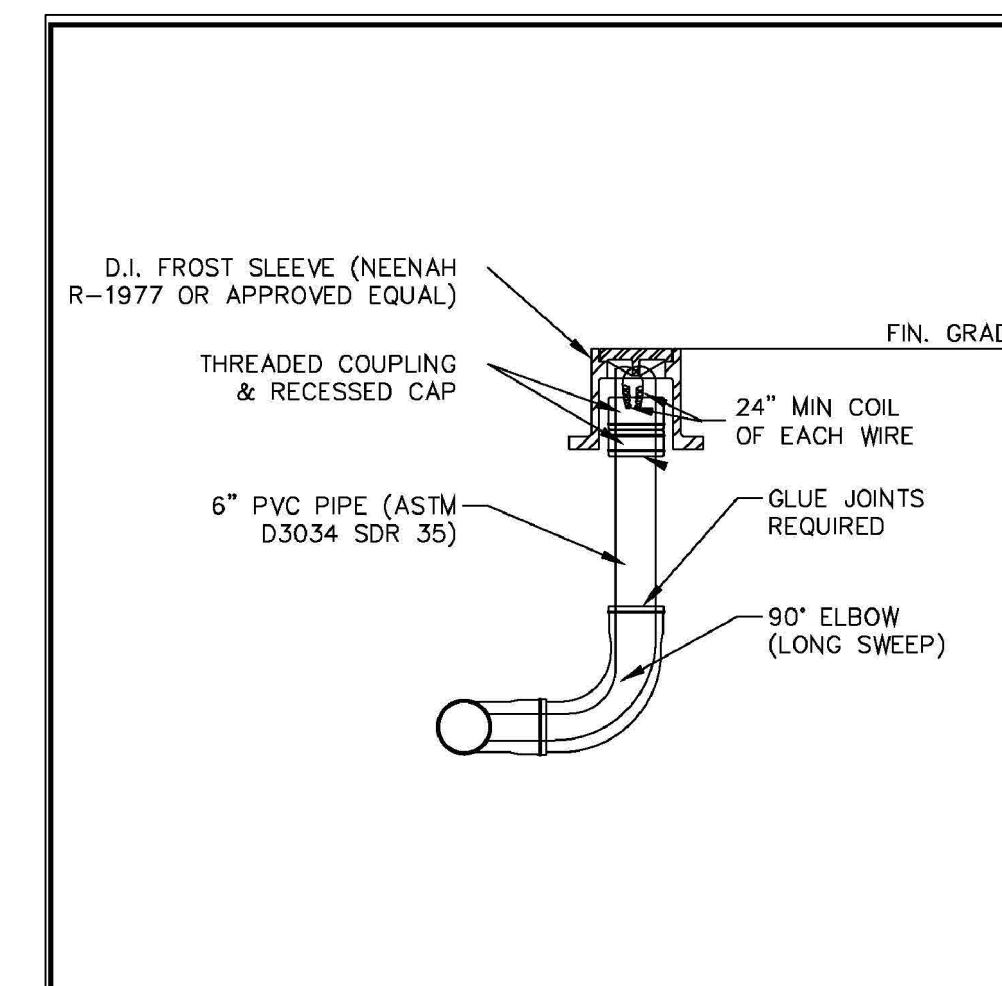
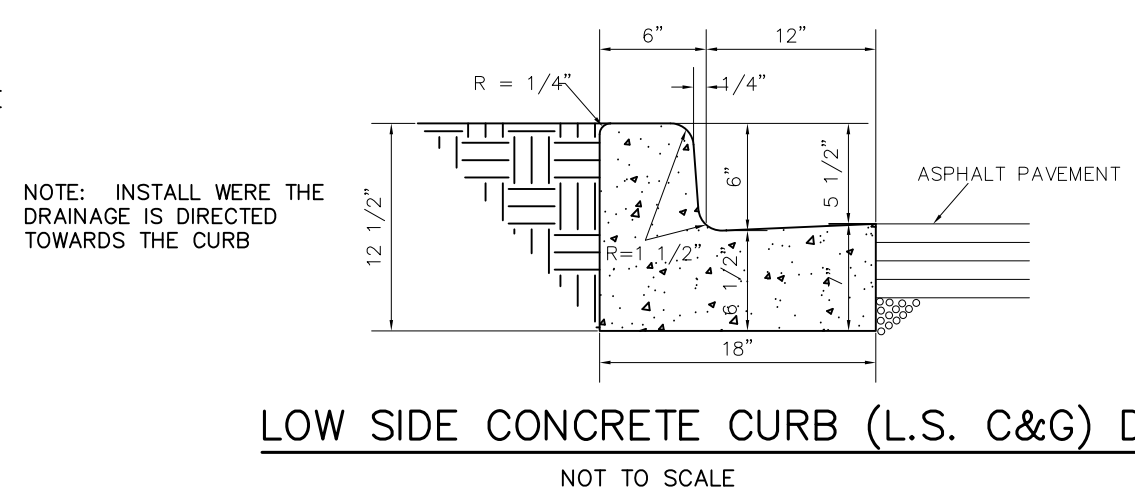
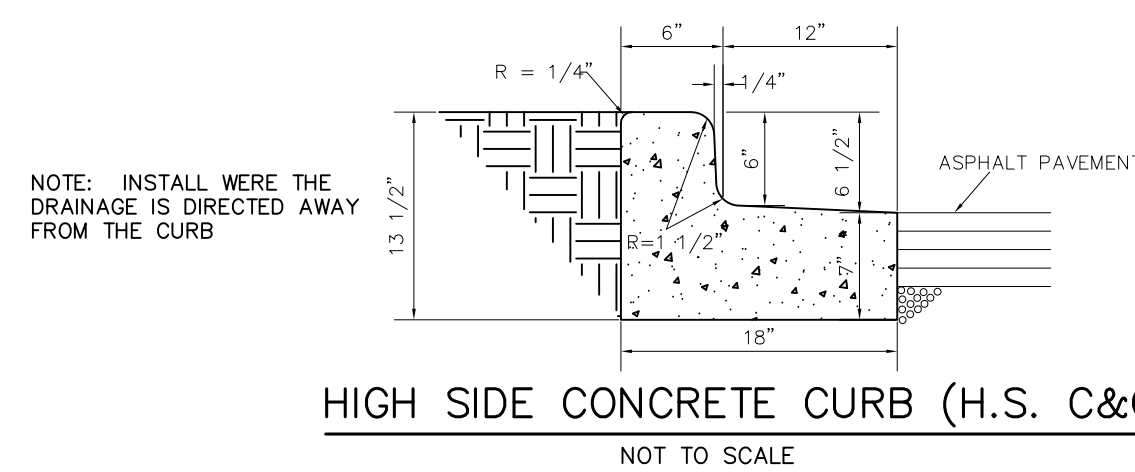
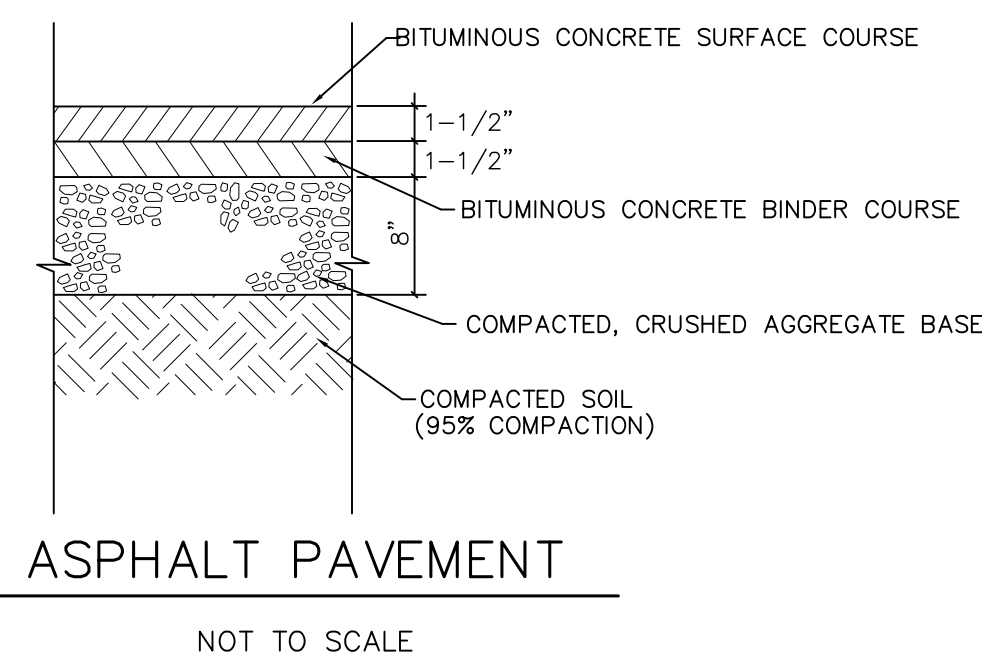
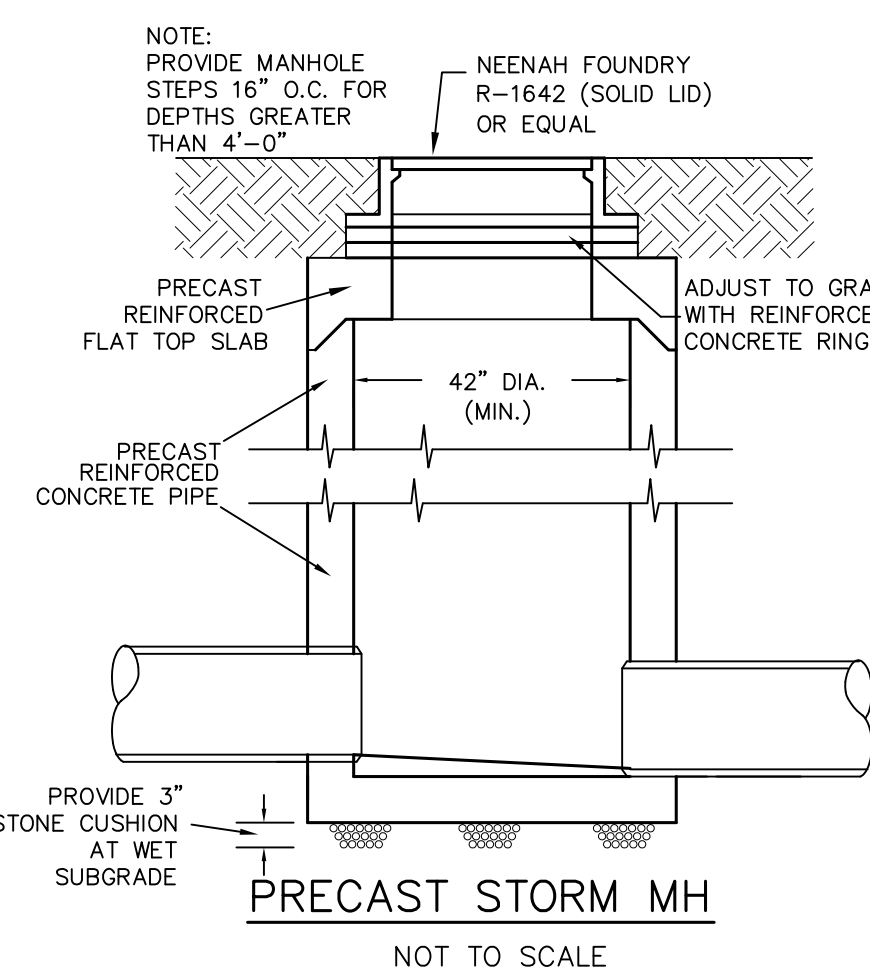
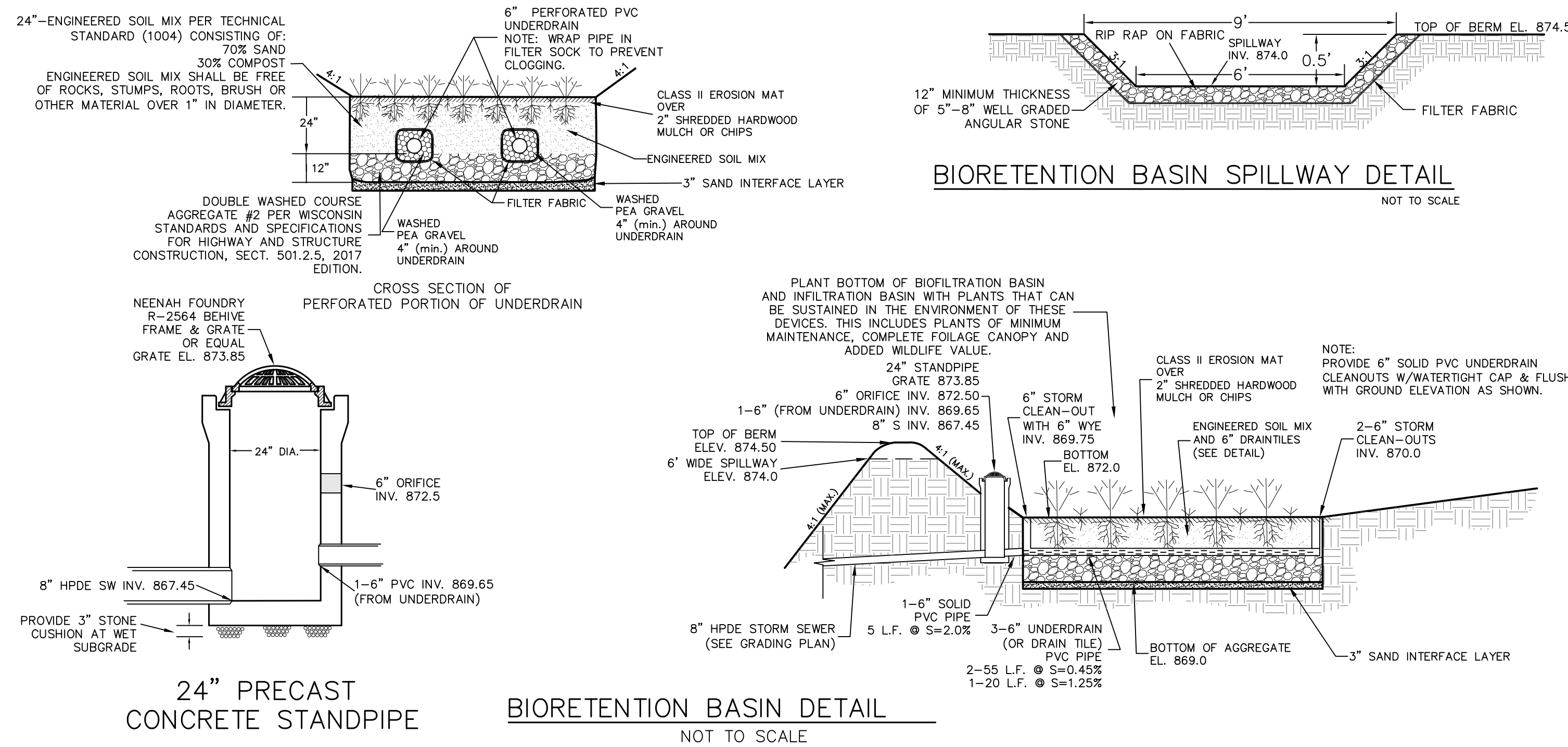
C2.0
SHEET 2 OF 4

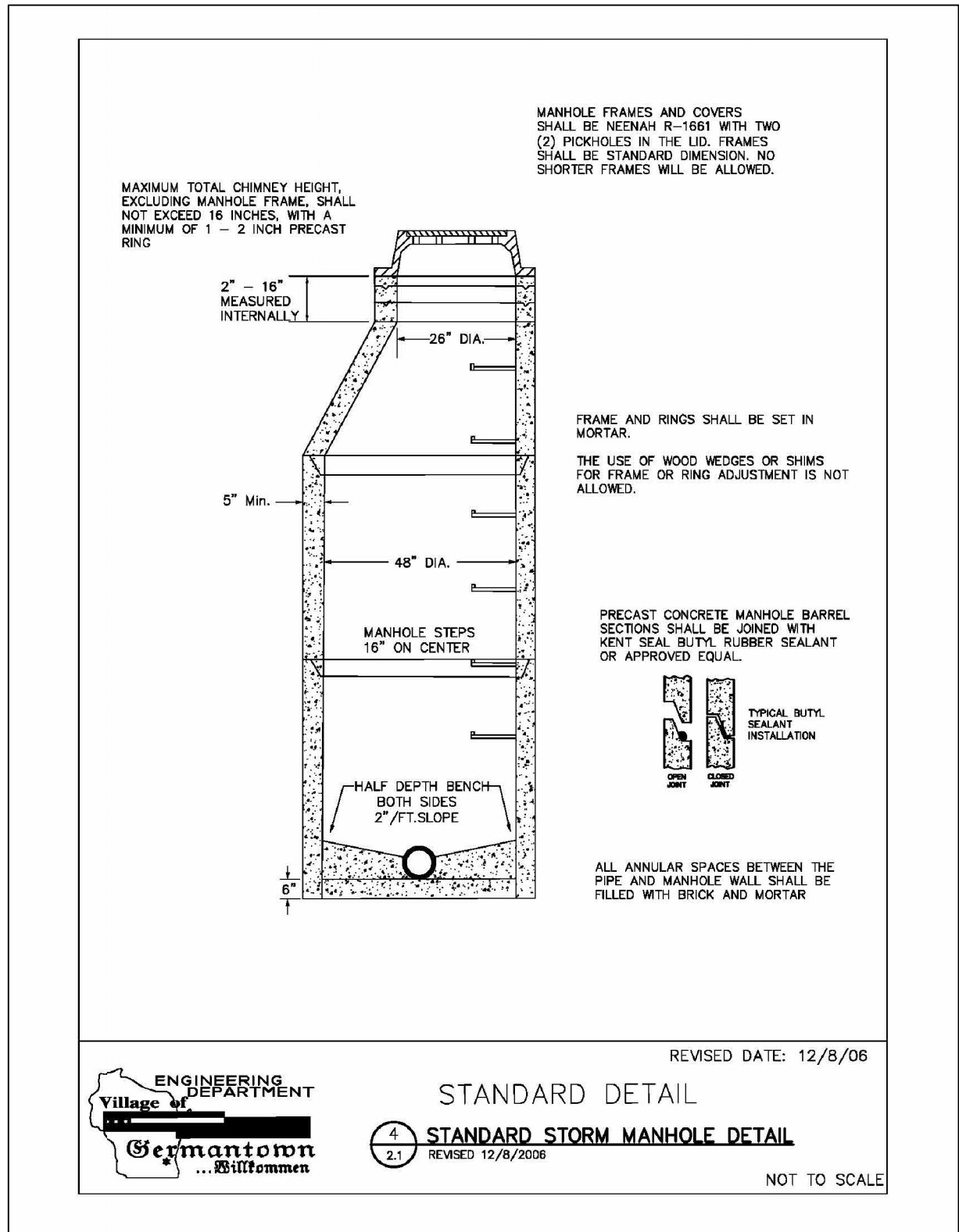
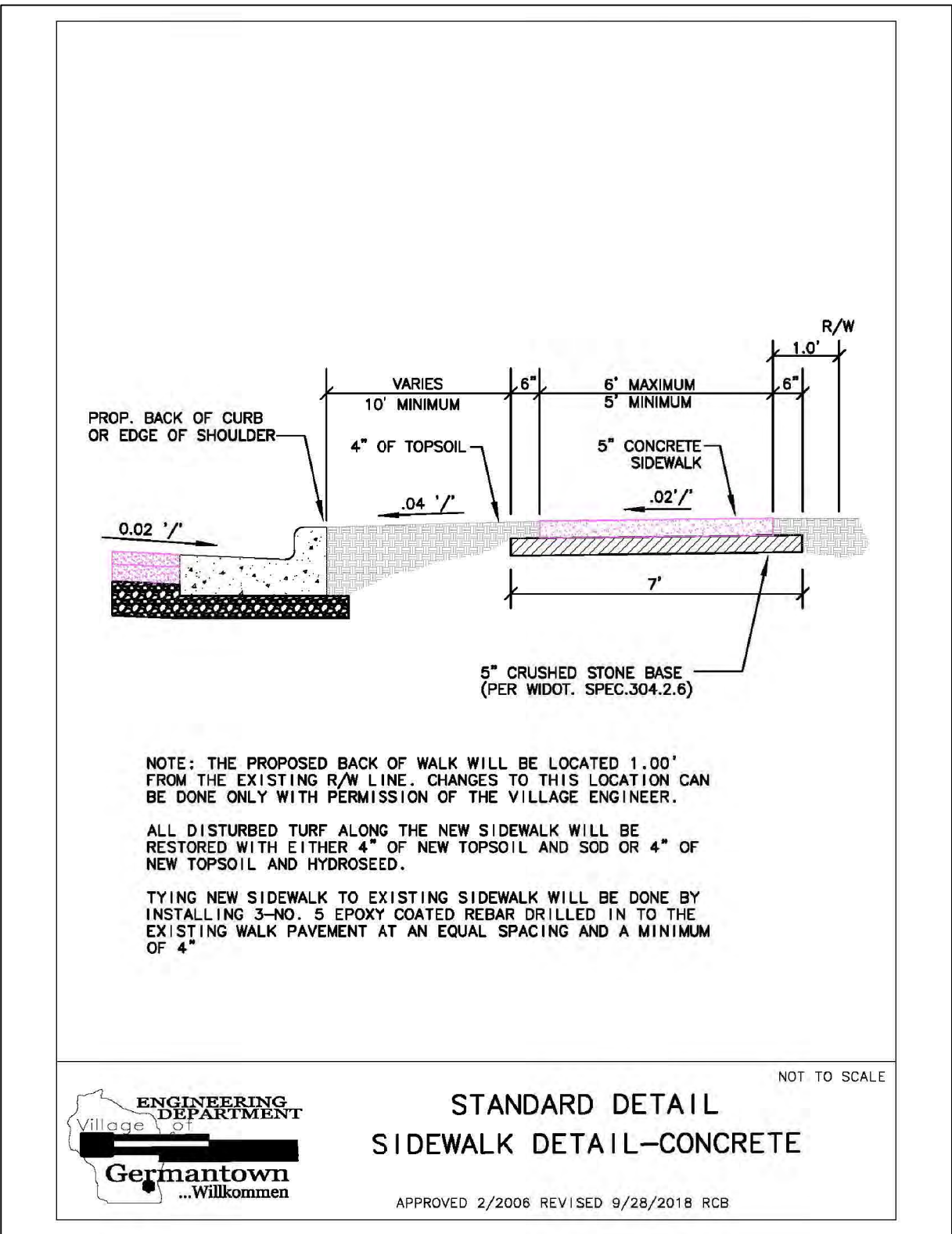
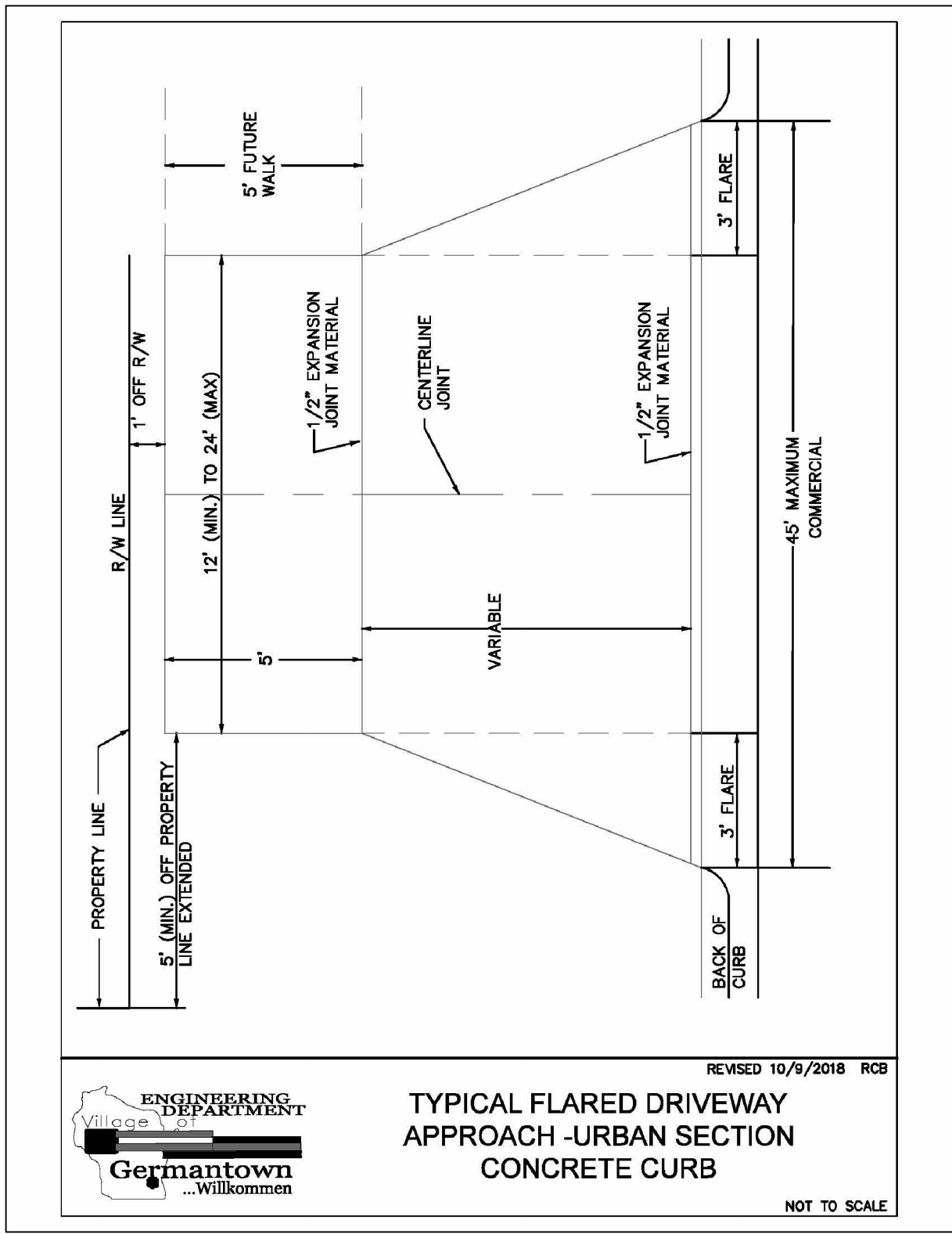
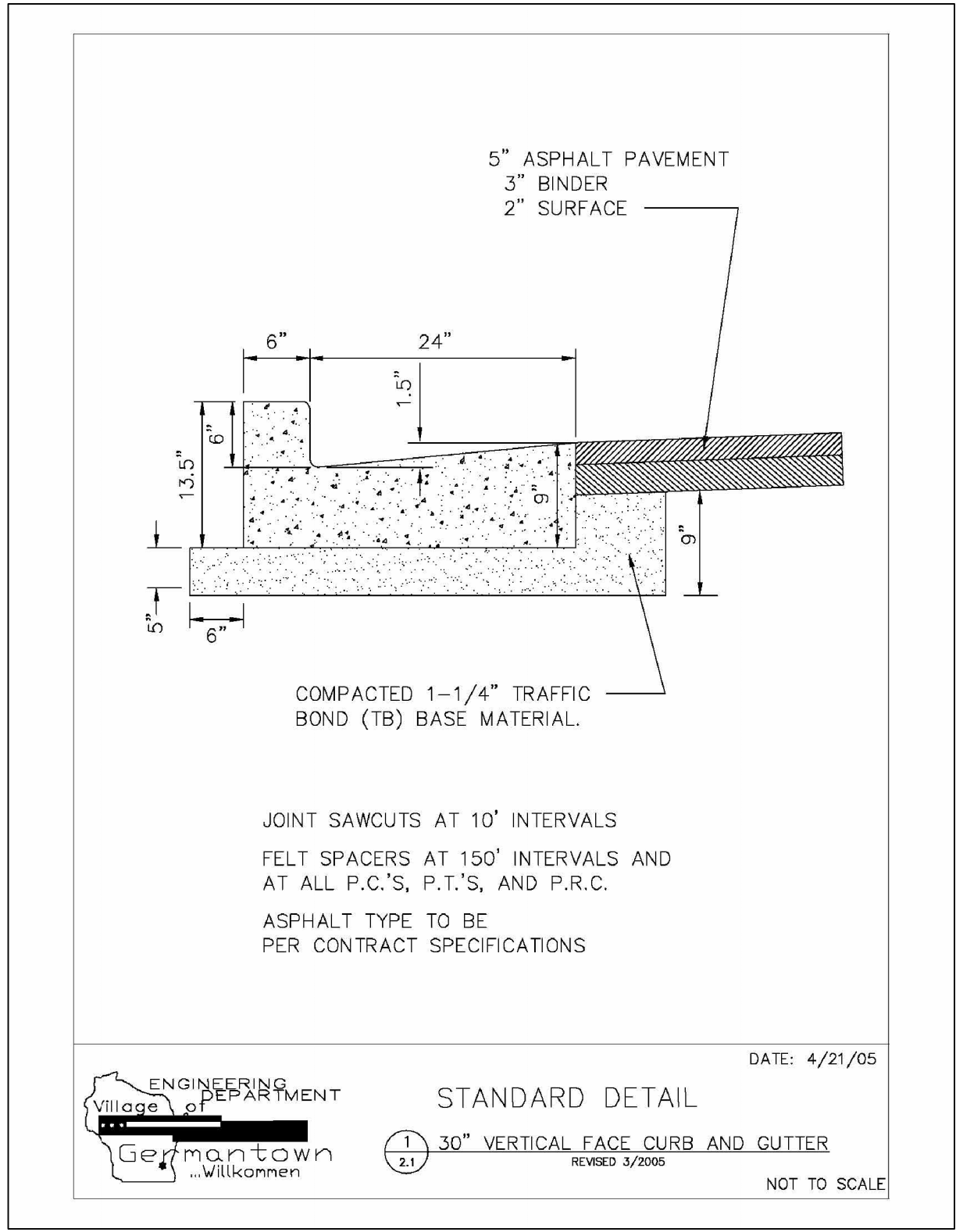


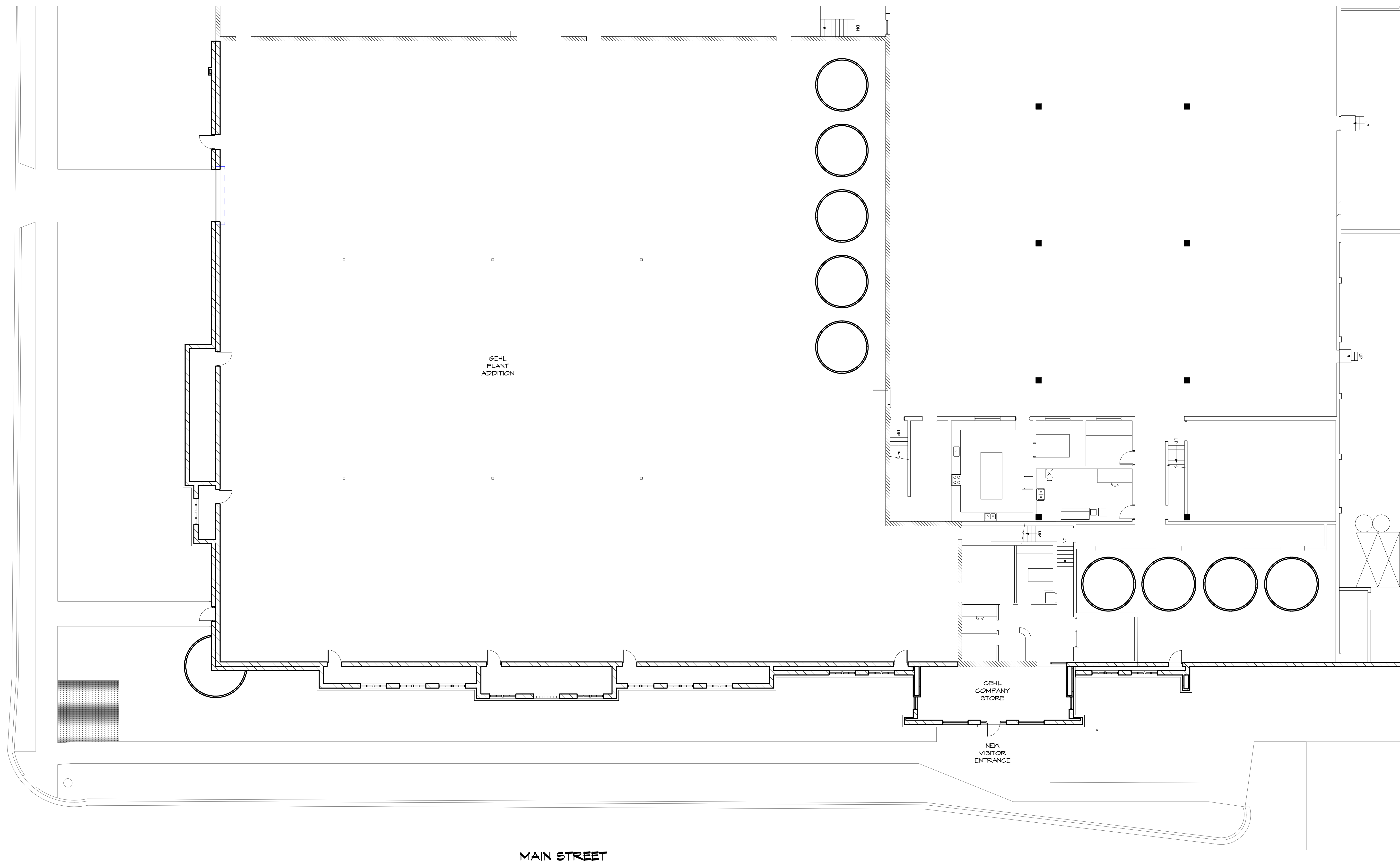
- SILT FENCE CONSTRUCTION SPECIFICATIONS**
PER DNR CPS (1056)
1. Construction silt fence around the disturbed areas as shown on Erosion Control Plan, to prevent sediment from being washed into the drainage system.
 2. Locate posts per DNR CPS (1056).
 3. When joints are necessary, refer to DNR CPS (1056).
 4. Filter fabric to be of nylon, polyester, propylene or ethylene yarn with extra strength - 50 lb/in. ² (Minimum) - and with a flow rate of at least 0.3 gal./sq. ft./min. Fabric should contain ultraviolet ray inhibitors and stabilizers.
 5. The filter fabric shall be anchored by spreading at least 8 inches of fabric in a 4" x 6" trench.
 6. The filter fabric shall be stapled and/or nailed to the upslope side of the posts.
 7. Post to be 1 1/8" x 1 1/8" hickory or oak, 3 feet long, spaced a maximum of 3 feet apart.
 8. Use wire reinforcement in unstabilized minor swales, ditches or diversions.
 9. Use WisDOT approved silt fence.



- NOTES:**
1. TAPER BOTTOM OF BAG TO MAINTAIN THREE INCHES OF CLEARANCE BETWEEN THE BAG AND THE STRUCTURE, MEASURED FROM THE BOTTOM OF THE OVERFLOW OPENINGS TO GHT STRUCTURE WALL.
 2. GEOTEXTILE FABRIC TYPE FF FOR FLAPS, TOP AND BOTTOM OF OUTSIDE OF FILTER BAG. FRONT, BACK AND BOTTOM OF FILTER BAG BEING ONE PIECE.
 3. FRONT LIFTING FLAP IS TO BE USED WHEN REMOVING AND MAINTAINING FILTER BAG.
 4. SIDE FLAPS SHALL BE A MAXIMUM OF TWO INCHES LONG. FOLD THE FABRIC OVER AND REINFORCE WITH MULTIPLE STITCHES.
 5. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2"X4". THE REBAR, STEEL PIPE, OR WOOD SHALL BE INSTALLED IN THE REAR FLAP AND SHALL NOT BLOCK THE TOP HALF OF THE CURB FACE OPENING.
- MAINTENANCE NOTES:**
1. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED IN THE FABRIC DOES NOT FALL INTO THE STRUCTURE. MATERIAL THAT HAS FALLEN INTO THE INLET SHALL BE IMMEDIATELY REMOVED.







FIRST FLOOR
SCALE: 3/32" = 1'-0"

TITLE	
DRAWN DWB	CHK'D TH
DATE 09/06/19	
SCALE 3/32" = 1'-0"	
DRAWING NO. A1.1	
PROJECT NO. 19073	REV.

MAIN STREET PLANT EXPANSION
GEHL FOODS
N116 W15970 MAIN STREET, GERMANTOWN, WI 53022



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CERTIFIED SURVEY MAP NO.

BEING A REDIVISION OF LOT 1 OF CERTIFIED SURVEY MAP No. 6802, OUTLOT 19 AND OUTLOT 20 OF ASSESSOR'S PLAT (SW ¼ NE ¼), IN THE VILLAGE OF GERMANTOWN, IN THE SOUTHWEST ¼ OF THE NORTHEAST ¼ AND SOUTHEAST ¼ OF THE NORTHEAST ¼ OF SECTION 22, TOWNSHIP 9 NORTH, RANGE 20 EAST, WASHINGTON COUNTY, WISCONSIN

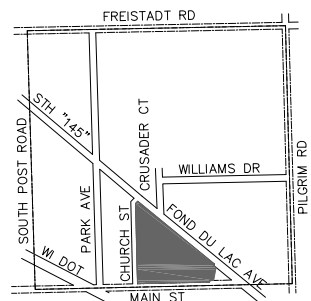
- IPF - INDICATES IRON PIPE FOUND
- IRF - INDICATES IRON ROD FOUND
- ▲ MGF - INDICATES MAG NAIL FOUND
- R.A. - INDICATES A DIMENSION AS PREVIOUSLY RECORDED IN OTHER DOCUMENTS.

ALL DIMENSIONS SHOWN ARE MEASURED TO THE NEAREST HUNDREDTH OF A FOOT.

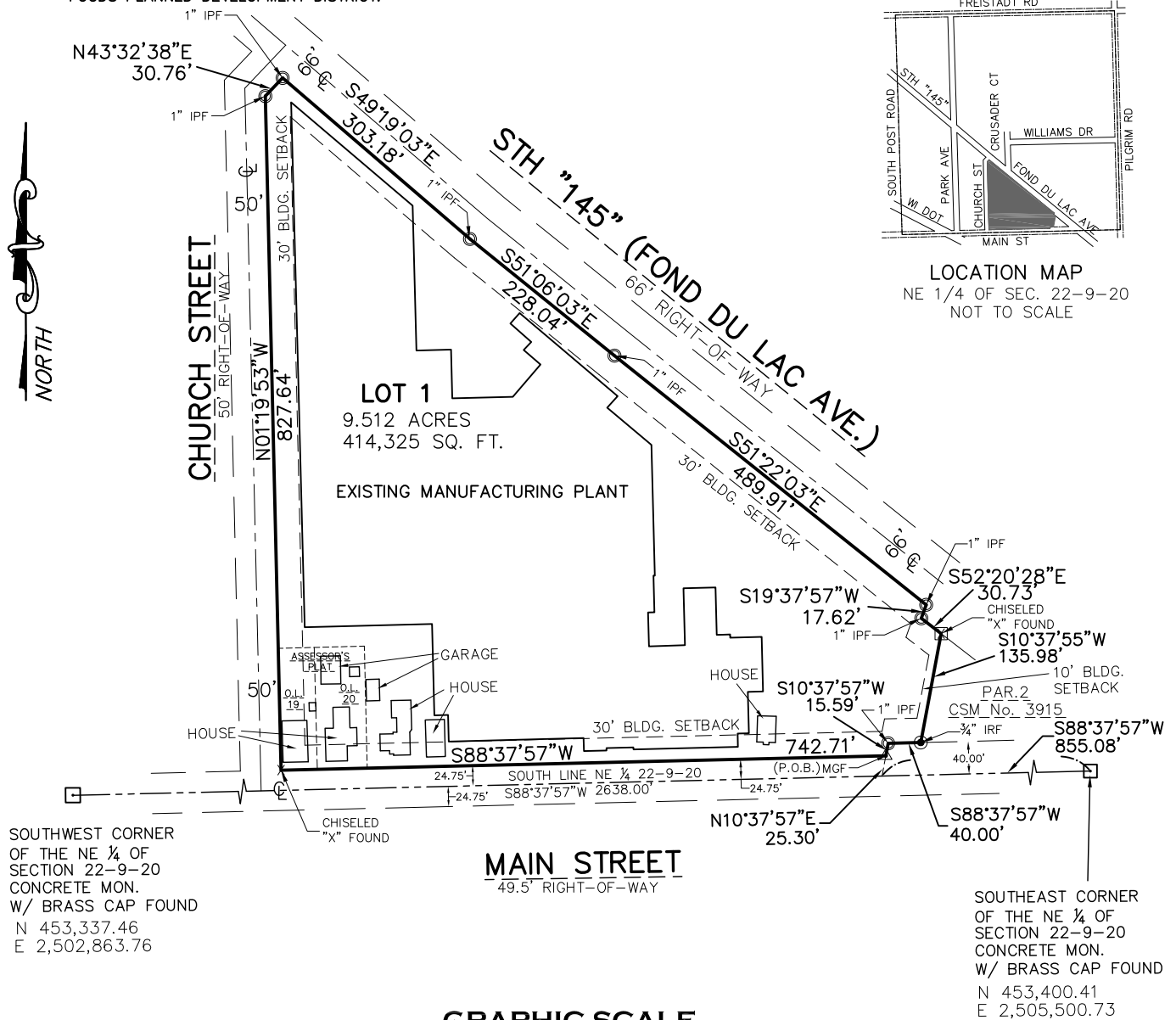
ALL BEARINGS SHOWN ARE REFERENCED TO SOUTH LINE OF THE NE ¼ OF SECTION 22, T9N, R20E, WISCONSIN STATE PLANE COORDINATE SYSTEM GRID, SOUTH ZONE, AND ALL BEARINGS ARE REFERENCED TO GRID NORTH.

EXISTING BUILDINGS ENCROACH ONTO EXISTING BUILDING SETBACK AS DEFINED BY VILLAGE ZONING CODE ON MAY 30, 2017.

BUILDING AND PARKING SETBACKS ARE ESTABLISHED IN THE GEHL FOODS PLANNED DEVELOPMENT DISTRICT.



LOCATION MAP
NE 1/4 OF SEC. 22-9-20
NOT TO SCALE



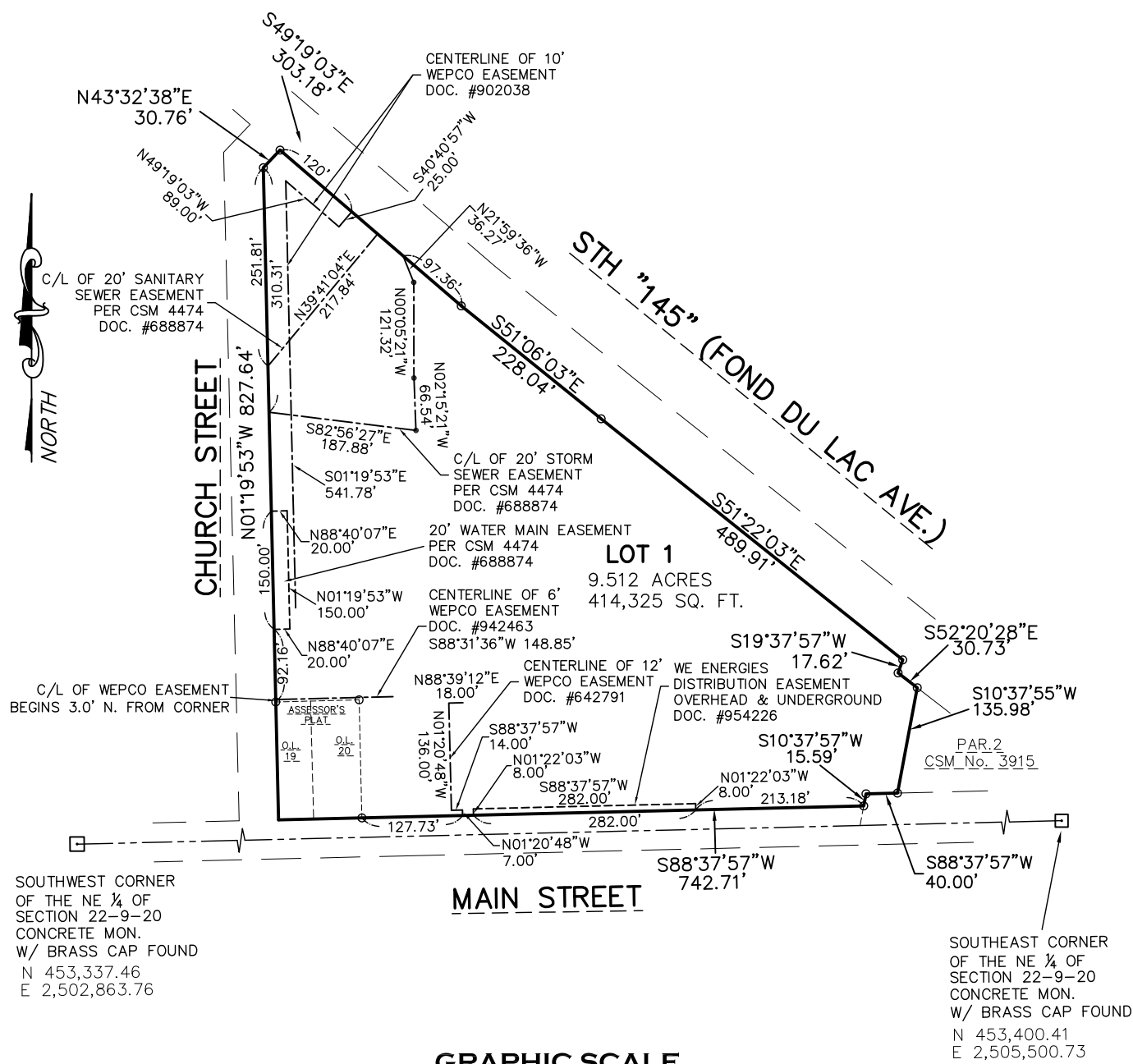
CJ
engineering
civil design and consulting
9205 W. Center Street
Suite 214
Milwaukee, WI 53222
PH. (414) 443-1312
www.cj-engineering.com

OWNER:
GEHL FOODS, LLC
N116 W15970 MAIN STREET
GERMANTOWN, WI 53022
(262) 251-8570

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EXISTING EASEMENTS



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PH. (414) 443-1312
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CERTIFIED SURVEY MAP NO. _____

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SURVEYOR'S CERTIFICATE

I, CHRISTOPHER JACKSON, A PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY:

THAT I HAVE SURVEYED, MAPPED AND COMBINED LOT 1 OF CERTIFIED SURVEY MAP No. 4474, OUTLOT 21, EXCEPT THE NORTH 42 FEET OF ASSESSOR’S PLAT (SW ¼ NE ¼), AND PARCEL 1 OF CERTIFIED SURVEY MAP No. 3915 IN THE VILLAGE OF GERMANTOWN, IN THE SOUTHWEST ¼ OF THE NORTHEAST ¼ AND SOUTHEAST ¼ OF THE NORTHEAST ¼ OF SECTION 22, TOWNSHIP 9 NORTH, RANGE 20 EAST, WASHINGTON COUNTY, WISCONSIN:

COMMENCING AT THE SOUTHEAST CORNER OF SAID NORTHEAST ¼ OF SECTION 22, THENCE S 88°37’57” W 855.08 FEET ALONG THE SOUTH LINE OF SAID NE 1/4 SECTION; THENCE 10°37’57” E 25.30 FEET TO THE NORTH R.O.W. LINE OF MAIN STREET AND THE POINT OF BEGINNING OF LANDS TO BE DESCRIBED; THENCE S 88°37’57” W ALONG SAID NORTH LINE 742.71 FEET TO THE EAST R.O.W. LINE OF CHURCH STREET; THENCE N 01°19’53” W ALONG SAID EAST R.O.W. LINE 827.64 FEET; THENCE N 43°32’38” E CONTINUING ALONG SAID EAST LINE, 30.76 FEET TO THE SOUTH R.O.W. LINE OF FOND DU LAC AVENUE (S.T.H. "145"); THENCE S 49°19’03” E ALONG SAID SOUTH R.O.W. LINE, 303.18 FEET; THENCE S 51°06’03” E CONTINUING ALONG SAID SOUTH R.O.W. LINE, 228.04 FEET; THENCE S 51°22’03” E CONTINUING ALONG SAID SOUTH R.O.W. LINE, 489.91 FEET; THENCE S 19°37’57” W, 17.62 FEET; THENCE S 52°20’28” E, 30.73 FEET; THENCE S 10°37’55” W, 135.98 FEET; THENCE S 88°37’57” W, 40.00 FEET; THENCE S 10°37’57” W, 15.59 FEET TO THE NORTH R.O.W. LINE OF MAIN STREET AND THE POINT OF BEGINNING.

CONTAINING: 414,325 SQUARE FEET OR 9.512 ACRES

THAT I HAVE MADE SUCH SURVEY, MAP AND LAND COMBINATION BY THE DIRECTION OF GEHL FOODS, LLC., OWNERS OF SAID LAND.

THAT SUCH MAP IS A CORRECT REPRESENTATION OF ALL EXTERIOR BOUNDARIES OF THE LAND SURVEYED AND THE COMBINATION THEREOF MADE.

THAT I HAVE FULLY COMPLIED WITH THE PROVISIONS OF CHAPTER 236 OF THE STATUTES OF THE STATE OF WISCONSIN AND THE REGULATIONS OF THE VILLAGE OF GERMANTOWN IN SURVEYING, MAPPING AND COMBINING THE SAME.

DATED THIS _____ DAY OF _____, 20__.

CHRISTOPHER A. JACKSON
PROFESSIONAL LAND SURVEYOR, S–2851
STATE OF WISCONSIN

CERTIFIED SURVEY MAP NO. _____

BEING A REDIVISION OF LOT 1 OF CERTIFIED SURVEY MAP No. 6802, OUTLOT 19 AND OUTLOT 20 OF ASSESSOR'S PLAT (SW ¼ NE ¼), IN THE VILLAGE OF GERMANTOWN, IN THE SOUTHWEST ¼ OF THE NORTHEAST ¼ AND SOUTHEAST ¼ OF THE NORTHEAST ¼ OF SECTION 22, TOWNSHIP 9 NORTH, RANGE 20 EAST, WASHINGTON COUNTY, WISCONSIN

CORPORATE OWNER'S CERTIFICATE

GEHL FOODS, LLC, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF WISCONSIN AS OWNER, DOES HEREBY CERTIFY THAT SAID COMPANY CAUSED THE LAND DESCRIBED ON THIS MAP TO BE SURVEYED, DIVIDED AND MAPPED AS REPRESENTED ON THIS MAP.

IN WITNESS WHEREOF, GEHL FOODS, LLC, HAS CAUSED THESE PRESENTS TO BE SIGNED BY CRAIG LEMIEUX, ITS CHIEF EXECUTIVE OFFICER (CEO), AND COUNTERSIGNED BY TIM PREUNINGER, ITS CHIEF FINANCIAL OFFICER (CFO), AND ITS CORPORATE SEAL TO BE AFFIXED THIS _____ DAY OF _____, 20__.

CRAIG LEMIEUX, CEO

STATE OF WISCONSIN) SS
WASHINGTON COUNTY)

TIM PREUNINGER, CFO

PERSONALLY CAME BEFORE ME THIS _____DAY OF _____, 20__, CRAIG LEMIEUX AND TIM PREUNINGER, TO ME KNOWN TO BE THE CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER OF GEHL FOODS, LLC. AND THE PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT AS SUCH OFFICERS OF SAID CORPORATION AND ACKNOWLEDGED THE SAME.

NOTARY PUBLIC, STATE OF WISCONSIN
MY COMMISSION EXPIRES _____,20__

CERTIFIED SURVEY MAP NO. _____

BEING A REDIVISION OF LOT 1 OF CERTIFIED SURVEY MAP No. 6802, OUTLOT 19 AND OUTLOT 20 OF ASSESSOR'S PLAT (SW ¼ NE ¼), IN THE VILLAGE OF GERMANTOWN, IN THE SOUTHWEST ¼ OF THE NORTHEAST ¼ AND SOUTHEAST ¼ OF THE NORTHEAST ¼ OF SECTION 22, TOWNSHIP 9 NORTH, RANGE 20 EAST, 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 _____ 20__.

DEAN WOLTER, CHAIRMAN

DATE

LAURA A. JOHNSON, SECRETARY

DATE

STATE OF WISCONSIN) SS
WASHINGTON COUNTY)

PERSONALLY CAME BEFORE ME THIS ____ DAY OF _____, 20__, DEAN WOLTER AND LAURA A. JOHNSON, TO ME KNOWN TO BE THE CHAIRMAN AND SECRETARY OF THE VILLAGE OF GERMANTOWN PLANNING COMMISSION. AND THE PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT AS SUCH OFFICERS OF SAID CORPORATION AND ACKNOWLEDGED THE SAME.

NOTARY PUBLIC, STATE OF WISCONSIN
MY COMMISSION EXPIRES _____, 20__

VILLAGE OF GERMANTOWN BOARD APPROVAL

THIS CERTIFIED SURVEY MAP, BEING A DIVISION OF NE ¼ SECTION 22, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN, HAVING BEEN APPROVED BY THE PLANNING COMMISSION BEING THE SAME, IS HEREBY APPROVED AND ACCEPTED BY THE VILLAGE BOARD OF TRUSTEES OF THE VILLAGE OF GERMANTOWN ON THIS ____ DAY OF _____, 20__.

DEAN WOLTER, VILLAGE PRESIDENT

DATE

DEANNA BRAUNSCHWEIG, WCMC/CMC, VILLAGE CLERK

DATE

STATE OF WISCONSIN) SS
WASHINGTON COUNTY)

PERSONALLY CAME BEFORE ME THIS ____ DAY OF _____, 20__, DEAN WOLTER AND DEANNA BRAUNSCHWEIG, TO ME KNOWN TO BE THE PRESIDENT AND CLERK OF THE VILLAGE OF GERMANTOWN BOARD. AND THE PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT AS SUCH OFFICERS OF SAID CORPORATION AND ACKNOWLEDGED THE SAME.

NOTARY PUBLIC, STATE OF WISCONSIN
MY COMMISSION EXPIRES _____, 20__



9205 W. Center Street, Suite 214
Milwaukee, WI 53222
Ph: (414) 443-1312

STORM WATER MANAGEMENT PLAN

FOR

Gehl Foods

Main Street,
Germantown, WI 53022

July 15, 2019
Revised September 5, 2019

PREPARED BY:

Randall S. Bruckner, PE
CJ Engineering
9205 W. Center Street Suite 214
Milwaukee, WI 53222
Ph. 414-443-1312

CJE Job No.: 1542-02r1-SWMP

TABLE OF CONTENTS

- 1.) Introduction
- 2.) SWMP Requirements
- 3.) Developed Site Area & Cover
- 4.) 24-Hour Rainfall Values
- 5.) Method of Analysis
- 6.) Drainage Summary
- 7.) Water Quality
- 8.) Conclusion
- 9.) Appendix

A. Existing Conditions

- i. Existing Site Geotechnical Report
- ii. HydroCAD / TR-55 calculations – Existing Conditions
- iii. SWMP – Existing Conditions plan

B. Proposed Conditions

- i. SWMP – Proposed Conditions Plan
- ii. HydroCAD / TR-55 calculations – Proposed Conditions
- iii. WinSLAMM for Windows version 10.2.0 Water Quality

C. Maintenance Requirements

Introduction:

The proposed redevelopment of a part of Gehl's property located at N116 W15970 Main Street will consist of two separate areas along the east and west sides of their Main Street Plant. The east area consists of the construction of a new asphalt parking lot at the east side of the existing plant that will replace an existing gravel parking lot. Approximately 3,240 s.f. of impervious surface will be added as a part of the parking lot redevelopment. Total disturbed area as a part of the east side redevelopment is 0.65 acres.

The second area of development will occur on the west side of the plant at the northeast intersection of Main Street and Church Street. The redevelopment will consist of the removal of three residential homes along with their subsequent garages and sheds and all other impervious surfaces such as drives and walks. The west area consists of a 24,236 s.f. building addition along with two side walk connections along Main Street and a proposed driveway entrance along Church Street. As a part of the redevelopment along Main Street, the existing sidewalk is to be relocated onto the subject property with an easement to allow additional street plantings and stamped concrete for visual enhancement. Approximately 10,930 s.f. of impervious surface will be added as a part of the parking lot redevelopment. Total disturbed area as a part of the east side redevelopment is 0.81 acres.

Between the east and west developments, a total of 1.46 acres will be disturbed with a total of 0.32 acres of added impervious.

In order to meet to the storm water management requirements of NR 151, Village of Germantown and MMSD, a new bioretention will be constructed along the south side of the east parking lot redevelopment that will accept the runoff from the proposed parking lot. Discharge from the proposed bio-basin will through an 8" storm sewer. Since there is not existing public storm sewer within Main Street near the proposed parking lot, the proposed 8" storm sewer will be installed within Main Street to an existing Public storm sewer 250' to the west. Furthermore, the west redevelopment will be analyzed as undetained for the runoff calculations.

Allowable runoff requirements:

Based on a redevelopment total of 1.46 acres disturbed and a total of 0.32 acres of added impervious surface:

MMSD Green Infrastructure Requirement:

The proposed redevelopment includes the construction of a proposed building expansion, a parking lot, driveway and walks. A total addition of 0.32 acres of impervious surface is proposed for the redevelopment. In order to meet storm water management requirements, a biofiltration basin is being proposed.

Per Chapter MMSD 120-7-6.5, the development must include green infrastructure with a detention volume equal to at least ½" multiplied by the total area of new or redeveloped impervious surface.

Required Volume:

$0.0416 \text{ feet} \times 13,939 \text{ feet}^2 = 580 \text{ ft}^3$ required detention volume

Proposed Volume (per included HydroCAD calculations):

Bioretention Basin = $5,213 \text{ ft}^3$ (at elevation 874.0, spillway elevation)

WDNR NR151 Requirements:

Per NR151.12(5)(b)1., by design, BMPs shall be employed to maintain or reduce the peak runoff discharge rates, to the maximum extent practical, as compared to pre-development conditions for the 2-year, 24-hour design storm.

Per NR151.122 Table 1, for redevelopment, by design, reduce to the maximum extent practical, the total suspended solids load from parking areas and roads by 40%.

Per NR151.124(3)(b)3, redevelopment areas are exempt from Infiltration Requirements.

Developed Site: (See the Proposed Conditions Plan: Appendix “B”).

Cover & CN: CN 74, >75% Grass Cover, Good, HSG C.
CN 98, Paved Parking & Roofs & Streets.
CN 98, Pond Surface Area.

Total analyzed Area: **1.60 ACRES**

24-Hour Rainfall Values:

2-Year: 2.67”

10-Year: 3.84”

100-Year: 6.40”

All rainfall data provided by the Village of Germantown

Method of Analysis:

The storm water runoff quantity was calculated using the methods outlines in TR-55 (“Urban Hydrology for Small Watersheds” by the U.S. Department of Agriculture’s Soil Conservation Services). Calculations were performed with the “HydroCAD 10.00 computer software. Water quality calculations were done using WinSLAMM for Windows version 10.2.0.

Drainage Summary: (See Summary of Calculations in Appendix)

Area	2 Year Storm	10 Year Storm	100 Year Storm
Existing Conditions			
East Subcatchment #1	1.96 cfs	3.30 cfs	6.26 cfs
West Subcatchment #2	1.82 cfs	3.11 cfs	5.98 cfs
Reach (total existing flow)	3.76 cfs	6.36 cfs	12.14 cfs
Proposed Conditions			

East Subcatchment #1 – (to bioretention basin)	2.28 cfs	3.71 cfs	6.83 cfs
Bioretention Basin	1.36 cfs	1.60 cfs	1.97 cfs
West Subcatchment #2 – (undetained)	2.44 cfs	3.80 cfs	6.73 cfs
Reach (Total Proposed Flow)	3.74 cfs	5.26 cfs	8.65 cfs
Total required Flow	3.76 cfs		

Water Quality:

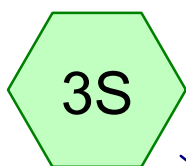
Based on the proposed construction bioretention basin, the site exceeds the WDNR requirements and Village of Germantown for redevelopment for water quality by removing over 40% of the total suspended solids (TSS) prior to discharge off site, as quantified using WinSLAMM for Windows version 10.2.0 (See appendix for calculation results). The TSS out of each area and total removal as a part of the series of site is as summarized below:

	Before Drainage System	After Controls	% Reduction
Total	377.7 lbs.	103.7 lbs.	72.54%

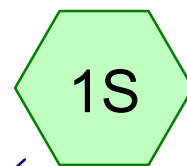
Conclusion:

Per MMSD and WDNR requirements, the basin and site have been designed and evaluated to meet the requirements of redevelopment for disturbing over 1 acre but under 0.5 acres of additional impervious surface. Furthermore, the bioretention basin will also remove over 40% of TSS from the runoff after redevelopment. Therefore, the proposed redevelopment meets and exceeds the storm water management and water quality requirements for the Village of Germantown, MMSD and NR 151.

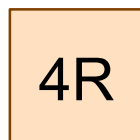
APPENDIX



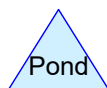
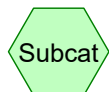
Existing West
Subcatchment 2 - area
matches proposed



Existing East
Subcatchment 1 - area
matches proposed



Total Existing Flow



Routing Diagram for CJE1542-02R0-PROPOSED-EXISTING

Prepared by CJ Engineering, Printed 7/12/2019

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Prepared by CJ Engineering

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Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.794	74	>75% Grass cover, Good, HSG C (1S, 3S)
0.622	98	Paved parking, gravel parking & roofs (1S, 3S)
0.184	98	Roofs (3S)
1.600	86	TOTAL AREA

CJE1542-02R0-PROPOSED-EXISTING

Prepared by CJ Engineering

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Type II 24-hr 2-yr Rainfall=2.67"

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Summary for Subcatchment 1S: Existing East Subcatchment 1 - area matches proposed

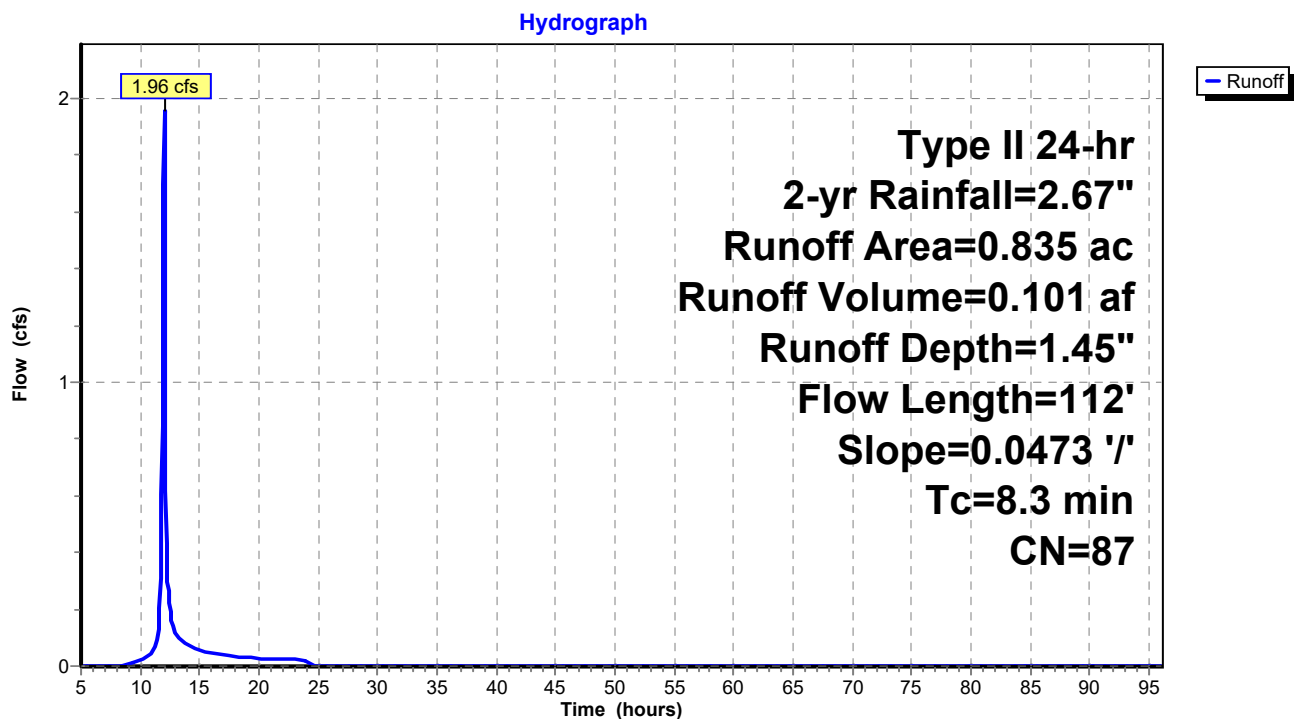
Runoff = 1.96 cfs @ 12.00 hrs, Volume= 0.101 af, Depth= 1.45"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs

Type II 24-hr 2-yr Rainfall=2.67"

Area (ac)	CN	Description
0.435	98	Paved parking, gravel parking & roofs
0.400	74	>75% Grass cover, Good, HSG C
0.835	87	Weighted Average
0.400		47.90% Pervious Area
0.435		52.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	112	0.0473	0.22		Sheet Flow, A-B
Grass: Short n= 0.150 P2= 2.67"					

Subcatchment 1S: Existing East Subcatchment 1 - area matches proposed

CJE1542-02R0-PROPOSED-EXISTING

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Type II 24-hr 2-yr Rainfall=2.67"

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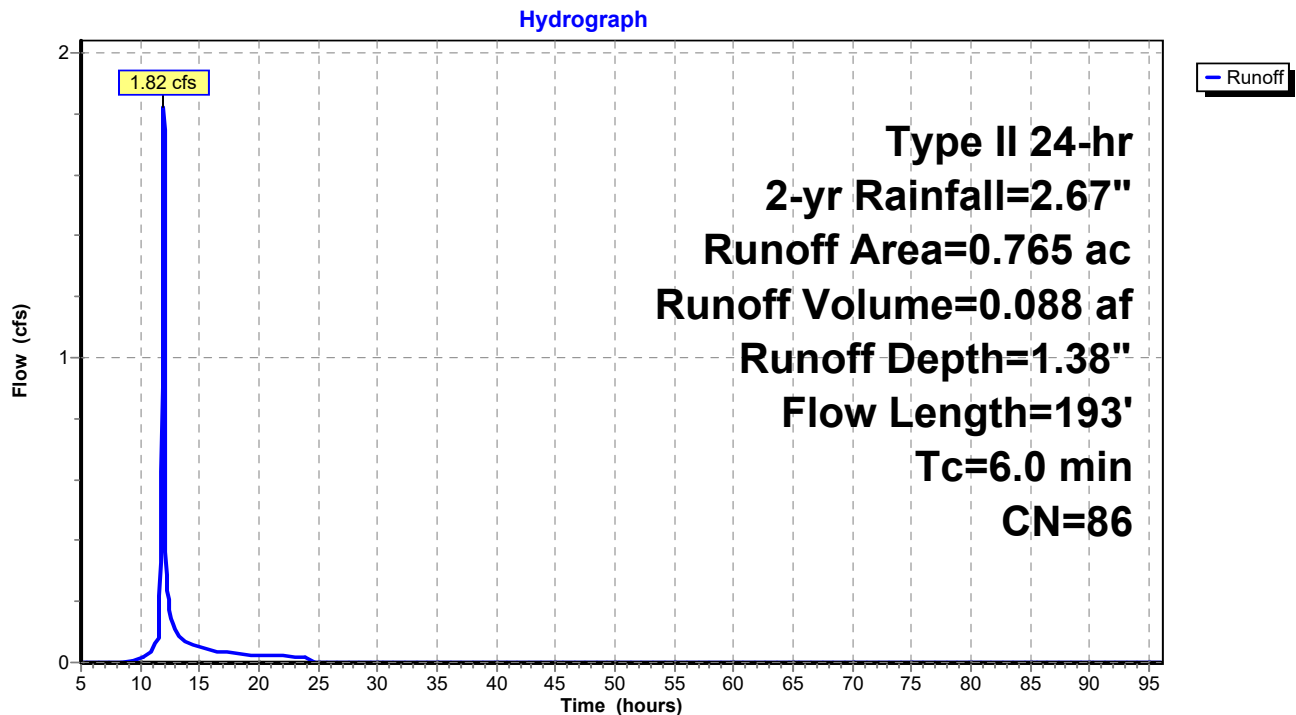
Summary for Subcatchment 3S: Existing West Subcatchment 2 - area matches proposed

Runoff = 1.82 cfs @ 11.97 hrs, Volume= 0.088 af, Depth= 1.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.67"

Area (ac)	CN	Description
0.187	98	Paved parking, gravel parking & roofs
* 0.184	98	Roofs
0.394	74	>75% Grass cover, Good, HSG C
0.765	86	Weighted Average
0.394		51.50% Pervious Area
0.371		48.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.5	47	0.0390	0.17		Sheet Flow, C-D Grass: Short n= 0.150 P2= 2.67"
1.1	82	0.0207	1.22		Sheet Flow, D-E Smooth surfaces n= 0.011 P2= 2.67"
0.4	64	0.0172	2.66		Shallow Concentrated Flow, E-F Paved Kv= 20.3 fps
6.0	193	Total			

Subcatchment 3S: Existing West Subcatchment 2 - area matches proposed

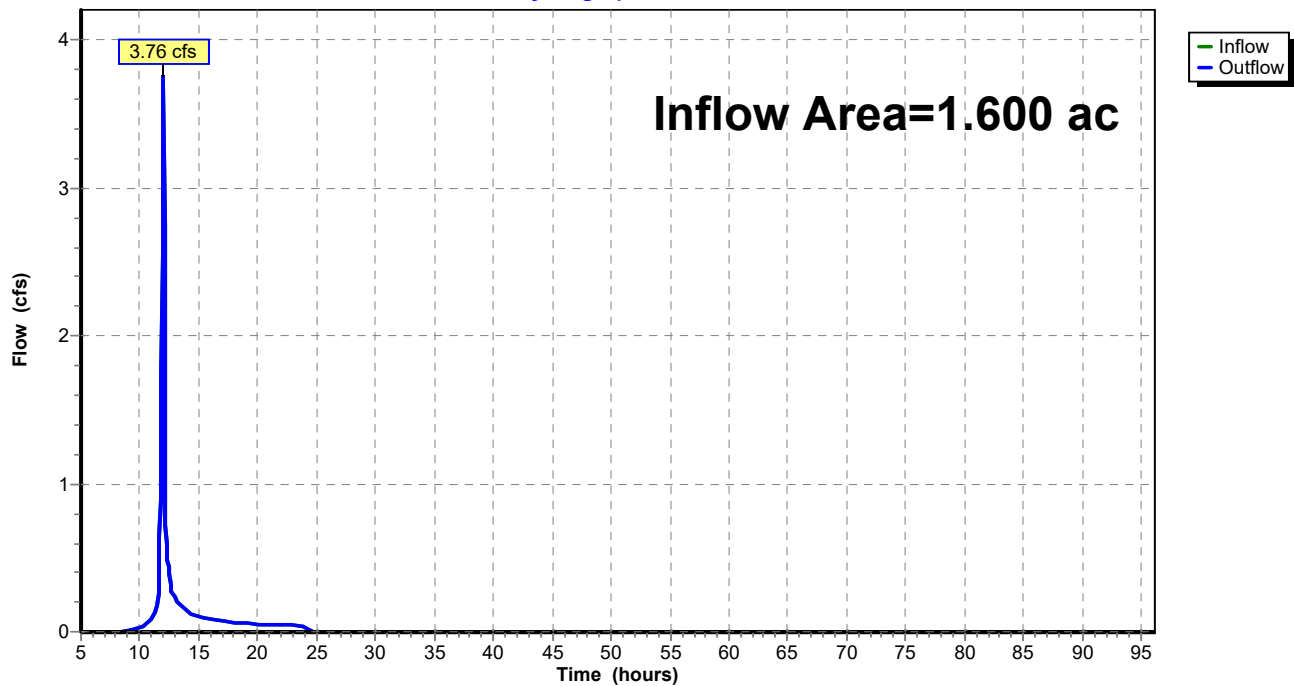
Summary for Reach 4R: Total Existing Flow

Inflow Area = 1.600 ac, 50.38% Impervious, Inflow Depth = 1.42" for 2-yr event
Inflow = 3.76 cfs @ 11.98 hrs, Volume= 0.189 af
Outflow = 3.76 cfs @ 11.98 hrs, Volume= 0.189 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs

Reach 4R: Total Existing Flow

Hydrograph



CJE1542-02R0-PROPOSED-EXISTING

Prepared by CJ Engineering

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Type II 24-hr 10-yr Rainfall=3.84"

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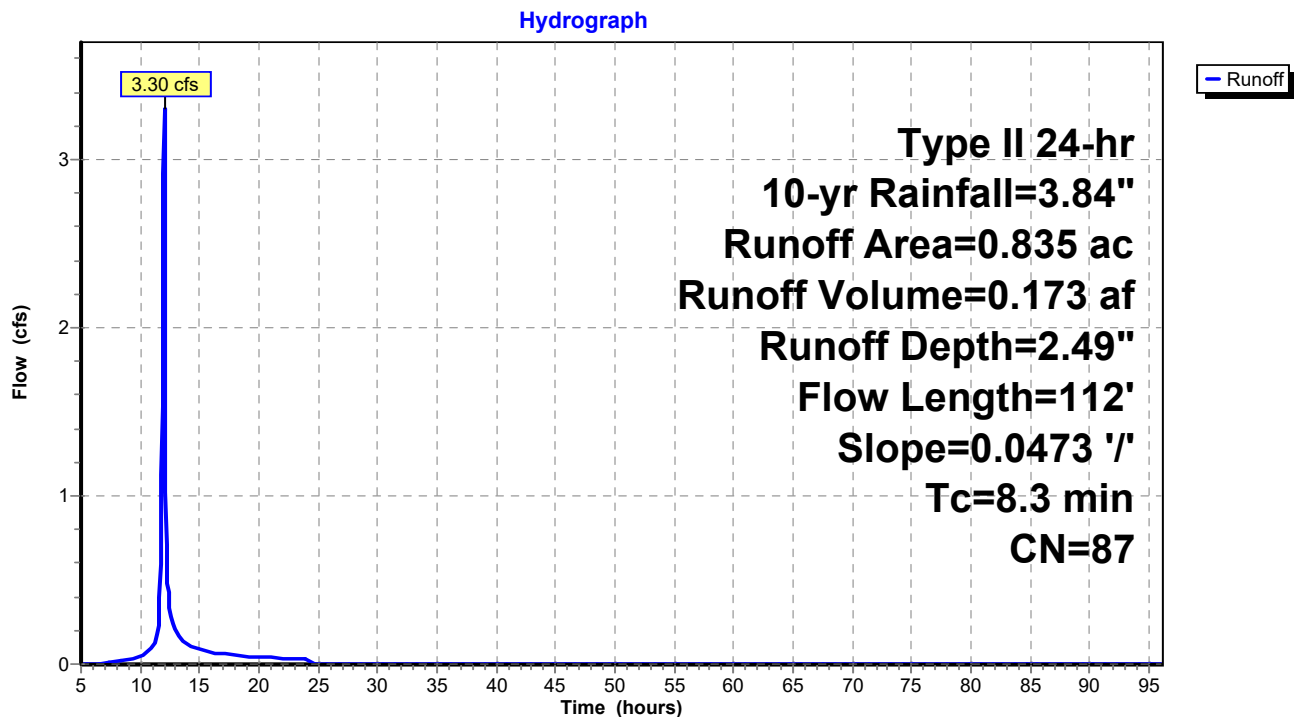
Summary for Subcatchment 1S: Existing East Subcatchment 1 - area matches proposed

Runoff = 3.30 cfs @ 11.99 hrs, Volume= 0.173 af, Depth= 2.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.84"

Area (ac)	CN	Description
0.435	98	Paved parking, gravel parking & roofs
0.400	74	>75% Grass cover, Good, HSG C
0.835	87	Weighted Average
0.400		47.90% Pervious Area
0.435		52.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	112	0.0473	0.22		Sheet Flow, A-B
Grass: Short n= 0.150 P2= 2.67"					

Subcatchment 1S: Existing East Subcatchment 1 - area matches proposed

CJE1542-02R0-PROPOSED-EXISTING

Prepared by CJ Engineering

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Type II 24-hr 10-yr Rainfall=3.84"

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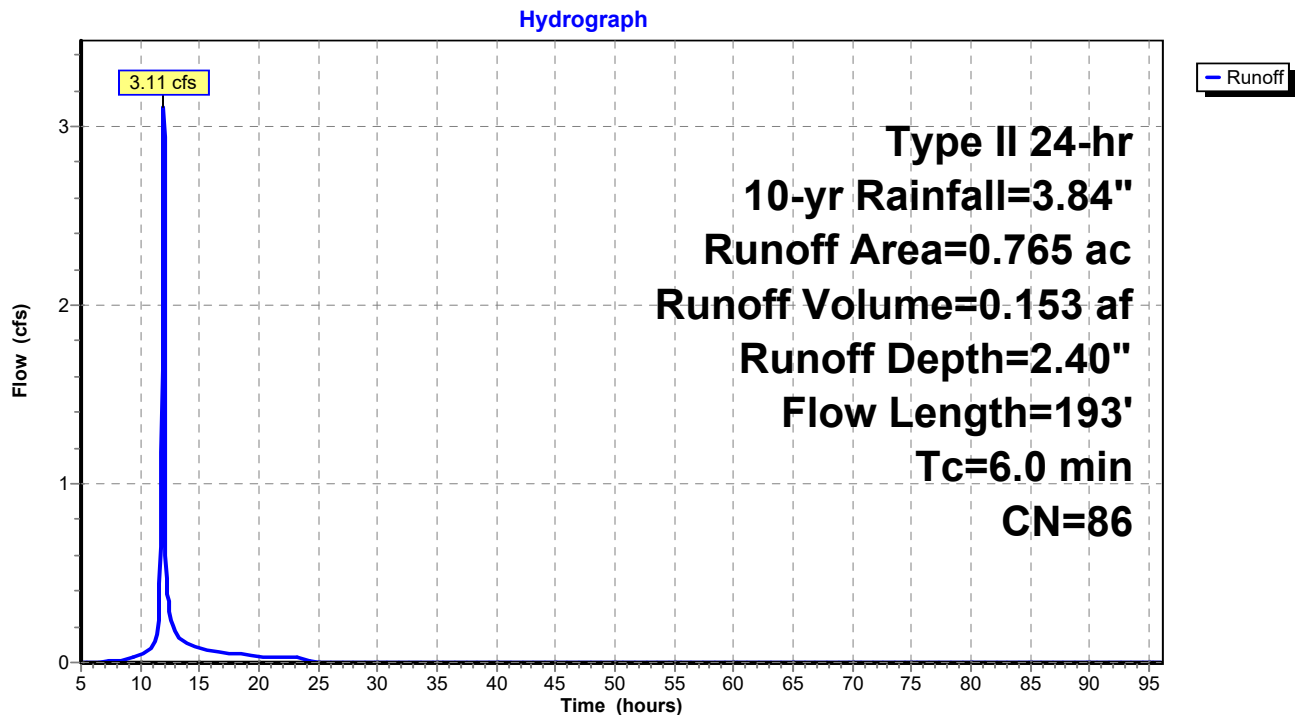
Summary for Subcatchment 3S: Existing West Subcatchment 2 - area matches proposed

Runoff = 3.11 cfs @ 11.97 hrs, Volume= 0.153 af, Depth= 2.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.84"

Area (ac)	CN	Description
0.187	98	Paved parking, gravel parking & roofs
* 0.184	98	Roofs
0.394	74	>75% Grass cover, Good, HSG C
0.765	86	Weighted Average
0.394		51.50% Pervious Area
0.371		48.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.5	47	0.0390	0.17		Sheet Flow, C-D Grass: Short n= 0.150 P2= 2.67"
1.1	82	0.0207	1.22		Sheet Flow, D-E Smooth surfaces n= 0.011 P2= 2.67"
0.4	64	0.0172	2.66		Shallow Concentrated Flow, E-F Paved Kv= 20.3 fps
6.0	193	Total			

Subcatchment 3S: Existing West Subcatchment 2 - area matches proposed

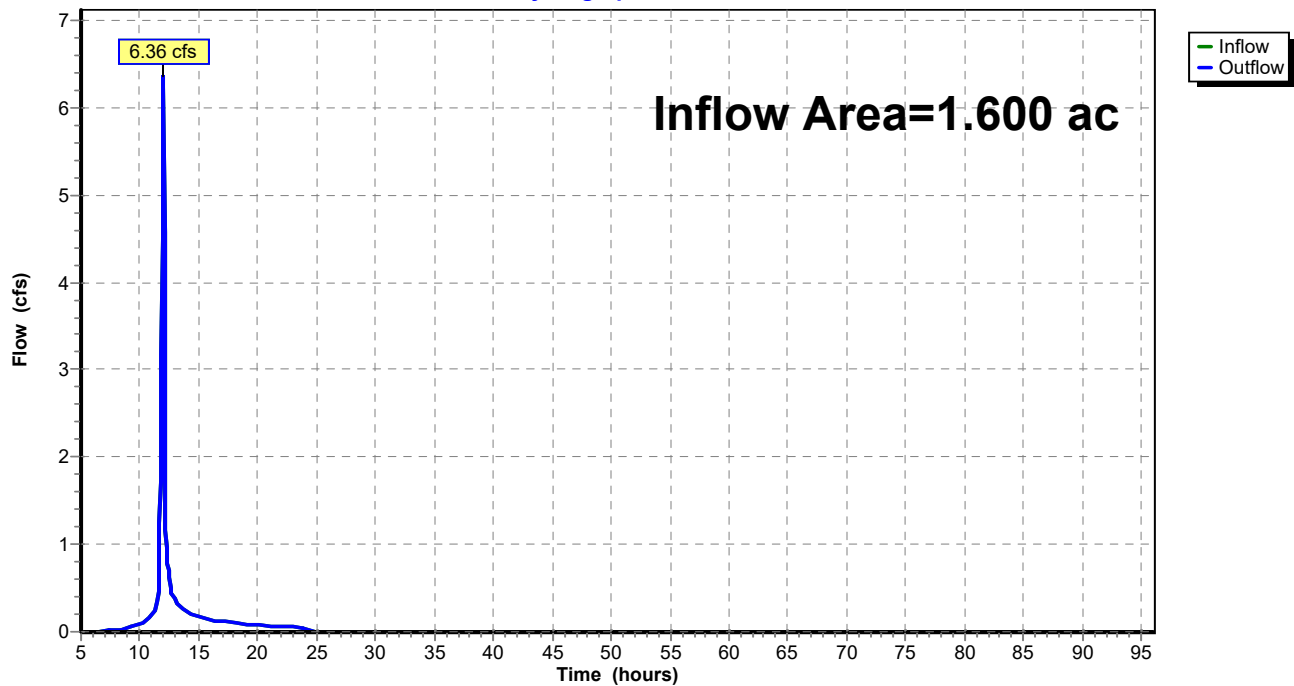
Summary for Reach 4R: Total Existing Flow

Inflow Area = 1.600 ac, 50.38% Impervious, Inflow Depth = 2.45" for 10-yr event
Inflow = 6.36 cfs @ 11.98 hrs, Volume= 0.326 af
Outflow = 6.36 cfs @ 11.98 hrs, Volume= 0.326 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs

Reach 4R: Total Existing Flow

Hydrograph



CJE1542-02R0-PROPOSED-EXISTING

Prepared by CJ Engineering

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Type II 24-hr 100-yr Rainfall=6.40"

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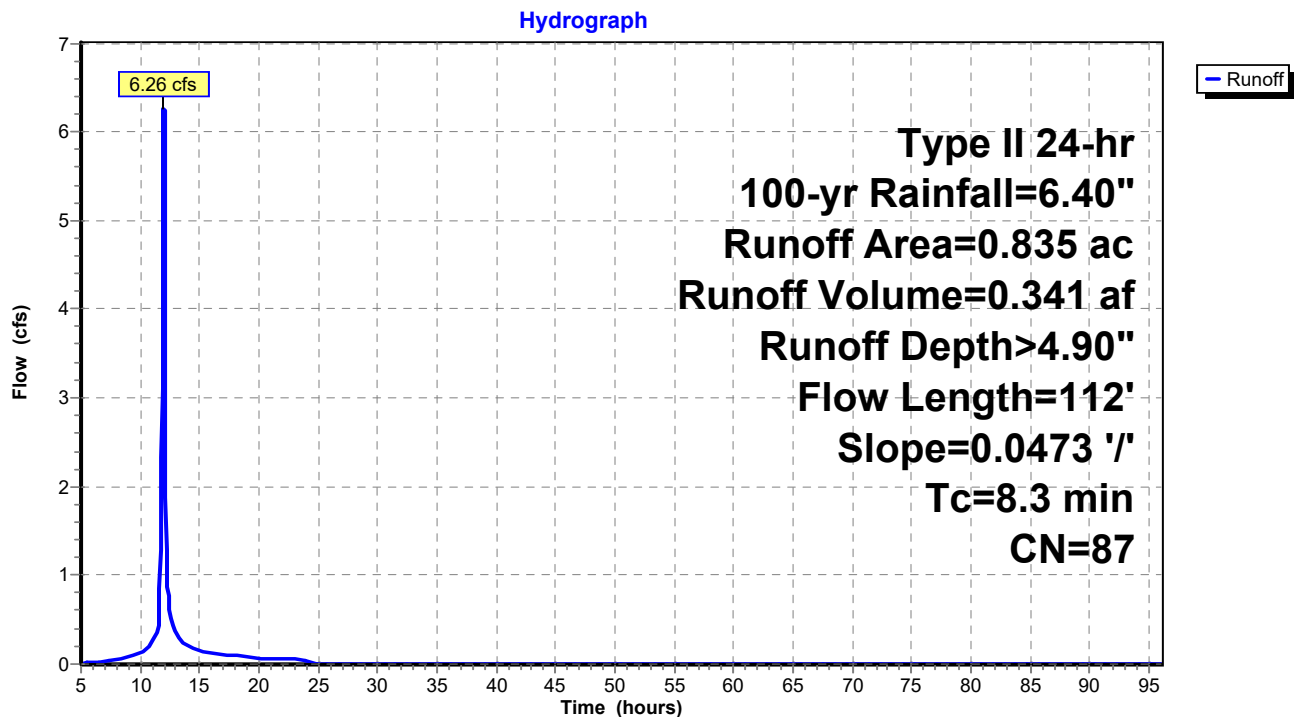
Summary for Subcatchment 1S: Existing East Subcatchment 1 - area matches proposed

Runoff = 6.26 cfs @ 11.99 hrs, Volume= 0.341 af, Depth> 4.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=6.40"

Area (ac)	CN	Description
0.435	98	Paved parking, gravel parking & roofs
0.400	74	>75% Grass cover, Good, HSG C
0.835	87	Weighted Average
0.400		47.90% Pervious Area
0.435		52.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	112	0.0473	0.22		Sheet Flow, A-B
Grass: Short n= 0.150 P2= 2.67"					

Subcatchment 1S: Existing East Subcatchment 1 - area matches proposed

CJE1542-02R0-PROPOSED-EXISTING

Prepared by CJ Engineering

HydroCAD® 10.00-16 s/n 03450 © 2015 HydroCAD Software Solutions LLC

Type II 24-hr 100-yr Rainfall=6.40"

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Summary for Subcatchment 3S: Existing West Subcatchment 2 - area matches proposed

Runoff = 5.98 cfs @ 11.97 hrs, Volume= 0.305 af, Depth> 4.79"

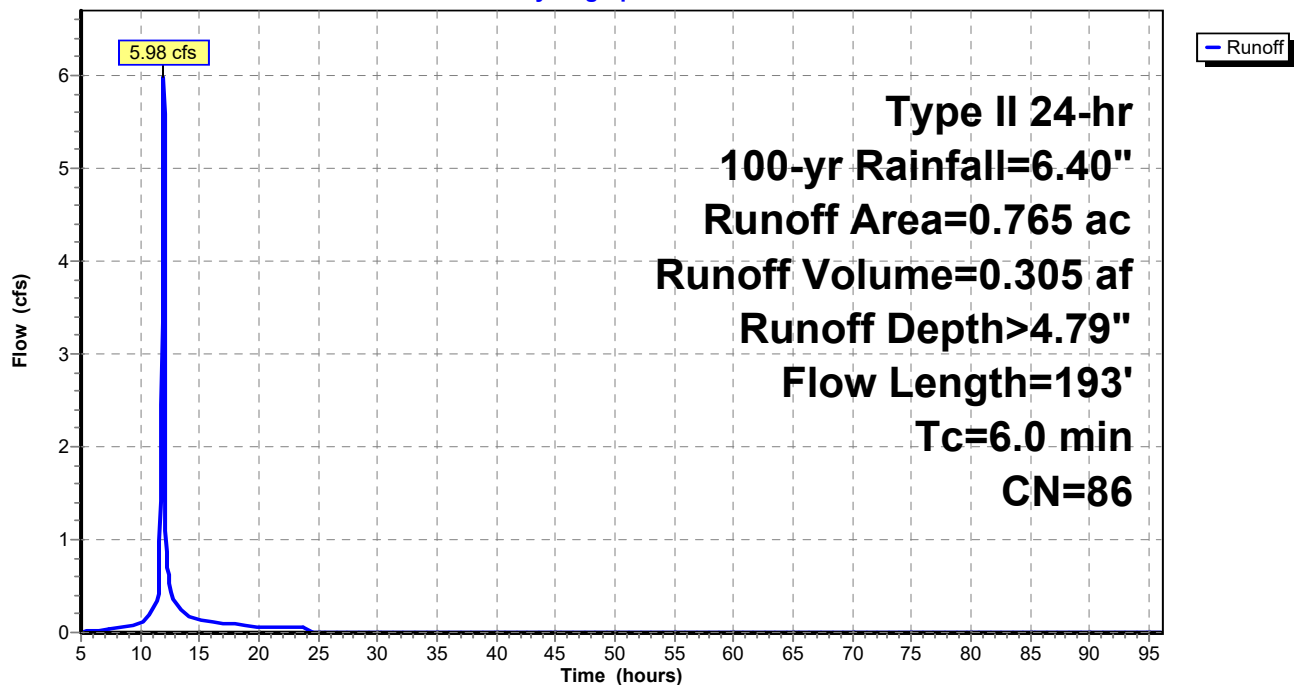
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=6.40"

Area (ac)	CN	Description
0.187	98	Paved parking, gravel parking & roofs
* 0.184	98	Roofs
0.394	74	>75% Grass cover, Good, HSG C
0.765	86	Weighted Average
0.394		51.50% Pervious Area
0.371		48.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.5	47	0.0390	0.17		Sheet Flow, C-D Grass: Short n= 0.150 P2= 2.67"
1.1	82	0.0207	1.22		Sheet Flow, D-E Smooth surfaces n= 0.011 P2= 2.67"
0.4	64	0.0172	2.66		Shallow Concentrated Flow, E-F Paved Kv= 20.3 fps
6.0	193	Total			

Subcatchment 3S: Existing West Subcatchment 2 - area matches proposed

Hydrograph



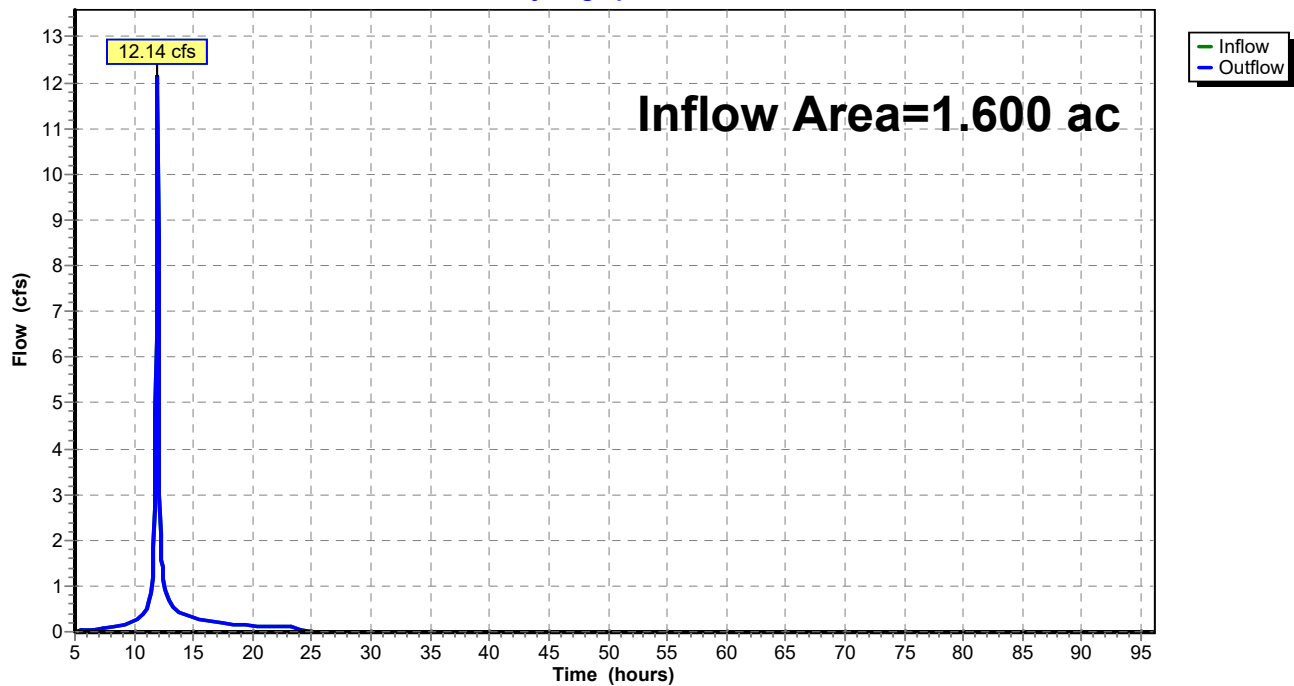
Summary for Reach 4R: Total Existing Flow

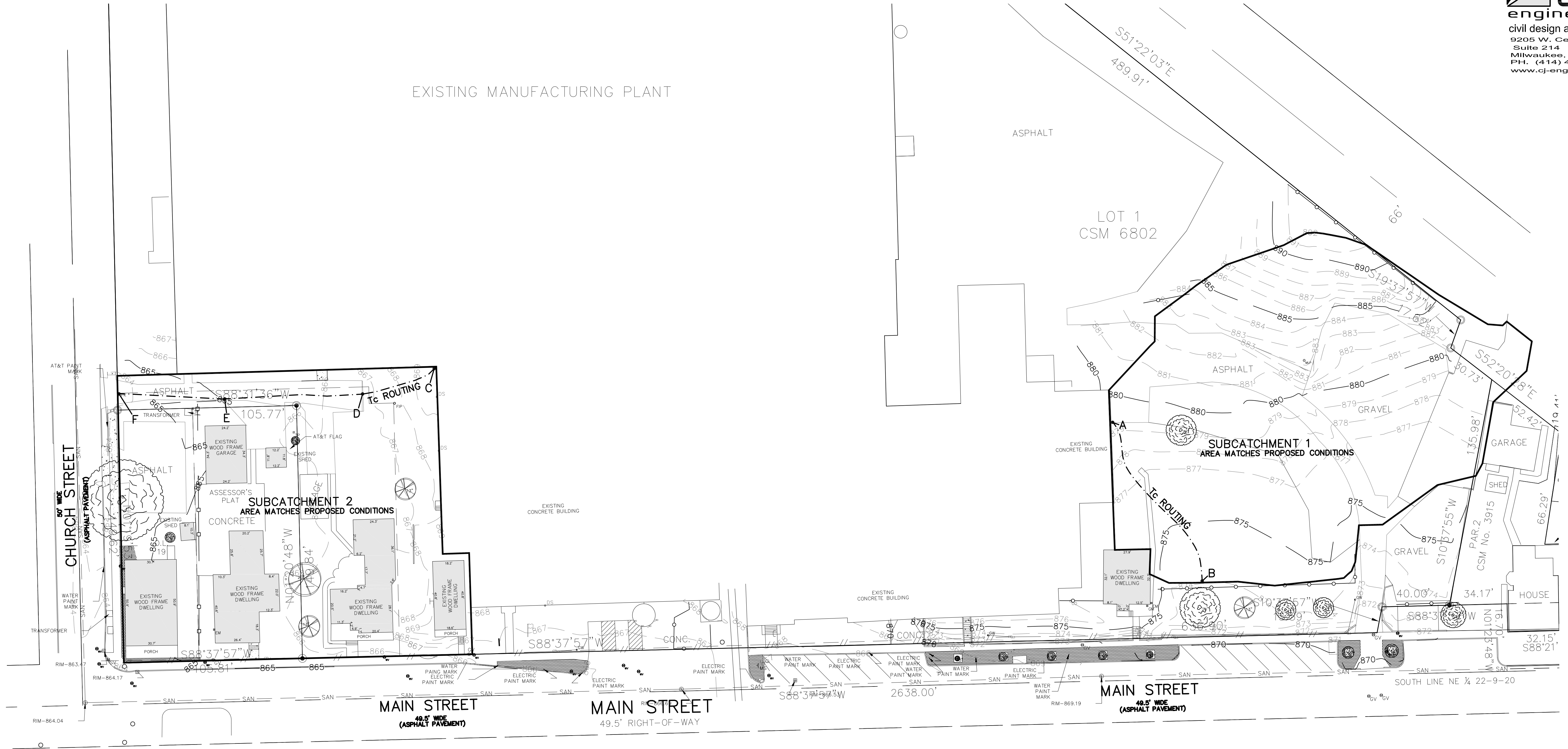
Inflow Area = 1.600 ac, 50.38% Impervious, Inflow Depth > 4.84" for 100-yr event
Inflow = 12.14 cfs @ 11.98 hrs, Volume= 0.646 af
Outflow = 12.14 cfs @ 11.98 hrs, Volume= 0.646 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs

Reach 4R: Total Existing Flow

Hydrograph

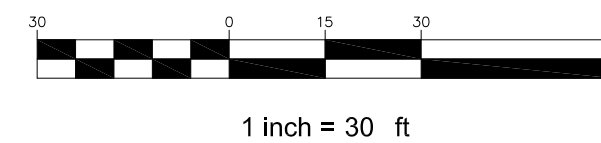




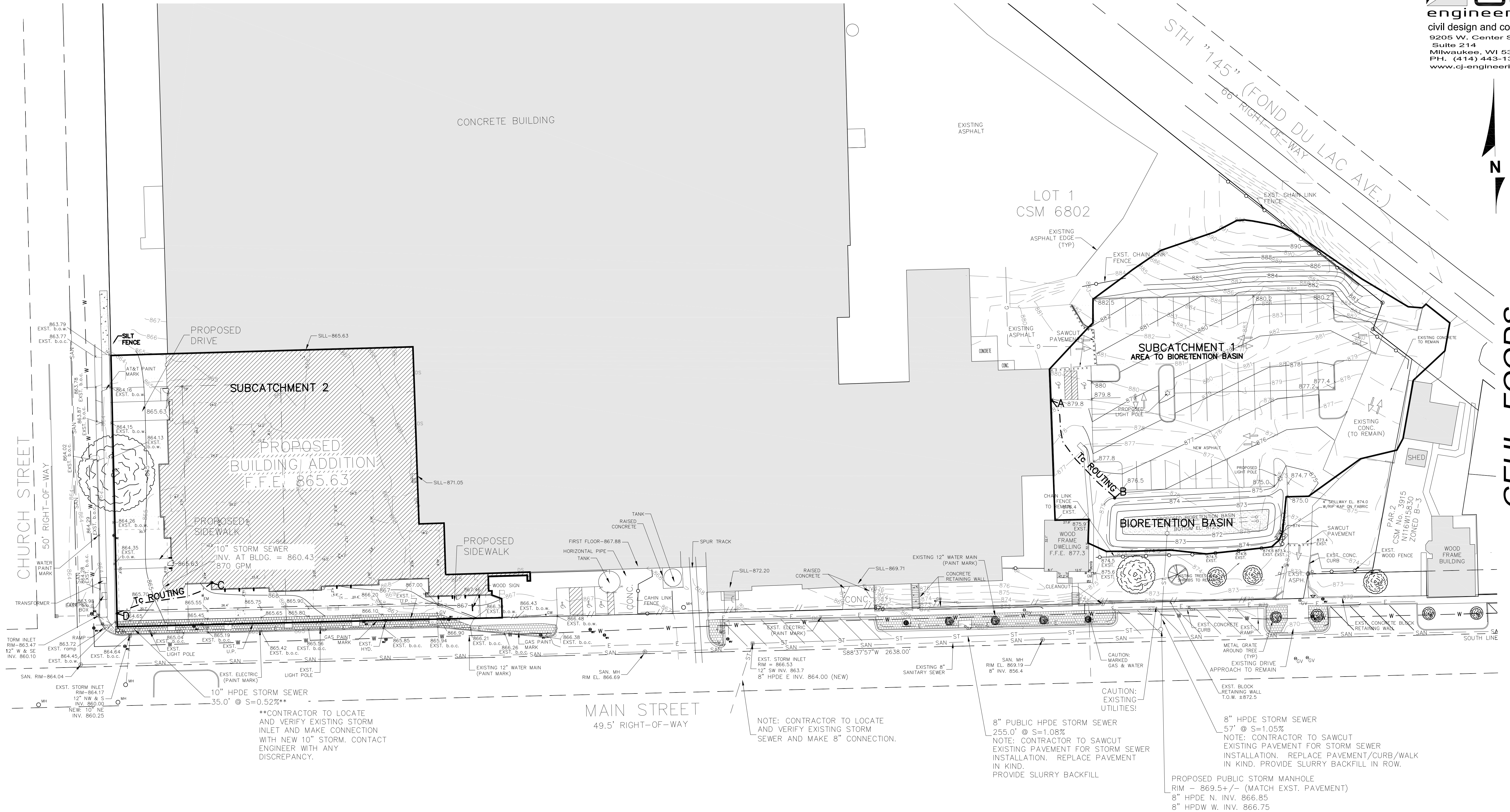
LEGEND

- 864--- EXISTING CONTOUR
- 863--- PROPOSED CONTOUR
- ST--- PROPOSED ELEVATION
- ST--- PROPOSED STORM SEWER
- ST--- PROPOSED SILT FENCE

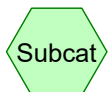
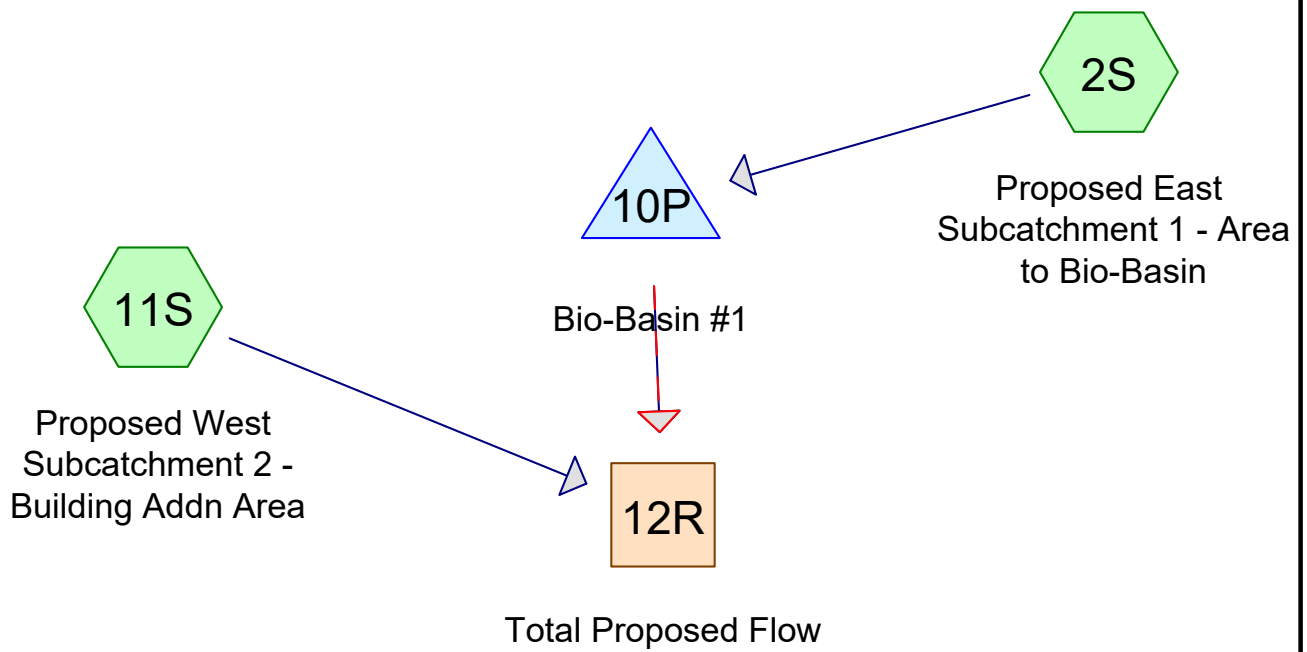
GRAPHIC SCALE



EXISTING CONDITIONS



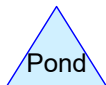
CJE NO.: I542-02R2
JULY 15, 2019
AUGUST 29, 2019
SEPTEMBER 5, 2019



Subcat



Reach



Pond



Link

Routing Diagram for CJE1542-02R1-PROPOSED-EXISTING
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Page 2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.522	74	>75% Grass cover, Good, HSG C (2S, 11S)
0.510	98	Paved parking & roofs (2S)
0.057	98	Proposed Drives-Walks (11S)
0.556	98	Proposed Roof (11S)
1.645	90	TOTAL AREA

CJE1542-02R1-PROPOSED-EXISTING

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Type II 24-hr 2-yr Rainfall=2.67"

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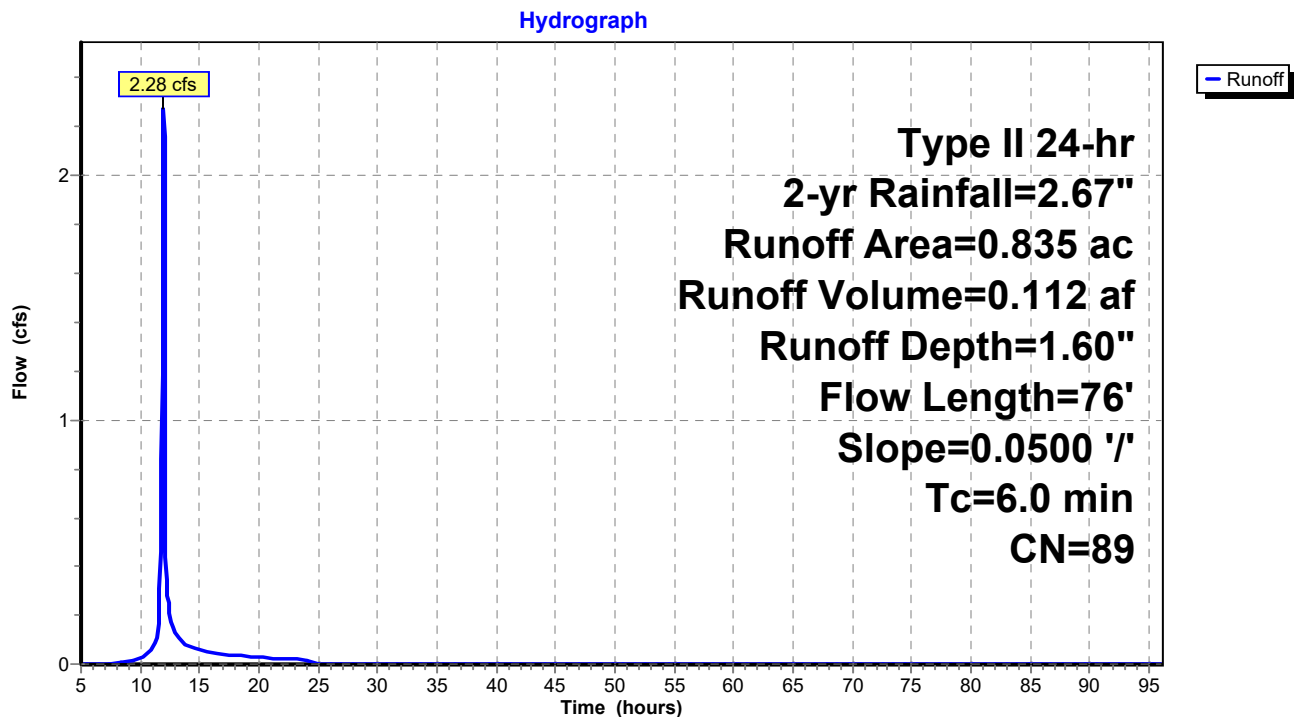
Summary for Subcatchment 2S: Proposed East Subcatchment 1 - Area to Bio-Basin

Runoff = 2.28 cfs @ 11.97 hrs, Volume= 0.112 af, Depth= 1.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.67"

Area (ac)	CN	Description
0.510	98	Paved parking & roofs
0.325	74	>75% Grass cover, Good, HSG C
0.835	89	Weighted Average
0.325		38.92% Pervious Area
0.510		61.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	76	0.0500	0.21		Sheet Flow, A-B
Grass: Short n= 0.150 P2= 2.67"					

Subcatchment 2S: Proposed East Subcatchment 1 - Area to Bio-Basin

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Type II 24-hr 2-yr Rainfall=2.67"

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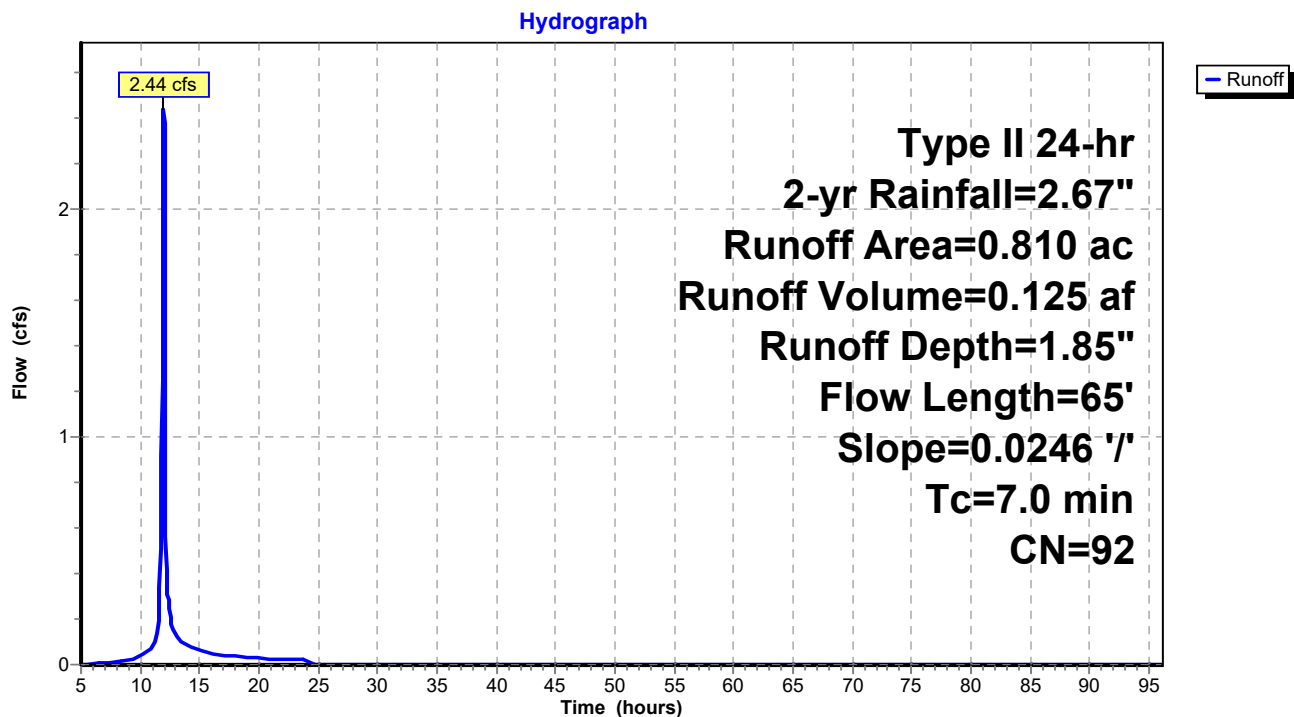
Summary for Subcatchment 11S: Proposed West Subcatchment 2 - Building Addn Area

Runoff = 2.44 cfs @ 11.98 hrs, Volume= 0.125 af, Depth= 1.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.67"

Area (ac)	CN	Description
* 0.556	98	Proposed Roof
* 0.057	98	Proposed Drives-Walks
0.197	74	>75% Grass cover, Good, HSG C
0.810	92	Weighted Average
0.197		24.32% Pervious Area
0.613		75.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	65	0.0246	0.15		Sheet Flow, C-D
Grass: Short n= 0.150 P2= 2.67"					

Subcatchment 11S: Proposed West Subcatchment 2 - Building Addn Area

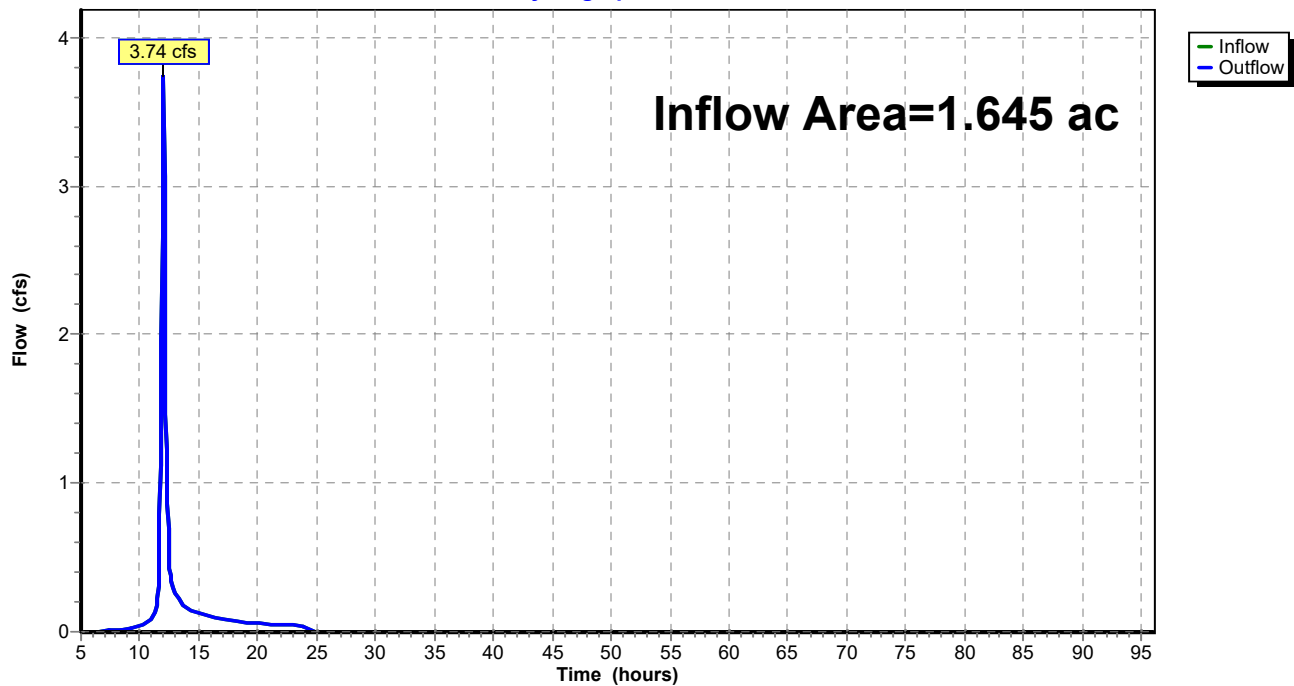
Summary for Reach 12R: Total Proposed Flow

Inflow Area = 1.645 ac, 68.27% Impervious, Inflow Depth = 1.68" for 2-yr event
Inflow = 3.74 cfs @ 11.99 hrs, Volume= 0.230 af
Outflow = 3.74 cfs @ 11.99 hrs, Volume= 0.230 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs

Reach 12R: Total Proposed Flow

Hydrograph



Summary for Pond 10P: Bio-Basin #1

Inflow Area = 0.835 ac, 61.08% Impervious, Inflow Depth = 1.60" for 2-yr event
 Inflow = 2.28 cfs @ 11.97 hrs, Volume= 0.112 af
 Outflow = 1.36 cfs @ 12.05 hrs, Volume= 0.105 af, Atten= 40%, Lag= 5.1 min
 Primary = 1.36 cfs @ 12.05 hrs, Volume= 0.105 af
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
 Peak Elev= 872.06' @ 12.05 hrs Surf.Area= 1,229 sf Storage= 1,102 cf

Plug-Flow detention time= 59.4 min calculated for 0.105 af (94% of inflow)
 Center-of-Mass det. time= 25.4 min (840.8 - 815.4)

Volume	Invert	Avail.Storage	Storage Description	
#1	869.00'	6,876 cf	Custom Stage Data (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
869.00	1,180	0.0	0	0
869.01	1,180	33.0	4	4
870.00	1,180	33.0	386	389
870.01	1,180	27.0	3	393
871.99	1,180	27.0	631	1,023
872.00	1,180	100.0	12	1,035
873.00	2,060	100.0	1,620	2,655
874.00	3,055	100.0	2,558	5,213
874.50	3,600	100.0	1,664	6,876

Device	Routing	Invert	Outlet Devices
#1	Primary	867.45'	8.0" Round Culvert L= 312.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 867.45' / 864.00' S= 0.0111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	869.75'	6.0" Round Culvert L= 5.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 869.75' / 869.65' S= 0.0200 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#3	Device 1	872.50'	6.0" Vert. Orifice/Grate C= 0.600
#4	Device 1	873.85'	24.0" Horiz. Orifice/Grate C= 0.600 in 24.0" Grate (100% open area) Limited to weir flow at low heads
#5	Secondary	874.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

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Type II 24-hr 2-yr Rainfall=2.67"

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Primary OutFlow Max=1.35 cfs @ 12.05 hrs HW=872.05' (Free Discharge)

1=Culvert (Passes 1.35 cfs of 1.78 cfs potential flow)

2=Culvert (Inlet Controls 1.35 cfs @ 6.90 fps)

3=Orifice/Grate (Controls 0.00 cfs)

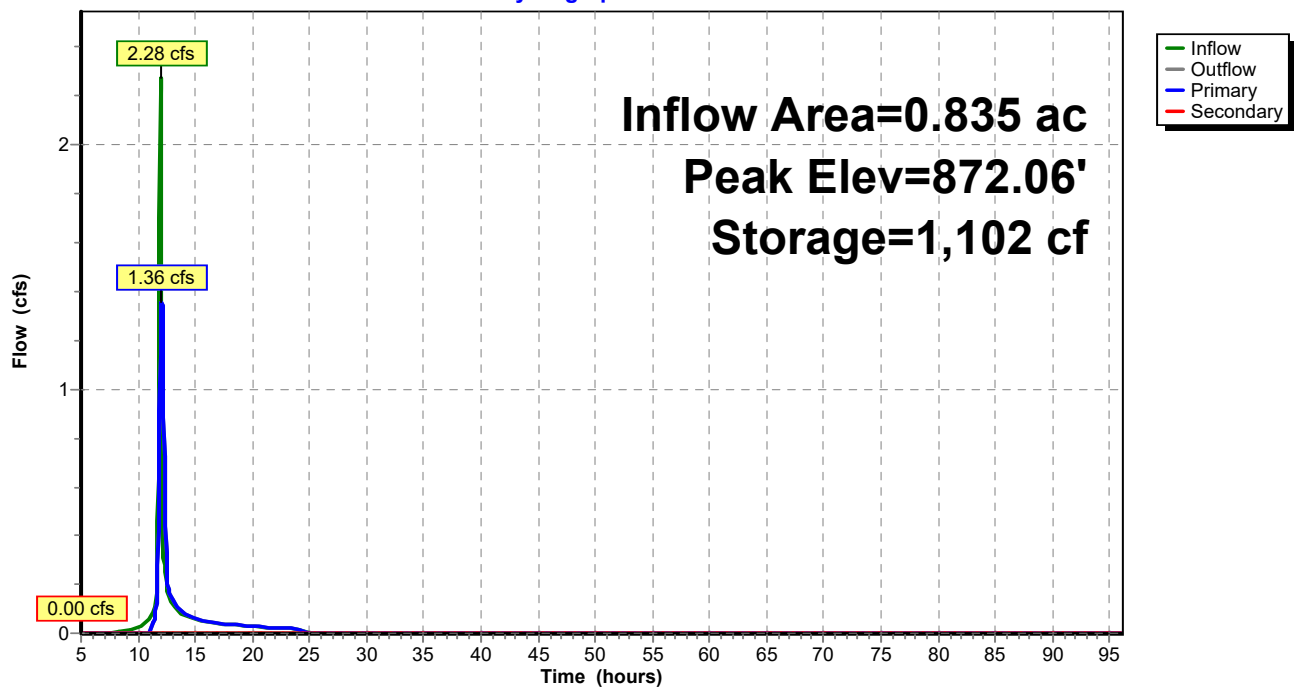
4=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=869.00' (Free Discharge)

5=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 10P: Bio-Basin #1

Hydrograph



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Type II 24-hr 10-yr Rainfall=3.84"

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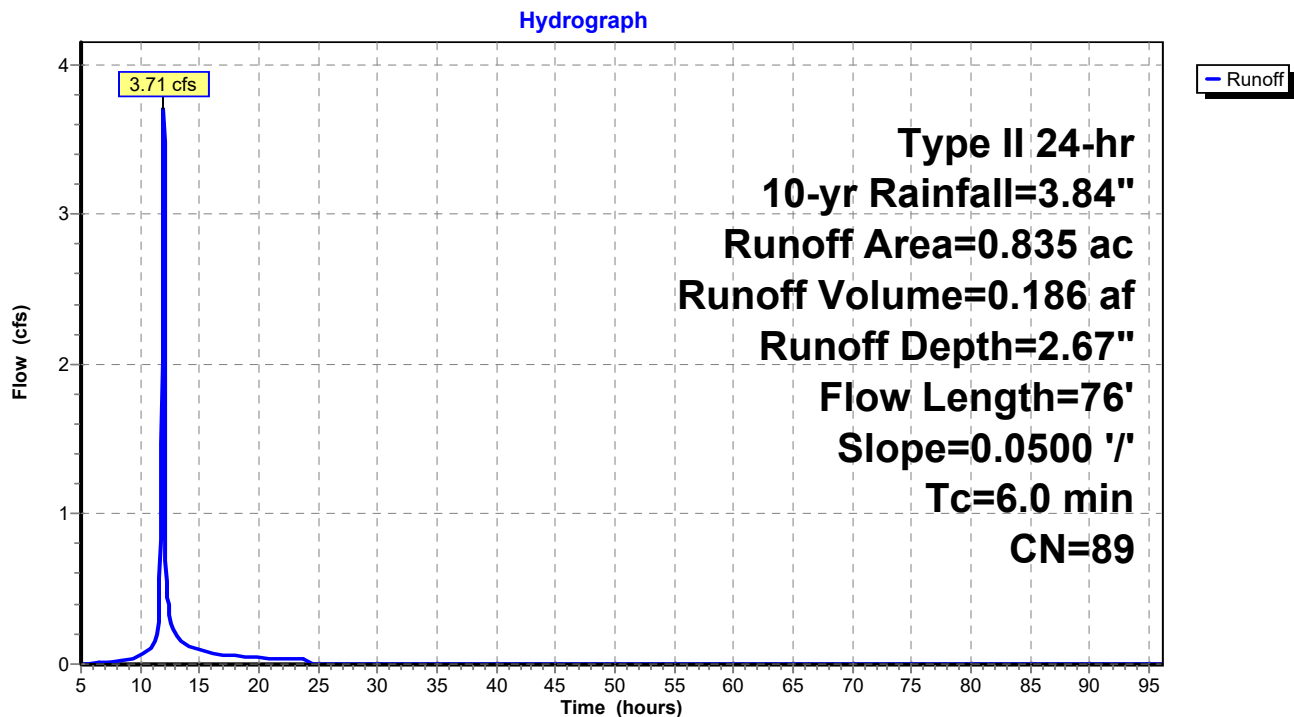
Summary for Subcatchment 2S: Proposed East Subcatchment 1 - Area to Bio-Basin

Runoff = 3.71 cfs @ 11.97 hrs, Volume= 0.186 af, Depth= 2.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.84"

Area (ac)	CN	Description
0.510	98	Paved parking & roofs
0.325	74	>75% Grass cover, Good, HSG C
0.835	89	Weighted Average
0.325		38.92% Pervious Area
0.510		61.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	76	0.0500	0.21		Sheet Flow, A-B
Grass: Short n= 0.150 P2= 2.67"					

Subcatchment 2S: Proposed East Subcatchment 1 - Area to Bio-Basin

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Type II 24-hr 10-yr Rainfall=3.84"

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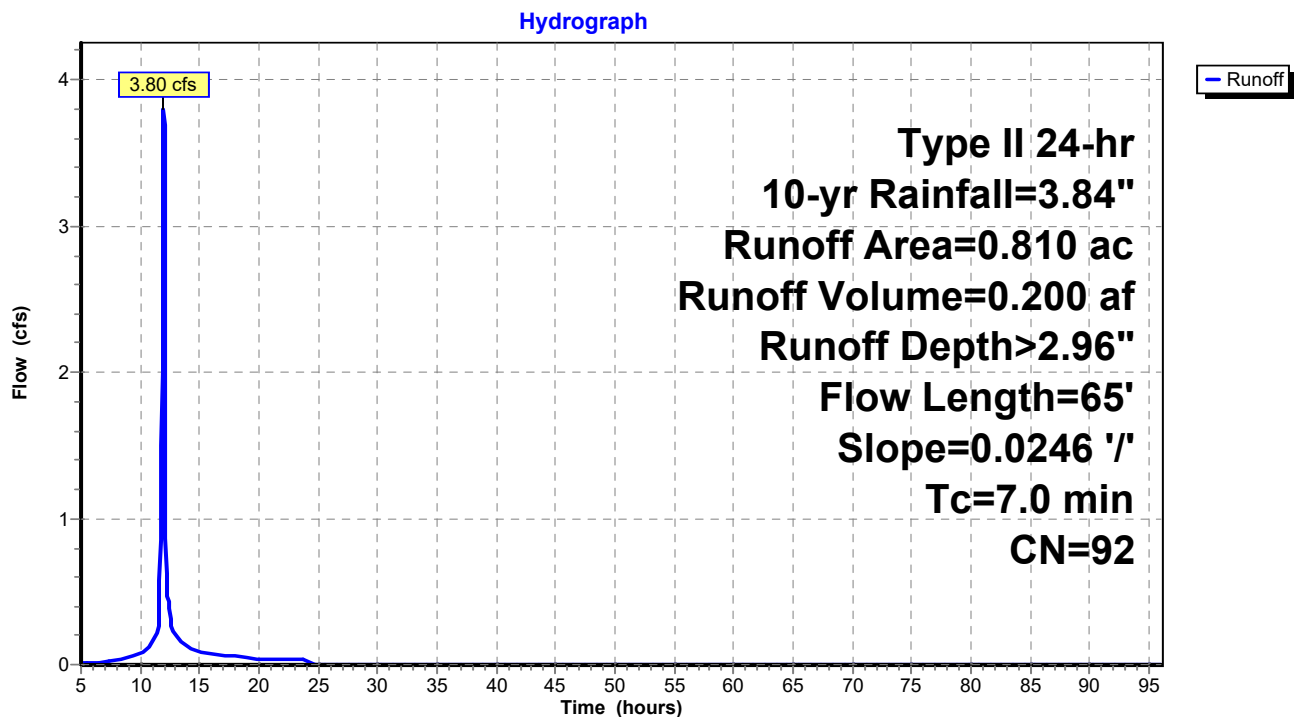
Summary for Subcatchment 11S: Proposed West Subcatchment 2 - Building Addn Area

Runoff = 3.80 cfs @ 11.98 hrs, Volume= 0.200 af, Depth> 2.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.84"

Area (ac)	CN	Description
* 0.556	98	Proposed Roof
* 0.057	98	Proposed Drives-Walks
0.197	74	>75% Grass cover, Good, HSG C
0.810	92	Weighted Average
0.197		24.32% Pervious Area
0.613		75.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	65	0.0246	0.15		Sheet Flow, C-D
Grass: Short n= 0.150 P2= 2.67"					

Subcatchment 11S: Proposed West Subcatchment 2 - Building Addn Area

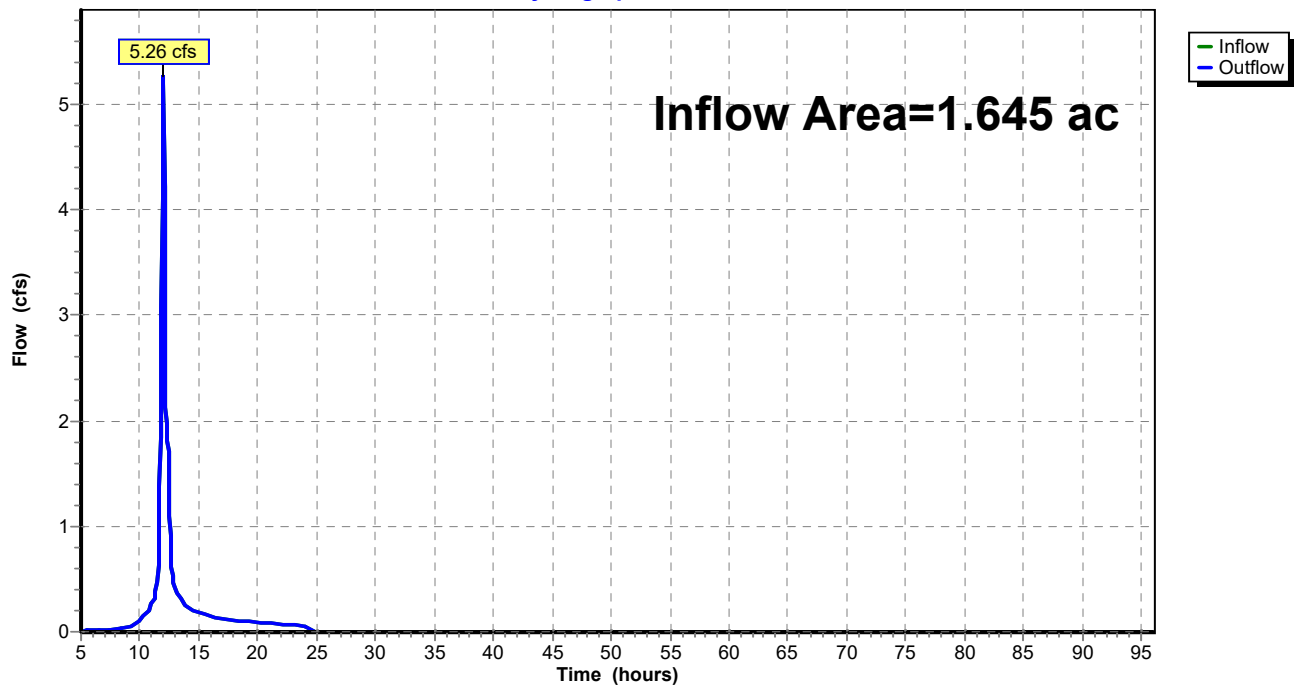
Summary for Reach 12R: Total Proposed Flow

Inflow Area = 1.645 ac, 68.27% Impervious, Inflow Depth > 2.77" for 10-yr event
Inflow = 5.26 cfs @ 11.98 hrs, Volume= 0.379 af
Outflow = 5.26 cfs @ 11.98 hrs, Volume= 0.379 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs

Reach 12R: Total Proposed Flow

Hydrograph



CJE1542-02R1-PROPOSED-EXISTING

Type II 24-hr 10-yr Rainfall=3.84"

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Summary for Pond 10P: Bio-Basin #1

Inflow Area = 0.835 ac, 61.08% Impervious, Inflow Depth = 2.67" for 10-yr event
 Inflow = 3.71 cfs @ 11.97 hrs, Volume= 0.186 af
 Outflow = 1.60 cfs @ 12.08 hrs, Volume= 0.179 af, Atten= 57%, Lag= 6.8 min
 Primary = 1.60 cfs @ 12.08 hrs, Volume= 0.179 af
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
 Peak Elev= 872.65' @ 12.08 hrs Surf.Area= 1,752 sf Storage= 1,988 cf

Plug-Flow detention time= 45.0 min calculated for 0.179 af (96% of inflow)
 Center-of-Mass det. time= 23.8 min (824.7 - 800.9)

Volume	Invert	Avail.Storage	Storage Description
#1	869.00'	6,876 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
869.00	1,180	0.0	0	0
869.01	1,180	33.0	4	4
870.00	1,180	33.0	386	389
870.01	1,180	27.0	3	393
871.99	1,180	27.0	631	1,023
872.00	1,180	100.0	12	1,035
873.00	2,060	100.0	1,620	2,655
874.00	3,055	100.0	2,558	5,213
874.50	3,600	100.0	1,664	6,876

Device	Routing	Invert	Outlet Devices
#1	Primary	867.45'	8.0" Round Culvert L= 312.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 867.45' / 864.00' S= 0.0111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	869.75'	6.0" Round Culvert L= 5.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 869.75' / 869.65' S= 0.0200 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#3	Device 1	872.50'	6.0" Vert. Orifice/Grate C= 0.600
#4	Device 1	873.85'	24.0" Horiz. Orifice/Grate C= 0.600 in 24.0" Grate (100% open area) Limited to weir flow at low heads
#5	Secondary	874.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

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Type II 24-hr 10-yr Rainfall=3.84"

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Primary OutFlow Max=1.59 cfs @ 12.08 hrs HW=872.64' (Free Discharge)

1=Culvert (Passes 1.59 cfs of 1.85 cfs potential flow)

2=Culvert (Inlet Controls 1.54 cfs @ 7.82 fps)

3=Orifice/Grate (Orifice Controls 0.06 cfs @ 1.28 fps)

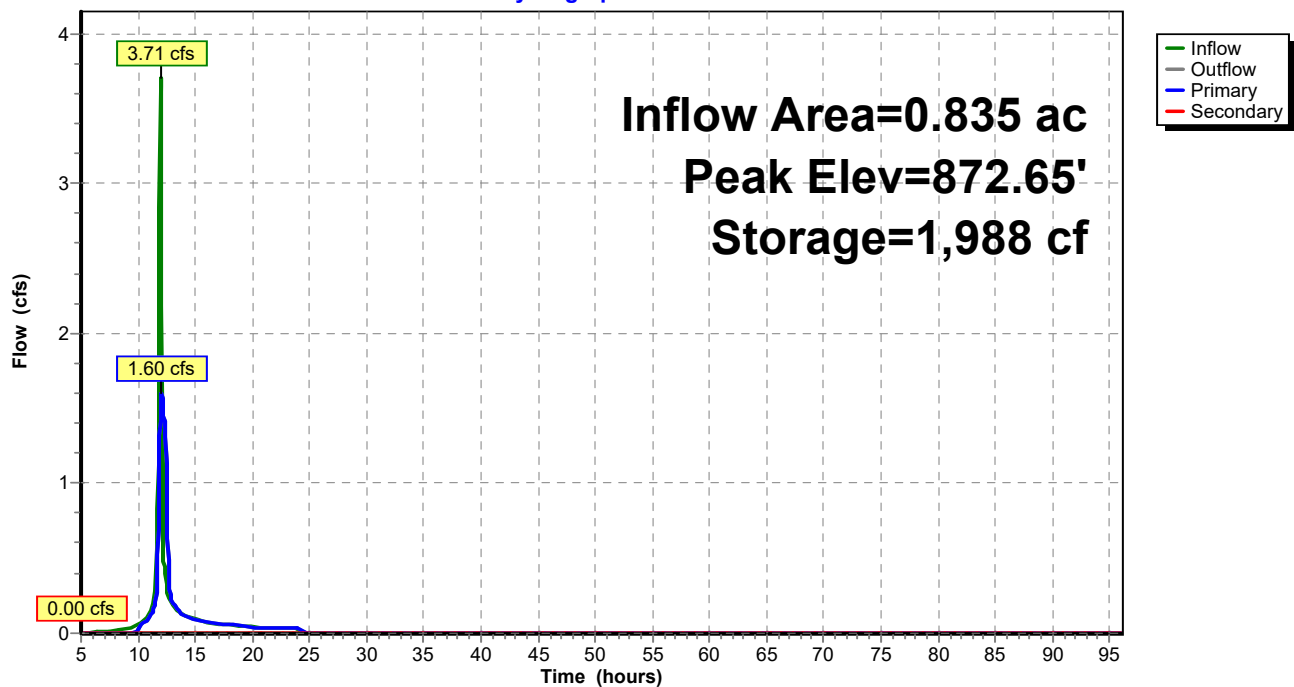
4=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=869.00' (Free Discharge)

5=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 10P: Bio-Basin #1

Hydrograph



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Type II 24-hr 100-yr Rainfall=6.40"

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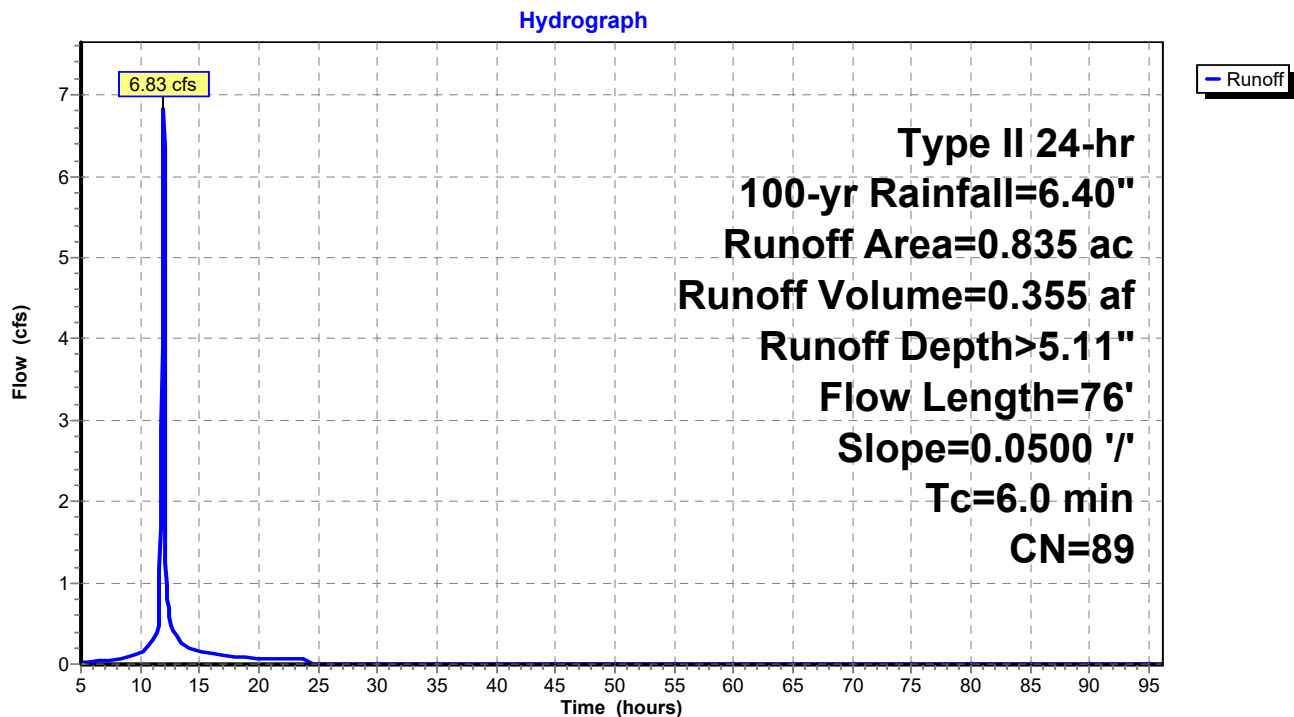
Summary for Subcatchment 2S: Proposed East Subcatchment 1 - Area to Bio-Basin

Runoff = 6.83 cfs @ 11.96 hrs, Volume= 0.355 af, Depth> 5.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=6.40"

Area (ac)	CN	Description
0.510	98	Paved parking & roofs
0.325	74	>75% Grass cover, Good, HSG C
0.835	89	Weighted Average
0.325		38.92% Pervious Area
0.510		61.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	76	0.0500	0.21		Sheet Flow, A-B
Grass: Short n= 0.150 P2= 2.67"					

Subcatchment 2S: Proposed East Subcatchment 1 - Area to Bio-Basin

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Type II 24-hr 100-yr Rainfall=6.40"

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Summary for Subcatchment 11S: Proposed West Subcatchment 2 - Building Addn Area

Runoff = 6.73 cfs @ 11.98 hrs, Volume= 0.366 af, Depth> 5.42"

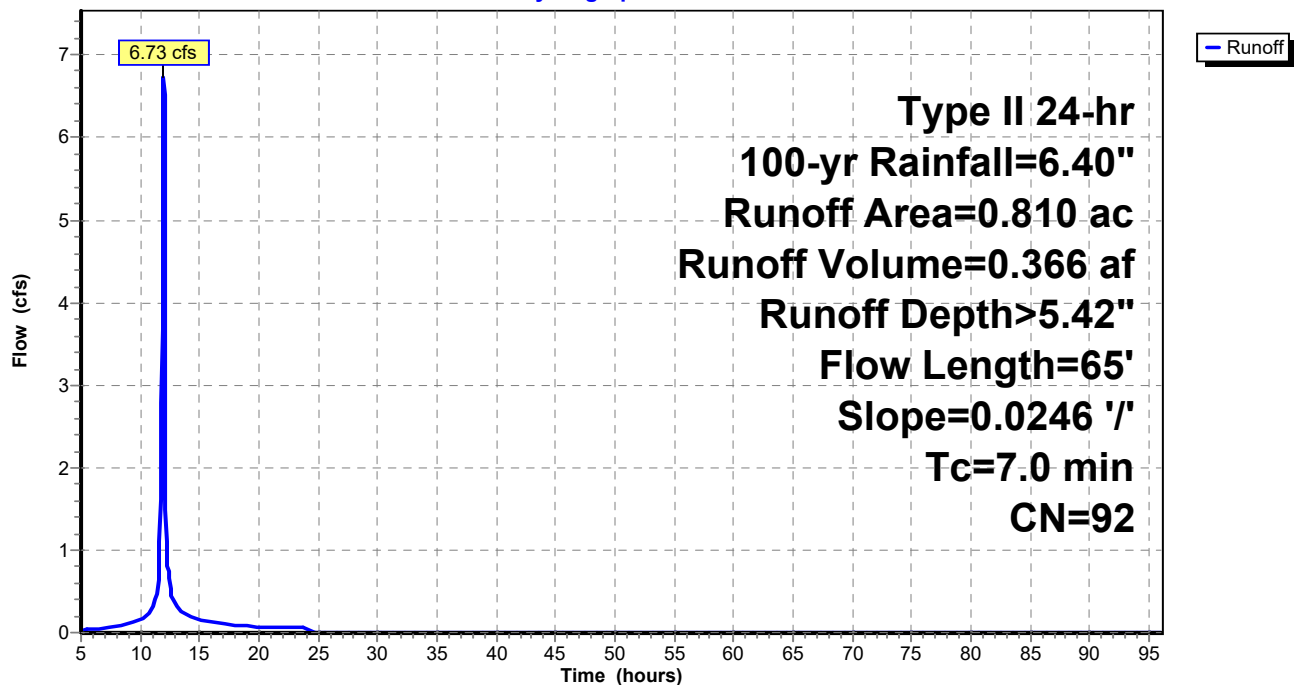
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=6.40"

Area (ac)	CN	Description
* 0.556	98	Proposed Roof
* 0.057	98	Proposed Drives-Walks
0.197	74	>75% Grass cover, Good, HSG C
0.810	92	Weighted Average
0.197		24.32% Pervious Area
0.613		75.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	65	0.0246	0.15		Sheet Flow, C-D
Grass: Short n= 0.150 P2= 2.67"					

Subcatchment 11S: Proposed West Subcatchment 2 - Building Addn Area

Hydrograph



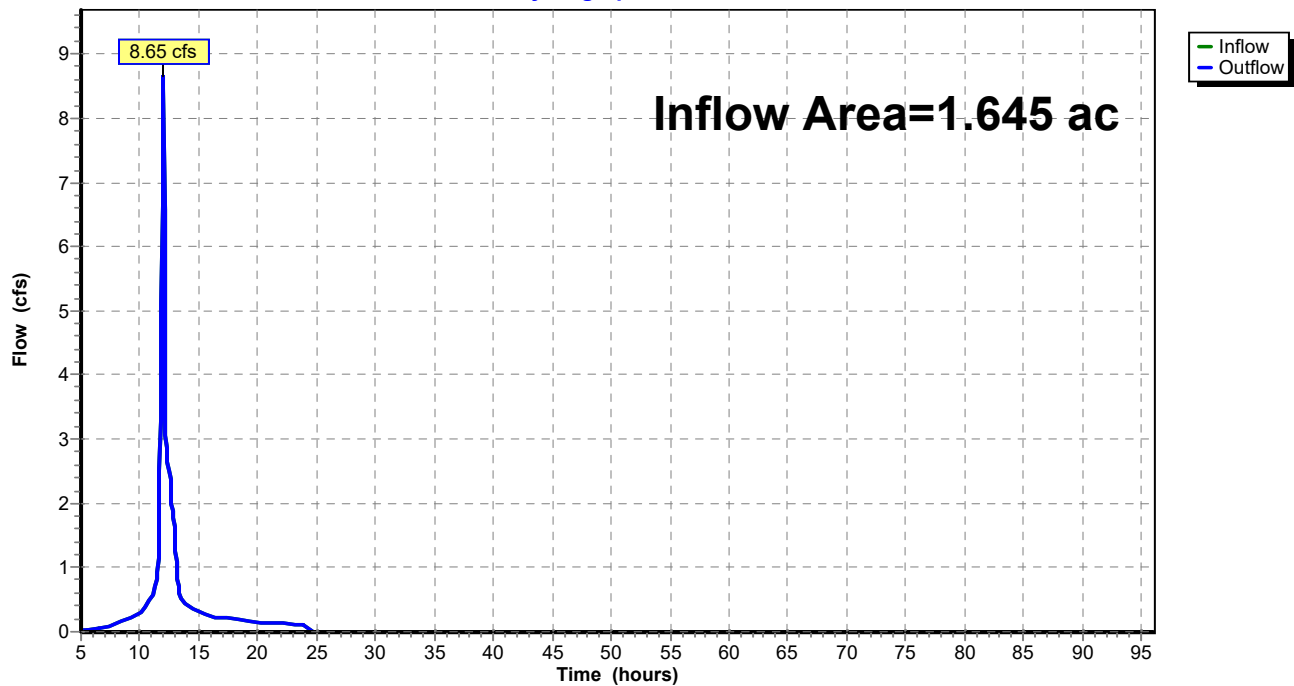
Summary for Reach 12R: Total Proposed Flow

Inflow Area = 1.645 ac, 68.27% Impervious, Inflow Depth > 5.21" for 100-yr event
Inflow = 8.65 cfs @ 11.98 hrs, Volume= 0.715 af
Outflow = 8.65 cfs @ 11.98 hrs, Volume= 0.715 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs

Reach 12R: Total Proposed Flow

Hydrograph



Summary for Pond 10P: Bio-Basin #1

Inflow Area = 0.835 ac, 61.08% Impervious, Inflow Depth > 5.11" for 100-yr event
 Inflow = 6.83 cfs @ 11.96 hrs, Volume= 0.355 af
 Outflow = 1.97 cfs @ 12.11 hrs, Volume= 0.349 af, Atten= 71%, Lag= 8.9 min
 Primary = 1.97 cfs @ 12.11 hrs, Volume= 0.349 af
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-96.00 hrs, dt= 0.05 hrs
 Peak Elev= 873.71' @ 12.11 hrs Surf.Area= 2,771 sf Storage= 4,380 cf

Plug-Flow detention time= 36.9 min calculated for 0.349 af (98% of inflow)
 Center-of-Mass det. time= 24.3 min (808.6 - 784.3)

Volume	Invert	Avail.Storage	Storage Description	
#1	869.00'	6,876 cf	Custom Stage Data (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
869.00	1,180	0.0	0	0
869.01	1,180	33.0	4	4
870.00	1,180	33.0	386	389
870.01	1,180	27.0	3	393
871.99	1,180	27.0	631	1,023
872.00	1,180	100.0	12	1,035
873.00	2,060	100.0	1,620	2,655
874.00	3,055	100.0	2,558	5,213
874.50	3,600	100.0	1,664	6,876

Device	Routing	Invert	Outlet Devices
#1	Primary	867.45'	8.0" Round Culvert L= 312.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 867.45' / 864.00' S= 0.0111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	869.75'	6.0" Round Culvert L= 5.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 869.75' / 869.65' S= 0.0200 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#3	Device 1	872.50'	6.0" Vert. Orifice/Grate C= 0.600
#4	Device 1	873.85'	24.0" Horiz. Orifice/Grate C= 0.600 in 24.0" Grate (100% open area) Limited to weir flow at low heads
#5	Secondary	874.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

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Type II 24-hr 100-yr Rainfall=6.40"

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Primary OutFlow Max=1.97 cfs @ 12.11 hrs HW=873.71' (Free Discharge)

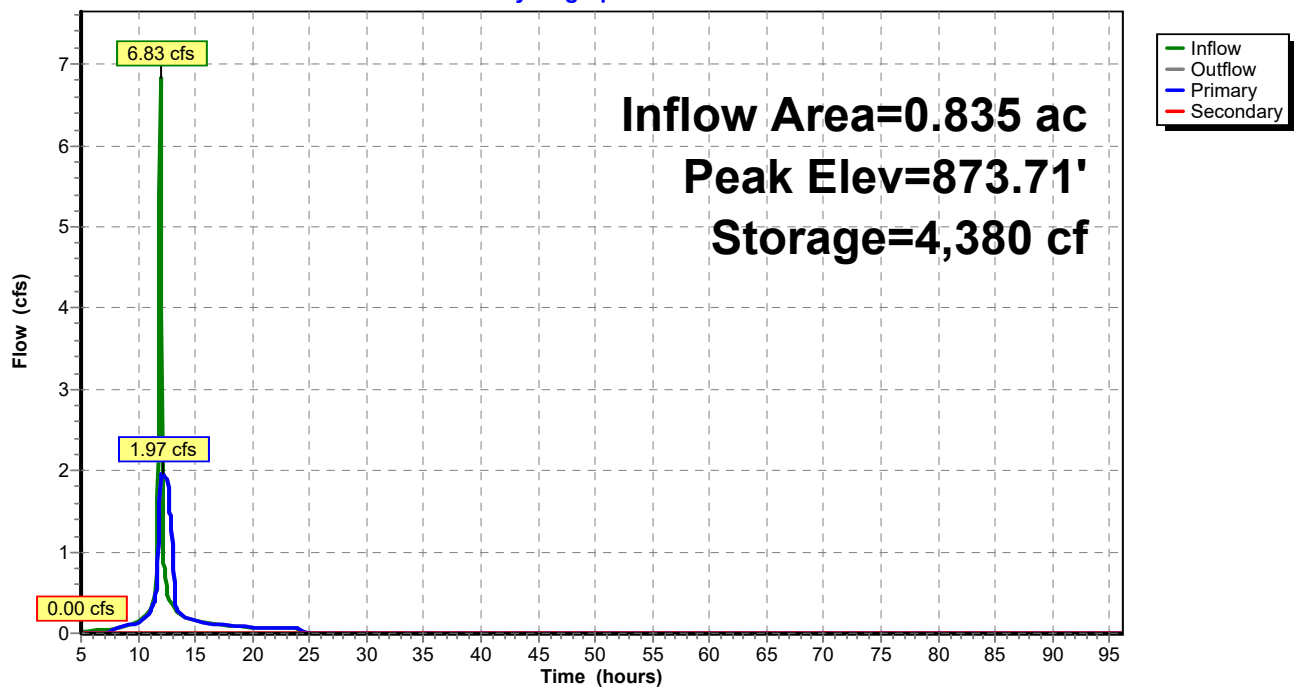
- 1=Culvert (Barrel Controls 1.97 cfs @ 5.64 fps)
- 2=Culvert (Passes < 1.82 cfs potential flow)
- 3=Orifice/Grate (Passes < 0.92 cfs potential flow)
- 4=Orifice/Grate (Controls 0.00 cfs)

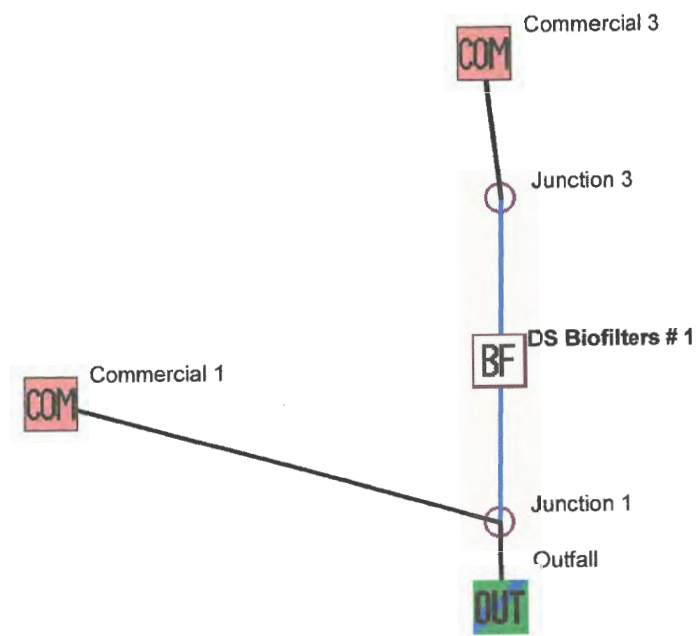
Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=869.00' (Free Discharge)

- 5=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 10P: Bio-Basin #1

Hydrograph





Data file name: Z:\WinSLAMM\CJE1542-02R1.mdb
 WinSLAMM Version 10.2.0
 Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
 Particulate Solids Concentration file name: C:\WinSLAMM Files\w10.1 WI_AVG01.pscx
 Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
 Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
 Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
 Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
 Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
 Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
 Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
 Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
 Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdxd
 Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
 Cost Data file name:
 Seed for random number generator: -42
 Study period starting date: 01/05/69 Study period ending date: 12/31/69
 Start of Winter Season: 12/06 End of Winter Season: 03/28
 Date: 08-29-2019 Time: 08:46:08
 Site information:

LU# 1 - Commercial: Commercial 1 Total area (ac): 0.057
 13 - Paved Parking 1: 0.057 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Commercial: Commercial 3 Total area (ac): 0.835
 13 - Paved Parking 1: 0.510 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
 45 - Large Landscaped Areas 1: 0.325 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Biofilter CP# 1 (DS) - DS Biofilters # 1

1. Top area (square feet) = 3600
2. Bottom area (square feet) = 1180
3. Depth (ft): 5.5
4. Biofilter width (ft) - for Cost Purposes Only: 20
5. Infiltration rate (in/hr) = 0.02
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 0.01
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 1
10. Porosity of rock filled volume = 0.33
11. Engineered soil infiltration rate: 3.6
12. Engineered soil depth (ft) = 2
13. Engineered soil porosity = 0.27
14. Percent solids reduction due to flow through engineered soil = 80
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

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

Biofilter Outlet/Discharge Characteristics:

Outlet type: Broad Crested Weir
 1. Weir crest length (ft): 6
 2. Weir crest width (ft): 10
 3. Height of datum to bottom of weir opening: 5

Outlet type: Vertical Stand Pipe
 1. Stand pipe diameter (ft): 2
 2. Stand pipe height above datum (ft): 4.85

Outlet type: Surface Discharge Pipe
 1. Surface discharge pipe outlet diameter (ft): 0.5
 2. Pipe invert elevation above datum (ft): 3.5
 3. Number of surface pipe outlets: 1

Outlet type: Drain Tile/Underdrain
 1. Underdrain outlet diameter (ft): 0.5
 2. Invert elevation above datum (ft): 1
 3. Number of underdrain outlets: 1

SLAMM for Windows Version 10.2.0

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Data file name: Z:\WinSLAMM\CJE1542-02R1.mdb

Data file description:

Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN

Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx

Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx

Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std

Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std

Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std

Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std

Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdX

Start of Winter Season: 12/06 End of Winter Season: 03/28

Model Run Start Date: 01/05/69 Model Run End Date: 12/31/69

Date of run: 08-29-2019 Time of run: 08:45:22

Total Area Modeled (acres): 0.892

Years in Model Run: 0.99

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	45265	-	133.7	377.7	-
Outfall Total with Controls:	37348	17.49%	44.47	103.7	72.54%
Annualized Total After Outfall Controls:	37867			105.1	

Pollutant Yield	Concentration - Percent Reduction	Concentration - No Controls	Concentration - With Controls	Conc. Units	Pollutant Yield No Controls	Pollutant Yield With Controls	Pol. Units
Particulate Solids	72.54 %	133.7	44.47	mg/L	377.7	103.7	lbs
Particulate Phosphorus	72.84 %	0.2166	0.07130	mg/L	0.6120	0.1662	lbs

Minimum Storm Water Practice Maintenance Requirements

BIORETENTION BASIN

System Description:

Bioretention basins are designed to reduce peak flows and reduce runoff total suspended solids (TSS) from the site by intercepting the runoff and allowing it to seep (infiltrate) into the engineered soil layer and through the perforated under-drain pipe. To function correctly, the bioretention basins size, depth, outlet standpipe and under-drain pipe must be maintained.

Minimum Maintenance Requirements:

To ensure the proper function of the bioretention basin, the following list of maintenance activities are required to be performed by the owner or authorized qualified representative:

1. A minimum of 70% soil cover made up of plants must be maintained on the bioretention basin bottom. The basin sides shall be a turf grass. Maintain plants and grasses per qualified landscape contractor recommendations.
2. Seasonal (early spring) inspection of the soil surface for the presence of sodium accumulation due to the introduction of chlorides for winter maintenance of the parking lot should occur. It is also recommended that the soil be flushed with 1" of clean water 3-4 times each spring. Consider reducing sodium/salting or use sodium alternatives.
3. The basin and all components (outlet standpipe, outlet pipe, vegetation and spillway) should be inspected after each heavy rain of 1.5" or more. If the basin is not draining properly (within 72 hours), further inspection may be required by persons with expertise in storm water management and/or soils.
 - o If basin is not draining, the 6" drain tile should be cleared of any blockages or obstructions. Clear blockages in the underdrain pipe, if present through the underdrain cleanout. Expose the stone and soil immediately around the pipe, clear blockages and replace per approved design. Also examine outlet orifice through the dual treated planks within the pond outlet manhole. Remove any sediment accumulated within the manhole and orifice.
 - o If soil testing shows that the soil surface has become crusted, sealed or compacted, Engineered soil should be replaced. Expose 6" drain tile and verify it is clear of obstructions. Remove and replace engineered soil per WDNR specifications. Replace bioretention plantings per approved Landscape Plan for the project.
 - o If sedimentation is determined to be causing the failure, the accumulated sediment must be removed and the area replanted in accordance with the approved Landscape Plan for the project. Sediment removed shall be deposited offsite at an appropriate soil disposal facility.
4. All outlet pipes, other flow control devices within the basin outlet manhole must be kept free of debris. Any blockage must be removed immediately.
5. Any eroding areas must be repaired immediately to prevent premature sediment build-up in the system. Erosion matting is recommended for repairing grassed areas.
6. Heavy equipment and vehicles must be kept off of the bottom and side slopes of bioretention basin to prevent soil compaction. Soil compaction will reduce infiltration and may cause failure of the basin, resulting in ponding and possible growth of wetland plants.
7. No unauthorized trees are to be planted or allowed to grow on the earthen berms or bottom of the basin. On the berms, tree root systems can reduce soil compaction and cause berm failure. On the basin bottom, trees may shade out the native grasses. Woody vegetation must be removed.
8. Check for invasive species growth and remove per species specific recommended practices.
9. No grading or filling of the basin or berms other than for sediment removal is allowed.
10. One required inspection a year shall be conducted in spring (between March 15th and April 15th). An inspection form must be completed and documented by a qualified person that represents the Owner. Any needed maintenance must be documented and scheduled for immediate repair. All repairs must be documented, preferably with photographs.
11. Snow shall not be dumped directly onto the conditioned planting bed.
12. See chart below for maintenance activity and frequency:

Activity	Frequency
Water Plants	As necessary during first growing season
Water as necessary during dry periods	As needed after first growing season
Re-mulch void areas	As needed
Treat diseased trees and shrubs	As needed
Inspect soil and repair eroded areas	Monthly
Remove litter and debris	Monthly
Add additional mulch	Once per year

Gehl Foods – Community Involvement

Gehl Foods has participated in the following:

- Germantown High School Fundraising Annual Event / Silent Auction past 3 years
- July 4th Parade, sponsor and participated for past 3 years
- Germantown Chamber Golf Outing, sponsor past couple of years
- Taste of Germantown, participated for past 2 years
- Walks/Runs (various), participated for past 3 years
- Breakfast w/Santa (Kiwanis), sponsor for past 3 years

Gehl Foods has donated the following financial support:

- Paid for the electrical to be run underground in front of the plant on Main St.
- \$100k towards the Pavilion in the Fireman's Park
- \$25k towards the Pavilion
- \$400k toward the sewer & water lines
- \$10k for Germantown High School/Tech Center
- \$5k to the Germantown Fire Dept for training
- Gehl Family paid for the War Memorial at the Fireman's Park
- Germantown High School Scholarships (2 at \$1k/each) for the past 3 years
- Chips/Cheese w/dispenser to those from the area who ask to support their events (free of charge)
- Gehl Foods snowplows on the south side of Main St (RR tracks going east)
- Gehl Foods paid for the redo of the storm sewer and roadway/turn when Crusader was improved (145 and Crusader)



Gehl Foods – Community Feedback

Gehl Foods held collaboration meetings on 8/27 and 9/3 to invite community members to help us design the expansion

These sessions:

- Offered participants tours to educate them on the nature of what we do and how we do it
- Provided product education, sampling, and an explanation of our technical complexity
- Discussed our employee base, the growth opportunities within Gehl Foods, and the percent of employees who are residents of Germantown
- Supplied more detail on what we do, our product reach, and our commitment to becoming a better corporate citizen
- Reviewed designs and solicited feedback with local residents, businesses and employees to help us design the expansion on Main St and other site developments
- Solicited input on community / beautification efforts such as:
 - Expanded side walks
 - Green space
 - Communal space / seating
 - Parking
 - Events participation / organization
 - Retail store



Gehl Foods – Design Evolution

8/27



Formulário de Registro de Atividade		Data: 15/03/2024	
Atividade		Local	
Atividade de Ensino		Laboratório de Física	
Atividade de Pesquisa		Laboratório de Física	
Atividade de Extensão		Laboratório de Física	
Atividade de Iniciação Científica		Laboratório de Física	
Atividade de Monitoria		Laboratório de Física	
Atividade de Orientação de Trabalho de Conclusão de Curso		Laboratório de Física	
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Atividade de Orientação de Trabalho de Conclusão de Curso			



Item	Value
Item 1	1000000
Item 2	2000000
Item 3	3000000
Item 4	4000000
Item 5	5000000
Item 6	6000000
Item 7	7000000
Item 8	8000000
Item 9	9000000
Item 10	10000000
Item 11	11000000
Item 12	12000000
Item 13	13000000
Item 14	14000000
Item 15	15000000
Item 16	16000000
Item 17	17000000
Item 18	18000000
Item 19	19000000
Item 20	20000000
Item 21	21000000
Item 22	22000000
Item 23	23000000
Item 24	24000000
Item 25	25000000
Item 26	26000000
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Item 28	28000000
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Item 30	30000000
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Item 32	32000000
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Item 34	34000000
Item 35	35000000
Item 36	36000000
Item 37	37000000
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Item 39	39000000
Item 40	40000000
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Item 43	43000000
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Item 80	80000000
Item 81	81000000
Item 82	82000000
Item 83	83000000
Item 84	84000000
Item 85	85000000
Item 86	86000000
Item 87	87000000
Item 88	88000000
Item 89	89000000
Item 90	90000000
Item 91	91000000
Item 92	92000000
Item 93	93000000
Item 94	94000000
Item 95	95000000
Item 96	96000000
Item 97	97000000
Item 98	98000000
Item 99	99000000
Item 100	100000000



9/3

Station #4 - Full Gehl White Design	
Likes	Improvement Ideas
Silo/Historical Aspect	Too much White
Authentic/Genuine	Silos visible
Movie Screen Opportunity	
More Mural Opportunity	

Preferred Design

[illegible]

Station #3 - Company Store Design	
Likes	Improvement Ideas
Brick Pavers	Power Lines (Bury Them?)
Greenery/Benches	Is road/sidewalk to scale?
Pavement/Brick	Lack of Plan Articulation
Break-Up of Façade	Lack of Murals
Signage	No Angle Parking or Church Street Show
	German Theme Worked In?



1. Name	...
2. Address	...
3. City	...
4. State	...
5. Zip	...
6. Phone	...
7. Fax	...
8. E-mail	...
9. Website	...
10. Other	...
11. Signature	...
12. Date	...
13. Initials	...
14. Title	...
15. Department	...
16. Organization	...
17. Address	...
18. City	...
19. State	...
20. Zip	...
21. Phone	...
22. Fax	...
23. E-mail	...
24. Website	...
25. Other	...
26. Signature	...
27. Date	...
28. Initials	...
29. Title	...
30. Department	...
31. Organization	...
32. Address	...
33. City	...
34. State	...
35. Zip	...
36. Phone	...
37. Fax	...
38. E-mail	...
39. Website	...
40. Other	...
41. Signature	...
42. Date	...
43. Initials	...
44. Title	...
45. Department	...
46. Organization	...
47. Address	...
48. City	...
49. State	...
50. Zip	...
51. Phone	...
52. Fax	...
53. E-mail	...
54. Website	...
55. Other	...
56. Signature	...
57. Date	...
58. Initials	...
59. Title	...
60. Department	...
61. Organization	...
62. Address	...
63. City	...
64. State	...
65. Zip	...
66. Phone	...
67. Fax	...
68. E-mail	...
69. Website	...
70. Other	...
71. Signature	...
72. Date	...
73. Initials	...
74. Title	...
75. Department	...
76. Organization	...
77. Address	...
78. City	...
79. State	...
80. Zip	...
81. Phone	...
82. Fax	...
83. E-mail	...
84. Website	...
85. Other	...
86. Signature	...
87. Date	...
88. Initials	...
89. Title	...
90. Department	...
91. Organization	...
92. Address	...
93. City	...
94. State	...
95. Zip	...
96. Phone	...
97. Fax	...
98. E-mail	...
99. Website	...
100. Other	...

Gehl Foods – Community Commitment

- Donation of the corner lot at Hwy 145 / Main Street to the Village
- Committed to creating crosswalks / additional green space
- Working to reduce the noise in our current setup including \$600k in nitrogen generation
- More office employees (30+) transferred to Main Street frequenting local businesses
- Increased employment in plant (~ 40 employees)
- Increased property taxes, water consumption / sanitary flow and associated revenue
- Collaborate with the Village and neighboring businesses on future Main St parking / improvements
- Create a beneficial environment that allows existing residents and businesses to co-exist and grow with Gehl Foods
 - Partnership with Chamber of Commerce, Business Assn to organize events and improve participation
 - Continue with and possibly expand relationship with local schools
 - Internship program
 - Establish a retail / company store



Gehl Foods – Why Main St?

- Utilities infrastructure at Main St. in place to support the 4 planned lines
- Batching infrastructure in place; no updates needed
- Why not the Freistadt location
 - No utility/batching infrastructure required for manufacturing
 - Building full; high speed packaging & automated warehouse
 - Cannot expand building; wetland/conservancy
- Why further expansion across Church St and Main St is not practical
 - Utilities Infrastructure will not support beyond the planned expansion
 - No way to integrate additional manufacturing facilities across public roads
 - No additional warehousing is feasible in the Main St area



Village of
Wisconsin



CERTIFIED SURVEY MAP (CSM) AND SITE PLAN APPLICATIONS

9/9/19 Plan Commission Meeting

Briohn Design Group, LLC / Illing Company/ Central Land Company III, LLC and
GGWW, LLC - William Wetterau

Village Planner Report

Germantown, Wisconsin

Summary

Briohn Design Group, LLC, agent for Illing Company, Central Land Company, and GGWW, LLC, William Wetterau, property owner, is requesting approval of a 2-lot Certified Survey Map (CSM) and Site Development and Building Plans for a 210,522-square-foot Industrial Building (Lot 1) and a 130,324-square-foot Multi-Tenant Industrial Building (Lot 2)

Location: Rockfield Road @ Goldendale Road, 3/4-mile east of US Highway 41

Agent/

Property Owners: Samuel Dickman
Central Land Company III, LLC
626 E. Wisconsin Avenue, Suite 1020
Milwaukee, WI 53202

William Wetterau
GGWW, LLC

Current Zoning: A-1: Agricultural

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

Location Map



Background

In 2018, the Village Board approved amendments to the Village's 2020 Land Use Plan (LUP) Map and creation of Tax Incremental Financing District No. 8 (TID#8). The primary purpose for TID#8 was to re-construct Holy Hill Road from US Highway 41 to Goldendale Road and extending sanitary sewer and water utilities along Goldendale Road and Holy Hill Road to serve development within the Gateway development area and other adjacent land within the Holy Hill Road corridor.

At the July 15, 2019 meeting, the Village Board approved the rezoning of 45.46 acres (Lots 2, 3, and 4 of CSM 5959) from the A-1 Agricultural District to M-1 Limited Industrial District to accommodate the construction of three industrial buildings on the site. The Plan Commission provided consultation to the applicant at their July 8, 2019 on the proposed CSM and the proposed site plan. The following are highlights from the Plan Commission comments at the consultation meeting.

- The east side of site is the edge of the industrial development area and should be well screened through ample landscaping and berms from the land to the east and north.
- The east elevation should be treated as a primary elevation in terms of architecture. Any applications for future additions to the east will be carefully reviewed for architectural aesthetics.
- The proposed future trailer parking on the south side of the potential eastern addition should be well screened.

Proposal

The applicant is seeking approval of a 2-lot Certified Survey Map (CSM) and a Site Development and Building Plans for two (2) industrial buildings on the 45.46 acre property.

CSM

The proposed 2-lot CSM includes:

- Lot 1: 20.027 acres
- Lot 2: 25.436 acres

Site Development & Building Plans

Site improvements on Lots 1 and 2 and construction on Lot 1 is anticipated to begin late 2019. Construction of the western building on Lot 2 is anticipated to begin in spring of 2020. The applicant will come back to the Plan Commission with a site plan application for the future east building on Lot 2. Below is a summary of the proposed improvements to the site:

Site Improvements for Lot 1

- Access drive from Goldendale Road on the south edge of Lot 1
- Access drive from Rockfield Road in the west corner of Lot 1
- Asphalt Paved Drives, parking stalls for 196 cars (plus 50 future car parking stalls)
- Asphalt paved Loading Dock Area

Building Improvements for Lot 1

- 240,468 square foot industrial building located toward the west side of the property to allow for a future addition of 75,000 square feet on the east side of

the building

- 31 truck docks with concrete apron (54 possible)
- 23 potential trailer parking stalls, 18 additional possible
- Painted pre-cast concrete wall panels on all four sides of the building
- Insulated grey tinted glazing with clear anodized aluminum framing
- Façade painting uses 3 tones of gray with a red accent color (see renderings submitted with application materials)
- Trash and recycling enclosure located on the south side of building will match the proposed building
- Roof top units (RTU's will be screed using a front and side wall parapet, which will extend four feet about the height of the building
- Prefabricated liquid chemical storage enclosure (10' x 12') on the southwest side of the building to store three to four (3-4) 55-gallon drums of acetone

Site Improvements for Lot 2

- Access drive from Goldendale Road near the center of the east side of Lot 2
- Asphalt Paved Drives, parking stalls for 99 cars (plus 195 future car parking stalls)
- Asphalt paved Loading Dock Area
- 84 potential trailer parking stalls on the northside of the lot

Building Improvements for Lot 2

- 130,324-square foot industrial building on the west half of Lot 2 and a future phase 117,324-square foot industrial building on the east half of Lot 2
- 26 possible truck docks with concrete apron
- Painted pre-cast concrete wall panels on all four sides of the building
- Insulated grey tinted glazing with clear anodized aluminum framing
- Façade painting uses 3 tones of gray with a red accent color (see renderings submitted with application materials)
- Trash and recycling enclosure will match the proposed building
- Roof top units (RTU's will be screed using a front and side wall parapet, which will extend four feet about the height of the building.
- Proposed a Regional Storm Pond located in the south east corner of the site

Operation Information (north lot)

As discussed in the application materials, the Illing Company is a distribution facility for plastic containers with some limited onsite production. This business is currently located in Germantown, but is looking for a place to expand their business. It is anticipated the business will have 60-70 employees initially, and up to 110 employees on one daytime shift. The business would be operated Monday through Friday, 7:00am to 6:00pm. Saturday operation may potentially occur.

Access & Parking

The Washington County Public Works Committee has approved the two (2) access drives off Goldendale Road (County Road Y). An application with detailed plans for the construction of the accesses will be submitted to Washington County in the next week with an anticipated turnaround time of three (3) weeks. The access onto Rockfield Road will need to be approved by the Village Public Works Department.

There are 196 parking stalls proposed for Lot 1 and the space and potential for 50 additional stalls on site. Lot 2 has 99 parking stalls proposed and the space and potential for 291 additional stalls on site. Space for trailer parking has also been detailed on the site plan.

Traffic Impact Analysis

As required by Washington County, a Traffic Impact Analysis for the proposed improvements was completed by Traffic Analysis & Design, Inc., which provided recommendations for future improvements in 2024 and 2029, as the site and the area continues to develop. No immediate improvements are recommended.

Storm Water Management

The subject property will be served by an onsite stormwater pond to be located in the southeast corner of Lot 2. Upon full build-out, proposed Lot 1 will contain 67.6% impervious surface on the site and proposed Lot 2 will contain 55.7% impervious surface, which meets the 80% maximum requirement for impervious surface on a site in the M-1 Limited Industrial District.

This site will include a stormwater pond on the southeast corner of Lot 2. This pond will serve both Lots 1 and 2.

Landscaping & Buffering

The site will be landscaped with berms of various heights (approximately 7-12 feet in height) along Rockfield Road and Goldendale road, which will help to screen the proposed structures. A variety of trees and shrubs will be planted along Rockfield Road and Goldendale Road. Deciduous shade trees will line the parking lot on the north side of the property and evergreens and deciduous trees will be added to the existing tree line to the west, which will enhance the buffer between the proposed development and the existing residential district. Foundation plantings are also shown on the landscape plan on the north side of the building on Lot 1 and the south side of the building on Lot 2.

Lighting

Exterior lighting of the site and building includes:

- (42) 105W LED 5000K (cool) cut-off wall building-mounted fixtures at a height of 24' on the front and sides of the proposed buildings facing the parking areas;
- (26) 150W LED 5000K (cool) cut-off wall building-mounted fixtures mounted at a height of 24' on the rear of the proposed buildings facing the loading docks and trailer parking areas;
- (42) 150W LED 5000K (cool) cut off pole-mounted fixtures at a height of 20' illuminating the access drives of the site.

Signage

A monument sign "placeholder" is shown in the north side of the site along Rockfield Road on the Landscaping Plans. Details of the monument sign and other wall signage will be provided in a separate Sign Permit Application reviewed by the Plan Commission.

Staff Comments**Planning & Zoning**

The proposed industrial buildings are designed as multi-tenant buildings for the purpose of future flexibility. The north building will be occupied solely by Illing Company, who will be relocating to the building on Lot 1 in June of 2020. Illing Company specializes in plastic container distribution and has outgrown their current facility on Clinton Drive in Germantown. There is not currently a tenant in place for the west building on Lot 2.

Since the original Site Plan Consultation, the overall elevation of the building on Lot 1 has been decreased by one foot. The berms on the north and east sides (along Rockfield Road and Goldendale Road) have also been increased in height. Several more trees have been added to the berms along the road rights-of-way as well as in the southeast corner of proposed Lot 2, which will assist in screening the development from northbound traffic on Goldendale Road.

The applicant has also added additional architectural details to the east elevation of the proposed north building, which includes a façade similar to that of the west elevation. This will provide an improved appearance for the neighboring properties to the north and east of the subject property.

Engineering

The Village Engineer and Public Works Department staff have identified plan corrections (see August 15, 2019 Public Works Director memo) pertaining to storm water management and erosion control. All items in this memo have been addressed on the plan sheets which are awaiting final approval by the Village Engineering Department Staff.

Surveyor

The Village Surveyor provided review memos to the applicant dated 8-26-19 and 9-4-19. There is one outstanding item to be corrected, which will be added as a condition of approval.

Fire Department

The Fire Department is recommending approval of the proposed Site and Architectural Plans subject to the following requirements:

1. Add one fire hydrant at the intersection of Goldendale Road and the north entry drive. Public hydrants should be located within the Village utility easement.
2. Knox boxes are required on all buildings at locations to be determined by GFD.

Note: The fire hydrant has been added to the plans at the intersection of Goldendale Road and the north entry drive, within the Village utility easement.

VILLAGE PLANNER RECOMMENDATION:*CSM Application*

APPROVE 2-lot Certified Survey Map (CSM) for the 45.46 acres (Lots 2, 3, and 4 of CSM 5959) owned by GGWW, LLC located in the southwest corner of the Goldendale Road and Rockfield Road intersection with the following condition:

1. The CSM shall be revised to reflect the Village Surveyor comments contained in the August 26, 2019 review memo prior to recording the CSM.

VILLAGE PLANNER RECOMMENDATION

APPROVE the site development and building plans submitted by Central Land Company III, LLC for the proposed industrial buildings located in the southwest corner of the Goldendale/Rockfield Road Intersection 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, and electrical plan sheets dated 7-12-2019 and revised 9-5-2019 and the landscaping plan sheets dated 9-5-2019, 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. State approved plans and a \$20,000 occupancy bond are required by Inspection services as part of the building permit application.
4. The Developer shall enter into a Development Agreement with the Village pursuant to Chapter 17.43 of the Village Code (Site Plan Approval) as well as, the preparation of detailed plans for the installation of public utilities and improvements including, but not limited to private access drives and storm water management facilities, master grading plan and erosion control, landscaping & street trees, open space, lighting and signage.
5. A revised stormwater management plan shall be submitted and will require final review and approval prior to commencing work onsite.
6. The Village Fire Department shall review and approve the proposed prefabricated liquid chemical storage enclosure (10' x 12') on the southwest side of the building prior to the issuance of a building permit.
7. All proposed exterior signage, including monument and wall-mounted signs, shall be reviewed and approved under a separate application by the Plan Commission.

--Continued--

8. Additional improvements to the site shall be brought before the Village Plan Commission for consideration and approval, including the proposed future construction of the industrial building on the east portion of Lot 2.
9. All technical issues and plan corrections identified by the Village Engineer and Public Works Department staff (see August 15, 2019 memo from the Public Works Director) 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.
10. Knox boxes are required on all buildings at locations to be determined by GFD.
11. 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 of

Germantown

Willkommen

Fee must accompany application

☐ \$2,900 with public improvements

☐ \$1,960 no public improvements

Paid _____ Date _____

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

CENTRAL LAND COMPANY III, LLC

BY: SAMUEL D. DICKMAN

626 E. WISCONSIN AVE., SUITE 1020

MILWAUKEE, WI 53202

Phone (414) 305-8111

Fax ()

E-Mail sam.e.dickman.com

PROPERTY OWNER

GC LW, LLC

BY: WILLIAM H. KUTTERAU

Phone (414) 791-0908

PROPERTY ADDRESS OR GENERAL LOCATION

TAX KEY NUMBER

2 PART OF W204 N12839 GOLDENHILL PKW LOT 2 PARCEL NUMBER GTNV 074988; LOT 3 PARCEL NUMBER GTNV 074989; LOT 4 GTNV 074990

3 PURPOSE OF LAND SPLIT

SEE ATTACHED	Will the land split require rezoning?	
	YES	
	From A1	To M1

4 READ AND INITIAL THE FOLLOWING:

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

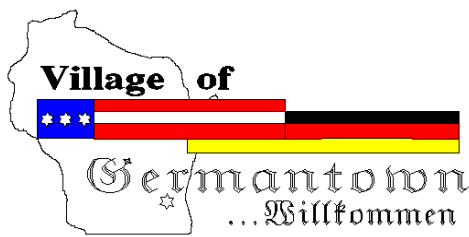
5 SIGNATURES -- ALL APPLICATIONS MUST BE SIGNED BY OWNER!

Applicant

Date

Owner

Date



Engineering Department Memorandum

To: Jeff Retzlaff Village Planner

CC:

From: Bob Beilfuss, PLS, Village Surveyor

Date: August 26, 2019-

2nd Review September 4, 2019

Re: Wetterau CSM

Jeff,

Here are my review comments for the CSM received 7-3-2019.

Certified Survey Map

Applicant or Owner: Bill Wetterau

Land Surveyor/Firm: Chris Jackson, PLS – CJ Engineering

Second Engineering Review Comments in Red- 9/4/2019.

1. A 3"x3" square as measured from the top and right edge of the paper is required by the Washington County Register of Deeds for recording information on the first sheet of this CSM document. **Revised as requested, no further action needed**
2. A notary signature block is required for all signatures including Village plan commission and Board approval certificates. Please add the notary signature blocks as needed. **Revised as requested, no further action needed**
3. Incorrect Village Clerk's name on the Village Board Certificate. The current clerk's name is Deanna Braunschweig, WCMC/CMC. **Revised as requested, no further action needed**
4. The Section Number in the Village Board Certificate is incorrect. **Revised as requested, no further action needed**
5. Add current building setback lines per current M-1 zoning code and include a date stamp statement so future users know which date of the zoning code was used. **Revised as requested, no further action needed**
6. The Surveyor's Certificate is incorrect. It contains a metes and bounds description for another property. This needs to be redone as every part of the certificate is incorrect. **Revised as requested, no further action needed**
7. Show original lot lines of Lot lines for Lots 2, 3 and 4 of Certified Survey Map No. 5959 as a screened or dashed linetype. **Revised as requested, no further action needed**

8. The west line of this CSM has two adjoining platted lots and there is no unplatted lands along the west line of this proposed CSM. Lot 1 of CSM No. 6182 is missing and needs to be mapped. Lot 1 of CSM No. 6824 is missing and needs to be mapped. **Revised as requested, no further action needed**
9. The Owner's contact information is missing. Add the owners name, address and telephone number. **Revised as requested, no further action needed**
10. The Owner's certificate is wrong as it pertains to a different owner and project. **Revised as requested, no further action needed**
11. The Notary certificate located in the corporate owner's certificate is wrong as it pertains to a different owner and project. **Revised as requested, no further action needed**
12. Add a notary certificate for the village planning commission and village board approval certificates. We have enough notary publics on staff and will take care of these signatures when it comes to recording. **Revised as requested, no further action needed**
13. Professional land surveyor seals and signatures are missing. **Revised as requested, no further action needed.**
14. Add a tie distance and bearing to one (1) PLSS monument and show the correct point of beginning of the boundary description. **Revised as requested, no further action needed.**
15. Create and record a release document for removing the access restriction from the previous CSM to be reviewed and approved by Washington County and the Village to be recorded prior to recording the CSM and include the recording information of the release document on the face of the new CSM. **In the Release document supplied via email on 9/4/19, the certificate for the Waukesha County Parks and Land Use Department needs to be removed as they are not involved nor are, they an objecting authority in this case. Also, change Town Clerk to Village Clerk in the Village Board certificate. This document still needs to be recorded and the recording information included on the face of the CSM.**

No further review comments.

We recommend this application be denied until a complete and correct document can be supplied for review by the Engineering Department.

Document Approval and Recording

For this CSM to be approved by the Village Board and recorded at the Washington County Register of Deeds, the document must be provided to the Village Clerk's office in a completed format including all original signatures of the owner and lending institution, original seals of the professional land surveyor on the recordable media the Wednesday prior to the scheduled Village Board meeting.

This includes the CADD file.

Any documents or digital files not submitted by the due date or contain outstanding technical review comments that have not be addressed, will be moved to the next scheduled Village Board meeting agenda.

Document Submittals and Data Conversion

As of October 2005, the Village of Germantown requires a digital copy of all Certified Survey Maps, Condominium Plats and Subdivision Plats in addition to the documents as required by Wisconsin Statute and Village Ordinances as part of the land division approval.

Prior to Recording the Certified Survey Map or Subdivision Plat, The professional land surveyor is responsible for submitting a copy of the AutoCad drawing file (.dwg) of the document in version 2018 on compact disk (CD) or via email to the Village Surveyor.

All digital professional land surveyor seals and signatures will be purged from the digital copy prior to submittal.

The model space of the drawing will be done in Wisconsin State Plane Coordinate System, South Zone (NAD 1927 datum) and the Grid Bearing basis.

Prior to Recording the Certified Survey Map or Final Subdivision Plat, the Village Engineering Department will verify that the boundary markers have been installed as described on the submitted map. All boundary corners are to be clearly marked in the field by the professional land surveyor of record.

CERTIFIED SURVEY MAP
NO. _____

BEING A REDIVISION OF LOTS 2, 3 AND 4 OF CERTIFIED SURVEY MAP No. 5959, IN THE NORTHEAST ¼ AND SOUTHEAST ¼ OF THE SOUTHEAST ¼ OF SECTION 7, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN

- - INDICATES 1" IRON PIPE SET
- - INDICATES ¾" IRON ROD FOUND

ALL DIMENSIONS SHOWN ARE MEASURED TO THE NEAREST HUNDREDTH OF A FOOT.

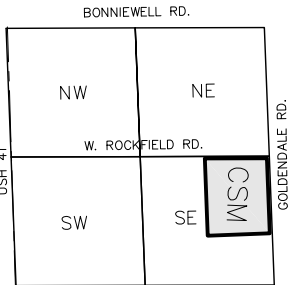
ALL BEARINGS SHOWN ARE REFERENCED TO EAST LINE OF THE SE ¼ OF SECTION 7, T9N, R20E, WISCONSIN STATE PLANE COORDINATE SYSTEM GRID, SOUTH ZONE, AND ALL BEARINGS ARE REFERENCED TO GRID NORTH.

NE CORNER OF THE SE ¼ OF SECTION 7 T9N, R20E
CONCRETE MONUMENT
W/ BRASS CAP FOUND
N 463,729.94
E 2,489,471.00

NW CORNER OF THE SE ¼ OF SECTION 7 T9N, R20E
CONCRETE MONUMENT W/
BRASS CAP FOUND
N 463,750.39
E 2,486,829.66

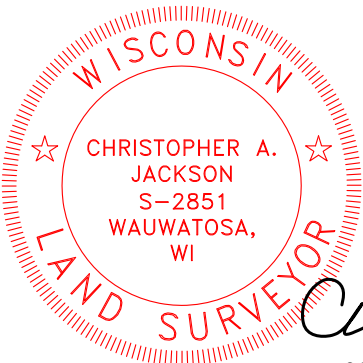
NOTES:
1 THE ACCESS RESTRICTION TO GOLDENDALE RD. (C.T.H. "Y") AS SHOWN ON CSM NO. 5959 IS REMOVED BY THIS CSM.
ACCESS TO C.T.H. "Y" ALLOWED PER WASHINGTON COUNTY ACCESS PERMIT ONLY.

2. SETBACKS ARE BASED ON THE M-1 ZONING REQUIREMENTS AS OF 08-30-19.

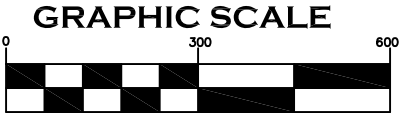


LOCATION MAP
SEC. 7-9-20
1" = 2000'

CJ
engineering
civil design and consulting
9205 W. Center Street
Suite 214
Milwaukee, WI 53222
PH. (414) 443-1312
www.cj-engineering.com



PREPARED FOR:
GERMANTOWN PARTNERS, LLC
626 E WISCONSIN AVE.
MILWAUKEE, WI 53202
(414) 271-6100



1 INCH = 300 FT.

08-30-19

CERTIFIED SURVEY MAP NO. _____

BEING A REDIVISION OF LOTS 2, 3 AND 4 OF CERTIFIED SURVEY MAP No. 5959, IN THE NORTHEAST ¼ AND SOUTHEAST ¼ OF THE SOUTHEAST ¼ OF SECTION 7, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN

SURVEYOR'S CERTIFICATE

I, CHRISTOPHER JACKSON, A PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY:
THAT I HAVE SURVEYED, MAPPED AND DIVIDED A REDIVISION OF LOTS 2, 3 AND 4 OF CERTIFIED SURVEY MAP No. 5959, IN THE NORTHEAST ¼ AND SOUTHEAST ¼ OF THE SOUTHEAST ¼ OF SECTION 7, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN:

COMMENCING AT THE NORTHEAST CORNER OF SAID SOUTHEAST ¼ OF SECTION 7, THENCE N 89°33'23" W 50.03 FEET ALONG THE NORTH LINE OF SAID SE 1/4 SECTION; THENCE S 01°35'40" E 40.03 FEET TO THE SOUTH R.O.W. LINE OF WEST ROCKFIELD ROAD, THE WEST R.O.W. LINE OF GOLDENDALE ROAD AND THE POINT OF BEGINNING OF LANDS TO BE DESCRIBED; THENCE S 01°35'40" E ALONG SAID WEST R.O.W. LINE OF GOLDENDALE 1536.45 FEET; THENCE S 88°24'20" W 1270.49 FEET; THENCE N 01°34'39" W 1581.64 FEET TO THE SOUTH R.O.W. LINE OF ROCKFIELD ROAD; THENCE S 89°33'23" E ALONG SAID SOUTH R.O.W. LINE, 1270.83 FEET TO THE POINT OF BEGINNING.

CONTAINING: 1,983,391 SQUARE FEET OR 45.532 ACRES

THAT I HAVE MADE SUCH SURVEY, MAP AND LAND COMBINATION BY THE DIRECTION OF GERMANTOWN PARTNERS, LLC., OWNERS OF SAID LAND.

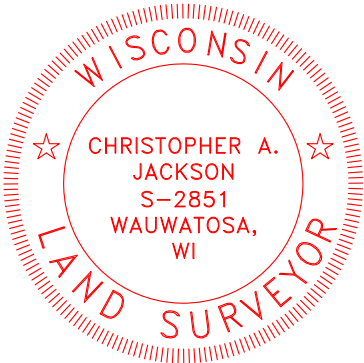
THAT SUCH MAP IS A CORRECT REPRESENTATION OF ALL EXTERIOR BOUNDARIES OF THE LAND SURVEYED AND THE COMBINATION THEREOF MADE.

THAT I HAVE FULLY COMPLIED WITH THE PROVISIONS OF CHAPTER 236 OF THE STATUTES OF THE STATE OF WISCONSIN AND THE REGULATIONS OF THE VILLAGE OF GERMANTOWN IN SURVEYING, MAPPING AND COMBINING THE SAME.

DATED THIS 30TH DAY OF AUGUST, 20 19.



CHRISTOPHER A. JACKSON
PROFESSIONAL LAND SURVEYOR, S-2851
STATE OF WISCONSIN



CERTIFIED SURVEY MAP NO. _____

BEING A REDIVISION OF LOTS 2, 3 AND 4 OF CERTIFIED SURVEY MAP No. 5959, IN THE NORTHEAST ¼ AND SOUTHEAST ¼ OF THE SOUTHEAST ¼ OF SECTION 7, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN

CORPORATE OWNER'S CERTIFICATE

GERMANTOWN PARTNERS LLC, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF WISCONSIN AS OWNER, DOES HEREBY CERTIFY THAT SAID COMPANY CAUSED THE LAND DESCRIBED ON THIS MAP TO BE SURVEYED, DIVIDED AND MAPPED AS REPRESENTED ON THIS MAP.

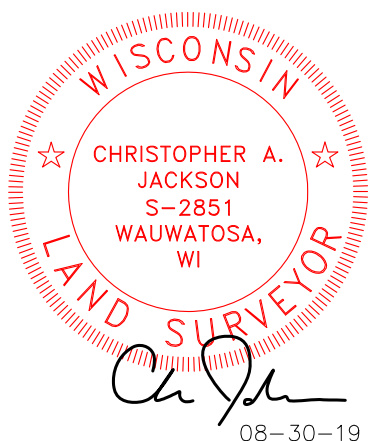
IN WITNESS WHEREOF, GERMANTOWN PARTNERS LLC, HAS CAUSED THESE PRESENTS TO BE SIGNED BY SAMUEL DICKMAN, MANAGER, AND ITS CORPORATE SEAL TO BE AFFIXED THIS _____ DAY OF _____, 20__.

SAMUEL DICKMAN, MANAGER

STATE OF WISCONSIN) SS
COUNTY)

PERSONALLY CAME BEFORE ME THIS _____ DAY OF _____, 20__, SAMUEL DICKMAN, TO ME KNOWN TO BE THE MANAGER OF GERMANTOWN PARTNERS, LLC. AND THE PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT AS SUCH OFFICERS OF SAID CORPORATION AND ACKNOWLEDGED THE SAME.

NOTARY PUBLIC, STATE OF WISCONSIN
MY COMMISSION EXPIRES _____, 20__



CERTIFIED SURVEY MAP NO.

BEING A REDIVISION OF LOTS 2, 3 AND 4 OF CERTIFIED SURVEY MAP No. 5959, IN THE NORTHEAST ¼ AND SOUTHEAST ¼ OF THE SOUTHEAST ¼ OF SECTION 7, TOWNSHIP 9 NORTH, RANGE 20 EAST, 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 _____ 20__.

DEAN WOLTER, CHAIRMAN

DATE _____

LAURA A. JOHNSON, SECRETARY

DATE _____

STATE OF WISCONSIN) SS
WASHINGTON COUNTY)

PERSONALLY CAME BEFORE ME THIS ____ DAY OF _____, 20____, DEAN WOLTER AND LAURA A. JOHNSON, TO ME KNOWN TO BE THE CHAIRMAN AND SECRETARY OF THE VILLAGE OF GERMANTOWN PLANNING COMMISSION. AND THE PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT AS SUCH OFFICERS OF SAID CORPORATION AND ACKNOWLEDGED THE SAME.

NOTARY PUBLIC, STATE OF WISCONSIN
MY COMMISSION EXPIRES _____, 20____

VILLAGE OF GERMANTOWN BOARD APPROVAL

THIS CERTIFIED SURVEY MAP, BEING A DIVISION OF SE ¼ SECTION 7, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN, HAVING BEEN APPROVED BY THE PLANNING COMMISSION BEING THE SAME, IS HEREBY APPROVED AND ACCEPTED BY THE VILLAGE BOARD OF TRUSTEES OF THE VILLAGE OF GERMANTOWN ON THIS ____ DAY OF _____, 20__.

DEAN WOLTER, VILLAGE PRESIDENT

DATE _____

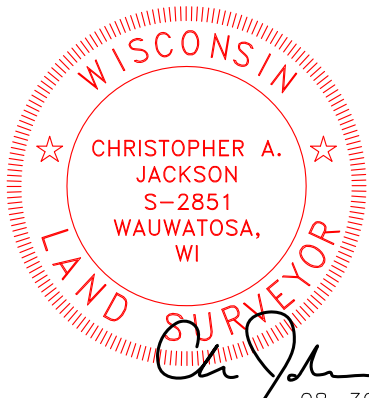
DEANNA BRAUNSCHWEIG, WCMC/CMC, VILLAGE CLERK

DATE

STATE OF WISCONSIN) SS
WASHINGTON COUNTY)

PERSONALLY CAME BEFORE ME THIS ____DAY OF _____, 20____, DEAN WOLTER AND DEANNA
BRAUNSCHWEIG, TO ME KNOWN TO BE THE PRESIDENT AND CLERK OF THE VILLAGE OF GERMANTOWN BOARD.
AND THE PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT AS SUCH OFFICERS OF SAID CORPORATION
AND ACKNOWLEDGED THE SAME.

NOTARY PUBLIC, STATE OF WISCONSIN
MY COMMISSION EXPIRES _____, 20____



08-30-19

RELEASE OF RESTRICTIONS

Lots 2 and 3 of Certified Survey Map No. 5959, Vol. 44, P. 75, recorded as Doc. No. 1106265, Village of Germantown

LEGAL DESCRIPTION: Lot 2 and 3 and 4, Certified Survey Map No. 5959, Vol. 44, P. 75, located in the NE 1/4 and SE1/4 of the SE1/4 of Section 7, T89N, R20E, Village of Germantown, Waukesha-Washington County, Wisconsin.

Recording Area

Name and Return Address:

Waukesha County
Planning and Zoning Division
515 W. Moreland Blvd.
Room AC230
Waukesha, WI 53188

Parcel Identification Numbers (PIN):

GTNV 074988, GTNV 074989 and
GTNV 074990 match lots 2 and 3 and
ensure recording block is correct size and it can be
returned to Germantown or Washington County

RELEASE FROM, RESTRICTIONS FOR LOTS 2, 3 & 4, CERTIFIED SURVEY MAP NO. 5959, VOL. 44, P. 75, RECORDED AS DOC NO. 1106265, VILLAGE OF GERMANTOWN, WAUKESHA-WASHINGTON COUNTY, WISCONSIN.

WHEREAS, Certified Survey Map No. 5959 is a four-lot recorded Certified Survey Map (CSM) as described above and located along CTH Y in the Village of Germantown, Waukesha County, Wisconsin, and was recorded on October 20, 2005 as Document No. 1106265, and

WHEREAS, the CSM contains a note as follows:

"ONLY ONE ACCESS POINT ALLOWED ON C.T.H. "Y" CENTERED 52' NORTH OF LOT (2) (SE) CORNER"

, and

WHEREAS, the current Lots 2, 3 and 4 of CSM 5959 will be re-divided by a new CSM into two new lots

WHEREAS, said the owner is requesting a two access points along CTH Y, which requires review and approval from the Washington County Highway Department as they have jurisdiction along CTH Y in this area of the Village of Germantown, and

WHEREAS, this release from the access restriction and the approval of the two new access locations to CTH Y reflects action taken by the Washington County Public Works Committee on August 21 July 31, 2019, and

WHEREAS, the property owner is required to record the Release and forward copies of the recorded Release of Restrictions to all parties that are the subject of this transaction.

NOW, THEREFORE, the undersigned hereby releases the access restriction of the original note stated on the CSM recorded on October 20, 2005 as Document No. 1106265 and creates two access locations along CTH Y as reflected by action taken by the Washington County Public Works Committee on August 21, 2019-

GERMANTOWN VILLAGE BOARD

This Release of Restriction was approved by Village Board action on the _____ day of _____, 20__.

Dean Wolter
Village President

Deanna Braunschweig
Town Clerk

~~WAUKESHA COUNTY DEPARTMENT OF PARKS AND LAND USE~~

~~The above, which has been filed as required by Chapter 236 of the Wisconsin State Statutes, is hereby approved on this _____ day of _____, 20__.~~

~~Dale R. Shaver, Director~~

STATE OF WISCONSIN)

SS

COUNTY OF **WAUKESHA**)

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Personally came before me this _____ day of _____, 20__, **Dale R. Shaver** to be known to be the representative who executed the foregoing instrument and acknowledged the same.

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NOTARY PUBLIC, STATE OF WISCONSIN

My Commission Expires:

(SEAL)

WASHINGTON COUNTY HIGHWAY DEPARTMENT

The above Release of Restriction is hereby approved on this ____ day of _____, 20__.

Scott M. Schmidt, PE, PLS
Washington County Highway Commissioner/County Surveyor

STATE OF WISCONSIN) SS
COUNTY OF WASHINGTON)

Personally came before me this _____ day of _____, 20__, Scott M. Schmidt to be known to be the representative who executed the foregoing instrument and acknowledged the same.

NOTARY PUBLIC, STATE OF WISCONSIN

My Commission Expires:

(SEAL)

This instrument was drafted by the
Waukesha County Department of Parks and Land Use Chris Jackson

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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 7

DATE 7-3-19

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

CENTRAL LAND COMPANY INC. LLC
BY: SAMUEL D. PICKMAN
626 E. WISCONSIN AVE., SUITE 1020
MILWAUKEE, WI 53202

Phone (414) 305-8111
E-Mail Sam.Dickman@central-land.com

PROPERTY OWNER

G.G.W.N., LLC
BY: WILLIAM H. WETTERAU

Phone (414) 791-0908
E-Mail B.L.BOBNTSTEEL@YANCO

2 PROPERTY ADDRESS

PART OF W204 N12839 GOLDENROCK RD., LOT 2 PARCEL NUMBER GTNV 074989;
LOT 3 PARCEL NUMBER GTNV 074989; LOT 4 GTNV 074990

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

North	South	East	West
<u>AGRICULTURAL</u>	<u>INDUSTRIAL</u>	<u>AGRICULTURAL</u>	<u>INDUSTRIAL</u>

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!

Samuel D. Pickman 7/1/19
Applicant Date

William H. Wetterau 7/1/19
Owner Date



**DESCRIPTION OF PROPOSAL AND PROJECT NARRATIVE
FOR SITE PLAN REVIEW INCLUDING USES AND BUILDING ARCHITECTURE OF A
NEW 210,522 SQUARE FEET SINGLE USER OR MULTI-TENANT BUILDING TO BE CONSTRUCTED
FOR THE DICKMAN COMPANY ON LAND LOCATED AT THE SOUTHWEST CORNER OF
ROCKFIELD AND GOLDENDALE ROADS INTERSECTION IN THE VILLAGE OF GERMANTOWN
WITH FUTURE EXPANSION OF TWO ADDITIONAL 130,324 SQUARE FOOT MUTI-TENANT
BUILDINGS LOCATED IMMEDIATELY SOUTH OF THE PROPOSED BUILDING**

July 1, 2019

Domenico Ferrante of Briohn Design Group, LLC
Jeff Hook of Briohn Building Corporation
3885 N. Brookfield Road, Suite 200
Brookfield, Wisconsin 53045

SUBMITTED: On behalf of the current property owner GGWW, LLC, William Wetterau and Central Land Company III, LLC, developer Sam Dickman of The Dickman Company:

BRIOHN is submitting this "Description of Proposal or project narrative" on behalf of THE DICKMAN COMPANY.

Briohn Design Group LLC and Briohn Building Corp are acting as the representative applicant. The Dickman Company is the applicant. We are respectfully submitting a review package for Plan Consultation and Rezoning Request. In order to engage in this process with Plan Commission, we include a completed Rezoning & PDD application form, appropriate fees, plat of survey with legal description, site plans, building elevations, floor plans and 3D renderings depicting the proposed north building.

We are requesting for the entire three parcel site with the following legal description:

"Lot 2, 3 and 4 of CSM 5959, being a part of the East ½ of the Southeast ¼ of Section 7. Town 9 North, Range 20 east, Village of Germantown, Washington County, Wisconsin. Containing 45.46 acres

Parcels: GTNV 074988 (Lot 2), GTNV 074989 (Lot 3), CTNV 074990 (Lot 4)"

We asked for the property to be rezoned from A-1 Agricultural to M-1 Limited Industrial. We submitted this request to be placed on the agenda for the July 8, 2019 Plan Commission meeting.

At this time and in addition to the previous rezoning request, we are asking for Plan Commission approval for the proposed development at the site located on the southwest corner of the intersection of Rockfield Road and Goldendale Road. The proposed project entails

the construction of potentially two buildings starting construction this year and completing in 2020. The first building is located on the North site and will have a footprint area of 210,522 square feet with a 10,140 square feet mezzanine level. The proposed north site area will be 20.03 acres (872,456 SF). The new building will allow for an addition of approximately 75,000 square feet in the future.

We also ask for approval of the west and east buildings on the south site. The proposed size of the building is 130,324 square feet. The future phase proposed east building could happen potentially at the same time as the construction of the west building construction or in the future. The proposed south site area will be 25.44 acres (1,108,042 SF).

We are also asking for the approval of the CSM as it relates to the redivision of the current three lot property into two lots: north site and south site. The total of all three lots which are currently owned by the same owner, is 45.47 acres (1,980,498 SF).

The Description of the Proposal and preliminary concept Plan of Operation:

The Dickman Company proposes to construct a 210,522(220,662) square foot Multi-Tenant industrial/warehouse building with the potential for either 1-5 tenants of approximately equal size (area) or one large user to occupy the entire building. Our client is a light industrial type business with limited production and is mostly focused on office, warehouse and distribution.

The building will be constructed of painted concrete pre-cast insulated wall panels for all four sides of the proposed building. The principal façade or north elevation and side (east and west) elevations have insulated grey tinted glazing with clear anodized aluminum framing for all the fenestration. Note we have included large glazed entries for up to five possible tenants. The façade painting scheme uses three complimentary color tones with the two of the colors used as grey accents. The primary wall color will be a light grey off white color. We do include a red accent color as well. The rear or south elevation contains a 32-loading dock 9X10 overhead doors with 2 larger 14X16 grade level overhead doors. We also include man doors as needed to accommodate code required exiting. Note we have designed the south wall to have built-in flexibility to allow for relocation of the overhead doors as needed for future tenants as well as expansion for additional loading dock doors as need. Please see attached building architectural elevations.

Our client will have approximately 60-70 employees with the initial building proposed for development with up to potentially 100-110 employees on one daytime shift. The shift would be potentially between 7:00am and 6:00pm Monday through Friday with potentially Saturdays as well. Besides our current client, the possible tenant mix could include a variety of industrial types such as a general light industrial user or a warehouse distribution user or both.

The parking required is based on 90-110 employees overall with limited visitor parking. We have included 192 car parking stalls with the potential to expand car parking for additional 50 cars in the future... We also indicate 20 possible semi-trailer type parking stalls. The rear trailer

parking can be converted to car parking if the need for additional car parking increases in the future. This provides some built-in flexibility to accommodate future users which may differ from the current anticipated user or tenant mix.

Note we do not include any unscreened outside storage as part of this proposal. We have included one trash and recyclables enclosure which is located on the rear or south side of the building and site. The walls of the enclosure are the same as the painted concrete of the building walls. We also include prefinished gates on a steel frame as well. The future roof top units (RTU's) shall be screened by use of an extended front wall parapet and side wall parapets which is 4 feet higher than the roof plane. Since we are at the preliminary stage, we are not specifically identifying RTU locations until we submit for final approval.

The ultimate potential is to have flexibility for our client to expand the north building to accommodate an additional 75,000 square feet of building expansion on the east side of the north site. The developer would also like to have the flexibility to potentially develop two more buildings immediately south of the initial proposed north building, the two buildings to be located on the south side of the overall site would be potentially 130,324 square feet each.

~~Ample parking is provided for either building. The architectural appearance of the proposed~~
two south buildings would be complimentary to the north building, providing the feel of a cohesive campus. We ask for approval of the both buildings on the south site with the intent to build the west building first.

We have followed up with a detailed submittal package for all three buildings. We will include additional details and information as part of the project narrative. We also include the following: additional architectural drawings and details of all three proposed buildings; complete civil drawings and specifications for all three parcels, complete landscape plans and specifications for all three parcels and site lighting photo-metrics and cut sheets for the overall development. We include a request for a CSM as well to join the three lots into 2 lots.

Our intent is to submit the items referenced above in order to be considered for placement on the agenda for the August 12, 2019 Plan Commission meeting. We know that this does not align with newest Plan Commission submittal schedule deadline, but we are asking if there is any chance to be heard on the August 12th Plan commission agenda, we would appreciate it. If this requires additional review fees, let us know. If this can't be arranged, we would want to be on the September 9, 2019 Plan Commission agenda. Based on receiving Plan commission recommendation for approval, we would ask for the village board to approve as well.

We respectfully ask the Village of Germantown, Plan Commission and village staff to review and evaluate our proposal including the submitted drawings and other support materials. We believe that the proposed new development will not only meet our client's needs and expectations but those of the Village of Germantown as well. We look forward to your comments, eventual approval and our continued mutual success and appreciate the assistance provided and afforded by the Village of Germantown in the Rezoning process as well as the eventual Plan Commission and Village Board approval process.

Please contact us if you have any questions or need additional information.

Sincerely,

Domenico M. Ferrante AIA
Director of Architecture, Briohn Design Group LLC





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

August 29, 2019

Samuel Dickman
Central Land Company III, LLC
626 E. Wisconsin Avenue, Suite 1020
Milwaukee, WI 53202

RE: Dickman Multi-Tenant Site; CSM and Site Plan Review Applications
Staff Review Comments

Mr. Dickman:

Village Staff has reviewed the application, plan set and supporting materials submitted for the CSM and Site Plan Review applications. Below are the outstanding items/issues that need to be addressed before this item can be placed on the Plan Commission Agenda for review/approval. Please provide the requested information, corrections and/or revisions as soon as possible. If necessary, Village staff would be happy to meet with you to discuss or clarify any of these items.

Community Development Department

1. Washington County has jurisdictional authority for access permits to Goldendale Road (CTH Y). What is the status of the application with Washington County?
2. A copy of the traffic study completed for Wash Co needs to be provided to the Village.
3. Documentation available from the WisDNR indicates that the former man-made ponds on the property had both exempt and non-exempt wetlands associated with that pond. The ponds have since been filled. Can you provide WisDNR documentation regarding the filling that was approved?
4. A wetland delineation was done for the Dielectric site to the south and identified a small wetland area within the wooded area on the north side of that property... which is the same wooded area extend into the south side of this property. Was there any other wetland delineation effort made regarding the wooded area and/or man-made storm pond north of the wooded area that is intended to also be filled as part of the south building construction?
5. The site plans provide details for two buildings but the project narrative dated July 1 indicates you are seeking approval for all three buildings at this time. Please confirm you are seeking approval at this time for all three buildings. What is the anticipated construction schedule/sequencing for both the north and south buildings?
6. The driveway and parking lot setback along the west property line is insufficient. While not specifically discussed previously, there is an older single-family farm on the property to the west that is actually located in a residential district (vs. the previous agricultural districts that were rezoned when the Zilber/Briggs development was created). Although effort was made to do so, this 5-acre parcel was not included in the overall corporate park and TID#8 area due to property owner resistance. Consequently, the Zoning Code requirement for a min. 50' setback between residential and non-residential districts for driveways and parking lots

will have to be met by this development. That parcel and the corresponding Rs-1 District is adjacent for approximately 700 feet from north to south and will affect the parking and driveway layout. The current proposed setback along the west property line is 25 feet to the nearest point of the parking drive and will have to be moved to the east.

7. Based on comments from staff, the Plan Commission and received at the public hearing on the rezoning request, the berming and landscaping on the north (along Rockfield Road), the east (Goldendale Road) and the west property line are insufficient. Apparently because of the need for filling, the planned 1st floor elevation for the buildings is nearly the same as the height of most of the berming with a few berm “peaks” only 2’-3’ higher than that and/or the perimeter driveway. The height of the berms need to be increased with greater degree of horizontal and vertical variation/undulation and additional landscaping (see comment below).
8. As discussed with the PC previously, this property is the outer perimeter of the “industrial area” with Goldendale Road and Rockfield Road as the boundary roads between industrial and what will likely be low density residential or other non-industrial land uses. The berming and landscaping along these edge roads needs to be significant. The landscape consultant, Heller & Assoc., is familiar with this type of site and situation and has prepared acceptable landscape plans that have been installed elsewhere in the Village, namely the Airgas and Weimer Bearing sites along Mequon Road that divide the Germantown Business Park from the adjacent low-density residential areas. The same type of plan in terms of plant types (deciduous shade, ornamental & evergreen trees, deciduous & evergreen shrubs, etc.), density of plantings integrated into the berms, minimum plant sizes, is required here along Rockfield, Goldendale and to some degree along the property line abutting the residential district to the west (to supplement what will be retained of the existing tree line). The plan presented is a solid start toward achieving what is needed to provide the buffer area required.
9. The east elevation/façade of the building should be consistent with the west façade. The elevation will need to be replicated or improved upon in the event an expansion to the east takes place. At the PC consultation, staff expressed concern about the potential for outside storage and trailer parking on the east side of the north building. Briohn indicated that there would be no outside storage and that the trailer parking was being moved. Now there’s “future” trailer parking on the east end of the north and the south sites (with little or no landscaping along the east edges or straddling the common property line between the buildings).
10. Please explain the “chemical storage” area shown near the S.E. corner of the north building parking area. What chemicals are being stored? Quantities?
11. Th perimeter light fixtures (identified as “C” on the lighting plan) will need back and/or side shielding. Are these LED fixtures and those mounted on the buildings (fixtures “A” and “B”) capable of being dimmed to a lower lighting level during night-time hours?
12. A sample board is required and can be brought to the PC meeting or delivered to staff in advance.

13. We are assuming that signage for each future tenant will be applied for with separate sign permit applications; however, are there specific locations on the site where single- or multi-tenant monument signs are proposed? If so, those need to be shown on the site plans.

Fire Department

1. Add one fire hydrant at the intersection of Goldendale Road and the north entry drive. Public hydrants should be located within the Village utility easement.
2. Knox boxes are required on all buildings at locations to be determined by GFD.

Public Works/Village Engineer

Please refer to the Memo provided by the Director of Public Works dated August 15, 2019.

Village Surveyor

Please refer to the Memo provided by the Village Surveyor dated July 16, 2019. All revisions must be made to the CSM prior to being placed on the Plan Commission Agenda.

When submitting revised plans or additional information, please submit (1) digital plan set and fifteen (15) full-size, hard-copy plan sets set to the Community Development 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



September 5, 2019

Mr. Jeff Retzlaff
Village of Germantown CDD
N112 W17001 Mequon Road
Germantown, WI 53022

RE: Dickman Multi-Tenant Site Planning review comments – Letter dated August 29, 2019

Dear Jeff,,

This letter shall address the comments per listed items as follows:

Comment 1: We have received Washington County Public Works Committee approval on the proposed two access drives as shown on submitted plans. These access drives are on Goldendale Road. We have also received favorable comments and overall general support by the county in the process thus far. We will submit detailed plans to Washington as directed by staff to obtain a permit to construct the proposed two access drives. Submit on Friday September 13th with anticipated permit in about 3 weeks from time of submittal.

Comment 2: We have emailed copy of TADI's Traffic study to Germantown CDD and will provide hard copy as well if requested.

Comment 3 and 4: We emailed documentation to Germantown CDD on September 4th and Jeff recognized that the information sent to him adequately addresses the villages comments/concerns.

Comment 5: We are asking for full approval for both the north building and the southwest building as implied. We are asking for overall site approval for the entire development including the building pad to allow for the future construction of the southeast building, knowing that we would have to ask for in the future Plan Commission approval for the building in the future. Proposed schedule: is to start construction in October for the north building. The developer has a tenant who needs to be in by June of 2020. The southwest building could start in spring, but this is not finalized as of now.

Comment 6: We moved the driveway to comply with the 50 feet setback requirement from a residence.

Comment 7: We enhanced the berms and along Rockfield and Goldendale as requested to the best of our ability.

Comment 8: Heller has made the landscape adjustments as directed.

Comment 9: We believe that the combination of the proposed landscape and the enhancements made to the east elevation are compatible with the west elevation. In the future the final east façade will have to meet the plan commission approval at that time.

Comment 10: The chemical storage building will house 3 – 55-gallon barrels of Acetone. The owner/tenant could place inside the facility for safety and logistical reasons. The prefabricated building would be specifically designed to house chemicals and its location on the west end would provide the necessary screening.

Comment 11: We have provided a supplement cut sheet addressing the “Fixture shielding and the “A and “B” fixtures can be dimmed if required.

Comment 12: Sample is available and will be brought to the meeting.

Comment 13: We added a potential monument sign placeholder location on the north side of the site as discussed with the village staff, and we will show on the landscape plan. Potential building mounted signage will be submitted at a later date for village approval as required by ordinance.

Please contact Briohn Design Group with any questions.

Sincerely,

Dom Ferrante

Aaron Koch

From: Wood, Peter C - DNR <Peter.Wood@wisconsin.gov>
Sent: Tuesday, October 30, 2018 7:53 AM
To: Aaron Koch
Subject: RE: Guenther Wetterau Property

Aaron,

DNR recently modified the policy regarding storm water ponds and wetland determinations. Under the current policy, a storm water pond can be filled or modified without an official wetland exemption as long as the pond is surrounded by fill, impervious areas, or other non-wetland areas. Based on my review of the documents provided and air photos, the storm water ponds on the Guenther Wetterau Property meet this criteria and are exempt from DNR wetland permitting.

Pete Wood, P.E.

Storm Water Engineer – Water Division
Wisconsin Department of Natural Resources
9531 Rayne Road
Sturtevant, WI 53177
Phone: 262-884-2360
Peter.Wood@wisconsin.gov

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

From: Aaron Koch <Aaron.Koch@pinnacle-engr.com>
Sent: Monday, October 29, 2018 6:14 PM
To: Wood, Peter C - DNR <Peter.Wood@wisconsin.gov>
Subject: [WARNING: ATTACHMENT(S) MAY CONTAIN MALWARE]Guenther Wetterau Property

Pete,

On behalf of the owners of the property in Germantown on the northwest corner of Holy Hill and Goldendale Roads, I am requesting your concurrence on the status of two stormwater ponds on the property. This property was intended to be developed as a mixed use development with two wet detention ponds planned on the north half of the site. The site was reviewed by Alice Thompson in 2005 before construction started and she reported that no wetlands were present on the site. The site plan was subsequently approved by the Village and construction began in 2006. Both detention ponds were completed, which included a substantial amount of blasting, along with well and septic systems, and the site was stripped and graded. In 2007, with the onset of the recession, work on the project was halted and the site was left derelict for several years until it was purchased by the current owners who cleaned up the site by removing the stone blast piles and re-spread the topsoil so that the land could again be farmed. The ponds were not filled at that time because it was not needed for the farming operations, and the filling also represented a much larger expense to accomplish properly. The intent of the current owners was always to own this property as an investment and sell it when utilities were extended to the site and the market became more favorable.

This year, the Village is extending public utilities to the site and the demand for industrial lots in this area has risen dramatically. The Village has also amended their master plan to include this parcel of land as industrial use. The owners have been approached by a potential buyer who is looking to develop the property as

industrial but is hesitant to do so without understanding the potential of modifications to the two stormwater ponds. The north pond presents a substantial difficulty in siting industrial developments since it is situated in the middle of the parcel, and must be filled in order for the seller to have confidence that they can effectively complete their master plans for the property. The southern pond is strategically located such that it might be able to be kept in place and serve as a stormwater pond for the development, though it is foreseeable that some modifications may be needed to the pond. Both ponds are completely isolated and do not have outlets and are not connected to any surrounding waterways.

Based on the fact that there is documented evidence that no wetlands existed on the site prior to construction, the ponds are entirely man made, and the ponds are functioning solely as stormwater ponds, I believe that that current DNR wetland regulations do not apply to these two stormwater ponds, and that the owners should be free to fill or modify the ponds to facilitate development of the parcel. Of course, any such land disturbing activities involving disturbance of more than 1 acre of land would require a WPDES permit and Village approvals would apply as well.

Please review and let me know if the DNR concurs with this assessment. Attached are supporting documents illustrating that these are clearly stormwater detention ponds along with the stormwater report, and wetland delineation letter by Alice Thompson. Please don't hesitate to call me with any questions.

Thank you for your assistance.

Aaron Koch, P.E. | Senior Project Manager



PINNACLE ENGINEERING GROUP

CIVIL ENGINEERING | NATURAL RESOURCES | SURVEYING

15850 W. Bluemound Road | Suite 210 | Brookfield, WI 53005
(262) 754-8888 Main | (262) 754-8897 Direct | (262) 754-8850 Fax
aaron.koch@pinnacle-engr.com | www.pinnacle-engr.com

PLAN | DESIGN | DELIVER

CONFIDENTIALITY NOTICE:

This message is intended for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient or the employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by email reply.



December 13, 2018

William Wetterau
GGWW LLC
17711 Cove Lane
Germantown WI 53022

SUBJECT: Coverage Under WPDES General Permit No. WI-S067831-05: Construction Site Storm Water Runoff

Permittee Name: GGWW LLC
Site Name: GGWW LLC Pond Fill
FIN: 64953

Dear Permittee:

The Wisconsin Department of Natural Resources received your Water Resources Application for Project Permits or Notice of Intent, on December 12, 2018, for the GGWW LLC Pond Fill site and has evaluated the information provided regarding storm water discharges from your construction site. We have determined that your construction site activities will be regulated under ch. 283, Wis. Stats., ch. NR 216, Wis. Adm. Code, and in accordance with Wisconsin Pollutant Discharge Elimination System (WPDES) General Permit No. WI-S067831-05, Construction Site Storm Water Runoff. All erosion control and storm water management activities undertaken at the site must be done in accordance with the terms and conditions of the general permit.

The **Start Date** of permit coverage for this site is December 13, 2018. The maximum period of permit coverage for this site is limited to 3 years from the **Start Date**. Therefore, permit coverage automatically expires and terminates 3 years from the Start Date and storm water discharges are no longer authorized unless another Notice of Intent and application fee to retain coverage under this permit or a reissued version of this permit is submitted to the Department 14 working days prior to expiration.

A copy of the general permit along with extensive storm water information including technical standards, forms, guidance and other documents is accessible on the Department's storm water program Internet site. To obtain a copy of the general permit, please download it and the associated documents listed below from the following Department Internet site:

<http://dnr.wi.gov/topic/stormwater/construction/forms.html>

- Construction Site Storm Water Runoff WPDES general permit No. WI-S067831-05
- Construction site inspection report form
- Notice of Termination form

If, for any reason, you are unable to access these documents over the Internet, please contact me and I will send them to you.

To ensure compliance with the general permit, please read it carefully and be sure you understand its contents. Please take special note of the following requirements (This is not a complete list of the terms and conditions of the general permit.):

1. The Construction Site Erosion Control Plan and Storm Water Management Plan that you completed prior to submitting your permit application must be implemented and maintained throughout construction. Failure to do so may result in enforcement action by the Department.

2. The general permit requires that erosion and sediment controls be routinely inspected at least every 7 days, and within 24 hours after a rainfall event of 0.5 inches or greater. Weekly written reports of all inspections must be maintained. The reports must contain the following information:

- a. Date, time, and exact place of inspection;
- b. Name(s) of individual(s) performing inspection;
- c. An assessment of the condition of erosion and sediment controls;
- d. A description of any erosion and sediment control implementation and maintenance performed;
- e. A description of the site's present phase of construction.

3. A **Certificate of Permit Coverage** must be posted in a conspicuous place on the construction site. The Certificate of Permit Coverage (WDNR Publication # WT-813) is enclosed for your use.

4. When construction activities have ceased and the site has undergone final stabilization, a Notice of Termination (NOT) of coverage under the general permit must be submitted to the Department.

It is important that you read and understand the terms and conditions of the general permit because they have the force of law and apply to you. Your project may lose its permit coverage if you do not comply with its terms and conditions. The Department may also withdraw your project from coverage under the general permit and require that you obtain an individual WPDES permit instead, based on the Department's own motion, upon the filing of a written petition by any person, or upon your request.

If you believe that you have a right to challenge this decision to grant permit coverage, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to s. 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with s. NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with s. NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30-day period for filing a petition for judicial review.

Thank you for your cooperation with the Construction Site Storm Water Discharge Permit Program. If you have any questions concerning the contents of this letter or the general permit, please contact Peter Wood, P.E. at (262) 884-2360.

Sincerely,



Peter Wood, P.E.
Southeast Region
Water Resources Engineer

ENCLOSURE: Certificate of Permit Coverage



CERTIFICATE OF PERMIT COVERAGE

UNDER THE WPDES CONSTRUCTION SITE STORM WATER RUNOFF PERMIT Permit No. WI-S067831-05

Under s. NR 216.455(2), Wis. Adm. Code, landowners of construction sites with storm water discharges regulated by the Wisconsin Department of Natural Resources (WDNR) Storm Water Permit Program are required to post this certificate in a conspicuous place at the construction site. This certifies that the site has been granted WDNR storm water permit coverage. The landowner must implement and maintain erosion control practices to limit sediment-contaminated runoff to waters of the state in accordance with the permit.

EROSION CONTROL COMPLAINTS should be reported to the WDNR Tip Line at **1-800-TIP-WDNR (1-800-847-9367)**

Please provide the following information to the Tip Line:

WDNR Site No. (FIN): 64953

Site Name: GGWW LLC Pond Fill

Address/Location: SW corner of Goldendale and Rockfield Roads Village of GERMANTOWN

Additional Information:

Landowner: GGWW LLC

Landowner's Contact Person: William Wetterau

Contact Telephone Number: (414) 791-0908

Permit Start Date: December 13, 2018

By:  _____





Surface Water Data Viewer Map



Legend

- NRCS Wisconsin Soils
 - Soil Mapping Unit
- Water
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
 - Interstate Highway
 - State Highway
 - US Highway
- County and Local Roads
 - County HWY
 - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN_Image_Basemap_Leaf_Off

Notes

0.1 0 0.06 0.1 Miles

NAD_1983_HARN_Wisconsin_TM

1: 3,960

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: <http://dnr.wi.gov/legal/>

**Dickman Light Industrial
Development
Traffic Impact Analysis**

Village of Germantown
Washington County, Wisconsin
July 31, 2019



TRAFFIC IMPACT ANALYSIS FOR:

DICKMAN LIGHT INDUSTRIAL DEVELOPMENT
GERMANTOWN, WISCONSIN

July 31, 2019



PREPARED FOR:

Briohn Design Group, LLC
3885 N. Brookfield Road, Suite 200
Brookfield, WI 53045
Phone: (262) 790-0500
Contact Person: Dom Ferrente, AIA, LEED, AP, BD+C

PREPARED BY:

Traffic Analysis & Design, Inc.
P.O. Box 128
Cedarburg, WI 53012
Phone: (262) 377-1845
Contact Persons: John A. Bieberitz, P.E., PTOE
Tammi Czewski, P.E., PTOE

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CHAPTER 1 – INTRODUCTION & EXECUTIVE SUMMARY

PART A – PURPOSE OF REPORT AND STUDY OBJECTIVES

A light industrial development is being proposed on about 45.5 acres located west of Goldendale Road (CTH Y) between W. Rockfield Road and Holy Hill Road in the Village of Germantown, Washington County, Wisconsin. Access to the site is proposed at two locations to Goldendale Road (CTH Y) and one location to W. Rockfield Road.

This report was prepared to determine the traffic impacts and recommended modifications to accommodate the additional traffic volumes expected from the proposed Dickman development plus several other future developments on nearby parcels along Holy Hill Road and Goldendale Road (CTH Y). Traffic impacts were evaluated for the Year 2019 Existing conditions, Year 2024 Build conditions, and Year 2029 Build conditions.

PART B – EXECUTIVE SUMMARY

The executive summary includes a description of the study area, description of the development and conclusions based on the findings of the TIA.

B1. Location of Study Site with Respect to Area Roadway Network

The study area includes the following intersections:

- Holy Hill Road & USH 41/45 Southbound Ramps
- Holy Hill Road & USH 41/45 Northbound Ramps
- Holy Hill Road & Gateway Crossing – in construction
- Holy Hill Road & Goldendale Road (CTH Y)
- STH 145 & Goldendale Road (CTH Y)
- Dickman Development N. Driveway & Goldendale Road (CTH Y) - proposed
- Dickman Development S. Driveway & Goldendale Road (CTH Y) - proposed

B2. Proposed Development

In addition to the proposed Dickman development, several other development areas near the study intersections are expected to be constructed within the horizon year 2024 and horizon year 2029 time-frames. For this study, developments within the Germantown TID 7 and 8 areas are expected to be constructed by the horizon year 2024. Additional developments south of Holy Hill Road are expected to be constructed by the horizon year 2025. The land use types and sizes for each horizon year are summarized below. The location of each development area is shown along with the location of each study intersection on [Exhibit 1-1](#).

Year 2024 Build Developments

- Area A: Buildout of the TID 7 area which includes 120,000 square feet of manufacturing buildings, 42,000 square feet of office buildings, and a 150,000 square foot light industrial building.
- Area B: Full buildout of the Germantown Corporate Park in the TID 8 area, which includes an 852,280 square foot distribution building with 40 employees and additional 1,407,750 square feet of light industrial speculation buildings.
- Area C: Light industrial development on 30 acres in the TID 8 area.

- Area D: Dickman Light Industrial development in the TID 8 area. Plans include construction of a northern building with a maximum of 300,502 square feet and 120 employees, plus two additional 130,324 square foot buildings to the south.

Year 2029 Build Developments

- Area E: Light industrial development on 110 acres directly to the south of Holy Hill Road and the TID 8 area.
- Area F: Highway commercial development on 10 acres to the west of Area E.

B3. Year 2024 Build Traffic Recommendations (Exhibit 1-2)

The study area intersections were analyzed based on the procedures set forth in the *Highway Capacity Manual*, 6th Edition (HCM) using Synchro 10. For the purpose of this study, LOS D was used to define acceptable peak hour operating conditions. *Note that improvements are recommended for consideration and are not legally binding. All agencies reserve the right to determine alternative solutions.*

Holy Hill Road & USH 41/45 Southbound Ramps

- Install actuated-coordinated traffic signal control. Traffic signal warrants are expected to be met.
- Provide a westbound protected-permitted left-turn phase.

Holy Hill Road & USH 41/45 Northbound Ramps

- Install actuated-coordinated traffic signal control. Traffic signal warrants are expected to be met.
- Provide a westbound protected-permitted left-turn phase.
- If feasible, extend the eastbound left-turn lane storage on Holy Hill Road to at least 300 feet (increase of about 270 feet). The expected 95th percentile queues exceed the available turn lane storage.

Holy Hill Road & Gateway Crossing

- Construct the intersection with an eastbound left-turn lane and westbound right-turn lane on Holy Hill Road. Construct the lanes with at least 100 feet of storage to accommodate the expected traffic queues.
- Construct the intersection with a 125-foot left-turn lane and full-length right-turn lane on Gateway Crossing.
- Install actuated-coordinated traffic signal control. Traffic signal warrants are expected to be met.

Holy Hill Road & Goldendale Road (CTH Y)

- Install stop signs on the eastbound and westbound approaches on Holy Hill Road. AWSC warrants are expected to be met.
- Provide an eastbound right-turn lane with at least 100 feet of storage to accommodate the expected traffic queue.
- Provide a northbound left-turn lane with at least 150 feet of storage to accommodate the expected traffic queue.

STH 145 & Goldendale Road (CTH Y)

- No modifications are recommended for this intersection.

Dickman Development N. Driveway & Goldendale Road (CTH Y)

- Site the Dickman N. Driveway 657 feet south of the center of W. Rockfield Road as noted on the site plan. The Washington County access spacing requirements and the intersection sight distance requirements are met for the north driveway.
- Construct the Dickman N. Driveway with a single, shared eastbound left-turn/right-turn lane.
- If consecutive northbound left-turn bypass lanes are not practical at the Dickman site driveways, provide a northbound left-turn lane on Goldendale Road (CTH Y).
- Install stop sign control on the eastbound driveway approach.

Dickman Development S. Driveway & Goldendale Road (CTH Y)

- Site the Dickman S. Driveway 1,130 feet south of the center of W. Rockfield Road as noted on the site plan.
- Construct the Dickman S. Driveway with a single, shared eastbound left-turn/right-turn lane.
- If consecutive northbound left-turn bypass lanes are not practical at the Dickman site driveways, provide a northbound left-turn lane on Goldendale Road (CTH Y).
- Install stop sign control on the eastbound driveway approach.

B4. Year 2029 Build Traffic Recommendations (In Addition to Year 2024 Build Traffic Recommendations) (Exhibit 1-3)Holy Hill Road & USH 41/45 Southbound Ramps

- Widen Holy Hill Road with an additional eastbound and westbound through lane through the intersection.

Holy Hill Road & USH 41/45 Northbound Ramps

- Widen Holy Hill Road with an additional eastbound and westbound through lane through the intersection.

Holy Hill Road & Gateway Crossing

- Widen Holy Hill Road with an additional eastbound and westbound through lane through the intersection.
- Construct a new south approach for development Area E with at least a 250-foot left-turn lane and separate through/right-turn lane.
- Construct an eastbound left-turn lane and westbound right-turn lane on Holy Hill Road. Construct the lanes with at least 100 feet of storage to accommodate the expected traffic queues.
- Provide a westbound protected-permitted left-turn phase.

Holy Hill Road & Goldendale Road (CTH Y)

- Install actuated traffic signal control. Traffic signal warrants are expected to be met.

- Provide an eastbound, westbound, and southbound left-turn lane with at least 100 feet of storage to accommodate the expected traffic queue.
- Extend the northbound left-turn lane to at least 200 feet (additional 50 feet of storage) to accommodate the expected traffic queue.

STH 145 & Goldendale Road (CTH Y)

- No modifications are recommended for this intersection.

Dickman Development N. Driveway & Goldendale Road (CTH Y)

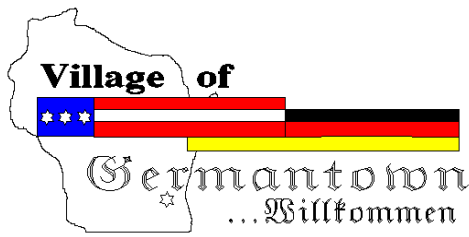
- No additional modifications are recommended for this intersection

Dickman Development S. Driveway & Goldendale Road (CTH Y)

- No additional modifications are recommended for this intersection

B5. Conclusion

With the recommended intersection modifications listed above, all movements at the study area intersections are expected to operate efficiently through buildout of the proposed site and off-site development areas.



Engineering Department Memorandum

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

From : Lawrence Ratayczak, P.E., Director of Public Works

Date : August 15, 2019

Re : Central Land Company – Goldendale and Rockfield Road.

Items Reviewed:

- | | |
|---|-----------------|
| 1. Civil Plan Set SV1.0 – C4.00 (8 pages) | Dated: 07-12-19 |
| 2. Stormwater Management Plan | Dated: 07-12-19 |

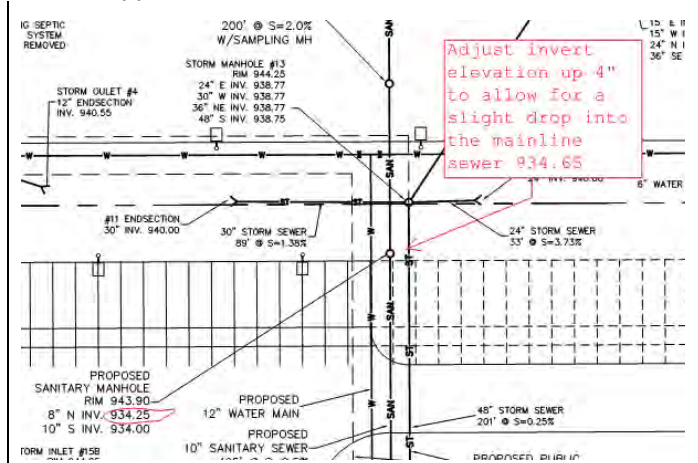
General Comments:

1. Please respond to each item below. **A written response addressing each item shall be included in your submittal.**
2. The submitted plans have been reviewed for general conformance with State and Village design guidelines. Additional comments could arise as a result of the plan completion and modifications. The items listed below will need to be fully resolved before the Engineering Dept. can recommend a formal approval of the plans and permit for construction.
3. This project will require a WRAPP/NOI from the DNR. Please submit a copy of the approved permit prior to final approval.
4. The project will require DSPS plumbing and infiltration system review and approval. Please provide a copy of the DSPS approval prior to engineering approval.
5. The site includes potential wetlands per the WDNR surface water data viewer. Please provide a wetland determination / delineation for the site.
6. As-builts prepared to Village standards shall be prepared and provided to the Village post-construction (for all applicable items).
7. A professional engineer's original seal is to be affixed, signed and dated on the final set of construction plans.
8. Contact Ryan Ehlerding, 262-250-4723 for a utility permit.
9. A detailed civil site plan does not appear to be included in the plans. Please provide a plan showing dimensions, paving types, ADA access, curb, etc.
10. Provide an exhibit showing a WB-67 can turn into through and exit the site. Adjust driveways and radii as required.
11. As a guide to the review response: Items in *italics* are resolved or acknowledged, items in regular font are to be addressed yet, items in **Bold** are additional feedback to remaining original comment.

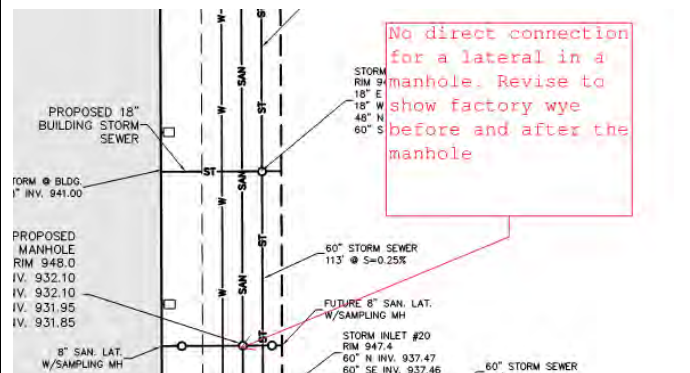
C2.0 Utility Plan

1. Public watermain improvements require plan and profile and WDNR watermain extension approval. Prepare the plan and profile sheets and submit to the water utility for review and approval.

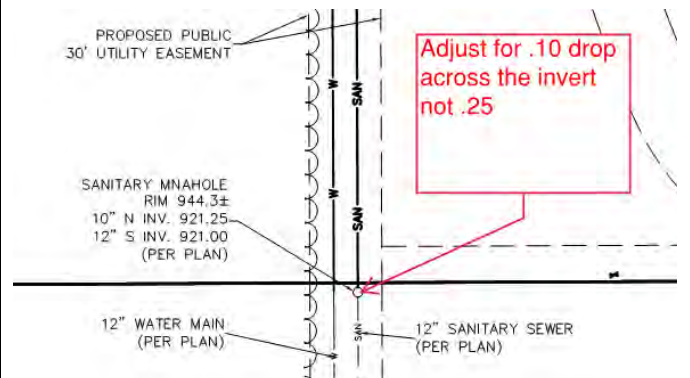
2. Hydrants and leads shall be public and within an easement.
3. Move the hydrants valves to 4' from the hydrant.
4. Bollards are required for hydrants in paved areas. Show bollards and provide a detail.
5. Call out all watermain valves, and building service shut offs with sizes.
6. Show and label crossings with elevations.
7. Add village standard hydrant detail (latest version) attached.
8. Sanitary sewer will require plan and profile and MMSD approval.
9. Adjust invert elevations as noted on the markup.



10. Revise lateral connections to connect with a factory wye and not into a manhole.



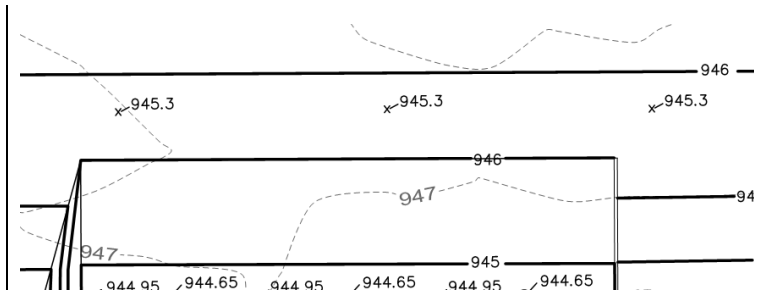
- 11 Adjust invert elevations as noted to right.



12. Please provide storm sewer calculations.

C1.2 Site Grading Plan

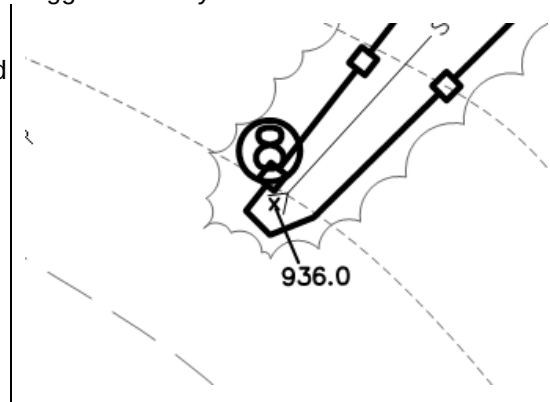
1. Spot elevations in this area do not match the contours.



2. Revise stormwater basin to have an emergency overflow weir.
3. Consider adding sediment forebays to the wet retention basin.
4. Show overland flow path through the site with large arrows.
5. Label door elevations and ground elevations around the buildings
6. Add a level spreader at the outlet from the basin. Add a detail for the level spreader to the plan set.

C3.0 Site Erosion Control Plan

1. Note reference the WisDOT PAL date 11/2/107, update date reference to the current date.
2. Construction schedule calls for the buffer area to be flagged. Clearly show the buffer area on the plans.
3. Slit fence does not work well out pipe outlets.
Please revise to show other erosion control method at all pipe outlets.



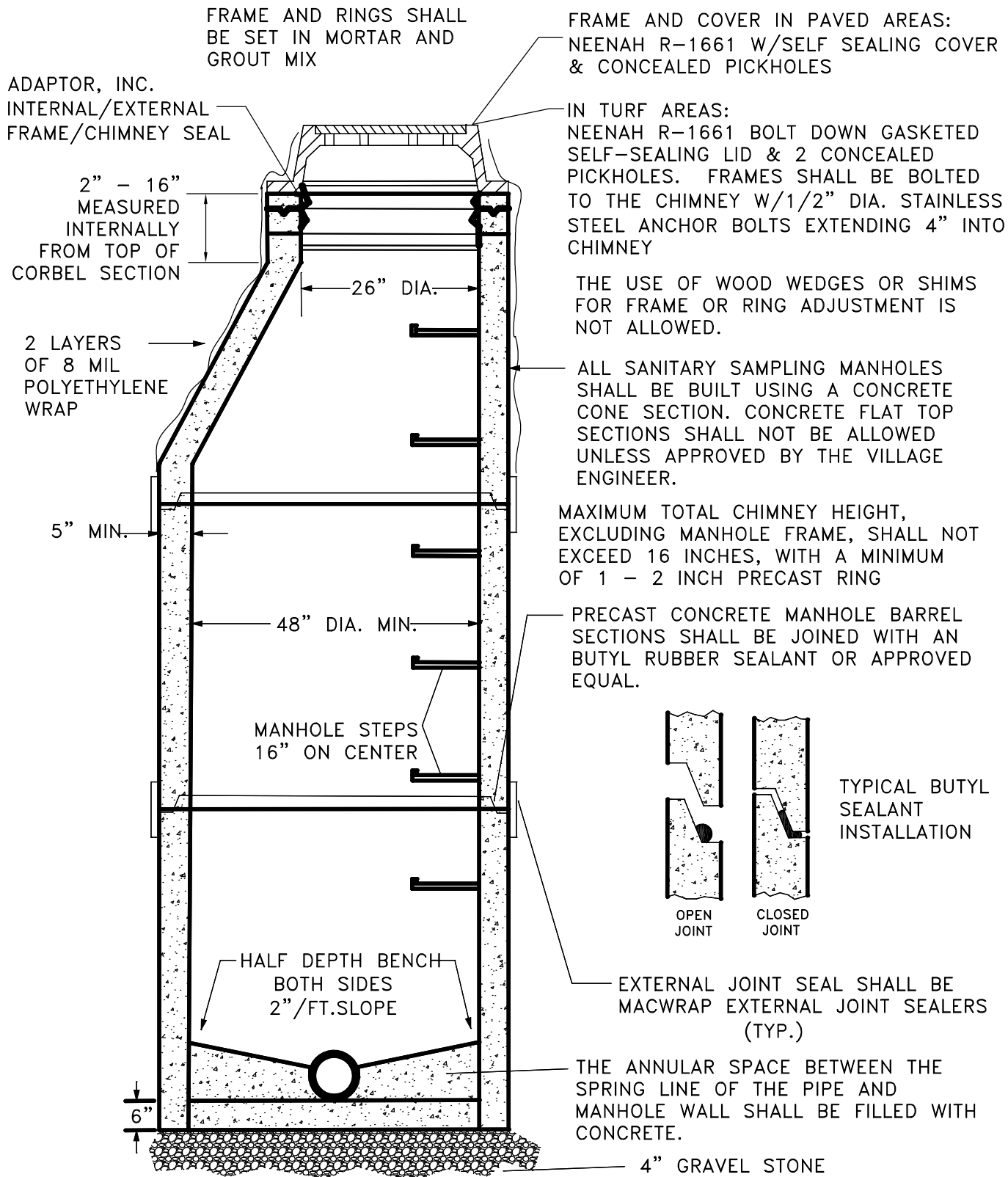
- 4 Show outlet protection on all flared end sections.

C4.0 Site Details

1. Add village standard sanitary sewer manhole detail.
2. Add village standard hydrant detail.

Stormwater Management Plan

1. Soil survey for this site shows mostly type C soils with a small area of type B/D soils on the northeast corner. Revise curve number to match soils types per the soil survey.
2. Add information about the rainfall distribution used to the rainfall section.
3. A portion of the site (between the building expansion and Goldendale road appears to overtop north to the bio-retention basin, but it is included in the drainage area to the wet pond. Adjust grading to overtop south or revise hydrocad modeling to account for large events routing a different direction.
4. Confirm that all the future improvements shown on the proposed exhibit are currently included within the stormwater management plan. Recommend creating a table to show total planned impervious verses what is currently being constructed. That table will greatly simplify future approvals.
5. Revise the hydrocad model to account for 27% voids in the engineered soil and 33% in the stone.
6. The site appears to have bedrock and a high groundwater table. Provide information showing the bottom of the bio-retention basin meets the separation distance required by WDNR and DSPS.
7. The detail for the bio-retention basins shows a 10' wide spillway at 945.50. Where is that spillway located?
8. Revise the pond detail to show the clay liner extending up to to 2 year water elevation.
9. Provide a detail for the South pond outlet control structure. Detail shall show wall thickness, top and bottom thickness, sump, casting type, etc.
10. Provide anti-seep collars on the pond outlet pipe.
11. The green infrastructure section of the report appears to reference a City of Milwaukee Ordinance. The Village of Germantown requires new developments to meet eh requirements of MMSD Chapter 13.
12. Change the land use in WinSLAMM to industrial.
- 13` Adjust the winter season to the correct dates for Milwaukee
- 14 Provide information on how the infiltration rate of 0.3 in/hr was chosen for the SLAMM model.
15. Revise the infiltration rate fraction side to 0.01 in the SLAMM model.
16. Adjust the engineered soil porosity to 0.27



SPRAY EPOXY COATINGS

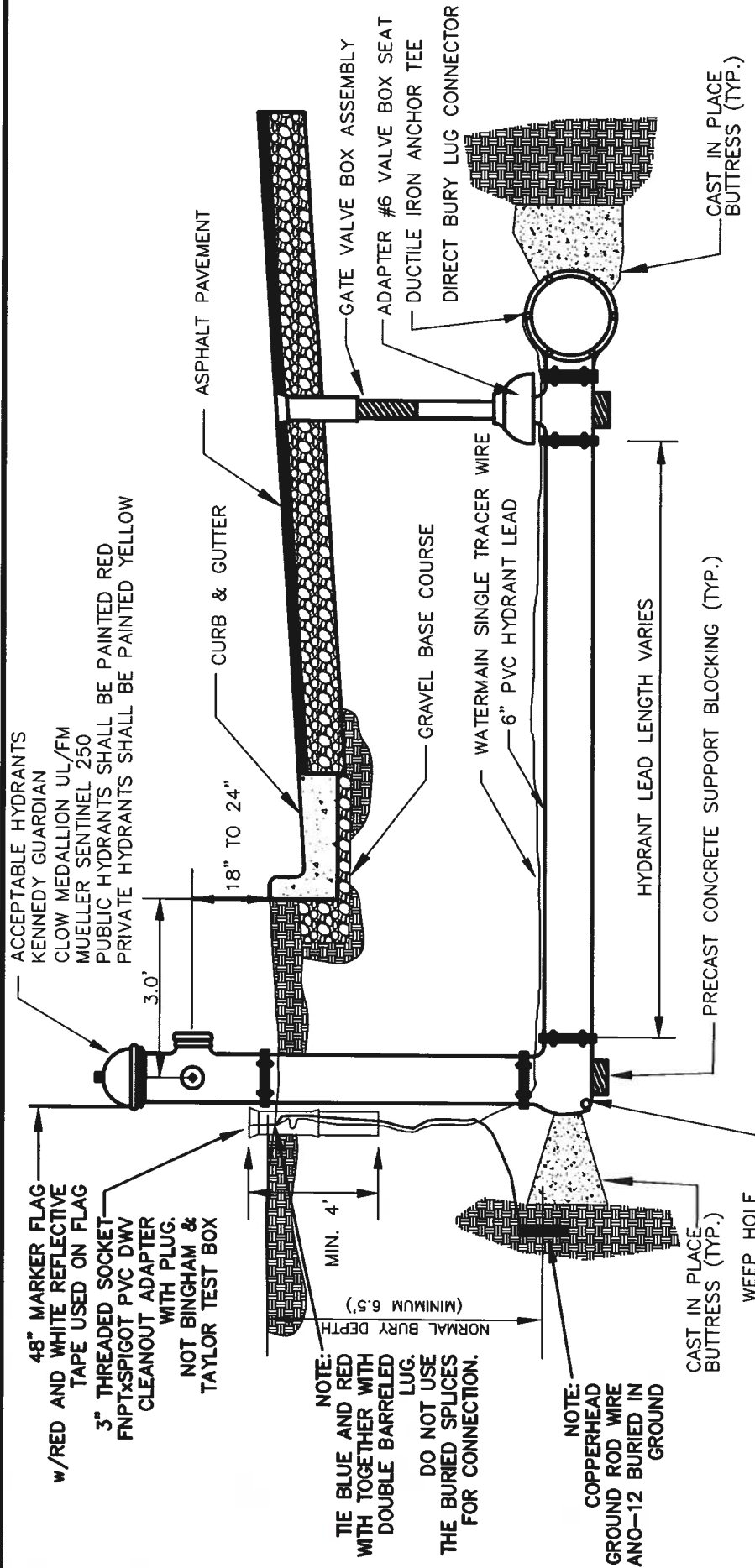
MH EXTERIOR: 2 COATS (BLACK) OF AMERON INTERNATIONAL, AMERCOAT 78 HB AT 8-10 MILS EA.
MH INTERIOR: 2 COATS (WHITE) OF PERMITE PCS-9043 TYPE II PERMOX PIPE GLAZE AT 20 MILS EA.
COATINGS SHALL BE APPLIED BY SUPPLIERS AT THE PLANT.



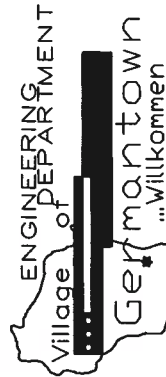
STANDARD SAMPLING MANHOLE DETAIL

REVISED DATE: 5/9/2016 RCB

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
5. ALL HYDRANTS ASSEMBLY'S SHALL BE "LIVE TAPPED" TO THE EXISTING WATER MAIN..



PVC HYDRANT BRANCH DETAIL

N.T.S.

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

FRAME AND COVER IN PAVED AREAS:
NEENAH R-1661 W/SELF SEALING COVER & CONCEALED PICKHOLES

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

ADAPTOR, INC.
INTERNAL/EXTERNAL
FRAME/CHIMNEY SEAL

2" - 16"
MEASURED
INTERNALLY
FROM TOP OF
CORBEL SECTION

2 LAYERS
OF 8 MIL
POLYETHYLENE
WRAP

5" MIN.

26" DIA.

THE USE OF WOOD WEDGES OR SHIMS FOR
FRAME OR RING ADJUSTMENT IS NOT ALLOWED.

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

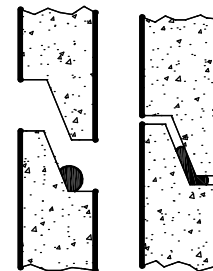
ALL CHIMNEY'S SHALL BE BUILT USING CRETEX
PRO - RINGS INSTALLED PER MANUFACTURES
INSTRUCTIONS.

48" DIA. MIN.

MANHOLE STEPS
16" ON CENTER

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

HALF DEPTH BENCH
BOTH SIDES
2"/FT. SLOPE



TYPICAL BUTYL
SEALANT
INSTALLATION

OPEN JOINT CLOSED JOINT

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

6"
↑

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

MIN. 4" GRAVEL STONE BASE

SPRAY EPOXY
COATINGS

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



STANDARD SANITARY MANHOLE DETAIL

REVISED DATE: 10/12/2017 RCB

NOT TO SCALE



Engineering Department Memorandum

To Jeffrey W. Retzlaff, AICP, Planning Director/Zoning Administrator
From Lawrence Ratayczak, P.E., Director of Public Works
Date August 15, 2019
Re Central Land Company - Goldendale and Rockfield Road.

Items Reviewed:

- | | |
|---|-----------------|
| 1. Civil Plan Set SV1.0 - C4.00 (8 pages) | Dated: 07-12-19 |
| 2. Stormwater Management Plan | Dated: 07-12-19 |

General Comments:

1. Please respond to each item below. **A written response addressing each item shall be included in your submittal.**
 - *Responses from CJ Engineering shown in red.*
2. The submitted plans have been reviewed for general conformance with State and Village design guidelines. Additional comments could arise as a result of the plan completion and modifications. The items listed below will need to be fully resolved before the Engineering Dept. can recommend a formal approval of the plans and permit for construction. - **OK**
3. This project will require a WRAPP/NOI from the DNR. Please submit a copy of the approved permit prior to final approval.
 - *The permit has been applied for; once it is received we will provide a copy to the Village.*
4. The project will require DSPS plumbing and infiltration system review and approval. Please provide a copy of the DSPS approval prior to engineering approval.
 - *An appointment has been made. We will also request an early start approval. When the approval is received we will provide a copy to the Village.*
5. The site includes potential wetlands per the WDNR surface water data viewer. Please provide a wetland determination / delineation for the site.
 - *Dave Meyer, wetland specialist and assured delineator visit the site and determine that there are no wetlands on the site. Email correspondence of his findings was sent to the Village on 09-04-19 and acknowledge as acceptable by Jeff Retzlaff.*
6. As-builts prepared to Village standards shall be prepared and provided to the Village post-construction (for all applicable items).
 - *Will provide once construction is completed.*
7. A professional engineer's original seal is to be affixed, signed and dated on the final set of construction plans.
 - *We will provide stamped copies of the final CDs.*
8. Contact Ryan Ehlerding, 262-250-4723 for a utility permit.
 - *The contractor will contact Ryan for the required permit.*
9. A detailed civil site plan does not appear to be included in the plans. Please provide a plan showing dimensions, paving types, ADA access, curb, etc.
 - *A dimensioned site plan is provide by the Architect, see sheets A0.1, A0.2 & A0.3*
10. Provide an exhibit showing a WB-67 can turn into through and exit the site. Adjust driveways and radii as required.
 - *This has been created and is included in the plan set.*

11. As a guide to the review response: Items in *italics* are resolved or acknowledged, items in regular font are to be addressed yet, items in **Bold** are additional feedback to remaining original comment.

C2.0 Utility Plan

1. Public watermain improvements require plan and profile and WDNR watermain extension approval.
Prepare the plan and profile sheets and submit to the water utility for review and approval.
 - *We are in the process of creating and will submit to the Village and WDNR for approval.*
2. Hydrants and leads shall be public and within an easement.
 - *The proposed easement has been revised to include all hydrants and leads.*
3. Move the hydrants valves to 4' from the hydrant.
 - *The valves have been moved to 4' from the hydrants.*
4. Bollards are required for hydrants in paved areas. Show bollards and provide a detail.
 - *NA, since all hydrants are located in grass/landscape areas.*
5. Call out all watermain valves, and building service shut offs with sizes.
 - *All valves are called off. Additional details will be provided on the plan and profile sheets.*
6. Show and label crossings with elevations.
 - *All crossing will be labeled with elevations on the plan and profile sheet.*
7. Add village standard hydrant detail (latest version) attached.
 - *The Village detail has been added to the detail sheets (C4.0)*
8. Sanitary sewer will require plan and profile and MMSD approval.
 - *We will create this plan and profile for Village and MMSD approval.*
9. Adjust invert elevations as noted on the markup.
 - *This area has been revised.*
10. Revise lateral connections to connect with a factory wye and not into a manhole.
 - *The laterals have been moved.*
11. Adjust invert elevations as noted on the markup.
 - *This area has been revised.*
12. Please provide storm sewer calculations.
 - *Storm sewer calcs. are enclosed and included in the SWMP.*

C1.2 Site Grading Plan

1. Spot elevations in this area do not match the contours.
 - *Revised and fixed this area.*
2. Revise storm water basin to have an emergency overflow weir.
 - *Added the overflow weir to the plans.*
3. Consider adding sediment forebays to the wet retention basin.
 - *This was considered but we decided against it since the runoff into the pond enters at different locations.*
4. Show overland flow path through the site with large arrows.
 - *We typically do not add the arrows since the contours and stop grades should make the drainage pattern clear. If required to do so we will add these to the plan.*
5. Label door elevations and ground elevations around the buildings.
 - *Added elevations at all doors of buildings.*
6. Add a level spreader at the outlet from the basin. Add a detail for the level spreader to the plan set.
 - *Added level spreader to the plan and included a detail on sheet C4.0*

C3.0 Site Erosion Control Plan

1. Note reference the WisDOT PAL date 11/2/107, update date reference to the current date.
 - *Updated the reference date.*
2. Construction schedule calls for the buffer area to be flagged. Clearly show the buffer area on the plans.
 - *There is no buffer area. We deleted this from the schedule.*
3. Slit fence does not work well out pipe outlets. Please revise to show other erosion control method at all pipe outlets.
 - *This has been changed to a hay bale. ...*
4. Show outlet protection on all flared end sections.
 - *Added call out for this to all end sections.*

C4.0 Site Details

1. Add village standard sanitary sewer manhole detail.
 - *Added detail to sheet C4.0*
2. Add village standard hydrant detail.
 - *Added detail to sheet C4.0*

Stormwater Management Plan

1. Soil survey for this site shows mostly type C soils with a small area of type B/D soils on the northeast corner. Revise curve number to match soils types per the soil survey.
 - *The site has been graded for the former Miracle Homes, so the underlying soils no longer are valid. The soil type of C has been used for the site. This is based on the current soil borings.*
2. Add information about the rainfall distribution used to the rainfall section.
 - *This information has been added to the report.*
3. A portion of the site (between the building expansion and Goldendale road appears to overtop north to the bio-retention basin, but it is included in the drainage area to the wet pond. Adjust grading to overtop south or revise hydrocad modeling to account for large events routing a different direction.
 - *This area has been clarified on the grading plan. The storm water subcatchment areas have been updated accordingly.*
4. Confirm that all the future improvements shown on the proposed exhibit are currently included within the stormwater management plan. Recommend creating a table to show total planned impervious verses what is currently being constructed. That table will greatly simplify future approvals.
 - *The future areas have been accounted for in the storm water basin(s) design. A table has been added to the report and plan.*
5. Revise the hydrocad model to account for 27% voids in the engineered soil and 33% in the stone.
 - *The model has been revised.*
6. The site appears to have bedrock and a high groundwater table. Provide information showing the bottom of the bio-retention basin meets the separation distance required by WDNR and DSPS.
 - *A note has been added to the detail. In addition we will get an updated soil testing in this area to confirm that the required separation is met.*
7. The detail for the bio-retention basins shows a 10' wide spillway at 945.50. Where is that spillway located?
 - *This is incorrect. The detail has been revised. The overspill location and grades have been added to the grading plan.*
8. Revise the pond detail to show the clay liner extending up to to 2 year water elevation.
 - *The liner has been extended to the 2-year peak elevation.*
9. Provide a detail for the South pond outlet control structure. Detail shall show wall thickness, top and bottom thickness, sump, casting type, etc.
 - *This has been added to the details.*
10. Provide anti-seep collars on the pond outlet pipe.
 - *An anti-seep collar has been added to the outlet pipe.*
11. The green infrastructure section of the report appears to reference a City of Milwaukee Ordinance. The Village of Germantown requires new developments to meet eh requirements of MMSD Chapter 13.
 - *This has been correct and the reference to the City of Milwaukee has been removed.*
12. Change the land use in WinSLAMM to industrial.
 - *This has been changed in the WinSLAMM model.*

13. Adjust the winter season to the correct dates for Milwaukee.

- *The dates have been corrected*

14. Provide information on how the infiltration rate of 0.3 in/hr was chosen for the SLAMM model.

- *We used the model values. This has been changed to 0.11 in/hr based on the DNR Tech standard 1002, table 2, for sandy clay loam soils.*

15. Revise the infiltration rate fraction side to 0.01 in the SLAMM model.

- *This has been changed / revised.*

16. Adjust the engineered soil porosity to 0.27.

- *This has been changed / revised.*



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STORM WATER MANAGEMENT PLAN

FOR

Dickman Multi-Tenant Development

Goldendale Road & Rockfield Road
Germantown, WI 53022

July 12, 2019
Revised: September 5, 2019

PREPARED BY:

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CJ Engineering
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CJE Job No.: 1928R1-SWMP

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Introduction:

The proposed development of Dickman Multi-Tenant Development will consist of the construction of a 240,468 s.f. commercial building (with a 60,034 s.f. future addition) and a 130,324 s.f. commercial building with a future 130,324 s.f. commercial building along with a paved parking, paved drives and loading areas as well as emergency access paved drives.

The existing site is a previously abandoned development where several large storm water basins were installed along with water wells and septic mounds. Since that abandoned development the northern most storm water management basins filled by others. The existing topography shows a ridge line which separates the site approximately in the middle. The north ½ of the site drains towards a roadway culvert under Rockfield Road and the south ½ drains towards either Goldendale Road or eventually towards Holy Hill Road. Subsurface exploration has been performed by GASTRA on the site. Per the report, the predominate native soils on site consist mostly of loose to very dense sands and silts beneath fill soil or topsoil with groundwater levels between 7 to 10 feet down. Furthermore, most borings experienced auger or sample refusal with an assumption of bedrock at that elevation which is consistent with the history of the site containing bedrock. Per GASTRA, the site can be considered exempt from infiltration requirements based on the presence of bedrock and groundwater.

In order to meet to the storm water management requirements of NR 151, Village of Germantown and MMSD, two new storm water facilities will be constructed. The first is a bioretention basin will be located near the north end of the site that will receive runoff from immediately adjacent parking lot and drives. Discharge from the bio-basin will be directed to the existing culvert under West Rockfield Road. The remaining site pervious and impervious surfaces, including all proposed and future buildings, will be directed to the proposed storm water pond located at the southeast corner of the site. Discharge from the storm water pond will be directed to the existing woodlands west of the proposed water pond. The basins and site have been evaluated via the unit release rate approach where maximum release rate for the 2-year storm event is 0.15 cfs/acre and the maximum release rate for the 100-year storm event is 0.5 cfs/acre. The proposed basins will have a 2.0 foot clay liner to provide groundwater separation due to the presence of ground water and bedrock.

Allowable runoff per MMSD requirements:

The basins and site have been evaluated via the unit release rate approach where maximum release rate for the 2-year storm event is 0.15 cfs/acre and the maximum release rate for the 100-year storm event is 0.5 cfs/acre.

Total Analyzed (Disturbed) Area = 41.24 acres

2 year maximum release rate = 41.24 acres x 0.15 cfs/acre = 6.19 cfs

100 year maximum release rate = 41.24 acres x 0.50 cfs/acre = 20.62 cfs

Developed Site: (See the Proposed Conditions Plan: Appendix “B”).

Soil Types: Per subsurface exploration performed by GASTRA, the native soils on site consist mostly of loose to very dense sands and silts beneath fill soil or topsoil with groundwater levels between 7 to 10 feet down.

Cover & CN: CN 61, >75% Grass Cover, Good, HSG B.
CN 98, Paved Parking & Roofs & Streets.
CN 98, Pond Surface Area.

Area Breakdown:

Subcatchment 1: Area to Bio-Retention Basin	
Proposed Pavement	2.16 Acres
Future Pavement Additions	0.21 Acres
Open	2.15 Acres
Total	4.52 Acres
Subcatchment 2: Area to Wet Pond	
Proposed Pavement	8.14 Acres
Future Pavement Additions	4.10 Acres
Proposed Building	8.51 Acres
Future Building	4.37 Acres
Water Surface	1.173 Acres
Open	7.24 Acres
Total	34.07 Acres
Subcatchment 3: Undetained Area	
Proposed Pavement	0.04 Acres
Future Pavement Additions	0.27 Acres
Open	2.43 Acres
Total	2.65 Acres

Total Area: **41.24 ACRES**

24-Hour Rainfall Values:

2-Year: 2.66”

10-Year: 3.82”

100-Year: 6.37”

Per Village of Germantown Code of Ordinance (Am. Ord. #13-09; Am. Ord. #07-14) Section 27.02 – Technical Standards, All rainfall data provided by NOAA Atlas 14, Precipitation-Frequency Atlas of the United States, Volume 8, Version 2.0 for the longitude and latitude of Germantown, WI; Lat. 43.2389°, Long. -88.1222°; Station ID: 47-3058

Rainfall Distribution: SCS-II-24 Hour

Method of Analysis:

The storm water runoff quantity was calculated using the methods outlines in TR-55 (“Urban Hydrology for Small Watersheds” by the U.S. Department of Agriculture’s Soil Conservation Services). Calculations were performed with the “HydroCAD 10.00 computer software. Water quality calculations were done using WinSLAMM for Windows version 10.2.0. An native soil infiltration rate of 0.11 was used in the calculation based on the majority of the existing site being classified as sandy clay loam by GESTRA Engineering, Inc. The Infiltration rate value can be reference in DNR Technical Standards 1002 – Page 5, Table 2.

Drainage Summary: (See Summary of Calculations in Appendix)

Area	2 Year Storm	10 Year Storm	100 Year Storm
Existing Conditions			
North Subcatchment #1	15.66 cfs	35.52 cfs	87.39 cfs
South Subcatchment #2	12.64 cfs	28.51 cfs	69.52 cfs
Reach (total existing flow)	27.76 cfs	63.03 cfs	155.04 cfs
Proposed Conditions			
North Subcatchment #1 – (to bioretention basin)	7.34 cfs	13.95 cfs	29.69 cfs
Bioretention Basin	1.09 cfs	2.09 cfs	2.70 cfs
South Subcatchment #2 – (to storm water pond)	76.29 cfs	122.94 cfs	225.12 cfs
Storm Water Pond	0.36 cfs	0.45 cfs	3.76 cfs
Undetained	1.33 cfs	4.19 cfs	12.47 cfs
Reach (Total Proposed Runoff)	1.62 cfs	5.98 cfs	15.11 cfs
Maximum Allowable Runoff	6.19 cfs		20.62 cfs

Green Infrastructure Requirement:

The proposed development includes the construction of proposed buildings, parking, drives and walks. A total of 1,210,615 s.f. (27.79 Acres) of impervious surface is proposed for the development. In order to meet storm water management requirements, a storm water pond and a biofiltration basin is being proposed.

Per MMSD Chapter 13, the development must include green infrastructure with a detention volume equal to at least ½” multiplied by the total area of new or redeveloped impervious surface.

Required Volume:

$$0.0416 \text{ feet} \times 1,210,615 \text{ feet}^2 = 50,362 \text{ ft}^3 \text{ required detention volume}$$

Proposed Volume (per included HydroCAD calculations):

$$\text{Bioretention Basin} = 65,305 \text{ ft}^3 \text{ (at elevation 945.5)}$$

Water Quality:

Based on the proposed construction of the wet detention basin and bioretention basin, the site exceeds the WDNR requirements and Village of Germantown for development for water quality by removing over 80% of the total suspended solids (TSS) prior to discharge off site, as quantified using WinSLAMM for Windows version 10.2.0 (See appendix for calculation results). The TSS out of each area and total removal as a part of the series of site is as summarized below:

	Before Drainage System	After Controls	% Reduction
Total	12,671 lbs.	1,357 lbs.	89.29%

Conclusion:

Per MMSD requirements, the basins and site have been evaluated via the unit release rate approach where maximum release rate for the 2-year storm event is 0.15 cfs/acre and the maximum release rate for the 100-year storm event is 0.5 cfs/acre. Furthermore, the bioretention basin and storm water pond will remove over 80% of TSS from the runoff after development. Therefore, the proposed development meets and exceeds the storm water management and water quality requirements for the Village of Germantown, MMSD and NR 151. Electronic copies of the HydroCad files will be provided if requested.

APPENDIX

GEOTECHNICAL ENGINEERING REPORT

***Proposed Multi-Tenant Development
Goldendale Road
Germantown, Wisconsin***

***GESTRA Project No.: 19173-10
June 28, 2019***

***Prepared For:
Briohn Building Corporation
3885 N. Brookfield Road, Suite 200
Brookfield, WI 53045***

Geotechnical Engineering Report
Proposed Multi-Tenant Development
Goldendale Road
Germantown, Wisconsin

GESTRA Project No. 19173-10
June 28, 2019

Prepared For:

Briohn Building Corporation
3885 N. Brookfield Road, Suite 200
Brookfield, WI 53045

Prepared By:



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**Geotechnical Engineering Report
Proposed Multi-Tenant Development
Goldendale Road
Germantown, Wisconsin**

1.0 INTRODUCTION

GESTRA Engineering, Inc. (GESTRA) was authorized by Briohn Building Corporation (Briohn) to complete a subsurface exploration and geotechnical report for the Proposed Multi-Tenant Development project located at the southwest corner of Goldendale Road and Rockfield Road in Germantown, Wisconsin. This report presents the results from the subsurface soil exploration and describes the field exploration, laboratory test results, and provides recommendations pertaining to the design and construction of the proposed new multi-tenant buildings, paved parking lots and drives, and stormwater basin.

The engineering recommendations and analysis contained within this report are based on the following project information which is a projection of GESTRA's understanding of the project. If for any reason the actual project information differs from what is reported below, GESTRA should be contacted so that we can review our recommendations in light of any new information.

1.1 PROJECT INFORMATION

The proposed project is the development of the property located southwest of the intersection of Rockfield Road and Goldendale Road in Germantown, Wisconsin. The proposed project will include 3 new multi-tenant buildings with associated pavements. A conceptual site layout is included in the Appendix. The north building will have an approximate footprint of 240,500 square feet (SF) with a possible 75,000 SF expansion on the east side of the building and will include a mezzanine section. The southern 2 buildings will have approximate 130,000 SF footprints. At this time, additional building details are not available, but we assume column loads will not exceed 150 kips and wall loads will not exceed 4 kips per lineal foot.

Paved asphalt entrances and exits will be located east of the buildings to access Goldendale Road. Car parking stalls are planned north and west of the north building and south of the south buildings, and trailer parking stalls are planned north of the south buildings. Loading docks are planned on the south side of the north building and the north side of the south buildings.

The plan finish floor elevation is 948 feet for the north building. An existing pond is present in the southeast corner of the north building and we understand engineered fill will be placed after the pond is drained and any unsuitable material removed. The depth of the pond is unknown at this time. For the remainder of the building (outside the existing pond), we estimate a maximum of 3 feet of excavation (cut) and 6 feet of fill will be required to attain finish floor elevation.

The plan finish floor elevation is 949 feet for the south buildings. An existing pond is present in the majority of the south half of the western south building and we understand engineered fill will be placed after the pond is drained and any unsuitable material removed. The depth of the pond is unknown at this time. For the remainder of the western south building (outside the existing pond), we estimate a maximum of 3 feet to 6 feet of fill will be required to attain finish floor elevation.

For the eastern south building, we estimate a maximum of 2 feet to 8 feet of fill will be required to attain finish floor elevation.

The existing ponds also extend under proposed pavement areas. Similar to the buildings, we understand engineered fill will be placed after the pond is drained and any unsuitable material removed.

In the southeast portion of the development, a stormwater pond is planned. The planned bottom elevation of the pond is 932 feet and we estimate 9 to 14 feet of cut is required from existing grades.

2.0 SCOPE OF WORK

GESTRA has performed the following services for the project:

- Contacted Diggers Hotline to locate the public utilities at the site.
- Field boring locations were provided by Capitol Survey Enterprises. Ground surface elevations were estimated from the topographic and boring location plan provided by CJ Engineering.
- Completed thirteen (13) standard penetration test (SPT) soil borings. Borings were planned to be drilled to 15 feet or 20 feet for borings adjacent to existing pond areas. Borings were terminated at auger refusal if encountered shallower than the planned boring depth. The eleven (11) borings for the building and pavement areas were sampled at 2 ½ foot intervals to 11 feet and 5-foot intervals thereafter except in boring B-4 where deep fill material was encountered. The two (2) stormwater borings were sampled at continuous 2-foot intervals. At the completion of drilling, boreholes were abandoned per WDNR requirements.
- Performed laboratory soil testing to assign classification and engineering properties to the soils encountered. The laboratory testing included hand penetrometer, moisture and organic content, Atterberg limits, and percent passing the number 200 sieve (P200).
- Prepared this engineering report presenting the results of the field exploration, laboratory testing, and provided the following recommendations pertaining to the proposed construction.
 - a. Building: shallow foundations, allowable bearing capacity, estimates of settlement, lateral earth pressures, seismic site classification, anticipation and management of groundwater, subgrade modulus for design of slabs on grade, and site preparation/soil correction.
 - b. Pavement: soil parameters for the pavement design consisting of an estimated CBR value(s), asphalt and base course thickness for the proposed parking lots and drives based on anticipated traffic, and site preparation/soil correction.
 - c. Stormwater: The soils from the stormwater borings were classified per the USCS system and the Field Book for Describing and Sampling Soils, USDA, NRCS, 2012, provided a discussion of soils conditions related to infiltration/detention basin design, and WDNR Storm Forms.

3.0 EXPLORATION RESULTS

3.1 SITE CONDITIONS

The majority of the property currently consists of undeveloped farmland. Two ponds are present in the development area and will be filled for the proposed construction and a wooded area is located in the southwest portion of the site. The majority of the wooded area is outside the planned development.

Site grading was occurring during our exploration in areas around the north pond with topsoil being stripped and stone being placed for construction traffic and additional construction roads are located along the west and south sides of the site. No records are available related to the earthwork performed to construct the existing ponds. Historic aerial photos from the Washington County GIS Maps show that the construction of the two ponds and portions of the site grading were completed between 2005 and 2010. Before 2005, the site consisted only of undeveloped farmland and the wooded area in the southwest portion of the site.

Based on the “Site Grading Plan” provided by CJ Engineering, the topography of the site is variable with slopes generally running downward towards the two pond areas. Elevations at the site (outside the ponds) vary between 935 and 952 feet. The depth of the ponds is not known at this time.

3.2 SUBSURFACE SOIL PROFILE

Eleven (11) of the borings were drilled on the existing surficial grass/vegetation and topsoil on the site. The topsoil at the boring locations varied in thickness from 4 to 21 inches. In borings B-2 and B-4, clayey fill material was encountered at the surface.

The following paragraphs provide an additional description of the materials encountered at the boring locations and Table 3-1 provides additional details related to the soil profile at each boring location.

Table 3-1 – Generalized Soil Profile ^[2]

Boring Number	Ground Surface Elev. (ft) ^[2]	Fill/Possible Fill Depth (ft) ^[2]	Native Soils	Refusal Depth (ft) ^[3]
B-1	944.5	NE ^[1]	Silty Sand	NE ^[1]
B-2	942.5	8.7	Sand with Gravel	NE ^[1]
B-3	943	NE ^[1]	Sandy Silt	8.5
B-4	943.5	20	Sand with Gravel	21.5
B-5	948	NE ^[1]	Silty Sand, Lean Clay	9.6
B-6	950	NE ^[1]	Silty Sand	12
B-7	950.5	NE ^[1]	Sandy Silt	12
B-8	946.5	NE ^[1]	Clayey Sand	4.5

Boring Number	Ground Surface Elev. (ft) ^[2]	Fill/Possible Fill Depth (ft) ^[2]	Native Soils	Refusal Depth (ft) ^[3]
B-9	946.5	3.9	Clayey Sand, Gravel with Sand	11
B-10	945	NE ^[1]	Gravel with Sand, Sandy/Silty Clay	NE ^[1]
B-11	941.5	NE ^[1]	Clayey Sand, Sand with Gravel	9
B-12	946.5	NE ^[1]	Sandy Silt	12
B-13	943.5	NE ^[1]	Silty Sand, Sandy Lean Clay	19.5

^[1] NE = not encountered.

^[2] Elevations are estimated from "Site Grading Plan". Estimated soil layer thickness may vary nearby and between boring locations.

^[3] Auger or sample refusal encountered on apparent bedrock. No sampling of bedrock performed.

Clayey fill soil was encountered in three (3) borings. The fill soils had SPT N-values that ranged between 1 and 11 and moisture contents that typically ranged between 12% and 25%. Organic content on samples of the fill soils with trace organics typically ranged from 1.3% to 3.4%. The moisture and organic content of the fill soils in sample SS-9 (approximate depth of 19 feet) from boring B-4 were 51.6% and 5.3% respectively.

The predominate native soils on site consisted mostly of loose to very dense sands and silts beneath the fill soil or topsoil. These soils had SPT N-values that ranged between 5 and sample refusal (50 blows for 6 inches or less). At several boring locations, the driller noted rig chatter that can be an indication of cobbles or boulders within the material. Native clay soils were encountered in borings B-5, B-10, and B-13 to approximate depths between 3.8 feet and the 15 or 19.5 feet termination depth of the boring. Hand penetrometer readings generally ranged from 0.5 tons per square foot (tsf) to over 4.5 tsf and moisture contents ranged between 7% and 23%.

Auger or sample refusal was encountered in 10 of the 13 borings performed. We assume the auger refusal was a result of bedrock, but no coring was performed to obtain samples to confirm bedrock. Therefore, it is possible that the refusal may be a result of cobbles or boulders in the subsurface.

Results of the field and laboratory tests and observations are depicted on the individual boring logs included in the Appendix I this report. Soils were grouped together based on similar observed properties. The stratification lines were estimated by the reviewing engineer based on the available data and experience. The actual in-situ changes between layers may differ slightly and may be more gradual than depicted on the boring logs. Subsurface and groundwater conditions can vary between borehole locations and in areas not explored.

It is important to note that the soil observations, fill depths, and topsoil thickness estimates were made in small diameter boreholes. Therefore, it should be understood that thicker or thinner deposits of the individual strata are likely to be encountered within other portions of the project. Furthermore, the estimation of strata thickness at a particular location can differ from person to person due to a sometimes indistinct transition between the soils encountered. Additionally, it must

be recognized that in the absence of foreign substances and/or debris within the soil samples obtained, it is sometimes difficult to distinguish between natural soils and clean soil fill.

3.3 GROUNDWATER OBSERVATIONS

Groundwater observations were made during and at the completion of drilling operations in all borings. Table 3-2 summarizes the observed water level readings. Borings not listed in this Table did not encounter water during or at completion of drilling.

Table 3-2: Summary of Groundwater Observations

Boring Number / Ground Elevation (ft) ^[2]	Depth / Elevation of Water During Drilling / Excavation (ft) ^[2]	Depth / Elevation of Water at the Completion of Drilling / Excavation (ft) ^[2]
B-1 / 944.5	4 / 940.5	7 / 937.5
B-2 / 942.5	9.5 / 931	NE ^[1]
B-9 / 946.5	7 / 939.5	10 / 936.5
B-11 / 941.5	8 / 933.5	8 / 933.5
B-12 / 946.5	7 / 939.5	8 / 938.5

^[1] NE = Water Not Encountered

^[2] Elevations are estimated from "Site Grading Plan"

Groundwater level fluctuations may occur with time and seasonal changes due to variations in precipitation, evaporation, surface water runoff and local dewatering. Perched water pockets and a higher water table may also be encountered during wet weather periods, particularly in more permeable silt and sand seams or granular fill material overlying less permeable clays. Installation and monitoring of an observation well would be required to assess true ground water elevation.

4.0 ANALYSIS AND RECOMMENDATIONS

4.1 Geotechnical Considerations

The primary geotechnical concerns identified at the site are the existing undocumented fill material and the existing ponds that will be filled. Additionally, due to the space between the borings, inability to drill in the existing ponds, and lack of information related to past earthwork on the property; there is inherent limitation in extrapolating the geotechnical information across the entire development and significant variations could be present in the subsurface conditions between the boring locations.

The deepest undocumented fill was encountered in borings B-2 and B-4 near the existing north pond. Based on the inconsistency in strength, moisture content, organic content, and material type of the existing fill, it is our opinion that the fill was not placed in a controlled manner. Therefore, GESTRA recommends complete removal of the existing fill from below the building footprint due

to the potential for excessive total or differential settlement. The mass excavation should extend a minimum of five feet beyond the edges of the new building and an additional foot horizontally for each vertical foot of new fill to be placed to provide adequate lateral confinement and could be performed as part of the mass grading required to fill the existing ponds. The existing material free of debris or other deleterious material could be reused as engineered fill, but moisture conditioning of the material should be anticipated.

The mass excavation and new engineered fill will mitigate the risks associated with the existing undocumented fill supporting the building slab on grade. Due to the unknown and assumed uncontrolled existing fill, supporting slabs on grade or pavements over the existing fill would be at the risk of the building owner. These risks may include increased settlement, buried unsuitable material or inconsistent material that could result in additional site excavation, subgrade instability, or other unforeseen potential detrimental conditions. Estimating potential settlement of slabs on grade or pavement supported over the existing undocumented fill cannot be accurately determined because of the unknown nature of the fill and variations in type, strength and consistency of the material.

Additional exploration through test pits or soil borings can be considered to help determine depth and extent of the existing fill, as well as refine recommendations for subgrade preparation. The test pits will also allow for cross sectional views of the existing fill and assist in evaluating the impact of groundwater on the mass excavation.

For the planned filling of the existing ponds, we recommend the water be completely drained from the ponds and any loose, wet, soft or disturbed soil should be completely removed prior to new fill placement. Depending on the conditions of the base of the pond, additional exploration through borings or test pits may be warranted to evaluate the suitability of the material for support of the proposed construction.

The recommendations presented in this report include assumptions related to the project design because detailed design information has not been developed. When additional design information is known, the recommendations presented in this report should be reviewed as information such as structural loads and changes in design elevations could impact the recommendations in this report.

4.2 Site Preparation

Site preparation for areas outside the existing ponds or recommended mass excavation should start with removal of surficial topsoil, organic soils, vegetation, debris or other deleterious material. In addition, all unused utilities or drain tile should be properly removed or abandoned. Material removed from the project site should be disposed in accordance with all applicable federal, state, and local regulations. Soil should not be stockpiled near or adjacent to the excavations.

In the building slab on grade area and pavement areas, after the initial site preparation described above, we recommend compacting the exposed material. Any areas of significant deflection during compaction may be disked, dried, and re-compacted if weather permits, or removed and replaced with engineered fill. After compaction and before base material is placed, a proof roll is recommended with a minimum 20 ton tri-axle dump truck, or like machinery imparting similar static loading on the soil and moving at no more than walking speed. A geotechnical engineer or their designated representative should be present during the proof roll in order to identify soft or unstable areas, if any, and subsequently recommend remediation procedures.

Based on the relatively high moisture contents (above 20%) observed in clayey fill materials and native lean clay, it is likely that areas of the proposed site may show instability when exposed to construction traffic. If instability is observed, these areas could be disked, dried, and re-compacted if weather permits, or removed and replaced with engineered fill.

It is possible that variations in the subsurface conditions may be encountered in the areas that were previously excavated near the ponds or at areas not explored in the borings. To further define potentially unsuitable subsurface conditions, we recommend additional exploration through test pits or additional geotechnical borings.

Site grading should direct runoff away from planned pavement areas and should be maintained throughout construction so that the potential for the softening of the subgrade soils is reduced. Equipment and working traffic should also be kept to a minimum on subgrade surfaces, especially during times of precipitation or following spring thaw. The contractor is responsible for maintaining completed earthwork areas. Consideration should be given to installing construction roads to reduce disturbance to the subgrade soils.

Based on our understanding of the project, cuts in the building area will likely be 3 feet or less, but fills of up to 20 feet may be required to attain subgrade elevation at portions of the site.

We recommend new engineered fill greater than 10 feet consist of granular material. Because of the nature of clay fill, there is potential for excessive settlement of the structure, pavements and utilities as a result of secondary or hydro-compression of a deep/thick engineered clay fill. This settlement would be in addition to the settlement that is a result of the new building loading. Secondary compression of clay fill is a result of longer term consolidation of the fill. Several variables affect estimating settlement as a result of secondary compression of the fill and the Naval Facilities Foundations and Earth Structures Design Manual estimates settlement may be on the order of 0.1% to 0.2% of the fill height in 3 to 4 years after completion of earthwork and 0.3% to 0.6% of the fill height in 15 to 20 years.

As a general rule for new fill placement, the lift thickness should not exceed 12 inches for granular soils and 9 inches for cohesive soils and the maximum particle size should be limited to 25% of the lift thickness. Engineered fill placed within the building pad, below foundations or in the pavement subgrade/base course should be compacted to a minimum of 95% of the modified Proctor dry density value. Structural soil fill should be placed a minimum of five feet beyond the edges of the new building and pavement areas, and an additional foot horizontally for each vertical foot of new fill to be placed to provide adequate lateral confinement. The inorganic site soils free of any construction debris that would be removed from excavations could be reused as structural fill; however, moisture conditioning of the material may be necessary.

The information presented in this report may be used to evaluate the site conditions for construction, but the contractor is responsible for determining site preparation means and methods required to complete the project. An aggressive construction schedule or construction during seasons with limited drying time may not allow for reconditioning of the subgrade and soil correction may require removal and replacement with structural fill or chemical stabilization.

4.3 Foundation Recommendations

The foundations for the proposed building can be supported on a typical shallow spread/strip footing system designed for a maximum net allowable soil bearing pressure of 3,000 pounds per square foot (psf) provided the recommendations in this report are followed. Spread foundations

designed for a maximum net allowable soil bearing capacity of 3,000 psf should be supported by the native clay with a minimum unconfined compressive strength 1.5 tsf, the native silt or sand with a minimum SPT N-Value of 10, or new engineered fill placed over these materials.

Table 4-1 provides the depths at each of the test boring locations to the soil recommended for an allowable bearing capacity of 3,000 psf.

Table 4-1: Recommended Excavation Depths

Boring Location	Existing Surface Ground Elevation (ft) ^[2]	Estimated Depth to 3,000 psf Allowable Bearing Capacity (ft)	
		Depth (ft) ^[1]	Elevation (ft) ^[2]
B-1	944.5	1	943.5
B-2	942.5	9	933.5
B-3	943	1	942
B-4	943.5	20	923.5
B-5	948	1	947
B-6	950	2	948
B-7	950.5	1	949.5
B-8	946.5	4.5	942
B-9	946.5	6.5	940
B-12	946.5	1	945.5
B-13	943.5	1	942.5

^[1] Depth is estimated based on samples collected; however, actual transition to bearing native soil may vary throughout the site

^[2] Elevations are estimated from "Site Grading Plan"

Where unsuitable soils are encountered at the foundation elevation, soil correction should consist of additional excavation to remove the unsuitable soils. If the over-excavation is being filled with engineered fill, we recommend the over-excavation be widened at a minimum 1H:1V ratio from the edge of the foundation. The over-excavation can then be filled to grade with suitable engineered fill consisting of a well graded granular material placed in lifts not exceeding 12 inches and compacted to at least 95% of the modified Proctor dry density (ASTM D1557). Alternatively, lean concrete with a minimum compressive strength of 500 psi could be used to fill the over-excavation to grade and lateral over-excavation will not be required.

The depth of excavation required to expose suitable bearing material may vary in areas not explored by GESTRA; therefore, we recommend the foundation excavations be reviewed by a geotechnical engineer or their designated representative to determine when soils suitable to support the recommended bearing capacity are observed.

The shallow foundation design should incorporate a minimum strip footing width of 18 inches and column pad width of 24 inches, even if the allowable bearing capacity has not been fully utilized. All foundations should bear a minimum of 48 inches below grade for heated structures and 60 inches for unheated structures in order to protect the structure from frost heave. We recommend that foundations also be suitably reinforced in order to compensate for the effects of minor differential movements due to subsurface soil variations.

If the recommendations as stated in this report are used in the design and construction of the proposed buildings, it is our opinion that total settlements will be less than 1 inch.

4.4 Floor Slab Recommendations

The subgrade material evaluated and prepared according to the recommendations in this report should be suitable to support slab on grade concrete. We recommend that a subgrade reaction modulus of 150 pounds per square inch per inch of deflection (pci) be used in the design of the floor slab at grade. The modulus value was assumed based on the native sands and silts or new engineered fill, assumes a 1-foot plate is used to determine the modulus and should be adjusted for the size of the foundation and confinement effect. We recommend that the floor slabs be suitably reinforced and designed to be separate from the foundation system in order to allow for separate movements. It is recommended the structural engineer specify the floor slab thickness, reinforcing, joint details and other parameters. At a minimum, the floor slabs are recommended to be reinforced or the concrete contain an appropriate fiber mesh additive to help control shrinkage cracking.

We recommend the installation of a capillary moisture break directly below the slab. It should consist of at least 6 inches of clean sand or gravel with a maximum particle size of 1 inch containing no more than 10% passing the number 200 sieve (fines) and follow the recommendations of ACI 302.1, Section 4.1. The structural engineer, architect, or manufacturer of a floor covering should determine the need of a vapor barrier, specify the vapor barrier location and consider the concrete curing and the effects of moisture on future flooring materials or building end use. If a vapor retarder is used, we recommend it be placed in accordance with ACI 302.1 Section 3.2 and should meet the requirements of ASTM E1745. The vapor retarder should include proper sealing at penetrations, overlap at joints, and sealing at the interface of the wall and slab and may require an adequate cushion material to prevent damage.

4.5 Below Grade Walls

It is our understanding that portions of the proposed building will be designed below grade. Below grade walls will need to be designed to resist lateral earth pressures. The values presented in Table 4-1 assume that the walls are vertical; that a clean, free-draining granular fill is used as backfill within 2 feet behind the wall; the backfill condition at the ground surface is level; and that adequate drainage is provided to prevent the buildup of any hydrostatic pressure. In addition, the below grade walls will also be required to resist the surcharge of traffic that may occur during or after construction.

Table 4-2: Below-Grade Wall Design Parameters

Below-Grade Wall Design Parameters		
	Silty/Sandy Clay	Sands and Silts
Total Unit Weight of Backfill (γ)	130 pcf	125 pcf
Angle of Internal Friction (Φ)	25°	28°
At-Rest Earth Pressure Coefficient, (K_o)	0.58	0.53
Active Earth Pressure Coefficient, (K_a)	0.41	0.36
Passive Earth Pressure Coefficient, (K_p)	2.46	2.75
Coefficient of sliding friction (ultimate)	0.3	0.35

Equivalent fluid densities can be calculated by multiplying unit weight by the listed pressure coefficients at different conditions. For walls that are free to rotate at least 0.001 times the height of the wall, such as a temporary earth retention system and retaining walls, then an active earth pressure condition will develop. For walls that will be restrained, such as permanent basement walls, then an at-rest condition will pertain. For passive resistance, we recommend using a minimum factor of safety of 2.0 in passive earth pressure calculations because of the large strains required to mobilize the full passive resistance, ignoring the upper 1 foot of soil in frost protected areas and ignoring the soil within the frost depth for other areas.

Drainage should be provided behind below-grade and retaining walls to prevent the buildup of hydrostatic pressures. We recommend that free-draining granular drainage aggregate be placed within 2 feet behind the back face of the below grade walls. Drainage pipes are recommended to be installed behind the walls and be drained by gravity or a sump pit and pump system. The drainage pipes should be surrounded by a minimum of 6 inches of drainage aggregate. The drainage aggregate should be completely wrapped in a non-woven, high survivability, geotextile fabric with an apparent opening size (AOS) in the range of 70 to 100. The geotextile fabric should prevent migration of any adjacent soil into the drainage aggregate. We do not recommend using a drainage pipe that includes a geotextile sleeve in immediate contact with the pipe.

We recommend a relatively impermeable barrier that may consist of a minimum 2 foot thick clay cap or Bituminous or Portland cement concrete (i.e. walkways and drives) be placed around each of the below-grade structures to minimize surface water infiltration into the backfill against the walls. The clay material, if used, should be placed and compacted as recommended in this report and should extend from final grade to a depth of at least 2 feet. The clay cap or impermeable barrier should slope away from the structure at a minimum 2 percent grade. Surcharge loads, including those from adjacent (present and future) structures, as well as temporary construction equipment, within a zone defined by a plane extending at a 45 degree angle above the base of the wall should also be included in the design. The size of the compactor used behind the wall should be limited to less than 500 pounds to minimize stresses on the wall. The backfill should be compacted to a

minimum of 90 percent of the maximum dry density as determined by the modified Proctor test, ASTM D-1557.

4.6 Seismic Site Classification

Section 1613 of the International Building Code 2015 (IBC) was used to assign a soil site classification. Based on the native soil conditions and the varying depth of possible bedrock observed, the soil site classification **C** (stiff soil) should be used in the structural design of the proposed building. Based on site class C, and mapped spectral response acceleration S_s and S_1 for Germantown, Wisconsin, the site coefficient F_a and F_v are 1.2 and 1.7, respectively.

4.7 Pavement Recommendations

The pavement subgrade soils should be prepared and proof rolled following the recommendations in this report. Any topsoil, vegetation, roots, debris (if present) or other deleterious material should be removed if exposed in the pavement subgrade. Our recommendations below assume the subgrade conditions are consistent with the results of our subsurface testing evaluation and that the subgrade is thoroughly prepared for construction based on the recommendations developed in this report. Additional corrective action should be determined at the time of construction for areas where it is necessary to provide a more consistent subgrade. Where excessively soft or moist soils are encountered, geogrid can be used to reduce the amount of excavation needed and provide a more consistent subgrade condition. Various options of geogrid strength and related thickness of granular fill are available, but the system selected should be designed by an experienced contractor or geogrid supplier based on the site soil conditions.

The Wisconsin Asphalt Pavement Association (WAPA) Asphalt Pavement Design Guide 2018, and the results of the geotechnical evaluation were used to provide the recommendations for the new asphalt drives and parking lots.

Based on the existing clay and potential for undocumented fill below future pavement areas, GESTRA recommends that "poor soil" (estimated CBR value between 2 and 5, SSV = 2.5) conditions should be assumed as the subgrade soils. Table 4-3 below presents the recommended hot mix asphalt and base course thicknesses for the new pavement areas for 2 different Traffic Classes. Pavement sections may be modified if the traffic volumes are different than presented below.

Base course material should be placed at moisture content within 2% of optimum and compacted to a minimum of 95% of the modified Proctor density. Hot Mix Asphalt (HMA) should be placed and compacted following the guidelines of WisDOT Standard Specifications for Highway and Structure Construction, section 460.3.

Table 4-3: Pavement Design Recommendations for Parking Lots

Traffic Class	Pavement Layer Type	Thickness (inches)	Material Type	WisDOT Specifications
Traffic Class II, (driveway and parking lots ≥ 50 stalls, 20 year ESALs < 2 million) ¹	Hot Mix Asphalt	4.0	LT	Section 460
	Base Course (Dense Graded)	12.0	1-1/4 inch Crushed Stone	Section 305
Traffic Class III, (medium-volume roadways, 20 year ESALs 2-8 million) ²	Hot Mix Asphalt	6.0	LT	Section 460
	Base Course (Dense Graded)	14.0	1-1/4 inch Crushed Stone	Section 305

1. Based on Table 7.2 of WAPA Asphalt Pavement Design Guide 2018

2. Based on Table 7.3 of WAPA Asphalt Pavement Design Guide 2018

One of the important considerations in designing a high quality and durable pavement is providing adequate drainage. Drainage design for the proposed pavement section is out of GESTRA's scope for this project. It is important that bird baths (leeching basins) and surface waves are not created during construction of the HMA layer. A proper slope should be allowed and drainage should be provided along the edges of pavements and catch basins to prevent the accumulation of free water within the base course, which otherwise may result in subgrade softening or swelling, and pavement deterioration under exposure and repeated traffic conditions.

Pavement sections presented in the above table should not be used for areas which experience repeated truck traffic, equipment or truck parking areas, entrances and exit aprons, or contain trash dumpster loading zones. In the areas listed above, a Portland Cement Concrete (PCC) pavement should be used. The PCC layer thickness is recommended to be 6.0 inches, with a minimum of 6.0 inch-thick crushed stone base course, but may be modified depending on the final design. The reinforcement details for PCC layers should be designed by the project design engineer as the project conditions dictate.

All pavements require regular maintenance and repair in order to maintain the serviceability of the pavement. These repairs and maintenance are due to normal wear and tear of the pavement surface and are required in order to extend the serviceability life of the pavement. However, after 20 years of service, a normal pavement structure is likely to deteriorate to a point where pavement rehabilitation may be required to maintain the serviceability.

4.8 Site Evaluation of Stormwater Infiltration

A stormwater pond is planned to be constructed in the southwest portion of the project site. The bottom of the pond is planned to be at an elevation of 932 feet. The samples collected from borings B-10 and B-11 (drilled at the proposed location of the pond) were evaluated for the above stormwater feature, and the WDNR Soil and Site Evaluation-Storm forms are included in Appendix I. The texture of the samples collected was identified visually.

Distinct variations were noted between the two stormwater borings. Native gravelly sandy clay loam was encountered in boring B-10 around the bottom of pond elevation and water and auger refusal was encountered in boring B-11.

The stratification lines between the soil types were identified based on the available data. The actual in-situ changes between layers may differ slightly and may be more gradual than depicted on the evaluation form. Subsurface and groundwater conditions can vary in areas not explored by GESTRA.

Based on our interpretation of the Wisconsin Department of Natural Resources (WDNR) NR 151.12(5)(c)6.a and Conservation Standard Practice 1002, and the groundwater and apparent bedrock encountered in B-11, it is GESTRA's opinion that the site can be considered exempt from infiltration requirements.

GESTRA evaluated the native soil conditions following the general guidelines of the WDNR Conservation Practice Standard 1001 for the design of Wet Detention Ponds. The existing native soil conditions were compared to Appendix D (Liner Flow Chart for Wet Detention Ponds) to determine if a liner is required. Based on the borings performed and laboratory test results, the native soils do not meet the requirements of Appendix D and construction of a liner is anticipated. Further evaluation of the depth to bedrock and bedrock elevation with respect to the proposed pond liner is recommended as excavation into bedrock will affect the design and construction requirements for a pond liner.

Project planning should consider a budget for local excavation for a clay liner. The following information is provided to discuss recommendations for liner. The recommendations are in part developed based on the information available in the Wisconsin Department of Safety and Professional Services Chapter SPS 382.365 and 360.30 and Appendix D of Technical Standard 1001 (Type A liner).

As a minimum, the base, sides and berms at elevations below the design high-water level should be constructed out of clay soils with the following properties:

- an average plasticity index (PI) of 12 or more with none less than 10,
- an average liquid limit (LL) of 25 or greater with none less than 20,
- a minimum of 50% of the soil by weight finer than the #200 sieve,
- a minimum of 90% of the soil by weight finer than the #4 sieve, and
- in-place hydraulic conductivity of the compacted soils should be 1×10^{-7} cm/sec or less.

Topsoil and other unsuitable material (e.g. fill, sandy, or silty materials) encountered during excavation should not be reused for the liner material. Moisture content adjustments are expected to be needed prior to the placement and compaction of the existing lean clay soils. Alternatively, a high density polyethylene (HDPE) or geosynthetic clay liner (GCL) could be considered in lieu of the installation of a clay liner. Another option would be constructing the liner using a soil-bentonite clay mix, but this system typically requires design and construction by a specialty contractor. Refer to Appendix D of Technical Standard 1001 for additional information related to the clay liner and these alternative liners.

The clay liner soils should be compacted using a sheepsfoot (or similar type) compactor to a minimum of 90% of the modified Proctor dry density value and at a moisture content at least 2%

wet of optimum as determined by ASTM D-1557. This material should be compacted in maximum 6-inch loose lifts and the compacted clay should be free of organics, cobbles, boulders, debris and any other unsuitable soils. The clay shall be disked or otherwise mechanically processed before compaction to break up clods so that the maximum clod size is 4 inches. The resulting clay liner should have a minimum thickness of 2 feet. Refer to NRCS Wisconsin Construction Specification 300 – Clay Liners for additional information pertaining to the placement and compaction of clay liner material.

Additional quality assurance testing is recommended during construction to confirm the material being placed meets the project requirements, including testing the clay liner materials for hydraulic conductivity and material properties. Regardless of the liner system selected, we recommend it be installed by a company with demonstrated prior experience with the product.

4.9 Construction Considerations

The detailed means and method of excavation and construction should be decided by the contractor and approved by the project design team. Based on the specific site information, geotechnical exploration results and requirements for the proposed structure, the following issues should be taken in consideration during construction.

Dewatering

Based on the soil borings performed, substantial water is anticipated to be encountered during excavation near the existing ponds. From the limited exploration performed, it cannot be established if the water encountered in our borings is related to the existing ponds or a groundwater table. Regardless of the water source, the contractor should develop a groundwater dewatering plan prior to the start of construction for review by the design engineer.

If water is encountered during other shallow excavations, we anticipate the appropriate number of temporary sump pits and pumps should be sufficient to remove anticipated volume of water in the excavation. The contractor should be prepared to control surface and groundwater and prevent it from accumulating in excavations or otherwise affecting construction.

Excavation Stability

Caving is a common issue for excavation side walls during construction, especially if fill material, granular soils, and/or water seepage are observed. An excavation plan should be developed and the length of excavation left open should be limited to prevent caving soil from covering the suitable bearing soils.

A temporary soil retention system may also be necessary in order to prevent caving or provide support of surrounding structures or utilities during construction. Providing recommendations or designing the retention system is out of the scope for GESTRA. The contractor must comply with the federal, state, local and updated OSHA regulations during excavation and in retention system design to ensure excavation safety.

Occupational Safety and Health Act (OSHA) has instituted strict standards for temporary construction excavations. These standards are outlined in 29 CFR Part 1926 Subpart P. Excavations within unstable soil conditions or extending five feet or more in depth should be adequately sloped or braced according to these standards. Excavation safety is the responsibility of the contractor. Material stockpiles or heavy equipment should not be placed near the edge of

the excavation slopes. The actual stable slope angle should be determined during construction and will depend upon the loading, soil, and groundwater conditions encountered.

Weather Implications

The subgrade soil or the soil at foundation level might become unstable with exposure to adverse weather such as rain, snow and freezing temperatures. The unstable areas due to weather exposure may require an additional undercut or stabilization and the representative geotechnical engineer should assist with the determination of the depth of additional undercut or stabilization procedure based on observation of the field condition.

Soil Sensitivity

Soil at the construction site will be exposed to moisture and disturbance from construction traffic, construction equipment and human factors. Due to the disturbance, soil may become sensitive with contact of water. Contractor should try to lessen the exposure the soil at the construction site may encounter to moisture and disturbances. Therefore, the foundations, floor slabs and pavements should be constructed immediately after the review of the representative geotechnical engineer.

Existing Fill

Foreign material was encountered within samples of the existing fill material collected. As a result, excavating, handling and disposing material offsite may have special requirements. GESTRA has not evaluated the material with respect to environmental considerations.

The depth and type of existing fill material varied between our borings. Consideration should be given to performing additional exploration through test pits or borings. The test pits will allow for cross sectional views of the existing fill to help define the condition of the fill, refine potential soil correction estimates, and determine potential for reuse of the existing fill.

5.0 EXPLORATION AND TESTING PROCEDURES

5.1 Layout and Elevation Procedures

A total of thirteen (13) soil borings were completed at the locations shown on the attached Borehole Location Map in Appendix I. The location of the borings were selected by our client and located in the field by Capitol Survey Enterprises. Surveyed ground surface elevations of the boreholes were not available for this report and elevations were estimated from the plans provided by CJ Engineering.

5.2 Field Testing Procedures

The boreholes were drilled using a track mounted Diedrich D-50 drill rig. The boreholes were initiated and advanced by using hollow stem augers. A 24-inch split spoon sample was typically collected at the surface, then 18-inches split spoon samples were collected at 2-1/2 foot intervals starting at a depth of 2 feet to a depth of 11 feet, except where deep fill materials were encountered. Below a depth of 16 feet spilt spoon samples were collected at 5-foot intervals to the assigned termination depth. Borings were terminated at auger refusal if encountered shallower than the planned boring depth.

All representative soil samples were taken in general accordance with the “Standard Method for Penetration Test and Split-Barrel Sampling of Soils” (ASTM D1586). After each sampling, a soil

sample was retained and placed in a jar and recorded for type, color, consistency, and moisture, sealed and then transported to the laboratory for further review and testing, if required. The specific drilling method used including the depths, rig type, crew chief, are included on each of the individual boring logs as it may change for each borehole.

5.3 Laboratory Testing Procedures

After completion of drilling operations, all of the retained soil samples were transported to GESTRA's laboratory and classified by a geotechnical engineer using the Unified Soil Classification System (USCS). A chart describing the classification system used is included in Appendix I of this report. The engineer assigned laboratory testing suited to extract important index properties of the soil layers. These tests included hand penetrometer, moisture and organic content, Atterberg limits, and percent passing the number 200 sieve (P200).

After completion of drilling operations, all of the retained soil samples were transported to GESTRA's laboratory and classified by a geotechnical engineer using the Unified Soil Classification System (USCS). Borings B-10 and B-11 were also classified using the Field Book for Describing and Sampling Soils, USDA, NRCS, 2012. Charts describing the classification systems used are included in Appendix I of this report. The engineer assigned laboratory testing suited to extract important index properties of the soil layers. These tests included Atterberg limits and percent passing the number 200 sieve (P200).

STANDARD OF CARE

Our exploration was limited to evaluating subsurface soil and groundwater conditions pertaining to the proposed project. GESTRA did not perform any environmental, chemical, or hydrogeologic testing as these were not part of our work scope.

This report should be made available in its entirety to bidding contractors for information purposes. The soil borings and site sketch should not be detached from this report. Our report is not valid if used for purposes other than what is described in the report.

All OSHA regulations such as those regarding proper sloping and temporary shoring of excavations should be followed during the entire construction process.

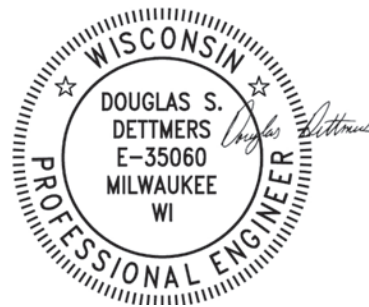
GESTRA has presented our professional opinions in this report in the form of recommendations. Our opinions are based on our understanding of current project information and related accepted engineering practices at the time of this report. Other than this, no warranty is implied or intended.

Sincerely,

GESTRA Engineering, Inc.

Report Prepared By:

Report Reviewed By:



A handwritten signature in blue ink that reads "Colin Anderson".

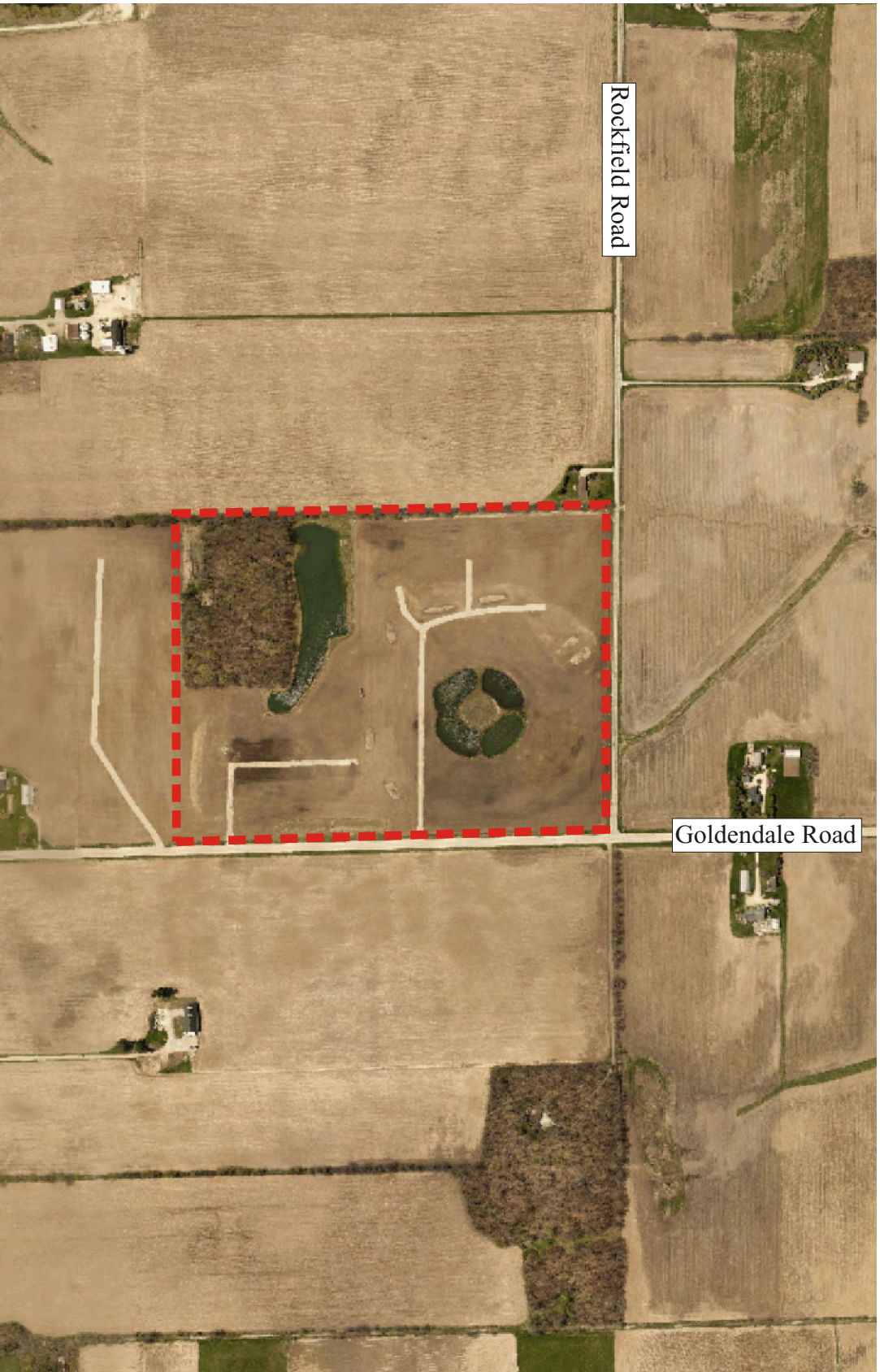
Colin Anderson, EIT
Staff Engineer

Digitally signed by Douglas Dettmers
Date: 2019.06.27 16:11:13 -05'00'

Douglas Dettmers, P.E.
Senior Engineer

APPENDIX I

SITE LOCATION MAP, BOREHOLE LOCATION MAP, SITE GRADING PLAN, TEST BORING LOGS, SOIL
AND SITE EVALUATION STORM FORMS, GENERAL NOTES AND SOILS CLASSIFICATION



Map obtained from Washington County GIS Maps

 = Project Site Location



GESTRA Engineering, Inc.
191 W. Edgerton Avenue
Milwaukee, WI 53207
Phone: (414) 933-7444
Fax: (414) 933-7844

Project Name & Location:
Proposed Multi-Tenant Development
Germantown, WI

Scale: Not to Scale

Drawing No.: 1 of 1

Prepared by: CA

Drawing Title:
Site Location Map

Checked by: DD

Project No.: 19173-10

Date: June 21st, 2019



GESTRA Engineering Inc.
191 W. Edgerton Avenue
Milwaukee, WI 53207
Phone: 414-933-7444, Fax: 414-933-7844

SOIL BORING LOG

PAGE NUMBER	1 of 1
BORING NUMBER	B-1
PROJECT NUMBER	19173-10
DRILLING RIG	Diedrich D50 ATV
DRILLING METHOD	3 1/4" HSA
SURFACE ELEVATION	944.5 ft

PROJECT NAME	Multi-Tenant Development	DATE DRILLING STARTED	6/12/2019
PROJECT LOCATION	Germantown, WI	DATE DRILLING ENDED	6/12/2019

BORING DRILLED BY

FIRM: Gestra
CREW CHIEF: S. Gonyer

FIELD LOG	M. Rhodes	LATITUDE	° ' "
LAB LOG / QC	J. Metzinger	LONGITUDE	° ' "

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft) Elevation	Soil Description and Geological Origin for Each Major Unit	USCS Classification	Graphic	Well Diagram	Unconfined Comp. Strength (Q _u or Q _p) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
SS - 1	18	3 6 9 9	15		TOPSOIL (4-inches) 0.3 (944.2) SILTY SAND, light brown, moist, medium dense								
SS - 2	18	4 6 6	12			SM							
				▽ 940.0	Wet at 4-feet								
SS - 3	15	6 11 7	18										Sample SS-3A
					5.8 (938.7) LEAN CLAY, dark brown mottled gray, moist, very stiff	CL			2.00			27.9	Sample SS-3B
				▽ 6.3 (938.2)	SILTY SAND, light brown, wet, loose, trace gravel								
SS - 4	5	4 3 2	5			SM							
				935.0									
SS - 5	8	3 2 2	4										
				10									
					12.3 (932.2) SANDY SILT, brown, very moist, medium dense, trace gravel								
				930.0		ML							
SS - 6	10	3 4 12	16										
				15	16 (928.5) End of Boring at 16.0 ft.								
				20	925.0								
				25	920.0								

WATER & CAVE-IN OBSERVATION DATA

▽	WATER ENCOUNTERED DURING DRILLING: 4 ft.	CAVE DEPTH AT COMPLETION: NMR	WET ☐ DRY ☐
▽	WATER LEVEL AT COMPLETION: 7 ft.	CAVE DEPTH AFTER 0 HOURS: NMR	WET ☐ DRY ☐
▽	WATER LEVEL AFTER 0 HOURS: NMR		

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.



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SOIL BORING LOG

PAGE NUMBER	1 of 1
BORING NUMBER	B-2
PROJECT NUMBER	19173-10
DRILLING RIG	Diedrich D50 ATV
DRILLING METHOD	3 1/4" HSA
SURFACE ELEVATION	942.5 ft

BORING DRILLED BY	FIELD LOG	LATITUDE	
FIRM: Gestra	M. Rhodes		
CREW CHIEF: S. Gonyer	LAB LOG / QC	LONGITUDE	
	J. Metzinger		

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft) Elevation	Soil Description and Geological Origin for Each Major Unit	USCS Classification	Graphic	Well Diagram	Unconfined Comp. Strength (Q _u or Q _p) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
SS - 1	5	1 1 1 1	2		SANDY LEAN CLAY, dark brown, moist, (FILL)							13.5	
SS - 2	3	1 1 0	1	940.0								12.2	
SS - 3	3	1 1 1	2	5								12.9	
SS - 4	12	1 1 2	3	935.0	Color changed to dark gray in Sample SS-4							21	LOI = 2.2%
SS - 5	5	4 8 11	19	10	SAND WITH GRAVEL, gray, wet, medium dense to very dense								
SS - 6	12	12 19 24	43	15		SP							
SS - 7	8	19 27 38	65	20									
				21	End of Boring at 21.0 ft.								
				25									

WATER & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: 9.5 ft.	CAVE DEPTH AT COMPLETION: NMR	WET ☐ DRY ☐
WATER LEVEL AT COMPLETION: NE	CAVE DEPTH AFTER 0 HOURS: NMR	WET ☐ DRY ☐
WATER LEVEL AFTER 0 HOURS: NMR		

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.



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SOIL BORING LOG

PAGE NUMBER	1 of 1
BORING NUMBER	B-3
PROJECT NUMBER	19173-10
DRILLING RIG	Diedrich D50 ATV
DRILLING METHOD	3 1/4" HSA
SURFACE ELEVATION	943 ft

PROJECT NAME	Multi-Tenant Development	DATE DRILLING STARTED	6/13/2019
PROJECT LOCATION	Germantown, WI	DATE DRILLING ENDED	6/13/2019

BORING DRILLED BY	FIELD LOG	LATITUDE	0 1 "
FIRM: Gestra	M. Rhodes	LONGITUDE	0 1 "
CREW CHIEF: S. Gonyer	C. Anderson		

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft) Elevation	Soil Description and Geological Origin for Each Major Unit	USCS Classification	Graphic	Well Diagram	Unconfined Comp. Strength (Q _u or Q _p) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
SS - 1	8	3 9 9 4	18		TOPSOIL (4.5-inches) SANDY SILT, light brown, moist, loose to very dense								Boring was offset 45-feet west due to water
SS - 2	18	19 27 17	44	940.0	0.4 (942.6)	ML							
SS - 3	17	1 2 3	5	5									Driller noted auger refusal was encountered at 6-feet. Boring was offset 3-feet west
SS - 4	4	2 50/1"	R	935.0	8.5 (934.5)								Driller noted auger refusal was encountered at 8.5-feet
				10	End of Boring at 8.5 ft.								
				930.0									
				15									
				925.0									
				20									
				920.0									
				25									

WATER & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE DEPTH AT COMPLETION: NMR	WET ☐ DRY ☐
WATER LEVEL AT COMPLETION: NE	CAVE DEPTH AFTER 0 HOURS: NMR	WET ☐ DRY ☐
WATER LEVEL AFTER 0 HOURS: NMR		

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.



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SOIL BORING LOG

PAGE NUMBER

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PROJECT NAME

Multi-Tenant Development

DATE DRILLING STARTED

6/13/2019

BORING NUMBER

B-4

PROJECT LOCATION

Germantown, WI

DATE DRILLING ENDED

6/13/2019

PROJECT NUMBER

19173-10

DRILLING RIG

Diedrich D50 ATV

BORING DRILLED BY

FIRM: Gestra
CREW CHIEF: S. Gonyer

FIELD LOG

M. Rhodes

LATITUDE

0 0 0

LAB LOG / QC

C. Anderson

LONGITUDE

0 0 0

DRILLING METHOD

3 1/4" HSA

SURFACE ELEVATION

943.5 ft

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft) Elevation	Soil Description and Geological Origin for Each Major Unit	USCS Classification	Graphic	Well Diagram	Unconfined Comp. Strength (Q _u or Q _p) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
SS - 1	6	2 3 4 2	7		SANDY LEAN CLAY, brown, moist, trace gravel, (FILL)							14.1	
SS - 2	8	1 1 1	2	940.0								23.6	LOI = 3.4%
SS - 3	10	2 3 2	5	5								21.1	
SS - 4	0	2 2 2	4	935.0	7.4 (936.1) LEAN CLAY WITH SAND, brown with dark gray, moist, (FILL)								
SS - 5	10	1 2 2	4	10								23.9	LOI = 1.3%
SS - 6	18	1 2 2	4	930.0	11.2 (932.3) SANDY LEAN CLAY, light brown, moist, trace gravel, (FILL)							13.6	
SS - 7	12	3 3 4	7	15	13.5 (930) LEAN CLAY, dark brown with gray, moist, with wood pieces, trace gravel, (FILL)							24.2	LOI = 2.4%
SS - 8	0	2 2 2	4	925.0									
SS - 9	12	7 8 6	14	20	20 (923.5) SAND WITH GRAVEL, light brown, moist, medium dense	SP						51.6	LOI = 5.3%
					21.5 (922) End of Boring at 21.5 ft.								Driller noted auger refusal was encountered at 21.5-feet
				920.0									
				25									

WATER & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE DEPTH AT COMPLETION: NMR	WET ☐ DRY ☐
WATER LEVEL AT COMPLETION: NE	CAVE DEPTH AFTER 0 HOURS: NMR	WET ☐ DRY ☐
WATER LEVEL AFTER 0 HOURS: NMR		

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.



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SOIL BORING LOG

PAGE NUMBER	1 of 1
BORING NUMBER	B-5
PROJECT NUMBER	19173-10
DRILLING RIG	Diedrich D50 ATV
DRILLING METHOD	3 1/4" HSA
SURFACE ELEVATION	948 ft

PROJECT NAME	Multi-Tenant Development	DATE DRILLING STARTED	6/12/2019
PROJECT LOCATION	Germantown, WI	DATE DRILLING ENDED	6/12/2019

BORING DRILLED BY	FIELD LOG	LATITUDE	0 1 "
FIRM: Gestra	M. Rhodes	LONGITUDE	0 1 "
CREW CHIEF: S. Gonyer	J. Metzinger		

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft) Elevation	Soil Description and Geological Origin for Each Major Unit	USCS Classification	Graphic	Well Diagram	Unconfined Comp. Strength (Q _u or Q _p) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
SS - 1	20	4 4 8 9	12		TOPSOIL (4-inches) 0.3 (947.7)	SM							
SS - 2	15	4 4 5	9	945.0	SILTY SAND, light brown, moist, medium dense 1.8 (946.2) LEAN CLAY WITH SAND, brown, moist, very stiff	CL			2.00			23.1	
SS - 3	18	4 4 7	11	5	3.8 (944.2) SILTY SAND, light brown, moist, medium dense, trace gravel	SM							
SS - 4	3	17 13 11	24	940.0									Driller noted stone in spoon tip of Sample SS-4
SS - 5	0	50/1"	R	10	9.6 (938.4) End of Boring at 9.6 ft.								Driller noted rig chatter from 8-feet to end of boring
													Driller noted auger refusal was encountered at 9.5-feet
				935.0									
				15									
				930.0									
				20									
				925.0									
				25									

WATER & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE DEPTH AT COMPLETION: NMR	WET ☐ DRY ☐
WATER LEVEL AT COMPLETION: NE	CAVE DEPTH AFTER 0 HOURS: NMR	WET ☐ DRY ☐
WATER LEVEL AFTER 0 HOURS: NMR		

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SOIL BORING LOG

PAGE NUMBER	1 of 1
BORING NUMBER	B-6
PROJECT NUMBER	19173-10
DRILLING RIG	Diedrich D50 ATV
DRILLING METHOD	3 1/4" HSA
SURFACE ELEVATION	950 ft

PROJECT NAME	Multi-Tenant Development	DATE DRILLING STARTED	6/12/2019
PROJECT LOCATION	Germantown, WI	DATE DRILLING ENDED	6/12/2019

BORING DRILLED BY	FIELD LOG	LATITUDE	
FIRM: Gestra	M. Rhodes		
CREW CHIEF: S. Gonyer	LAB LOG / QC	LONGITUDE	
	C. Anderson		

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft) Elevation	Soil Description and Geological Origin for Each Major Unit	USCS Classification	Graphic	Well Diagram	Unconfined Comp. Strength (Q _u or Q _p) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
SS - 1	15	4 4 3 4	7		TOPSOIL (8-inches)								
					0.7 (949.3)								
SS - 2	18	4 6 6	12		SILTY SAND, brown, moist, loose	SM							
					1.6 (948.4)								
SS - 3	18	7 6 6	12	5 945.0	SILTY SAND WITH GRAVEL, light brown, moist, medium dense	SM							
SS - 4	18	4 13 19	32		SANDY SILT WITH GRAVEL, light brown, moist, dense to very dense	ML							Driller noted rig chatter from 7-feet to the termination of boring
SS - 5	18	6 24 12	36	10 940.0									
SS - 6	0	50/0"			12 (938)								Driller noted auger refusal was encountered at 12-feet
					End of Boring at 12.0 ft.								
				15 935.0									
				20 930.0									
				25 925.0									

WATER & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE DEPTH AT COMPLETION: NMR	WET ☐ DRY ☐
WATER LEVEL AT COMPLETION: NE	CAVE DEPTH AFTER 0 HOURS: NMR	WET ☐ DRY ☐
WATER LEVEL AFTER 0 HOURS: NMR		

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.



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SOIL BORING LOG

PAGE NUMBER

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PROJECT NAME

Multi-Tenant Development

DATE DRILLING STARTED

6/12/2019

BORING NUMBER

B-7

PROJECT LOCATION

Germantown, WI

DATE DRILLING ENDED

6/12/2019

PROJECT NUMBER

19173-10

DRILLING RIG

Diedrich D50 ATV

BORING DRILLED BY

FIRM: Gestra
CREW CHIEF: S. Gonyer

FIELD LOG

M. Rhodes

LATITUDE

0 1 "

LAB LOG / QC

C. Anderson

LONGITUDE

0 1 "

DRILLING METHOD

3 1/4" HSA

SURFACE ELEVATION

950.5 ft

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft) Elevation	Soil Description and Geological Origin for Each Major Unit	USCS Classification	Graphic	Well Diagram	Unconfined Comp. Strength (Q _u or Q _p) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
SS - 1	12	4 8 13 13	21	950.0	TOPSOIL (8-inches)								
SS - 2	18	4 8 13	21		SANDY SILT, brown, moist, medium dense	ML							
SS - 3	15	5 4 6	10	945.0	SANDY SILT, light brown, moist, medium dense to very dense, trace gravel	ML							
SS - 4	10	6 20 33	53		With cobbles from 7-feet to termination of boring	ML							
SS - 5	8	29 50/3"		940.0									
SS - 6	0	50/0"			End of Boring at 12.0 ft.								
				15									
				20									
				25									

WATER & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE DEPTH AT COMPLETION: NMR	WET ☐ DRY ☐
WATER LEVEL AT COMPLETION: NE	CAVE DEPTH AFTER 0 HOURS: NMR	WET ☐ DRY ☐
WATER LEVEL AFTER 0 HOURS: NMR		

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.



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SOIL BORING LOG

PAGE NUMBER

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PROJECT NAME

Multi-Tenant Development

DATE DRILLING STARTED

6/13/2019

BORING NUMBER

B-8

PROJECT LOCATION

Germantown, WI

DATE DRILLING ENDED

6/13/2019

PROJECT NUMBER

19173-10

DRILLING RIG

Diedrich D50 ATV

BORING DRILLED BY

FIRM: Gestra
CREW CHIEF: S. Gonyer

FIELD LOG

M. Rhodes

LATITUDE

0.1"

LAB LOG / QC

C. Anderson

LONGITUDE

0.1"

DRILLING METHOD

3 1/4" HSA

SURFACE ELEVATION

946.5 ft

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft) Elevation	Soil Description and Geological Origin for Each Major Unit	USCS Classification	Graphic	Well Diagram	Unconfined Comp. Strength (Q _u or Q _p) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
SS - 1	12	1 4 6 7	10	945.0	TOPSOIL (9-inches)								Driller noted boring was offset twice after shallow refusal was encountered at 2.5-feet and 4-feet
					0.8 (945.7)								
	2	6 6 3	9		CLAYEY SAND, dark brown, moist, loose to medium dense, (POSSIBLE FILL)	SC							
					4.5 (942)								Driller noted auger refusal was encountered at 4.5-feet
				5	End of Boring at 4.5 ft.								
				940.0									
				10									
				935.0									
				15									
				930.0									
				20									
				925.0									
				25									

WATER & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE DEPTH AT COMPLETION: NMR	WET ☐
WATER LEVEL AT COMPLETION: NE	CAVE DEPTH AFTER 0 HOURS: NMR	DRY ☐
WATER LEVEL AFTER 0 HOURS: NMR		WET ☐
		DRY ☐

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.



PAGE NUMBER

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PROJECT NAME	
--------------	--

Multi-Tenant Development

DATE DRILLING STARTED _____

6/13/2019

BOILING NUMBER
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B-9

PROJECT LOCATION

Germantown, WI

DATE DRILLING ENDED

6/13/2019

PROJECT NUMBER

19173-10

DRILLING RIG

Diedrich D50 ATV

BORING DRILLED BY

FIRM: Gestra
CREW CHIEF: S. Gonyer

FIELD LOG

M. Rhodes

LATITUDE

© I H

LAB LOG / QC

C. Anderson

LONGITUDE

DRILLING METHOD	
-----------------	--

3¼" HSA

SURFACE ELEVATION

946.5 ft

Driller noted auger refusal was encountered at 11-feet

WATER & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 7 ft.		CAVE DEPTH AT COMPLETION: NMR	WET ☐	DRY ☐
	WATER LEVEL AT COMPLETION: 10 ft.		CAVE DEPTH AFTER 0 HOURS: NMR	WET ☐	DRY ☐
	WATER LEVEL AFTER 0 HOURS: NMR				

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.



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SOIL BORING LOG

PAGE NUMBER	1 of 1
BORING NUMBER	B-10
PROJECT NUMBER	19173-10
DRILLING RIG	Diedrich D50 ATV
DRILLING METHOD	3 1/4" HSA
SURFACE ELEVATION	945 ft

BORING DRILLED BY	FIELD LOG	LATITUDE
FIRM: Gestra	M. Rhodes	0 1 "
CREW CHIEF: S. Gonyer	LAB LOG / QC	LONGITUDE
	C. Anderson	0 1 "

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft) Elevation	Soil Description and Geological Origin for Each Major Unit	USCS Classification	Graphic	Well Diagram	Unconfined Comp. Strength (Q _u or Q _p) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
SS - 2 SS - 1	10	11 13 8 10	21		TOPSOIL (8-inches) 0.7 (944.3)								
	1	50/1"			GRAVEL WITH SAND, light brown, moist, medium dense to very dense	GP							
					3.1 (941.9)								
SS - 3	18	2 3 3 3	6	5 940.0	SANDY LEAN CLAY WITH GRAVEL, light brown, moist, stiff to very stiff	CL			1.00			10.6	
SS - 4	18	3 8 13 10	21						3.50			7.7	
SS - 5	17	7 11 37 20	48	10 935.0	SILTY CLAY WITH SAND AND GRAVEL, grayish brown, moist, very stiff to hard				2.50	16	6	8.1	
SS - 6	15	5 3 15 15	18			CL-ML			2.50			7.7	P200 = 54.7%
SS - 7	18	4 17 21 37	38									7.5	Sample disturbed; no Qp obtained
SS - 8	5	16 21		15 930.0	15 (930)				4.5+			8	
					End of Boring at 15.0 ft.								
				20 925.0									
				25 920.0									

WATER & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE DEPTH AT COMPLETION: NMR	WET ☐ DRY ☐
WATER LEVEL AT COMPLETION: NE	CAVE DEPTH AFTER 0 HOURS: NMR	WET ☐ DRY ☐
WATER LEVEL AFTER 0 HOURS: NMR		

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.



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SOIL BORING LOG

PAGE NUMBER	1 of 1
BORING NUMBER	B-11
PROJECT NUMBER	19173-10
DRILLING RIG	Diedrich D50 ATV
DRILLING METHOD	3 1/4" HSA
SURFACE ELEVATION	941.5 ft

PROJECT NAME	Multi-Tenant Development	DATE DRILLING STARTED	6/13/2019
PROJECT LOCATION	Germantown, WI	DATE DRILLING ENDED	6/13/2019

BORING DRILLED BY	FIELD LOG	LATITUDE	0 1 "
FIRM: Gestra	M. Rhodes	LONGITUDE	0 1 "
CREW CHIEF: S. Gonyer	C. Anderson		

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft) Elevation	Soil Description and Geological Origin for Each Major Unit	USCS Classification	Graphic	Well Diagram	Unconfined Comp. Strength (Q _u or Q _p) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
SS - 1	12	2 3 4 4	7	940.0	TOPSOIL (8-inches) CLAYEY SAND WITH GRAVEL, light brown, moist, loose				0.7 (940.8)				
SS - 2	13	2 3 3 4	6			SC							
SS - 3	14	3 3 3 7	6	5					5.6 (935.9)				P200 = 46.8%
SS - 4	7	4 4 14 25	18	935.0	SAND WITH GRAVEL, light brown, moist, medium dense to very dense	SP							P200 = 12.8%
SS - 5	3	50/3"			Wet at 8-feet				9 (932.5)				Driller noted auger refusal encountered at 9-feet
				10	End of Boring at 9.0 ft.								
				930.0									
				15									
				925.0									
				20									
				920.0									
				25									

WATER & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: 8 ft.	CAVE DEPTH AT COMPLETION: NMR	WET ☐
WATER LEVEL AT COMPLETION: 8 ft.	CAVE DEPTH AFTER 0 HOURS: NMR	DRY ☐
WATER LEVEL AFTER 0 HOURS: NMR		WET ☐
		DRY ☐

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.



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SOIL BORING LOG

PAGE NUMBER	1 of 1
BORING NUMBER	B-12
PROJECT NUMBER	19173-10
DRILLING RIG	Diedrich D50 ATV
DRILLING METHOD	3 1/4" HSA
SURFACE ELEVATION	946.5 ft

PROJECT NAME	Multi-Tenant Development	DATE DRILLING STARTED	6/13/2019
PROJECT LOCATION	Germantown, WI	DATE DRILLING ENDED	6/13/2019

BORING DRILLED BY	FIELD LOG	LATITUDE	
FIRM: Gestra	M. Rhodes		
CREW CHIEF: S. Gonyer	LAB LOG / QC	LONGITUDE	
	C. Anderson		

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft) Elevation	Soil Description and Geological Origin for Each Major Unit	USCS Classification	Graphic	Well Diagram	Unconfined Comp. Strength (Q _u or Q _p) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
SS - 1	16	6 7 6 4	13	945.0	TOPSOIL (12-inches) 1 (945.5)								
SS - 2	12	5 5 7	12		SANDY SILT, brown, moist, loose to medium dense	ML							
SS - 3	14	3 4 4	8	5									
SS - 4	15	2 7 10	17	940.0	6.3 (940.2) SILTY SAND WITH GRAVEL, light brown, wet, medium dense	SM							
SS - 5	10	1 2 3	5	10	8.8 (937.7) SILT WITH GRAVEL, light brown, wet, loose to very dense	ML							
SS - 6	0	50/0"		935.0	12 (934.5) End of Boring at 12.0 ft.								Driller noted auger refusal was encountered at 12-feet
				15									
				930.0									
				20									
				925.0									
				25									

WATER & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: 7 ft.	CAVE DEPTH AT COMPLETION: NMR	WET ☐ DRY ☐
WATER LEVEL AT COMPLETION: 8 ft.	CAVE DEPTH AFTER 0 HOURS: NMR	WET ☐ DRY ☐
WATER LEVEL AFTER 0 HOURS: NMR		

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.



GESTRA Engineering Inc.
191 W. Edgerton Avenue
Milwaukee, WI 53207
Phone: 414-933-7444, Fax: 414-933-7844

SOIL BORING LOG

PAGE NUMBER	1 of 1
BORING NUMBER	B-13
PROJECT NUMBER	19173-10
DRILLING RIG	Diedrich D50 ATV
DRILLING METHOD	3 1/4" HSA
SURFACE ELEVATION	943.5 ft

PROJECT NAME	Multi-Tenant Development	DATE DRILLING STARTED	6/13/2019
PROJECT LOCATION	Germantown, WI	DATE DRILLING ENDED	6/13/2019

BORING DRILLED BY	FIELD LOG	LATITUDE	0 0 00
FIRM: Gestra	M. Rhodes	LONGITUDE	0 0 00
CREW CHIEF: S. Gonyer	C. Anderson		

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft) Elevation	Soil Description and Geological Origin for Each Major Unit	USCS Classification	Graphic	Well Diagram	Unconfined Comp. Strength (Q _u or Q _p) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
SS - 1	18	2 4 4 12	8		TOPSOIL (12-inches)								
SS - 2	17	6 6 7	13	940.0	SILTY SAND, light brown, moist, medium dense	SM							
SS - 3	17	2 2 3	5	935.0	SANDY LEAN CLAY WITH GRAVEL, light brown, moist, medium stiff to very stiff	CL			0.50			11.9	P200 = 51.4%
SS - 4	18	4 13 13	26	930.0					2.50			8.3	
SS - 5	16	7 15 19	34	925.0					3.00			7.9	
SS - 6	12	36 35 37	72	920.0	With cobbles from 14.5-feet to termination of boring								Sample disturbed; no Qp obtained
SS - 7	0	50/0"		20	End of Boring at 19.5 ft.								Sample refusal at 19.5-feet

WATER & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE DEPTH AT COMPLETION: NMR	WET ☐
WATER LEVEL AT COMPLETION: NE	CAVE DEPTH AFTER 0 HOURS: NMR	DRY ☐
WATER LEVEL AFTER 0 HOURS: NMR		WET ☐
		DRY ☐

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.



1002-CPS-23
Division of Industry Services
P. O. Box 2658
Madison, Wisconsin 53701
Scott Walker, Governor
Laura Gutierrez, Secretary

SOIL AND SITE EVALUATION – STORM

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

Page 1 of 1

Attach a complete site plan on paper not less than 8 1/2 x 11 inches in size. Plan must include, but not limited to: vertical and horizontal reference point (BM), direction and percent of slope, scale or dimensions, north arrow, and BM referenced to nearest road		County Washington	
Please print all information		Parcel I.D. 074988	
Personal information you provide may be used for secondary purposes [Privacy Law, s. 15.04(1)(m)]		Reviewed by: DD Date: 06/24/19	
Property Owner GGWW LLC		Property Location	
Property Owner's Mail Address N119W17711 Cove Lane		Govt. Lot SE 1/4 1/4 S 7 T 9 N R 20 E (or) W	
City State Zip Code Phone Number Germantown WI 53022		Lot # Block # Subd. Name or CSM #	
Drainage area _____ ☐ sq. ft ☐ acres		☒ City ☐ Village ☐ Town Nearest Road	
Test site suitable for (check all that apply): ☐ Site not suitable; ☐ Bioretention; ☐ Subsurface Dispersal System; ☐ Reuse; ☐ Irrigation; ☐ Other _____		Germantown Goldendale Road	
Hydraulic Application Test Method		Soil Moisture Date of soil borings: 6/13/19	
☒ Morphological Evaluation ☐ Double Ring Infiltrometer ☐ Other: (specify) _____		USDA-NRCS WETS Value: ☐ Dry = 1; ☒ Normal = 2; ☐ Wet = 3.	

B-10	#OBS. ☐ Pit ☒ Boring	Ground surface elevation. 945 ft.	Elevation of limiting factor 941.9 ft.							
Horizon	Depth ft.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
A	0.7	10YR2/2	-	SiCL	1, F, GR	mFR	-	0-10	-	0.04
B	3.1	10YR7/4	-	vGRS	0, SG	mL	-	40-70	-	3.60
C	7.8	10YR7/4	-	GRSCL	0, M	mFI	-	15-35	-	0.11
C	15	10YR5/2	-	GRSCL	0, M	mFI	-	15-35	-	0.11
Comments:										

B-11	#OBS. ☐ Pit ☒ Boring	Ground surface elevation. 941.5 ft.	Elevation of limiting factor 933.5 ft.							
Horizon	Depth ft.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
A	0.7	10YR2/2	-	SiCL	1, F, GR	mFR	-	0-15	-	0.04
B	5.6	10YR6/4	-	GRSL	1, F, SBK	mFR	-	10-30	-	0.50
C	9	10YR6/4	-	GRS	0, SG	mL	-	20-40	-	3.60
Comments: Water encountered at 8 feet during drilling										
Name (Please Print) Jeffrey Bruesewitz P.G.				Signature 				Credential Number PG-1333		
Address 191 W. Edgerton Ave, Milwaukee, WI 53207				Date Evaluation Conducted 6/14/19				Telephone Number 414-933-7444		

SBD-10793 (R01/17)

WDNR
September 2017

GENERAL NOTES					
DRILLING AND SAMPLING SYMBOLS				TEST SYMBOLS	
SYMBOL	DEFINITION			SYMBOL	DEFINITION
HSA	Hollow Stem Auger			MC	Moisture Content - % of Dry Wt. – ASTM D 2216
RWB	Rotary Wash Boring (Mud Drilling)			OC	Organic Content - % of Dry Wt. – ASTM D 2974
_FA	4", 6" or 10" Diameter Flight Auger			DD	Dry Density – Pounds Per Cubic Foot
_HA	2", 4" or 6" Hand Auger			LL, PL	Liquid and Plastic Limit – ASTM D 4318
_DC	2 1/2" , 4" , 5" or 6" Steel Drive Casing				
_RC	Size A, B, or N Rotary Casing				Additional Insertions
PD	Pipe Drill or Cleanout Tube			Qu	Unconfined Comp. Strength-psf – ASTM D 2166
CS	Continuous Split Spoon Sampling			Qp	Penetrometer Reading – Tons/Square Foot
DM	Drill Mud			Ts	Torvane Reading – Tons/Square Foot
JW	Jetting Water			G	Specific Gravity – ASTM D 854
SS	2" O.D. Split Spoon Sample			SL	Shrinkage Limits – ASTM D 427
_L	2 1/2" or 3 1/2" O.D. SB Liner Sample			OC	Organic Content – Combustion Method
ST	3" Thin Walled Tube Sample (Shelby Tube)			SP	Swell Pressure - Tons/Square Foot
3TP	3" Thin Walled Tube (Pitcher Sampler)			PS	Percent Swell
_TO	2" or 3" Thin Walled Tube (Osterberg Sampler)			FS	Free Swell – Percent
_W	Wash Sample			pH	Hydrogen Ion Content. Meter Method
B	Bag Sample			SC	Sulfate Content – Parts/ Million, same as mg/L
P	Test Pit Sample			CC	Chloride Content - Parts/ Million, same as mg/L
_Q	BQ, NQ, or PQ Wireline System			C*	One Dimensional Consolidation – ASTM D 2453
_X	AX, BX, or NX Double Tube Barrel			Qc*	Triaxial Compression
CR	Core Recovery – Percent			D.S.*	Direct Shear – ASTM D 3080
NSR	No Sample Recovered, classification based on action of drilling, equipment and/or material noted in drilling fluid or on sampling bit.			K*	Coefficient of Permeability – cm/sec
NMR	No Measurement Recorded, primarily due to presence of drilling or coring fluid.			D*	Dispersion test
				DH*	Double Hydrometer – ASTM D 4221
				MA*	Particle Size Analysis – ASTM D 422
				R	Laboratory Receptivity, in ohm – cm – ASTM G 57
				E*	Pressuremeter Deformation Modulus – TSF
				PM*	Pressuremeter Test
				VS*	Field Vane Shear – ASTM D 2573
				IR*	Infiltrometer Test – ASTM D 3385
▽	Water Level Symbol			RQD	Rock Quality Designation – Percent
*See attached data sheet or graph					
WATER LEVEL					
Water levels shown on the boring logs are the levels measured in the borings at the time and under the conditions indicated. In sand, the indicated levels may be considered reliable ground water levels. In clay soil, it may not be possible to determine the ground water level within the normal time required for test borings, except where lenses or layers of more pervious waterbearing soil are present. Even then, an extended period of time may be necessary to reach equilibrium. Therefore, the position of the water level symbol for cohesive or mixed texture soils may not indicate the true level of the ground water table. Perched water refers to water above an impervious layer, thus impeding in reaching the water table. The available water level information is given at the bottom of the log sheet.					
DESCRIPTIVE TERMINOLOGY					
DENSITY TERM	"N" VALUE	CONSISTENCY TERM	Unconfined Compressive Strength, (tsf)	"N" VALUE	Lamination Layer Lens Varved Dry Moist Wet Water bearing
Very Loose	0-4				Up to 1/2" thick stratum
Loose	4-10	Very Soft	<0.25	0-2	1/2" to 6" thick stratum
Medium Dense	10-30	Soft	0.25 - 0.49	2-4	1/2" to 6" discontinuous stratum
Dense	30-50	Medium Stiff	0.5 - 0.99	4-8	Alternating laminations
Very Dense	Over 50	Stiff	1.0 - 1.99	8-16	Powdery, no noticeable water
		Very Stiff	2.0 - 3.99	16-30	Below saturation
		Hard	4.0+	Over 30	Saturated, above liquid limit
Standard "N" Penetration: Blows per Foot of a 140 Pound Hammer Falling 30 inches on a 2 inch OD Split Barrel Sampler					Pervious soil below water
RELATIVE GRAVEL PROPORTIONS				RELATIVE SIZES	
CONDITION	TERM	RANGE		Boulder	Over 12"
Coarse Grained Soils	trace of gravel	2-14%		Cobble	3" - 12"
	with gravel	15-49%		Gravel	
Fine Grained Soils				Coarse	3/4" - 3"
15-29% + No. 200	trace of gravel	2-14%		Fine	#4 – 3/4"
15-29% + No. 200	with gravel	15-29%		Sand	
				Coarse	#4 - #10
30% + No. 200	trace of gravel	2-14%		Medium	#10 - #40
30% + No. 200	with gravel	15-24%		Fine	#40- #200
30% + No. 200	gravelly	25-49%		Silt & Clay	- # 200, Based on Plasticity

SOILS CLASSIFICATION FOR ENGINEERING PURPOSES

ASTM Designation: D 2487 - 83

(Based on Unified Soil Classification System)

SOIL ENGINEERING

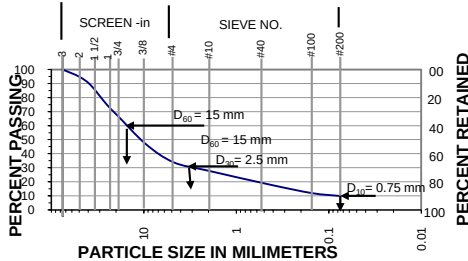
Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests ^A				Soil Classification ^B	
				Group Symble	Group Name
Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels More than 50% coarse fraction retained on No. 4 sieve	Clean Gravels	Less	$Cu \geq 4$ and $1 \leq Cc \leq 3^E$	GW Well graded gravel ^F
		Less than 5% fines ^C		$Cu < 4$ and/or $1 > Cc > 3^E$	GP Poorly graded gravel ^F
		Gravels with Fines		Fines Classify as ML or MH	GM Silty gravel ^{F,G,H}
		more than 12% fines ^C		Fines classify as CL or CH	GC Clayey gravel ^{F,G,H}
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean sands		$Cu \geq 6$ and $1 \leq Cc \leq 3^E$	SW Well graded sand ^I
		Less than 5% fines ^D		$Cu < 6$ and/or $1 > Cc > 3^E$	SP Poorly graded sand ^I
		Sands with Fines		Fines Classify as ML or MH	SM Silty sand ^{G,H,I}
		more than 12% fines ^D		Fines classify as CL or CH	SC Clayey sand ^{G,H,I}
		inorganic	PI > 7 and plots on or above "A" line	CL	Lean clay ^{K,L,M}
			PI < 4 or plots below "A" line	ML	Silt ^{K,L,M}
		organic	Liquid limit - oven dried	< 0.75	OL Organic clay ^{K,L,M,N}
			Liquid limit - not dried		Organic Silt ^{K,L,M,O}
Fine-Grained Soils 50% or more passes the No. 200 sieve	Silts and Clays Liquid Limit less than 50	inorganic	PI plots on or above "A" line	CH	Fat clay ^{K,L,M}
			PI plots below "A" line	MH	Elastic silt ^{K,L,M}
		Organic	Liquid limit - oven dried	< 0.75	OH Organic clay ^{K,L,M,P}
			Liquid limit - not dried		Organic Silt ^{K,L,M,Q}
	Silts and Clays Liquid Limit 50 or more	Primarily organic matter, dark in color, and organic odor		PT	Peat
		Hemic Peat 33 % - 67 % Fibers		sapric	Peat < 33% Fibers
		Fibric Peat > 67% Fibers			

- ^A Based on the material passing the 3-in (75-mm) sieve
- ^B If field sample contained cobbles or boulders, or both, add with cobbles or boulders, or both to group name
- ^C Gravels with 5 to 12 % fines require dual symbols:
GW - GM well-graded gravel with silt
GW - GC well-graded gravel with clay
GP - GM poorly-graded gravel with Silt
GP - GC poorly-graded gravel with clay
- ^D Sands with 5 to 12 % fines require dual symbols:
SW - SM well-graded sand with silt
SW - SC well-graded sand with clay
SP - SM poorly-graded sand with Silt
SP - SC poorly-graded sand with clay

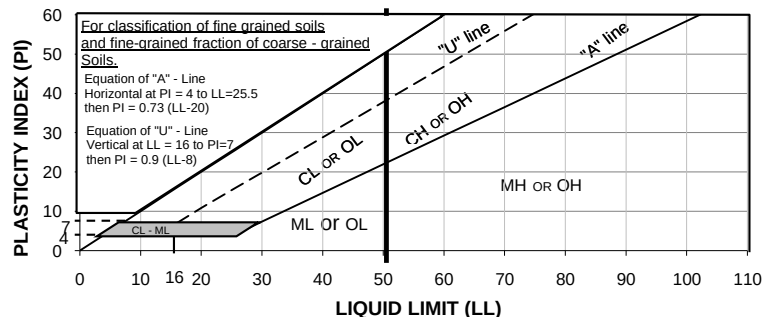
- ^E $Cu = \frac{D_{60}}{D_{10}}$ $Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
- ^F If soil contains $\geq 15\%$ sand, add "with sand" to group name
- ^G If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM
- ^H If fines are organic, add "with organic fines" to group name.
- ^I If soil contains $\geq 15\%$ gravel, add "with gravel" to group name.

- ^J If Atterberg limits plot in hatched area, soil is a CL-ML silty clay
- If soil contains 15 to 29% plus No. 200, add, "with sand" or "with gravel", whichever is predominant
- ^L If soil contains $\geq 30\%$ plus No.200, predominantly sand, add "sandy" to the group name
- ^M If soil contains $\geq 30\%$ plus No.200, predominantly gravel add "gravelly" to the group name
- ^N PI ≥ 4 and plots on or above "A" Line
- ^O PI < 4 or plots below "A" Line
- ^P PI plots on or above "A" Line
- ^Q PI plots below "A" Line

SIEVE ANALYSIS



$$Cu = \frac{D_{60}}{D_{10}} = \frac{15}{0.75} = 200 \quad Cc = \frac{(D_{30})^2}{D_{60} \times D_{10}} = \frac{(2.5)^2}{15 \times 0.75} = 5.6$$



SOILS CLASSIFICATION FOR ENGINEERING PURPOSES				SOIL ENGINEERING	
(Based on U.S. Dept. of Agriculture & Natural Resources Conservation Service)					
Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests				Soil Classification	
				Group Symble	Group Name
Coarse-Grained Soils More than 15% retained on No. 10 sieve	Rock Fragments	≥ 15% but < 35% rock fragments	> 25"	BY	Boulders
			10" < 25"	ST	Stones
			3" < 10"	CB	Cobbles
	Gravels	≥ 15% but < 35% gravel	3/4" < 3"	CGR	Coarse Gravel
			# 4 < 3/4"	MGR	Medium Gravel
			# 10 < # 4	FGR	Fine Gravel
Sands	Texture class based on Texture Triangle	Use rock fragment modifiers if > 15% retained on # 10	# 18 < # 10	VCOS	Very Coarse Sand
			# 35 < # 18	COS	Coarse Sand
			# 60 < # 35	S	Sand
			# 140 < # 60	FS	Fine Sand
			# 300 < # 140	VFS	Very Fine Sand
Fine-Grained Soils 50% or more passes the No. 300 sieve	Silts and Clays Texture class based on Texture Triangle	Use rock fragment modifiers if > 15% retained on # 10	.02 mm < .05 mm	Coarse Silt	
			.002 mm < .02 mm	Fine Silt	
			.0002 mm < .002 mm	Coarse Clay	
			< .0002 mm	Fine Clay	

^F Use Field Book for Describing and Sampling Soils V 2.0

Texture Triangle

Texture Classes ^F

Texture Classes ^F	Code
Loamy Coarse Sand	LCOS
Loamy Sand	LS
Loamy Fine Sand	LFS
Loamy Very Fine Sand	LVFS
Coarse Sandy Loam	COSL
Sandy Loam	SL
Fine Sandy Loam	FSL
Very Fine Sandy Loam	VFSL
Loam	L
Silt Loam	SIL
Silt	SI
Sandy Clay Loam	SCL
Clay Loam	CL
Silty Clay Loam	SICL
Sandy Clay	SC
Silty Clay	SIC
Clay	C

15 < 35 % size adjective
35 < 60 % Very (size adj.)
60 < 90 % Extremely (size adj.)

SIEVE ANALYSIS

APPENDIX II
LABORATORY TEST RESULTS



Laboratory Test Results of Atterberg Limits of Soil

Project Name: Multi-Tenant Development
Project Number: 19173-10
Project Location: Germantown, WI
ASTM Designation: D4318

Date: June 18, 2019
Client: Briohn Building Corporation

Sample Information

Type of Sample Split Spoon
Boring Number B-7
Sample Number 3
Depth of Sample 4.5'-6'

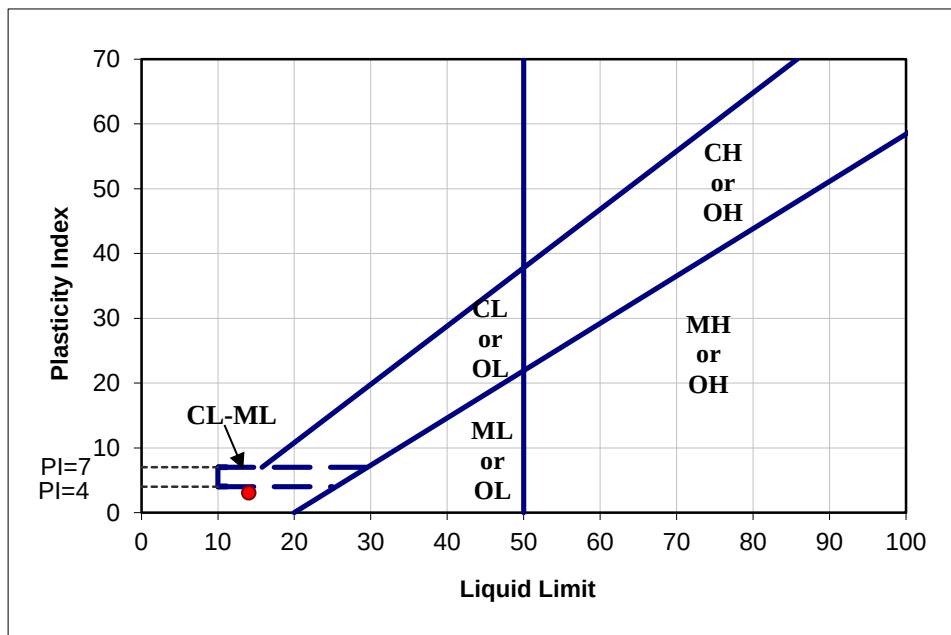
Determination of Liquid Limit

Cup Number	G2	D28	B11
Weight of Cup (g)	14.31	14.67	14.37
Weight of Wet Soil and Cup (g)	38.19	38.34	39.66
Weight of Dry Soil and Cup (g)	35.38	35.40	36.40
Moisture Content (%)	13.3	14.2	14.8
Blow Counts	35	22	16

Determination of Plastic Limit

Cup Number	D5	D2
Weight of Cup (g)	7.26	7.23
Weight of Wet Soil and Cup (g)	14.41	14.80
Weight of Dry Soil and Cup (g)	13.68	14.03
Moisture Content (%)	11.4	11.3

Compilation of Test Results



Liquid Limit	<u>14</u>
Plastic Limit	<u>11</u>
Plasticity Index	<u>3</u>
USCS Symbol	<u>ML</u>

Performed by: A.Rodriguez

Reviewed By: C. Anderson

GESTRA Engineering, Inc.



GESTRA Engineering, Inc.

191 W. Edgerton Ave

Milwaukee, WI 53207

Phone: (414) 933-7444; Fax: (414) 933-7844

**Laboratory Test Results of
Amount of Soil finer than #200 Sieve**

Project Name: Multi-Tenant Development
Project Number: 19173-10
Project Location: Germantown, WI
ASTM Designation: D1140

Date: June 17, 2019
Report To: Briohn Building Corporation

Boring Number	B-9	B-10	B-11	B-11	B-13			
Sample Number	3	6	3	4	3			
Soak Time (to the nearest 10 min.)	360	360	270	360	120			
Weight of Pan (g)	156.6	156.2	136.6	154.6	133.9			
Weight of Wet Soil and Pan (g)	479.0	376.9	422.7	421.7	394.6			
Weight of Wet Soil (g)	322.4	220.7	286.1	267.1	260.7			
Weight of Dry Soil and Pan (g)	434.3	361.1	395.0	410.8	366.9			
Weight of Dry Soil (g)	277.7	204.9	258.4	256.2	233.0			
Weight of Soil and Pan after Wash (g)	327.4	249.0	274.0	377.9	247.2			
Weight of Soil after Wash (g)	170.8	92.8	137.4	223.3	113.3			
Percentage of Material Passing #200 (%)	38.5	54.7	46.8	12.8	51.4			
Moisture Content (%)	16.10	7.71	10.72	4.25	11.89			

Boring Number								
Sample Number								
Soak Time (to the nearest 10 min.)								
Weight of Pan (g)								
Weight of Wet Soil and Pan (g)								
Weight of Wet Soil (g)								
Weight of Dry Soil and Pan (g)								
Weight of Dry Soil (g)								
Weight of Soil and Pan after Wash (g)								
Weight of Soil after Wash (g)								
Percentage of Material Passing #200 (%)								
Moisture Content (%)								

Performed by A. Rodriguez

Reviewed by C. Anderson

Geotechnical-Structural-Pavement-Construction Material



Laboratory Test Results of Atterberg Limits of Soil

Project Name: Multi-Tenant Development
Project Number: 19173-10
Project Location: Germantown, WI
ASTM Designation: D4318

Date: June 18, 2019
Client: Briohn Building Corporation

Sample Information

Type of Sample Split Spoon
Boring Number B-10
Sample Number 5
Depth of Sample 8'-10'

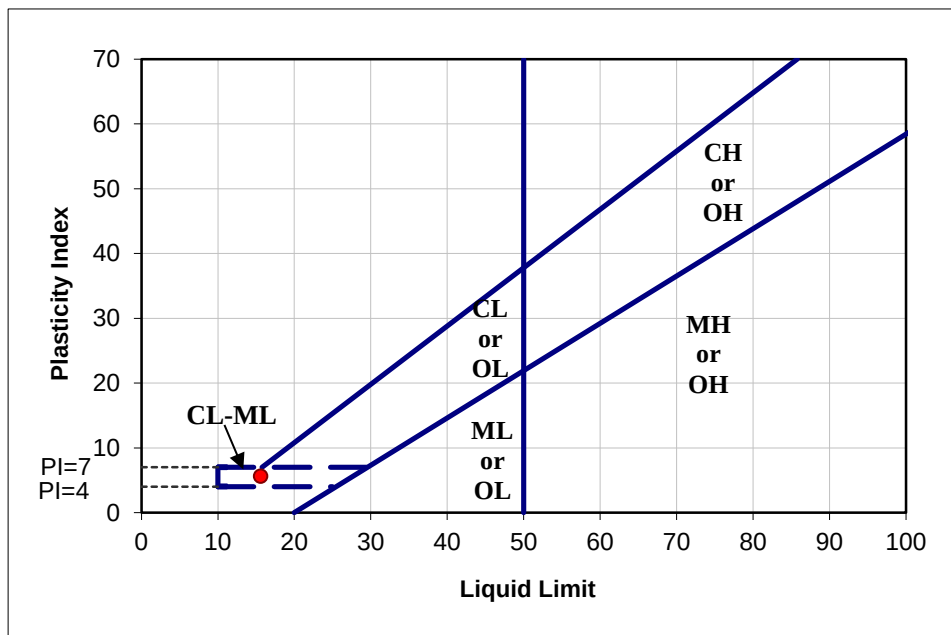
Determination of Liquid Limit

Cup Number	D15	L13	D18
Weight of Cup (g)	14.60	14.54	14.52
Weight of Wet Soil and Cup (g)	32.71	32.63	35.14
Weight of Dry Soil and Cup (g)	30.40	30.11	32.12
Moisture Content (%)	14.6	16.2	17.2
Blow Counts	31	22	15

Determination of Plastic Limit

Cup Number	D7	D8
Weight of Cup (g)	7.24	7.21
Weight of Wet Soil and Cup (g)	13.40	13.26
Weight of Dry Soil and Cup (g)	12.84	12.72
Moisture Content (%)	10.0	9.8

Compilation of Test Results

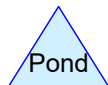
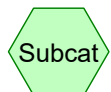
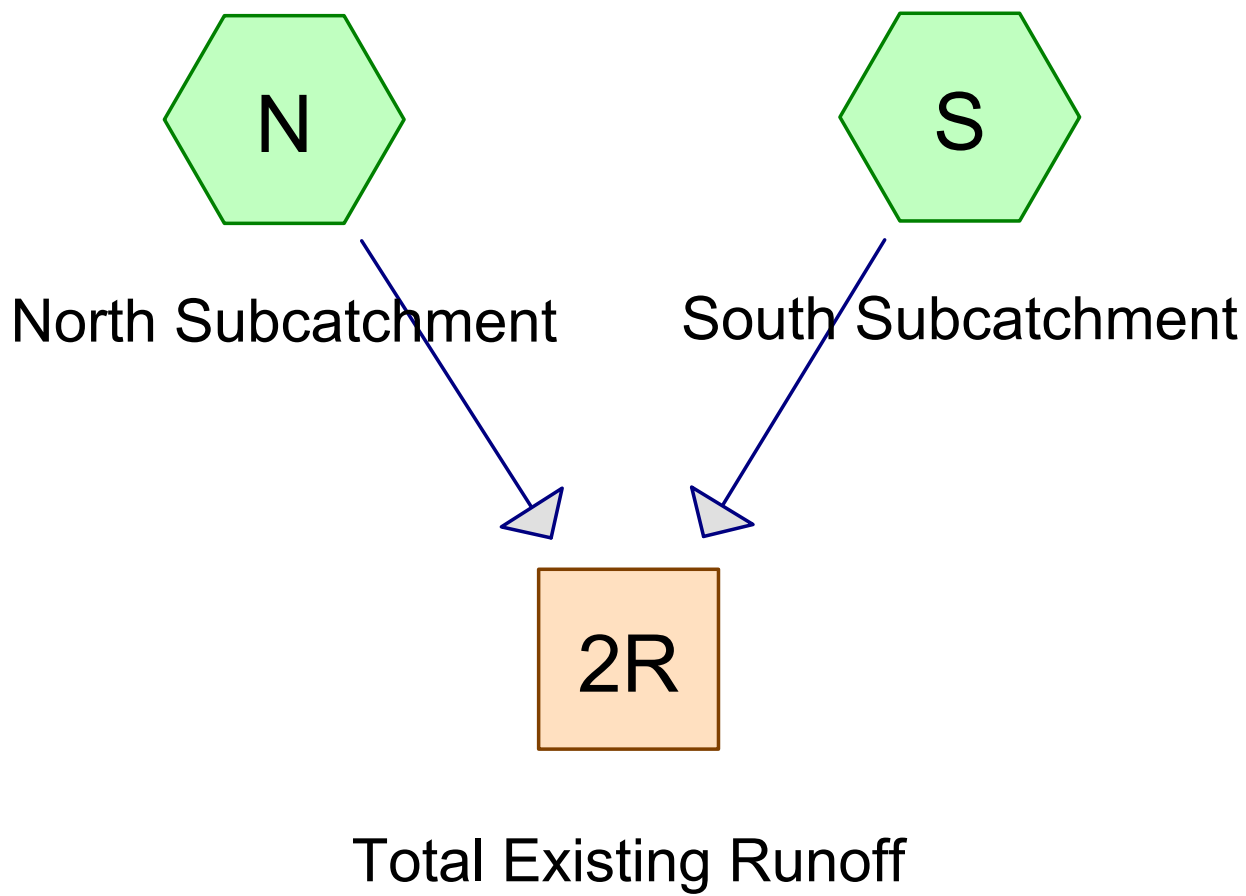


Liquid Limit 16
Plastic Limit 10
Plasticity Index 6
USCS Symbol CL-ML

Performed by: B.Bills

Reviewed By: C. Anderson

GESTRA Engineering, Inc.



Routing Diagram for CJE1928R2-EC

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CJE1928R2-EC

Prepared by {enter your company name here}

Printed 9/6/2019

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
41.243	74	Pasture/grassland/range, Good, HSG C (N, S)
41.243	74	TOTAL AREA

CJE1928R2-EC*Type II 24-hr 2 YR Rainfall=2.66"*

Prepared by {enter your company name here}

Printed 9/6/2019

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Page 3

Time span=5.00-24.00 hrs, dt=0.01 hrs, 1901 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment N: North Subcatchment Runoff Area=24.189 ac 0.00% Impervious Runoff Depth>0.69"
Flow Length=738' Tc=22.7 min CN=74 Runoff=15.66 cfs 1.399 af

Subcatchment S: South Subcatchment Runoff Area=17.054 ac 0.00% Impervious Runoff Depth>0.70"
Flow Length=452' Tc=18.4 min CN=74 Runoff=12.64 cfs 0.988 af

Reach 2R: Total Existing Runoff

Inflow=27.76 cfs 2.388 af

Outflow=27.76 cfs 2.388 af

Total Runoff Area = 41.243 ac Runoff Volume = 2.388 af Average Runoff Depth = 0.69"
100.00% Pervious = 41.243 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment N: North Subcatchment

Runoff = 15.66 cfs @ 12.18 hrs, Volume= 1.399 af, Depth> 0.69"

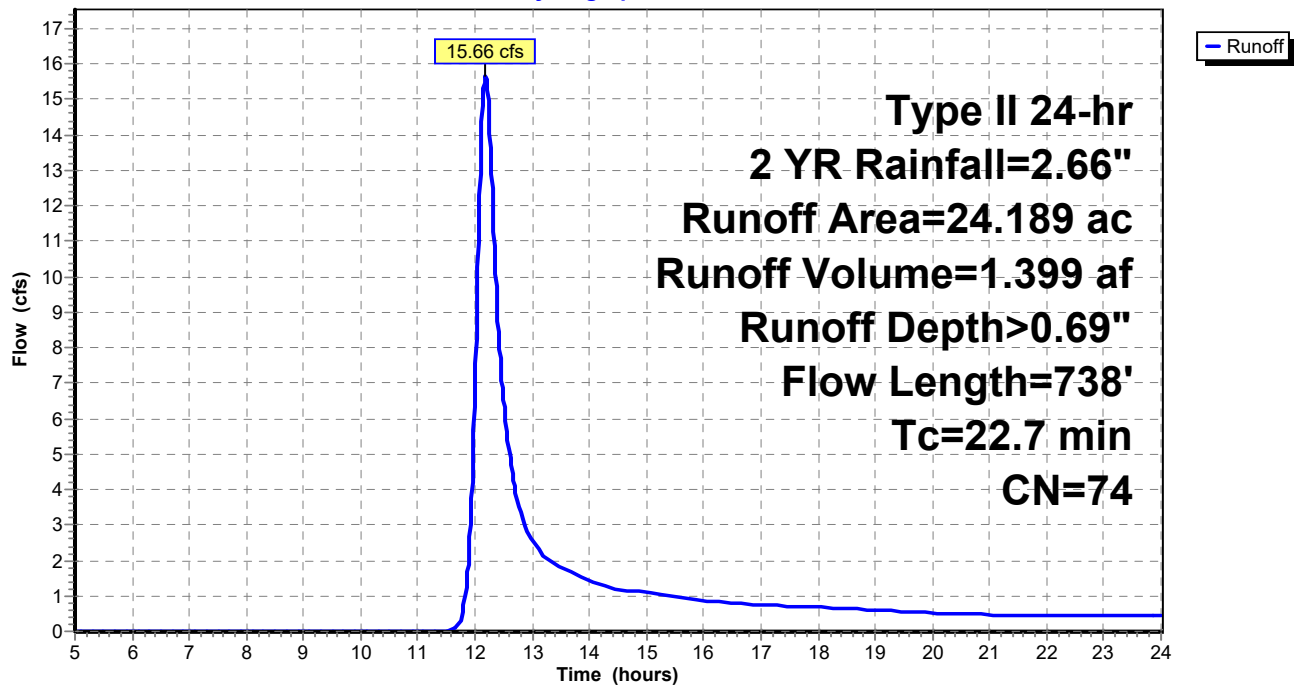
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 2 YR Rainfall=2.66"

Area (ac)	CN	Description
24.189	74	Pasture/grassland/range, Good, HSG C
24.189		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.6	150	0.0133	0.14		Sheet Flow, A-B Grass: Short n= 0.150 P2= 2.64"
5.1	588	0.0145	1.94		Shallow Concentrated Flow, B-C Unpaved Kv= 16.1 fps
22.7	738	Total			

Subcatchment N: North Subcatchment

Hydrograph



Summary for Subcatchment S: South Subcatchment

Runoff = 12.64 cfs @ 12.12 hrs, Volume= 0.988 af, Depth> 0.70"

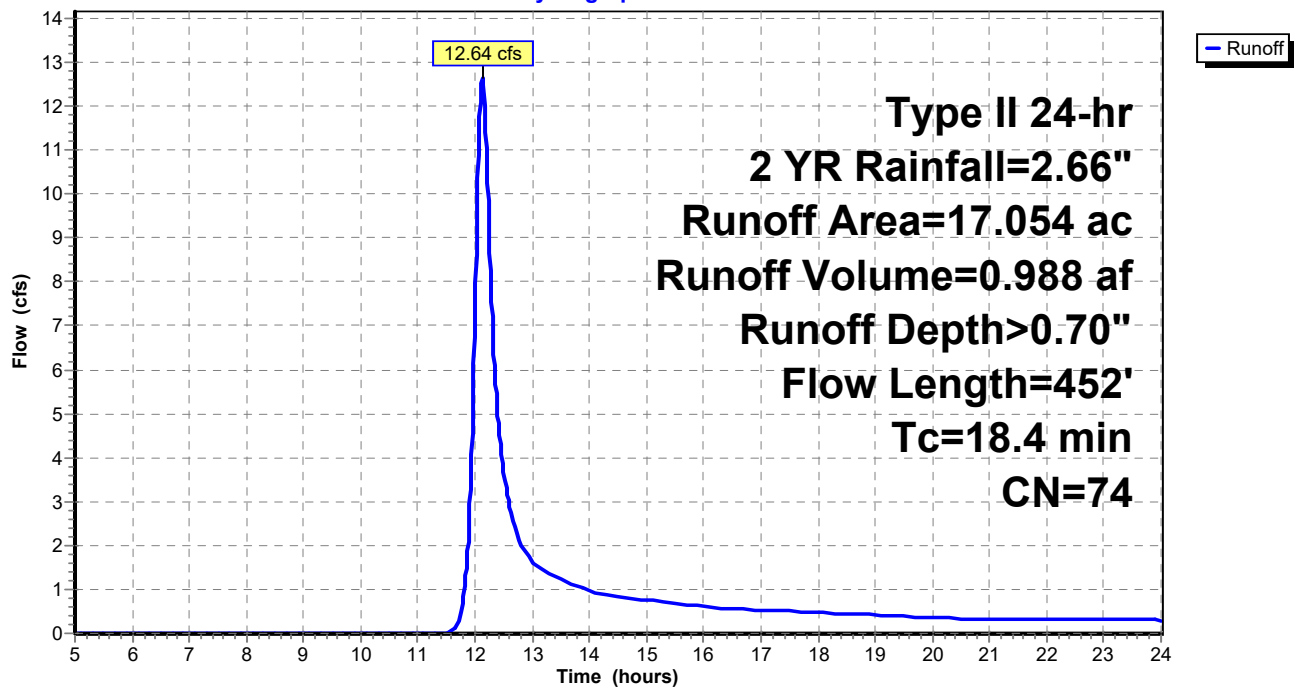
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 2 YR Rainfall=2.66"

Area (ac)	CN	Description
17.054	74	Pasture/grassland/range, Good, HSG C
17.054		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.5	150	0.0183	0.16		Sheet Flow, D-E Grass: Short n= 0.150 P2= 2.64"
2.9	302	0.0116	1.73		Shallow Concentrated Flow, E-F Unpaved Kv= 16.1 fps
18.4	452	Total			

Subcatchment S: South Subcatchment

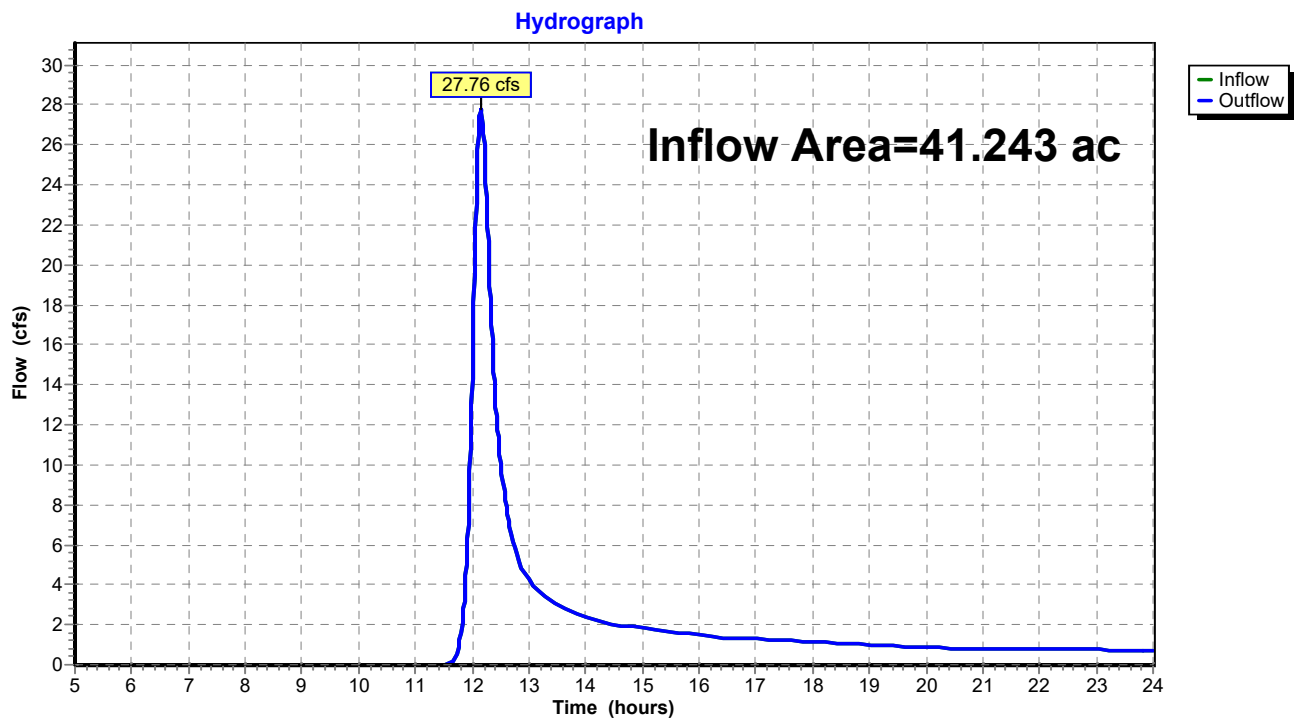
Hydrograph



Summary for Reach 2R: Total Existing Runoff

Inflow Area = 41.243 ac, 0.00% Impervious, Inflow Depth > 0.69" for 2 YR event
Inflow = 27.76 cfs @ 12.16 hrs, Volume= 2.388 af
Outflow = 27.76 cfs @ 12.16 hrs, Volume= 2.388 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs

Reach 2R: Total Existing Runoff

Time span=5.00-24.00 hrs, dt=0.01 hrs, 1901 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment N: North Subcatchment Runoff Area=24.189 ac 0.00% Impervious Runoff Depth>1.45"
Flow Length=738' Tc=22.7 min CN=74 Runoff=35.52 cfs 2.933 af

Subcatchment S: South Subcatchment Runoff Area=17.054 ac 0.00% Impervious Runoff Depth>1.46"
Flow Length=452' Tc=18.4 min CN=74 Runoff=28.51 cfs 2.071 af

Reach 2R: Total Existing Runoff

Inflow=63.03 cfs 5.004 af

Outflow=63.03 cfs 5.004 af

Total Runoff Area = 41.243 ac Runoff Volume = 5.004 af Average Runoff Depth = 1.46"
100.00% Pervious = 41.243 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment N: North Subcatchment

Runoff = 35.52 cfs @ 12.17 hrs, Volume= 2.933 af, Depth> 1.45"

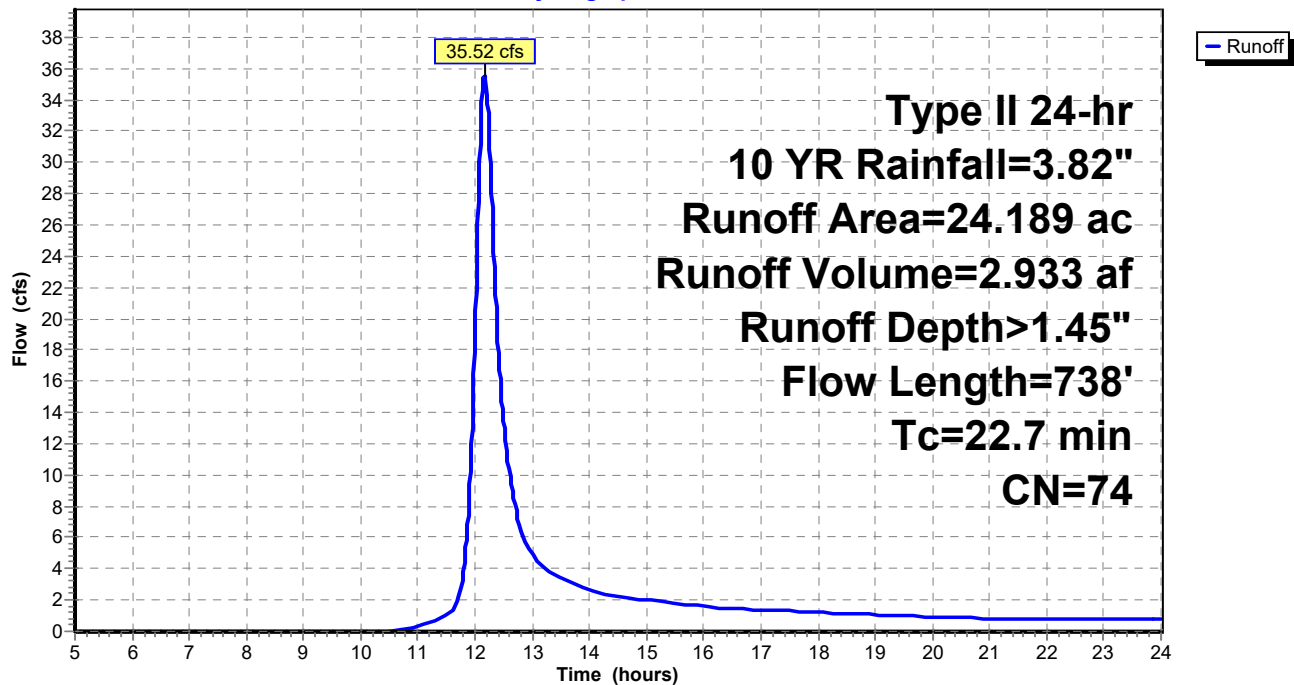
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 YR Rainfall=3.82"

Area (ac)	CN	Description
24.189	74	Pasture/grassland/range, Good, HSG C
24.189		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.6	150	0.0133	0.14		Sheet Flow, A-B Grass: Short n= 0.150 P2= 2.64"
5.1	588	0.0145	1.94		Shallow Concentrated Flow, B-C Unpaved Kv= 16.1 fps
22.7	738	Total			

Subcatchment N: North Subcatchment

Hydrograph



Summary for Subcatchment S: South Subcatchment

Runoff = 28.51 cfs @ 12.12 hrs, Volume= 2.071 af, Depth> 1.46"

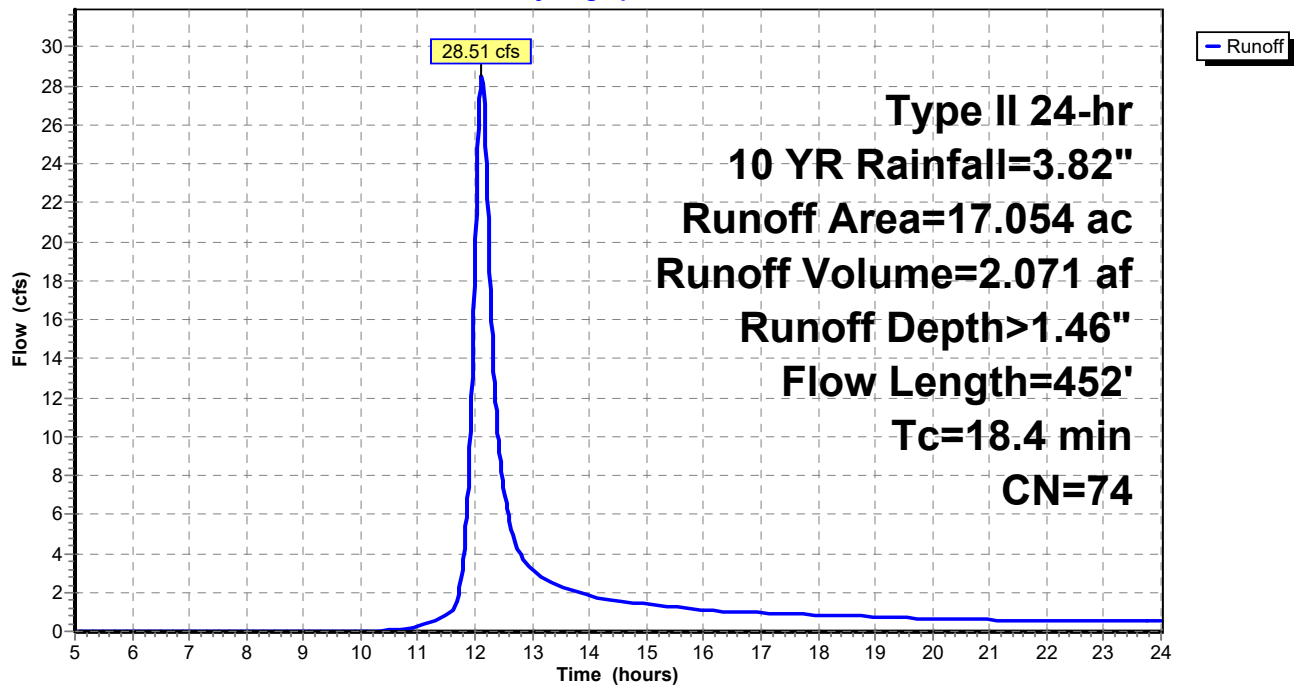
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 YR Rainfall=3.82"

Area (ac)	CN	Description
17.054	74	Pasture/grassland/range, Good, HSG C
17.054		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.5	150	0.0183	0.16		Sheet Flow, D-E Grass: Short n= 0.150 P2= 2.64"
2.9	302	0.0116	1.73		Shallow Concentrated Flow, E-F Unpaved Kv= 16.1 fps
18.4	452	Total			

Subcatchment S: South Subcatchment

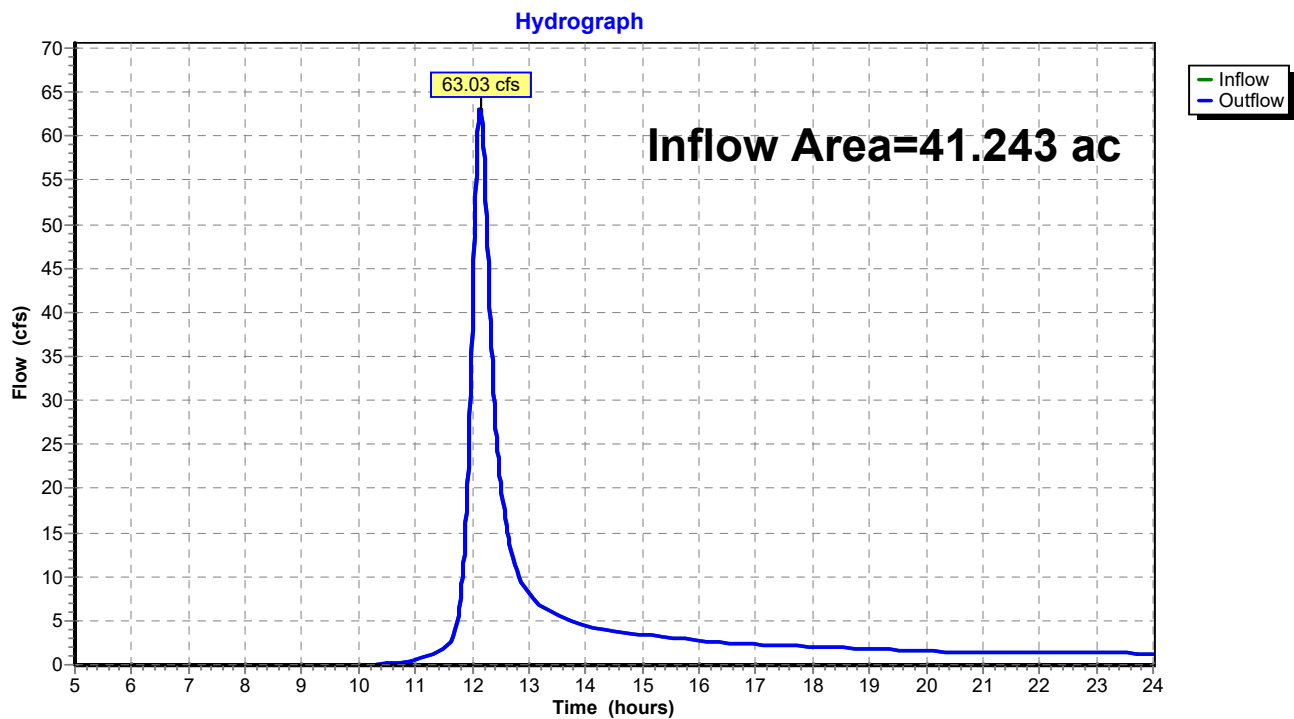
Hydrograph



Summary for Reach 2R: Total Existing Runoff

Inflow Area = 41.243 ac, 0.00% Impervious, Inflow Depth > 1.46" for 10 YR event
Inflow = 63.03 cfs @ 12.14 hrs, Volume= 5.004 af
Outflow = 63.03 cfs @ 12.14 hrs, Volume= 5.004 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs

Reach 2R: Total Existing Runoff

CJE1928R2-EC*Type II 24-hr 100 YR Rainfall=6.37"*

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Time span=5.00-24.00 hrs, dt=0.01 hrs, 1901 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment N: North Subcatchment Runoff Area=24.189 ac 0.00% Impervious Runoff Depth>3.48"
Flow Length=738' Tc=22.7 min CN=74 Runoff=87.39 cfs 7.010 af

Subcatchment S: South Subcatchment Runoff Area=17.054 ac 0.00% Impervious Runoff Depth>3.48"
Flow Length=452' Tc=18.4 min CN=74 Runoff=69.52 cfs 4.948 af

Reach 2R: Total Existing Runoff

Inflow=155.04 cfs 11.958 af

Outflow=155.04 cfs 11.958 af

Total Runoff Area = 41.243 ac Runoff Volume = 11.958 af Average Runoff Depth = 3.48"
100.00% Pervious = 41.243 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment N: North Subcatchment

Runoff = 87.39 cfs @ 12.16 hrs, Volume= 7.010 af, Depth> 3.48"

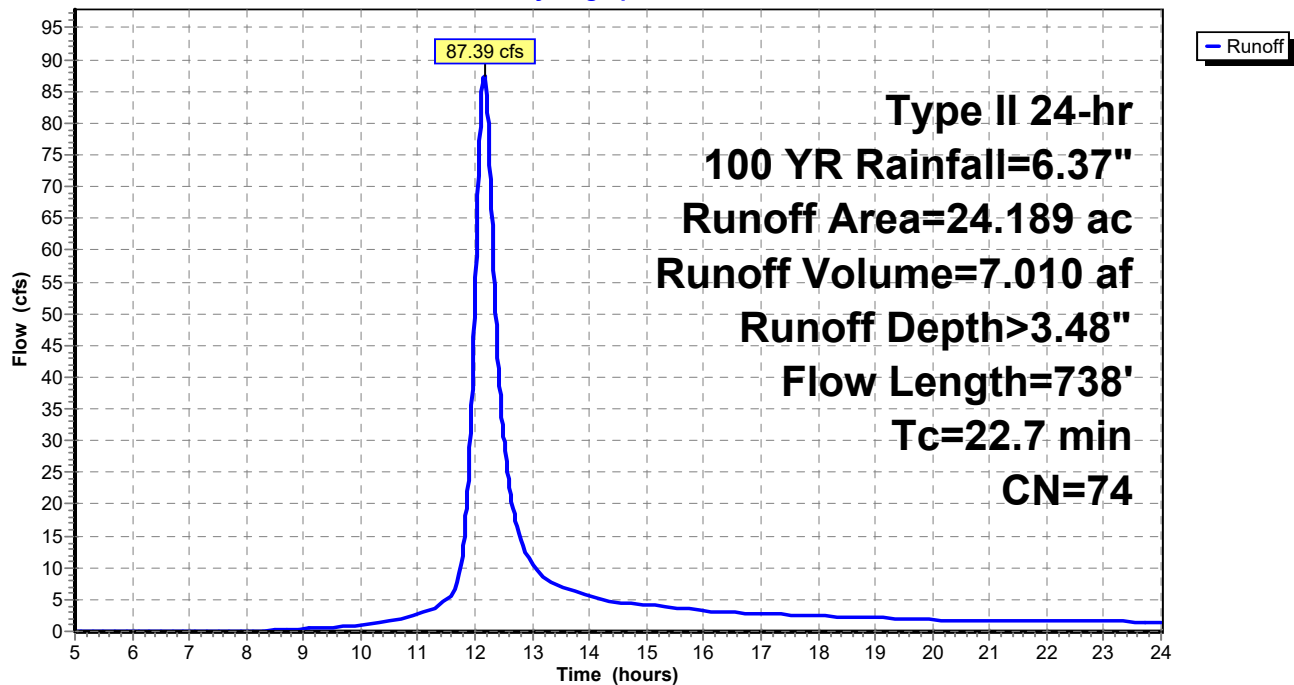
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 YR Rainfall=6.37"

Area (ac)	CN	Description
24.189	74	Pasture/grassland/range, Good, HSG C
24.189		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.6	150	0.0133	0.14		Sheet Flow, A-B Grass: Short n= 0.150 P2= 2.64"
5.1	588	0.0145	1.94		Shallow Concentrated Flow, B-C Unpaved Kv= 16.1 fps
22.7	738	Total			

Subcatchment N: North Subcatchment

Hydrograph



Summary for Subcatchment S: South Subcatchment

Runoff = 69.52 cfs @ 12.11 hrs, Volume= 4.948 af, Depth> 3.48"

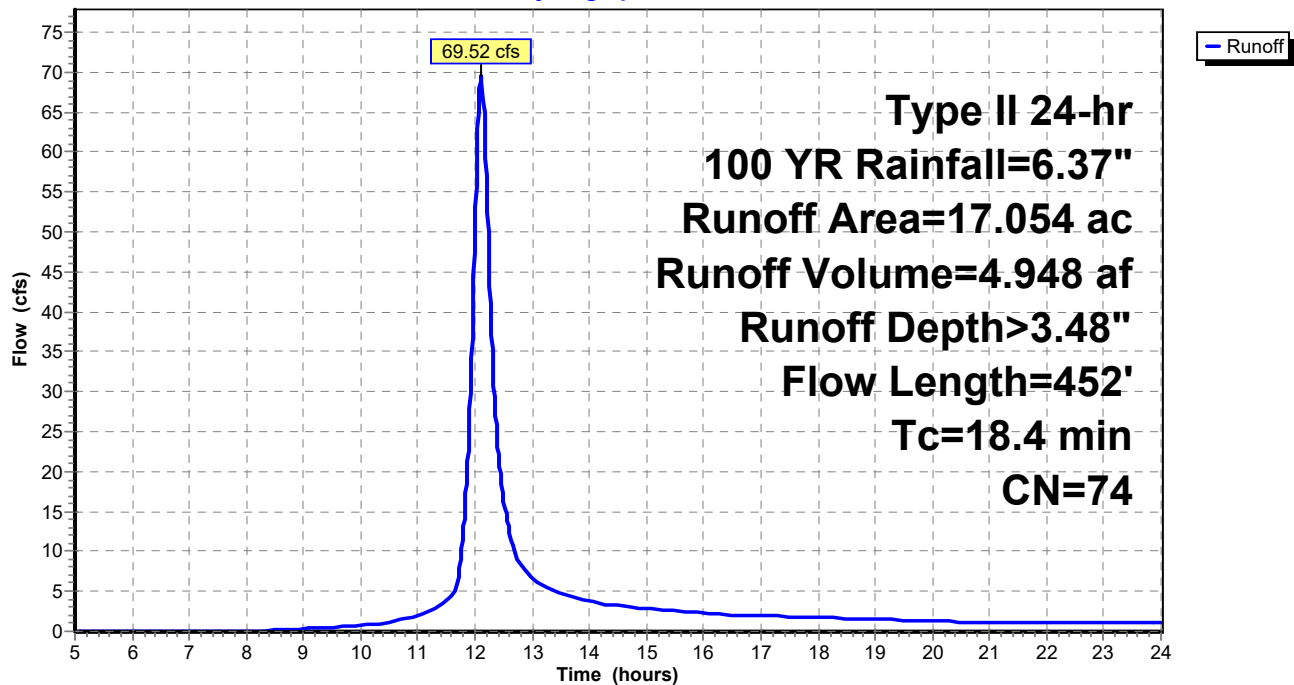
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 YR Rainfall=6.37"

Area (ac)	CN	Description
17.054	74	Pasture/grassland/range, Good, HSG C
17.054		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.5	150	0.0183	0.16		Sheet Flow, D-E Grass: Short n= 0.150 P2= 2.64"
2.9	302	0.0116	1.73		Shallow Concentrated Flow, E-F Unpaved Kv= 16.1 fps
18.4	452	Total			

Subcatchment S: South Subcatchment

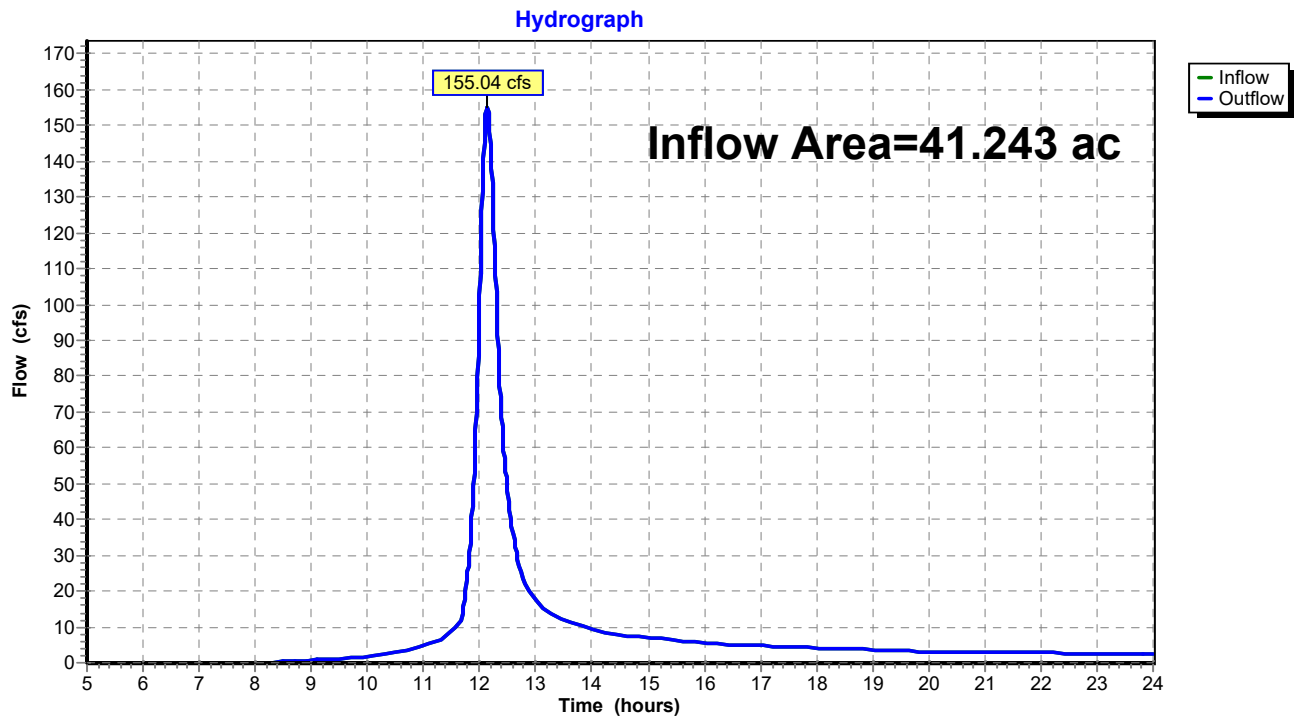
Hydrograph



Summary for Reach 2R: Total Existing Runoff

Inflow Area = 41.243 ac, 0.00% Impervious, Inflow Depth > 3.48" for 100 YR event
Inflow = 155.04 cfs @ 12.13 hrs, Volume= 11.958 af
Outflow = 155.04 cfs @ 12.13 hrs, Volume= 11.958 af, Atten= 0%, Lag= 0.0 min

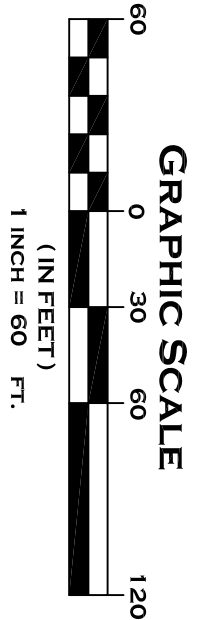
Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs

Reach 2R: Total Existing Runoff

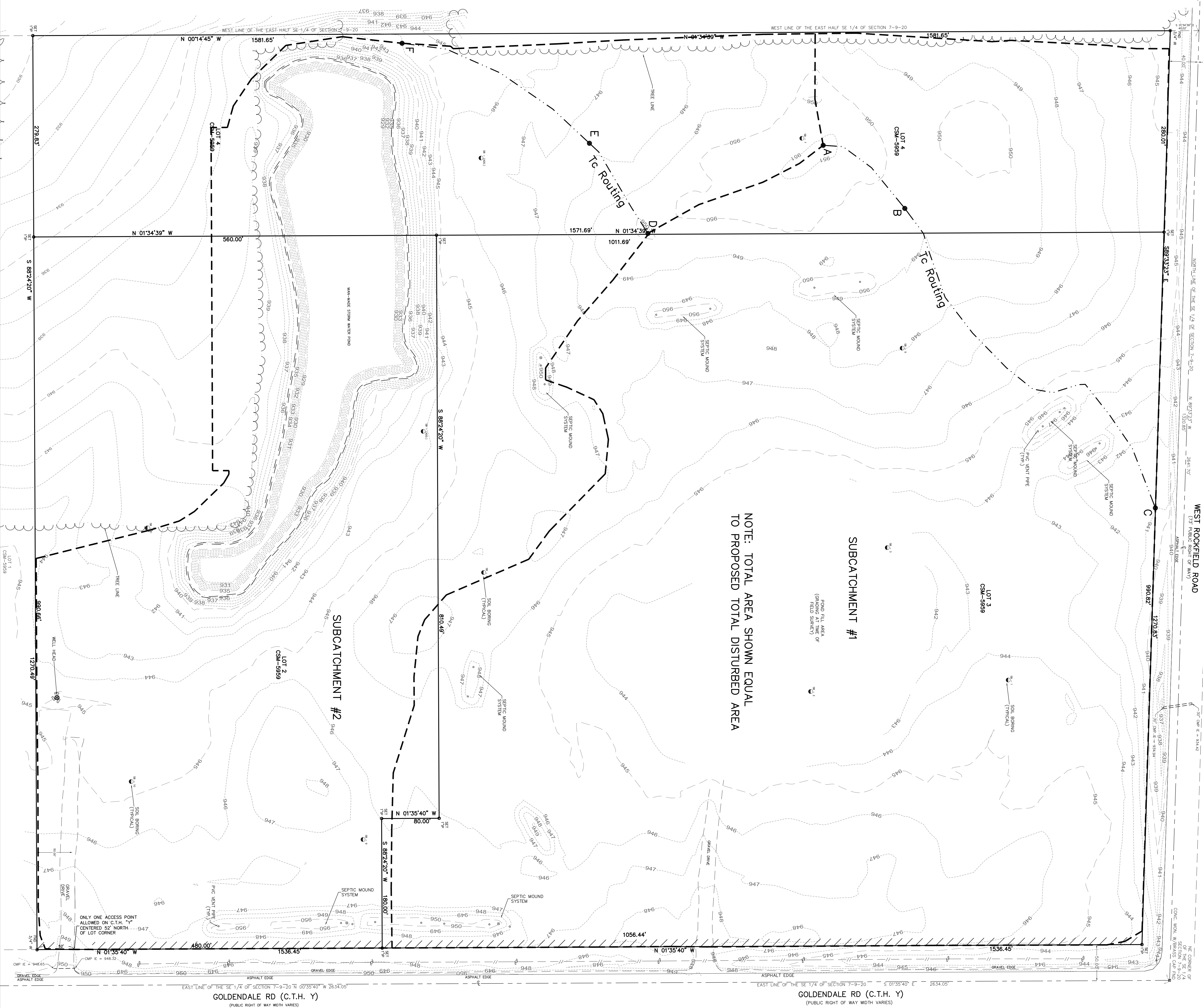


DICKMAN MULTI-TENANT DEVELOPEMMENT
GERMANTOWN, WISCONSIN

CUE NO.: CUE1928RIEX
JULY 12, 2019



SWMP - EXISTING CONDITIONS



PROPOSED SUBCATCHMENT AREAS

SUBCATCHMENT 1 - TO SUBCATCHMENT BASIN
FUTURE PAVED ADDITIONS: 0.21 ACRES
OPEN: 2.15 ACRES
TOTAL: 2.36 ACRES

SUBCATCHMENT 2 - TO WEST POND
FUTURE PAVED ADDITIONS: 4.10 ACRES
OPEN: 1.73 ACRES
TOTAL: 5.83 ACRES

SUBCATCHMENT 3 - TO WEST POND
FUTURE PAVED ADDITIONS: 4.10 ACRES
OPEN: 1.73 ACRES
TOTAL: 5.83 ACRES

TOTAL ANALYZED AREA: 41.243 ACRES

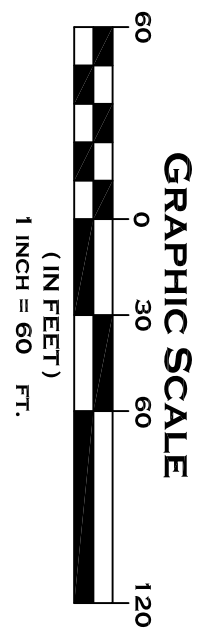
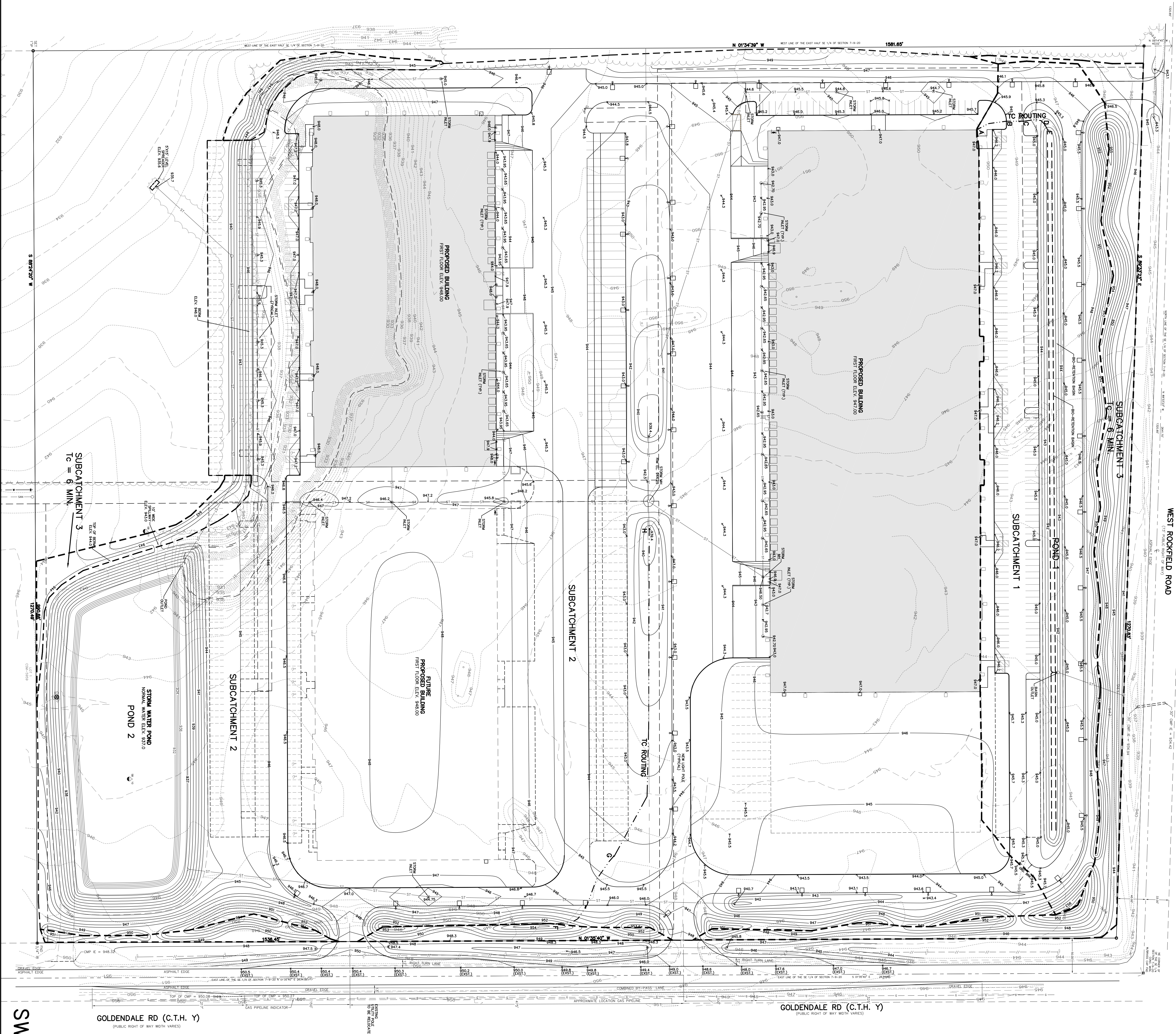
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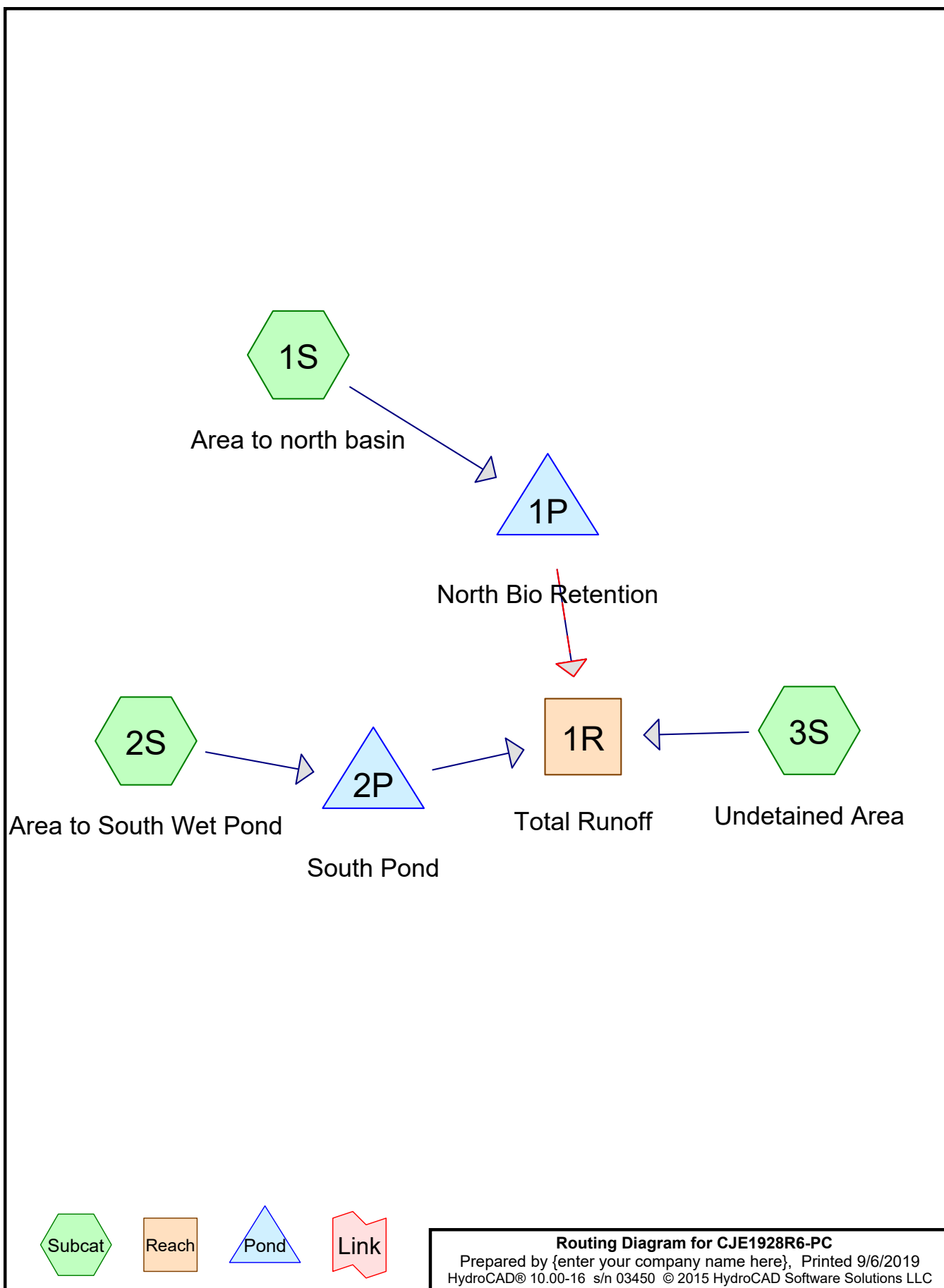
C/E NO.: CJE029R6
JULY 12, 2019
REV: 09-05-19

DICKMAN MULTI-TENANT DEVELOPMENT

GERMANTOWN, WISCONSIN

CJE
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civil design and consulting
9205 W. Center Street
Suite 214 WJ 53222
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www.cje-engineering.com

SWMP - PROPOSED CONDITIONS



Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
11.730	61	>75% Grass cover, Good, HSG B (1S, 2S, 3S)
0.210	98	Future Paved (1S)
4.100	98	Future Paved parking HSG C (2S)
0.270	98	Future Paved parking, HSG C (3S)
4.370	98	Future Roof HSG C (2S)
2.160	98	Paved Roads (1S)
8.180	98	Paved parking, HSG C (2S, 3S)
8.510	98	Roofs, HSG C (2S)
1.713	98	Water Surface, HSG C (2S)
41.243	87	TOTAL AREA

CJE1928R6-PC

Type II 24-hr 2 YR Rainfall=2.66"

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Page 3

Time span=5.00-24.00 hrs, dt=0.01 hrs, 1901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Area to north basin Runoff Area=4.520 ac 52.43% Impervious Runoff Depth>1.00"
Flow Length=109' Tc=8.5 min CN=80 Runoff=7.34 cfs 0.376 af

Subcatchment 2S: Area to South Wet Pond Runoff Area=34.073 ac 78.75% Impervious Runoff Depth>1.67"
Flow Length=614' Tc=13.8 min CN=90 Runoff=76.29 cfs 4.739 af

Subcatchment 3S: Undetained Area Runoff Area=2.650 ac 11.70% Impervious Runoff Depth>0.36"
Tc=6.0 min CN=65 Runoff=1.33 cfs 0.079 af

Reach 1R: Total Runoff Inflow=1.62 cfs 0.687 af
Outflow=1.62 cfs 0.687 af

Pond 1P: North Bio Retention Peak Elev=940.79' Storage=6,825 cf Inflow=7.34 cfs 0.376 af
Outflow=1.09 cfs 0.269 af

Pond 2P: South Pond Peak Elev=939.38' Storage=191,650 cf Inflow=76.29 cfs 4.739 af
Outflow=0.36 cfs 0.339 af

Total Runoff Area = 41.243 ac Runoff Volume = 5.194 af Average Runoff Depth = 1.51"
28.44% Pervious = 11.730 ac 71.56% Impervious = 29.513 ac

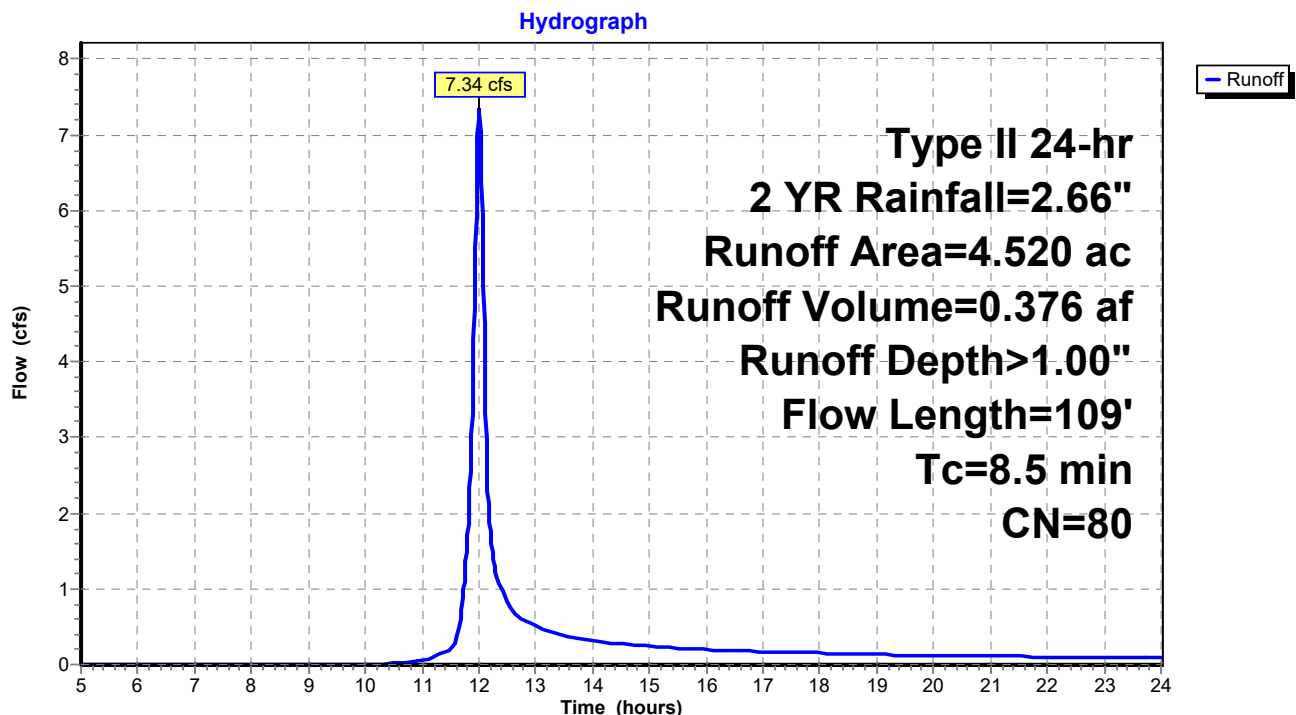
Summary for Subcatchment 1S: Area to north basin

Runoff = 7.34 cfs @ 12.01 hrs, Volume= 0.376 af, Depth> 1.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 2 YR Rainfall=2.66"

Area (ac)	CN	Description
* 2.160	98	Paved Roads
* 0.210	98	Future Paved
2.150	61	>75% Grass cover, Good, HSG B
4.520	80	Weighted Average
2.150		47.57% Pervious Area
2.370		52.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	43	0.0230	0.14		Sheet Flow, A-B Grass: Short n= 0.150 P2= 2.64"
0.5	24	0.0120	0.77		Sheet Flow, B-C Smooth surfaces n= 0.011 P2= 2.64"
2.8	34	0.0669	0.20		Sheet Flow, C-D Grass: Short n= 0.150 P2= 2.64"
0.0	8	0.2500	8.05		Shallow Concentrated Flow, D-E Unpaved Kv= 16.1 fps
8.5	109	Total			

Subcatchment 1S: Area to north basin

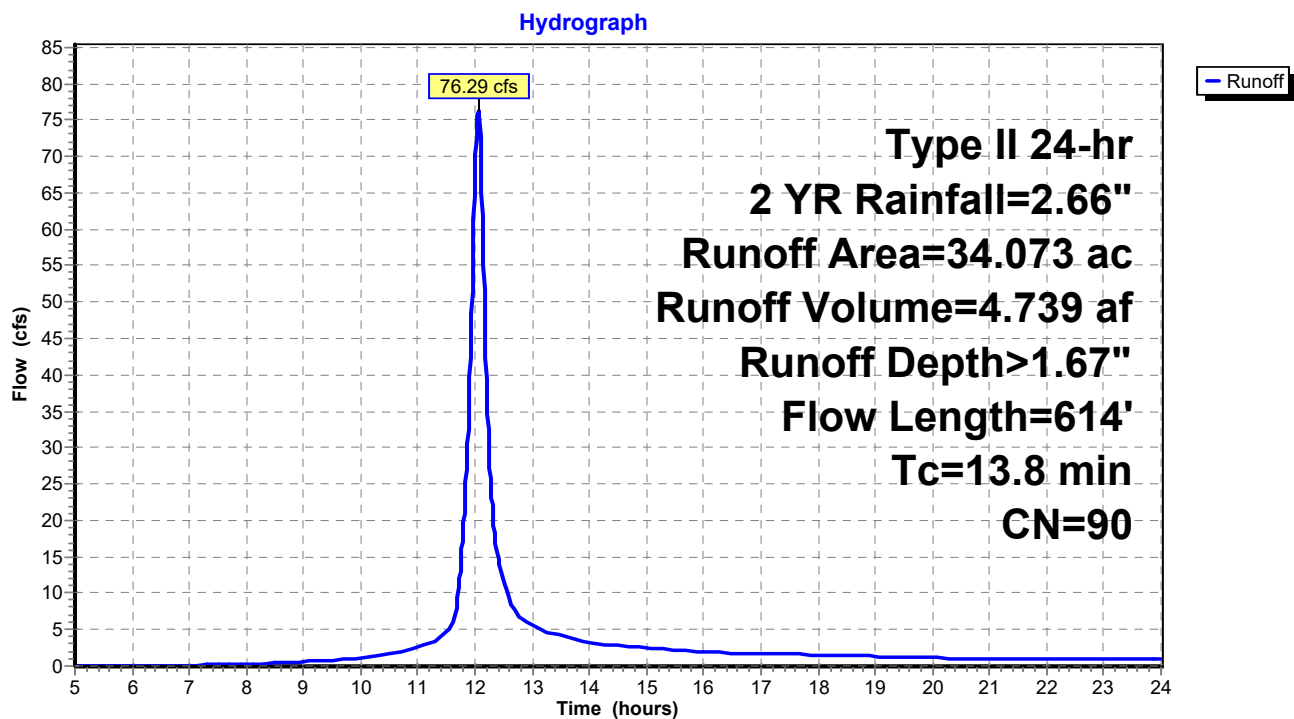
Summary for Subcatchment 2S: Area to South Wet Pond

Runoff = 76.29 cfs @ 12.06 hrs, Volume= 4.739 af, Depth> 1.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 2 YR Rainfall=2.66"

Area (ac)	CN	Description
8.510	98	Roofs, HSG C
* 4.370	98	Future Roof HSG C
* 4.100	98	Future Paved parking HSG C
8.140	98	Paved parking, HSG C
1.713	98	Water Surface, HSG C
7.240	61	>75% Grass cover, Good, HSG B
34.073	90	Weighted Average
7.240		21.25% Pervious Area
26.833		78.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	136	0.0550	0.25		Sheet Flow, F-G Grass: Short n= 0.150 P2= 2.64"
4.6	478	0.0115	1.73		Shallow Concentrated Flow, G-H Unpaved Kv= 16.1 fps
13.8	614	Total			

Subcatchment 2S: Area to South Wet Pond

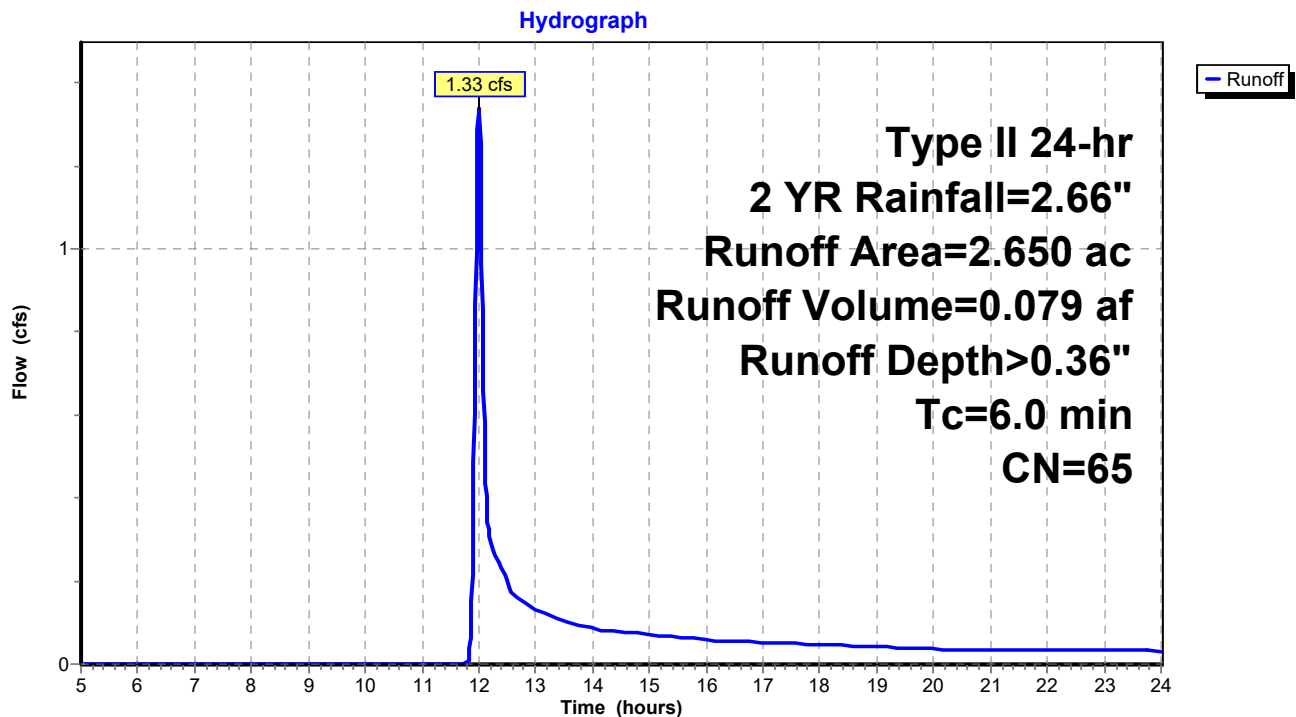
Summary for Subcatchment 3S: Undetained Area

Runoff = 1.33 cfs @ 12.00 hrs, Volume= 0.079 af, Depth> 0.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 2 YR Rainfall=2.66"

Area (ac)	CN	Description
0.040	98	Paved parking, HSG C
* 0.270	98	Future Paved parking, HSG C
2.340	61	>75% Grass cover, Good, HSG B
2.650	65	Weighted Average
2.340		88.30% Pervious Area
0.310		11.70% Impervious Area

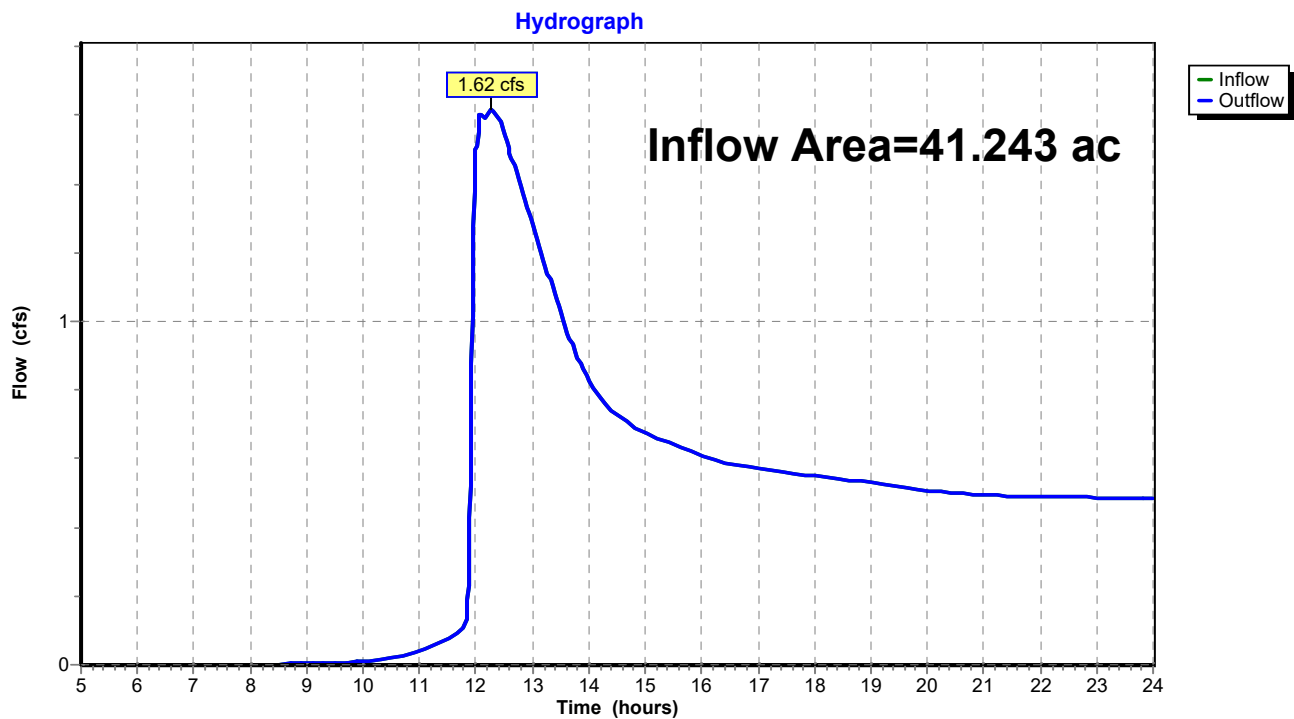
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Min. Tc

Subcatchment 3S: Undetained Area

Summary for Reach 1R: Total Runoff

Inflow Area = 41.243 ac, 71.56% Impervious, Inflow Depth > 0.20" for 2 YR event
Inflow = 1.62 cfs @ 12.28 hrs, Volume= 0.687 af
Outflow = 1.62 cfs @ 12.28 hrs, Volume= 0.687 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs

Reach 1R: Total Runoff

Summary for Pond 1P: North Bio Retention

Inflow Area = 4.520 ac, 52.43% Impervious, Inflow Depth > 1.00" for 2 YR event
 Inflow = 7.34 cfs @ 12.01 hrs, Volume= 0.376 af
 Outflow = 1.09 cfs @ 12.35 hrs, Volume= 0.269 af, Atten= 85%, Lag= 20.7 min
 Primary = 1.09 cfs @ 12.35 hrs, Volume= 0.269 af

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
 Peak Elev= 940.79' @ 12.35 hrs Surf.Area= 12,602 sf Storage= 6,825 cf

Plug-Flow detention time= 182.9 min calculated for 0.269 af (72% of inflow)
 Center-of-Mass det. time= 76.9 min (927.0 - 850.2)

Volume	Invert	Avail.Storage	Storage Description	
#1	939.00'	85,192 cf	Custom Stage Data (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
939.00	12,602	0.0	0	0
939.01	12,602	33.0	42	42
939.99	12,602	33.0	4,075	4,117
940.00	12,602	27.0	34	4,151
942.00	12,602	27.0	6,805	10,956
942.01	12,602	100.0	126	11,082
943.00	20,605	100.0	16,437	27,520
944.00	28,770	100.0	24,688	52,207
945.00	37,199	100.0	32,985	85,192

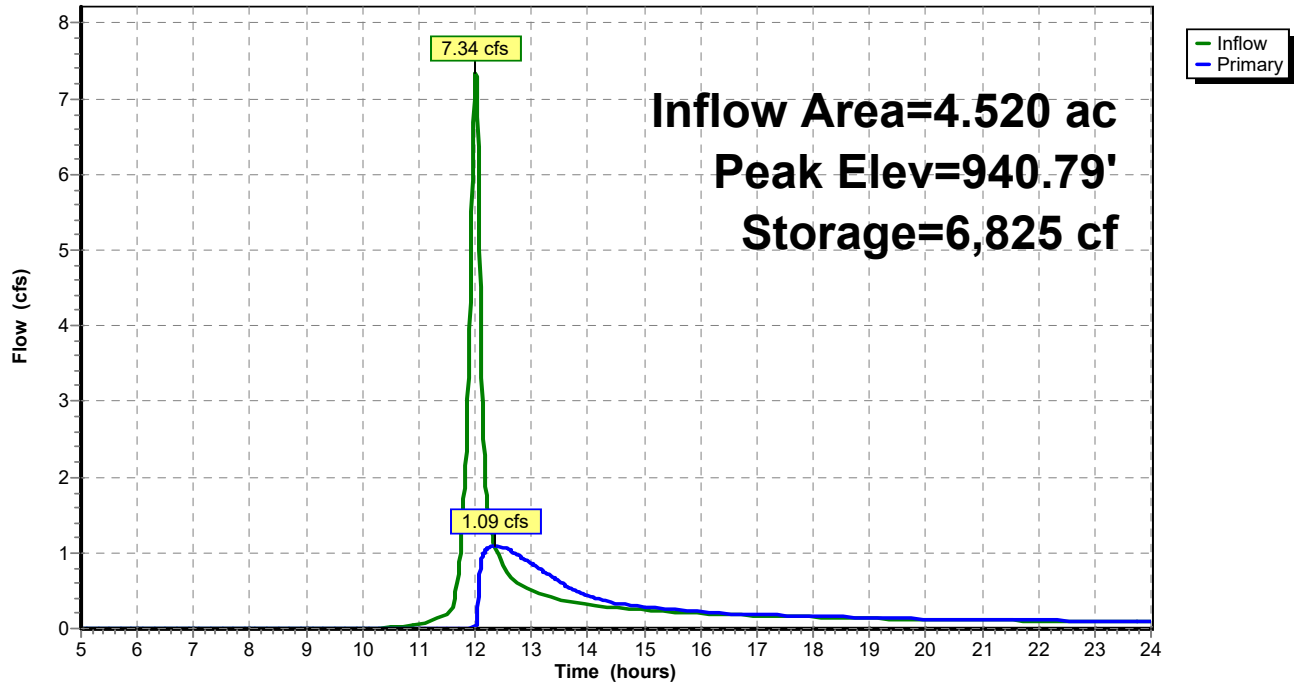
Device	Routing	Invert	Outlet Devices
#1	Primary	940.00'	12.0" Round Culvert L= 96.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 940.00' / 939.00' S= 0.0104 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	940.00'	6.0" Round Culvert X 2.00 L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 940.00' / 939.90' S= 0.0200 '/' Cc= 0.900 n= 0.010, Flow Area= 0.20 sf
#3	Device 1	943.00'	3.0" Vert. Orifice/Grate C= 0.600
#4	Device 1	944.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.09 cfs @ 12.35 hrs HW=940.79' (Free Discharge)

- 1=Culvert (Passes 1.09 cfs of 2.00 cfs potential flow)
- 2=Culvert (Inlet Controls 1.09 cfs @ 2.78 fps)
- 3=Orifice/Grate (Controls 0.00 cfs)
- 4=Orifice/Grate (Controls 0.00 cfs)

Pond 1P: North Bio Retention

Hydrograph



Summary for Pond 2P: South Pond

Inflow Area = 34.073 ac, 78.75% Impervious, Inflow Depth > 1.67" for 2 YR event
 Inflow = 76.29 cfs @ 12.06 hrs, Volume= 4.739 af
 Outflow = 0.36 cfs @ 24.00 hrs, Volume= 0.339 af, Atten= 100%, Lag= 716.7 min
 Primary = 0.36 cfs @ 24.00 hrs, Volume= 0.339 af

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
 Peak Elev= 939.38' @ 24.00 hrs Surf.Area= 86,339 sf Storage= 191,650 cf

Plug-Flow detention time= 471.8 min calculated for 0.339 af (7% of inflow)
 Center-of-Mass det. time= 264.9 min (1,081.2 - 816.3)

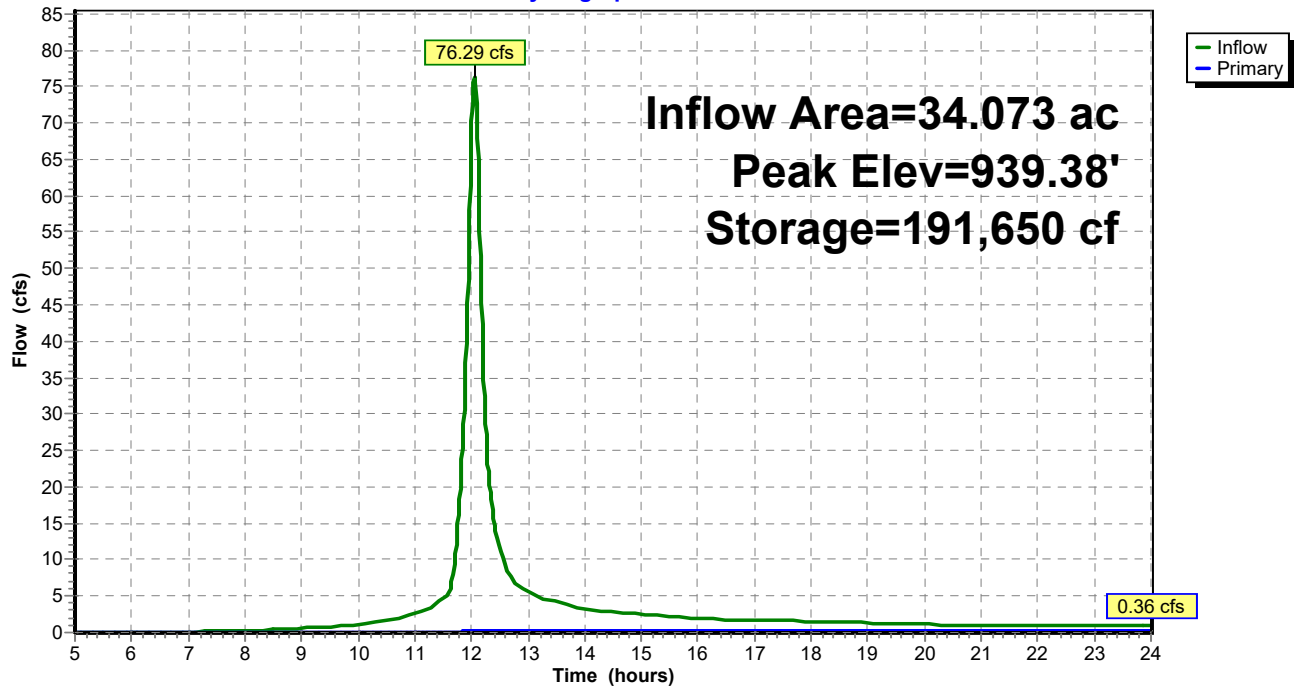
Volume	Invert	Avail.Storage	Storage Description
#1	937.00'	645,503 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
937.00	74,638	0	0
938.00	79,482	77,060	77,060
939.00	84,402	81,942	159,002
940.00	89,468	86,935	245,937
941.00	94,595	92,032	337,969
942.00	99,787	97,191	435,160
943.00	105,143	102,465	537,625
944.00	110,614	107,879	645,503

Device	Routing	Invert	Outlet Devices
#1	Primary	937.00'	12.0" Round Culvert L= 464.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 937.00' / 936.00' S= 0.0022 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 0.79 sf
#2	Device 1	937.00'	3.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	942.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Primary	943.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.36 cfs @ 24.00 hrs HW=939.38' (Free Discharge)

1=Culvert (Passes 0.36 cfs of 2.43 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.36 cfs @ 7.23 fps)
 3=Orifice/Grate (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: South Pond**Hydrograph**

CJE1928R6-PC*Type II 24-hr 10 YR Rainfall=3.82"*

Prepared by {enter your company name here}

Printed 9/6/2019

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Time span=5.00-24.00 hrs, dt=0.01 hrs, 1901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Area to north basin Runoff Area=4.520 ac 52.43% Impervious Runoff Depth>1.89"
Flow Length=109' Tc=8.5 min CN=80 Runoff=13.95 cfs 0.712 af

Subcatchment 2S: Area to South Wet Pond Runoff Area=34.073 ac 78.75% Impervious Runoff Depth>2.74"
Flow Length=614' Tc=13.8 min CN=90 Runoff=122.94 cfs 7.781 af

Subcatchment 3S: Undetained Area Runoff Area=2.650 ac 11.70% Impervious Runoff Depth>0.92"
Tc=6.0 min CN=65 Runoff=4.19 cfs 0.204 af

Reach 1R: Total Runoff Inflow=5.98 cfs 1.255 af
Outflow=5.98 cfs 1.255 af

Pond 1P: North Bio Retention Peak Elev=942.20' Storage=13,656 cf Inflow=13.95 cfs 0.712 af
Outflow=2.09 cfs 0.601 af

Pond 2P: South Pond Peak Elev=940.80' Storage=319,369 cf Inflow=122.94 cfs 7.781 af
Outflow=0.45 cfs 0.449 af

Total Runoff Area = 41.243 ac Runoff Volume = 8.697 af Average Runoff Depth = 2.53"
28.44% Pervious = 11.730 ac 71.56% Impervious = 29.513 ac

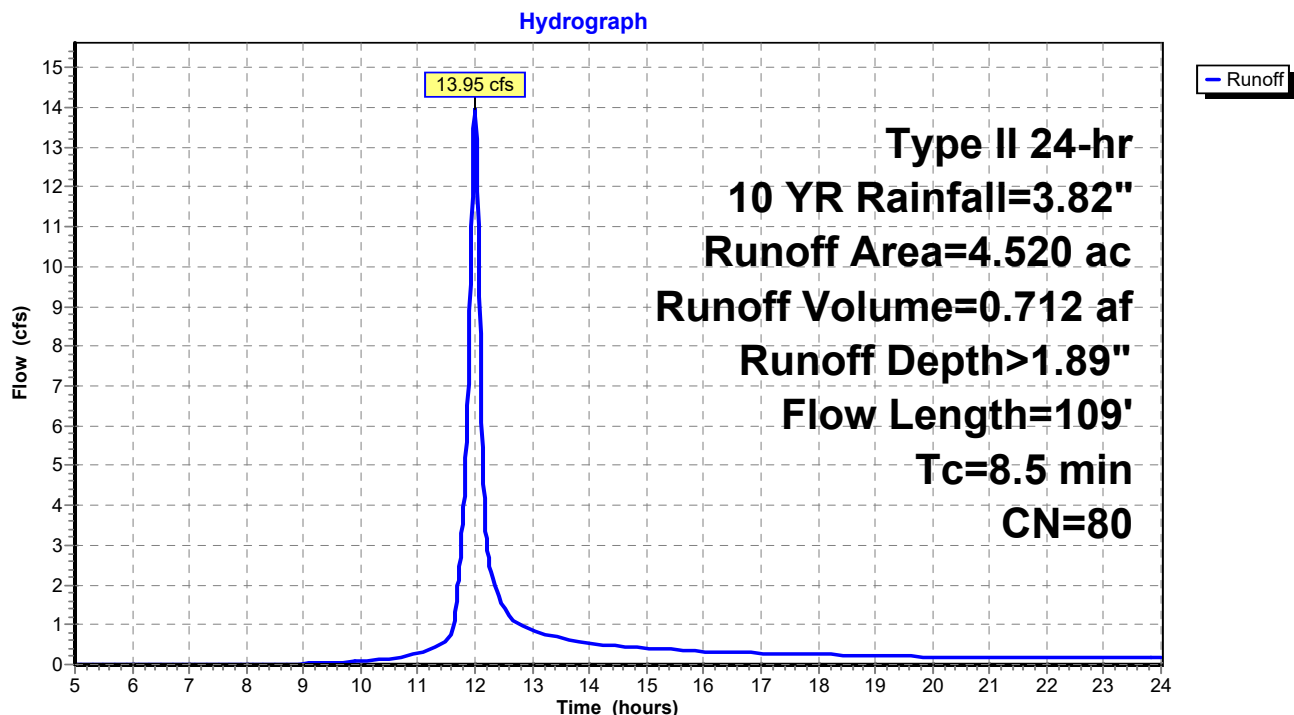
Summary for Subcatchment 1S: Area to north basin

Runoff = 13.95 cfs @ 12.00 hrs, Volume= 0.712 af, Depth> 1.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 YR Rainfall=3.82"

Area (ac)	CN	Description
* 2.160	98	Paved Roads
* 0.210	98	Future Paved
2.150	61	>75% Grass cover, Good, HSG B
4.520	80	Weighted Average
2.150		47.57% Pervious Area
2.370		52.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	43	0.0230	0.14		Sheet Flow, A-B Grass: Short n= 0.150 P2= 2.64"
0.5	24	0.0120	0.77		Sheet Flow, B-C Smooth surfaces n= 0.011 P2= 2.64"
2.8	34	0.0669	0.20		Sheet Flow, C-D Grass: Short n= 0.150 P2= 2.64"
0.0	8	0.2500	8.05		Shallow Concentrated Flow, D-E Unpaved Kv= 16.1 fps
8.5	109	Total			

Subcatchment 1S: Area to north basin

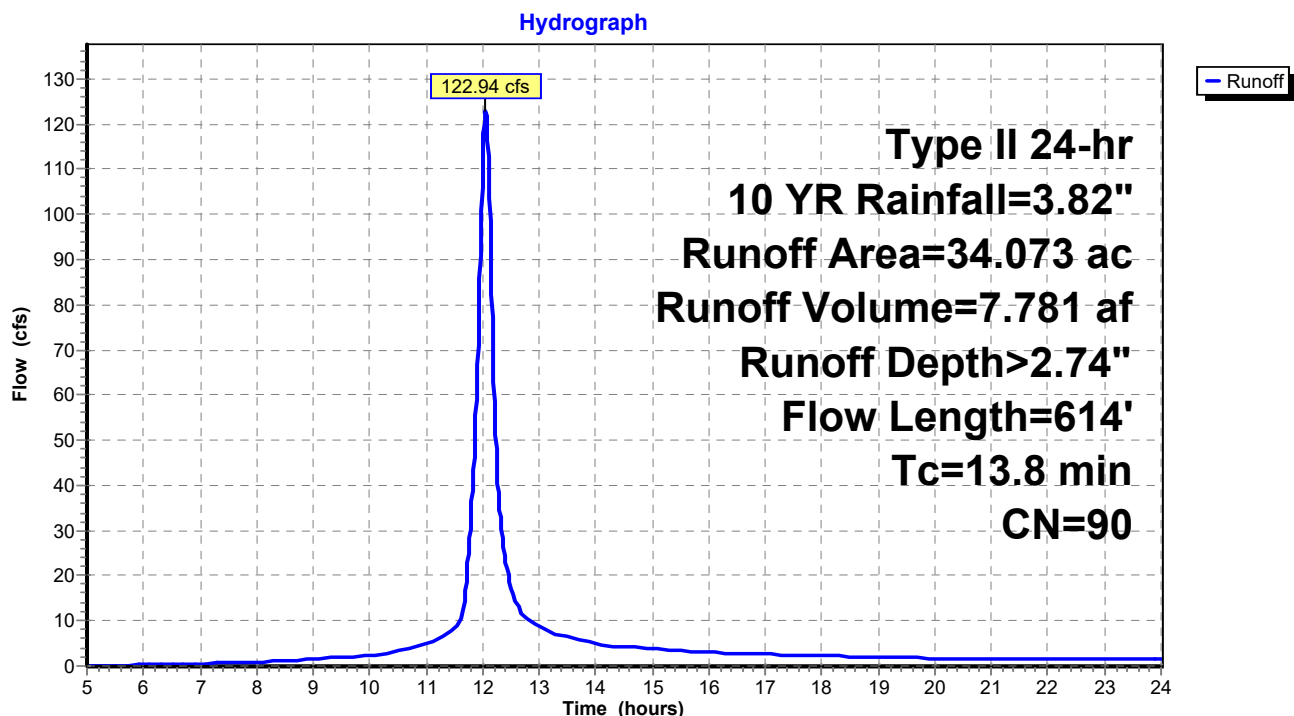
Summary for Subcatchment 2S: Area to South Wet Pond

Runoff = 122.94 cfs @ 12.05 hrs, Volume= 7.781 af, Depth> 2.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 YR Rainfall=3.82"

Area (ac)	CN	Description
8.510	98	Roofs, HSG C
* 4.370	98	Future Roof HSG C
* 4.100	98	Future Paved parking HSG C
8.140	98	Paved parking, HSG C
1.713	98	Water Surface, HSG C
7.240	61	>75% Grass cover, Good, HSG B
34.073	90	Weighted Average
7.240		21.25% Pervious Area
26.833		78.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	136	0.0550	0.25		Sheet Flow, F-G Grass: Short n= 0.150 P2= 2.64"
4.6	478	0.0115	1.73		Shallow Concentrated Flow, G-H Unpaved Kv= 16.1 fps
13.8	614	Total			

Subcatchment 2S: Area to South Wet Pond

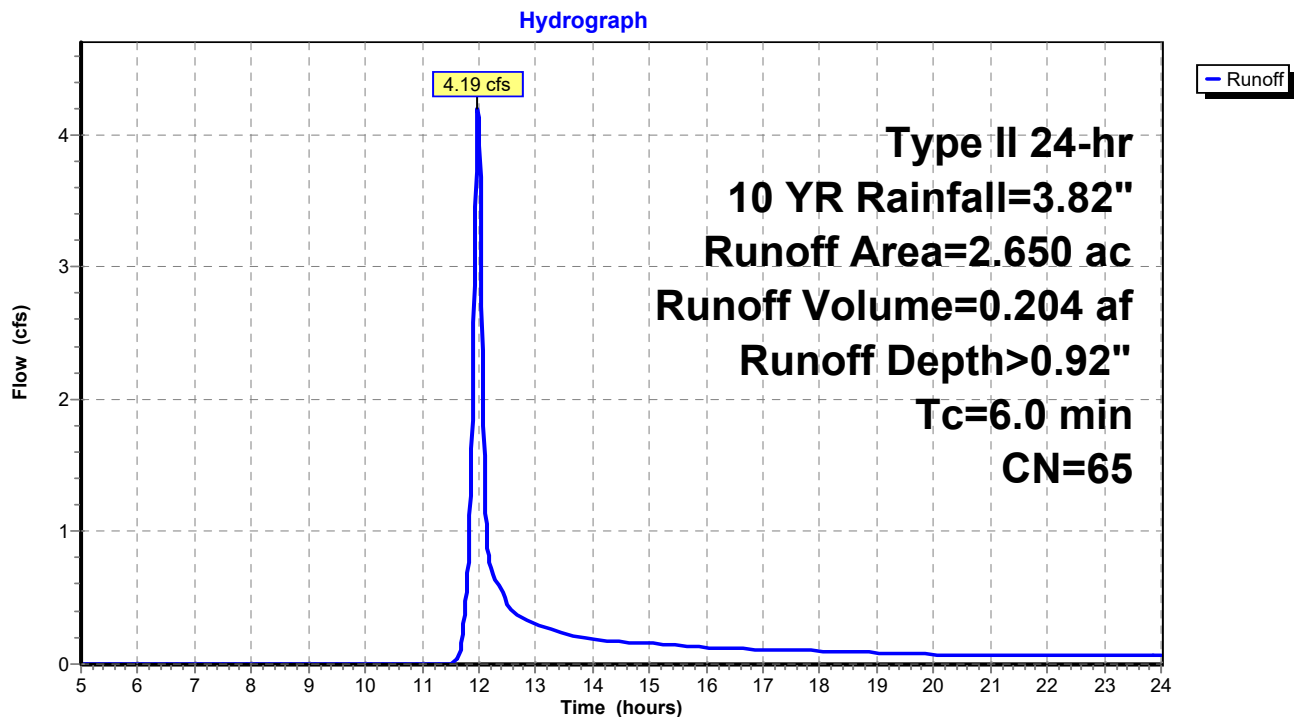
Summary for Subcatchment 3S: Undetained Area

Runoff = 4.19 cfs @ 11.98 hrs, Volume= 0.204 af, Depth> 0.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 YR Rainfall=3.82"

Area (ac)	CN	Description
0.040	98	Paved parking, HSG C
* 0.270	98	Future Paved parking, HSG C
2.340	61	>75% Grass cover, Good, HSG B
2.650	65	Weighted Average
2.340		88.30% Pervious Area
0.310		11.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Min. Tc

Subcatchment 3S: Undetained Area

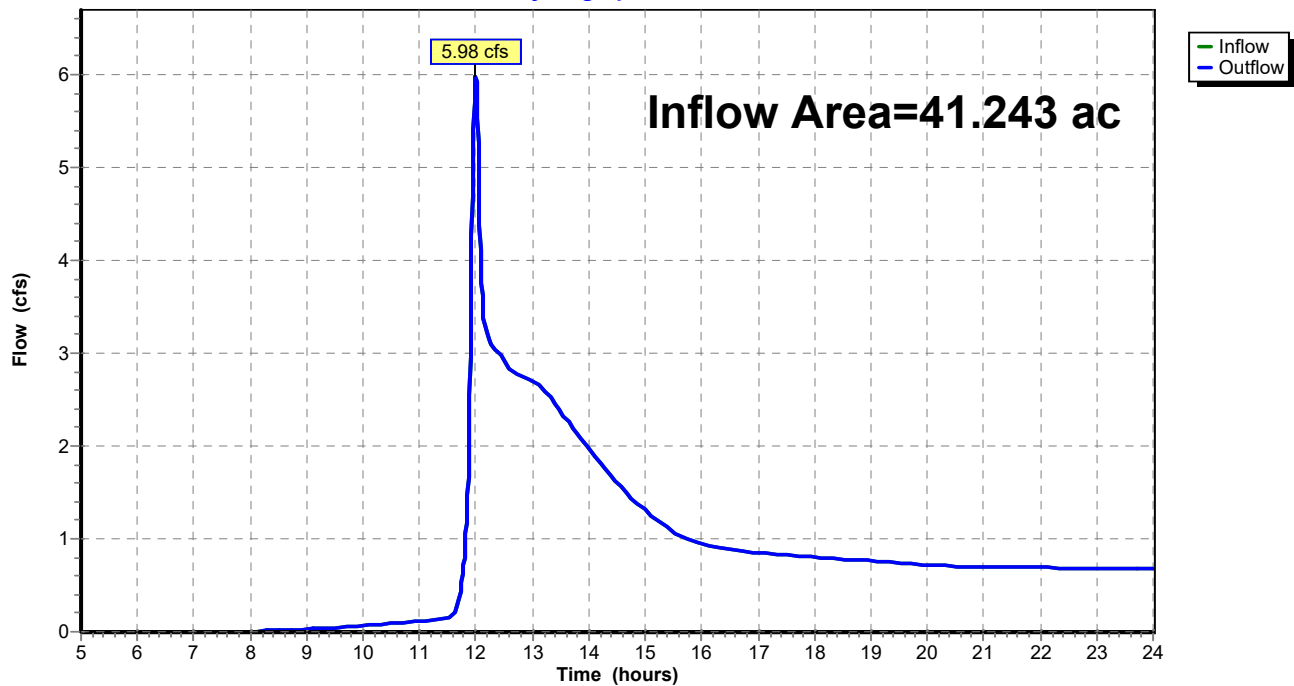
Summary for Reach 1R: Total Runoff

Inflow Area = 41.243 ac, 71.56% Impervious, Inflow Depth > 0.37" for 10 YR event
Inflow = 5.98 cfs @ 12.00 hrs, Volume= 1.255 af
Outflow = 5.98 cfs @ 12.00 hrs, Volume= 1.255 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs

Reach 1R: Total Runoff

Hydrograph



Summary for Pond 1P: North Bio Retention

Inflow Area = 4.520 ac, 52.43% Impervious, Inflow Depth > 1.89" for 10 YR event
 Inflow = 13.95 cfs @ 12.00 hrs, Volume= 0.712 af
 Outflow = 2.09 cfs @ 12.32 hrs, Volume= 0.601 af, Atten= 85%, Lag= 18.8 min
 Primary = 2.09 cfs @ 12.32 hrs, Volume= 0.601 af

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
 Peak Elev= 942.20' @ 12.32 hrs Surf.Area= 14,157 sf Storage= 13,656 cf

Plug-Flow detention time= 134.8 min calculated for 0.601 af (84% of inflow)
 Center-of-Mass det. time= 64.4 min (896.1 - 831.7)

Volume	Invert	Avail.Storage	Storage Description	
#1	939.00'	85,192 cf	Custom Stage Data (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
939.00	12,602	0.0	0	0
939.01	12,602	33.0	42	42
939.99	12,602	33.0	4,075	4,117
940.00	12,602	27.0	34	4,151
942.00	12,602	27.0	6,805	10,956
942.01	12,602	100.0	126	11,082
943.00	20,605	100.0	16,437	27,520
944.00	28,770	100.0	24,688	52,207
945.00	37,199	100.0	32,985	85,192

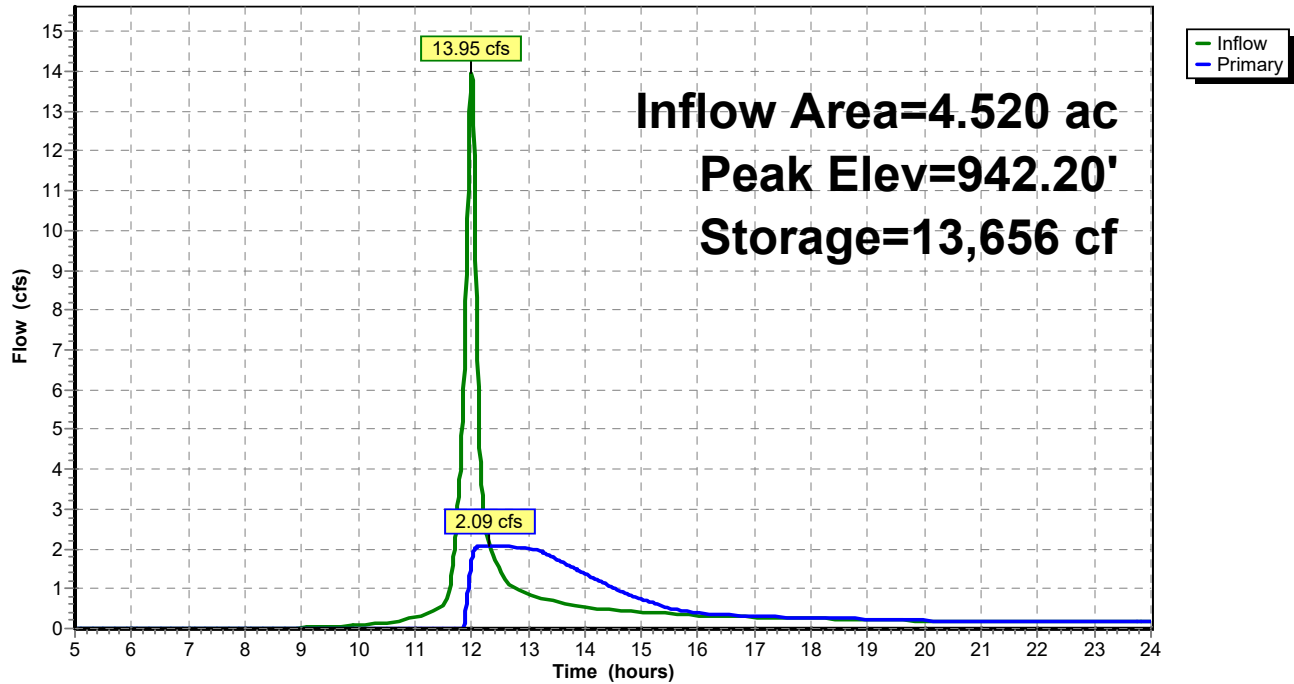
Device	Routing	Invert	Outlet Devices
#1	Primary	940.00'	12.0" Round Culvert L= 96.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 940.00' / 939.00' S= 0.0104 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	940.00'	6.0" Round Culvert X 2.00 L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 940.00' / 939.90' S= 0.0200 '/' Cc= 0.900 n= 0.010, Flow Area= 0.20 sf
#3	Device 1	943.00'	3.0" Vert. Orifice/Grate C= 0.600
#4	Device 1	944.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.09 cfs @ 12.32 hrs HW=942.20' (Free Discharge)

- 1=Culvert (Passes 2.09 cfs of 4.89 cfs potential flow)
- 2=Culvert (Inlet Controls 2.09 cfs @ 5.31 fps)
- 3=Orifice/Grate (Controls 0.00 cfs)
- 4=Orifice/Grate (Controls 0.00 cfs)

Pond 1P: North Bio Retention

Hydrograph



Summary for Pond 2P: South Pond

Inflow Area = 34.073 ac, 78.75% Impervious, Inflow Depth > 2.74" for 10 YR event
 Inflow = 122.94 cfs @ 12.05 hrs, Volume= 7.781 af
 Outflow = 0.45 cfs @ 24.00 hrs, Volume= 0.449 af, Atten= 100%, Lag= 716.8 min
 Primary = 0.45 cfs @ 24.00 hrs, Volume= 0.449 af

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
 Peak Elev= 940.80' @ 24.00 hrs Surf.Area= 93,581 sf Storage= 319,369 cf

Plug-Flow detention time= 531.7 min calculated for 0.449 af (6% of inflow)
 Center-of-Mass det. time= 263.6 min (1,066.0 - 802.4)

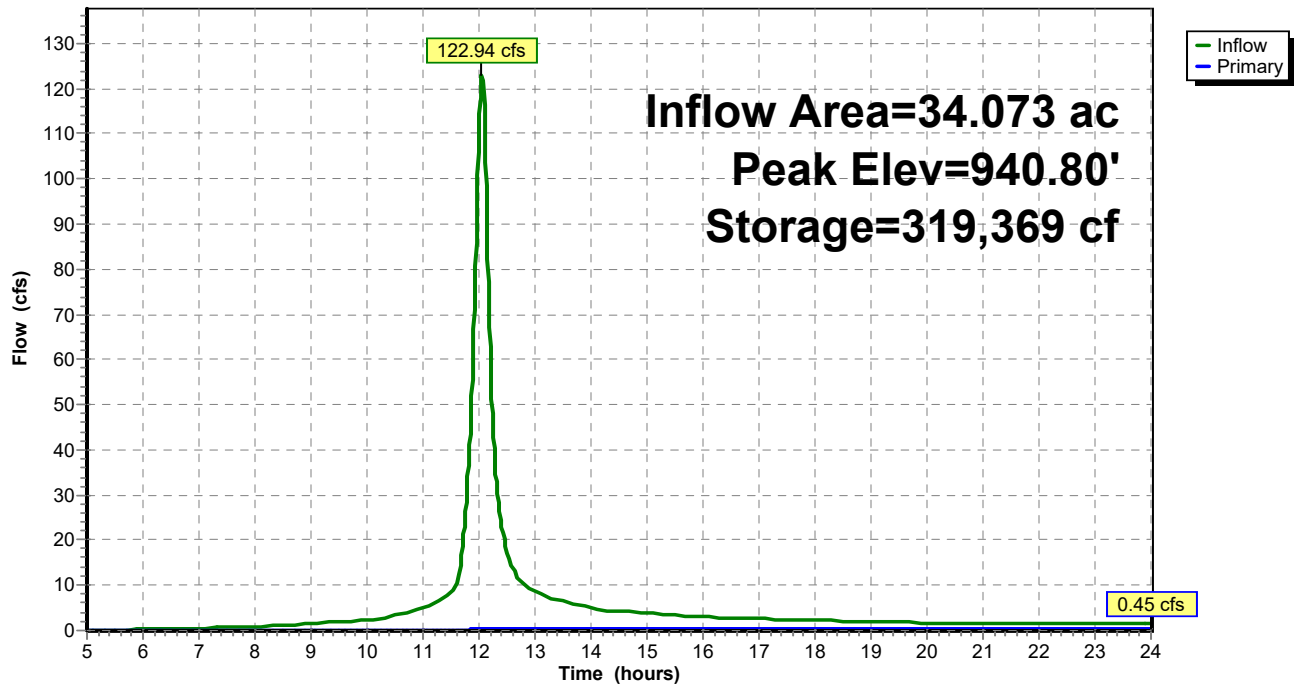
Volume	Invert	Avail.Storage	Storage Description
#1	937.00'	645,503 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
937.00	74,638	0	0
938.00	79,482	77,060	77,060
939.00	84,402	81,942	159,002
940.00	89,468	86,935	245,937
941.00	94,595	92,032	337,969
942.00	99,787	97,191	435,160
943.00	105,143	102,465	537,625
944.00	110,614	107,879	645,503

Device	Routing	Invert	Outlet Devices
#1	Primary	937.00'	12.0" Round Culvert L= 464.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 937.00' / 936.00' S= 0.0022 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 0.79 sf
#2	Device 1	937.00'	3.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	942.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Primary	943.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.45 cfs @ 24.00 hrs HW=940.80' (Free Discharge)

1=Culvert (Passes 0.45 cfs of 3.07 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.45 cfs @ 9.23 fps)
 3=Orifice/Grate (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: South Pond**Hydrograph**

CJE1928R6-PC

Type II 24-hr 100 YR Rainfall=6.37"

Prepared by {enter your company name here}

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Time span=5.00-24.00 hrs, dt=0.01 hrs, 1901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Area to north basin Runoff Area=4.520 ac 52.43% Impervious Runoff Depth>4.11"
Flow Length=109' Tc=8.5 min CN=80 Runoff=29.69 cfs 1.548 af

Subcatchment 2S: Area to South Wet Pond Runoff Area=34.073 ac 78.75% Impervious Runoff Depth>5.17"
Flow Length=614' Tc=13.8 min CN=90 Runoff=225.12 cfs 14.688 af

Subcatchment 3S: Undetained Area Runoff Area=2.650 ac 11.70% Impervious Runoff Depth>2.62"
Tc=6.0 min CN=65 Runoff=12.47 cfs 0.578 af

Reach 1R: Total Runoff Inflow=15.11 cfs 5.488 af
Outflow=15.11 cfs 5.488 af

Pond 1P: North Bio Retention Peak Elev=943.29' Storage=33,747 cf Inflow=29.69 cfs 1.548 af
Outflow=2.70 cfs 1.431 af

Pond 2P: South Pond Peak Elev=942.71' Storage=507,218 cf Inflow=225.12 cfs 14.688 af
Outflow=3.76 cfs 3.479 af

Total Runoff Area = 41.243 ac Runoff Volume = 16.814 af Average Runoff Depth = 4.89"
28.44% Pervious = 11.730 ac 71.56% Impervious = 29.513 ac

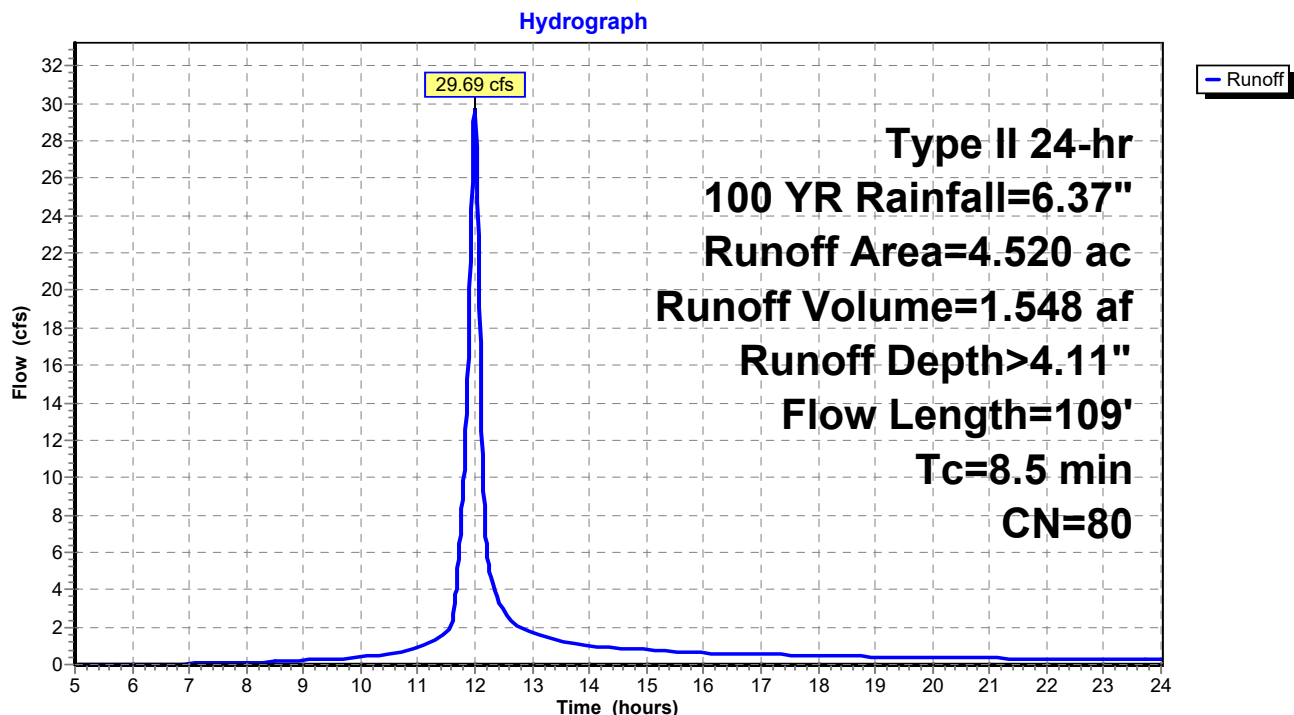
Summary for Subcatchment 1S: Area to north basin

Runoff = 29.69 cfs @ 12.00 hrs, Volume= 1.548 af, Depth> 4.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 YR Rainfall=6.37"

Area (ac)	CN	Description
* 2.160	98	Paved Roads
* 0.210	98	Future Paved
2.150	61	>75% Grass cover, Good, HSG B
4.520	80	Weighted Average
2.150		47.57% Pervious Area
2.370		52.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	43	0.0230	0.14		Sheet Flow, A-B Grass: Short n= 0.150 P2= 2.64"
0.5	24	0.0120	0.77		Sheet Flow, B-C Smooth surfaces n= 0.011 P2= 2.64"
2.8	34	0.0669	0.20		Sheet Flow, C-D Grass: Short n= 0.150 P2= 2.64"
0.0	8	0.2500	8.05		Shallow Concentrated Flow, D-E Unpaved Kv= 16.1 fps
8.5	109	Total			

Subcatchment 1S: Area to north basin

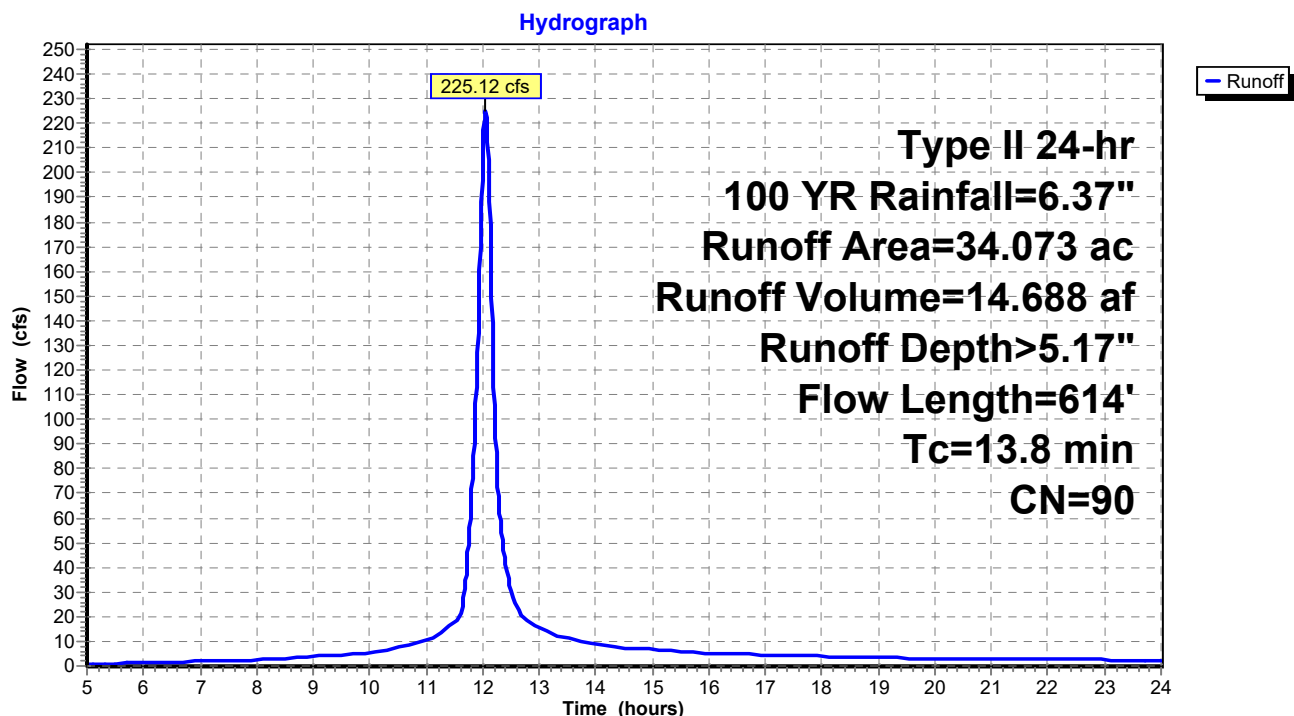
Summary for Subcatchment 2S: Area to South Wet Pond

Runoff = 225.12 cfs @ 12.05 hrs, Volume= 14.688 af, Depth> 5.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 YR Rainfall=6.37"

Area (ac)	CN	Description
8.510	98	Roofs, HSG C
* 4.370	98	Future Roof HSG C
* 4.100	98	Future Paved parking HSG C
8.140	98	Paved parking, HSG C
1.713	98	Water Surface, HSG C
7.240	61	>75% Grass cover, Good, HSG B
34.073	90	Weighted Average
7.240		21.25% Pervious Area
26.833		78.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	136	0.0550	0.25		Sheet Flow, F-G Grass: Short n= 0.150 P2= 2.64"
4.6	478	0.0115	1.73		Shallow Concentrated Flow, G-H Unpaved Kv= 16.1 fps
13.8	614	Total			

Subcatchment 2S: Area to South Wet Pond

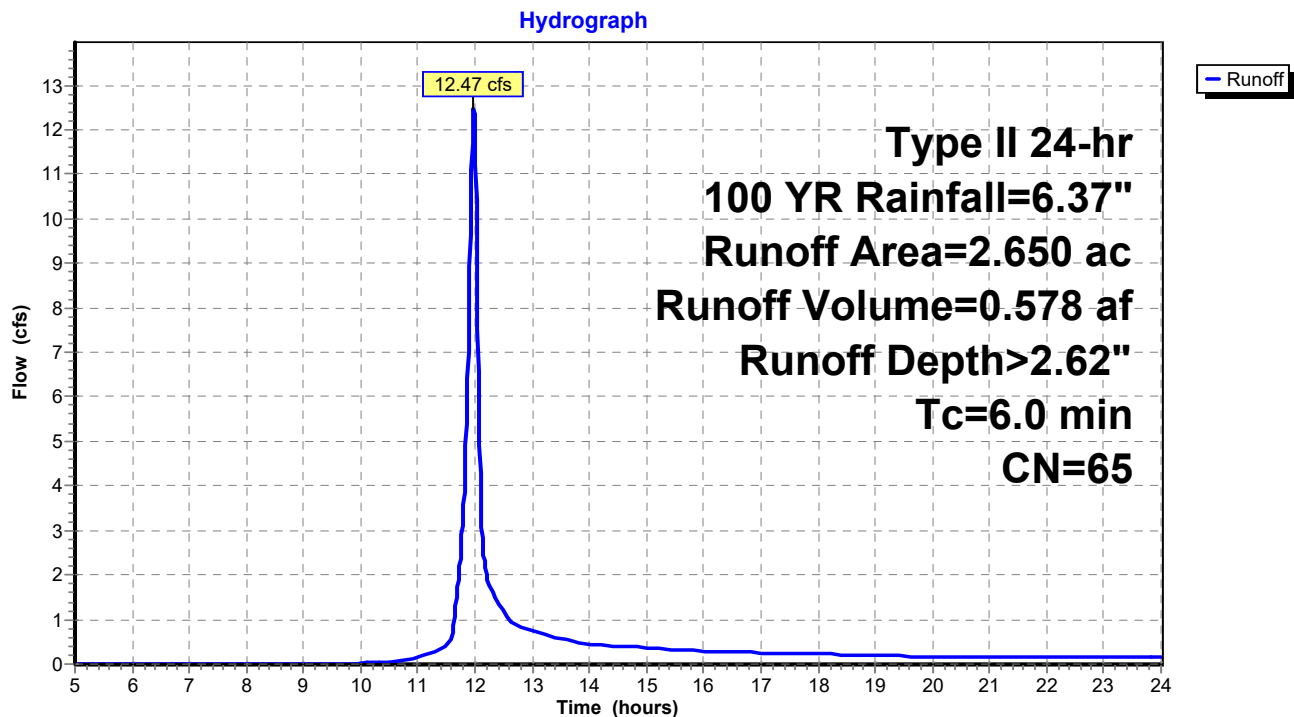
Summary for Subcatchment 3S: Undetained Area

Runoff = 12.47 cfs @ 11.98 hrs, Volume= 0.578 af, Depth> 2.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 YR Rainfall=6.37"

Area (ac)	CN	Description
0.040	98	Paved parking, HSG C
* 0.270	98	Future Paved parking, HSG C
2.340	61	>75% Grass cover, Good, HSG B
2.650	65	Weighted Average
2.340		88.30% Pervious Area
0.310		11.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Min. Tc

Subcatchment 3S: Undetained Area

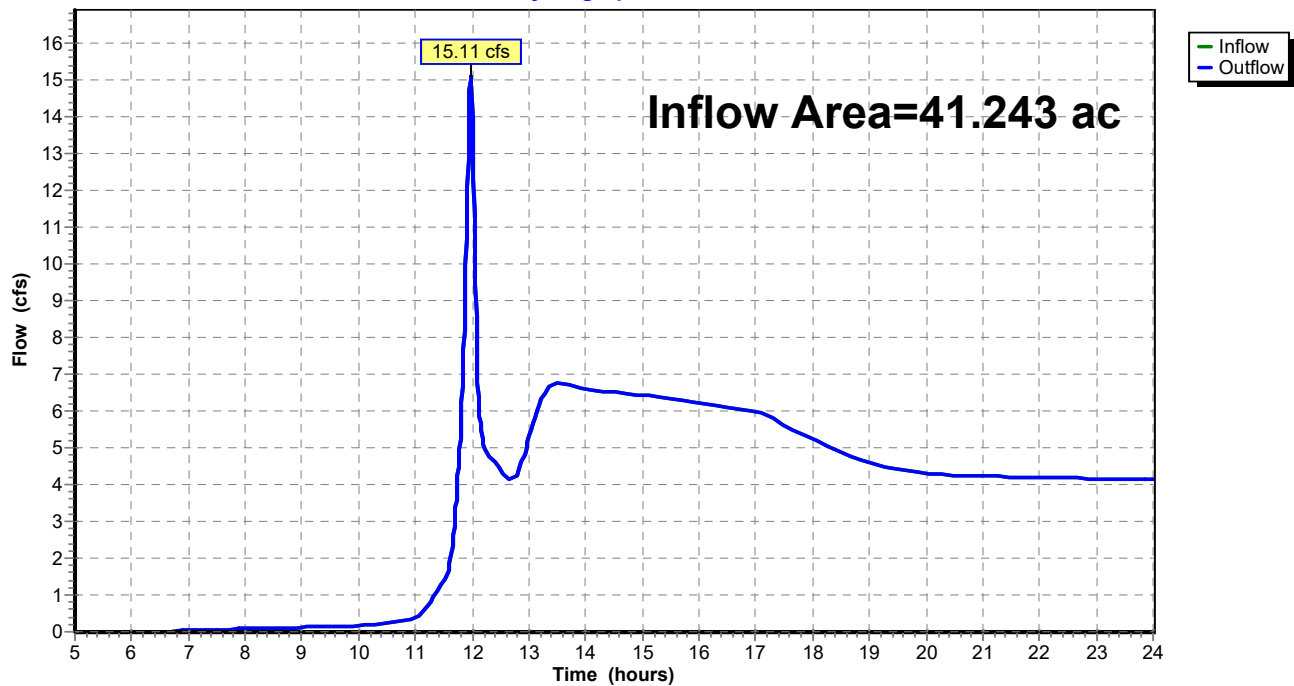
Summary for Reach 1R: Total Runoff

Inflow Area = 41.243 ac, 71.56% Impervious, Inflow Depth > 1.60" for 100 YR event
Inflow = 15.11 cfs @ 11.98 hrs, Volume= 5.488 af
Outflow = 15.11 cfs @ 11.98 hrs, Volume= 5.488 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs

Reach 1R: Total Runoff

Hydrograph



Summary for Pond 1P: North Bio Retention

Inflow Area = 4.520 ac, 52.43% Impervious, Inflow Depth > 4.11" for 100 YR event
 Inflow = 29.69 cfs @ 12.00 hrs, Volume= 1.548 af
 Outflow = 2.70 cfs @ 12.54 hrs, Volume= 1.431 af, Atten= 91%, Lag= 32.4 min
 Primary = 2.70 cfs @ 12.54 hrs, Volume= 1.431 af

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
 Peak Elev= 943.29' @ 12.54 hrs Surf.Area= 22,940 sf Storage= 33,747 cf

Plug-Flow detention time= 158.6 min calculated for 1.431 af (92% of inflow)
 Center-of-Mass det. time= 118.5 min (928.2 - 809.7)

Volume	Invert	Avail.Storage	Storage Description	
#1	939.00'	85,192 cf	Custom Stage Data (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
939.00	12,602	0.0	0	0
939.01	12,602	33.0	42	42
939.99	12,602	33.0	4,075	4,117
940.00	12,602	27.0	34	4,151
942.00	12,602	27.0	6,805	10,956
942.01	12,602	100.0	126	11,082
943.00	20,605	100.0	16,437	27,520
944.00	28,770	100.0	24,688	52,207
945.00	37,199	100.0	32,985	85,192

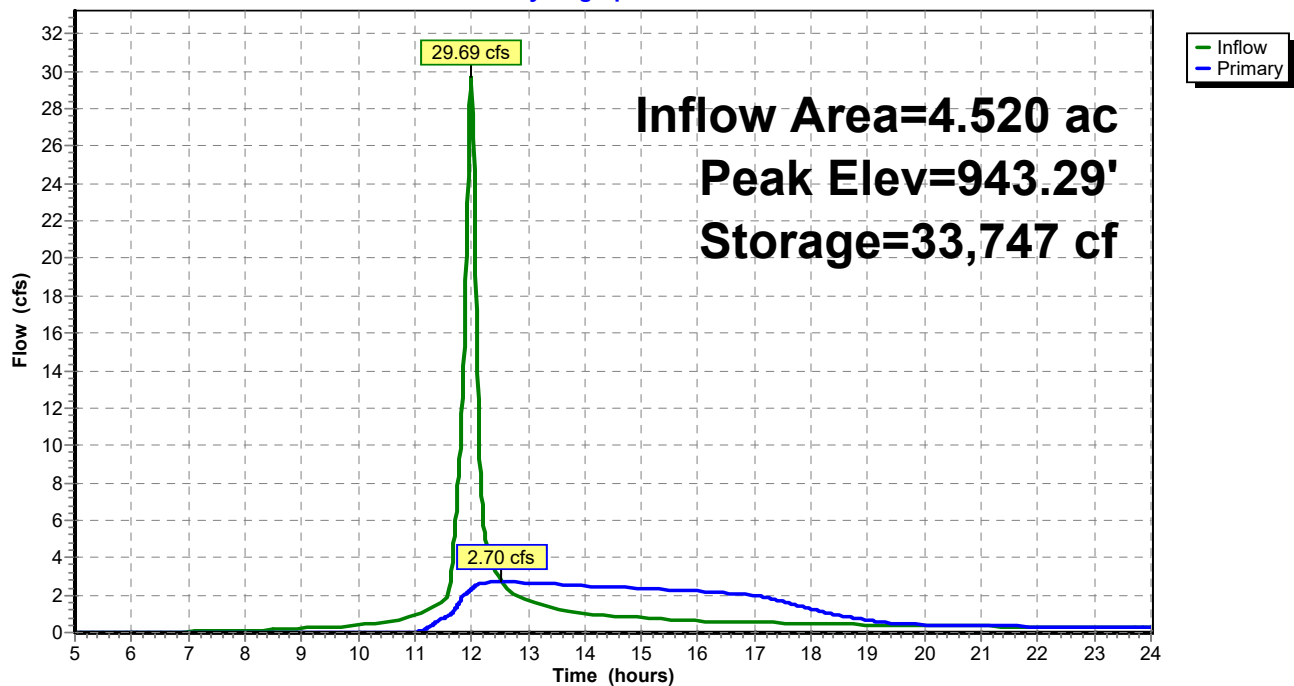
Device	Routing	Invert	Outlet Devices
#1	Primary	940.00'	12.0" Round Culvert L= 96.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 940.00' / 939.00' S= 0.0104 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	940.00'	6.0" Round Culvert X 2.00 L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 940.00' / 939.90' S= 0.0200 '/' Cc= 0.900 n= 0.010, Flow Area= 0.20 sf
#3	Device 1	943.00'	3.0" Vert. Orifice/Grate C= 0.600
#4	Device 1	944.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.70 cfs @ 12.54 hrs HW=943.29' (Free Discharge)

- 1=Culvert (Passes 2.70 cfs of 5.97 cfs potential flow)
- 2=Culvert (Inlet Controls 2.60 cfs @ 6.62 fps)
- 3=Orifice/Grate (Orifice Controls 0.09 cfs @ 1.93 fps)
- 4=Orifice/Grate (Controls 0.00 cfs)

Pond 1P: North Bio Retention

Hydrograph



Summary for Pond 2P: South Pond

Inflow Area = 34.073 ac, 78.75% Impervious, Inflow Depth > 5.17" for 100 YR event
 Inflow = 225.12 cfs @ 12.05 hrs, Volume= 14.688 af
 Outflow = 3.76 cfs @ 18.36 hrs, Volume= 3.479 af, Atten= 98%, Lag= 378.5 min
 Primary = 3.76 cfs @ 18.36 hrs, Volume= 3.479 af

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.01 hrs
 Peak Elev= 942.71' @ 18.36 hrs Surf.Area= 103,582 sf Storage= 507,218 cf

Plug-Flow detention time= 475.2 min calculated for 3.476 af (24% of inflow)
 Center-of-Mass det. time= 311.7 min (1,098.6 - 786.8)

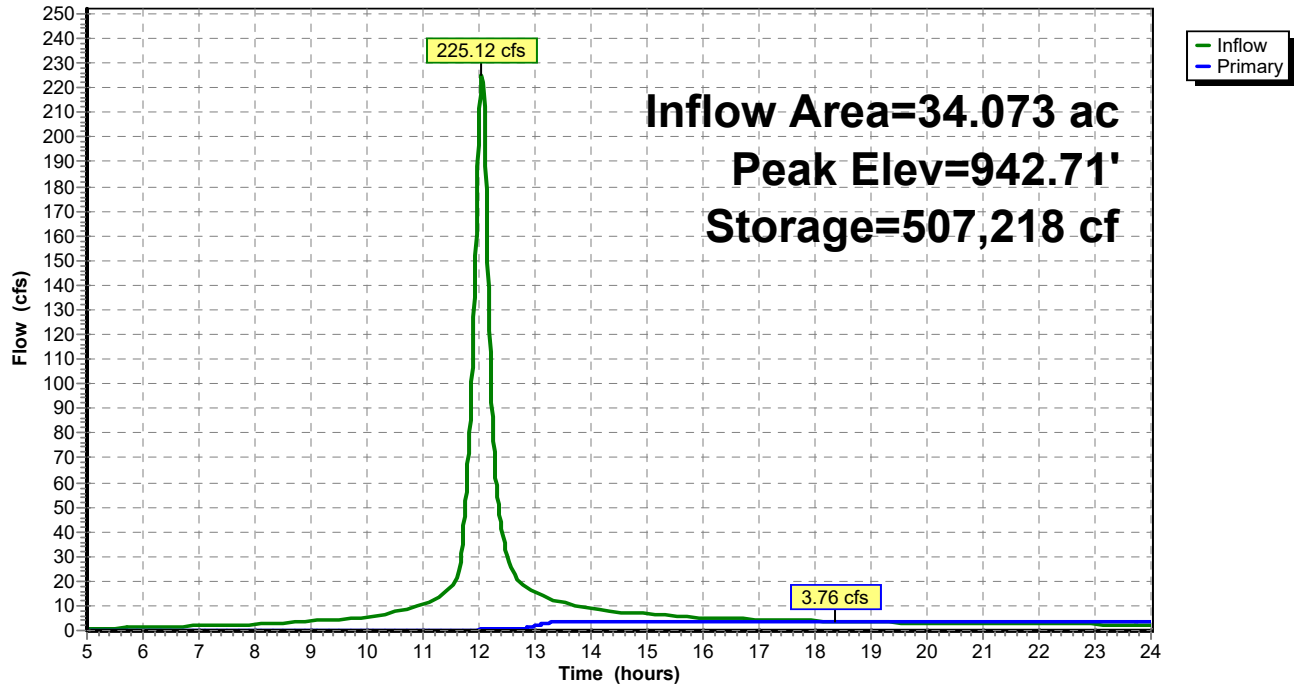
Volume	Invert	Avail.Storage	Storage Description
#1	937.00'	645,503 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
937.00	74,638	0	0
938.00	79,482	77,060	77,060
939.00	84,402	81,942	159,002
940.00	89,468	86,935	245,937
941.00	94,595	92,032	337,969
942.00	99,787	97,191	435,160
943.00	105,143	102,465	537,625
944.00	110,614	107,879	645,503

Device	Routing	Invert	Outlet Devices
#1	Primary	937.00'	12.0" Round Culvert L= 464.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 937.00' / 936.00' S= 0.0022 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 0.79 sf
#2	Device 1	937.00'	3.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	942.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Primary	943.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=3.76 cfs @ 18.36 hrs HW=942.71' (Free Discharge)

1=Culvert (Barrel Controls 3.76 cfs @ 4.78 fps)
 2=Orifice/Grate (Passes < 0.56 cfs potential flow)
 3=Orifice/Grate (Passes < 12.26 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: South Pond**Hydrograph**

Data file name: Z:\WinSLAMM\CJE1928R2.mdb
WinSLAMM Version 10.2.0
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppd
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
Seed for random number generator: -42
Study period starting date: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/02 End of Winter Season: 03/12
Date: 09-06-2019 Time: 09:46:35
Site information:

LU# 1 - Institutional: Institutional 1 Total area (ac): 4.520
13 - Paved Parking 1: 2.160 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
14 - Paved Parking 2: 0.210 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 2.150 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Institutional: Institutional 2 Total area (ac): 34.073
1 - Roofs 1: 8.510 ac. Flat Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
2 - Roofs 2: 4.370 ac. Flat Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 4.100 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
14 - Paved Parking 2: 8.140 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 7.240 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
70 - Water Body Areas: 1.713 ac. Source Area PSD File:

LU# 3 - Institutional: Institutional 3 Total area (ac): 2.650
13 - Paved Parking 1: 0.040 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
14 - Paved Parking 2: 0.270 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 2.340 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Wet Detention Pond CP# 1 (DS) - DS Wet Pond # 1
Particle Size Distribution file name: Not needed - calculated by program
Initial stage elevation (ft): 5
Peak to Average Flow Ratio: 3.8
Maximum flow allowed into pond (cfs): No maximum value entered
Outlet Characteristics:
Outlet type: Orifice 1
1. Orifice diameter (ft): 0.25
2. Number of orifices: 1

3. Invert elevation above datum (ft): 5

Outlet type: Broad Crested Weir

1. Weir crest length (ft): 10

2. Weir crest width (ft): 10

3. Height from datum to bottom of weir opening: 11

Outlet type: Vertical Stand Pipe

1. Stand pipe diameter (ft): 2

2. Stand pipe height above datum (ft): 10

Pond stage and surface area

Entry Number	Stage (ft)	Pond Area (acres)	Natural Seepage (in/hr)	Other Outflow (cfs)
0	0.00	0.0000	0.00	0.00
1	1.00	1.2990	0.00	0.00
2	2.00	1.3485	0.00	0.00
3	3.00	1.3988	0.00	0.00
4	4.00	1.4496	0.00	0.00
5	5.00	1.7134	0.00	0.00
6	6.00	1.8246	0.00	0.00
7	7.00	1.9376	0.00	0.00
8	8.00	2.0539	0.00	0.00
9	9.00	2.1716	0.00	0.00
10	10.00	2.2908	0.00	0.00
11	11.00	2.4137	0.00	0.00
12	12.00	2.5393	0.00	0.00

Control Practice 2: Biofilter CP# 1 (DS) - DS Biofilters # 1

1. Top area (square feet) = 37199

2. Bottom area (square feet) = 12602

3. Depth (ft): 6

4. Biofilter width (ft) - for Cost Purposes Only: 20

5. Infiltration rate (in/hr) = 0.11

6. Random infiltration rate generation? No

7. Infiltration rate fraction (side): 0.01

8. Infiltration rate fraction (bottom): 1

9. Depth of biofilter that is rock filled (ft) 1

10. Porosity of rock filled volume = 0.33

11. Engineered soil infiltration rate: 1.6

12. Engineered soil depth (ft) = 2

13. Engineered soil porosity = 0.27

14. Percent solids reduction due to flow through engineered soil = 0

15. Biofilter peak to average flow ratio = 3.8

16. Number of biofiltration control devices = 1

17. Particle size distribution file: Not needed - calculated by program

18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil

Biofilter Outlet/Discharge Characteristics:

Outlet type: Broad Crested Weir

1. Weir crest length (ft): 10

2. Weir crest width (ft): 10

3. Height of datum to bottom of weir opening: 5.5

Outlet type: Vertical Stand Pipe

1. Stand pipe diameter (ft): 2

2. Stand pipe height above datum (ft): 5

Outlet type: Surface Discharge Pipe

1. Surface discharge pipe outlet diameter (ft): 0.25
2. Pipe invert elevation above datum (ft): 4
3. Number of surface pipe outlets: 1

Outlet type: Drain Tile/Underdrain

1. Underdrain outlet diameter (ft): 0.5
2. Invert elevation above datum (ft): 1
3. Number of underdrain outlets: 2

SLAMM for Windows Version 10.2.0
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Data file name: Z:\WinSLAMM\CJE1928R2.mdb

Data file description:

Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN

Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx

Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx

Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std

Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std

Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std

Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std

Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx

Start of Winter Season: 12/02 End of Winter Season: 03/12

Model Run Start Date: 01/05/69 Model Run End Date: 12/31/69

Date of run: 09-06-2019 Time of run: 10:22:57

Total Area Modeled (acres): 41.243

Years in Model Run: 0.99

Runoff Volume (cu ft) Reduction	Percent Runoff Volume Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
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Total of all Land Uses without Controls:	2.506E+06	-	81.00	12671	-
Outfall Total with Controls:	2.372E+06	5.35%	9.167	1357	89.29%
Annualized Total After Outfall Controls:	2.404E+06			1376	

Pollutant Percent Reduction	Concentration - No Controls	Concentration - With Controls	Conc. Units	Pollutant Yield No Controls	Pollutant Yield With Controls	Pol. Yield Units
Particulate Solids	81.00	9.167	mg/L	12671	1357	lbs 89.29 %
Particulate Phosphorus	0.1917	0.02129	mg/L	29.98	3.152	lbs 89.49 %

Storm Sewer Calculations

Project #	CJE1928 - Dickman Germantown	Design By	P.J.S.
Description	Multi Tenant Industrial, Germantown, WI	Check By	C.A.J.

Date	5-Sep-19
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Storm Sewer Structure Information					Drainage Area			Rainfall and Runoff Data				Flow	Storm Pipe Information & Computations											Time of Flow		
In Roadway	From Structure	To Structure	Invert (From)	Invert (To)	a	A	C	C a	Sum C a	Rainfall Frequency Used (year)	I	Total Flow in Pipe	L	D	Necessary Drop	Actual Drop	S	Sf	Pipe Material	Manning's n	d	Vn	Ti	T	Tc	
					Individual Area	Accumulated Area	Individual Imperviousness Coefficient	Individual C a	Accumulated C a		Rainfall Intensity		cfs	feet							feet	feet				feet
					Acres	Acres	Individual Imperviousness Coefficient	Individual C a	Accumulated C a	in/hr	ft/s	feet	feet	feet	feet	min	min	min								
	1	2	942.45	942.12	0.37	0.37	0.51	0.19	0.19	10	5.10	0.97	134	0.833	0.19	0.33	0.25%	0.14%	PVC	0.011	0.54	2.59	10.00	0.86	10.86	
	2	3	942.10	941.80	0.27	0.64	0.53	0.14	0.33	10	4.94	1.65	126	1	0.19	0.30	0.24%	0.15%	PVC	0.011	0.68	2.91		0.72	11.59	
	3	4	941.78	940.55	0.23	0.87	0.58	0.13	0.47	10	4.82	2.25	431	1	1.22	1.23	0.29%	0.29%	PVC	0.011	0.82	3.26		2.20	13.79	
	5	10A	941.00	940.75	6.90	6.90	0.9	6.21	6.21	10	5.10	31.66	8	2	0.21	0.25	3.13%	2.64%	RCP	0.015	1.50	12.50	10.00	0.01	10.01	
	6	7	940.80	940.44	0.16	0.16	0.77	0.12	0.12	10	5.10	0.62	144	1	0.03	0.36	0.25%	0.02%	PVC	0.011	0.37	2.33	10.00	1.03	11.03	
	7	10	940.42	939.67	0.49	0.65	0.8	0.39	0.51	10	4.91	2.52	300	1.25	0.33	0.75	0.25%	0.11%	PVC	0.011	0.74	3.32		1.51	12.54	
	10	9	939.65	939.52	0.08	0.73	0.8	0.07	0.58	10	4.66	2.71	50	1.25	0.06	0.13	0.26%	0.13%	PVC	0.011	0.77	3.43		0.24	12.78	
	9	10A	939.50	939.37	0.10	0.83	0.8	0.08	0.66	10	4.62	3.06	51	1.25	0.08	0.13	0.25%	0.16%	PVC	0.011	0.84	3.48		0.24	13.02	
	8	10A	939.95	939.50	0.16	0.16	0.8	0.13	0.13	10	5.10	3.06	79	1.25	0.13	0.45	0.57%	0.16%	PVC	0.011	0.65	4.76	10.00	0.28	10.52	
	10A	13	939.35	938.77		7.89			7.00	10	4.58	32.07	191	3	0.58	0.58	0.30%	0.31%	RCP	0.015	2.48	5.13		0.62	13.92	
	11	13	939.40	938.77	4.75	4.75	0.66	3.14	3.14	10	5.10	32.07	89	2.5	0.72	0.63	0.71%	0.83%	RCP	0.015	2.29	6.80	10.00	0.22	10.84	
	12	13	939.40	938.77	3.88	3.88	0.55	2.13	2.13	10	5.10	32.07	33	2	0.88	0.63	1.91%	2.71%	RCP	0.015	2.00	10.21	10.00	0.05	10.27	
	13	16	938.75	938.25		16.52			12.27	10	4.45	54.58	201	4	0.38	0.50	0.25%	0.19%	RCP	0.015	2.91	5.57		0.60	14.58	
	14	15	941.46	940.88	0.27	0.27	0.8	0.22	0.22	10	5.10	1.10	229	0.833	0.41	0.58	0.25%	0.18%	PVC	0.011	0.59	2.68	10.00	1.43	11.43	
	15	16	940.80	940.20	0.27	0.54	0.8	0.22	0.43	10	4.84	2.09	236	1	0.58	0.60	0.25%	0.25%	PVC	0.011	0.81	3.08		1.28	12.70	
	16	19	938.20	937.77	0.16	17.22	0.25	0.04	12.74	10	4.36	55.50	156	4	0.31	0.43	0.28%	0.20%	RCP	0.015	2.83	5.83		0.45	16.30	
	18	19	941.00	939.50	2.99	2.99	0.9	2.69	2.69	10	5.10	13.72	48	1.5	1.08	1.50	3.13%	2.30%	RCP	0.015	1.07	10.22	10.00	0.08	10.52	
	17	19	940.00	939.50	2.99	2.99	0.9	2.69	2.69	10	5.10	13.72	8	1.5	0.18	0.50	6.25%	2.30%	RCP	0.015	0.84	13.45	10.00	0.01	10.09	
	19	20	937.75	937.47	0.33	23.53	0.25	0.08	18.20	10	4.13	75.17	113	5	0.12	0.28	0.25%	0.11%	RCP	0.015	2.99	6.13		0.31	16.62	
	20	28	937.47	937.27	0.15	23.68	0.25	0.04	18.24	10	4.09	75.17	101	5	0.11	0.20	0.20%	0.11%	RCP	0.015	3.23	5.60		0.30	16.92	
	21	22	941.75	941.32	0.31	0.31	0.47	0.15	0.15	10	5.10	0.74	167	0.833	0.14	0.43	0.26%	0.08%	PVC	0.011	0.45	2.48	10.00	1.12	11.12	
	22	23	941.30	940.89	0.23	0.53	0.53	0.12	0.26	10	4.89	1.30	166	1	0.16	0.41	0.25%	0.10%	PVC	0.011	0.57	2.80		0.99	12.11	
	23	24	940.87	940.62	0.24	0.77	0.71	0.17	0.44	10	4.73	2.06	102	1	0.24	0.25	0.25%	0.24%	PVC	0.011	0.81	3.02		0.56	12.67	
	24	25	940.60	940.07	0.24	1.01	0.69	0.16	0.60	10	4.64	2.77	120	1	0.52	0.53	0.44%	0.44%	PVC	0.011	0.81	4.06		0.49	13.17	
	25	26	940.05	939.52	0.20	1.21	0.69	0.14	0.73	10	4.56	3.34	79	1	0.49	0.53	0.67%	0.64%	PVC	0.011	0.79	5.00		0.26	13.43	
	26	27	939.50	939.15	0.19	1.40	0.69	0.13	0.86	10	4.52	3.91	80	1.25	0.21	0.35	0.44%	0.27%	PVC	0.011	0.83	4.54		0.29	13.72	
	27	28	939.10	938.50	0.15	1.55	0.66	0.10	0.96	10	4.48	4.32	133	1.25	0.42	0.60	0.45%	0.32%	PVC	0.011	0.88	4.68		0.47	14.20	
	28	29	937.27	937.00		25.23			19.21	10	4.05	77.86	125	5	0.15	0.27	0.22%	0.12%	RCP	0.015	3.21	5.85		0.36	17.75	
	30	31	940.70	939.45	3.01	3.01	0.32	0.96	0.96	10	5.10	4.92	431	1.5	1.25	1.25	0.29%	0.30%	RCP	0.015	1.23	3.16	10.00	2.27	12.27	
	31	32	939.40	937.07	0.55	3.56	0.43	0.24	1.20	10	4.70	5.65	343	1.5	1.31	2.33	0.68%	0.39%	RCP	0.015	0.97	4.66		1.23	13.50	

Minimum Storm Water Practice Maintenance Requirements

WET DETENTION BASINS

System Description:

The wet detention basins are designed to together remove Total Suspended Solids (TSS) in the site runoff and to reduce pre-development downstream peak flows. Swales function to convey runoff to the basins, as well as filter pollutants, especially from smaller storms. To function correctly, the pond size, water level and outlet structures must be maintained as specified in the approved plans.

Minimum Maintenance Requirements:

To ensure the proper function of the storm water management practices described above, the following activities must be completed:

1. All outlet structures and pipes must be checked monthly to ensure there is no blockage from floating debris or ice, especially the washed stone in front of the orifices and the trash rack on the risers in the main part of the basins. Any blockage must be removed immediately. The washed stone must be replaced when it becomes clogged.
2. Grass swales shall be preserved to allow free flowing of surface runoff in accordance with approved grading plans. No buildings or other structures are allowed in these areas. No grading or filling is allowed that may interrupt flows in any way.
3. Grass swales, inlets and outlets must be checked at least twice yearly (spring and fall) and after heavy rains for signs of erosion. Any eroding areas must be repaired immediately to prevent premature sediment build-up in the basin. Erosion matting is recommended for repairing grassed areas.
4. NO trees are to be planted or allowed to grow on the earthen berms. Tree root systems can reduce soil compaction and cause berm failure. The berms must be inspected annually and any woody vegetation removed.
5. If floating algae or weed growth becomes a nuisance (decay odors, etc.), it must be removed from the basin and deposited where it cannot drain back into the basin. Removal of the vegetation from the water reduces re-growth the following season (by harvesting the nutrients). Wetland vegetation must be maintained along the waters edge for safety and pollutant removal purposes.
6. The basins are to be cleaned out prior to the depth of sediment reaching the dewatering hole. All removed sediment must be placed in an appropriate upland disposal site and stabilized (grass cover) to prevent sediment from washing back into the basin.
7. No grading or filling of the basins or berms other than for sediment removal is allowed, unless otherwise approved by the Village of Germantown.
8. To promote more effective infiltration, mowing in the drainage ways, detention basins, and wetland fringe areas should be minimized. If mowing is deemed necessary, the mowing heights should be no shorter than six (6) inches. Restricting any mowing to late summer or autumn will minimize mortality to ground nesting birds. To discourage the presence of nuisance waterfowl (i.e. Canada Geese), a minimum 30-foot wide no-mow fringe shall be maintained around all detention basins, where possible.
9. After Vegetation is 70% established, the use of herbicides/pesticides is to be discontinued along the swales & basins.

BIORETENTION BASIN

System Description:

Bioretention basins are designed to reduce peak flows and reduce runoff total suspended solids (TSS) from the site by intercepting the runoff and allowing it to seep (infiltrate) into the engineered soil layer and through the perforated under-drain pipe. To function correctly, the bioretention basins size, depth, outlet standpipe and under-drain pipe must be maintained.

Minimum Maintenance Requirements:

To ensure the proper function of the bioretention basin, the following list of maintenance activities are required to be performed by the owner or authorized qualified representative:

1. A minimum of 70% soil cover made up of plants must be maintained on the bioretention basin bottom. The basin sides shall be a turf grass. Maintain plants and grasses per qualified landscape

- contractor recommendations.
2. Seasonal (early spring) inspection of the soil surface for the presence of sodium accumulation due to the introduction of chlorides for winter maintenance of the parking lot should occur. It is also recommended that the soil be flushed with 1" of clean water 3-4 times each spring. Consider reducing sodium/salting or use sodium alternatives.
 3. The basin and all components (outlet standpipe, outlet pipe, vegetation and spillway) should be inspected after each heavy rain of 1.5" or more. If the basin is not draining properly (within 72 hours), further inspection may be required by persons with expertise in storm water management and/or soils.
 - If basin is not draining, the 6" drain tile should be cleared of any blockages or obstructions. Clear blockages in the underdrain pipe, if present through the underdrain cleanout. Expose the stone and soil immediately around the pipe, clear blockages and replace per approved design. Also examine outlet orifice through the dual treated planks within the pond outlet manhole. Remove any sediment accumulated within the manhole and orifice.
 - If soil testing shows that the soil surface has become crusted, sealed or compacted, Engineered soil should be replaced. Expose 6" drain tile and verify it is clear of obstructions. Remove and replace engineered soil per WDNR specifications. Replace bioretention plantings per approved Landscape Plan for the project.
 - If sedimentation is determined to be causing the failure, the accumulated sediment must be removed and the area replanted in accordance with the approved Landscape Plan for the project. Sediment removed shall be deposited offsite at an appropriate soil disposal facility.
 4. All outlet pipes, other flow control devices within the basin outlet manhole must be kept free of debris. Any blockage must be removed immediately.
 5. Any eroding areas must be repaired immediately to prevent premature sediment build-up in the system. Erosion matting is recommended for repairing grassed areas.
 6. Heavy equipment and vehicles must be kept off of the bottom and side slopes of bioretention basin to prevent soil compaction. Soil compaction will reduce infiltration and may cause failure of the basin, resulting in ponding and possible growth of wetland plants.
 7. No unauthorized trees are to be planted or allowed to grow on the earthen berms or bottom of the basin. On the berms, tree root systems can reduce soil compaction and cause berm failure. On the basin bottom, trees may shade out the native grasses. Woody vegetation must be removed.
 8. Check for invasive species growth and remove per species specific recommended practices.
 9. No grading or filling of the basin or berms other than for sediment removal is allowed.
 10. One required inspection a year shall be conducted in spring (between March 15th and April 15th). An inspection form must be completed and documented by a qualified person that represents the Owner. Any needed maintenance must be documented and scheduled for immediate repair. All repairs must be documented, preferably with photographs.
 11. Snow shall not be dumped directly onto the conditioned planting bed.
 12. See chart below for maintenance activity and frequency:

Activity	Frequency
Water Plants	As necessary during first growing season
Water as necessary during dry periods	As needed after first growing season
Re-mulch void areas	As needed
Treat diseased trees and shrubs	As needed
Inspect soil and repair eroded areas	Monthly
Remove litter and debris	Monthly
Add additional mulch	Once per year

PROPOSED BUILDING:

DICKMAN GERMANTOWN

SW CORNER - ROCKFIELD RD. & GOLDENDALE RD.
GERMANTOWN, WISCONSIN 53022



1 AERIAL VIEW - LOOKING NORTH / NORTH WEST
NO SCALE



2 AERIAL VIEW - LOOKING NORTH EAST
NO SCALE



3 NORTH BUILDING - VIEW OF NORTH WEST CORNER LOOKING SOUTH / SOUTH EAST
NO SCALE

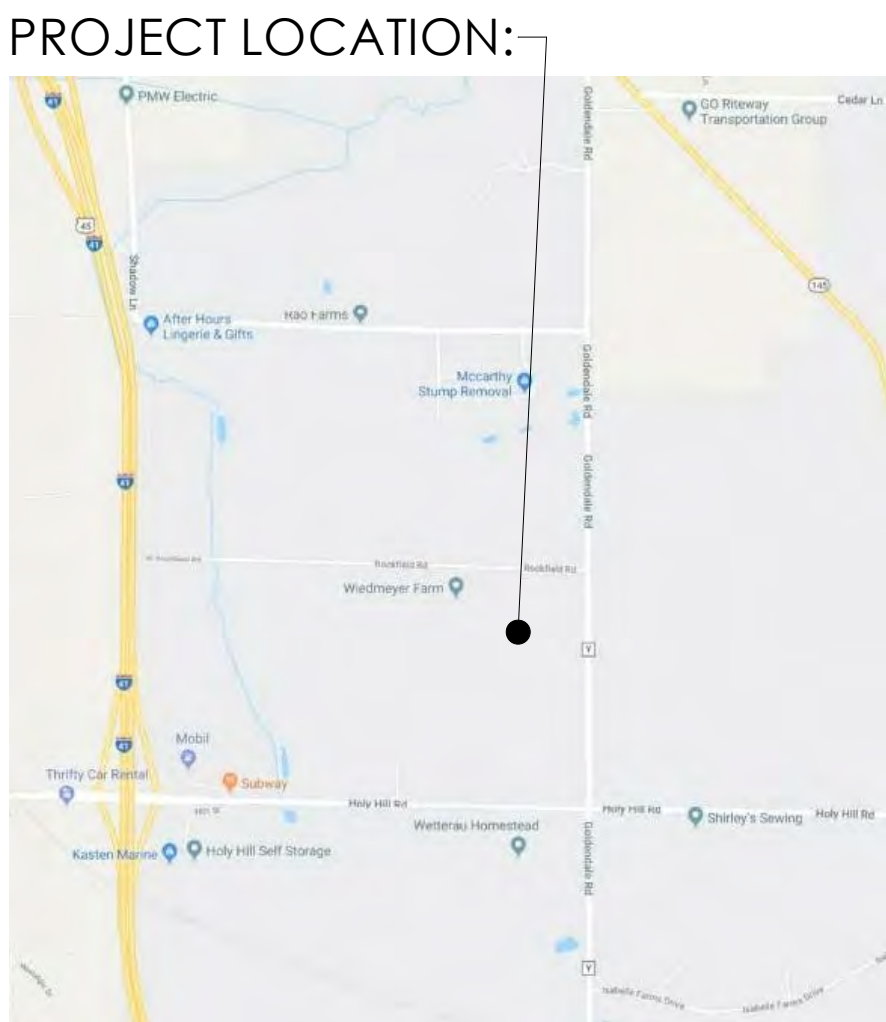


4 SOUTH BUILDING - VIEW OF SOUTH WEST CORNER LOOKING NORTH EAST
NO SCALE

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0-GENERAL	
*T1.1	TITLE SHEET
T1.2	EXTERIOR PERSPECTIVES NORTH BUILDING
T1.3	EXTERIOR PERSPECTIVES SOUTH BUILDING
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GS.1	SPECIFICATIONS
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2-SURVEY	
SV1.0	ALTA / NSPS SURVEY
3-CIVIL	
*C1.0	COMPLETE SITE GRADING PLAN
*C1.1	SITE GRADING PLAN - NORTH
*C1.2	SITE GRADING PLAN - SOUTH
*C2.0	SITE UTILITY PLAN
*C2.1	SITE UTILITY PLAN - NORTH
*C2.2	SITE UTILITY PLAN - SOUTH
*C3.0	EROSION CONTROL PLAN
*C4.0	SITE DETAILS
*WB-S0/67	SITE FIRE ACCESS EXHIBIT
4-LANDSCAPING	
*L1.0	OVERALL LANDSCAPE PLAN
*L1.1	ENLARGED LANDSCAPE PLAN - NORTH SITE
*L1.2	ENLARGED LANDSCAPE PLAN - SOUTH BUILDING
*L1.3	ENLARGED LANDSCAPE PLAN - BUILDING FOUNDATIONS
*L1.4	LANDSCAPE DETAILS, NOTES, & SCHEDULES
5-ARCHITECTURAL	
*A0.1	OVERALL SITE PLAN
*A0.2	NORTH SITE PLAN
*A0.3	SOUTH SITE PLAN
A1.1	NORTH FLOOR PLAN LOWER LEVEL
A1.2	NORTH FLOOR PLAN UPPER LEVEL
A1.3	SOUTH FLOOR PLAN TYPICAL FOR PROPOSED WEST BUILDING
A1.4	SOUTH FLOOR PLAN TYPICAL FOR FUTURE PHASE EAST BUILDING
A5.1	NORTH BUILDING ELEVATIONS & NOTES
A5.2	SOUTH BUILDING ELEVATIONS & NOTES
5-ELECTRICAL	
*E1.0	EXTERIOR PHOTOMETRIC LIGHTING PLAN
E2.0	LIGHTING CUT SHEETS
*E2.1	LIGHTING CUT SHEETS



5 VICINITY MAP
3/4" = 1'-0"



SITE LOCATION MAP
SCALE: N.T.S.

PLAN COMMISSION SUBMITTAL

JULY 12, 2019 (REVISED SHEETS DESIGNATED BY * AND RESUBMITTED TO GERMANTOWN ON SEPTEMBER 5, 2019 TO ADDRESS VILLAGE COMMENTS)

OWNER :		GENERAL CONTRACTOR :		ARCHITECT :		PROJECT INFORMATION: PROPOSED NORTH BUILDING		PROJECT INFORMATION: PROPOSED SOUTH BUILDING (WEST)		PROJECT INFORMATION: PROPOSED FUTURE SOUTH BUILDING (EAST)	
THE DICKMAN COMPANY SAM DICKMAN JR.		BRIOHN BUILDING CORPORATION JEFF HOOK, PM		BRIOHN DESIGN GROUP LLC DOMENIC FERRANTE, AIA		CODE: SPS 360-366 WISCONSIN COMMERCIAL BUILDING CODE (IBC 2015, IECC 2015/2009, IEBC 2015, IMC 2015 AND IFGC 2009) SPS 314 FIRE PREVENTION SPS 316 ELECTRICAL SPS 381-387 PLUMBING		CODE: SPS 360-366 WISCONSIN COMMERCIAL BUILDING CODE (IBC 2015, IECC 2015/2009, IEBC 2015, IMC 2015 AND IFGC 2015) SPS 314 FIRE PREVENTION SPS 316 ELECTRICAL SPS 381-387 PLUMBING		CODE: SPS 360-366 WISCONSIN COMMERCIAL BUILDING CODE (IBC 2015, IECC 2015/2009, IEBC 2015, IMC 2015 AND IFGC 2015) SPS 314 FIRE PREVENTION SPS 316 ELECTRICAL SPS 381-387 PLUMBING	
626 EAST WISCONSIN AVE., SUITE 1020 MILWAUKEE, WI 53202		3885 N. BROOKFIELD RD., SUITE 200 BROOKFIELD, WISCONSIN 53045 (262) 790-0500 PHONE (262) 790-0505 FAX		3885 N. BROOKFIELD RD., SUITE 200 BROOKFIELD, WISCONSIN 53045 (262) 790-0500 PHONE (262) 790-0505 FAX		OCCUPANCY: PRIMARY S-1 (MODERATE HAZARD STORAGE) SECONDARY B (OFFICE/BUSINESS) SECONDARY F-1 (MODERATE HAZARD STORAGE)		OCCUPANCY: PRIMARY F-1/S-1 (MANUFACTURING OR STORAGE) SECONDARY B (OFFICE/BUSINESS)		OCCUPANCY: PRIMARY F-1/S-1 (MANUFACTURING OR STORAGE) SECONDARY B (OFFICE/BUSINESS)	
CIVIL ENGINEER: CJ ENGINEERING CHRISTOPHER A. JACKSON, P.E.		LANDSCAPE ARCHITECT : HELLER & ASSOCIATES DAVID HELLER, ASLA		CLASS OF CONSTRUCTION: TYPE 2B		CLASS OF CONSTRUCTION: TYPE 2B		CLASS OF CONSTRUCTION: TYPE 2B		CLASS OF CONSTRUCTION: TYPE 2B	
9205 WEST CENTER STREET, SUITE 214 MILWAUKEE, WISCONSIN 53222 (414) 443-1312 PHONE (262) 443-1317 FAX		4715 JAMES AVENUE RACINE, WISCONSIN 53402 (262) 639-9733 PHONE (262) 639-9739 FAX		SPRINKLER SYSTEM: FULL - NFPA 13		SPRINKLER SYSTEM: FULL - NFPA 13		SPRINKLER SYSTEM: FULL - NFPA 13		SPRINKLER SYSTEM: FULL - NFPA 13	
				FLOOR LEVELS: 2		FLOOR LEVELS: 1		FLOOR LEVELS: 1		FLOOR LEVELS: 1	
				NUMBER OF STORIES 1+MEZZANINE		NUMBER OF STORIES 1		NUMBER OF STORIES 1		NUMBER OF STORIES 1	
				TOTAL SITE AREA: 872,456 SF 20.03 ACRES (NORTH SITE)		TOTAL SITE AREA: 1,108,042 SF 25.44 ACRES (SOUTH SITE)		TOTAL SITE AREA: 1,108,042 SF 25.44 ACRES (SOUTH SITE)		TOTAL SITE AREA: 1,108,042 SF 25.44 ACRES (SOUTH SITE)	
				TOTAL BUILDING AREA: 240,468 SF FOOTPRINT (MAIN LEVEL), 10,140 SF MEZZANINE = 250,608 SF		TOTAL BUILDING AREA: 130,324 SF		TOTAL BUILDING AREA: 130,324 SF		TOTAL BUILDING AREA: 130,324 SF	

NOTE:
ALL MECHANICAL ELECTRICAL
PLUMBING AND FIRE SPRINKLER
ENGINEERING BY DESIGN-BUILD
CONTRACTORS

BRIOHN

DESIGN GROUP

3885 N. BROOKFIELD ROAD, SUITE 200
BROOKFIELD, WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

TITLE SHEET

PROPOSED BUILDING:
DICKMAN GERMANTOWN
SW CORNER - ROCKFIELD RD & GOLDENDALE RD
GERMANTOWN, WI 53022

JOB: 3172

DRAWN: CK

CHECKED: DF

DATE: JULY 12, 2019

SHEET: T1.1



1 NORTH BUILDING - VIEW OF NORTH WEST CORNER LOOKING SOUTH / SOUTH EAST
NO SCALE



2 NORTH BUILDING - VIEW OF NORTH EAST CORNER LOOKING SOUTH WEST
NO SCALE



3 NORTH BUILDING - VIEW OF NORTH EAST CORNER LOOKING SOUTH WEST
NO SCALE



4 NORTH BUILDING - VIEW OF EAST WALL LOOKING WEST
NO SCALE



1 SOUTH BUILDING - VIEW OF SOUTH WEST CORNER LOOKING NORTH / NORTH EAST
NO SCALE



2 SOUTH BUILDING - VIEW OF SOUTH WALL LOOKING NORTH / NORTH WEST
NO SCALE

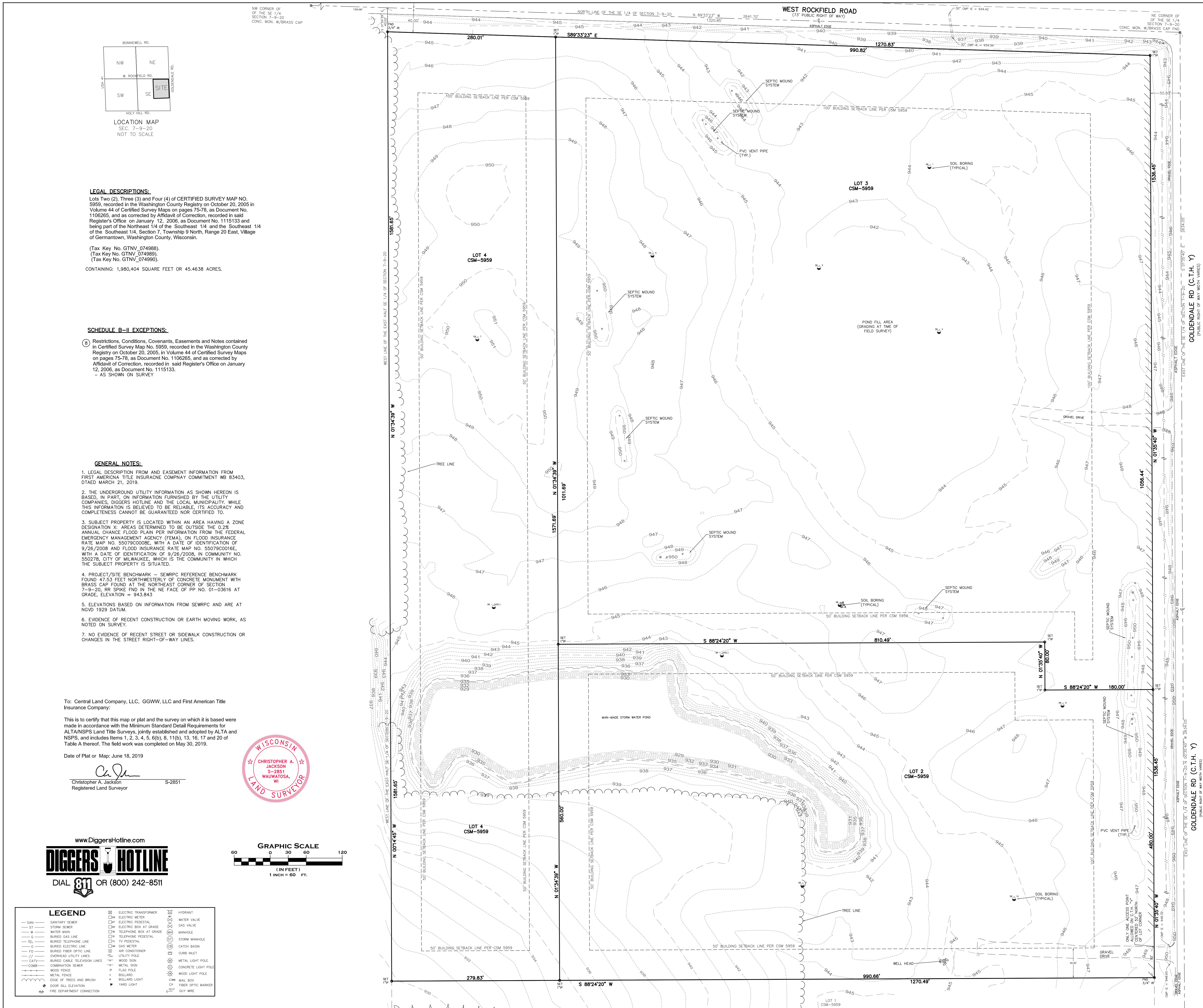


3 SOUTH BUILDING - VIEW OF SOUTH WALL LOOKING NORTH / NORTH WEST
NO SCALE

DICKMAN GERMANTOWN DEVELOPMENT
ROCKFIELD RD & GOLDENDALE RD GERMANTOWN, WI

CJE NO.: I928R0AL
JUNE 18, 2019
JULY 12, 2019

SVI.0
ALTA/NSPS SURVEY



DICKMAN MULTI-TENANT DEVELOPMENT

GERMANTOWN, WISCONSIN

CJE NO.: CJEI928R6
SEPTEMBER 04, 2019

C1.0
SHEET 1 OF 8

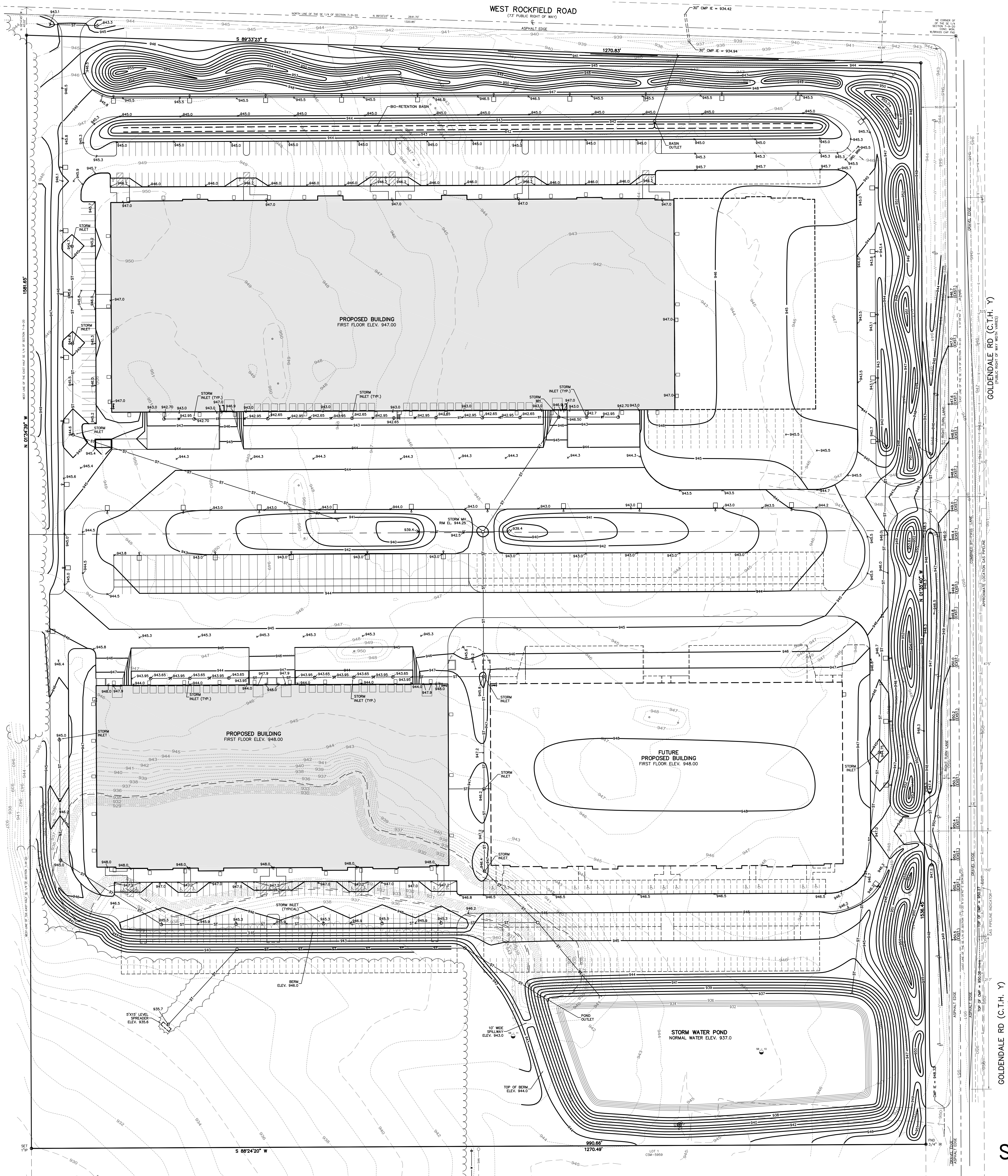
SITE GRADING PLAN

- NOTE:
1. TOTAL DISTURBED AREA = 41.11 ACRES
 2. SPOT GRADES ALONG THE CURB ARE AT THE BOTTOM OF THE CURB.

www.DiggersHotline.com
DIGGERS HOTLINE
DIAL 811 OR (800) 242-8511

LEGEND

--- 94.3 --- EXISTING CONTOUR
--- 94.6 --- PROPOSED CONTOUR
x 942.5 PROPOSED ELEVATION
--- ST --- PROPOSED STORM SEWER



GOLDENDALE RD (C.T.H. Y)
(PUBLIC RIGHT OF WAY WIDTH WAIVED)

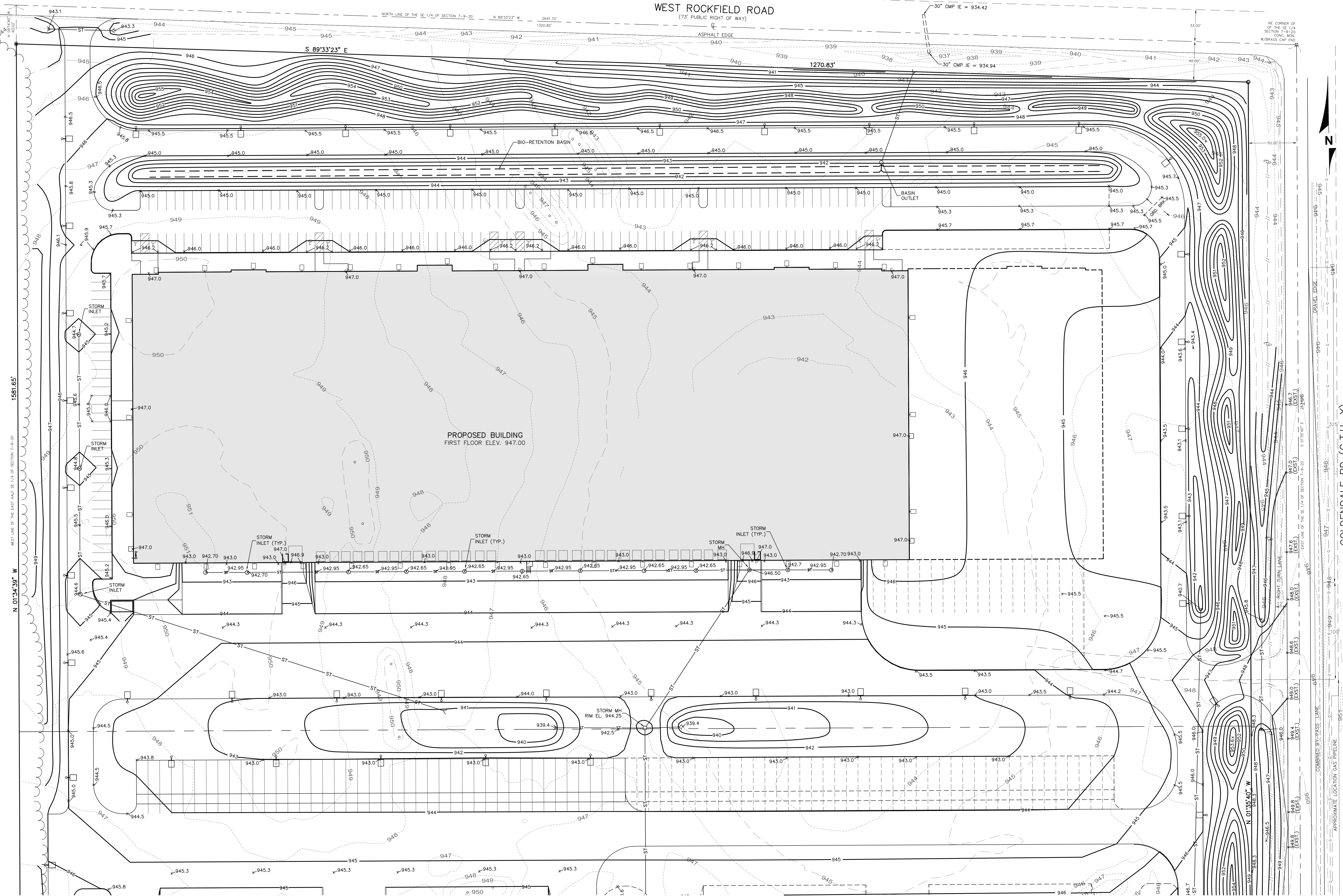
GRAPHIC SCALE
0 30 60 120
(IN FEET)
1 INCH = 60 FT.

DICKMAN MULTI-TENANT DEVELOPMENT

GERMANTOWN, WISCONSIN

CJE NO.: CJEI928R6
SEPTEMBER 04, 2019

C1.1
SHEET 2 OF 8

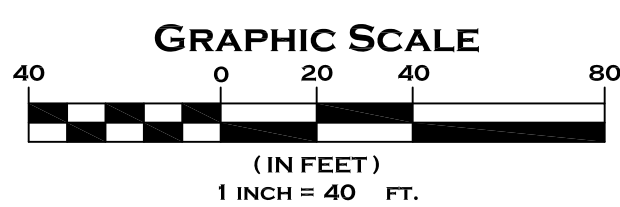


LEGEND

- 943 --- EXISTING CONTOUR
- 946 --- PROPOSED CONTOUR
- x 942.5 --- PROPOSED ELEVATION
- ST --- PROPOSED STORM SEWER

www.DiggersHotline.com
DIGGERS HOTLINE
DIAL 811 OR (800) 242-8511

- NOTE:
1. TOTAL DISTURBED AREA = 41.11 ACRES
 2. SPOT GRADES ALONG THE CURB ARE AT THE BOTTOM OF THE CURB.



SITE GRADING PLAN

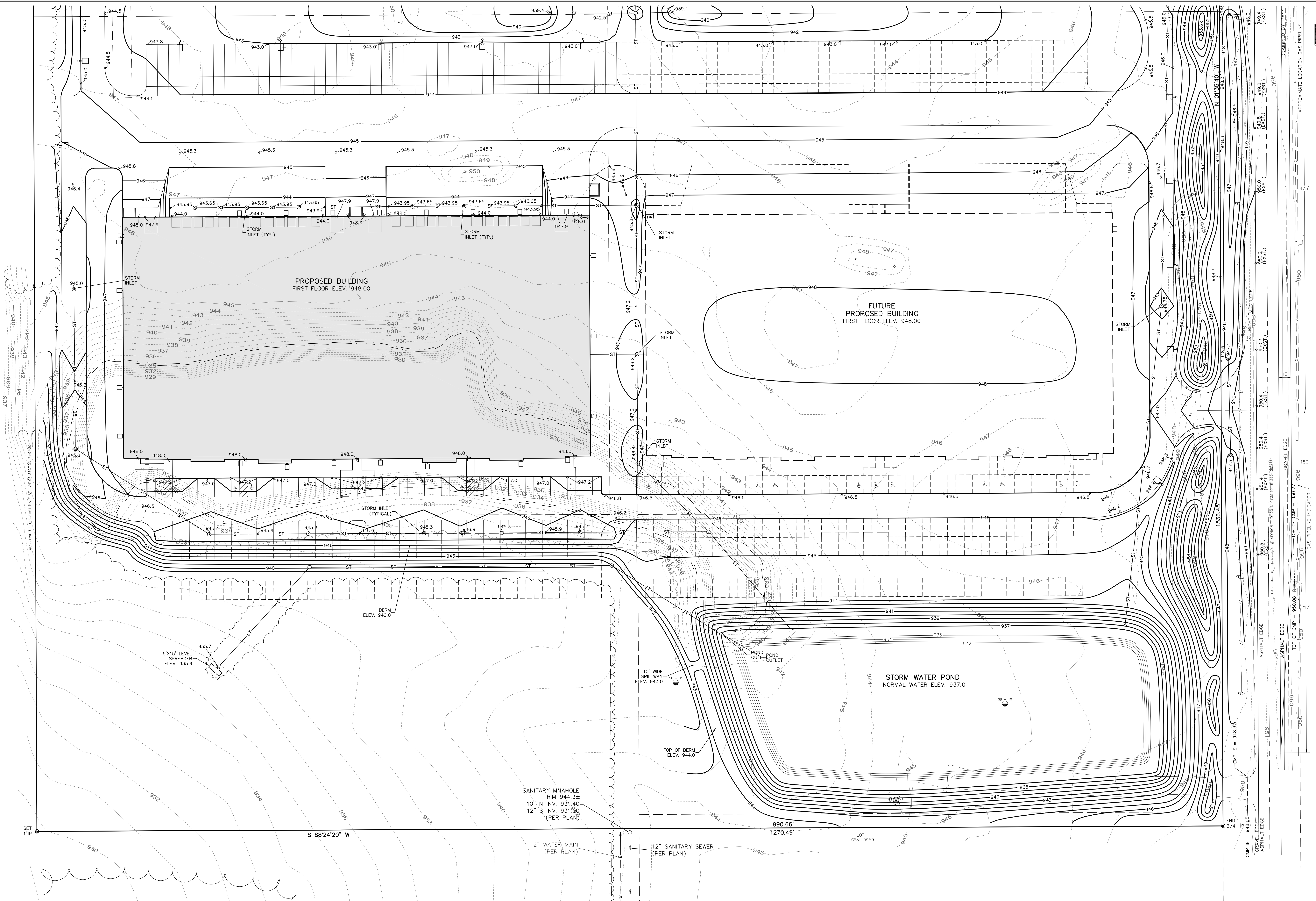


DICKMAN MULTI-TENANT DEVELOPMENT
GERMANTOWN, WISCONSIN

CJE NO.: CJEI928R6
SEPTEMBER 04, 2019

C1.2
SHEET 3 OF 8

SITE GRADING PLAN

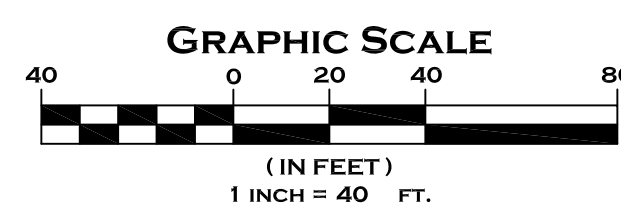


LEGEND

----- 943 -----	EXISTING CONTOUR
----- 946 -----	PROPOSED CONTOUR
x 942.5	PROPOSED ELEVATION
----- ST -----	PROPOSED STORM SEWER

www.DiggersHotline.com
DIGGERS HOTLINE
DIAL 811 OR (800) 242-8511

NOTE:
1. TOTAL DISTURBED AREA = 41.11 ACRES
2. SPOT GRADES ALONG THE CURB ARE AT THE BOTTOM OF THE CURB.



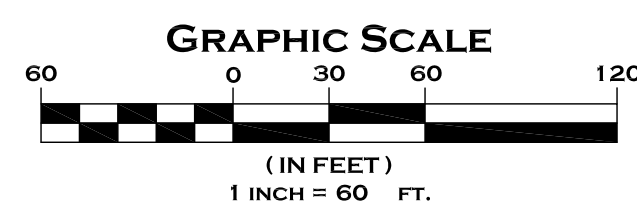
GOLDENDALE RD (C.T.H. Y)

DICKMAN MULTI-TENANT DEVELOPMENT

GERMANTOWN, WISCONSIN

CJE NO.: CJEI928R6
SEPTEMBER 04, 2019

C2.0
SHEET 4 OF 8



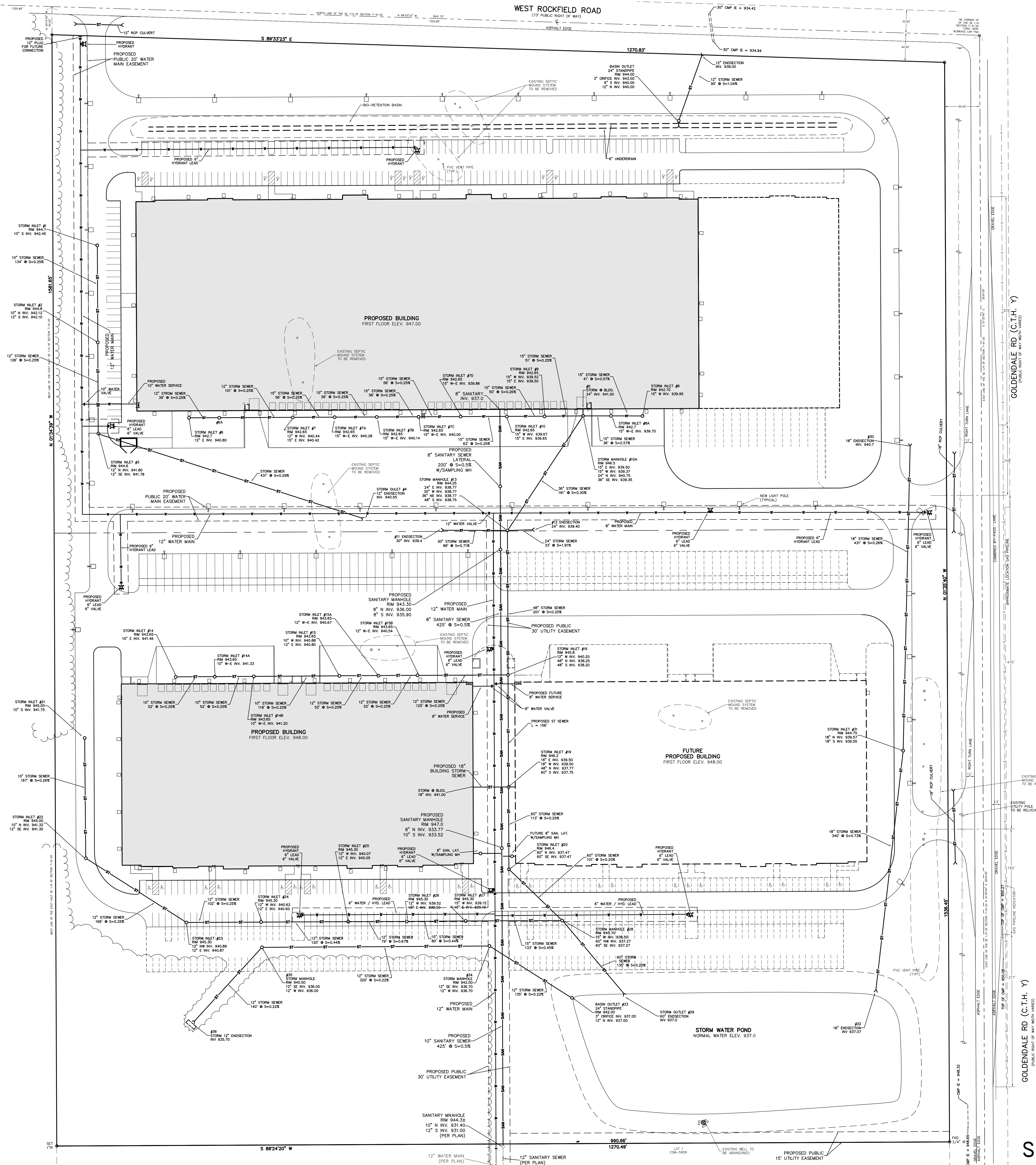
SITE UTILITY PLAN

- NOTES:
1. ALL STORM SEWER, SANITARY SEWER, AND WATER MAIN MATERIALS AND INSTALLATION PER APPLICABLE SECTIONS OF THE LATEST EDITIONS OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (STANDARD SPECIFICATIONS), WISCONSIN ADMINISTRATIVE PLUMBING CODE AND THE VILLAGE OF GERMANTOWN REQUIREMENTS.
 2. ALL TRENCHES IN PAVEMENT AREAS SHALL HAVE GRAVEL BACKFILL.
 3. EXACT SIZE AND LOCATION OF SANITARY AND WATER SERVICE TO PROPOSED BUILDING BY PLUMBING CONSULTANT/CONTRACTOR.
 4. PROPOSED WATER SERVICE SHALL HAVE A MINIMUM 6 FEET OF COVER.
 5. THE CONTRACTOR SHALL VERIFY ALL SEWER AND WATER CONNECTIONS PRIOR TO UTILITY CONSTRUCTION. NOTIFY THE ENGINEER WITH ANY DISCREPANCIES.



LEGEND

---	EXISTING STORM SEWER
ST---	PROPOSED STORM SEWER
---	EXISTING SANITARY SEWER
SAN---	PROPOSED SANITARY SEWER
---	EXISTING WATER MAIN
W---	PROPOSED WATER MAIN
---	BURIED GAS MAIN
---	OVER HEAD WIRE
---	BURIED ELECTRIC
○	UTILITY POLE



DICKMAN MULTI-TENANT DEVELOPMENT

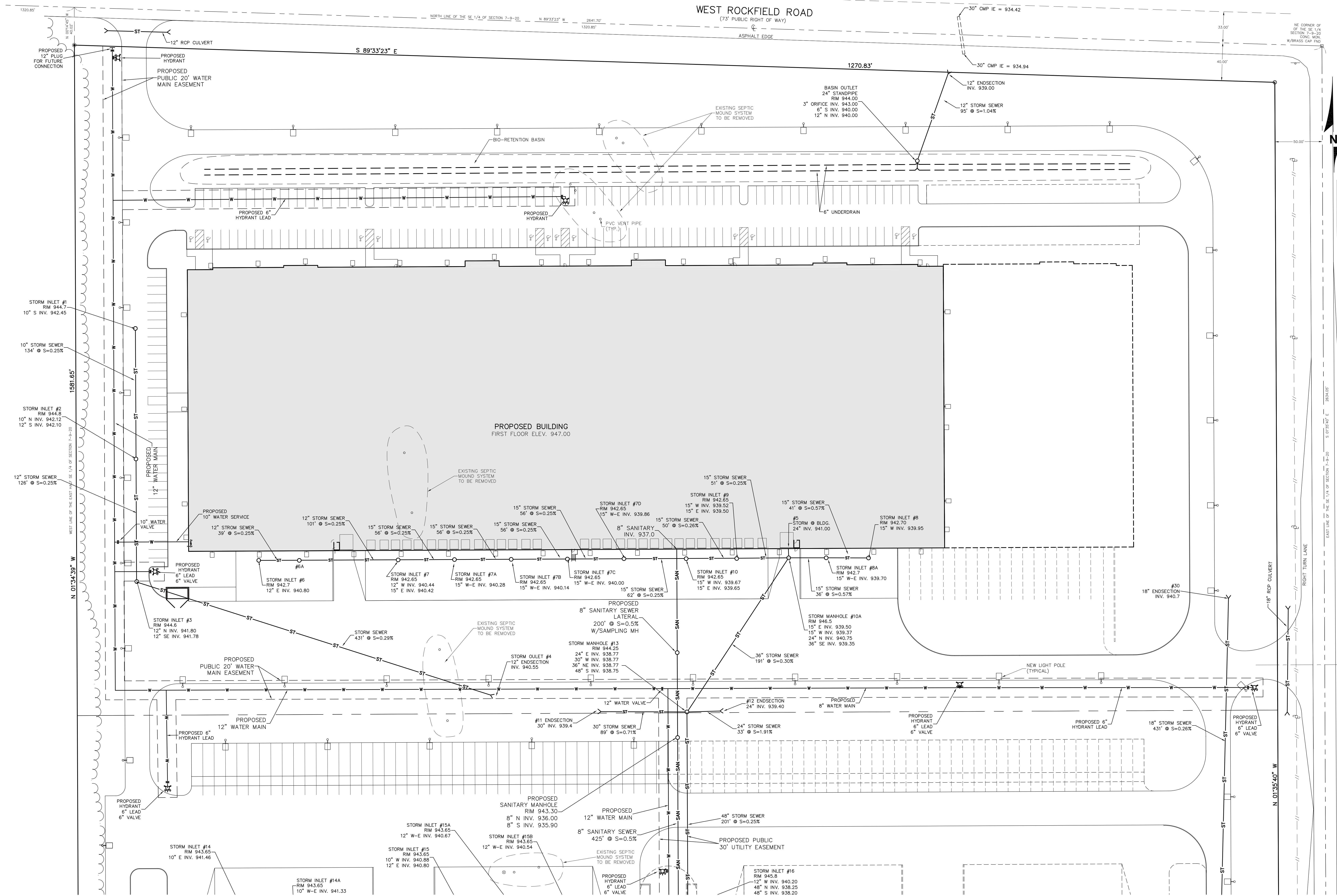
GERMANTOWN, WISCONSIN

GOLDENDALE RD. (C.T.H. Y)
(PUBLIC RIGHT OF WAY WIDTH VARIES)

CJE NO.: CJE1928R6
SEPTEMBER 04, 2019

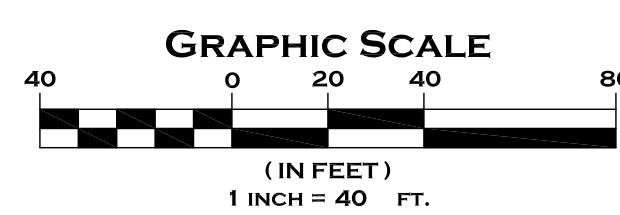
C2.1

SHEET 5 OF 8

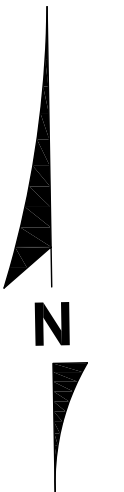


LEGEND	
ST	EXISTING STORM SEWER
ST	PROPOSED STORM SEWER
SS	EXISTING SANITARY SEWER
SS	PROPOSED SANITARY SEWER
WM	EXISTING WATER MAIN
WM	PROPOSED WATER MAIN
GM	BURIED GAS MAIN
OW	OVER HEAD WIRE
EP	BURIED ELECTRIC UTILITY POLE

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SITE UTILITY PLAN - NORTH



DICKMAN MULTI-TENANT DEVELOPMENT

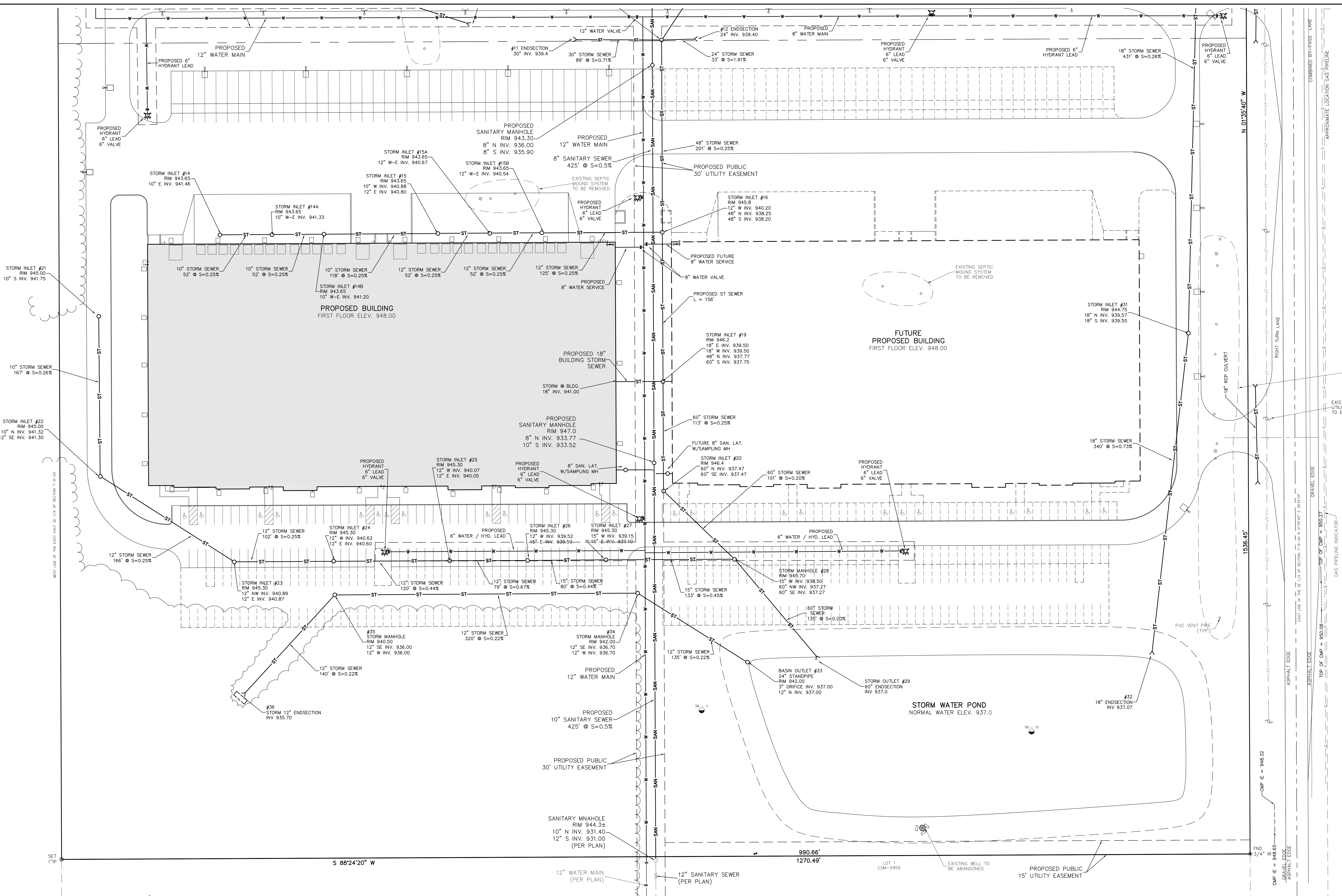
GERMANTOWN, WISCONSIN

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(PUBLIC RIGHT OF WAY WIDTH VARIES)

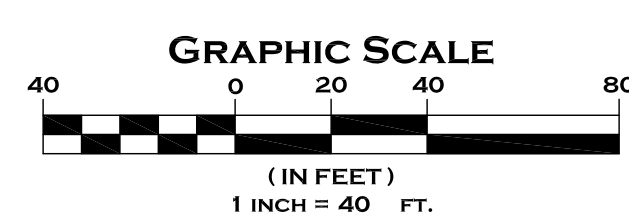
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SEPTEMBER 04, 2019

C2.2

SHEET 6 OF 8



LEGEND	
—ST—	EXISTING STORM SEWER
—ST—	PROPOSED STORM SEWER
—SAN—	EXISTING SANITARY SEWER
—SAN—	PROPOSED SANITARY SEWER
—W—	EXISTING WATER MAIN
—W—	PROPOSED WATER MAIN
—G—	BURIED GAS MAIN
—E—	OVER HEAD WIRE
—E—	BURIED ELECTRIC
—P—	UTILITY POLE



SITE UTILITY PLAN - SOUTH

CONSTRUCTION SCHEDULE

1. OBTAIN PLAN APPROVAL AND OTHER APPLICABLE PERMITS.
2. INSTALL CONSTRUCTION EXIT COMPLETE WITH PROPOSED GULCHES AND HAY BALES.
3. INSTALL SILT FENCE.
4. INSTALL REMAINING HAY BALE DITCH CHECKS ALONG ROCKFIELD ROAD AND GOLDENDALE ROADSIDE DITCHES.
5. STRIP TOPSOIL FROM TEMPORARY SEDIMENTATION BASINS AND STOCKPILE AT LOCATION SHOWN.
6. INSTALL TEMPORARY SEDIMENT BASINS COMPLETE WITH OUTLET:
 - A. THE AREA OF THE PERMANENT BIO-RETENTION BASIN WILL BE USED AS TEMPORARY SEDIMENTATION BASIN DURING CONSTRUCTION. DO NOT INSTALL DRAINAGE, AGGREGATE OR ENGINEERED SOIL AT THIS STAGE.
 - B. ROUGH GRADE AND OVER EXCAVATE TO ELEVATION SHOWN.
 - C. INSTALL 6" PVC OUTLET PIPE AS SHOWN.
 - D. MATERIAL FROM PROPOSED SEDIMENTATION BASIN TO BE USED TO FILL EXISTING STORM WATER POND.
7. INSTALL DIVERSION BERM/SWALE TO DIRECT CONSTRUCTION RUNOFF TO THE TEMPORARY SEDIMENTATION BASIN.
8. STRIP REMAINING TOPSOIL AND STOCKPILE AT LOCATION SHOWN OR OTHER APPROVED AREA.
9. ROUGH GRADE SITE.
10. BEGIN BUILDING CONSTRUCTION.
11. INSTALL PROPOSED UTILITIES.
12. INSTALL OUTLET PROTECTION AND ANY REMAINING HAY BALES.
13. INSTALL LEVEL SPREADER.
14. INSTALL INLET GRAVE SCREENS IN ALL NEW STORM INLETS.
15. PROVIDE IMMEDIATE TEMPORARY STABILIZATION (EXAMPLE: TEMPORARY SEEDING) OF ANY DISTURBED AREAS WHICH WILL REMAIN INACTIVE FOR A PERIOD EXCEEDING 14 DAYS.
16. INSTALL CURB, WALK AND BASE COURSE OF PAVEMENT.
17. REMOVE TEMPORARY SEDIMENT BASIN AND INSTALL PERMANENT BIO-RETENTION BASIN. DEWATER BASIN INTO DEWATERING BASIN. INSTALL AGGREGATE, 6" DRAIN TILES AND OUTLET PIPES, ENGINEERED SOIL AND PLANTINGS.
18. FINAL GRADE SLOPES AND TOPSOIL CRITICAL SLOPES; VEGETATE AND MAINTAIN ALL DISTURBED AREAS.
19. ALL EROSION CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER RAINFALL, NEEDED REPAIRS WILL BE PERFORMED IMMEDIATELY.
20. AFTER SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND VEGETATE THE DISTURBED AREAS.
21. ESTIMATED TIME BEFORE FINAL STABILIZATION - 18 MONTHS.

MAINTENANCE PLAN

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY 3" RUNOFF-PRODUCTION RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
2. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES ABOUT 0.5 FT. DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.
3. ALL SEEDING AREAS WILL BE WATERED, FERTILIZED, RESEED AS NECESSARY, AND MULCHED TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
4. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY STREET CLEANING BEFORE THE END OF EACH DAY.

WINTER CONDITIONS

DURING WINTER CONSTRUCTION (NOVEMBER 1 TO MAY 1), CONTRACTOR TO PROVIDE TYPE B SOIL STABILIZER, POLYACRYLAMIDE (PAM) PER LATEST ROOT PAL (UPDATED 11/22/2017) ON ALL DISTURBED AREAS THAT ARE NOT TO BE DISTURBED BEYOND 7 DAYS. CONTRACTOR TO INSTALL PAM PER WNR TECHNICAL STANDARD 1050 AND THE MANUFACTURER'S SPECIFICATIONS.

TEMPORARY STABILIZATION METHODS

TEMPORARY SEEDING:
DURING GROWING SEASON (MAY 2 - OCTOBER 31) TEMPORARY SEEDING (COVER CROP) TO BE USED FOR TEMPORARY STABILIZATION DURING SITE CONSTRUCTION.

Species	Lbs./Acre	Percent Purity
Oats	131*	98
Cereal Rye	131*	97
Winter Wheat	131*	95
Annual Ryegrass	80*	97
* Full Seeding		

LAND APPLICATION OF ADDITIVES:
DURING NONGROWING SEASON (NOVEMBER 1 - MAY 1) CONTRACTOR TO PROVIDE TYPE B SOIL STABILIZER DURING SITE CONSTRUCTION. STABILIZER TO BE POLYACRYLAMIDE (PAM) PER LATEST ROOT PAL (UPDATED 04/30/2019) - SEE WNR TECHNICAL STANDARD 1050.

STABILIZATION SHOULD BE COMPLETED WITHIN 7 DAYS OF ESTABLISHING FINAL GRADE OR THAT WILL OTHERWISE EXIST FOR MORE THAN 14 DAYS.

SITE DEWATERING

DEWATERING TO CONFORM WITH WNR CONSERVATION PRACTICE STANDARD 1061.
ALL PUMPED EFFLUENT FROM DEWATERING OPERATIONS SHALL BE DISCHARGED TO A GEOTEXTILE FILTER BAG CONFORMING TO WNR CONSERVATION PRACTICE STANDARD 1061. THE GEOTEXTILE BAG SHALL BE PLACED ON A VEGETATED/STABILIZED GROUND PRIOR TO DISCHARGE.

EROSION CONTROL PRACTICES SCHEDULE

- ① SILT FENCE
- ② CONSTRUCTION EXIT
- ③ TEMPORARY DIVERSION BERM
- ④ SEDIMENT BASIN
- ⑤ EROSION MAT
- ⑥ HAY BALE DITCH CHECK
- ⑦ INLET PROTECTION
- ⑧ OUTLET PROTECTION

EROSION MATTING

FOR FINAL STABILIZATION, PROVIDE CLASS 1, TYPE B EROSION MAT PER WNR EROSION CONTROL PAL IN ALL SWALES AND ON ALL SLOPES 4:1 OR GREATER.
INSTALL PER MANUFACTURER'S SPECIFICATIONS.

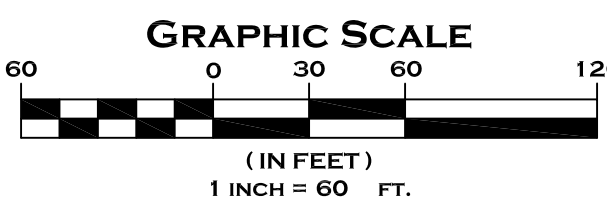
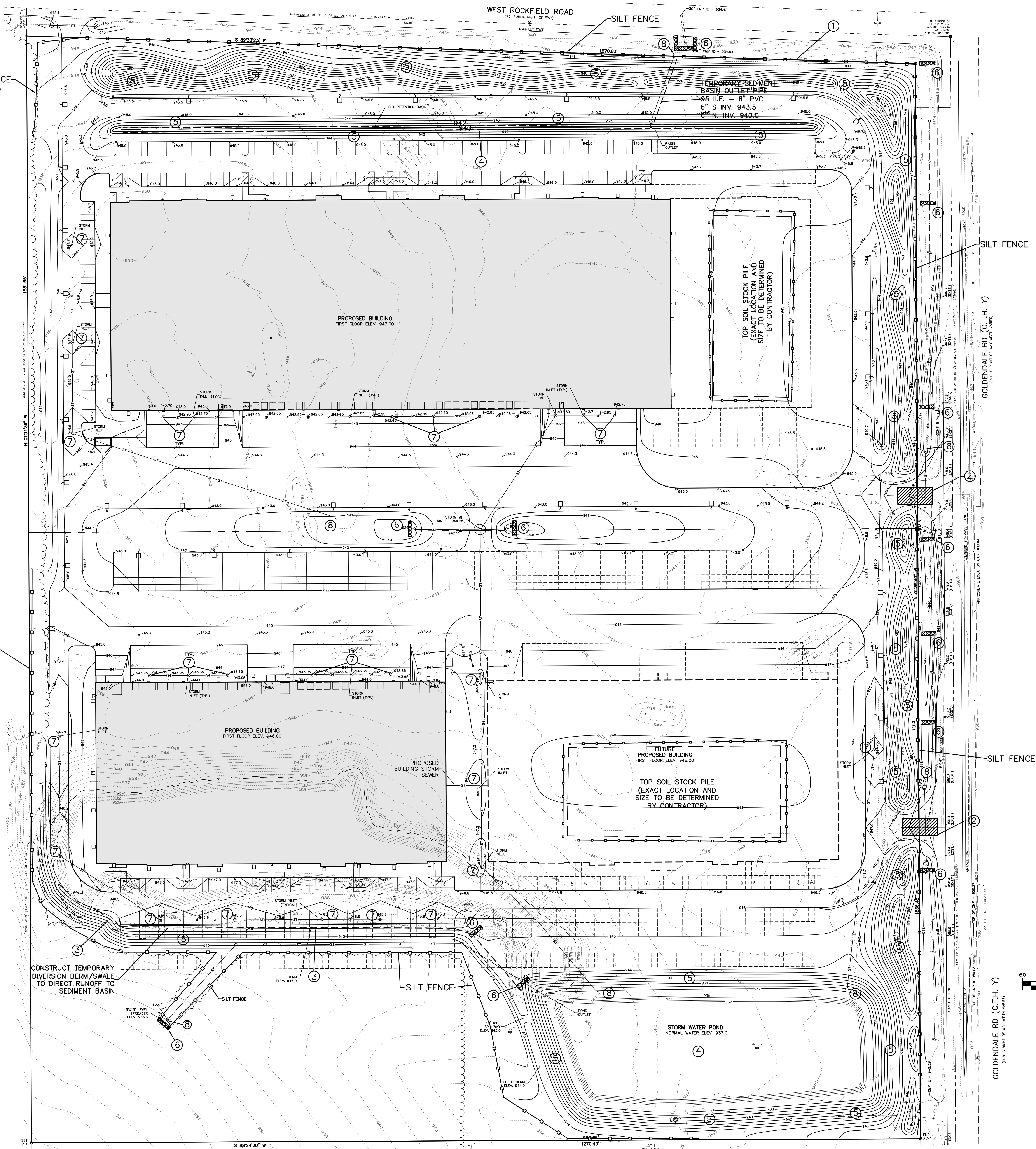
NOTE:
1. TOTAL DISTURBED AREA = 41.11 ACRES

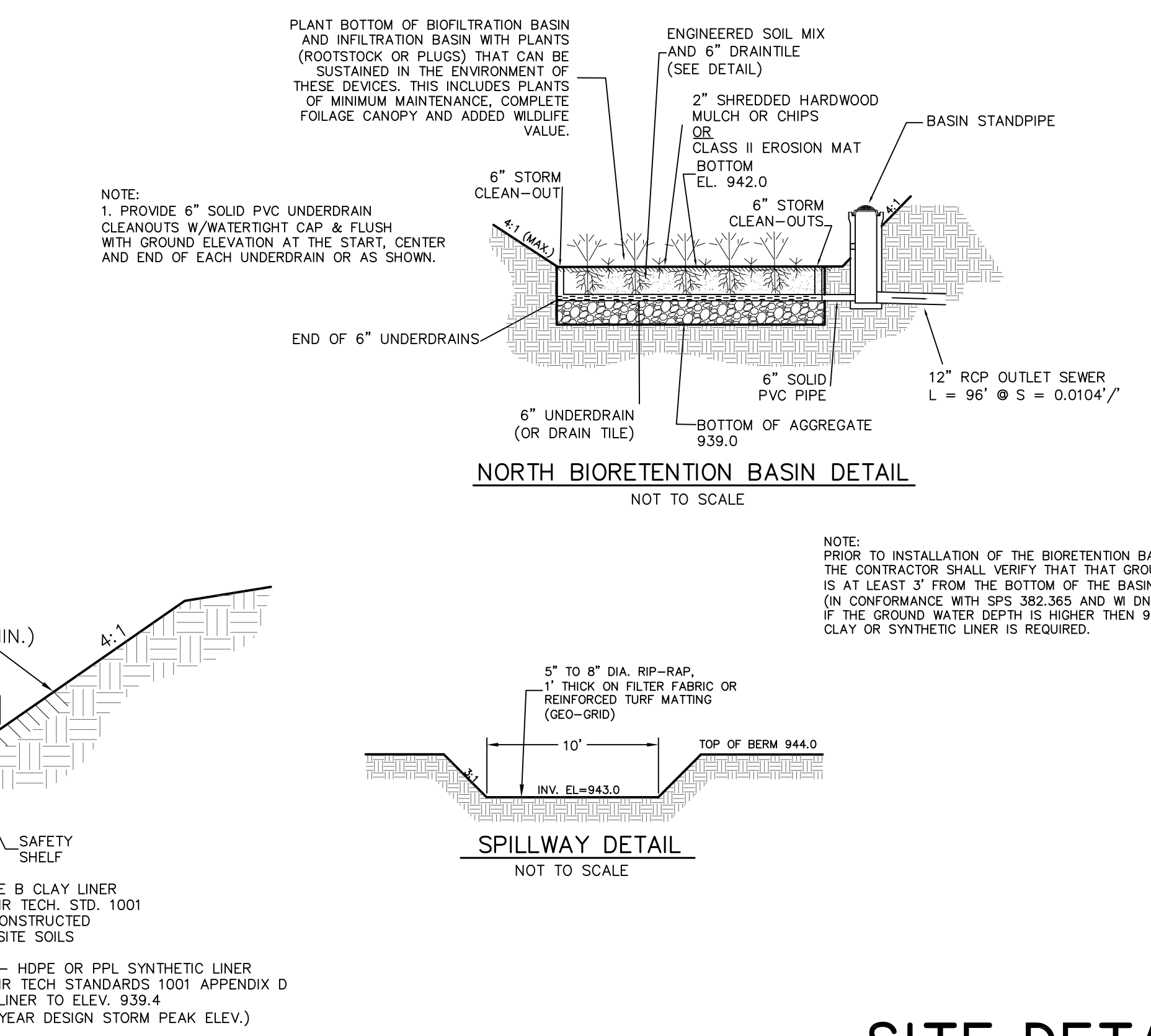
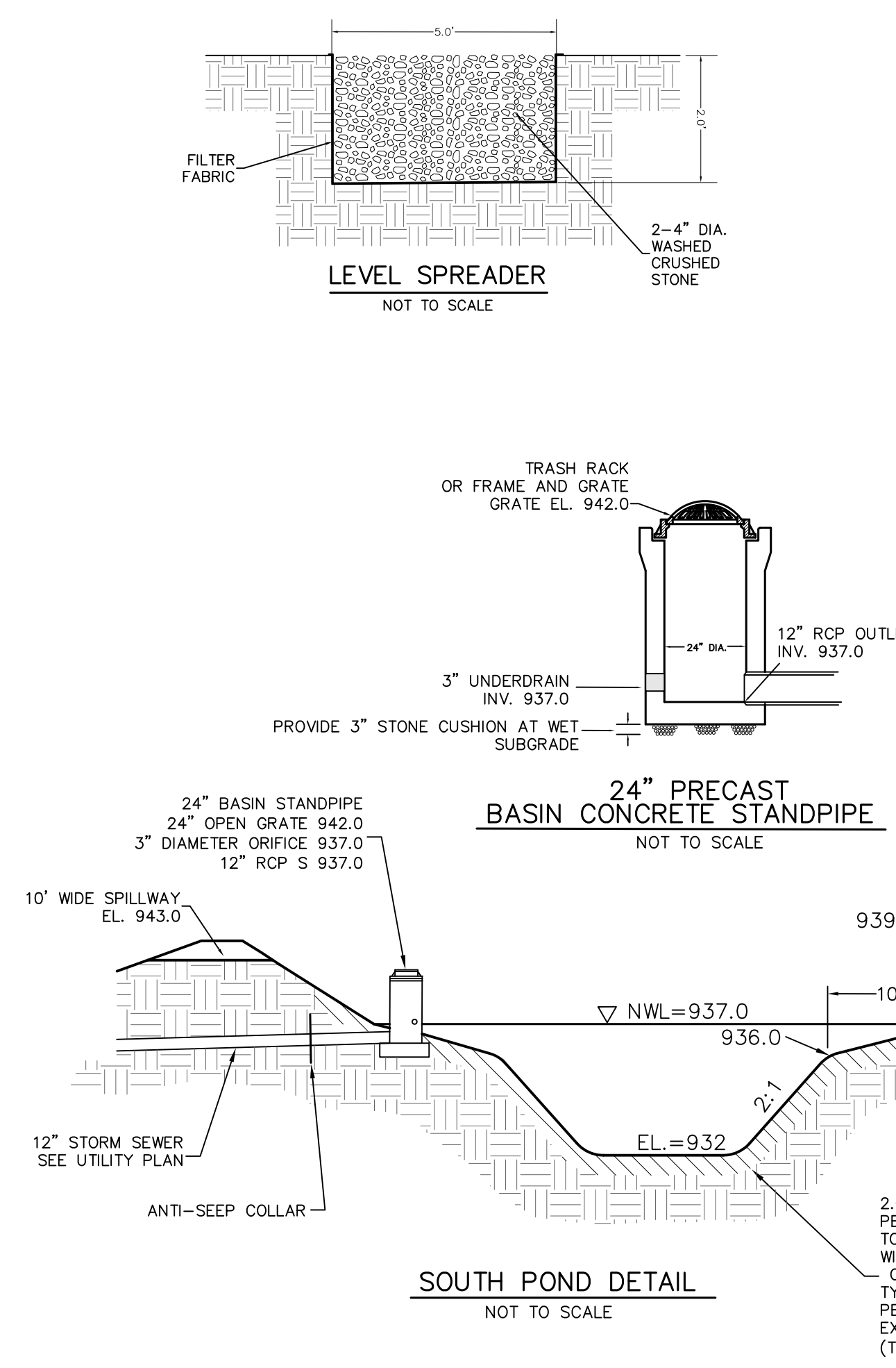
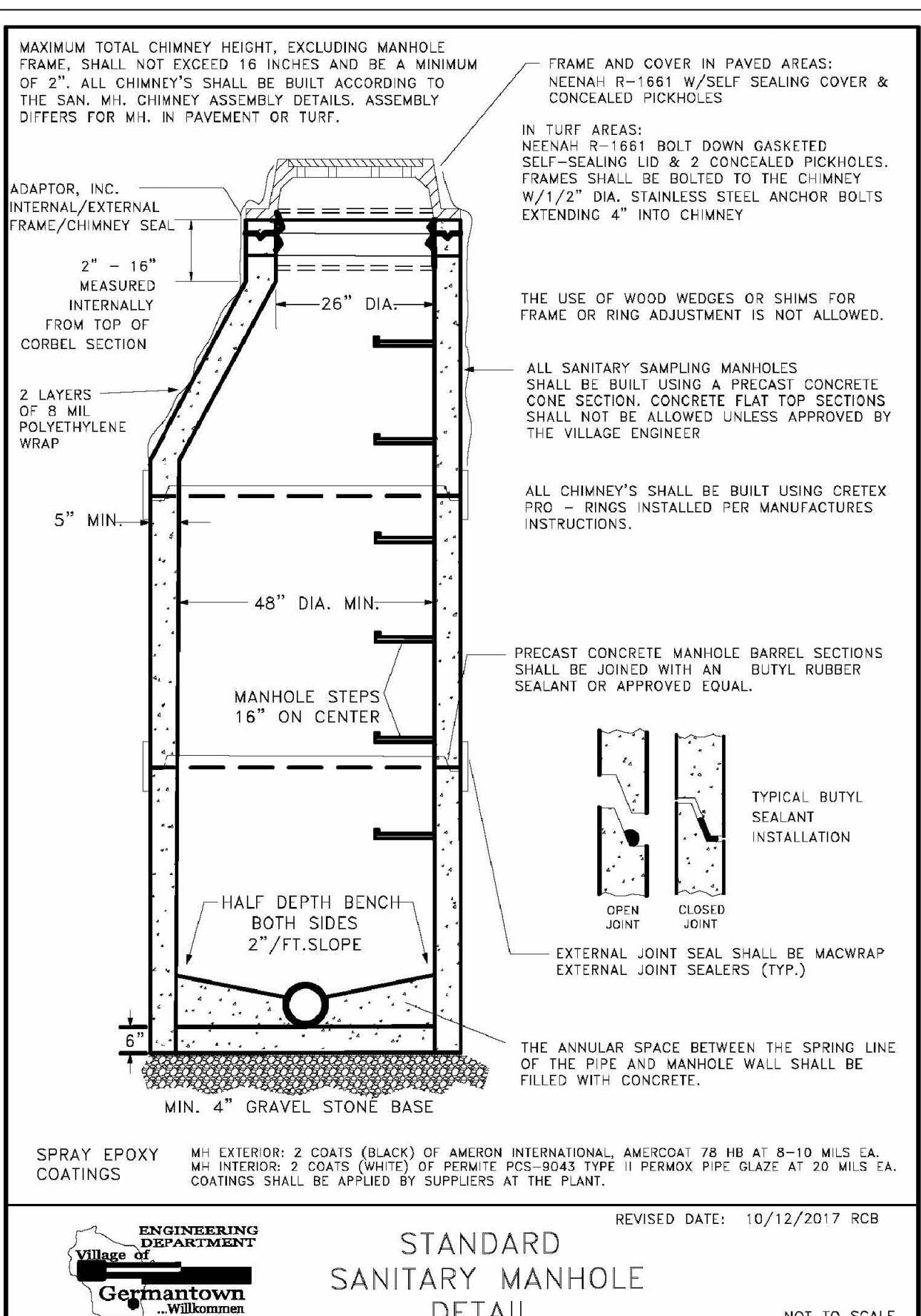
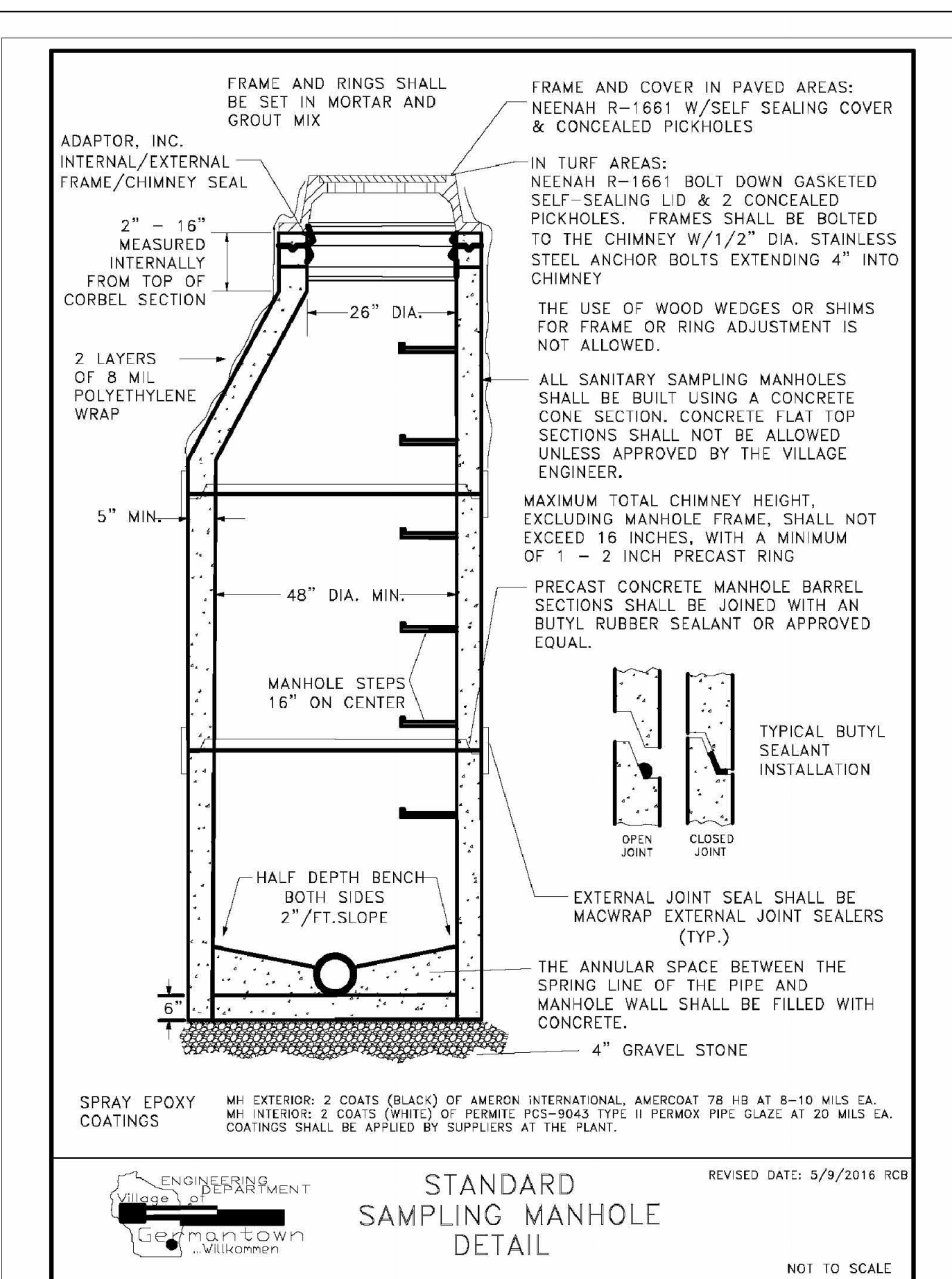
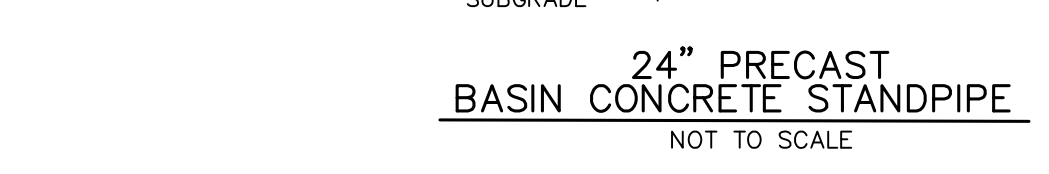
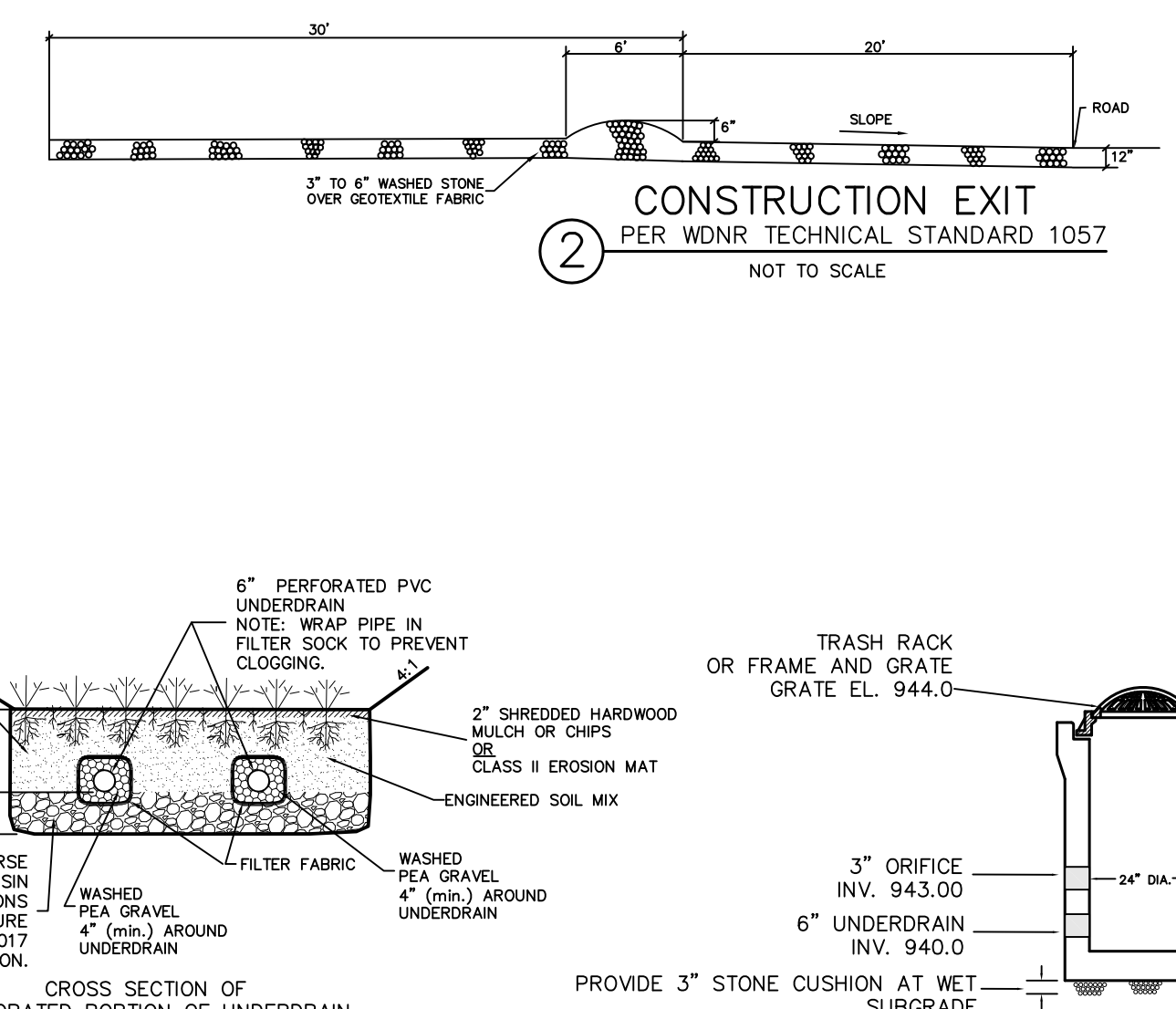
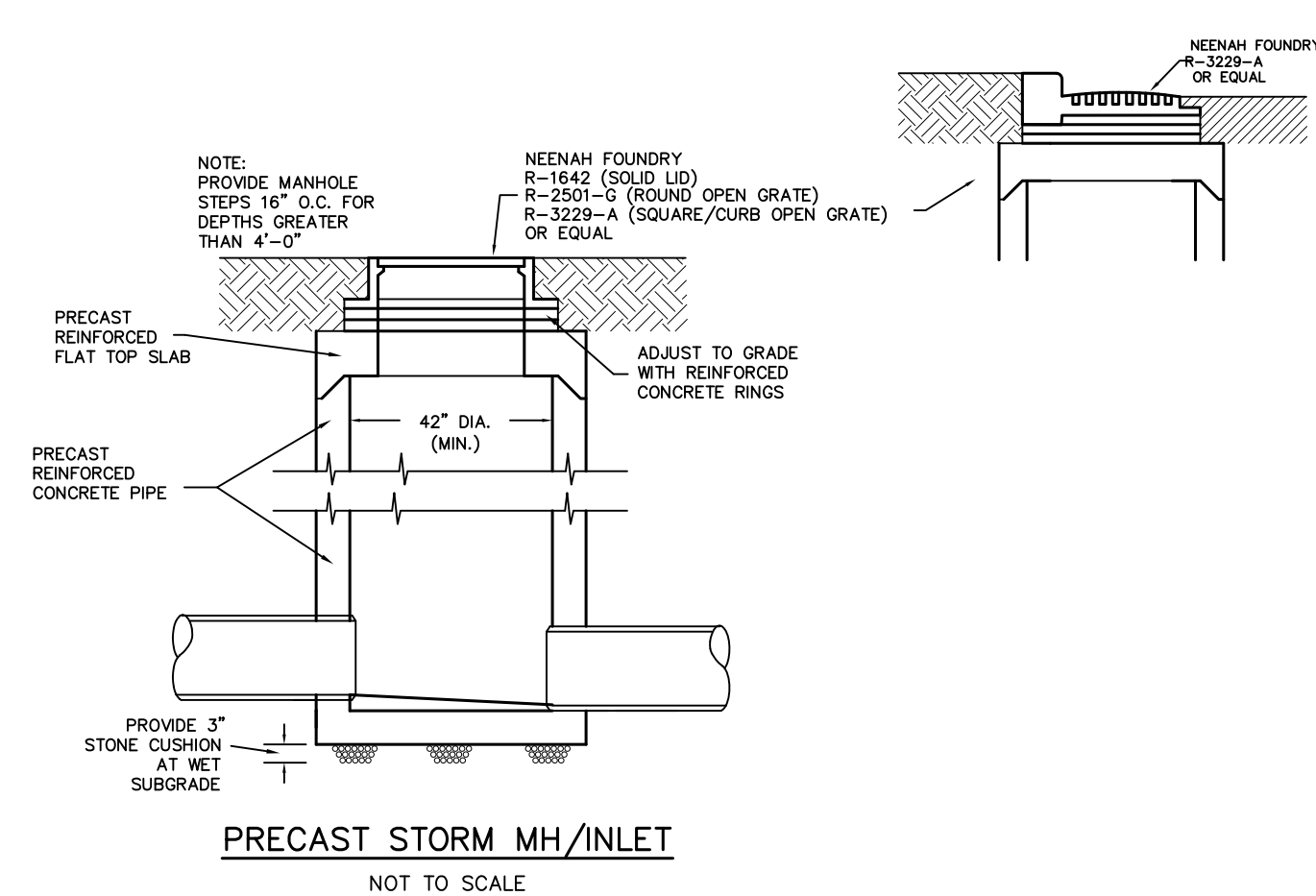
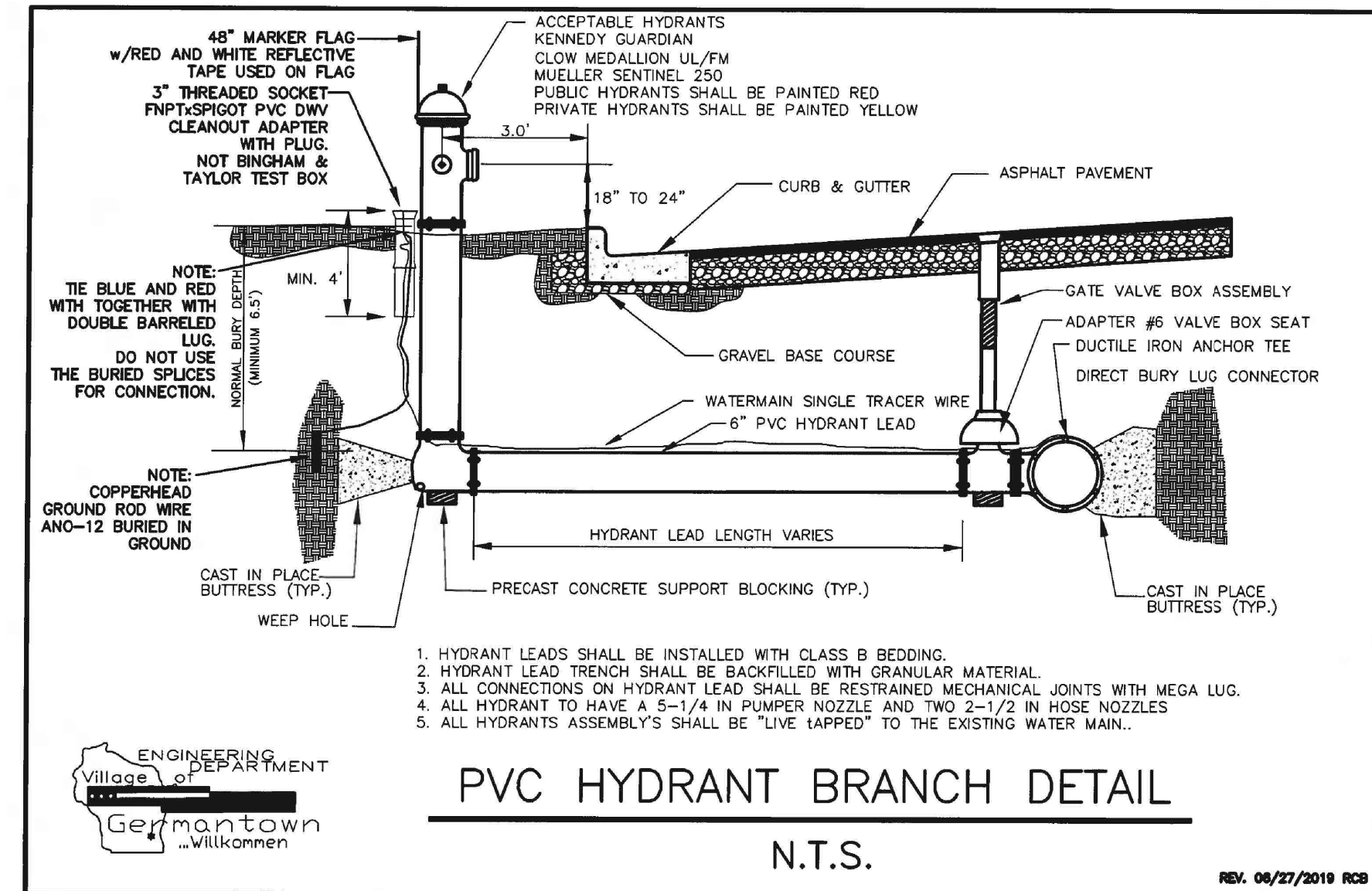
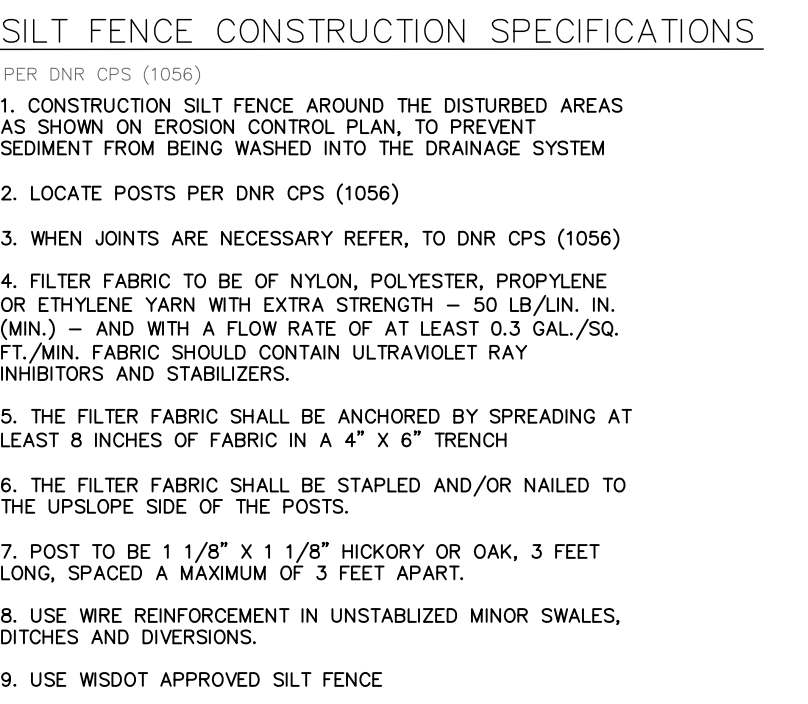
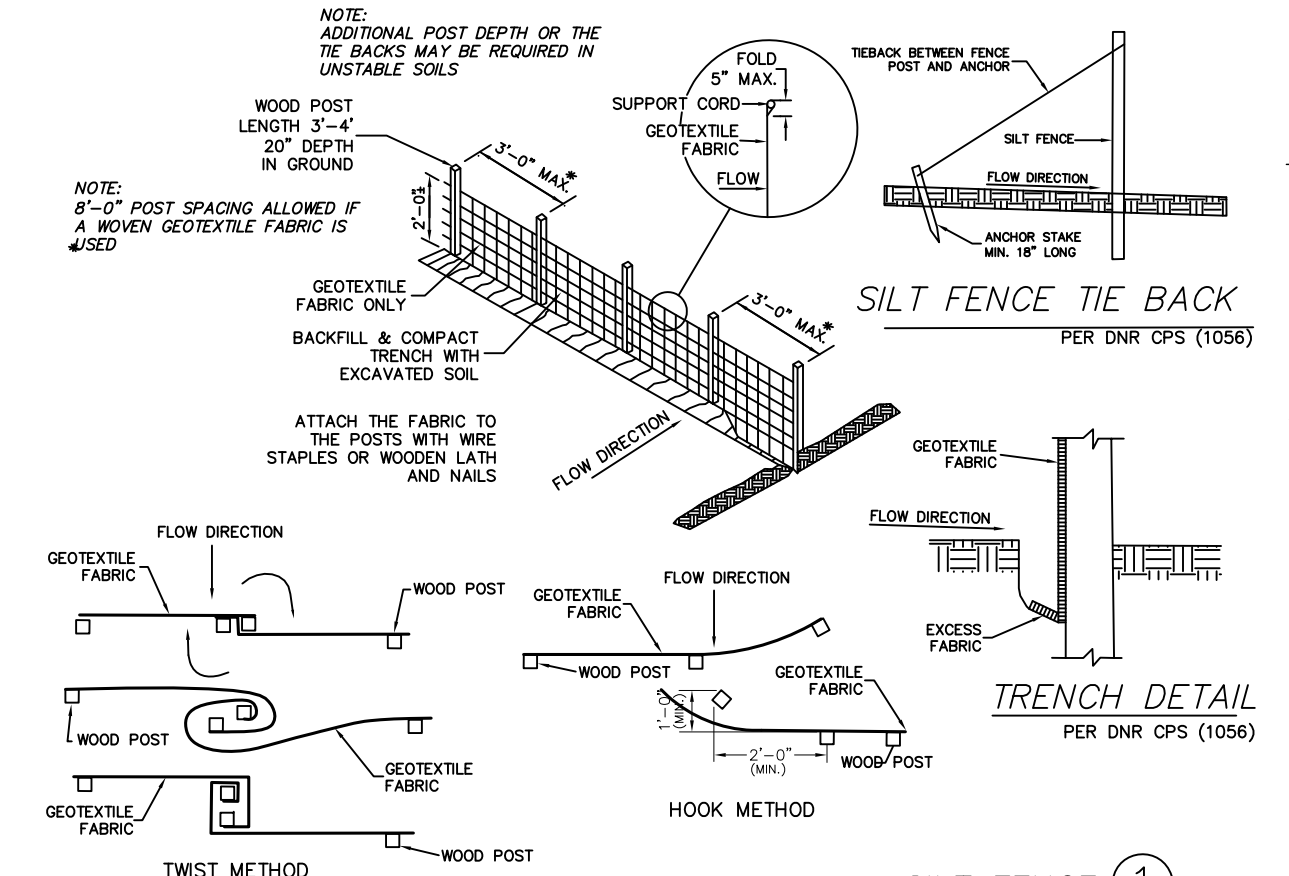
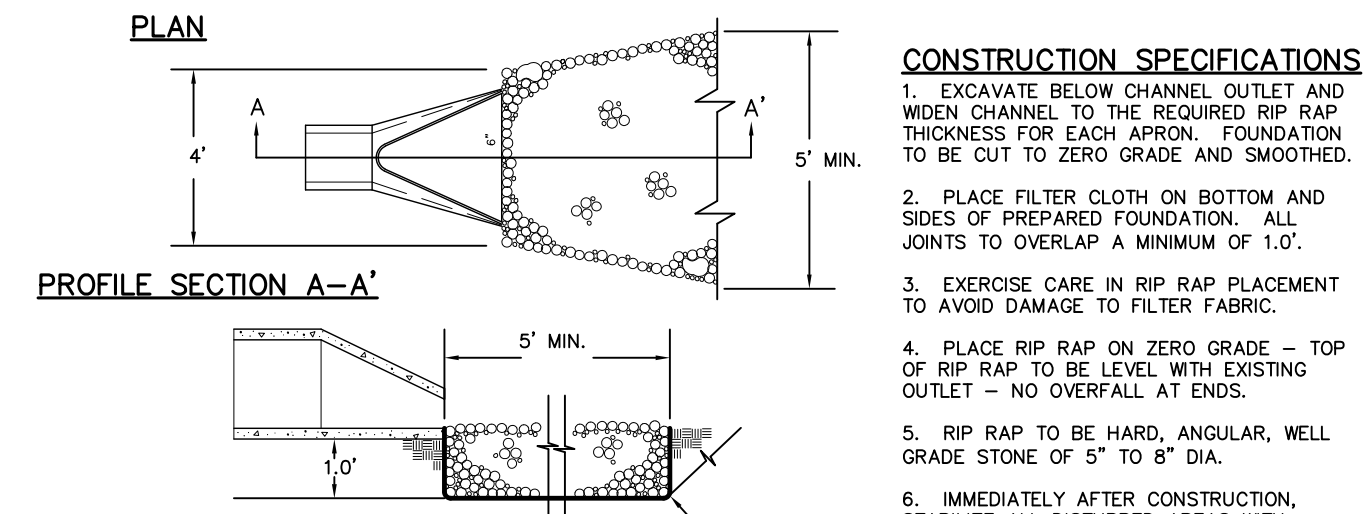
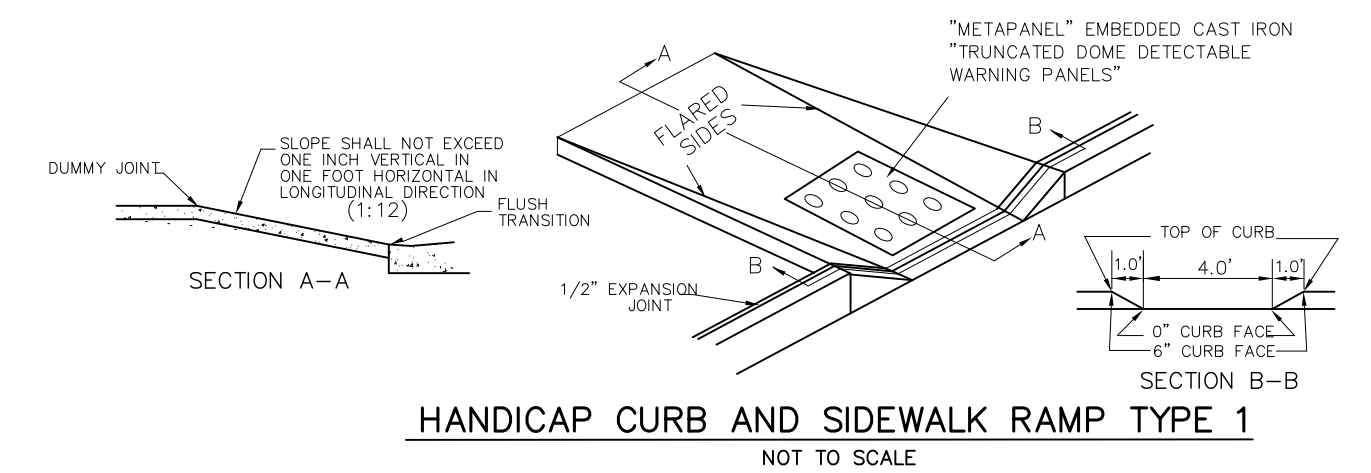
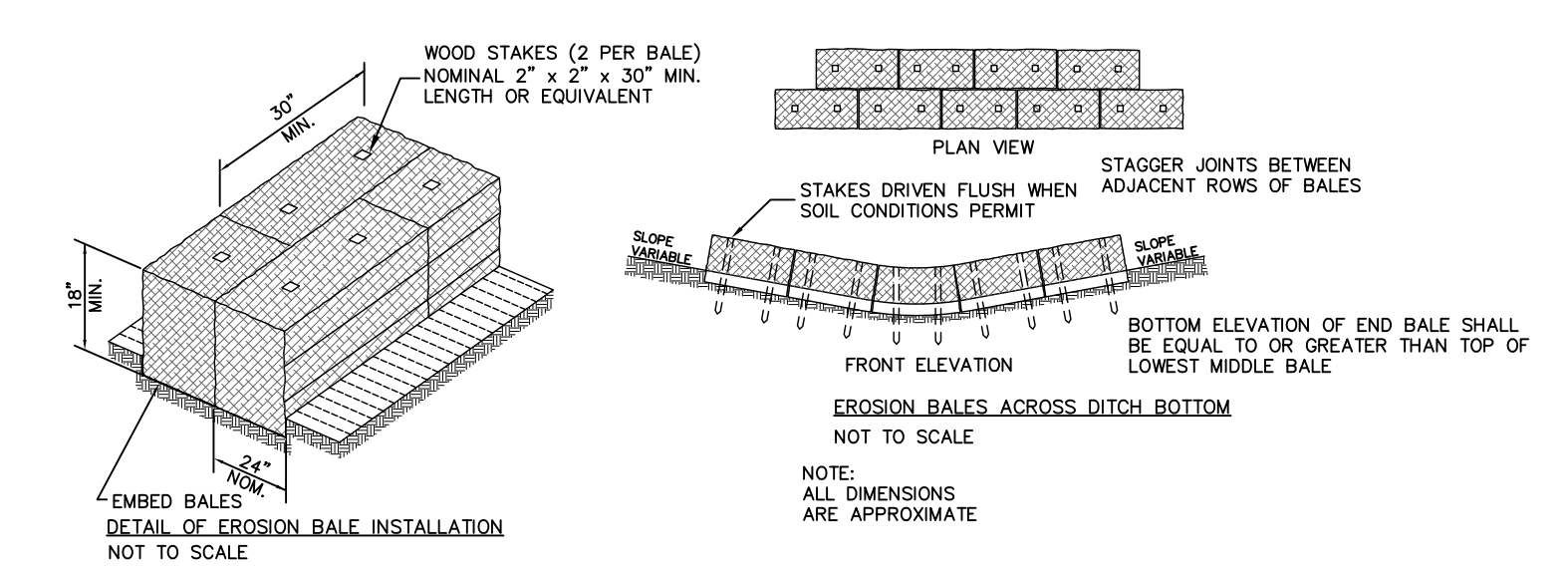
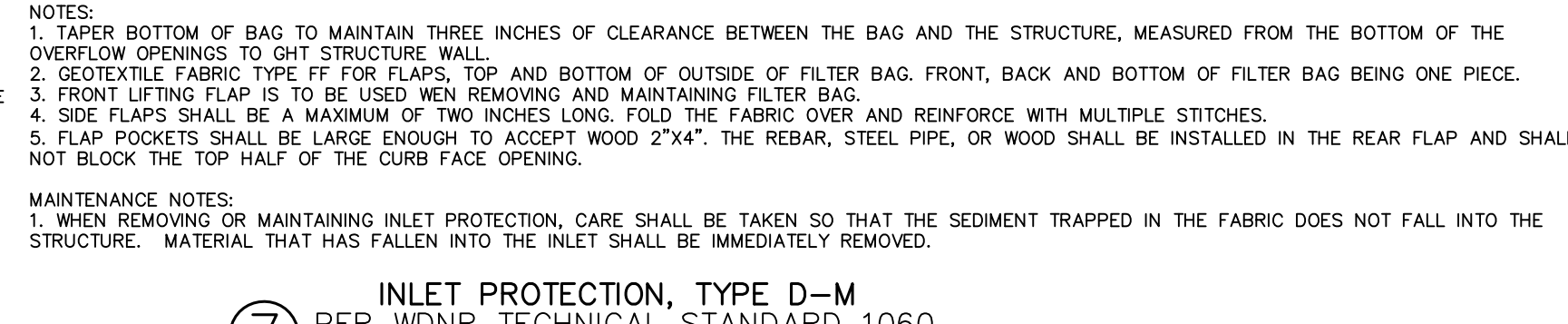
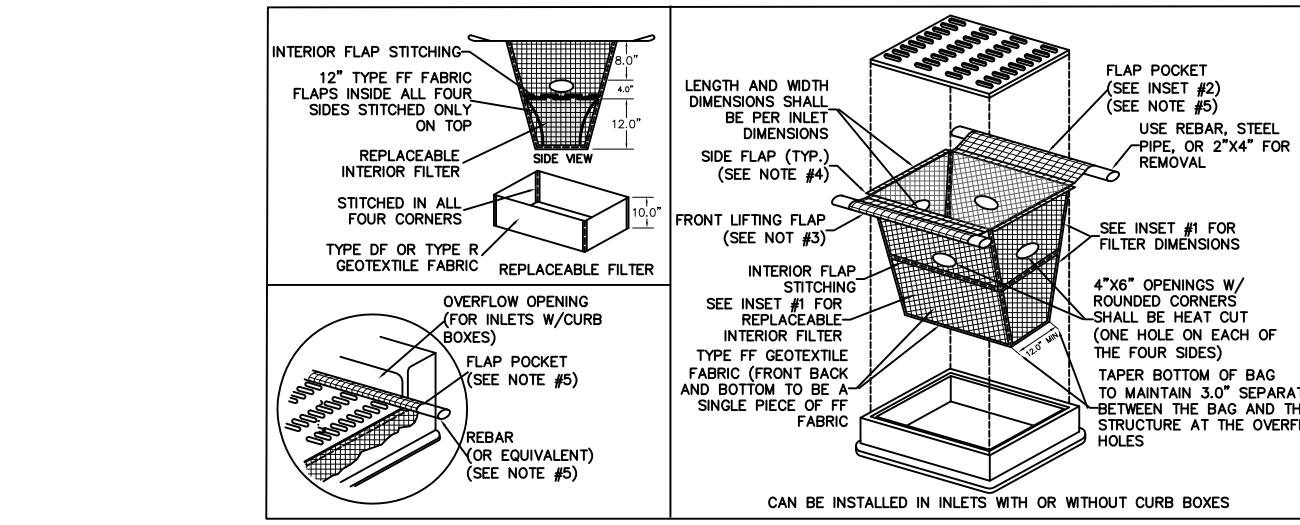
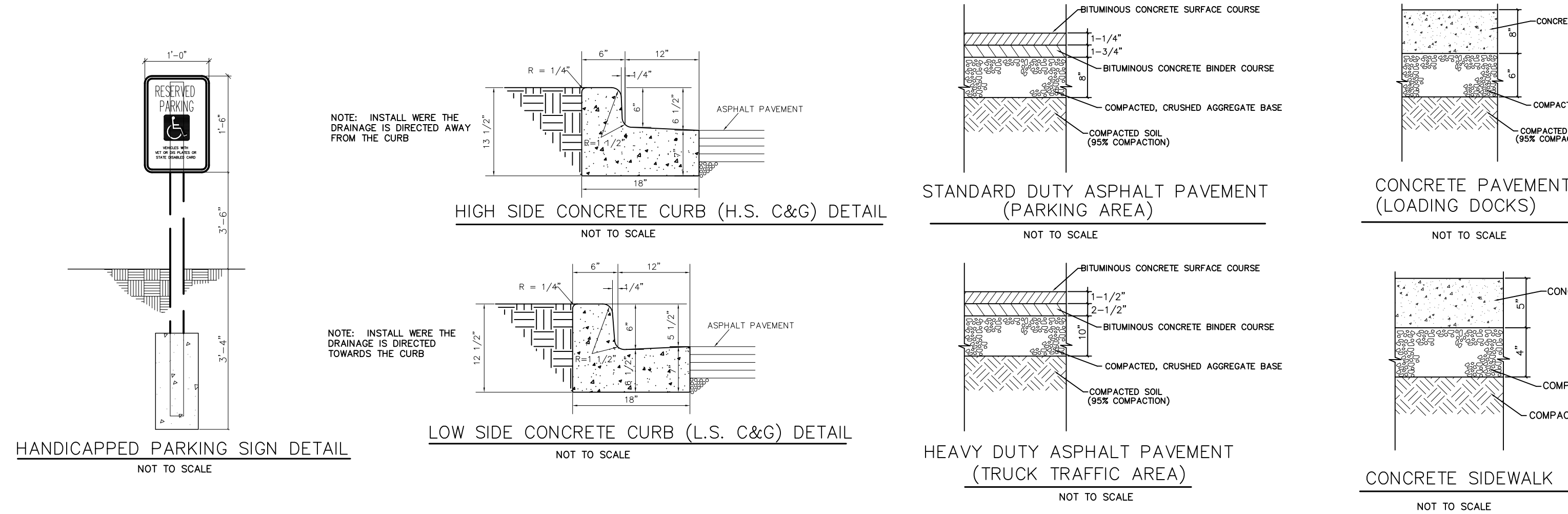
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LEGEND

..... 943	EXISTING CONTOUR
———— 946 ————	PROPOSED CONTOUR
—x— 942.5 —x—	PROPOSED ELEVATION
—ST—	PROPOSED STORM SEWER



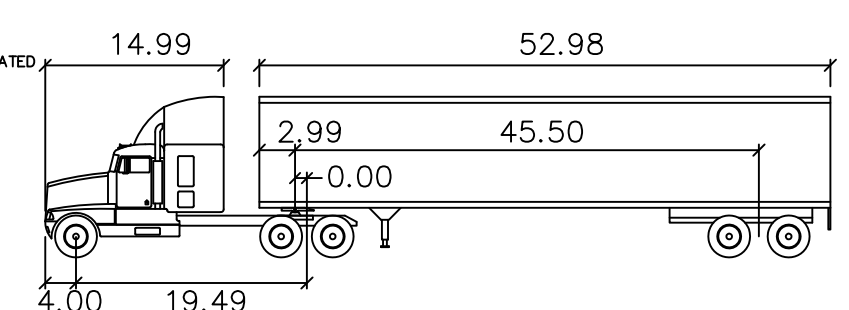
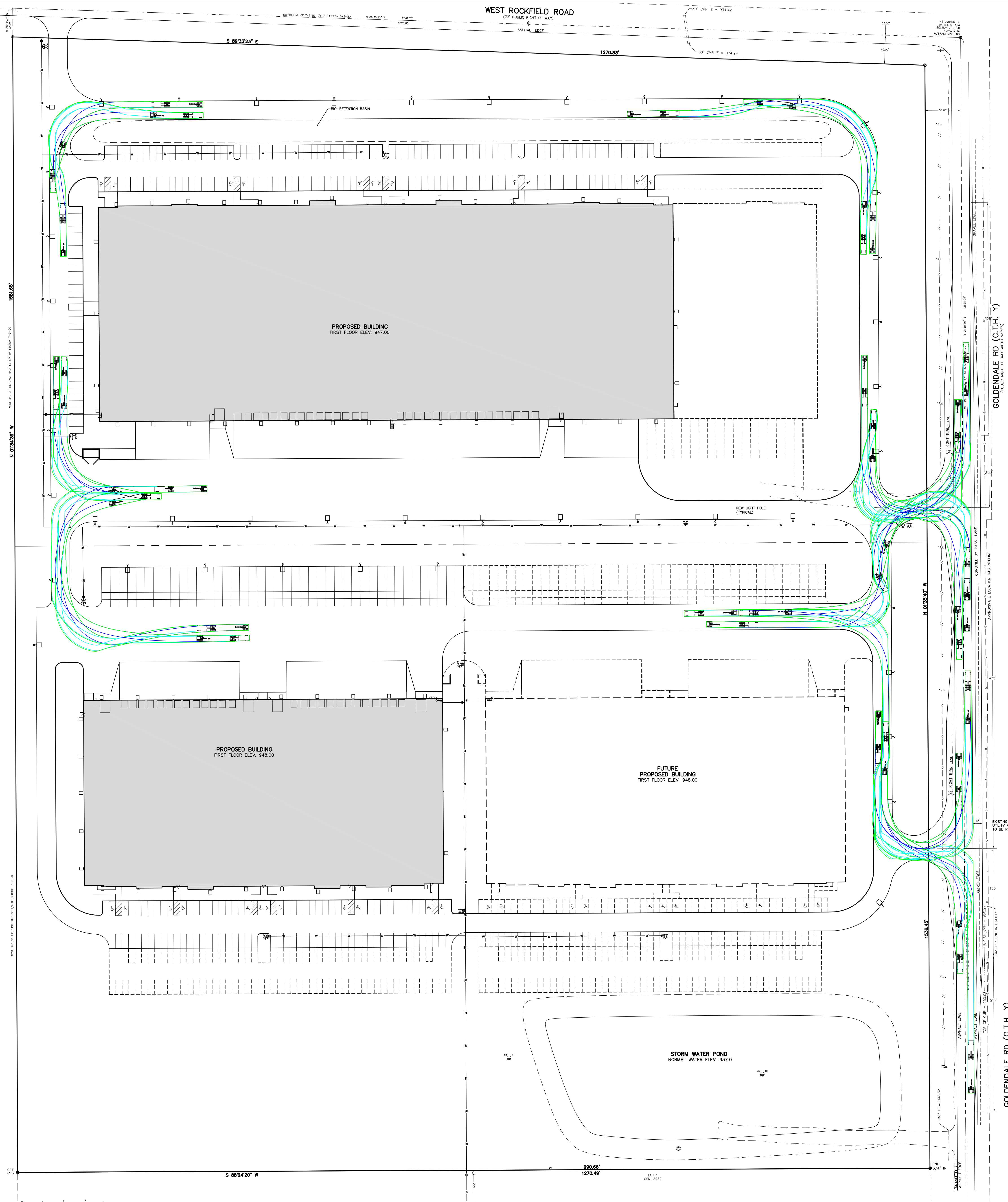




DICKMAN MULTI-TENANT DEVELOPMENT
GERMANTOWN, WISCONSIN

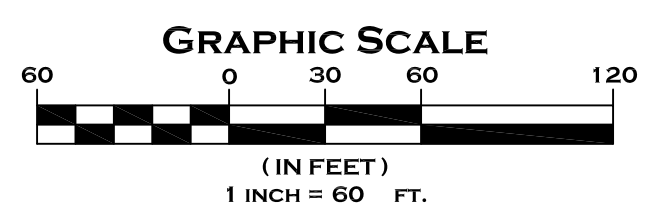


LEGEND	
	REAR WHEEL BASE EXTENTS
	FRONT WHEEL BASE EXTENTS
	TRACTOR TRAILER BODY EXTENTS



WB-67 DIMENSIONS - NOT TO SCALE

Feet	
Tractor Width	8.01
Trailer Width	10.50
Tractor Track	10.01
Trailer Track	10.50
Lock to Lock Time	6.0 s
Articulating Angle	28.4 deg
	75.0 deg



WB-67
SITE TRUCK ACCESS EXHIBIT

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

DIGGERS HOTLINE

CALL DIGGERS HOTLINE 811 or 1-800-242-8811
MILWAUKEE AREA 259-1881
WIS. STATUTE 182.075(1974)
REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

CARDNO / JF New, Inc. www.cardnojfnew.com 128 Sunset Drive Walkerton, Indiana 46574 Ph: 574-586-3400	6140 Cottonwood Road Suite A Fitchburg, Wisconsin 53719 Ph: 608-661-2965	6605 Steger Road Suite A Monee, Illinois 60449 Ph: 708-534-3450
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Stormwater Seed Mix		For Use on Stormwater Management Ponds (SMP) side slopes to Normal Water Line (NWL)		PLS
Botanical Name	Common Name			Ounces/Acre
Permanent Grasses/Sedges/Rushes:				
<i>Carex cristatella</i>	Crested Oval Sedge			1.00
<i>Carex frankii</i>	Bristly Cattail Sedge			1.00
<i>Carex lurida</i>	Bottlebrush Sedge			2.00
<i>Carex sparganioides v. cephaloidea</i>	Rough-Clustered Sedge			2.00
<i>Carex vulpinoidea</i>	Brown Fox Sedge			6.00
<i>Eleocharis ovata</i>	Blunt Spike Rush			0.50
<i>Elymus virginicus</i>	Virginia Wild Rye			12.00
<i>Glyceria striata</i>	Fowl Manna Grass			1.25
<i>Juncus effusus</i>	Common Rush			1.00
<i>Juncus torreyi</i>	Torrey's Rush			0.25
<i>Leersia oryzoides</i>	Rice Cut Grass			1.00
<i>Panicum virgatum</i>	Switch Grass			2.00
<i>Scirpus atrovirens</i>	Dark Green Rush			1.00
<i>Scirpus cyperinus</i>	Wool Grass			0.50
<i>Scirpus fluviatilis</i>	River Bulrush			0.25
<i>Scirpus validus</i>	Great Bulrush			6.00
Total				45.75

Temporary Cover:			
<i>Avena sativa</i>	Common Oat		360.00
<i>Lolium multiflorum</i>	Annual Rye		116.00
Total			476.00

Forbs:			
<i>Alisma</i> spp.	Water Plantain (Various Mix)		4.25
<i>Asclepias incarnata</i>	Swamp Milkweed		1.50
<i>Bidens</i> spp.	Bidens (Various Mix)		2.00
<i>Helenium autumnale</i>	Sneezeweed		3.00
<i>Mimulus ringens</i>	Monkey Flower		1.00
<i>Penthorum sedoides</i>	Ditch Stonecrop		0.50
<i>Polygonum pensylvanicum</i>	Pinkweed		4.00
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan		1.00
<i>Sagittaria latifolia</i>	Broad-Leaf Arrowhead		1.00
<i>Senna hebecarpa</i>	Wild Senna		1.00
<i>Thalictrum dasycarpum</i>	Purple Meadow Rue		2.00
Total			21.25

Approximate area of coverage:		
Total area (SF) of coverage surrounding SWM ponds:		37,610
Total area (acres) of coverage surrounding SWM ponds:		0.86

STORMWATER SEED MIX: NORTH SITE

CARDNO / JF New, Inc. www.cardnojfnew.com 128 Sunset Drive Walkerton, Indiana 46574 Ph: 574-586-3400	6140 Cottonwood Road Suite A Fitchburg, Wisconsin 53719 Ph: 608-661-2965	6605 Steger Road Suite A Monee, Illinois 60449 Ph: 708-534-3450
---	---	--

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Botanical Name	Common Name			Ounces/Acre
Permanent Grasses/Sedges/Rushes:				
<i>Carex cristatella</i>	Crested Oval Sedge			1.00
<i>Carex frankii</i>	Bristly Cattail Sedge			1.00
<i>Carex lurida</i>	Bottlebrush Sedge			2.00
<i>Carex sparganioides v. cephaloidea</i>	Rough-Clustered Sedge			2.00
<i>Carex vulpinoidea</i>	Brown Fox Sedge			6.00
<i>Eleocharis ovata</i>	Blunt Spike Rush			0.50
<i>Elymus virginicus</i>	Virginia Wild Rye			12.00
<i>Glyceria striata</i>	Fowl Manna Grass			1.25
<i>Juncus effusus</i>	Common Rush			1.00
<i>Juncus torreyi</i>	Torrey's Rush			0.25
<i>Leersia oryzoides</i>	Rice Cut Grass			1.00
<i>Panicum virgatum</i>	Switch Grass			2.00
<i>Scirpus atrovirens</i>	Dark Green Rush			1.00
<i>Scirpus cyperinus</i>	Wool Grass			0.50
<i>Scirpus fluviatilis</i>	River Bulrush			0.25
<i>Scirpus validus</i>	Great Bulrush			6.00
Total				45.75

Temporary Cover:			
<i>Avena sativa</i>	Common Oat		360.00
<i>Lolium multiflorum</i>	Annual Rye		116.00
Total			476.00

Forbs:			
<i>Alisma</i> spp.	Water Plantain (Various Mix)		4.25
<i>Asclepias incarnata</i>	Swamp Milkweed		1.50
<i>Bidens</i> spp.	Bidens (Various Mix)		2.00
<i>Helenium autumnale</i>	Sneezeweed		3.00
<i>Mimulus ringens</i>	Monkey Flower		1.00
<i>Penthorum sedoides</i>	Ditch Stonecrop		0.50
<i>Polygonum pensylvanicum</i>	Pinkweed		4.00
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan		1.00
<i>Sagittaria latifolia</i>	Broad-Leaf Arrowhead		1.00
<i>Senna hebecarpa</i>	Wild Senna		1.00
<i>Thalictrum dasycarpum</i>	Purple Meadow Rue		2.00
Total			21.25

Approximate area of coverage:		
Total area (SF) of coverage surrounding SWM ponds:		39,710
Total area (acres) of coverage surrounding SWM ponds:		0.91

STORMWATER SEED MIX: SOUTH SITE

Zoning Classification: Industrial

Site Landscaping Requirements

Street trees shall be planted or payment in lieu of planting for developed and/or subdivided lands.

All yards sodded or seeded on at least 4" of topsoil.

	North Site	South Site
LF of Rockfield Rd. Frontage:	1,271 LF	0 LF
Street Trees Shown:	25 Trees	0 Trees
LF of Goldendale Rd. Frontage:	664 LF	872 LF
Street Trees Shown:	17 Trees	26 Trees

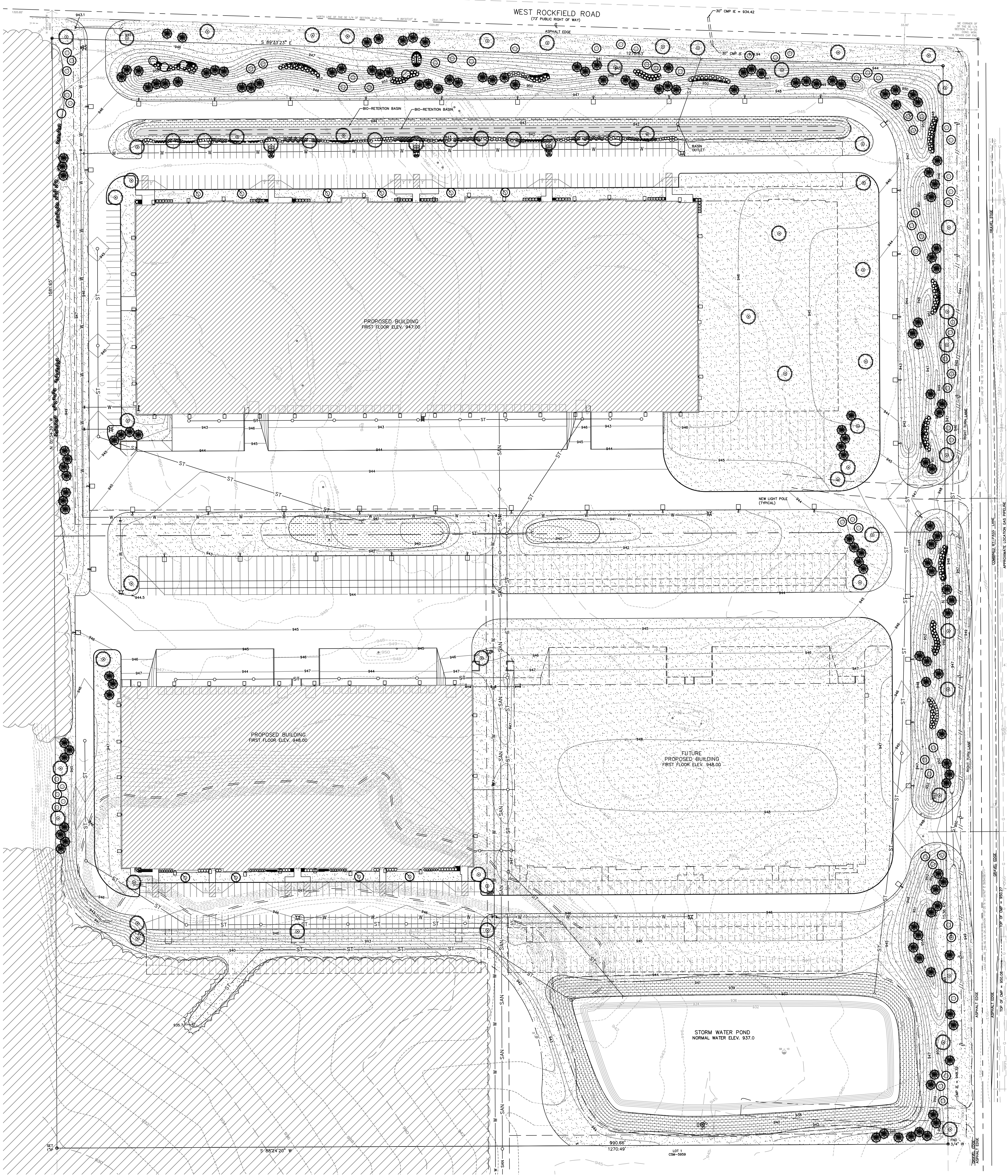
Parking Lot Landscaping

A minimum of 5% of the parking lot area to be landscaped. At a rate of 1 tree (2" cal.) per 10 spaces. Perimeter screening shall be provided of at least 5' wide. Evergreens shall be used adjacent to other lots.

	North Site	South Site
Area of Parking Lot:	55,020 SF	59,422 SF
Percent of Landscape Area:	5.0%	5.0%
Required Landscape Area:	2,751.0 SF	2,971.1 SF
Landscape Area Shown:	3,387.0 SF	3,406.0 SF

Number of Parking Spaces:	196 Spaces	141 Spaces
Required Number of Trees:	19.6 Trees	14.1 Trees
Number of Trees Shown:	25 Trees	14 Trees

CODE REQUIREMENTS



OVERALL LANDSCAPE PLAN

Scale: 1" = 60'0"

OVERALL LANDSCAPE PLAN

DICKMAN GERMANTOWN

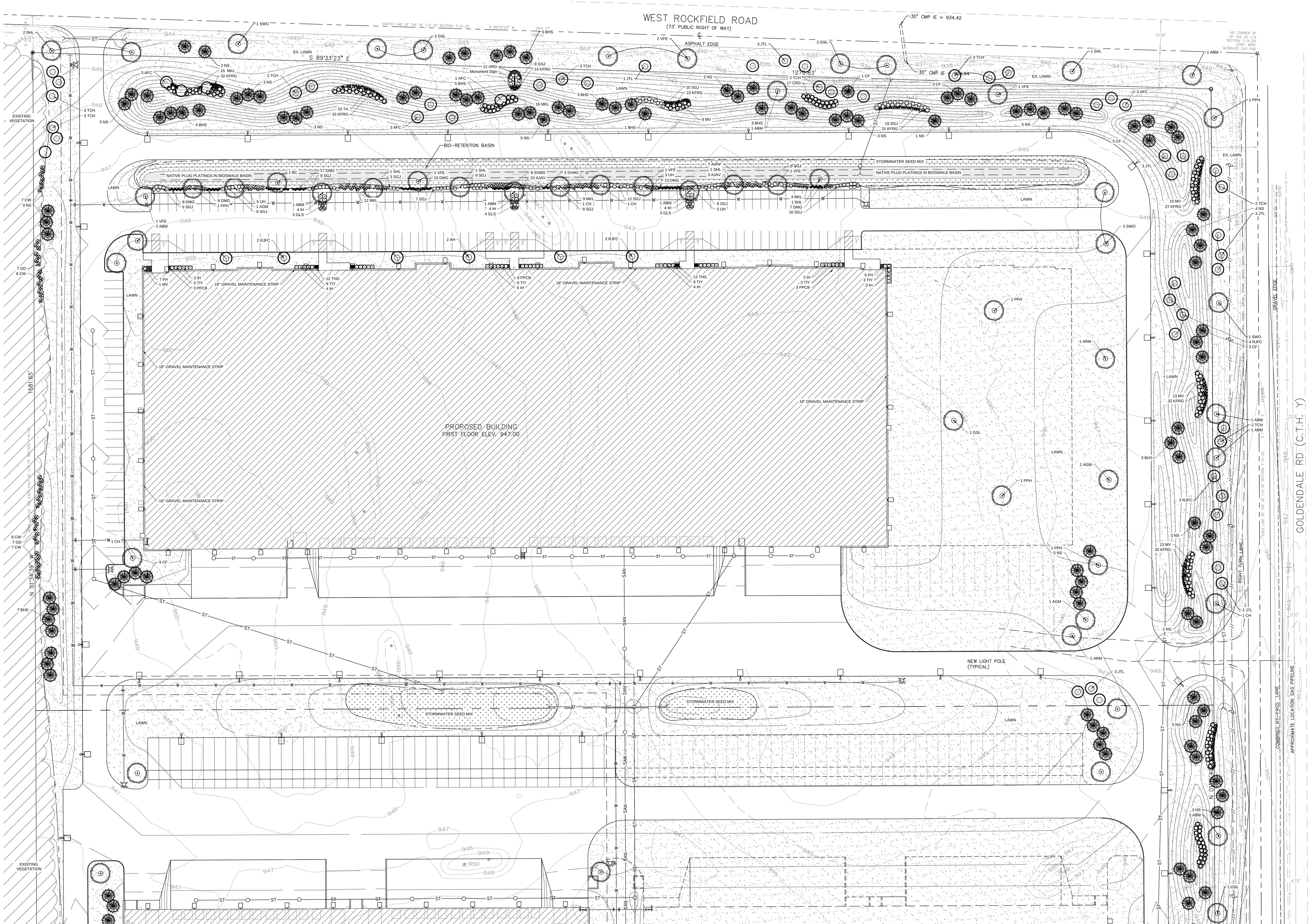
SW CORNER - ROCKFIELD RD & GOLDENDALE RD
GERMANTOWN, WI 53022

JOB:	3172
DRAWN:	PCA
CHECKED:	WDH
DATE:	SEPTEMBER 5, 2019
SHEET:	

DIGGERS HOTLINE

CALL DIGGERS HOTLINE
811 or 1-800-242-8811
MID. AREA 253-1881
WS STATUTE 182.07(5)(974)
REQUIRES MIN. 3 BOD. DAYS
NOTICE BEFORE YOU EXCAVATE

- SHADE TREES (DECIDUOUS)**
- ARM Armstrong Red Maple
 - ABM Autumn Blaze Maple
 - CH Common Hackberry
 - PHH Prairie Pride Hackberry
 - SHL Skyline Honeylocust
 - AGM Autumn Gold Maidenhair
 - SWO Swamp White Oak
 - BC Bald Cypress
 - GSL Greenspire Linden
 - VFE Valley Forge American Elm
- ORNAMENTAL TREES (DECIDUOUS)**
- AH American Hornbeam
 - TCH Thornless Cockspur Hawthorn
 - AFC Adams Flowering Crabapple
 - RJFC Red Jewel Flowering Crabapple
 - JTL Ivory Silk Japanese Tree Lilac
- EVERGREEN TREES**
- CF Concolor Fir
 - NS Norway Spruce
 - BHS Black Hills Spruce
- EVERGREEN SHRUBS**
- SGJ Sea Green Juniper
 - GSI Green Sargent Juniper
 - TIY Taunton Intermediate Yew
- DECIDUOUS SHRUBS**
- GD Gray Dogwood
 - CRD Cardinal Redtwig Dogwood
 - CW Common Witchhazel
 - IH Incrediball Hydrangea
 - TA Tardiva Hydrangea
 - UH Unique Hydrangea
 - GLS Gro Low Fragrant Sumac
 - MKL Miss Kim Dwarf Lilac
 - AJAW Autumn Jazz Arrowwood Viburnum
 - MV Mohican Viburnum
- ORNAMENTAL GRASSES**
- KFRG Karl Foerster Feather Reed Grass
 - THG Tufted Hair Grass
 - DMG Dwarf Maidengrass
 - SVMG Silver Variegated Maidengrass
- HERBACEOUS PERENNIALS**
- HRD Happy Returns Daylily
 - PPCB Palace Purple Coralbells
 - FH Francee Hosta
- PLANT ABBREVIATIONS**



BIOSWALE LIVE PLUG PLANTINGS					
Plant Spacing:		18" on-center		Total Area:	12,507 SF
				Total Required Plants:	5559 Plants
QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	NOTES
926	<i>Aesclepias incarnata</i>	Swamp Milkweed	Qt.	18" o.c.	Full, well rooted plant, evenly shaped
926	<i>Aster nova-angliae</i>	New England Aster	Qt.	18" o.c.	Full, well rooted plant, evenly shaped
926	<i>Carex vulpinoidea</i>	Fox Sedge	Qt.	18" o.c.	Full, well rooted plant, evenly shaped
926	<i>Physostegia virginiana</i>	Obedient Plant	Qt.	18" o.c.	Full, well rooted plant, evenly shaped
926	<i>Spartina pectinata</i>	Prairie Cord Grass	Qt.	18" o.c.	Full, well rooted plant, evenly shaped
926	<i>Verbena hastata</i>	Blue Vervain	Qt.	18" o.c.	Full, well rooted plant, evenly shaped

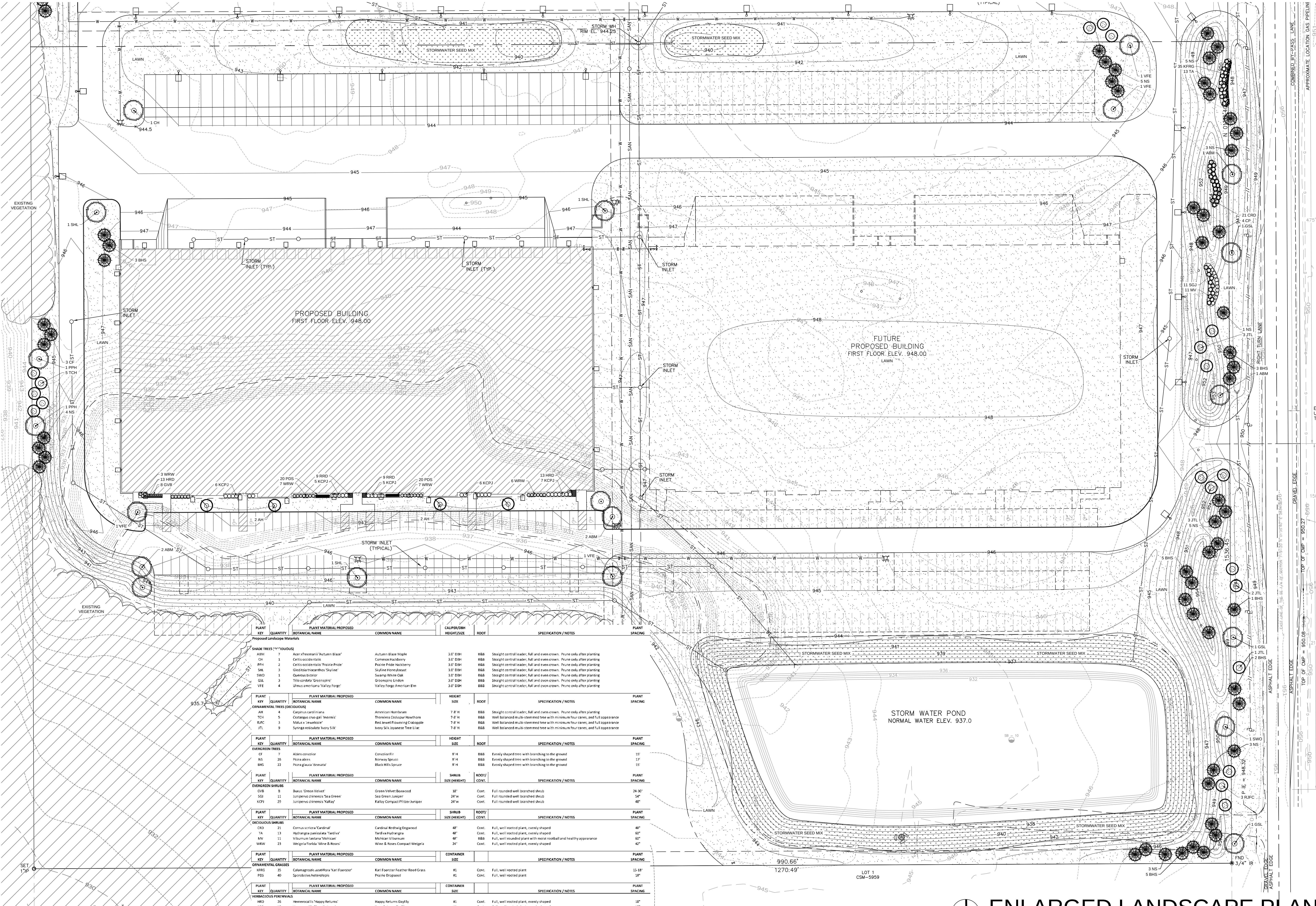


ENLARGED LANDSCAPE PLAN

Scale: 1" = 40'0"



CALL DIGGERS HOTLINE
811 or 1-800-242-8811
NEED AREA 250' x 100'
WE STRIKE 150' (75' x 75')
REQUIRES MIN. 3' BORN 0.4%
NOTICE BEFORE YOU EXCAVATE



PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED	COMMON NAME	HEIGHT / DBH	ROOT	SPECIFICATION / NOTES	PLANT SPACING
Proposed Landscape Materials							
SHADE TREES ("TODIGUS")							
ASH	7	Acer Freemanii 'Naxium Blue'	Autumn Blaze Maple	3.0' DBH	BSB	Straight central leader, full and even crown. Prune only after planting	
CH	1	Cornus occidentalis	Common Hackberry	3.0' DBH	BSB	Straight central leader, full and even crown. Prune only after planting	
PH	3	Cornus occidentalis 'Prairie Pride'	Prairie Pride Hackberry	3.0' DBH	BSB	Straight central leader, full and even crown. Prune only after planting	
SHL	3	Gleditsia triacanthos 'Skyline'	Skyline Honeylocust	3.0' DBH	BSB	Straight central leader, full and even crown. Prune only after planting	
SWD	1	Quercus bicolor	Swamp White Oak	3.0' DBH	BSB	Straight central leader, full and even crown. Prune only after planting	
GSL	3	Tilia cordata 'Greenspire'	Greenspire Linden	3.0' DBH	BSB	Straight central leader, full and even crown. Prune only after planting	
VFE	4	Ulmus americana 'Valley Forge'	Valley Forge American Elm	3.0' DBH	BSB	Straight central leader, full and even crown. Prune only after planting	
ORNAMENTAL TREES (DECIDUOUS)							
AM	4	Carpinus caroliniana	American Hornbeam	7.8' H	BSB	Straight central leader, full and even crown. Prune only after planting	
TCU	5	Cornus coccinea 'Inermis'	Thornless Coccinea Hawthorn	7.8' H	BSB	Well balanced multi-stemmed tree with minimum four stems, and full appearance	
RFC	3	Malus 'Jewelcolor'	Red Jewel Flowering Crabapple	7.8' H	BSB	Well balanced multi-stemmed tree with minimum four stems, and full appearance	
JTL	3	Syringa reticulata 'Kerry Silk'	Kerry Silk Japanese Tree Lilac	7.8' H	BSB	Well balanced multi-stemmed tree with minimum four stems, and full appearance	
EVERGREEN TREES							
AD	7	Adiantum ciliatum	Common Fern	8' H	BSB	Evenly shaped tree with branching to the ground	15'
NS	25	Pinus strobus	Norway Spruce	8' H	BSB	Evenly shaped tree with branching to the ground	17'
BHS	22	Pinus glauca 'Sonsol'	Black Hills Spruce	8' H	BSB	Evenly shaped tree with branching to the ground	15'
SHRUBS							
GVV	3	Baccharis 'Green Velvet'	Green Velvet Broomrape	36"	Cont.	Full rounded well branched shrub	24' x 30'
SSG	11	Juniperus chinensis 'Sea Green'	Sea Green Juniper	24" W	Cont.	Full rounded well branched shrub	34'
KCP	23	Juniperus chinensis 'Kobold'	Kobold Compact Juniper	24" W	Cont.	Full rounded well branched shrub	48"
HERBACEOUS PERENNIALS							
CRD	25	Coreopsis 'Cardinal'	Cardinal Redtop Englemann	48"	Cont.	Full, well rooted plant, evenly shaped	48"
TA	13	Hieracium pinnatifidum 'Tadpole'	Tadpole Hieracium	48"	Cont.	Full, well rooted plant, evenly shaped	60"
NR	11	Quercus bicolor 'Naxium'	Naxium White Oak	48"	Cont.	Full, well rooted plant with round canopy and healthy appearance	60"
WRW	23	Wegelia Florida 'Vine & Rose'	Vine & Rose Compact Wegelia	24"	Cont.	Full, well rooted plant, evenly shaped	42"
GRASSES							
KFRG	85	Calamagrostis canadensis 'Karl Foerster'	Karl Foerster Feather Reed Grass	#1	Cont.	Full, well rooted plant	15' x 18'
PDS	40	Sporobolus heterostachyus	Prune Dropseed	#1	Cont.	Full, well rooted plant	34"
HERBACEOUS PERENNIALS							
HRD	26	Hemerocallis 'Happy Returns'	Happy Returns Daylily	#1	Cont.	Full, well rooted plant, evenly shaped	34"
RSD	18	Hemerocallis 'Roses Returns'	Roses Returns Daylily	#1	Cont.	Full, well rooted plant, evenly shaped	34"
PLANT KEY							
KEY	QUANTITY	PLANT MATERIAL PROPOSED	COMMON NAME	CONTAINER	SIZE	SPECIFICATION / NOTES	PLANT SPACING
LAWN	5517	Lawn Establishment Area / Grading Area					
55070		Lawn Establishment Area / Grading Area	see plan for area delineation	5Y	Reeder's Deluxe 50 Seed Mix (800-785-3300)		
4612		Stormwater Seed Mix	see plan for area delineation	5Y	Enforce 5075 Erosion Control Blankets (or approved equiv)		
Hardscape Materials							
52		Heritage Blue Granite Mulch (3.0" x 3.0" pieces)	Area: 825 SF		7" depth		
555		Aluminum Edge Restraint (grout areas)	Perimeter Profile: 3/8" x 3/8" Black Duraflex Finish	1P			
825		Landscape Fabric	Under Gravel Areas Only	5P			
59		Shredded Hardwood Mulch (1" depth)	Area: 6,325 SF				
39		Soil Amendments (1" depth)	Area: 6,325 SF				
3294		Paverstone Topsoil (4" over lawn areas)	Area: 535,265 SF				
39		Paverstone Topsoil (2" over bed areas)	Area: 6,325 SF				

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

Seed Composition:
Reeder's Deluxe 50 Seed Mix (800-785-3300)

20% Kentucky Bluegrass (Seed Quality)
10% Kentucky Bluegrass
10% Ken Blue Kentucky Bluegrass
25% Creeping Red Fescue

15% Quaker Pinnatifid Ryegrass
10% Fescue Pinnatifid Ryegrass

Seed at rate of 150-200 lbs per acre

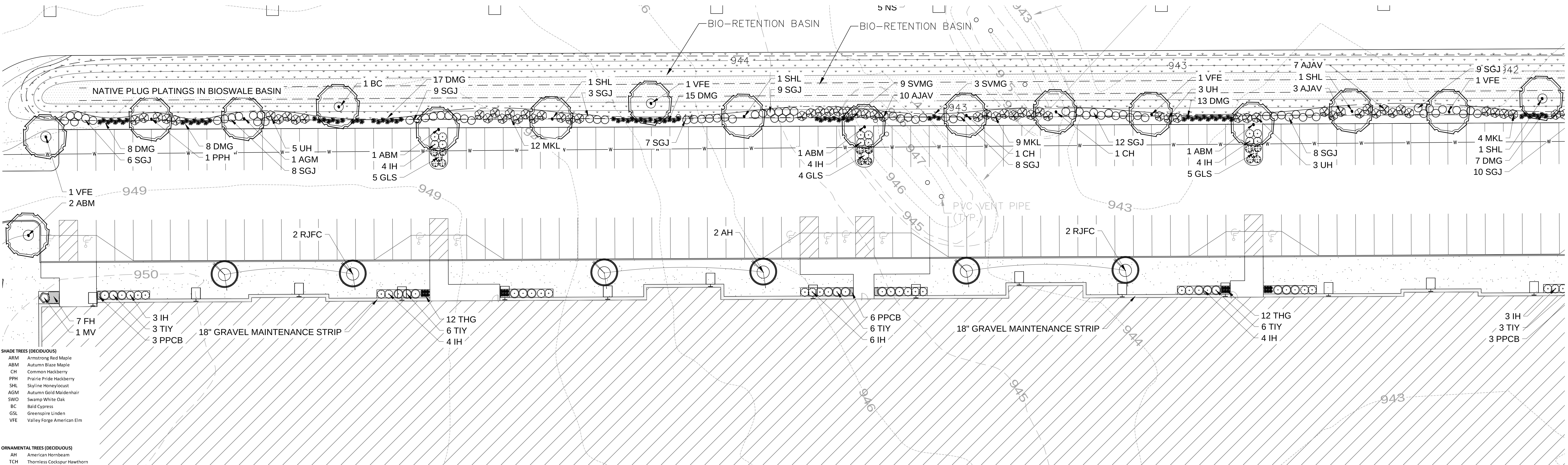


ENLARGED LANDSCAPE PLAN

Scale: 1" = 40'0"



CALL DIGGERS HOTLINE
811 or 1-800-242-8811
MILWAUKEE AREA 253-1881
WIS. STATUTE 182.07(5)(974)
REQUIRES MIN. 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE



SHADE TREES (DECIDUOUS)
ARM Armstrong Red Maple
ABM Autumn Blaze Maple
CH Common Hackberry
PPH Prairie Pride Hackberry
SHL Skyline Honeylocust
AGM Autumn Gold Maidenhair
SWO Swamp White Oak
BC Bald Cypress
GSL Greenspire Linden
VFE Valley Forge American Elm

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JTL Ivory Silk Japanese Tree Lilac

EVERGREEN TREES
CF Concolor Fir
NS Norway Spruce
BHS Black Hills Spruce

EVERGREEN SHRUBS
SGJ Sea Green Juniper
GSJ Green Sargent Juniper
TIY Taunton Intermediate Yew

DECIDUOUS SHRUBS
GD Gray Dogwood
CRD Cardinal Redtwig Dogwood
CW Common Witchhazel
IH Incrediball Hydrangea
TA Tardiva Hydrangea
UH Unique Hydrangea
GLS Gro Low Fragrant Sumac
MKL Miss Kim Dwarf Lilac
AJAV Autumn Jazz Arrowwood Viburnum
MV Mohican Viburnum

ORNAMENTAL GRASSES
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THG Tufted Hair Grass
DMG Dwarf Maidengrass
SVMG Silver Variegated Maidengrass

HERBACEOUS PERENNIALS
HRD Happy Returns Daylily
PPCB Palace Purple Coralbells
FH French Hosta

PLANT ABBREVIATIONS

SHADE TREES (DECIDUOUS)
ABM Autumn Blaze Maple
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NS Norway Spruce
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EVERGREEN SHRUBS
GVB Green Velvet Boxwood
SGJ Sea Green Juniper
KCPJ Kallay Compact Pfritzer Juniper

DECIDUOUS SHRUBS
CRD Cardinal Redtwig Dogwood
TA Tardiva Hydrangea
MV Mohican Viburnum
WRW Wine & Roses Compact Weigela

ORNAMENTAL GRASSES
KFRG Karl Foerster Feather Reed Grass
PDS Prairie Dropseed

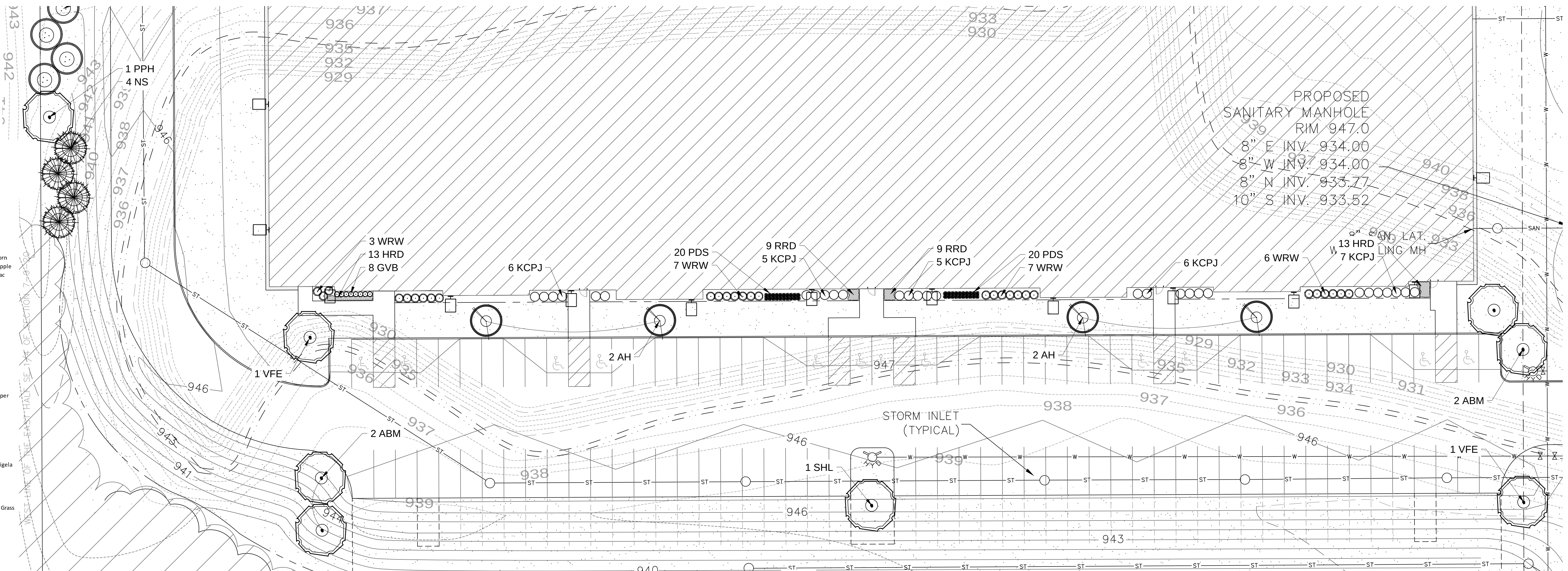
HERBACEOUS PERENNIALS
HRD Happy Returns Daylily
RRD Rosy Returns Daylily

PLANT ABBREVIATIONS



FOUNDATION LANDSCAPE PLAN: NORTH BUILDING

Scale: 1" = 20'0"



FOUNDATION LANDSCAPE PLAN: SOUTH BUILDING

Scale: 1" = 20'0"

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DO IN RESCUE

DIGGERS

HOTLINE

CALL DIGGERS HOTLINE

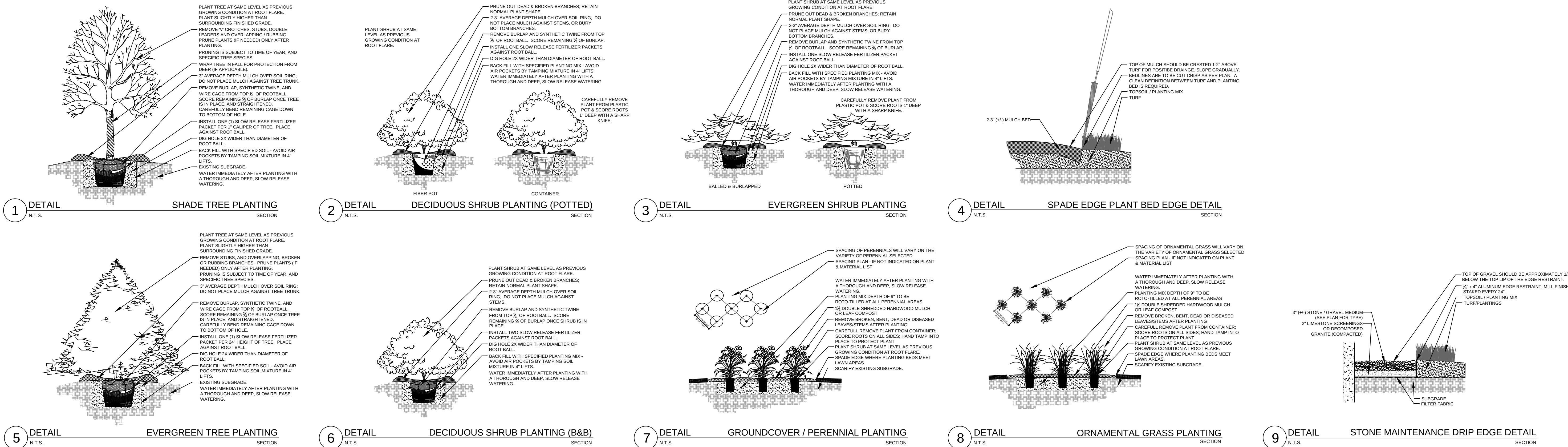
811 or 1-800-242-8811

NEED AREA 250'-180'

MS STATUTE 182.075(1974)

REQUIRES MAX 3 WORK DAYS

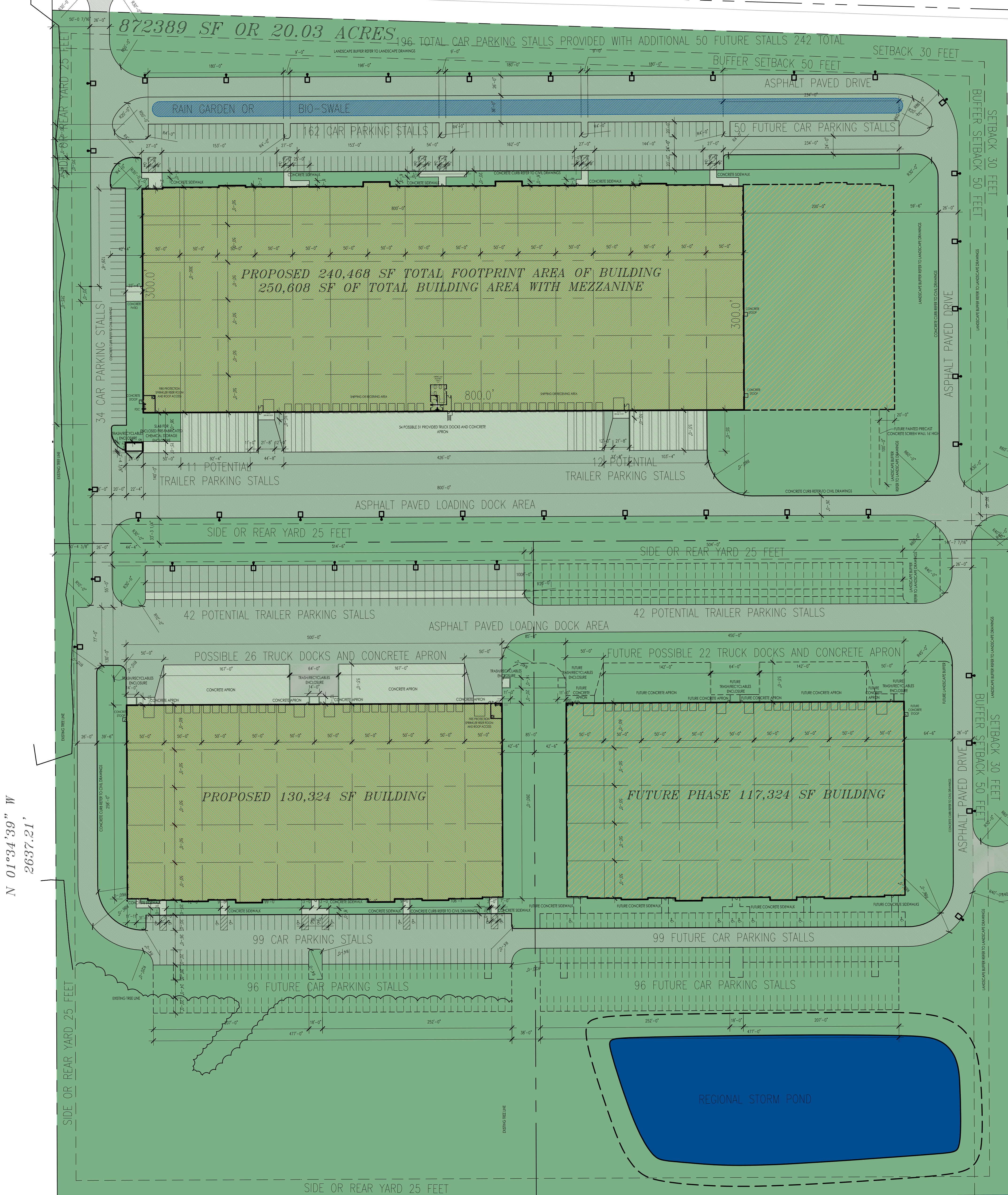
NOTICE BEFORE YOU EXCAVATE



PROPOSED 30 FOOT WIDE ACCESS DRIVE
TO BE APPROVED BY VILLAGE

S 89°33'23" E 1320.85'

ROCKFIELD ROAD



GOLDENDALE ROAD

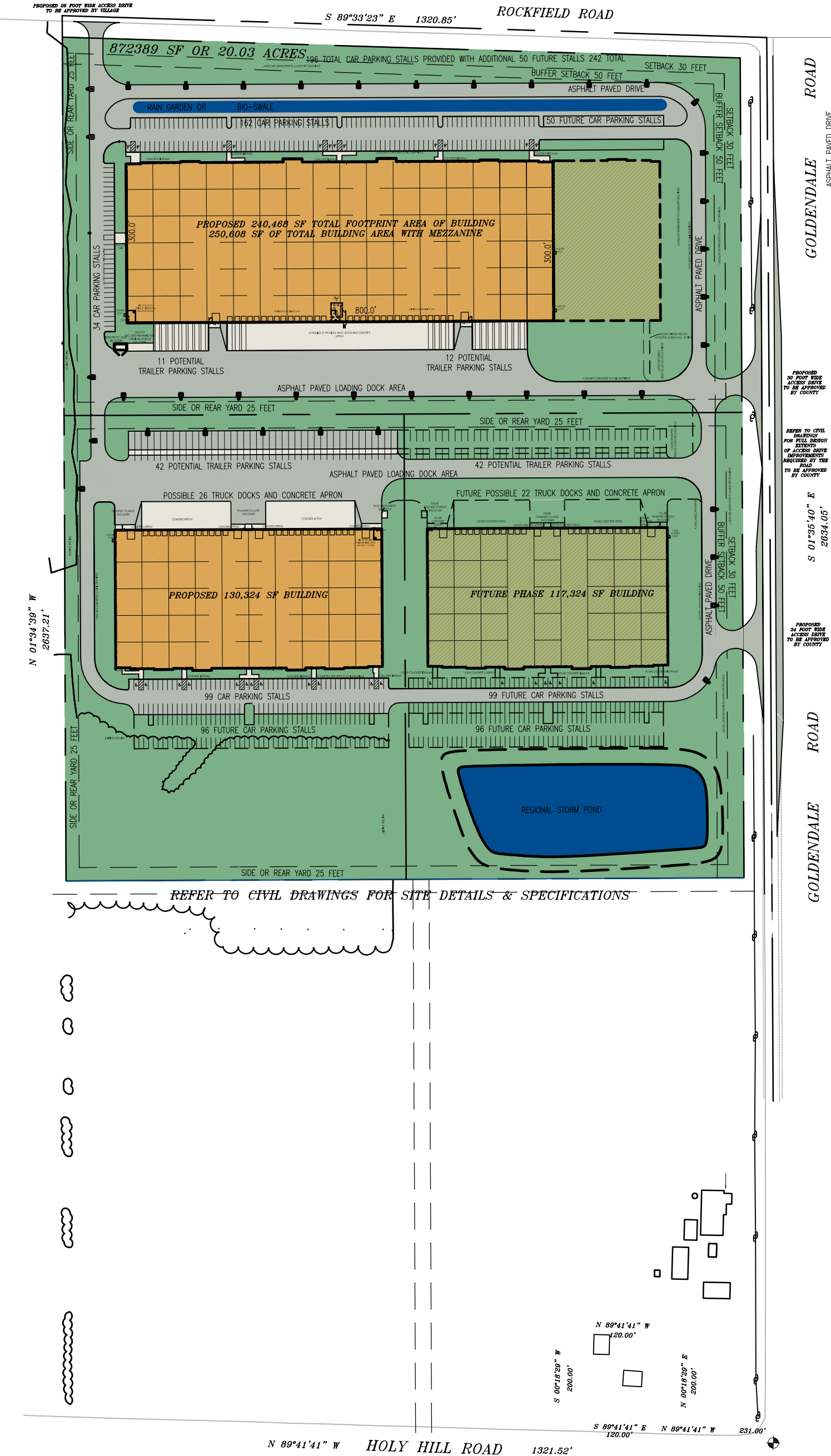
ASPHALT PAVED DRIVE

PROPOSED
30 FOOT WIDE
ACCESS DRIVE
TO BE APPROVED
BY COUNTY

REFER TO CIVIL
DRAWINGS
FOR FULL DESIGN
EXTENTS
OF ACCESS DRIVE
IMPROVEMENTS
REQUIRED BY THE
ROAD
TO BE APPROVED
BY COUNTY

S 01°35'40" E
2634.05'

GOLDENDALE ROAD



GENERAL SITE STATISTICS:

SITE IS CURRENTLY ZONED A1 AGRICULTURAL.

WE PROPOSE AND HAVE SUBMITTED TO REZONE M1 LIMITED INDUSTRIAL.

TOTAL CURRENT OVERALL SITE AREA (LOT 2, 3 AND 4) AREA: 1,980,498 SF OR 45.47 ACRES.

PROPOSED NORTH LOT TOTAL AREA: 872,456 SF OR 20.03 ACRES.

PROPOSED BUILDING AREA 240,468 SF

PROPOSED PAVEMENT AREA 255,760 SF

PROPOSED TOTAL IMPERVIOUS AREA 496,228 SF

PROPOSED FUTURE BUILDING 60,034 SF

PROPOSED FUTURE PAVEMENT 33,280 SF

PROPOSED FUTURE TOTAL IMPERVIOUS 93,314 SF

TOTAL IMPERVIOUS AREA 589,542 SF

TOTAL OPEN SPACE AREA 282,914 SF

GREEN SPACE PROVIDED IS 32.4%

NORTH PARKING:

REQUIRED AND PROVIDED 196 TOTAL 9X20 STALLS PROPOSED.

FUTURE PROVIDED 50 ADDITIONAL 9X20 STALLS AVAILABLE.

TRAILER PARKING 23 TOTAL 12X53 STALLS PROVIDED WITH 18 POSSIBLE FUTURE LOCATIONS.

PROPOSED SOUTH LOT TOTAL AREA: 1,108,042 SF OR 25.44 ACRES.

PROPOSED BUILDING AREA 130,324 SF

PROPOSED PAVEMENT AREA 198,483 SF

PROPOSED TOTAL IMPERVIOUS AREA 328,807 SF

PROPOSED FUTURE BUILDING 130,324 SF

PROPOSED FUTURE PAVEMENT 158,006 SF

PROPOSED FUTURE TOTAL IMPERVIOUS 288,330 SF

TOTAL IMPERVIOUS AREA 617,137 SF

TOTAL OPEN SPACE AREA 490,905 SF

GREEN SPACE PROVIDED IS 44.3%

SOUTH PARKING:

REQUIRED AND PROVIDED 99 TOTAL 9X20 STALLS PROPOSED AND PROVIDED.

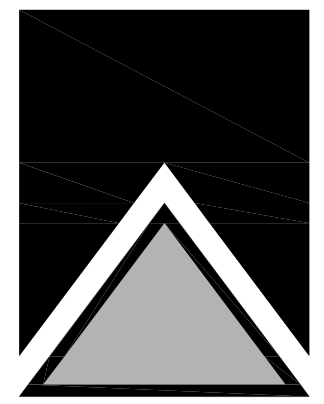
FUTURE PROVIDED 291 ADDITIONAL 9X20 STALLS AVAILABLE.

TRAILER PARKING 42 TOTAL 12X53 STALLS PROVIDED WITH 42 FUTURE POSSIBLE LOCATIONS.

GENERAL SITE NOTE:
REFER TO CIVIL DRAWINGS FOR ADDITIONAL SITE INFORMATION AS WELL AS LANDSCAPE
DRAWINGS AND EXTERIOR LIGHTING PHOTOMETRIC DRAWING AND LIGHTING CUT SHEETS
FOR SITE PLANTINGS PROPOSED.

2 SITE PLAN
Scale: 1" = 60'-0"

BRIORN



DESIGN GROUP
3805 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD, WISCONSIN 53005-1660
(262) 784-6500 PHONE
(262) 784-6505 FAX

OVERALL SITE PLANS

SHEET TITLE

PROPOSED BUILDING:
ILLING COMPANY, INC.
SW CORNER - ROCKFIELD RD & GOLDENDALE RD
GERMANTOWN, WI 53022

JOB: 3172
DRAWN: DF
CHECKED: DF
DATE: JULY 12, 2019
SHEET:

A0.1

ROCKFIELD ROAD

BOOK

CONVENT

ASPHALT PAVED DRIVE

PROPOSED
30 FOOT WIDE
ACCESS DRIVE
TO BE APPROVED
BY COUNTY

REFER TO CIVIL
DRAWINGS
FOR FULL DESIGN
EXTENTS
OF ACCESS DRIVE
IMPROVEMENTS
REQUIRED BY THE
ROAD
TO BE APPROVED
BY COUNTY

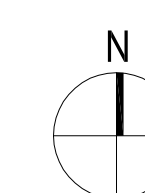
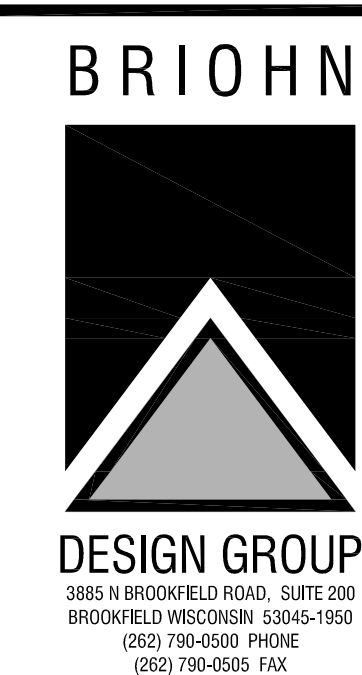
NORTH SITE PLAN

SHEET TWO

PROPOSED BUILDING:
ILLING COMPANY, INC.
SW CORNER - ROCKFIELD RD & GOLDENDALE RD
GERMANTOWN, WI 53022

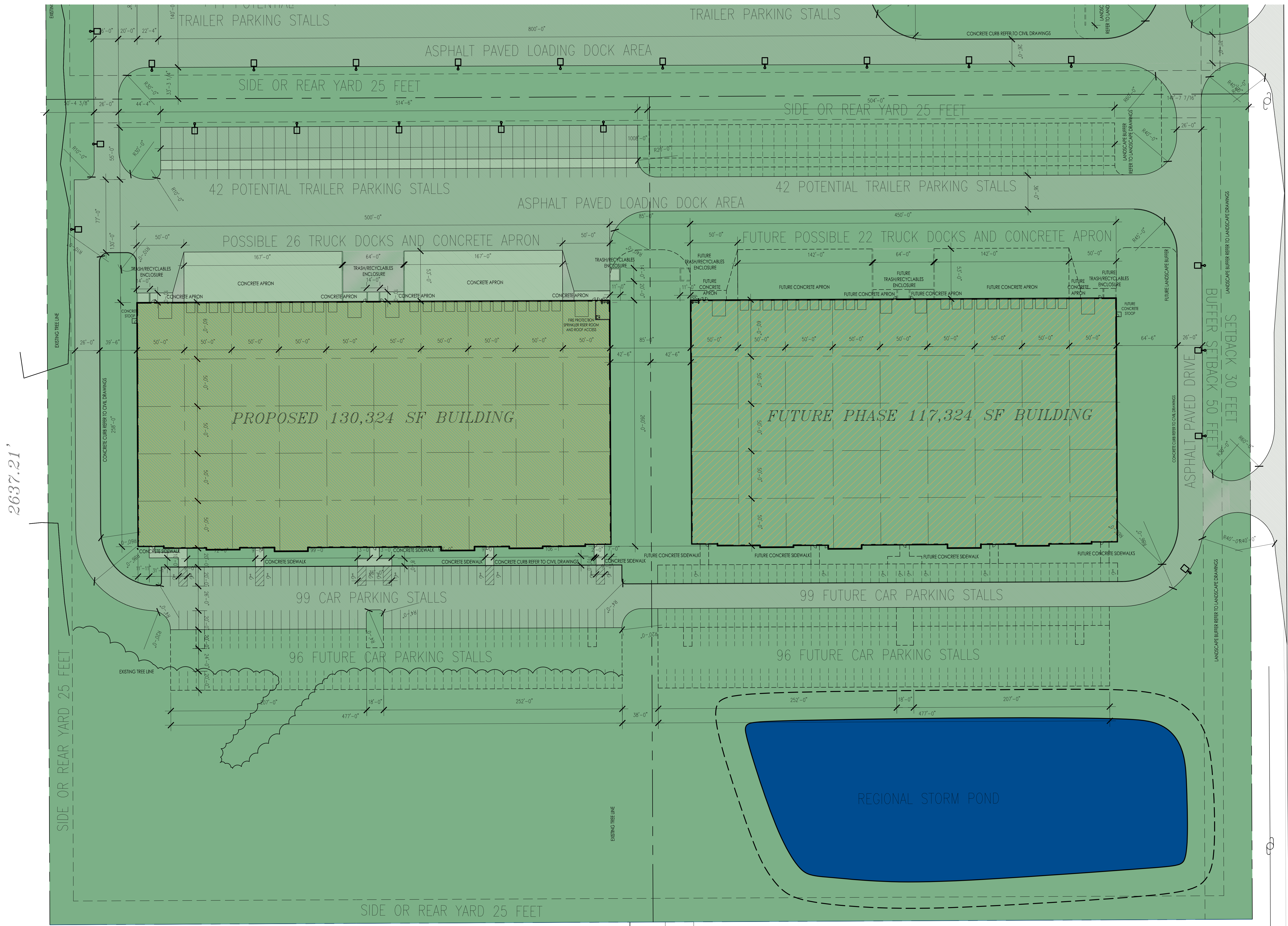
JOB: 3172
DRAWN: DF
CHECKED: DF
DATE: JULY 12, 2019
SHEET:

A0.2



1

SITE PLAN
Scale: 1" = 40'-0"



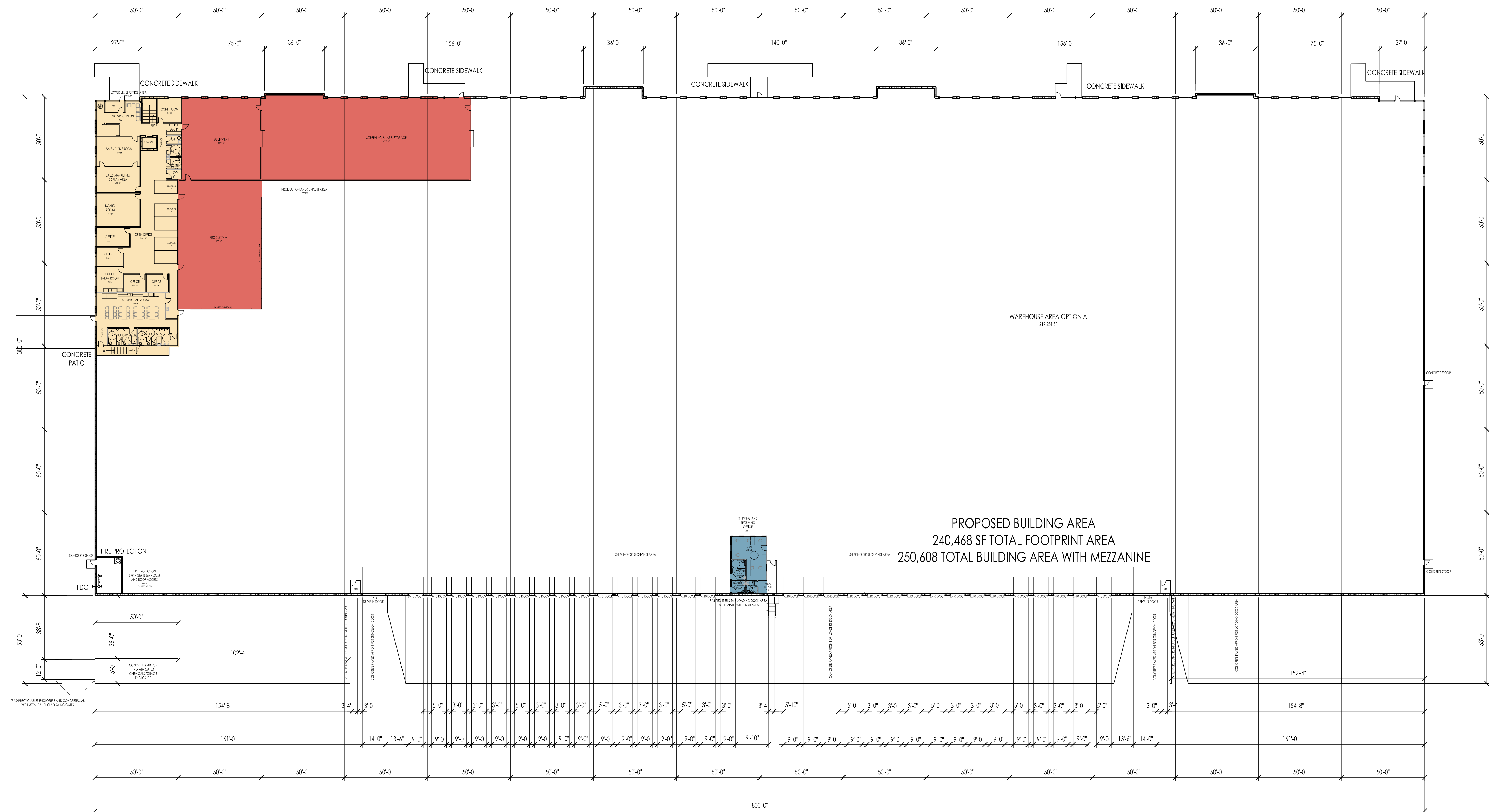
PROPOSED
30 FOOT WIDE
ACCESS DRIVE
TO BE APPROVED
BY COUNTY

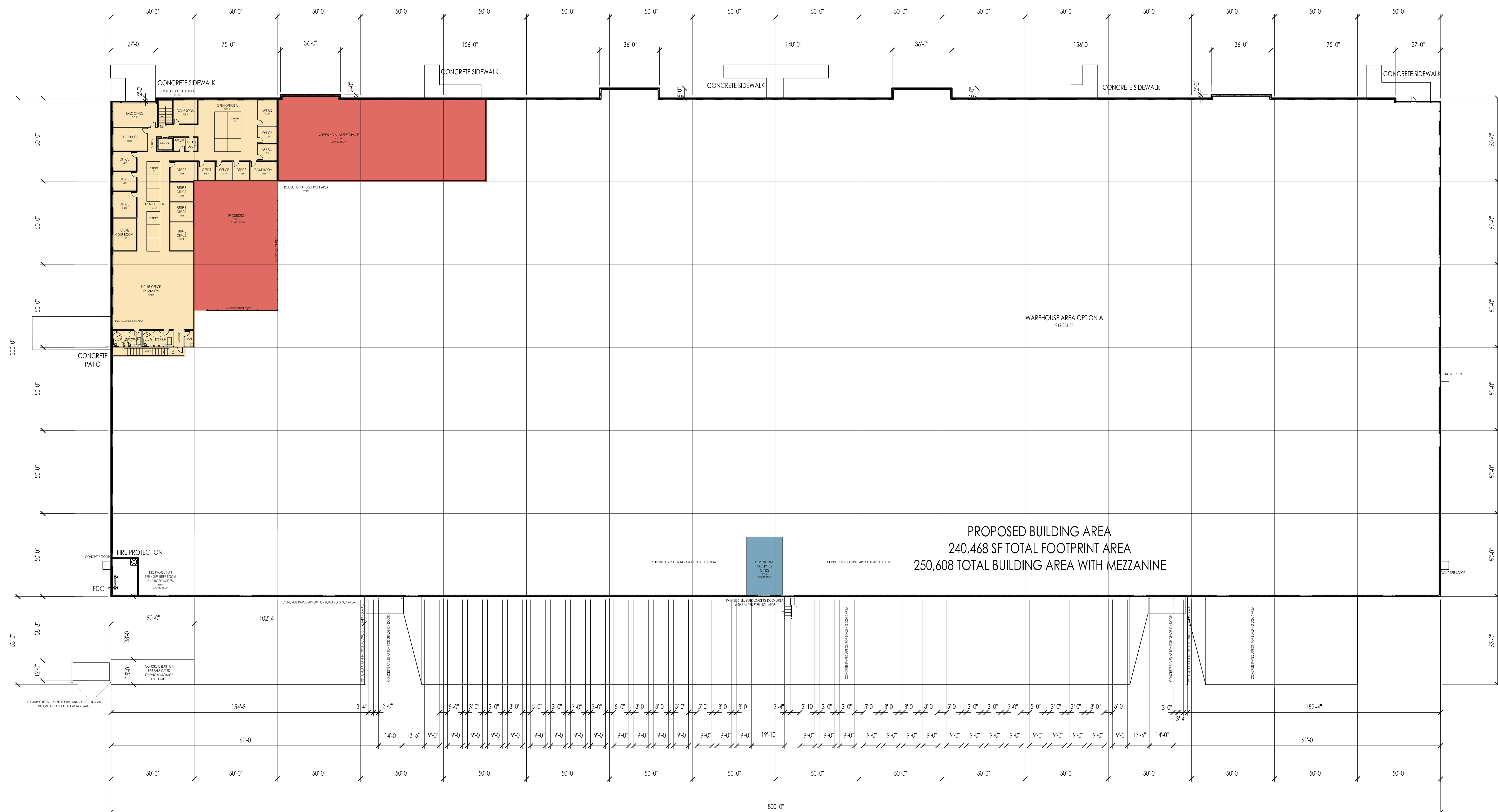
REFER TO CIVIL
DRAWINGS
FOR FULL DESIGN
EXTENTS
OF ACCESS DRIVE
IMPROVEMENTS
REQUIRED BY THE
ROAD
TO BE APPROVED
BY COUNTY

S 01°35'40" E
2634.05'

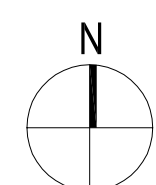
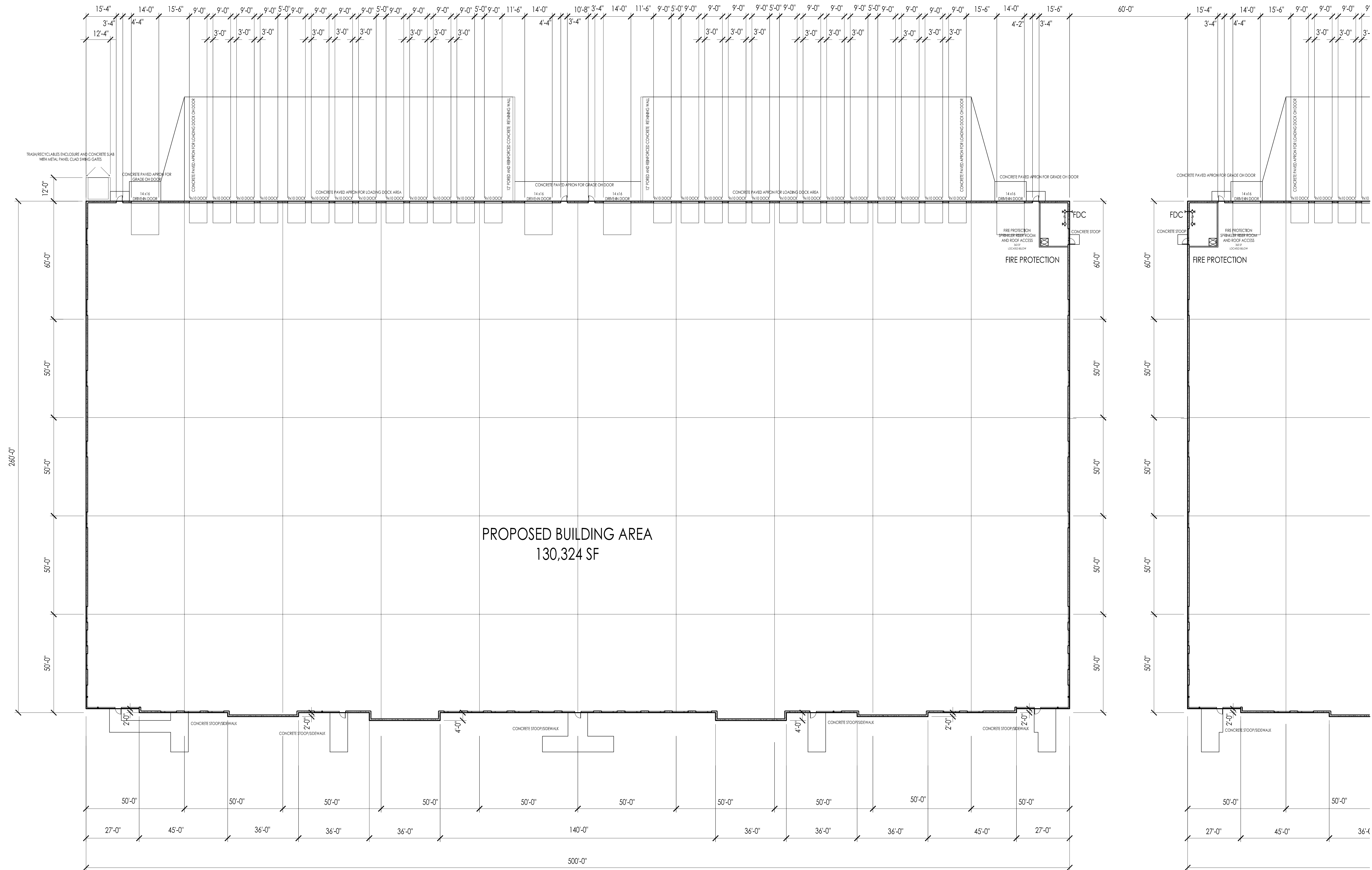
PROPOSED
34 FOOT WIDE
ACCESS DRIVE
TO BE APPROVED
BY COUNTY

OLDENDALE ROAD





N
1
NORTH BUILDING UPPER LEVEL
Scale: 1" = 30'-0"



1 SOUTH BUILDING FLOOR PLAN (WEST)
Scale: 1" = 20'-0"

BRIOHN
DESIGN GROUP
3885 N. BROOKFIELD ROAD, SUITE 200
BROOKFIELD, WISCONSIN 53005-1950
(262) 786-6500 PHONE
(262) 786-6505 FAX

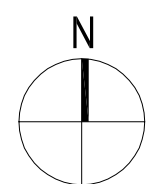
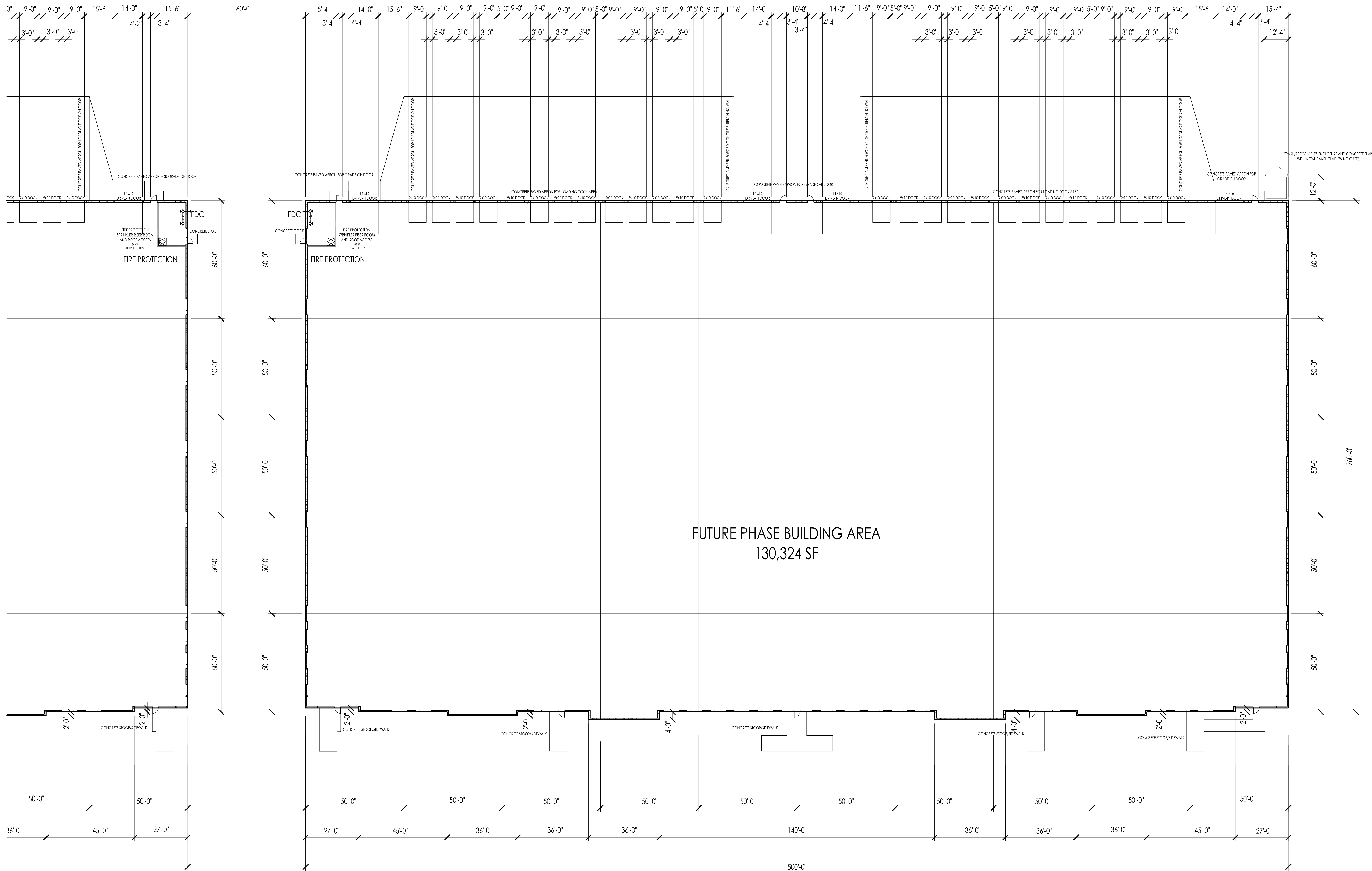
SOUTH FLOOR PLAN
TYPICAL FOR
PROPOSED WEST BUILDING

SHEET TITLE

PROPOSED BUILDING:
DICKMAN GERMANTOWN
SW CORNER - ROCKFIELD RD & GOLDENDALE RD
GERMANTOWN, WI 53022

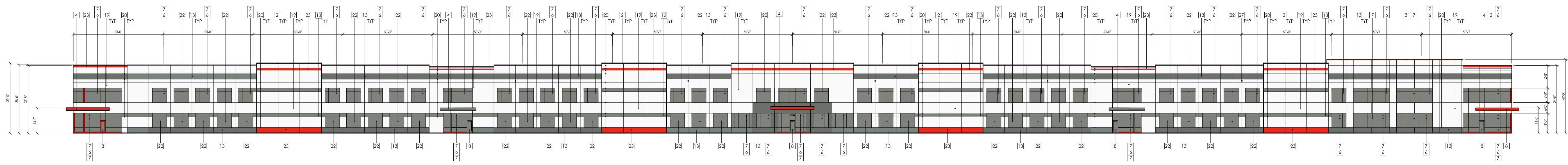
JOB:	3172
DRAWN:	DF
CHECKED:	DF
DATE:	JULY 12, 2019
SHEET:	

A1.3

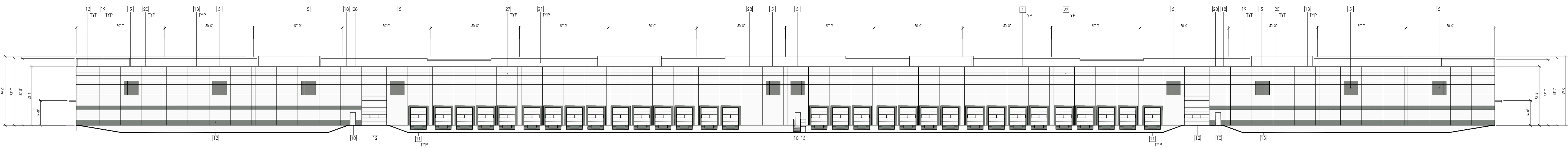


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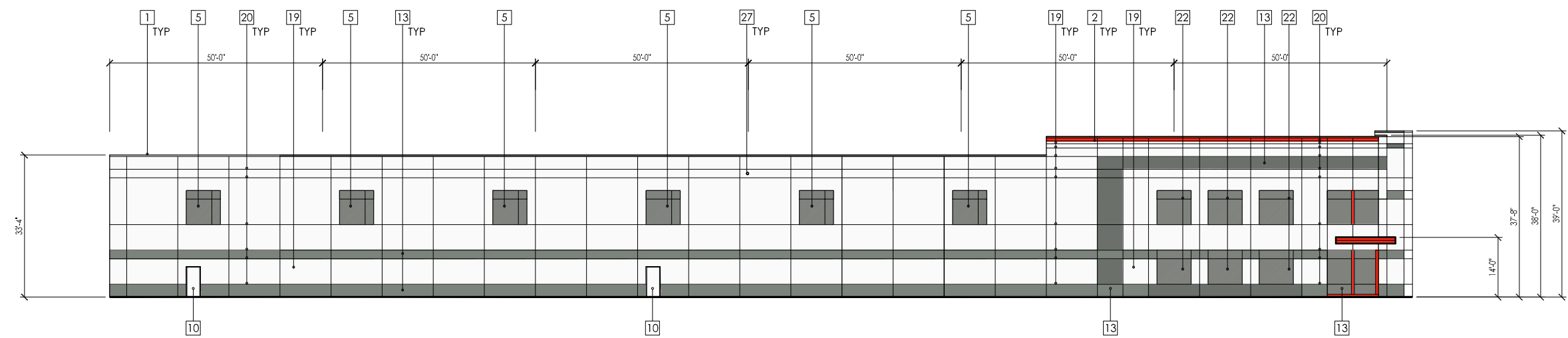
SOUTH BUILDING FLOOR PLAN (WEST)
Scale: 1" = 20'-0"



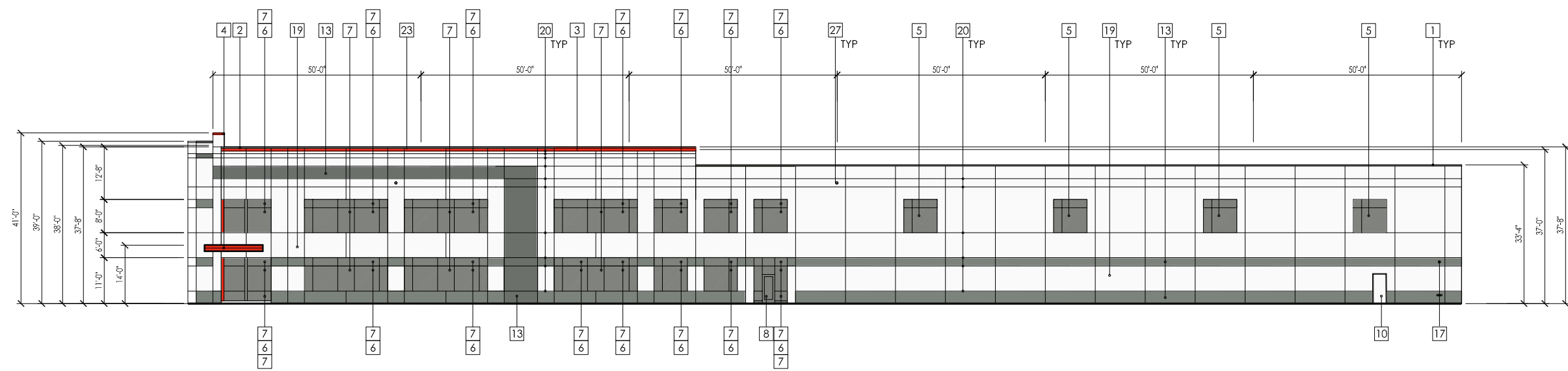
1 NORTH ELEVATION
Scale: 1" = 30'-0"



2 SOUTH ELEVATION
Scale: 1" = 30'-0"



3 EAST ELEVATION
Scale: 1" = 30'-0"

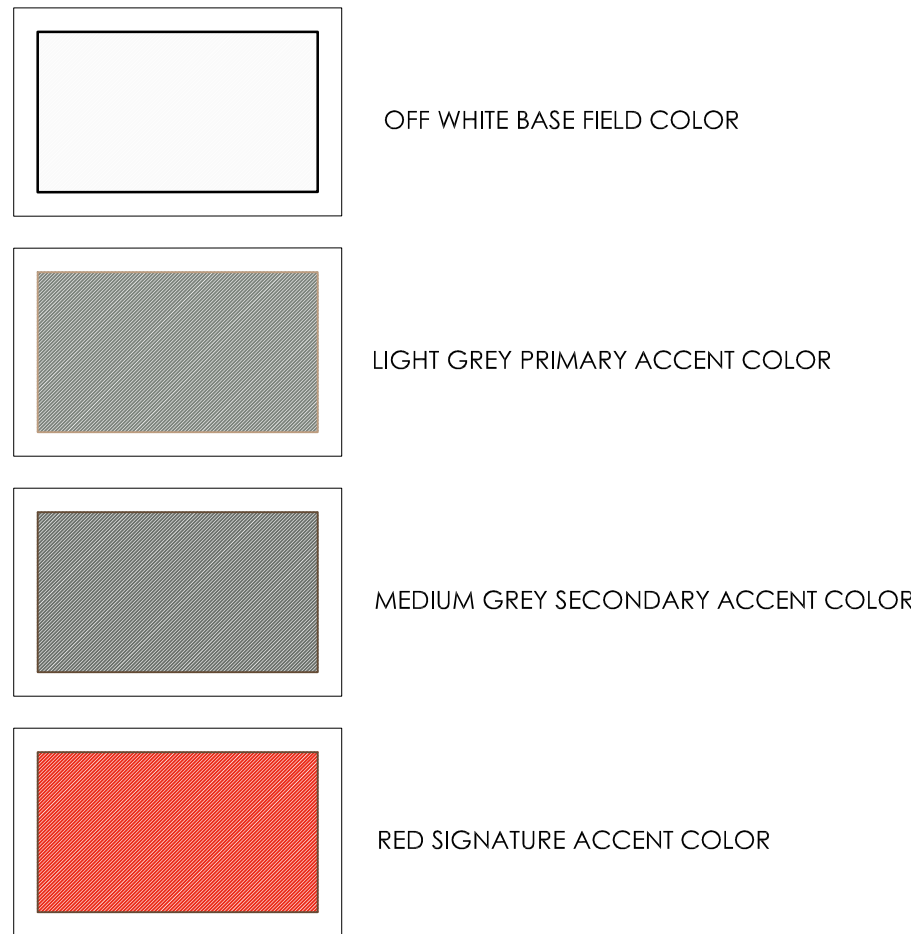


4 WEST ELEVATION
Scale: 1" = 30'-0"

ELEVATION CODED NOTES:

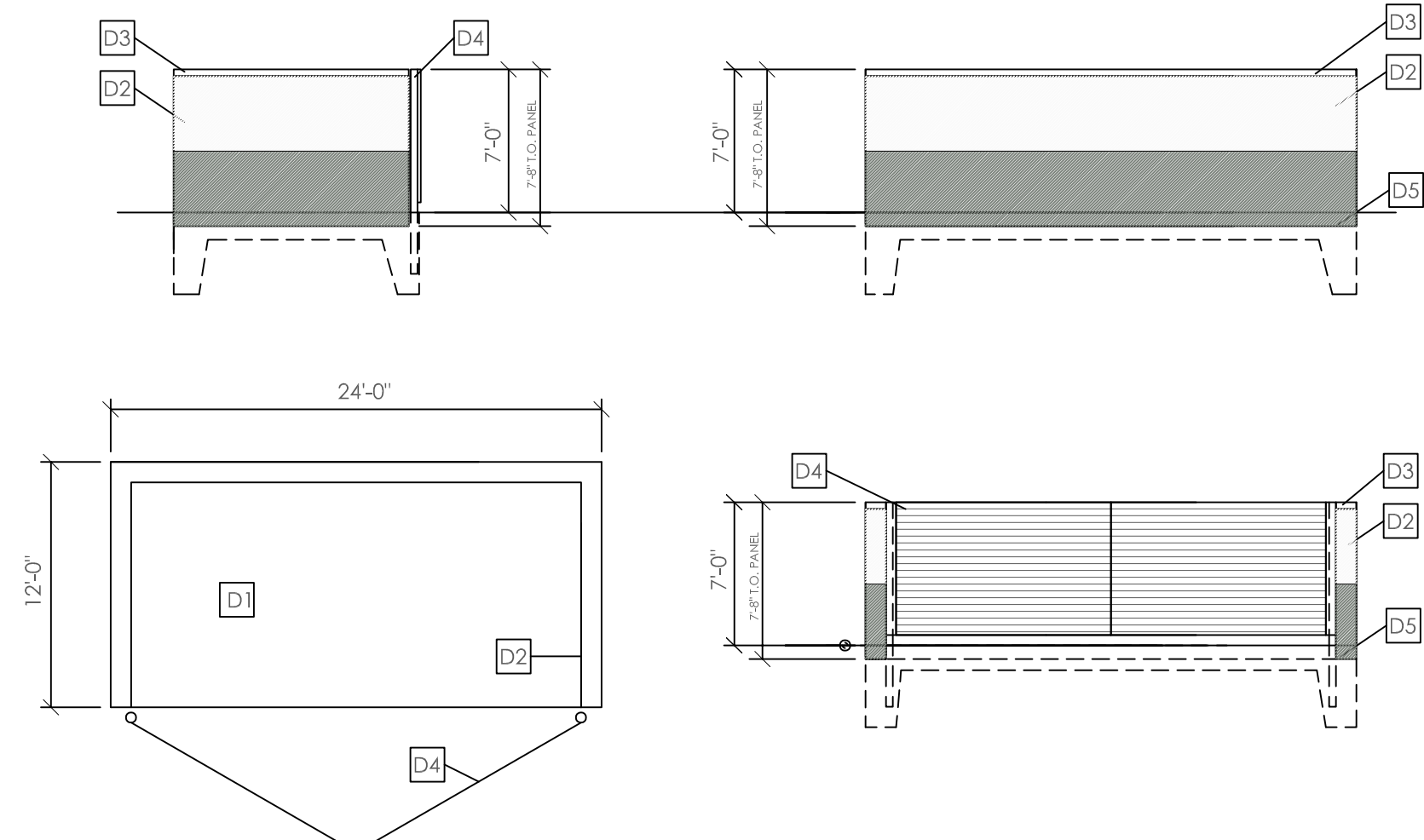
- PRE FINISHED METAL 24 GA. GRAVEL STOP COLOR SHALL BE "CLEAR ANODIZED FINISH".
- PRE FINISHED METAL 24 GA. METAL CAP/CORING FINISH COLOR SHALL BE "CLEAR ANODIZED FINISH".
- PRE FINISHED METAL 24 GA. METAL CAP/CORING FINISH COLOR SHALL BE "RED FINISH".
- PRE FINISHED METAL 24 GA. METAL CANOPY AND SOFFIT FINISH COLOR SHALL BE "RED OR GREY FINISH" AS INDICATED ON THE ELEVATIONS.
- FIXED AND THERMALLY BROKEN PRE FINISHED ALUMINUM FRAMED AND 1" INSULATED LOW-E TINTED CLERESTORY WINDOW UNITS.
- FIXED AND THERMALLY BROKEN PRE FINISHED ALUMINUM FRAMED AND 1" INSULATED LOW-E GREY TINTED STANDARD WINDOW UNITS - VISION.
- FIXED AND THERMALLY BROKEN PRE FINISHED ALUMINUM FRAMED AND 1" INSULATED LOW-E GREY TINTED STANDARD WINDOW UNITS - SPANDREL.
- FIXED AND THERMALLY BROKEN PRE FINISHED ALUMINUM FRAMED AND 1" INSULATED LOW-E GREY TINTED WINDOW AND ENTRY UNITS.
- NOT USED.
- 3'-0" x 7'-0" INSULATED AND PAINTED GALVANIZED HOLLOW METAL DOOR AND FRAME WITH ADA HARDWARE - PAINTED TO MATCH ADJACENT WALL COLOR.
- 9'-0" x 10'-0" INSULATED FACTORY PRE-FINISHED "WHITE" STEEL OVERHEAD DOOR AND FRAME WITH WEATHER-SEAL - PRE-FINISH COLOR TO COMPLEMENT OFF WHITE COLOR OF WALL COLOR. NOTE PROVIDE SHELTER, FULL PANEL VISION LITES AND DOCK LEVELER.
- 14'-0" x 16'-0" INSULATED FACTORY PRE-FINISHED "WHITE" STEEL OVERHEAD DOOR AND FRAME WITH WEATHER-SEAL - PRE-FINISH COLOR TO COMPLEMENT OFF WHITE COLOR OF WALL COLOR. NOTE PROVIDE FULL PANEL VISION LITES. PROVIDE 6" DIA X 3'-6" H PAINTED STEEL BOLLARDS.
- PRE-FINISHED METAL ACCENT BAND "COLOR TO MATCH COLOR KEY".
- PAINTED PRE-FINISHED METAL PANEL CLADDING ON GATES ATTACHED TO GALVANIZED STEEL FRAME AND 6" DIAMETER HINGED POSTS FOR SUPPORT "PAINT FINISH TO MATCH OFF WHITE COLOR OF WALL COLOR.
- PRE-FINISHED PAINTED GALVANIZED STEEL GRATE STYLE STAIR AND LANDING WITH FRAMING, COLUMNS, GUARDRAILS AND HANDRAILS REQUIRED PER ADA CODE.
- TRASH ENCLOSURE SIDEWALLS TO BE CONSTRUCTED OF PAINTED POURED AND REINFORCED 12" CONCRETE WALLS OR PAINTED PRE-CAST CONCRETE 10" WALLS "PAINT FINISH TO MATCH OFF WHITE OF MAIN BUILDING WALLS AS INDICATED ON ELEVATIONS."
- FDC FIRE DEPARTMENT CONNECTION AND ALARM AS REQUIRED BY MEMPHIS FIRE DEPARTMENT.
- FREE STANDING POURED IN PLACE AND REINFORCED 12" CONCRETE RETAINING WALLS EXTENDS TO 3'-6" OFF THE FINISH FLOOR FLANKING LOADING DOCK AREA WHERE SHOWN ON FLOOR PLAN.
- TYPICAL FOR - BUILDING WALLS SHALL BE CONSTRUCTED OF 10" INSULATED AND PAINTED PRE-CAST CONCRETE WALL PANELS "PAINT FINISH SHALL BE THREE COLORS WITH THE MAIN FIELD COLOR - OFF WHITE WITH THREE ACCENT COLORS AS INDICATED ON ELEVATIONS."
- TYPICAL FOR - BUILDING WALLS SHALL BE CONSTRUCTED OF 10" INSULATED AND PAINTED PRE-CAST CONCRETE WITH 1" REVEALS AS INDICATED ON ELEVATIONS."
- PARAPET WALLS LOCATED BEYOND.
- PAINTED WINDOW ACCENT - LIGHT GREY.
- PAINTED SIGNATURE ACCENT - RED.
- GAS METER & SERVICE NOT SHOWN LOCATION TO BE VERIFIED WITH GAS COMPANY (WE-ENERGIES).
- ELECTRIC METER & SERVICE NOT SHOWN LOCATION TO BE VERIFIED WITH ELECTRIC COMPANY (WE-ENERGIES).
- WALL MOUNTED LED LIGHT FIXTURES - NOT SHOWN - REFER TO EXTERIOR LIGHTING PLAN.
- APPROXIMATE LOCATIONS OF PRE-FINISHED METAL ESCUTCHEON (LAMBS TONGUE STYLE) SECONDARY ROOF DRAINS AND COVERS.
- APPROXIMATE LOCATIONS OF PRE-FINISHED METAL LOUVERS IF REQUIRED FOR AIR HANDLING.

ELEVATION PAINT COLOR KEY:



DUMPSTER ENCLOSURE CODED NOTES:

- 6" THICK CONCRETE REINFORCED FLOOR SLAB ON COMPACTED GRAVEL BASE
- PRECAST WALL PANELS FINISH AND COLOR TO MATCH BUILDING
- PREFINISHED METAL COPING. (24 GA.) COLOR: TO MATCH WALL COLOR
- HORIZONTAL COMPOSITE SLATS ON GALVANIZED STEEL GATE FRAME. SLAT COLOR: SW7048 URBANE BRONZE. PROVIDE GALVANIZED SUPPORT POSTS.
- REINFORCED POURED CONCRETE THICKENED SLAB EDGE REINFORCED W/ (2) #5 BARS CONT.



5 PROPOSED TRASH ENCLOSURE
Scale: 1/8" = 1'-0"



SHEET TITLE

PROPOSED BUILDING:
DICKMAN GERMANTOWN
SW CORNER - ROCKFIELD RD & GOLDENDALE RD
GERMANTOWN, WI 53022

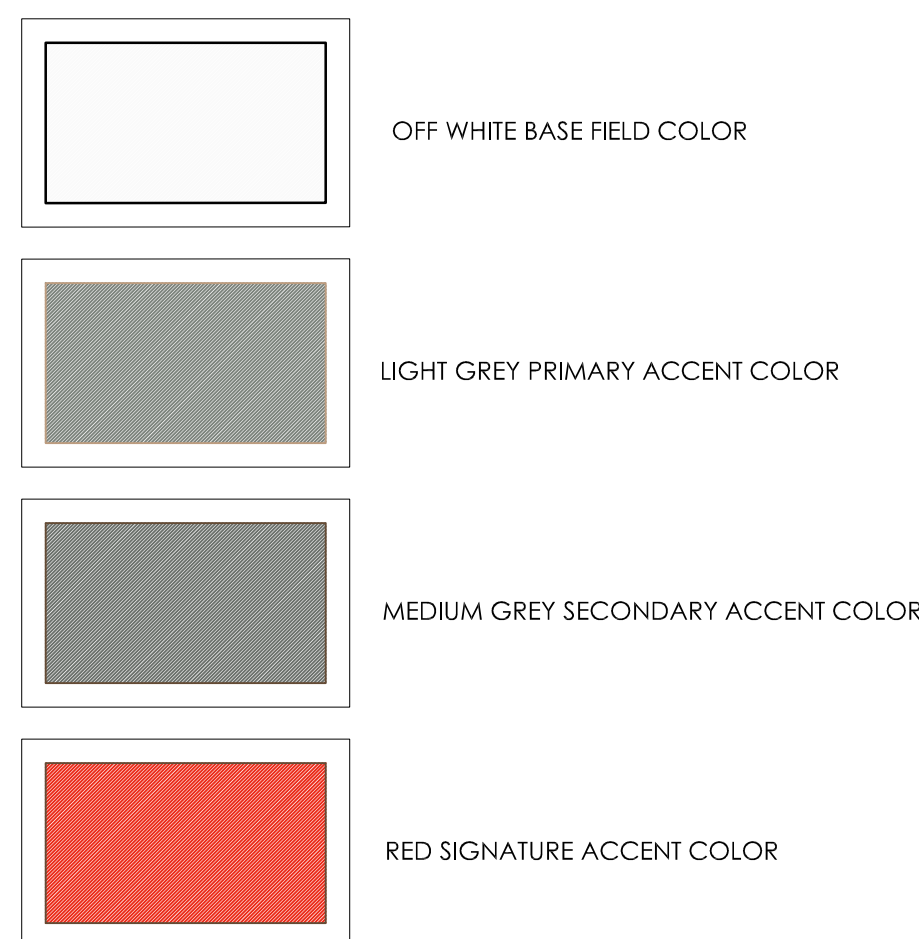
JOB:	3172
DRAWN:	DF
CHECKED:	DF
DATE:	JULY 12, 2019
SHEET:	

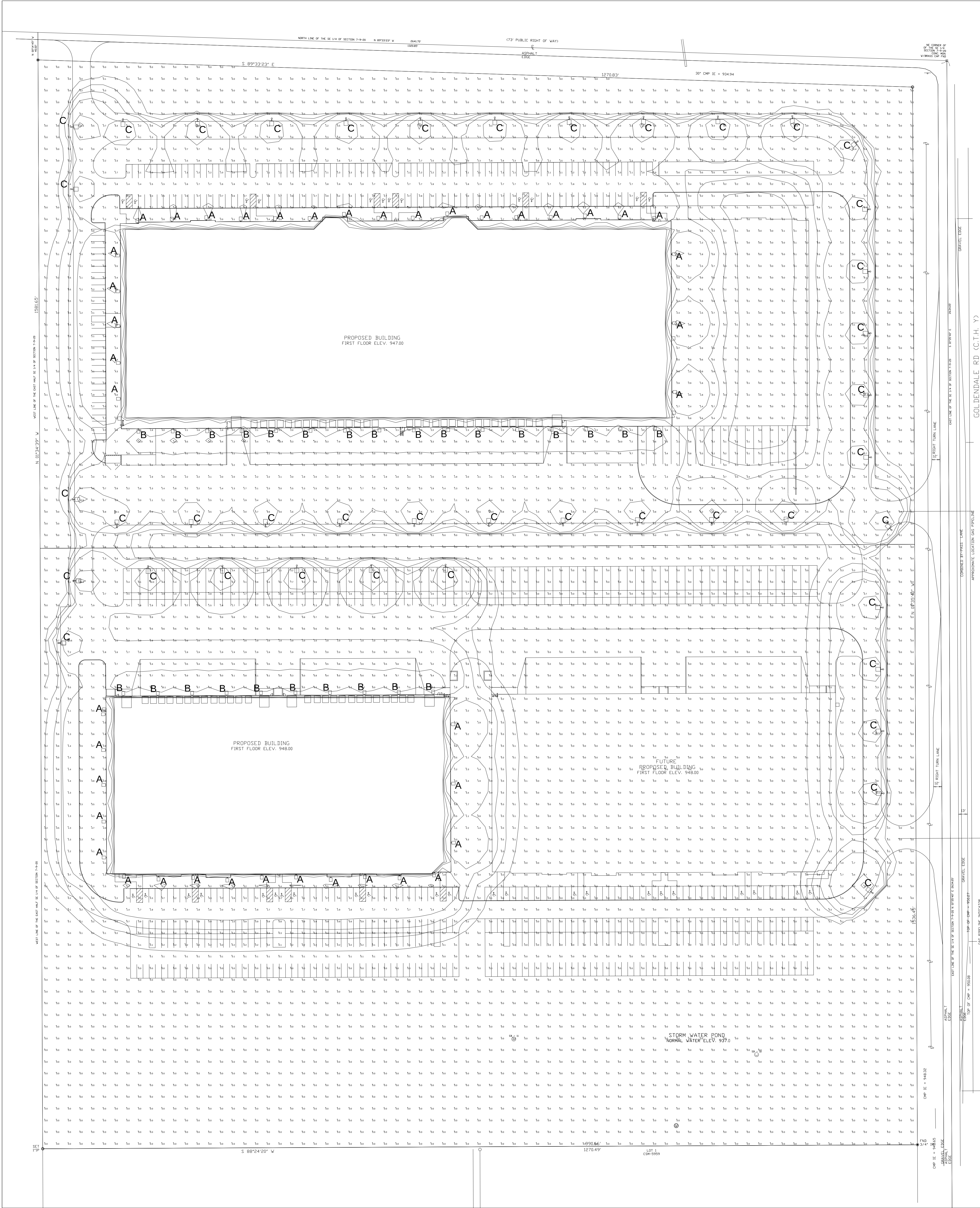
A5.2



1	PRE FINISHED METAL 24 GA. GRAVEL STOP COLOR SHALL BE "CLEAR ANODIZED FINISH".
2	PRE FINISHED METAL 24 GA. METAL CAP/COPING FINISH COLOR SHALL BE "CLEAR ANODIZED FINISH".
3	PRE FINISHED METAL 24 GA. METAL CAP/COPING FINISH COLOR SHALL BE "RED FINISH".
4	PRE FINISHED METAL 24 GA. METAL CANOPY AND SOFFIT FINISH COLOR SHALL BE "RED OR GREY FINISH" AS INDICATED ON THE ELEVATIONS.
5	FIXED AND THERMALLY BROKEN PRE FINISHED ALUMINUM FRAMED AND 1" INSULATED LOW-E TINTED CLERESTORY WINDOW UNITS.
6	FIXED AND THERMALLY BROKEN PRE FINISHED ALUMINUM FRAMED AND 1" INSULATED LOW-E GREY TINTED STANDARD WINDOW UNITS - VISION.
7	FIXED AND THERMALLY BROKEN PRE FINISHED ALUMINUM FRAMED AND 1" INSULATED LOW-E GREY TINTED STANDARD WINDOW UNITS - SPANDREL.
8	FIXED AND THERMALLY BROKEN PRE FINISHED ALUMINUM FRAMED AND 1" INSULATED LOW-E GREY TINTED WINDOW AND ENTRY UNITS.
9	NOT USED.
10	3'-0" x 7'-0" INSULATED AND PAINTED GALVANIZED HOLLOW METAL DOOR AND FRAME WITH ADA HARDWARE - PAINTED TO MATCH ADJACENT WALL COLOR.
11	9'-0" x 10'-0" INSULATED FACTORY PRE-FINISHED "WHITE" STEEL OVERHEAD DOOR AND FRAME WITH WEATHER-SEAL - PRE-FINISH COLOR TO COMPLEMENT OFF WHITE COLOR OF WALL COLOR. NOTE PROVIDE SHELTER, FULL PANEL VISION LITES AND DOCK LEVELER.
12	14'-0" x 16'-0" INSULATED FACTORY PRE-FINISHED "WHITE" STEEL OVERHEAD DOOR AND FRAME WITH WEATHER-SEAL - PRE-FINISH COLOR TO COMPLEMENT OFF WHITE COLOR OF WALL COLOR. NOTE PROVIDE FULL PANEL VISION LITES, PROVIDE 6" DIA X 3 1/2" H PAINTED STEEL ROLLARDS.
13	PRE-FINISHED METAL ACCENT BAND "COLOR TO MATCH COLOR KEY".
14	PAINTED PRE-FINISHED METAL PANEL CLADDING ON GATES ATTACHED TO GALVANIZED STEEL FRAME AND 6" DIAMETER HINGED POSTS FOR SUPPORT PAINT FINISH TO MATCH OFF WHITE COLOR OF WALL COLOR.
15	PRE-FINISHED PAINTED GALVANIZED STEEL GRATE STYLE STAIR AND LANDING WITH FRAMING, COLUMNS, GUARDRAILS AND HANDRAILS REQUIRED PER ADA CODE.
16	TRASH-ENCLOSURE SIDEWALLS TO BE CONSTRUCTED OF PAINTED POURED AND REINFORCED 12" CONCRETE WALLS OR PAINTED PRE-CAST CONCRETE 12" WALLS PAINT FINISH TO MATCH OFF WHITE OF MAIN BUILDING WALLS AS INDICATED ON ELEVATIONS."
17	FDC FIRE DEPARTMENT CONNECTION AND ALARM AS REQUIRED BY MEMPHONE FALLS FIRE DEPARTMENT.
18	FREE STANDING POURED IN PLACE AND REINFORCED 12" CONCRETE RETAINING WALLS EXTENDS TO 3'-4" OOF THE FINISH FLOOR FINISHING LOADING DOCK AREA WHERE SHOWN ON FLOOR PLAN.
19	TYPICAL FOR- BUILDING WALLS SHALL BE CONSTRUCTED OF 10" INSULATED AND PAINTED PRE-CAST CONCRETE WALL PANELS "PAINT FINISH SHALL BE THREE COLORS WITH THE MAIN BUILDING COLOR - OFF WHITE WITH THREE ACCENT COLORS AS INDICATED ON ELEVATIONS."
20	TYPICAL FOR- BUILDING WALLS SHALL BE CONSTRUCTED OF 10" INSULATED AND PAINTED PRE-CAST CONCRETE WITH 1" REVEALS AS INDICATED ON ELEVATIONS."
21	PARAPET WALLS LOCATED BEYOND.
22	PAINTED WINDOW ACCENT - LIGHT GREY.
23	PAINTED SIGNATURE ACCENT - RED.
24	GAS METER & SERVICE NOT SHOWN LOCATION TO BE VERIFIED WITH GAS COMPANY (WY-ENERGIES).
25	ELECTRIC METER & SERVICE NOT SHOWN LOCATION TO BE VERIFIED WITH ELECTRIC COMPANY (WY-ENERGIES).
26	WALL MOUNTED LED LIGHT FIXTURES - NOT SHOWN - REFER TO EXTERIOR LIGHTING PLAN.
27	APPROXIMATE LOCATIONS OF PRE-FINISHED METAL ESCUTCHEON (JAMBS TONGUE STYLE) SECONDARY ROOF DRAINS AND COVERS.
28	APPROXIMATE LOCATIONS OF PRE-FINISHED METAL LOUVERS IF REQUIRED FOR AIR HANDLING.

ELEVATION PAINT COLOR KEY:





Luminaire Schedule						
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps
	A	42	RAB LIGHTING, INC.	WPLEDT105 (TYPE IV)	CAST FINNED METAL HOUSING, 6 CIRCUIT BOARDS EACH WITH 1 LED, MOLDED 2-PIECE PLASTIC REFLECTOR WITH SPECULAR FINISH AND 1 APERTURE PER LED, CLEAR FLAT GLASS LENS IN CAST PAINTED METAL LENS FRAME.	6
				Building Mounted at 24'		105.7
	B	26	RAB LIGHTING, INC.	WPLEDT150 (TYPE IV)	CAST FINNED METAL HOUSING, 6 CIRCUIT BOARDS EACH WITH 1 LED, MOLDED 2-PIECE PLASTIC REFLECTOR WITH SPECULAR FINISH AND 1 APERTURE PER LED, CLEAR FLAT GLASS LENS IN CAST PAINTED METAL LENS FRAME.	6
				Building Mounted at 24'		155.7
	C	42	RAB LIGHTING, INC.	ALEDAT150 (TYPE IV)	CAST FINNED METAL HOUSING, 6 CIRCUIT BOARDS EACH WITH 1 LED, MOLDED 2-PIECE PLASTIC REFLECTOR WITH SPECULAR FINISH AND 1 APERTURE PER LED, CLEAR FLAT GLASS LENS IN CAST PAINTED METAL LENS FRAME.	6
				20' pole mounted on a 2" base Back light shields will be installed on all pole fixtures		155.7

Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
Calc Zone #1	+	1.1 fc	12.6 fc	0.0 fc	N/A	N/A	0.1:1

WPLED4T105

TYPE: A

RAB Outdoor



Color: Bronze

Weight: 34.8 lbs.

Project:

Type:

Prepared By:

Date:

Driver Info

Type	Constant Current	Watts	105W
120V	0.86A	Color Temp	5000K (Cool)
208V	0.58A	Color Accuracy	70 CRI
240V	0.50A	L70 Lifespan	100,000
277V	0.44A	Lumens	13,680
Input Watts	109.4W	Efficacy	125 LPW
Efficiency	96%		

LED Info

Type	Constant Current	Watts	105W
120V	0.86A	Color Temp	5000K (Cool)
208V	0.58A	Color Accuracy	70 CRI
240V	0.50A	L70 Lifespan	100,000
277V	0.44A	Lumens	13,680
Input Watts	109.4W	Efficacy	125 LPW
Efficiency	96%		

Technical Specifications

Listings

UL Listing:

Suitable for wet locations

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. DLC Product Code: P00007193

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

LEDs:

Multi-chip, high-output, long-life LEDs

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5-year period

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

IES Classification:

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semi-circular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

IP Rating:

Ingress Protection rating of IP66 for dust and water

Maximum Ambient Temperature:

Suitable for use in 40°C (104°F)

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Thermal Management:

Superior thermal management with external "Air-Flow" fins

Housing:

Die-cast aluminum housing, lens frame and mounting arm

Mounting:

Heavy-duty mounting arm with "O" ring seal & stainless steel screws

Reflector:

Specular vacuum-metalized polycarbonate

Gaskets:

High-temperature silicone gaskets

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free, RoHS-compliant components

Need help? Tech help line: (888) 722-1000 Email: custserv@rablighting.com Website: www.rablighting.com
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Page 1 of 2

WPLED4T150

TYPE: B

RAB Outdoor



Color: Bronze

Weight: 34.8 lbs.

Project:

Type:

Prepared By:

Date:

Driver Info

Type	Constant Current	Watts	150W
120V	1.31A	Color Temp	5000K (Cool)
208V	0.86A	Color Accuracy	71 CRI
240V	0.69A	L70 Lifespan	100,000
277V	0.60A	Lumens	18,464
Input Watts	155.8W	Efficacy	118.5 LPW
Efficiency	96%		

LED Info

Type	Constant Current	Watts	150W
120V	1.31A	Color Temp	5000K (Cool)
208V	0.86A	Color Accuracy	71 CRI
240V	0.69A	L70 Lifespan	100,000
277V	0.60A	Lumens	18,464
Input Watts	155.8W	Efficacy	118.5 LPW
Efficiency	96%		

Technical Specifications

Listings

UL Listing:

Suitable for wet locations

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. DLC Product Code: P0000714K

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

LEDs:

Multi-chip, high-output, long-life LEDs

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5-year period

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

IES Classification:

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semi-circular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

IP Rating:

Ingress Protection rating of IP66 for dust and water

Maximum Ambient Temperature:

Suitable for use in 40°C (104°F)

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Thermal Management:

Superior thermal management with external "Air-Flow" fins

Housing:

Die-cast aluminum housing, lens frame and mounting arm

Mounting:

Heavy-duty mounting arm with "O" ring seal & stainless steel screws

Reflector:

Specular vacuum-metalized polycarbonate

Gaskets:

High-temperature silicone gaskets

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free, RoHS-compliant components

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Page 1 of 2

ALED4T150

TYPE: C

RAB Outdoor



Color: Bronze

Weight: 32.9 lbs.

Project:

Type:

Prepared By:

Date:

Driver Info

Type	Constant Current	Watts	150W
120V	1.31A	Color Temp	5000K (Cool)
208V	0.86A	Color Accuracy	71 CRI
240V	0.69A	L70 Lifespan	100,000
277V	0.60A	Lumens	18,464
Input Watts	155.8W	Efficacy	118.5 LPW
Efficiency	96%		

LED Info

Type	Constant Current	Watts	150W
120V	1.31A	Color Temp	5000K (Cool)
208V	0.86A	Color Accuracy	71 CRI
240V	0.69A	L70 Lifespan	100,000
277V	0.60A	Lumens	18,464
Input Watts	155.8W	Efficacy	118.5 LPW
Efficiency	96%		

Technical Specifications

Listings

UL Listing:

Suitable for wet locations

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. DLC Product Code: P0000715F

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

Dark Sky Conformance:

Conforms to (allows for conformance to) the IDA's fully shielding requirement, emitting no light above 90 degrees (with the exclusion of incidental light reflecting from fixture housing, mounts, and pole).

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

LEDs:

Multi-chip, high-output, long-life LEDs

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5-year period

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

IES Classification:

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semi-circular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

Effective Projected Area:

EPA ≈ 0.75

Maximum Ambient Temperature:

Suitable for use in 40°C (104°F)

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Thermal Management:

Superior thermal management with external "Air-Flow" fins

Lens:

Tempered glass lens

Housing:

Die-cast aluminum housing, lens frame and mounting arm

IP Rating:

Ingress Protection rating of IP66 for dust and water

Mounting:

Universal mounting arm compatible for hole spacing patterns from 1" to 5 1/2" center to center. Round Pole Adaptor plate included as a standard. Easy slide and lock to mount fixture with ease. Round pole diameter must be >4" to mount fixtures at 90° orientation.

Reflector:

Specular vacuum-metalized polycarbonate

Need help? Tech help line: (888) 722-1000 Email: custserv@rablighting.com Website: www.rablighting.com
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Page 1 of 3

WPLED4T105

RAB Outdoor

Technical Specifications (continued)

Electrical

THD:

7.6% at 120V, 16.5% at 277V

Drivers:

Two Drivers, Constant Current, Class 2, 1400mA, 100-277V, 50-60Hz, 0.8A, Power Factor 99%

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Patents:

The design of WPLED105 is protected by patents pending in US, Canada, China, Taiwan and Mexico

Buy American Act Compliance:

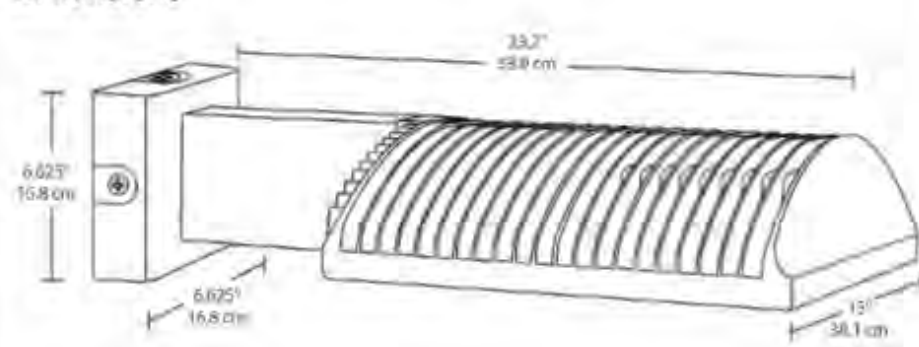
RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical

BUG Rating:

B1 U0 G2

Dimensions



Features

High performance LED light engine
Maintains 70% of initial lumens at 100,000-hours
Weatherproof high temperature silicone gaskets
Superior heat sinking with die cast aluminum housing and external fins
Replaces 400W MH
100 up to 277 Volts
5-Year, No-Compromise Warranty

Ordering Matrix

Family	Optics	Wattage	Color Temp.	Mounting	Finish	Driver Options	Other Options
WPLED	4T	105					
4T = Type IV 3T = Type III 2T = Type II	50 = 50W 78 = 78W 105 = 105W 125 = 125W 150 = 150W	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Arm FX = Flat Mount	Blank = Bronze W = White	Blank = Standard /BL = BL-Level /D10 = 0-10V Dimming /480 D10 = 480V 0-10V Dimming	Blank = Standard /PC = 120V Photocell /PC2 = 277V Photocell /PCT = 120-277V Twistlock Photocell /PCT4 = 480V Twistlock Photocell /PCS = 120V Swivel Photocell /PCs2 = 277V Swivel Photocell /PCS4 = 480V Swivel Photocell /WS2 = Multi-Level Motion Sensor (20 ft. mt. ht.) /WS4 = Multi-Level Motion Sensor (40 ft. mt. ht.) /LC = Lightcloud Controller	

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Page 2 of 2

WPLED4T150

RAB Outdoor

Technical Specifications (continued)

Electrical

THD:

4.7% at 120V, 13.3% at 277V

Driver:

One Driver, Constant Current, Class 2, 2100mA, 100-277V, 50-60Hz, Power Factor 99%

Other

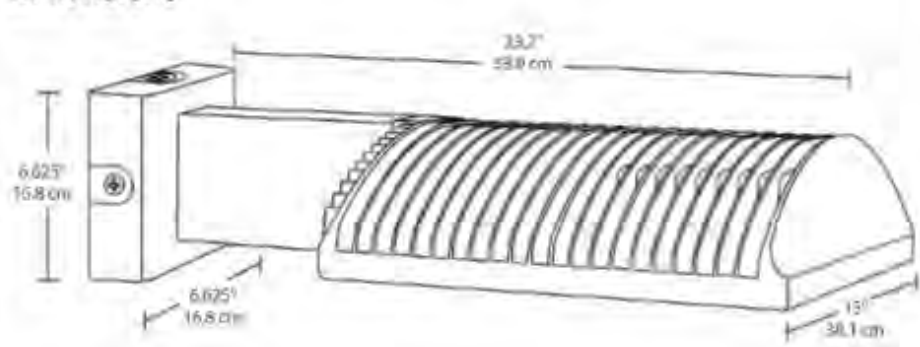
Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Patents:

The design of WPLED150 is protected by patents pending in US, Canada, China, Taiwan and Mexico

Dimensions



Features

High performance LED light engine
Maintains 70% of initial lumens at 100,000-hours
Weatherproof high temperature silicone gaskets
Superior heat sinking with die cast aluminum housing and external fins
Replaces 400W MH
100 up to 277 Volts
5-Year, No-Compromise Warranty

Ordering Matrix

Family	Optics	Wattage	Color Temp	Mounting	Finish	Driver Options	Other Options
WPLED	4T	150					
4T = Type IV 3T = Type III 2T = Type II	50 = 50W 78 = 78W 105 = 105W 125 = 125W 150 = 150W	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Arm FX = Flat Mount	Blank = Bronze W = White	Blank = Standard /480 = 480V /BL = B-Level /D10 = 0-10V Dimming 480/D10 = 480V 0-10V Dimming	Blank = Standard /PC = 120V Photocell /PC2 = 277V Photocell /PCT = 120-277V Twistlock Photocell /PCT4 = 480V Twistlock Photocell /PCS = 120V Swivel Photocell /PC52 = 277V Swivel Photocell /PCS4 = 480V Swivel Photocell /WS2 = Multi-Level Motion Sensor (20 ft. mt. ht.) /WS4 = Multi-Level Motion Sensor (40 ft. mt. ht.) /LC = Lightcloud Controller	

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Page 2 of 2

ALED4T150

RAB Outdoor

Technical Specifications (continued)

Construction

Gaskets:

SITE PLAN APPLICATION

9/9/19 Plan Commission Meeting

Germantown Dental Office

Village Planner Report

Germantown, Wisconsin

Summary

Tarr Group LLC, agent for Compass Properties Germantown, LLC, property owner, is seeking approval of site development and building plans for a 4,324-square-foot dental office building on the 0.87-acre parcel located on the north side of Mequon Road, east of Squire Drive, on the east side of Associated Bank.

Property Location: North of Mequon Road, east of Squire Drive

Agent/

Property Owner:

Tarr Group, LLC
3229 Purple Ash Drive
Zionsville, IN 46077

Compass Properties Germantown, LLC
735 N Water Street Suite M180
Milwaukee, WI 53202

Current Zoning: B-2/PDD: Community Business/Germantown Marketplace PDD

Adjacent Land Uses		Zoning
North	Commercial	B-2/PDD
South	Single-Family Residential	Rs-6
East	Commercial	B-2/PDD
West	Commercial	B-2/PDD



Proposal

Tarr Group LLC, agent for Compass Properties Germantown, LLC, property owner, is seeking approval of site development and building plans for a 4,324-square-foot dental office building on the 0.87-acre parcel located on the north side of Mequon Road, east of Squire Drive, on the east side of Associated Bank. The proposed improvements include:

- 4,324-square-foot, one-story (31'3" tall) dental office building
- Building Exterior: EIFS/brick exterior veneer with wood columns, wood trusses/joints and partial shingle/build-up roof system
- Wood Trellises covering the entrances on the south and west sides of the building
- Dental Office use consistent with the B-2 Community Business District requirements
- Approximately 14 employees anticipated
- 49 parking spaces including 2 ADA compliant spaces

Access & Parking. The development will be served by the existing driveways off of Mequon Road and Squire Drive. An existing recorded Access and Parking Easement agreement exists for this property. A total of 49 parking spaces including 2 ADA compliant will be provided on the site and will be available for the use of all customers, not limited to Dental Office customers. Village code requires a minimum of 7 parking spaces per doctor for Medical/Dental uses.

Storm Water Management. This site is served by storm sewer. The impervious surface on the site will be reduced to 86% with the proposed development. This plan meets the maximum impervious surface coverage of 90% in the Germantown Marketplace PDD conditions and restrictions.

Landscaping. The proposed improvements to the site will double the existing amount of pervious surface on the site. The project will provide 2,250 square feet of landscaping, which will be located on all four sides of the building as well as near the dumpster and near the parking on the west side of the building. The landscaping will include six (6) additional trees and 26 deciduous shrubs and 42 evergreen shrubs.

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

- (4) 17W LED round, dimmable, recessed lighting mounted at 10'
- (3) 37W LED 4000K "neutral white" exterior wall pack lights mounted at a height of 10'
- (3) Utility LED 4000K Site Light Fixtures mounted at a height of 25' (2 back-to-back located near the dumpster enclosure and one single fixture located near the parking along the west side of the lot)

Signage. A separate sign permit application, meeting the requirements of Chapter 17.46, shall be submitted for all proposed signage.

Staff Comments**Planning & Zoning**

The Germantown Marketplace PDD was created in 2015 in order to create and sell a separate parcel for the Associated Bank (Lot 2) and to create an additional development lot (Lot 3). The PDD allowed the ability to relax the basic restrictions of the B-2 Community Business Zoning District and other applicable zoning code provisions. A copy of Resolution No. 04-15 adopting such conditions and restrictions has been included in the application materials. The Germantown Marketplace PDD also required the proposed development on Lot 3 to complete a Traffic Impact Analysis for the site. The applicant has submitted a Traffic Impact Analysis completed by Traffic Analysis & Design, Inc. which concludes no changes to the existing geometrics or traffic control are necessary to accommodate the limited additional traffic from the proposed dental office.

It is staff's opinion that the proposed building architecture and materials are consistent with the Germanic Theme Corridor on Mequon Road and the architecture of the surrounding buildings.

The Village's lighting guidelines limit the maximum height of exterior light fixtures to 25 feet. The proposed exterior light fixtures meet this requirement.

The dumpster enclosure is located on the north side of the proposed dental building. Landscaping has been moved to the north side of the dumpster to improve the view of the businesses to the north. The dumpster will also be enclosed on four sides with 8-foot tall opaque panel screening fence. Planning and Development Staff preference moving the dumpster enclosure to the west side of the property, further south near the dental building in order to maintain the more often used parking stalls closer to the businesses to the north (i.e. Jimmy John's, White House of Music, UPS Store, etc.).

Engineering

The Village Engineer and Public Works Department staff have identified several technical issues and plan corrections (see August 7, 2019 Public Works Director memo) pertaining to Erosion control, utilities, and drainage. All items have been addressed by the applicant in a revised set of plans which are awaiting final approval by the Village Engineering Department Staff.

VILLAGE PLANNER RECOMMENDATION

APPROVE the site development and building plans submitted by Tarr Group, LLC for the proposed 4,324-square-foot dental office located on Lot 3 in the Pick-N-Save Commercial area 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, landscaping, and electrical plan sheets dated 9-3-19 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. All proposed exterior signage, including monument and wall-mounted signs, shall be reviewed and approved under a separate application by the Plan Commission.
4. State approved plans and a \$20,000 occupancy bond are required by the Building Inspection Department as part of the building permit application.
5. All technical issues and plan corrections identified by the Village Engineer and Public Works Department staff (see August 7, 2019 memo from the Public Works Director) 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.



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 8

DATE

7-12-19

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

Tarr Group, LLC

3229 Purple Ash Drive

Zionsville, IN 46077

Phone () 317-678-7517

E-Mail jamie@tarr-group.com

PROPERTY OWNER

Compass Properties Germantown, LLC
Compass Properties, LLC

735 N Water Street

Suite M180

Milwaukee, WI 53202

Phone (414) 765-0305

E-Mail Sheldon@compassproperties.com

2

PROPERTY ADDRESS

TBD per Village of Germantown

3

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

North	South	East	West
White House of Music - Retail	ROW/Residential	Parking Lot	Associated Bank - Commercial

4

READ AND INITIAL THE FOLLOWING:

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

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

DT 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!

Dylan J. Zarr 7/3/19

Applicant

Date

Sheldon

Owner

Date



Architecture ■ Engineering

Germantown, WI – Dental Building
Design Intent Narrative & Building Data
July 11, 2019



Synopsis:

The scope of work consists of a new single tenant 4,325 square foot shell building, located in Germantown, WI. The structure includes, but is not limited to, a 4" thick concrete slab, wood stud framing with EIFS/brick exterior veneer with wood columns, wood trusses/joists and partial shingle/built-up roof system on plywood roof decking. All new construction will match that allowed in type v-b construction.

Occupancy classification:

IBC Classification - Business* (Dental Office)

Life Safety Code Classification - Business (Dental Office)

*Per IBC 303.1.2, all rooms having less than 50 people and having no more than 750 sq. Ft. Shall be classified as support space for business occupancy.

Building construction:

Construction Type: Type V-B

Sprinklered: No

Fire Alarm: No

Tenant area:

4,325 sq. Ft. (gross square footage)

4,000 sq. Ft. (net square footage)

Occupant load & egress widths:

4,000 sq. Ft. / 100 sf/person = 40 persons

40 persons * 0.2 in/person = 8 inches required, 102 inches provided



4 WEST ELEVATION



TRELLIS AXON VIEW



3 NORTH ELEVATION



DENTAL BUILDING - Germantown, WI

SCHEMATIC EXTERIOR ELEVATIONS

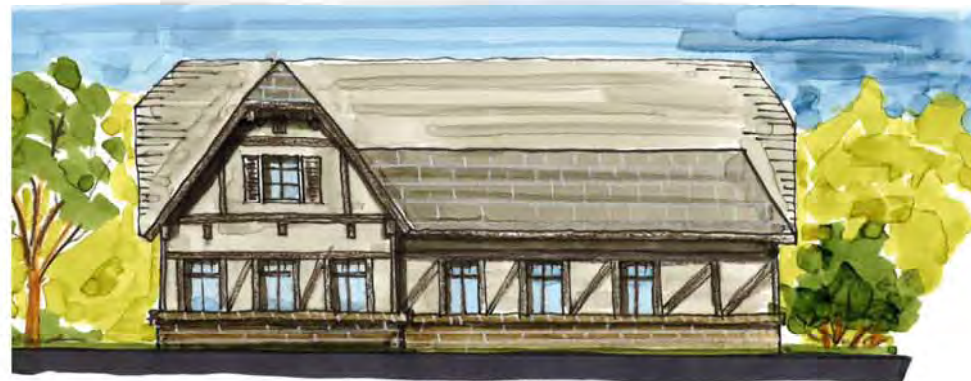




TRELLIS AXON VIEW



2 SOUTH ELEVATION



1 EAST ELEVATION

BEAUTY IS ON THE OUTSIDE.



- MAINTENANCE FREE MATERIALS
- PROFESSIONAL GRADE EXTRUDED ALUMINUM FRAME
- EASY INSTALL, NO SPECIAL TOOLS REQUIRED

Elegant, durable and long lasting screening for today's modern businesses, Covrit provides a complete line of screening solutions to hide, protect, or partition anything on your property.

Our modular, made-to-order system is available in a wide variety of styles and colors can be customized to fit any size space.



covrit[®]



Designed by our in-house engineering team and manufactured in our state-of-the-art facility, our professional grade screen wall systems and gates have transformed property at big box retailers, shopping centers, restaurants, community parks, apartment complexes, and more. We are your ideal partner for all your screening needs.

STANDARD ENCLOSURE SIZES



SINGLE
11'D x 11'W x 7' or 8'H
Fits 6- or 8-yard dumpster



SINGLE w/WALK-IN
11'D x 16'W x 7' or 8'H
Fits 6- or 8-yard dumpster with
ADA compliant walk-in access



DOUBLE
11'D x 22'W x 7' or 8'H
Fits two 6- or 8-yard dumpsters
with two sets of gates.



SINGLE XL
13'D x 13'W x 7' or 8'H
Adds an additional 24" of space
around a 6- or 8-yard dumpster



SINGLE XL w/WALK-IN
13'D x 18'W x 7' or 8'H
Adds an additional 24" of space
around a 6- or 8-yard dumpster
with ADA compliant walk-in access.



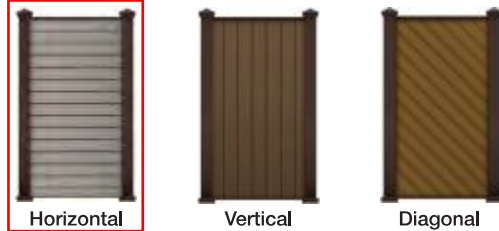
DOUBLE XL
13'D x 26'W x 7' or 8'H
Adds an additional 24" of space
around two 6- or 8-yard dumpsters
with two set of gates.

CUSTOM ENCLOSURES

Create a custom enclosure to shield outdoor equipment such as generators or transformers. Use it as a partition for condominiums, restaurant patios or courtyards. Have a special request? No problem. Our made-to-order process enables custom shapes and sizes to suit your unique project requirements. Simply contact us for your custom quote.

PANEL STYLES

PLANKWALL® PVC



(Our most requested options)

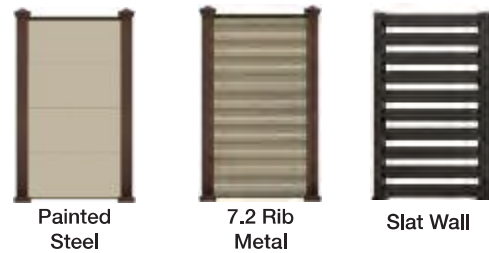
1-SIDED WOOD GRAIN



2-SIDED WOOD GRAIN



METAL SERIES



COLORS



Metal Series panels are available in 9 standard colors. Custom colors are available and will result in additional lead time. Contact a project manager for details.

ACRYLICAP® ABS



STANDARD COLORS

Acrylicap panels are available in 13 standard colors. Need a custom color? Provide a Sherwin Williams or PMS code and we can color match.



POST OPTIONS

POST COLORS

Popular colors are shown here, but custom colors can be accommodated.



POST CAP STYLES

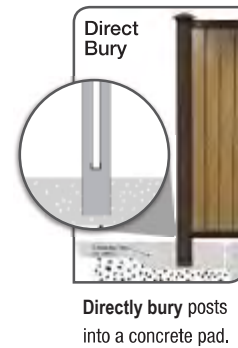


TOP RAIL STYLES (Acrylicap® only)



POST MOUNTING

Choose from 3 mounting options. Our installation guides provide a clearly-defined process from start to finish.



PLANKWALL SYSTEM

We mount our planks using professional grade aluminum posts and rails to complete the finest modular wall system on the market. A proprietary aluminum stiffener is integrated between each plank providing an attractive reveal while reinforcing the screen wall structure, eliminating the need for horizontal stringers.

Plankwall is completely maintenance-free and comes with a 20-year fade and stain resistance warranty.



GridLite

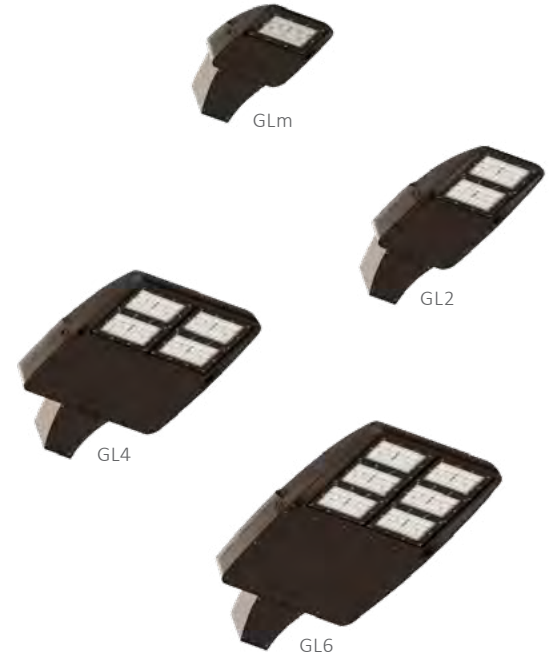
UTILITY LED SITE LIGHT FIXTURE

ENERGYLITE

PROJECT

TYPE

- / 120 - 277 V Standard; 347 - 480 V option available
- / 10 year warranty
- / Chip-scale package LEDs
- / 0 - 10 V dimming standard; DALI dimming option available
- / C136.41 compliant rotating photocell receptacle
- / Corrosion resistant powder-coated finish to minimum 3.0 mil. thickness
- / Die cast aluminum housing designed for optimal thermal performance
- / 1000 hour salt spray compliant
- / Marine grade finish option available
- / DLC and DLC Premium listed
- / UL and IDA Dark Sky listed
- / IP66 rated optical and electrical chambers
- / 3G Bridge Vibration Rated (ANSI C136.31-2010)
- / Surge Protection (ANSI C136.2-2015)
10kV 5kA Standard; 20kV 10kA optional*
- / Suitable for wet locations
- / Rated for operation -40°C to 40°C; For 50°C, consult factory
- / Adjustable for 1½" to 2½" O.D. tenon



TM-21 Lumen Maintenance Projection

The projected lumen maintenance is calculated by utilizing the LED manufacturer's LM80 test data in conjunction with third party verified in-situ LED drive current and LED temperature data. All data is taken at a maximum drive current of 1050mA and an ambient temperature of 25°C. Projected data is limited to 6 times the actual tested hours by the LED manufacturer.

Calculated		Projected	
L ₇₀	>150,000 hours	L ₇₀	>60,000 hours
L ₈₀	>100,000 hours	L ₈₀	>60,000 hours
L ₉₀	>40,000 hours	L ₉₀	>40,000 hours

Fixture	Weight	EPA
GLm	8 lbs.	0.26 sq. ft.
GL2	17 lbs.	0.38 sq. ft.
GL4	27 lbs.	0.44 sq. ft.
GL6	42 lbs.	0.57 sq. ft.

Ordering Information

Example: GL2/18/2M/830/STD/10/10/3/GY/YK/HS-SS

Fixture	Output	Distribution	CRI + CCT	Voltage	Surge	Photocell Receptacle*	Finish	Mounting	Options + Accessories
GL2	10 - 10,000 11 - 11,000 12 - 12,000 13 - 13,000 14 - 14,000 15 - 15,000 16 - 16,000 17 - 17,000 18 - 18,000 19 - 19,000	2M - Type II Med 3M - Type III Med 4S - Type IV Short 5Q - Type 5 Square	730 - 70+ CRI, 3000K 830 - 80+ CRI, 3000K 930 - 90+ CRI, 3000K 740 - 70+ CRI, 4000K 840 - 80+ CRI, 4000K 940 - 90+ CRI, 4000K 750 - 70+ CRI, 5000K 850 - 80+ CRI, 5000K 950 - 90+ CRI, 5000K	STD - 120-277 V HV - 347-480 V**	10 - 10kV 5kA 20 - 20kV 10kA*	3 - 3 pin 7 - 7 pin 0 - none * Photo cell by others	BZ - Bronze GY* - Grey BK* - Black GN* - Green	SA - Site Arm HT - Horizontal Tenon KM - Knuckle WM - Wall Mount WP - Wall Pack	HS - House side shield MG - Marine Grade RP - Round Pole Adapter SC - Shorting Cap
GL4	20 - 20,000 24 - 24,000 28 - 28,000 32 - 32,000 36 - 36,000		* Other CRI + CCT combinations available						
GL6	40 - 40,000 44 - 44,000 48 - 48,000 52 - 52,000								

* Consult factory for lead time and availability

** 20kV 10kA surge protection is required for HV - 347-480 V

GridLite

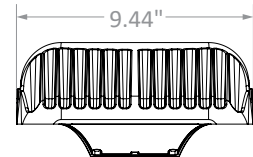
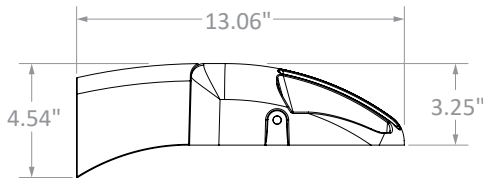
UTILITY LED SITE LIGHT FIXTURE

ENERGYLITE

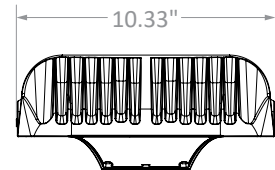
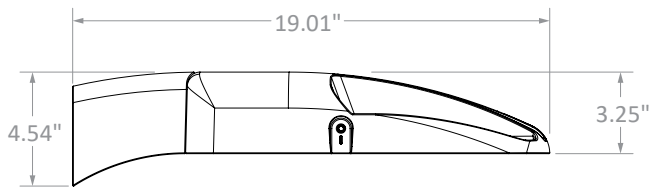
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TYPE

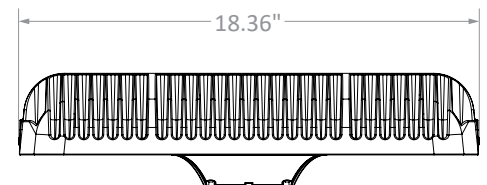
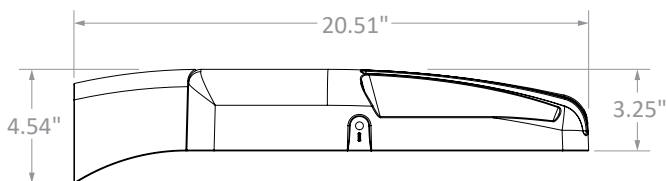
GLm



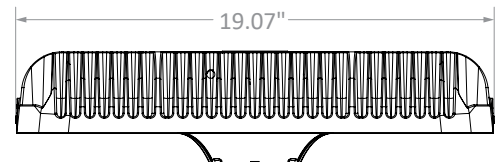
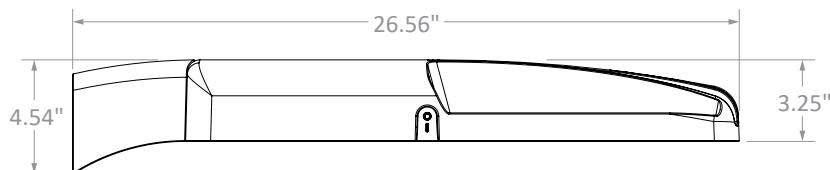
GL2



GL4



GL6



GridLite

UTILITY LED SITE LIGHT FIXTURE

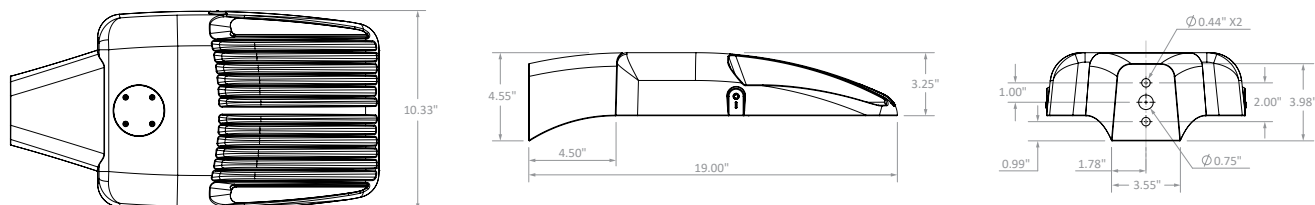
ENERGYLITE

PROJECT

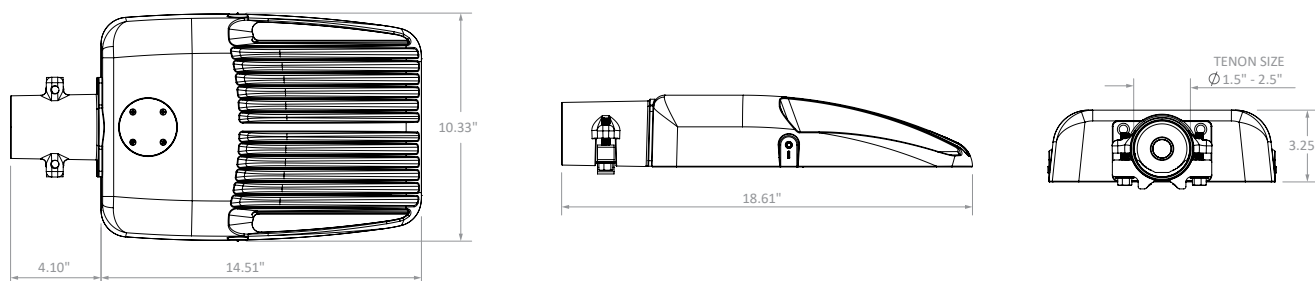
TYPE

GL2

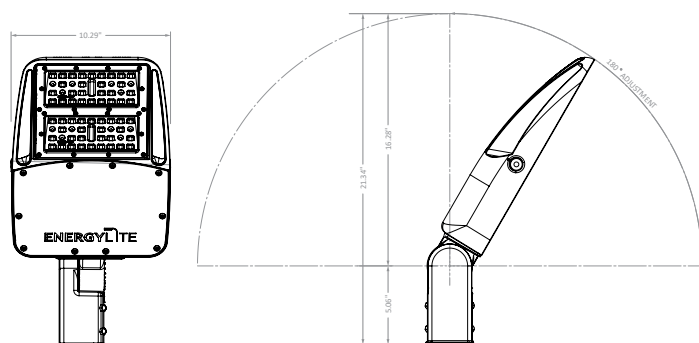
Site Arm



Horizontal Tenon



Knuckle



Horizontal Tenon



Wall Mount



Knuckle

/ GL2 PERFORMANCE DATA

Fixture	Performance Package	Drive Current	Color Temperature (CCT)	TYPE II MEDIUM OPTIC AT 70 CRI		TYPE III MEDIUM OPTIC AT 70 CRI		Input Power (Watts)
				Luminous Flux Output (Nominal Lumens)	Efficacy (Lumens per Watt)	Luminous Flux Output (Nominal Lumens)	Efficacy (Lumens per Watt)	
GL2	10	470 mA	4000K / 5000K	10,482	126.0	10,695	128.6	83.2
			3000K	10,062	121.0	10,267	123.5	83.2
	11	530 mA	4000K / 5000K	11,499	123.7	11,734	126.2	93.0
			3000K	11,039	118.7	11,264	121.1	93.0
	12	600 mA	4000K / 5000K	12,670	119.2	12,928	121.6	106.3
			3000K	12,163	114.4	12,411	116.8	106.3
	13	650 mA	4000K / 5000K	13,535	117.6	13,810	119.9	115.1
			3000K	12,993	112.8	13,258	115.1	115.1
	14	700 mA	4000K / 5000K	14,450	116.1	14,745	118.4	124.5
			3000K	13,872	111.4	14,155	113.7	124.5
	15	775 mA	4000K / 5000K	15,519	113.0	15,835	115.3	137.3
			3000K	14,898	108.5	15,202	110.7	137.3
	16	850 mA	4000K / 5000K	16,689	110.8	17,029	113.1	150.6
			3000K	16,022	106.4	16,348	108.6	150.6
	17	910 mA	4000K / 5000K	17,554	108.4	17,912	110.6	161.9
			3000K	16,852	104.1	17,196	106.2	161.9
	18	980 mA	4000K / 5000K	18,572	106.3	18,950	108.5	174.7
			3000K	17,829	102.1	18,192	104.1	174.7
	19	1050 mA	4000K / 5000K	19,590	104.5	19,989	106.6	187.5
			3000K	18,806	100.3	19,189	102.4	187.5

Fixture	Performance Package	Drive Current	Color Temperature (CCT)	TYPE IV SHORT OPTIC AT 70 CRI		TYPE V SQUARE OPTIC AT 70 CRI		Input Power (Watts)
				Luminous Flux Output (Nominal Lumens)	Efficacy (Lumens per Watt)	Luminous Flux Output (Nominal Lumens)	Efficacy (Lumens per Watt)	
GL2	10	470 mA	4000K / 5000K	10,054	120.9	10,482	126.0	83.2
			3000K	9,652	116.1	10,062	121.0	83.2
	11	530 mA	4000K / 5000K	11,030	118.6	11,499	123.7	93.0
			3000K	10,589	113.9	11,039	118.7	93.0
	12	600 mA	4000K / 5000K	12,152	114.3	12,670	119.2	106.3
			3000K	11,666	109.8	12,163	114.4	106.3
	13	650 mA	4000K / 5000K	12,982	112.8	13,535	117.6	115.1
			3000K	12,463	108.2	12,993	112.8	115.1
	14	700 mA	4000K / 5000K	13,861	111.3	14,450	116.1	124.5
			3000K	13,306	106.9	13,872	111.4	124.5
	15	775 mA	4000K / 5000K	14,886	108.4	15,519	113.0	137.3
			3000K	14,290	104.1	14,898	108.5	137.3
	16	850 mA	4000K / 5000K	16,008	106.3	16,689	110.8	150.6
			3000K	15,368	102.1	16,022	106.4	150.6
	17	910 mA	4000K / 5000K	16,838	104.0	17,554	108.4	161.9
			3000K	16,164	99.9	16,852	104.1	161.9
	18	980 mA	4000K / 5000K	17,814	102.0	18,572	106.3	174.7
			3000K	17,101	97.9	17,829	102.1	174.7
	19	1050 mA	4000K / 5000K	18,790	100.2	19,590	104.5	187.5
			3000K	18,038	96.2	18,806	100.3	187.5

/ GL4 PERFORMANCE DATA

Fixture	Performance Package	Drive Current	Color Temperature (CCT)	TYPE II MEDIUM OPTIC AT 70 CRI		TYPE III MEDIUM OPTIC AT 70 CRI		Input Power (Watts)
				Luminous Flux Output (Nominal Lumens)	Efficacy (Lumens per Watt)	Luminous Flux Output (Nominal Lumens)	Efficacy (Lumens per Watt)	
GL4	20	470 mA	4000K / 5000K	20,963	126.0	21,391	128.6	166.3
			3000K	20,125	121.0	20,535	123.5	166.3
	21	500 mA	4000K / 5000K	21,981	124.8	22,429	127.3	176.2
			3000K	21,102	119.8	21,532	122.2	176.2
	22	530 mA	4000K / 5000K	22,999	123.7	23,467	126.2	186.0
			3000K	22,079	118.7	22,529	121.1	186.0
	23	565 mA	4000K / 5000K	24,169	121.3	24,661	123.8	199.3
			3000K	23,202	116.4	23,675	118.8	199.3
	24	600 mA	4000K / 5000K	25,339	119.2	25,856	121.6	212.6
			3000K	24,326	114.4	24,821	116.8	212.6
	25	625 mA	4000K / 5000K	26,204	118.3	26,738	120.8	221.4
			3000K	25,156	113.6	25,669	115.9	221.4
	26	650 mA	4000K / 5000K	27,069	117.6	27,621	119.9	230.3
			3000K	25,986	112.8	26,516	115.1	230.3
	27	675 mA	4000K / 5000K	27,985	116.8	28,555	119.2	239.6
			3000K	26,866	112.1	27,413	114.4	239.6
	28	700 mA	4000K / 5000K	28,901	116.1	29,490	118.4	249.0
			3000K	27,745	111.4	28,310	113.7	249.0
	29	740 mA	4000K / 5000K	29,969	114.5	30,580	116.8	261.8
			3000K	28,771	109.9	29,357	112.1	261.8
	30	775 mA	4000K / 5000K	31,038	113.0	31,671	115.3	274.6
			3000K	29,796	108.5	30,404	110.7	274.6
	31	815 mA	4000K / 5000K	32,208	111.9	32,865	114.2	287.8
			3000K	30,920	107.4	31,550	109.6	287.8
	32	850 mA	4000K / 5000K	33,379	110.8	34,059	113.1	301.1
			3000K	32,043	106.4	32,696	108.6	301.1
	33	885 mA	4000K / 5000K	34,244	109.6	34,941	111.8	312.4
			3000K	32,874	105.2	33,544	107.4	312.4
	34	910 mA	4000K / 5000K	35,109	108.4	35,824	110.6	323.8
			3000K	33,704	104.1	34,391	106.2	323.8
	35	940 mA	4000K / 5000K	36,126	107.3	36,862	109.5	336.6
			3000K	34,681	103.0	35,388	105.1	336.6
	36	980 mA	4000K / 5000K	37,144	106.3	37,901	108.5	349.4
			3000K	35,658	102.1	36,385	104.1	349.4
	37	1015 mA	4000K / 5000K	38,161	105.4	38,939	107.5	362.1
			3000K	36,635	101.2	37,382	103.2	362.1
	38	1050 mA	4000K / 5000K	39,179	104.5	39,978	106.6	374.9
			3000K	37,612	100.3	38,378	102.4	374.9

/ GL4 PERFORMANCE DATA *continued*

Fixture	Performance Package	Drive Current	Color Temperature (CCT)	TYPE IV SHORT OPTIC AT 70 CRI		TYPE V SQUARE OPTIC AT 70 CRI		Input Power (Watts)
				Luminous Flux Output (Nominal Lumens)	Efficacy (Lumens per Watt)	Luminous Flux Output (Nominal Lumens)	Efficacy (Lumens per Watt)	
GL4	20	470 mA	4000K / 5000K	20,108	120.9	20,963	126.0	166.3
			3000K	19,303	116.1	20,125	121.0	166.3
	21	500 mA	4000K / 5000K	21,084	119.7	21,981	124.8	176.2
			3000K	20,240	114.9	21,102	119.8	176.2
	22	530 mA	4000K / 5000K	22,060	118.6	22,999	123.7	186.0
			3000K	21,178	113.9	22,079	118.7	186.0
	23	565 mA	4000K / 5000K	23,182	116.3	24,169	121.3	199.3
			3000K	22,255	111.7	23,202	116.4	199.3
	24	600 mA	4000K / 5000K	24,305	114.3	25,339	119.2	212.6
			3000K	23,333	109.8	24,326	114.4	212.6
	25	625 mA	4000K / 5000K	25,135	113.5	26,204	118.3	221.4
			3000K	24,129	109.0	25,156	113.6	221.4
	26	650 mA	4000K / 5000K	25,964	112.8	27,069	117.6	230.3
			3000K	24,926	108.2	25,986	112.8	230.3
	27	675 mA	4000K / 5000K	26,843	112.0	27,985	116.8	239.6
			3000K	25,769	107.5	26,866	112.1	239.6
	28	700 mA	4000K / 5000K	27,721	111.3	28,901	116.1	249.0
			3000K	26,612	106.9	27,745	111.4	249.0
	29	740 mA	4000K / 5000K	28,746	109.8	29,969	114.5	261.8
			3000K	27,596	105.4	28,771	109.9	261.8
	30	775 mA	4000K / 5000K	29,771	108.4	31,038	113.0	274.6
			3000K	28,580	104.1	29,796	108.5	274.6
	31	815 mA	4000K / 5000K	30,894	107.3	32,208	111.9	287.8
			3000K	29,658	103.0	30,920	107.4	287.8
	32	850 mA	4000K / 5000K	32,016	106.3	33,379	110.8	301.1
			3000K	30,736	102.1	32,043	106.4	301.1
	33	885 mA	4000K / 5000K	32,846	105.1	34,244	109.6	312.4
			3000K	31,532	100.9	32,874	105.2	312.4
	34	910 mA	4000K / 5000K	33,676	104.0	35,109	108.4	323.8
			3000K	32,329	99.9	33,704	104.1	323.8
	35	940 mA	4000K / 5000K	34,652	103.0	36,126	107.3	336.6
			3000K	33,266	98.8	34,681	103.0	336.6
	36	980 mA	4000K / 5000K	35,628	102.0	37,144	106.3	349.4
			3000K	34,203	97.9	35,658	102.1	349.4
	37	1015 mA	4000K / 5000K	36,604	101.1	38,161	105.4	362.1
			3000K	35,140	97.0	36,635	101.2	362.1
	38	1050 mA	4000K / 5000K	37,580	100.2	39,179	104.5	374.9
			3000K	36,077	96.2	37,612	100.3	374.9

SLMPRO6

SLIMLED™

6" Round LED Slim Profile Recess Retrofit, 17W,
Dimmable
Recess Lighting

Job Information		
Project Name	WMG Development	Type
Location		C1
Quantity		Date
Contact/Phone		
Notes		

Features

Body

Durable airtight aluminum body with etched white PMMA diffuser lens for low glare.

LED Characteristics

This general application light fixture features a 17 watt LED module that maintains uniform intensity producing up to 1200 lumens; with a typical CRI of 80. Available in 2700 K, 3000 K, 3500 K or 4000 K colour temperature.

Dimming

100%-10% dimming capability. This fixture is compatible with industry standard TRIAC/ELV dimmers (contact factory for listing of compatible dimmers).

Beam Spread

The fixture lens provides 110° beam spread.

Mounting

Includes two spring loaded clips to attached to any ceiling material.

LED Driver

Extruded aluminum hardwire box with 420mA dimmable class II electronic LED driver with 100-135V AC input. Includes an 18" plenum rated FT6 wire with DC 2.1 connector from driver to fixture.

Quick Connect push-in terminals

Three "Quick connect" push-in terminals for fast and easy wiring.

Operating Temperature

-20°C~40°C (-4°F~104°F)

Environment

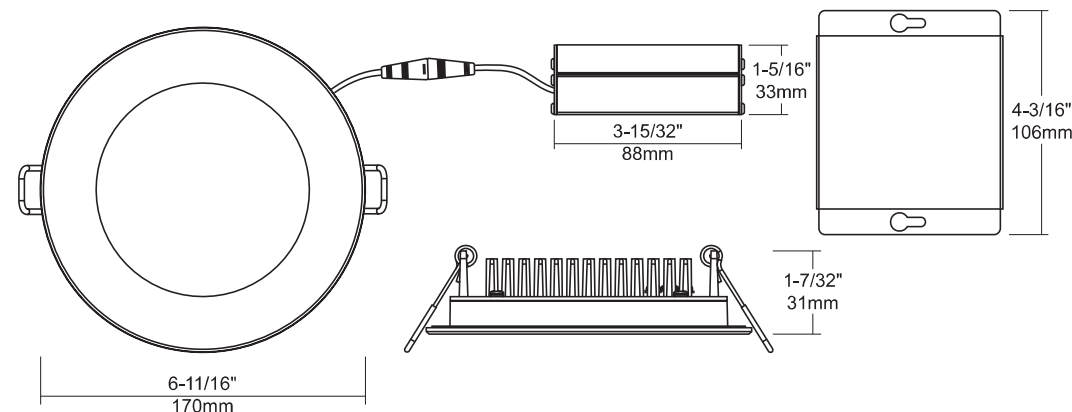
- Suitable for wet locations.
- Suitable for insulated ceiling applications.

SPECIFICATION	
Application	Ceiling Recess Mount
Approved Location	Wet
Beam Angle	110°
CCT	2700 K / 3000 K / 3500 K / 4000 K
Certification	cETLus
Class II	Yes
Colour	BK / BN / SL / WH
CRI	80
Dimming	Yes
Dimming Tech	Phase dimming
Energy Star	Yes
Hole Cut	Ø 6 3/16" (157mm)
Input	100-135V AC
LM80	Yes
Lumens	1150 / 1175 / 1175 / 1200 (based on WH)
Lumens per Watt	67.6 / 69.1 / 69.1 / 70.5 (based on WH)
Power Factor	>0.9
Projected Life	70% @ 50,000 hrs
Warranty	Lifetime ¹
Wattage	17W



Description

The SLMPRO6 is a 17 watt 6" round slim profile light fixture for recess retrofit application. It is a high-performance, easy to install residential and commercial grade downlight solution that offers super high output, energy-efficiency and streamlined design. Suitable for wet locations.



Notes: Accessories are sold separately. For additional options please consult your Liteline representative.
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

Ordering Guide

Colour Temperature	Driver Options ¹	Trim Finish
SLMPRO6 - 30K		BK
27K : 2700 K 30K : 3000 K 35K : 3500 K 40K : 4000 K	Leave blank for standard 120V driver L3 : Lutron Hi-Lume® 1% (3 Wire) E : Lutron Hi-Lume® 1% (EcoSystem®) EM : Emergency Backup, 120~277V, 0-10V C : 120~347V, 0-10V	BK : Black BN : Brushed Nickel SL : Silver WH : White

¹ Lifetime warranty only applies to fixture and standard driver. All other drivers are 5 year warranty.

Accessories



SLM-60-FC
60" Flexible connector, for use with SlimLED fixtures.



P-NCMK-1
New construction mounting kit. Includes hanger bars, brackets and screws.



VBE-3
Vapour barrier extender. For use in remodel applications.



P-6020
6¼" Round pre-mounting plate with driver attachment clip, for 6" SlimLED round fixtures.



VBE-1
Vapour barrier extender. For use in new construction applications.



VBE-4
Vapour barrier extender. For use in remodel applications.

Compatible Dimmers

Dimmer Type	Brand	Model	Light Output		Maximum Number of Fixtures per Dimmer	
			Min	Max	Min	Max
CFL/LED	Lutron	DVCL-153	10%	89%	1	14
		CTCL-153	0%	88%	1	1
		MACL-153	0%	82%	1	1
		PD-6WCL-	0%	83%	1	2
	Legrand	HCL453PTC	0%	90%	1	12
ELV	Leviton	6674	6%	90%	1	5
	Lutron	MAELV-300	0%	91%	1	16
		NTELV-300	7%	82%	1	16
	Legrand	H703PTU	6%	98%	2	40
	Cooper	AAL06	16%	90%	2	9
	Leviton	6615	15%	96%	1	35
		IPE04	10%	92%	1	34
		DSE06	5%	96%	1	34
Incandescent	Lutron	D600	0%	86%	1	12
		DV-600P	0%	90%	2	10
	Cooper	R1061	0%	94%	2	9
	Leviton	6633-P	0%	97%	4	12



HINKLEY LIGHTNING, INC.
33000 PIN OAK PARKWAY | AVON LAKE, OHIO 44012
[PH] 330.653.5500 [F] 440.653.5555
HINKLEYLIGHTNING.com | FREDRICKRAMOND.com

Extra Large Wall Mount Lantern 1639BZ-LED



ITEM NUMBER	1639BZ-LED
BRAND	Hinkley Lighting
MATERIAL	Aluminum
GLASS	Etched Lens
HEIGHT	36.0"
WIDTH	12.0"
LED COLOR TEMP	3000
VOLTAGE	120v
LED LUMENS	1800
WATTAGE	23w LED *Included
TITLE	TWENTYFOUR DEC
CERTIFICATION	C-US Wet Rated

FEATURES AND BENEFITS

- Meets California Energy Commission 2016 Title regulations
- Fixture is ADA compliant and adheres to the standards and guidelines listed by the Americans with Disabilities Act.
- For complete warranty information visit [\(hyperlink\)](#)
- 2 year finish warranty
- LED components carry a 5-year limited warranty
- Bold lines and a clean, minimalist style complement contemporary architecture
- Bold and robust dark bronze finish

FINISH	Bronze
--------	--------

AT HINKLEY, WE EMBRACE THE DESIGN PHILOSOPHY THAT YOU CAN MERGE TOGETHER THE LIGHTING, FURNITURE, ART, COLORS AND ACCESSORIES YOU LOVE INTO A BEAUTIFUL ENVIRONMENT THAT DEFINES YOUR OWN PERSONAL STYLE. WE HOPE YOU WILL BE INSPIRED BY OUR COMMITMENT TO KEEP YOUR 'LIFE AGLOW.'

life AGLOW®



37, 57 and 62 Watt SLIM Wall packs are designed to cover the footprint of most traditional wall packs. They are suitable for mounting heights from 20' to 30', and replace HID Wattages from 200W MH to 320W MH. These ultra-high efficiency fixtures are available in cutoff or full cutoff models.

Color: Bronze

Weight: 9.0 lbs

Project:

Type:

Prepared By:

Date:

Driver Info

Type	Constant Current
120V	0.31A
208V	0.19A
240V	0.16A
277V	0.14A
Input Watts	34.6W
Efficiency	N/A

LED Info

Watts	37W
Color Temp	4000K (Neutral)
Color Accuracy	73 CRI
L70 Lifespan	100,000
Lumens	3,873
Efficacy	111.9 LPW

Technical Specifications

Listings

UL Listing:

Suitable for Wet Locations. Wall Mount Only.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. DLC Product Code: P00001722

Construction

Footprint:

Designed to replace RAB HID WP1 wall packs, both in size and footprint template, so upgrading to LED is easy and seamless

IP Rating:

Ingress Protection rating of IP66 for dust and water

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in 40°C (104°F)

Housing:

Precision die-cast aluminum housing and door frame

Mounting:

Die-cast back box with four (4) conduit entry points and knockout pattern for junction box or direct wall mounting. Hinged housing and bubble level for easy installation.

Cutoff:

Cutoff (10°)

Recommended Mounting Height:

Up to 20 ft

Lens:

Microprismatic diffusion glass lens reduces glare and has smooth and even light distribution

Reflector:

Specular thermoplastic

Gaskets:

The unique design of the tight-lock gasket ensures no water or environmental elements will ever get inside the SLIM

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

LED Characteristics

LED:

Long-life, high-efficiency, micro-power, surface mount LEDs; binned and mixed for uniform light output and color

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5-year period

Technical Specifications (continued)

LED Characteristics

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Other

Accessories:

Available accessories include polyshield and wire guard. Click [here](#) to see all accessories.

Patents:

The design of the SLIM™ is protected by patents pending in US, Canada, China, Taiwan and Mexico

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

HID Replacement Range:

Replaces 200W Metal Halide

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical

BUG Rating:

B1 U1 G1

Electrical

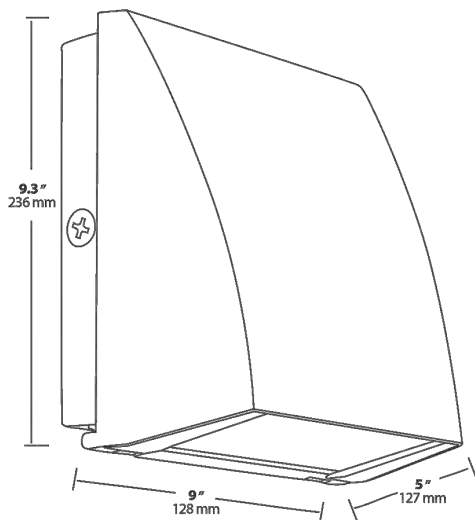
Driver:

Constant Current, 100-277V. 50/60Hz, 100-277VAC 0.6A, 4kV Surge Protection, 700mA, Power Factor 99.4%.

THD:

22.1% at 347V

Dimensions



Features

Covers footprint of most traditional wall packs

Easy installation with hinged access, bubble level and multiple conduit entries

Tight-lock gasket keeps elements out

100,000-hour LED lifespan

5-Year, No-Compromise Warranty

Ordering Matrix

Family	Cutoff	Wattage	Color Temp	Finish	Driver Options	Options	Other Options
SLIM		37	N				
	Blank = Cutoff (10 degrees) FC = Full Cutoff (0 degrees)	37 = 37W 57 = 57W 62 = 62W	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Bronze W = White	Blank = Standard (120-277V) /BL = Bi-Level /D10 = Dimmable /480 = 480V	/LC = Lightcloud® Controller Blank = No Option /PC = 120V Button Photocell /PC2 = 277V Button Photocell /PCS = 120V Swivel Photocell /PCS2 = 277V Swivel Photocell	USA = BAA Compliant Blank = Standard



September 3, 2019

Jeff Retzlaff – Community Development
Lawrence Ratayczak – Public Works

Re: Tarr Group – Dental Building Site Plan Review Application Staff Review Comments

Dear Reviewers,

Thank you for the comments on our submittal. Enclosed are updated drawings addressing your comments. Below you will find all of your comments and advisements and our corresponding responses.

Mr. Retzlaff -

1. **Comment:** Please provide the heights of the proposed light poles. Village code limits overall height to 25 feet.
Response: *Sheet PH2.1 has been updated to show the total height of the light poles.*
2. **Comment:** Please provide at least one updated rendering consistent with and showing the proposed dental building with the trellis and of the dumpster.
Response: *An updated rendering has been provided showing the trellis. A manufacturer's specification booklet has been provided showing the size, material, and color of the dumpster to be used.*
3. **Comment:** Specifications for the pre-fab Dumpster need to be provided.
Response: *A manufacturer's specification booklet has been provided showing the size, material, and color of the dumpster to be used.*
4. **Comment:** The dumpster location is questionable given that displaces parking stalls in front of (closer to) the other retail stores in the main building, and, presents a view of the dumpster to those same stores. Consider relocating the dumpster to the west bank of parking stalls closer to Mequon Road or integrating it with the parking stalls near the northeast corner of the building.
Response: *We had explored alternate locations for the dumpster during the initial design phase and the current location was the best option due to existing site topography. The dumpster pad was rotated 180 degrees so that the dumpster now faces Mequon Rd and the new dental office. This will prevent the main building from having a view in to the dumpster.*
5. **Comment:** The landscaping plan lists four (4) dark arborvitaes to be planted. These are not indicated on the site plan. Minimum planting sizes need to be 3" dia. for deciduous trees, 2.5" for ornamental trees, 8' height for evergreen trees, and 5-gal for shrubs.
Response: *Understood. Plant list has been updated*

6. **Comment:** Additional foundation landscaping is needed around the perimeter of the building (four sides).

Response: Understood.

7. **Comment:** Do you intend to sign the parking stalls within the property boundary for “dental office use only” or will they be available for other store patrons to use?

Response: All spaces will be available for other store patrons to use.

8. **Comment:** A separate Sign Permit Application should be submitted for the wall signage. All signs must meet the requirements of Chapter 17.46.

Response: Understood, sign permitting will be managed by the developer during the construction process

Mr. Ratayczak -

9. **Comment:** Please respond to each item below. A written response addressing each item shall be included in your submittal.

Response: Understood

10. **Comment:** The submitted plans have been reviewed for general conformance with State and Village design guidelines. Additional comments could arise as a result of the plan completion and modifications. The items listed below will need to be fully resolved before the Engineering Dept. can recommend a formal approval of the plans and permit for construction.

Response: Understood

11. **Comment:** The project will require DSPS plumbing system review and approval. Please provide a copy of the DSPS approval prior to engineering approval

Response: Understood, will provide upon receipt

12. **Comment:** As-builts prepared to Village standards shall be prepared and provided to the Village post-construction (for all applicable items).

Response: Understood

13. **Comment:** A professional engineer’s original seal is to be affixed, signed and dated on the final set of construction plans.

Response: Understood

14. **Comment:** Contact Frank Rosecky, 262-250-4722 for a utility permit

Response: We have contacted Mr. Rosecky for a utility permit.

15. **Comment:** 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.

Response: Understood

16. **Comment:** C1.3 Erosion & Sediment Control Plan: Revise notes to require inspections at least once every 7 days and within 24 hours of a rainfall event of a 0.5" or more.
Response: *Sediment and Erosion Control Standard Note #2 and Construction Sequence Note #2 has been revised to reflect the inspection requirements.*
17. **Comment:** C1.3 Erosion & Sediment Control Plan: Revise notes to require inspection reports per WDNR standards be kept on-site and available upon request.
Response: *Sediment and Erosion Control Standard Note #2 has been revised to reflect the inspection requirements.*
18. **Comment:** C1.3 Erosion & Sediment Control Plan: Update notes to reference Wisconsin Standards. Note 18 currently refers to NC's water quality standards.
Response: *The note has been revised to reference WDNR standards.*
19. **Comment:** C3.1 Utility Plan: Plans note 6" PVC sewer lateral, but cleanouts are noted as 4". Please revise.
Response: *The plans have been revised accordingly.*
20. **Comment:** C3.1 Utility Plan: Revise sanitary sewer. Move manhole A-2 further east so the lateral from the building can connect directly to the manhole without the bends and cleanout. Add a sampling manhole to the lateral. See attached plan markup for additional detail.
Response: *The sanitary sewer plans have been revised accordingly. The 6" lateral now travels straight to the manhole and a sample manhole has been added to the lateral.*
21. **Comment:** C3.1 Utility Plan: Connection to the existing watermain shall be made with a Smith Blair-repair clamp with a CC port.
Response: *A Water Notes section has been added to this sheet. Note #3 refers to the connection clamp.*
22. **Comment:** C3.1 Utility Plan: Connection to the watermain for the irrigation line shall be made with the same Smith Blair repair clamp.
Response: *This note has been added to Water Notes #4.*
23. **Comment:** C3.1 Utility Plan: Install tracer wire per Village Standards (see attached).
Response: *This note has been added to Water Notes #5 and General Utility Notes #10. The specifications provided in the comment letter have been added to sheet C5.4.*
24. **Comment:** C3.1 Utility Plan: Install a separate curb stop for the irrigation line.
Response: *A curb stop for the irrigation line has been added to the plans.*
25. **Comment:** C3.1 Utility Plan: If the irrigation meter is installed outside it needs to be in a pit that allows for it to be removed and installed from above ground with separate shut offs for the inlet and outlet. Alternatively the meter could be installed inside with a lateral back outside.
Response: *A Mueller (or approved equal) water pit has been added to the plans. A detail for the water pit has been added to sheet C5.4.*
26. **Comment:** C3.1 Utility Plan: Water lateral shall be DR 9, please revise note #11.
Response: *This note has been added to Water Notes #6*

27. Comment: C4.2 Drainage Plan: Existing storm sewer running under the building is noted as 18" at the catch basin east of the building and 15" at the catch basin west of the building. Please clarify the size of the existing storm sewer. If it is 18" proposed storm sewer shall be increased to 18" to match.

Response: *The plans were incorrectly labeled and have been revised to 18".*

28. Comment: C4.2 Drainage Plan: Provide detailed spot elevations for the grading.

Response: *Sheet C4.1 is included in the plans. The detailed grading has been broken out from the drainage plan for clarity.*

29. Comment: C4.2 Drainage Plan: Please provide storm sewer calculations.

Response: *Sheet C4.3 has been added containing drainage calculations*

30. Comment: C5.2 Details: Inlet protection detail is blurry and difficult to read. Please correct.

Response: *The inlet protection detail has been revised and should be clearer.*

31. Comment: C5.2 Details: Plans call for flexstorm inlet filters. If these are to serve as the inlet protection the WisDOT inlet protection detail can be removed.

Response: *The WisDOT inlet protection Type B is to be used during construction since the FlexStorm can only be used on a stabilized site. FlexStorm will be installed once the site is paved and stabilized.*

32. Comment: C5.3 Details: Many of these details are blurry and difficult to read. Please correct.

Response: *The details have been revised and should be clearer. Detail number 5 (the FlexStorm operation and maintenance plan) might still be blurry. If so, we will work out a solution for the final set of plans that are approved.*

33. Comment: C5.3 Details: Inlet cover detail shows a number of different types of inlet covers. Please clarify which ones will be used on this project.

Response: *The detail has been marked up to show the inlet cover that's being used (Type B-A). All other details are marked through.*

If you have any questions or require additional information, please do not hesitate to contact me via email (dylan@tarr-group.com) or phone (615-829-0331).

Sincerely,

A handwritten signature in blue ink, appearing to read "Dylan Tarr".

Dylan Tarr, PE

AGENCY CONTACTS

ZONING
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CONTACT: JEFF RETZLAFF, AICP
PHONE: 262-250-4735
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ENGINEERING/STORMWATER
VILLAGE OF GERMANTOWN
CONTACT: ERIC NITSCHKE
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FIRE
GERMANTOWN FIRE DEPARTMENT
CONTACT: STEVE SMITH
PHONE: 262-502-4701
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WATER
VILLAGE OF GERMANTOWN
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GAS
WE ENERGIES
CONTACT: LAURIE FREDRICKS
PHONE: 262-253-4542

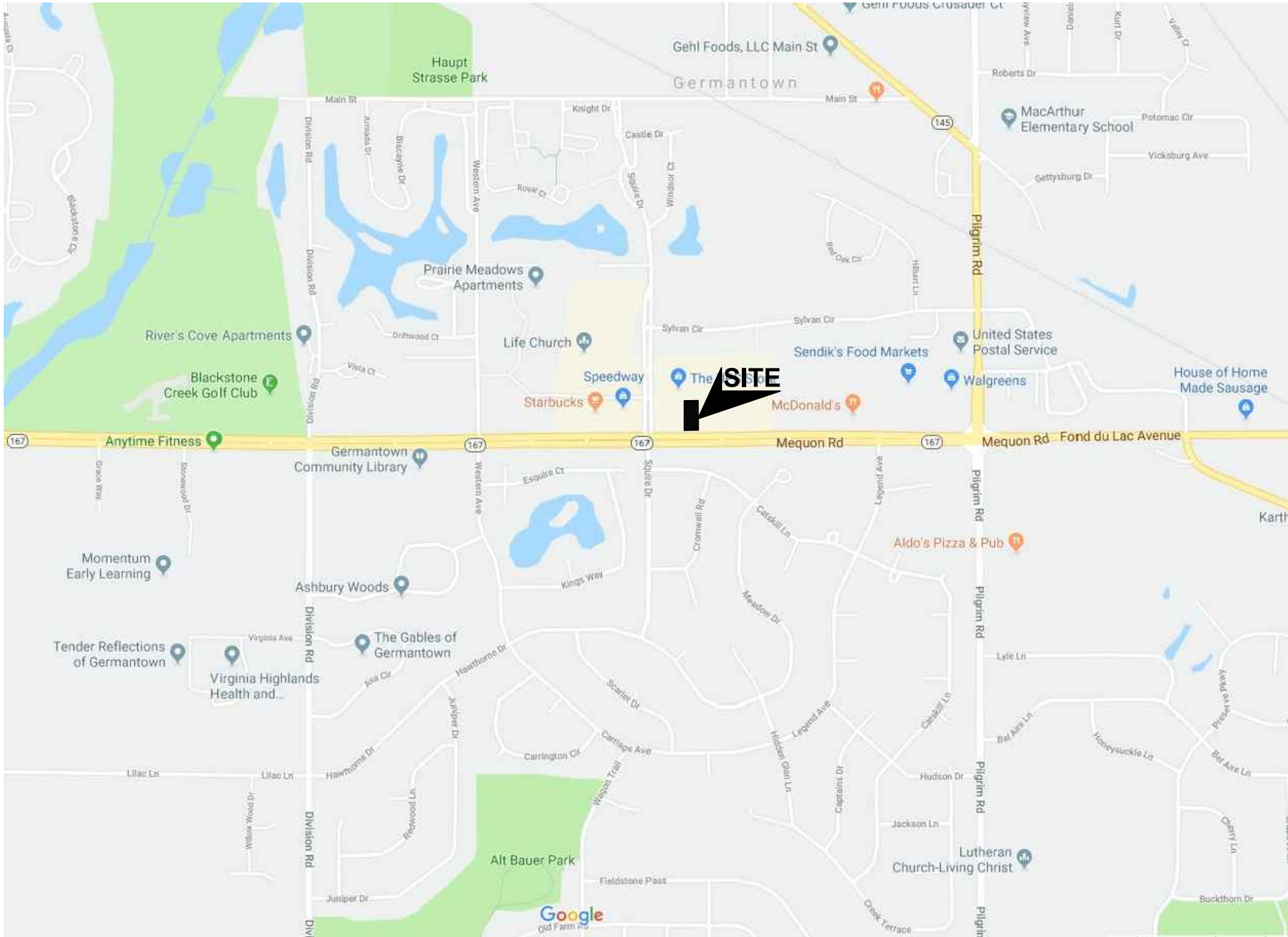
ELECTRIC
WE ENERGIES
CONTACT: LAURIE FREDRICKS
PHONE: 262-253-4542

TELEPHONE & CABLE
AT&T
PHONE: 888-944-0447

4,324 SQUARE FOOT - SINGLE STORY DENTAL OFFICE

GERMANTOWN DENTAL OFFICE

N112 W16200 MEQUON ROAD (LOT 3)
GERMANTOWN, WISCONSIN



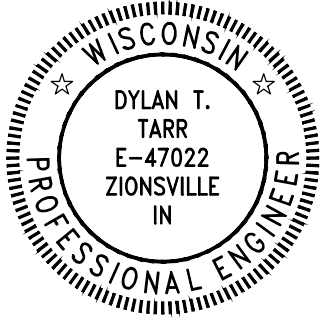
VICINITY MAP
NTS

DESIGN CONTACTS

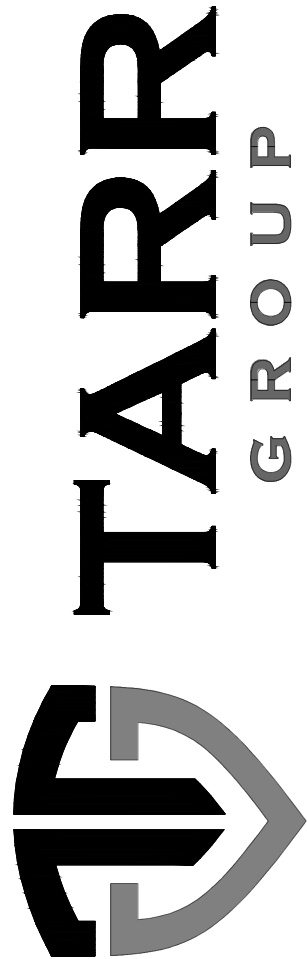
SURVEYOR: DAAR CORPORATION
518 WEST CHERRY STREET
MILWAUKEE, WI 53212
CONTACT: JEFFREY JOHNSON
PHONE: 414-225-9817
EMAIL: JEFF.JOHNSON@DARRCORP.COM

CIVIL ENGINEER / LANDSCAPE ARCHITECT:
TARR GROUP, LLC
3229 PURPLE ASH DRIVE
ZIONSVILLE, IN 46077
ENGINEERING CONTACT: KEVIN PULIS
PHONE: 843-633-3579
EMAIL: KEVIN@TARR-GROUP.COM
LANDSCAPE ARCHITECT: TIM HUBER
PHONE: 502-648-3803
EMAIL: TIM@TARR-GROUP.COM

DEVELOPER: WMG DEVELOPMENT, LLC.
PO BOX 768
EFFINGHAM, IL 62401
CONTACT: BRIAN SCHROCK
PHONE: 314-537-4140



09/03/2019



3229 PURPLE ASH DRIVE
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GERMANTOWN DENTAL OFFICE
WMG DEVELOPMENT, LLC
N112 W16200 MEQUON ROAD (LOT 3)
GERMANTOWN, WISCONSIN

ABBREVIATIONS:

@	AT
CL	CENTERLINE
PL	PROPERTY LINE
Ø	DIAMETER
±	MATCH EXISTING FINISHED GRADE
BC	BOTTOM OF CURB
BLDG	BUILDING
BTM	BOTTOM
CO	CLEANOUT
E	EAST
ELEV	ELEVATION
F	FLUSH
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FES	FLARED END SECTION
FM	FORCEMAIN
FT	FOOT
HDPE	HIGH-DENSITY POLYETHYLENE
IE	INVERT ELEVATION
IN	INCH
LF	LINEAR FEET
MEFG	MATCH EXISTING FINISHED GRADE
MH	MANHOLE
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
N	NORTH
OC	ON CENTER
PVC	POLYVINYL CHLORIDE
R	RADIUS
S	SLOPE / SOUTH
SS	SANITARY SEWER
S/W	SIDEWALK
TC	TOP OF CURB
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
W	WEST
WQv	WATER QUALITY VOLUME
WSE	WATER SURFACE ELEVATION
WT	WATER

DRAWING INDEX

SHEET NO.	SHEET TITLE
C0.1	COVER SHEET
C1.1	EXISTING CONDITIONS
C1.2	DEMOLITION PLAN
C1.3	EROSION & SEDIMENT CONTROL PLAN
C2.1	SITE LAYOUT PLAN
C3.1	UTILITY PLAN
C3.2	SANITARY SEWER PLAN & PROFILE
C4.1	GRADING PLAN
C4.2	DRAINAGE PLAN
C4.3	STORM DRAINAGE ANALYSIS
C5.1	CIVIL DETAILS
C5.2	CIVIL DETAILS
C5.3	CIVIL DETAILS
C5.4	CIVIL DETAILS
L2.1	LANDSCAPE PLAN
L5.1	LANDSCAPE DETAILS
L12.1	IRRIGATION PLAN
PH2.1	PHOTOMETRIC PLAN

ORIGINAL ISSUE DATE: 07/11/2019

REVISIONS:

PER VILLAGE COMMENTS 09/03/2019

PROJ. NO.: 19015

COVER SHEET

C0.1

ALTA/NSPS LAND TITLE SURVEY

Survey No. 120155

JUNE 19, 2019

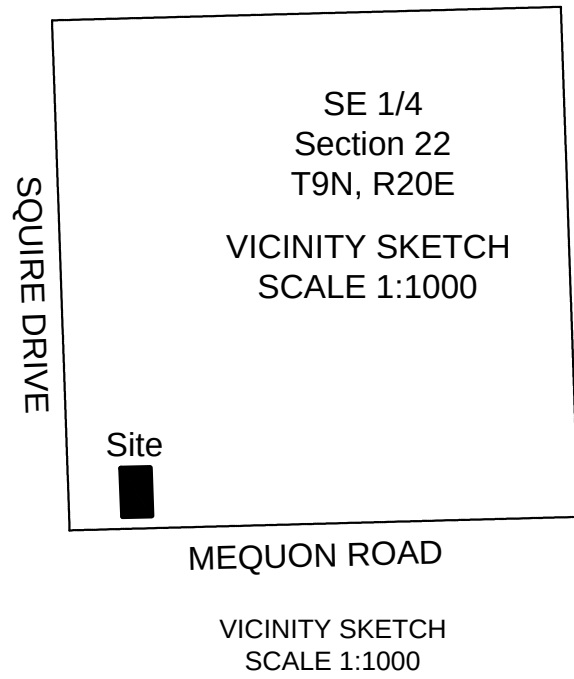
LOCATION: N112 W16200 MEQUON ROAD, GERMANTOWN, WISCONSIN

LEGAL DESCRIPTION: Lot 3 of Certified Survey Map No. 6605 recorded in the Washington County Register of Deeds office on February 26, 2015 in Volume 50 of Certified Survey Maps on page 239, as Document No. 1376239, being a re-division of Lot 1 of Certified Survey Map No. 3414, located in the Southwest 1/4 of the Southeast 1/4 of Section 22, Township 9 North, Range 20 East, in the Village of Germantown, Washington County, Wisconsin. Corrected by a Certified Survey Map Correction and Ratification Affidavit recorded March 18, 2015, as Document No. 1377494 .

TAX ID NO.: GTNV 224-986-003

The above described parcel is the same land as described in KNIGHT BARRY TITLE GROUP COMMITMENT FOR TITLE INSURANCE File #:1038162 bearing an effective date of May 30, 2019 at 8:00 A.M.

VICINITY SKETCH



LEGEND OF SYMBOLS & ABBREVIATIONS

	Transformer		Water Valve		Conc. = Concrete		Underground Cable TV Line
	Cable Pedestal		Hydrant		Exist. = Existing		Underground Watermain
	Telephone Pedestal		Square Catch Basin		M.H. = Manhole		Underground Telephone
	Lot Corner		Sanitary Sewer Manhole		San. = Sanitary		Underground Gas Line
	Guy Wire		Curb Inlet Catch Basin		Rec. = Record		Underground Electric
	Flag Pole		Electric Meters		Typ. = Typical		Underground Storm Sewer
	Storm Sewer Manhole		Chiseled Cross		T.O.C. = Top of Curb		Overhead Wires
	Gas Meter		Gas Valve		Sec. = Section		Underground Sanitary Sewer
	Ground Light		Sign		Mon. = Monument		Water Shut Off
	Electric Pedestal		Light Pole		P.O.B. =Point of Beginning		Bollard
	Traffic Light		Utility Pole		P.O.C. =Point of Commencement		Catch Basin Round
	Telephone Vault		Telephone Manhole		Handicap		Electric Manhole
	Mailbox		A/C Air Conditioning Unit				Traffic Direction Arrow

NOTES CORRESPONDING TO SCHEDULE B - II

200. Conveyance of Lands to County for Highway Purposes and other matters as contained in the instrument recorded May 24, 1959 in Volume 210 of Deeds on page 195, as Document No. 232692. NOT SHOWN ON SURVEY. Affected by a Conveyance of Rights in Land and other matters as contained in the instrument recorded December 19, 1996 in Volume 1658 of Records on page 377, as Document No. 735707. SHOWN ON SURVEY.

201. Easements, restrictions and other matters shown on Certified Survey Map No. 3414 recorded July 7, 1989 as Document No. 545725. NOT SHOWN ON SURVEY.

202. Utility Easement to Wisconsin Electric Power Company and other matters contained in the instrument recorded June 7, 1990 in Volume 1074 of Records on page 655 as Document No. 560987. NOT SHOWN ON SURVEY. Affected by a Conveyance of Right in Land recorded November 27, 1995 in Volume 1550 of Records on page 667, as Document No. 704909. SHOWN ON SURVEY.

203. Utility Easement to Wisconsin Electric Power Company and other matters contained in the instrument recorded September 14, 1990 in Volume 1089 of Records on page 180 as Document No. 566242. NOT SHOWN ON SURVEY.

Affected by a Conveyance of Right in Land recorded November 27, 1995 in Volume 1550 of Records on page 667, as Document No. 704909. NOT SHOWN ON SURVEY.

204. Access and Parking Easement Agreement and other matters as contained in the instrument recorded October 4, 1991 in Volume 1145 of Records on page 651, as Document No. 586134. SHOWN ON SURVEY

Amended by an Amendment to Access and Parking Easement Agreement recorded September 20, 1994 in Volume 1459 of Records on page 135, as Document No. 677266. NOT SHOWN ON SURVEY.

205. Restrictions, conditions and other matters as contained in the Germantown Marketplace Declaration of Covenants and Restrictions recorded April 26, 1996 in Volume 1590 of Records on page 325, as Document No. 716129. NOT SHOWN ON SURVEY.

206. Restrictions, conditions and other matters as contained in the Restrictive Covenant recorded April 30, 2001, as Document No. 884120. NOT SHOWN ON SURVEY.

207. Easements, restrictions and other matters shown on Certified Survey Map No. 6605 recorded February 26, 2015 as Document No. 1376239. SHOWN ON SURVEY.

Corrected by a Certified Survey Map Correction and Ratification Affidavit recorded March 18, 2015, as Document No. 1377494. SHOWN ON SURVEY.

208. Conditions, restrictions, easements, fees and other matters as contained in the Declaration Regarding Conditions, Covenants, and Restrictions recorded March 31, 2015, as Document No. 1378355. SHOWN ON SURVEY.

NOTE: The above Declaration includes a Cross Access Easement, a Cross Parking Easement, a Stormwater Drainage Easement and Utility Easement. SHOWN ON SURVEY.

300. Judgments and/or liens, if any, docketed or filed against the prospective owner of Land. Further report will be made as to such judgments and liens when the Company is advised as to the name of the prospective owner.

400. Mortgage.

401. Mortgage.

402. Financial Statement

403. Financial Statement

Notes:

- The location and size of underground structures and utilities shown hereon have been located to a reasonable degree of accuracy, but DAAR Engineering, Inc. does not guarantee their exact location or the location of others not shown. Contact Diggers Hotline. Underground electric, water and communication utilities were marked in the field as of May 17, 2019 by Diggers Hotline Ticket #20192012273
- There exists 88 regular parking spaces and 1 handicap parking spaces on the subject property. Parking Stalls = 89 Total.
- Subject property serviced by public sewer and water.
- The Land Area of the subject property is 37,901 Square Feet or 0.8701 Acres as described in the legal description.
- At the time of Survey there was no evidence of earth moving or construction.
- At the time of Survey there was no evidence that the property is used as a solid waste dump, sump or sanitary landfill.
- No Wetlands were delineated at the time of the survey.
- No evidence was found for Cemetery or burial grounds on or adjacent to the site.

FLOOD NOTE:

This property described on this Survey lies in Zone AE and is partially in a Special Flood Hazard Area as defined by the Federal Emergency Management Agency as identified on the Flood Insurance Rate Map Community Panel No. 55161C0376D dated November 20, 2013.

STATEMENT OF ENCROACHMENTS

None Observed

ALTA/SURVEY CERTIFICATION

To KNIGHT BARRY TITLE GROUP ; Compass Properties Germantown, LLC:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6a, 6B, 7a, 7B(1), 8, 9, 10A, 11, 13, 14, 16, 17 of Table A thereof.

The field work was completed on May 31, 2019.
Date of Plat or Map: June 19, 2019.

06/27/2019

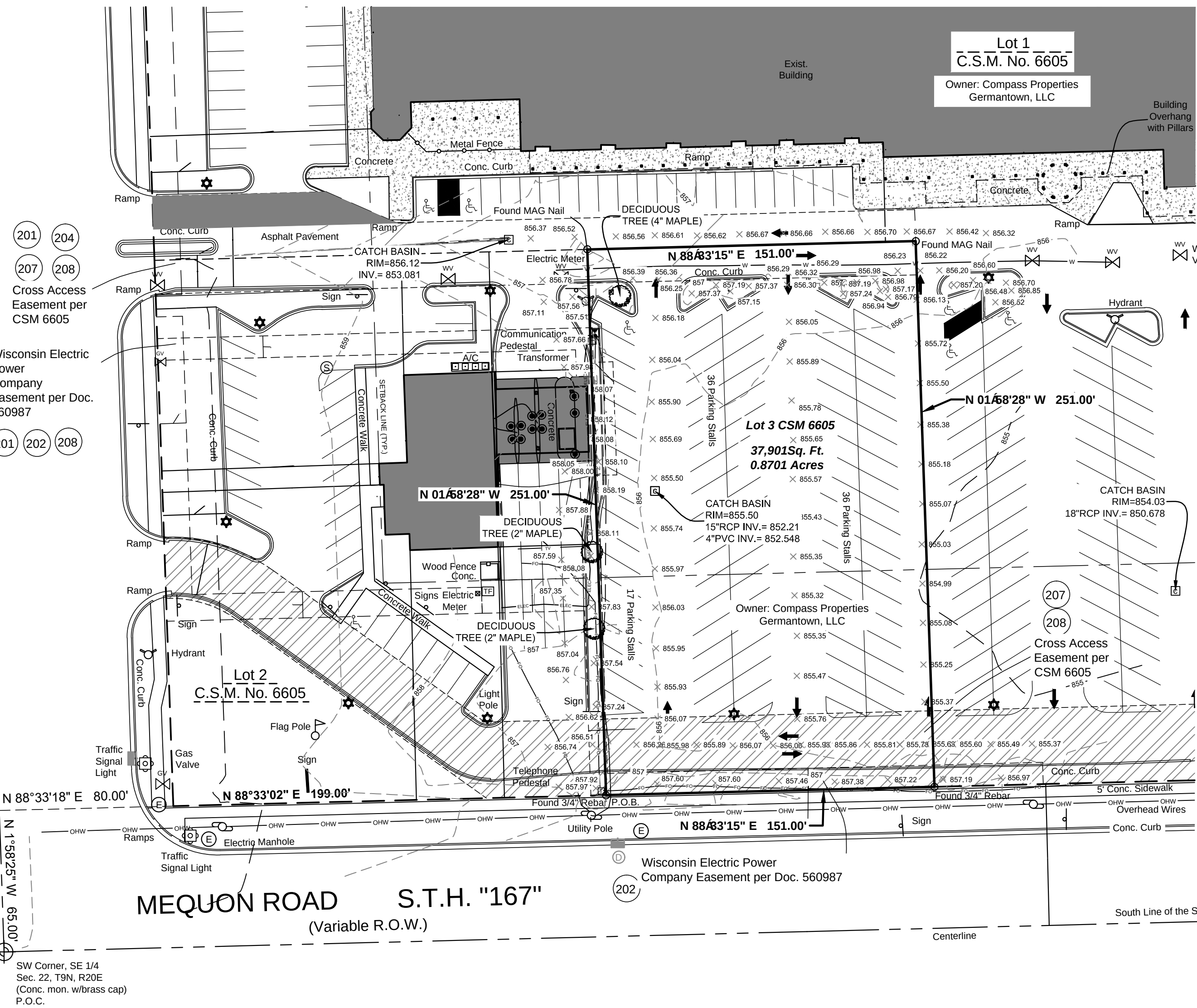
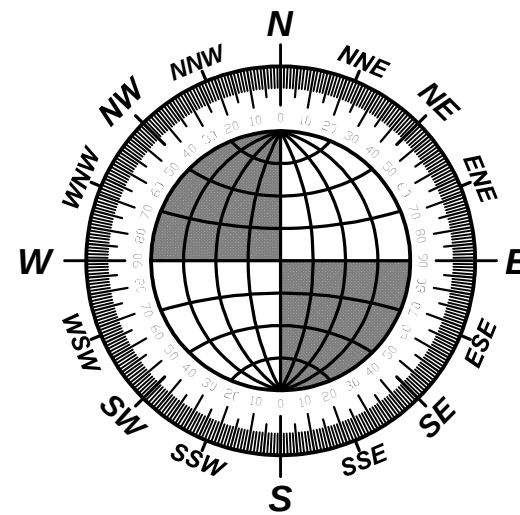
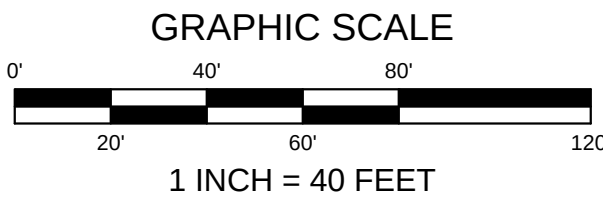
Jeffrey B. Johnson, PLS
Registration No.1734
Within the State of WI

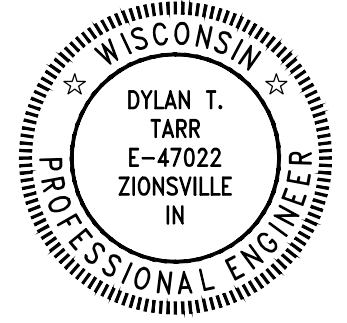
Survey Prepared by: Jeffrey B. Johnson
Field Work / This Instrument Drafted by: Jeffrey B. Johnson
DAAR Engineering, Inc. - 518 West Cherry Street - Milwaukee, WI 53212
Phone: 414-225-9817 - Fax: 414-604-0677

ZONED: B-2 COMMUNITY BUSINESS DISTRICT
PRINCIPAL BUILDING SETBACK REQUIREMENTS:
FRONT: 100.00 FEET
REAR: 40.00 FEET
SIDE: 40.00 FEET
BUILDING HEIGHT: 45.00 FT MAX

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

Bearings refer to Grid North of the Wisconsin State Plane Coordinate System Grid, South Zone per N.A.D. 1927. The West line of the Southeast 1/4 of Section 22, Township 9 North, Range 20 East has a reference bearing of N 01°58'25" W.





09/03/2019



3229 PURPLE ASH DRIVE
ZIONSVILLE, IN 46077
EMAIL: KEVIN@TARR-GROUP.COM
PHONE: 843-633-3579

GERMANTOWN DENTAL OFFICE
WMG DEVELOPMENT, LLC
N112 W16200 MEQUON ROAD (LOT 3)
GERMANTOWN, WISCONSIN

ORIGINAL ISSUE DATE: 07/11/2019
REVISIONS:
PER VILLAGE COMMENTS 09/03/2019

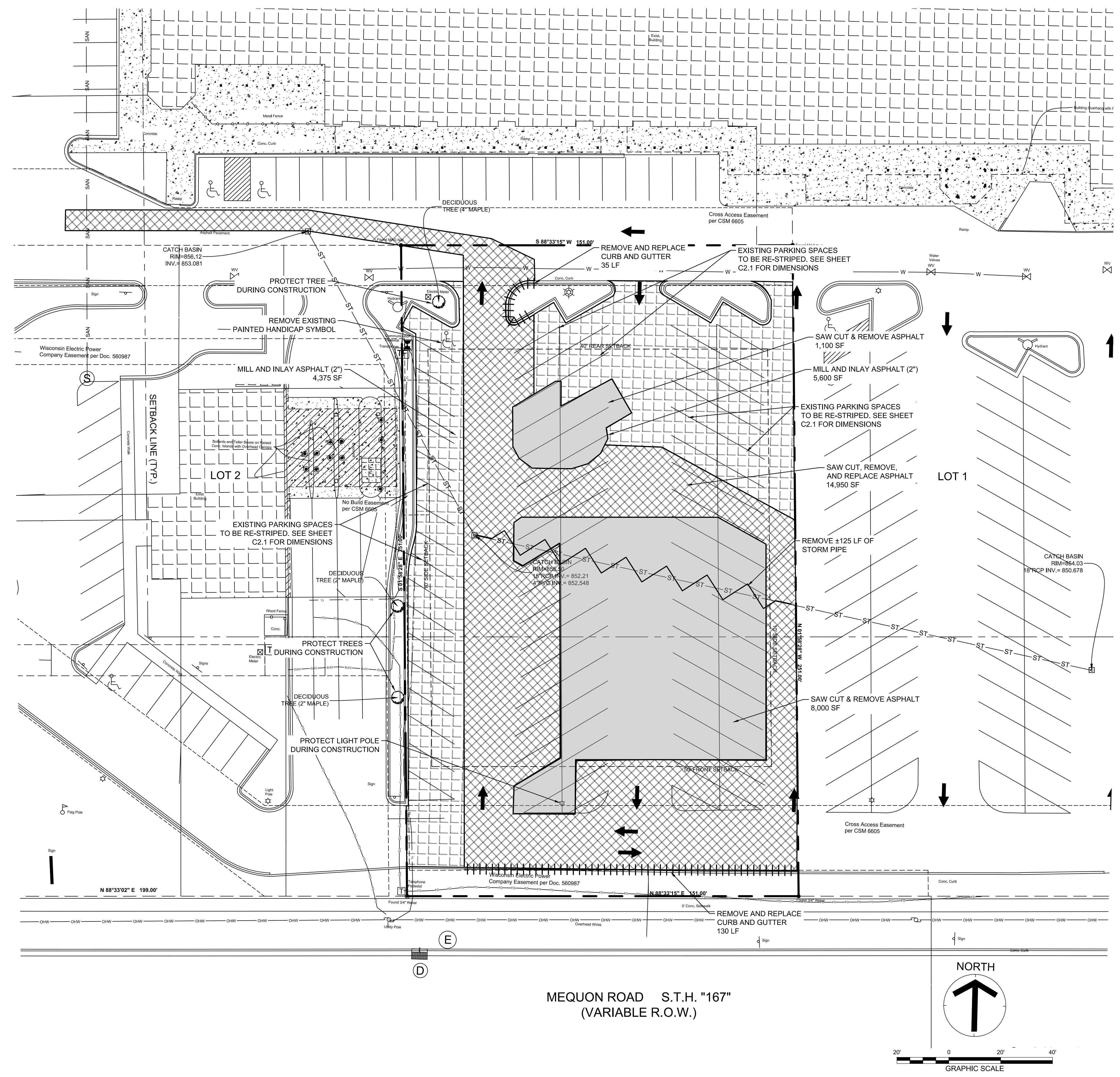
PROJ. NO.: 19015

DEMOLITION PLAN

C1.2

DEMOLITION LEGEND

- SAWCUT & REMOVE ASPHALT
- SAWCUT, REMOVE, AND REPLACE ASPHALT
- MILL AND INLAY ASPHALT (2")
- REMOVE STORM PIPE
- REMOVE AND REPLACE CURB AND GUTTER



C1.2-DEMO.dwg

SEDIMENT AND EROSION CONTROL STANDARD NOTES

1. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN TWENTY-ONE DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
 - WHERE STABILIZATION BY THE 21ST DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
 - WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
2. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF 0.5" OR MORE. INSPECTION REPORTS SHALL BE COMPLETED PER WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) STANDARDS AND SHALL BE KEPT ON-SITE AND AVAILABLE UPON REQUEST.
3. IF PERIODIC INSPECTIONS OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY, OR INCORRECTLY, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
4. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
7. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE EROSION CONTROL MEASURES.
8. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
9. A COPY OF THE PLANS, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
10. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
11. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE CONTAINED PER THE STANDARD DETAILS.
12. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMP'S (SEDIMENT BASIN, FILTER BAG, ETC.).
13. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
 - WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
 - WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
 - FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
 - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
14. IF EXISTING BMP'S NEED TO BE MODIFIED OR IF ADDITIONAL BMP'S ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR WDNR STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED AND ALTERNATIVE BMP'S MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
15. IF THE SAME PERSON CONDUCTS THE LAND-DISTURBING ACTIVITY AND ANY RELATED BORROW OR WASTE ACTIVITY, THE RELATED BORROW OR WASTE ACTIVITY SHALL CONSTITUTE PART OF THE LAND-DISTURBING ACTIVITY UNLESS THE BORROW OR WASTE ACTIVITY IS REGULATED UNDER THE MINING ACT OF 1971, OR IS A LANDFILL REGULATED BY THE DIVISION OF SOLID WASTE MANAGEMENT. IF THE LAND-DISTURBING ACTIVITY AND ANY RELATED BORROW OR THE SAME PERSON DOES NOT CONDUCT WASTE ACTIVITIES, THEY SHALL BE CONSIDERED SEPARATE LAND-DISTURBING ACTIVITIES.

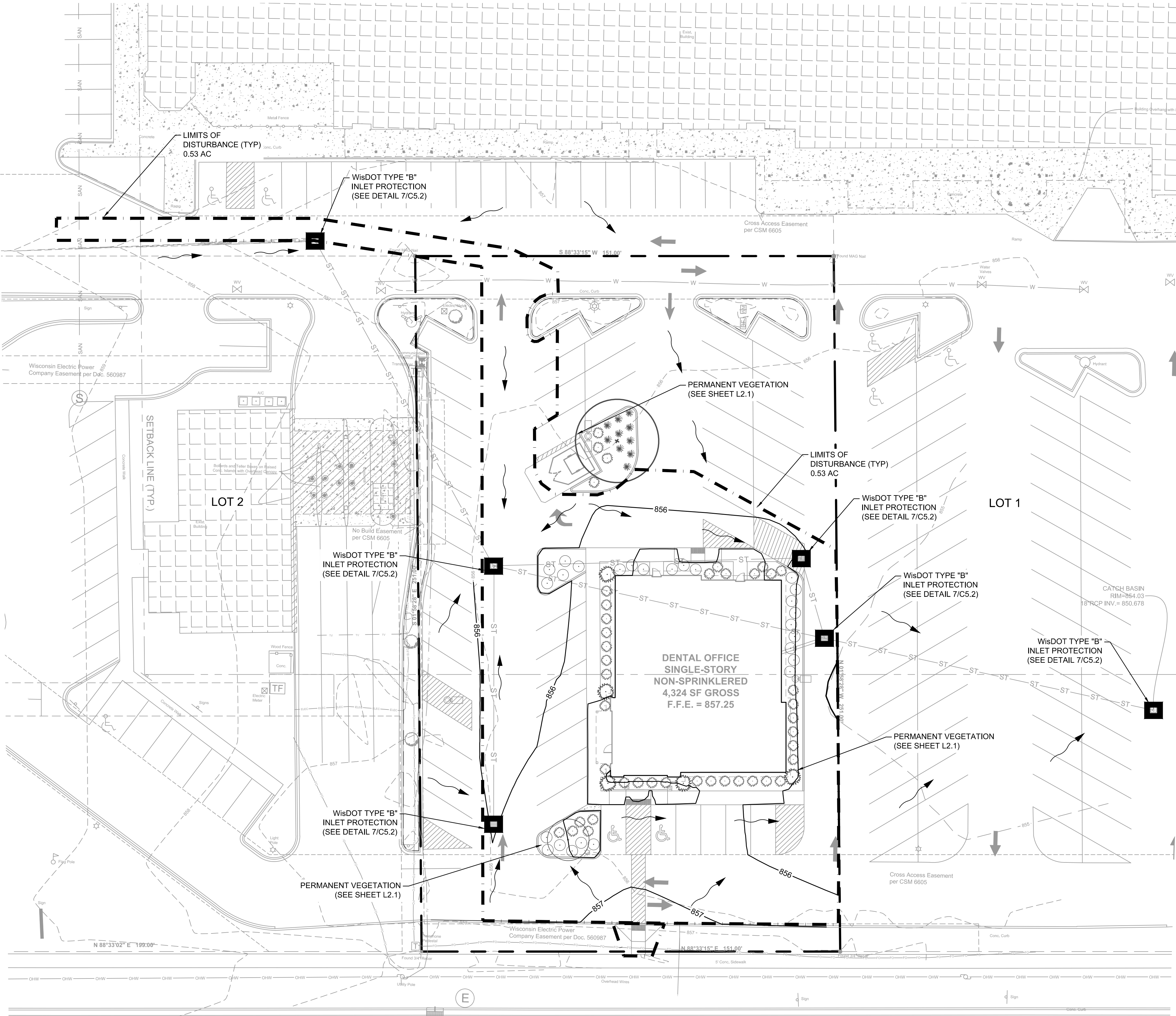
CONSTRUCTION SEQUENCE NOTES

1. PRIOR TO ANY LAND-DISTURBING ACTIVITY, CATCH BASIN INSERTS SHALL BE INSTALLED IN EXISTING CATCH BASINS.
2. ONCE EROSION CONTROL MEASURES ARE INSTALLED, CONSTRUCTION CAN BEGIN. A SITE INSPECTION SHALL BE PERFORMED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF 0.5" OR MORE.
3. EXCAVATED SOIL SHALL BE STOCKPILED AWAY FROM SHOPPING CENTER TRAFFIC AND PROTECTED FROM EROSION. SOILS SHALL BE REPLACED AS SOON AS PRACTICABLE OR REMOVED FROM THE SITE IF UNSUITABLE OR NOT NEEDED.
4. DEMOLISHED ASPHALT AND CONCRETE SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND TAKEN TO AN APPROVED WASTE HANDLING FACILITY.
5. AREAS THAT REACH ROUGH FINAL GRADING AND ARE NOT TO BE DISTURBED FOR 21 DAYS SHALL BE TEMPORARILY STABILIZED.
6. PERMANENT STABILIZATION AND LANDSCAPING SHALL BE INSTALLED AS SOON AS SITE WORK IS COMPLETED. REFER TO SHEET L2.1 FOR LANDSCAPING PLAN.

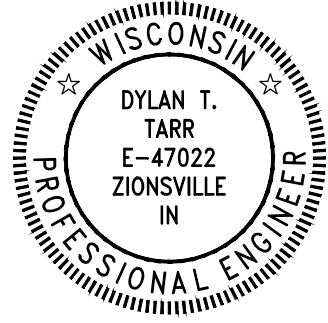
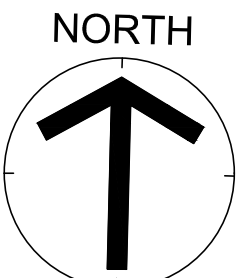
EROSION CONTROL LEGEND

DESCRIPTION	SYMBOL
INLET PROTECTION	
LIMITS OF DISTURBANCE:	
DRAINAGE PATTERN	

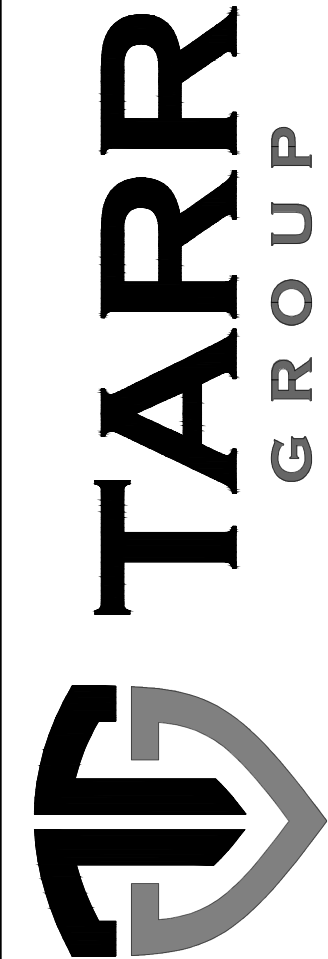
TOTAL SITE AREA = 10.53 AC
LIMITS OF DISTURBANCE = 0.53 AC



MEQUON ROAD S.T.H. "167"
(VARIABLE R.O.W.)



09/03/2019



3229 PURPLE ASH DRIVE
ZIONSVILLE, IN 46077
EMAIL: KEVIN@TARR-GROUP.COM
PHONE: 843-633-3579

GERMANTOWN DENTAL OFFICE
WMG DEVELOPMENT, LLC
N112 W16200 MEQUON ROAD (LOT 3)
GERMANTOWN, WISCONSIN

ORIGINAL ISSUE DATE: 07/11/2019

REVISIONS:

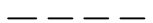
PER VILLAGE COMMENTS 09/03/2019

PROJ. NO.: 19015

EROSION & SEDIMENT
CONTROL PLAN

C1.3

LEGEND

	PROPERTY LINE
	EASEMENT / SETBACK LINE
	CONCRETE SIDEWALK/DUMPSTER PAD
	EXISTING ACCESS EASEMENT
	EXISTING CONCRETE SIDEWALK

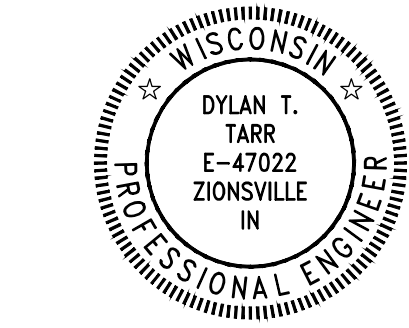
1. ALL EXISTING STRUCTURES, CONCRETE PADS/WALKS/DRIVES AND UTILITY SERVICES ON THE SITE SHALL BE REMOVED TO FULL DEPTH PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR SHALL CHECK EXISTING GRADES, DIMENSIONS, AND INVERTS IN THE FIELD AND REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO BEGINNING WORK.
3. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES, OBTAIN ALL PERMITS AND PAY ALL FEES PRIOR TO BEGINNING WORK.
4. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY. INSTALL ALL UTILITIES AND IRRIGATION SLEEVES PRIOR TO INSTALLATION OF PAVEMENT.
5. THE CONTRACTOR SHALL PROTECT ALL TREES TO REMAIN, IN ACCORDANCE WITH THE SPECIFICATIONS. DO NOT OPERATE OR STORE HEAVY EQUIPMENT OR STORE MATERIALS WITHIN THE DRIPLINES OF TREES OR OUTSIDE THE LIMIT OF GRADING.
6. CONCRETE WALKS AND PADS SHALL HAVE A BROOM FINISH WITH NO EXPOSED AGGREGATE ON ANY FACE. ALL CONCRETE TO BE MINIMUM 4,000 PSI COMPRESSIVE STRENGTH WITH 5% (+/-) AIR ENTRAINMENT. MIXTURES WITH WATER/CEMENT RATIOS AT 0.5 OR BELOW ARE RECOMMENDED. CURB COMPS, SIDEWALKS, AND DRIVEWAY RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL CURRENT LOCAL REQUIREMENTS. IF APPLICABLE, THE CONTRACTOR SHALL REQUEST INSPECTION OF SIDEWALK AND RAMP FORMS PRIOR TO PLACEMENT OF CONCRETE, NO FLY ASH PERMITTED.
7. CONSTRUCTION OF REINFORCED CONCRETE PAVEMENT SHALL BE IN ACCORDANCE WITH ACI 330 STANDARD SPECIFICATIONS. CURING COMPOUND SHALL BE APPLIED TO ALL CONCRETE SURFACES IMMEDIATELY AFTER BROOM. CONTRACTOR SHALL REJECT CONCRETE IF IT CANNOT BE PLACED WITHIN 90 MINUTES OF BATCH TIME OR WITHIN 75 MINUTES DURING SUMMER HIGH TEMPERATURE CONDITIONS.
8. ADJUST GRADE TO EXISTING ASPHALT PAVEMENT TO REMAIN RESULTING FROM NEW CONSTRUCTION SHALL BE REPLACED WITH LIKE MATERIALS AT CONTRACTOR'S EXPENSE.
9. DIMENSIONS ARE TO THE FACE OF CURB, EXPOSED FACE OF WALL, EDGE OF CONCRETE OR TO THE FACE OF BUILDING, UNLESS OTHERWISE NOTED.
10. SCREENED ITEMS INDICATE A PRE-CONSTRUCTION TOPOGRAPHIC SURVEY PROVIDED BY DAAR ENGINEERING, INC., DATED 06/25/2019
11. CONCRETE PAVEMENT CONSTRUCTION JOINTS SHALL BE CONSTRUCTED TO A DEPTH OF AT LEAST 1/4 THE CONCRETE THICKNESS, AND SHALL DIVIDE CONCRETE ROUGHLY INTO SQUARES WITH MAXIMUM 10 SEGMENTS. JOINTS CAN BE SAWCUT, FORMED, OR TOOLED.
12. MAINTAIN ONE SET OF MARKED-UP AS-BUILT DRAWINGS ON THE JOB SITE FOR DISTRIBUTION TO THE ENGINEER UPON COMPLETION OF THE PROJECT.
13. CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY FOR COMPLETED SITE. CONSULT ENGINEER FOR SPECIFIC REQUIREMENTS.
14. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING POSTAL DELIVERY METHOD WITH THE LOCAL JURISDICTION. IF A PHYSICAL MAILBOX IS REQUIRED, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE PURCHASE, LOCATION PLACEMENT, AND INSTALLATION.

1. PROPERTY ZONED: B-2 (GERMANTOWN MARKETPLACE PDD OVERLAY)

SETBACKS (PER OVERLAY): FRONT = 50'
LEFT SIDE = 10'
RIGHT SIDE = 10'
REAR = 40'
2. ADJACENT ZONING AND USES:
NORTH: B-2 (GERMANTOWN MARKETPLACE PDD OVERLAY), COMMERCIAL RETAIL
SOUTH: ROAD RIGHT-OF-WAY, MEQUON RD
EAST: B-2 (GERMANTOWN MARKETPLACE PDD OVERLAY), COMMERCIAL RETAIL
WEST: B-2 (GERMANTOWN MARKETPLACE PDD OVERLAY), COMMERCIAL BANK
3. SITE AREA: 37,901 S.F. = ±0.87 ACRES
4. BUILDING AREA: 4,232 S.F. GROSS AREA
ONE-STORY, MAX HEIGHT = 25'-0"
5. USE: DENTAL OFFICE - APPROXIMATELY 14 EMPLOYEES
6. PARKING:
USE: DENTAL OFFICE @ 7 PER 1 DOCTOR
MIN. PARKING REQUIRED: 7 SPACES
PARKING PROVIDED: 49 SPACES (INCLUDES 2 HANDICAP SPACES)
7. EXISTING IMPERVIOUS AREA: 0.81 ACRES = 93%
EXISTING PERVIOUS AREA: 0.06 ACRES = 7%

PROPOSED IMPERVIOUS AREA: 0.75 ACRES = 86%
PROPOSED PERVIOUS AREA: 0.12 ACRES = 14%

0.78 AC OF LOT COVERAGE PERMITTED, 0.75 AC PROPOSED (96.2% OF PERMITTEE

The logo for TARR GROUP, featuring a stylized 'TG' monogram inside a shield-like shape, with the words 'TARR' and 'GROUP' stacked vertically to its right.

3229 PURPLE ASH DRIVE
ZIONSVILLE, IN 46077
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PHONE: 843-633-3579

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SITE PLAN

C2.1

GENERAL UTILITY NOTES:

1. WATER AND SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL LOCAL CODES AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL PAY ALL FEES AND OBTAIN ALL PERMITS.
3. ALL EXISTING UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND ARE BASED ON BEST INFORMATION AVAILABLE. ADDITIONAL UTILITIES MAY BE PRESENT. SHOULD UNCHARTED UTILITIES BE ENCOUNTERED DURING EXCAVATION OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE FOR INSTRUCTIONS.
4. THE CONTRACTOR SHALL NOTIFY THE WISCONSIN ONE-CALL SYSTEM AT (811) AT LEAST THREE WORKING DAYS PRIOR TO ANY EXCAVATION AND/OR DEMOLITION.
5. MAINTAIN 10-FOOT HORIZONTAL AND 24-INCH VERTICAL SEPARATIONS BETWEEN SANITARY SEWER AND WATER SUPPLY LINES.
6. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES WITHIN 14 DAYS OF MOBILIZATION. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTORS EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SEQUENCING OF CONSTRUCTION FOR ALL UTILITY LINES SO THAT WATER LINES AND UNDERGROUND ELECTRIC DO NOT CONFLICT WITH SANITARY SEWERS OR STORM INSTALL UTILITIES PRIOR TO FINAL PAVEMENT CONSTRUCTION.
8. BACKFILL UTILITY TRENCHES UNDER PAVEMENT AREAS WITH CRUSHED STONE OR GRAVEL. BACKFILL UTILITY TRENCHES IN LAWN AREAS WITH SATISFACTORY FILL MATERIAL COMPACTED TO AT LEAST 95% OF MAXIMUM PER ASTM D1557.
9. ADJUST ALL EXISTING CASTINGS TO MATCH PROPOSED FINISH GRADE.
10. ALL SANITARY SEWER PIPE SHALL BE SCHEDULE SDR35 PVC. TRACER WIRE SHALL BE INSTALLED ON ALL NEW SANITARY SEWER LINES. REFER TO SHEET C5.4 FOR SPECIFICATIONS.
11. CONTRACTOR IS RESPONSIBLE FOR ALL PUBLIC UTILITY CONNECTIONS (ELECTRIC, WATER, GAS, SEPTIC, SEWER) AS WELL AS PROVIDING ALL INFRASTRUCTURE REQUIRED BY UTILITY COMPANY.
12. ALL WATER LINES SHALL BE INSTALLED A MINIMUM OF 6 FEET BELOW GRADE.
13. SCREENED ITEMS INDICATE A PRE-CONSTRUCTION TOPOGRAPHIC SURVEY PROVIDED BY DAAR ENGINEERING, INC., DATED 08/25/2019.

WATER NOTES:

1. WATER METERS AND BACKFLOW DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH VILLAGE OF GERMANTOWN WATER UTILITY REGULATIONS.
2. VILLAGE OF GERMANTOWN CONTACT: PAUL HAUGEN, PHONE 262-253-8254
3. CONNECTION TO THE EXISTING 8" WATER MAIN SHALL BE MADE WITH A SMITH-BLAIR REPAIR CLAMP WITH A CC PORT.
4. CONNECTION TO THE PROPOSED 2" WATER SERVICE FOR THE 1" IRRIGATION LINE SHALL BE MADE WITH A SMITH-BLAIR REPAIR CLAMP WITH A CC PORT.
5. TRACER WIRE SHALL BE INSTALLED ON NEW WATER LINES. REFER TO SHEET C5.4 FOR SPECIFICATIONS
6. WATER SERVICE PIPE SHALL BE DR9 HDPE.
7. 18" DIAMETER COIL TANDEM WATER PIT BY MUELLER (OR APPROVED EQUAL) TO BE INSTALLED FOR IRRIGATION METER. SEE DETAIL ON SHEET C5.4.
8. REFER TO SHEET C5.4 FOR WATER VALVE CASTING SPECIFICATIONS.
9. ALL WATER LINES SHALL BE INSTALLED A MINIMUM OF 6 FEET BELOW GRADE.

UTILITY CONTACTS

SANITARY SEWER
VILLAGE OF GERMANTOWN
CONTACT: TIMOTHY ZIMMERMAN
PHONE: 262-253-7765
EMAIL:
TZIMMERMAN@VILLAGE.GERMANTOWN.WI.US

WATER
VILLAGE OF GERMANTOWN
CONTACT: PAUL HAUGEN
PHONE: 262-253-8254
EMAIL:
PHAUGEN@VILLAGE.GERMANTOWN.WI.US

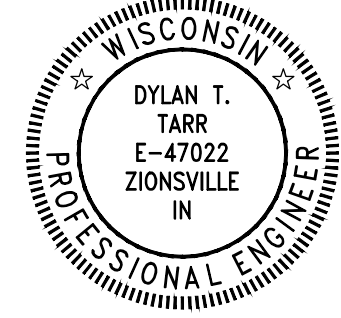
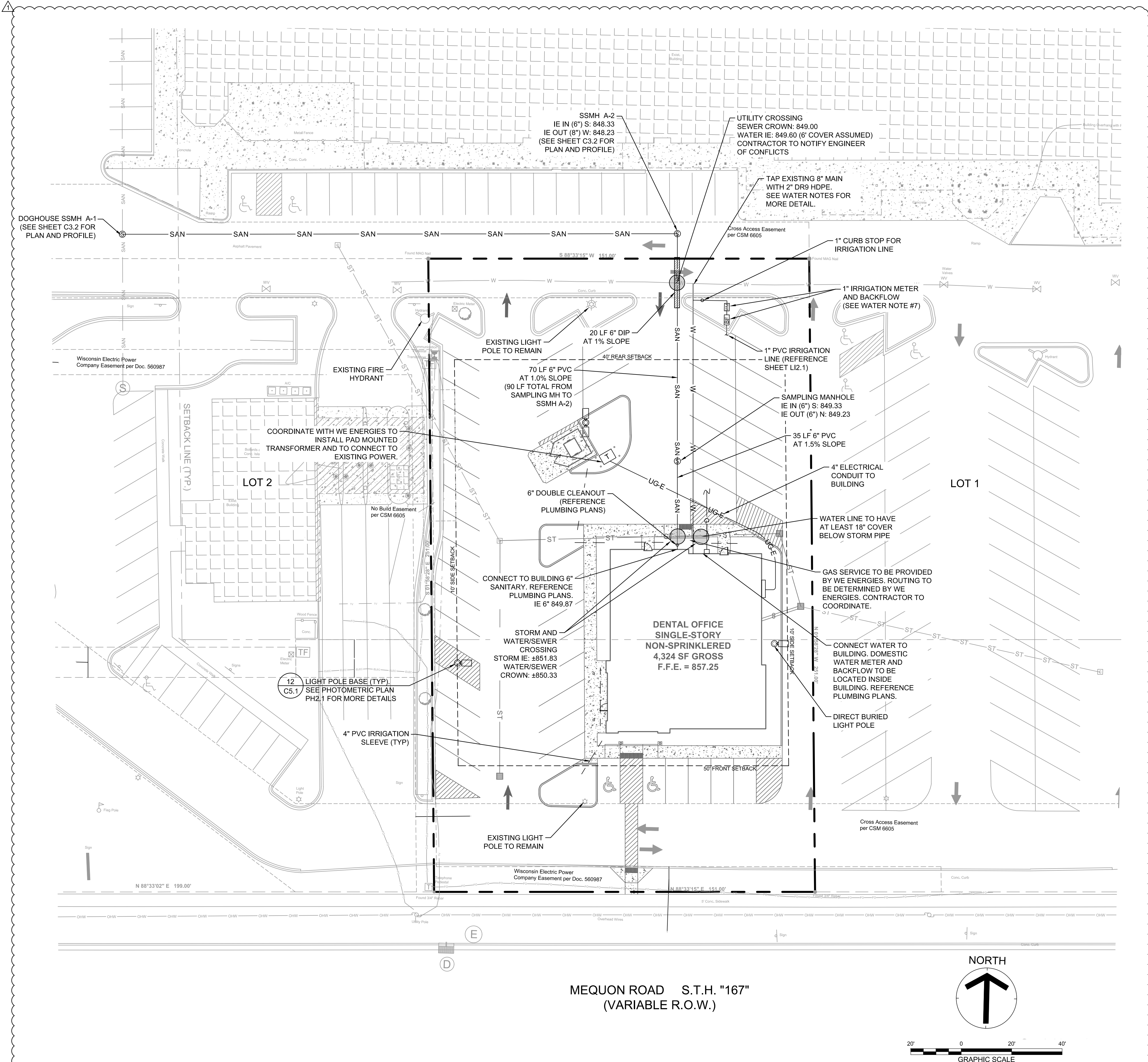
GAS
WE ENERGIES
CONTACT: LAURIE FREDRICKS
PHONE: 262-253-4542

ELECTRIC
WE ENERGIES
CONTACT: LAURIE FREDRICKS
PHONE: 262-253-4542

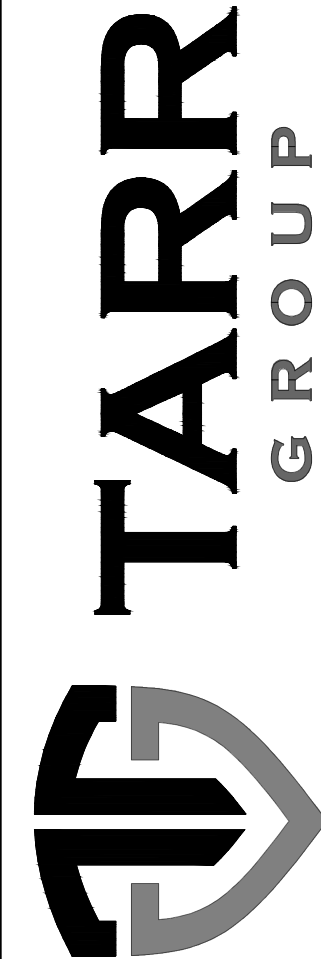
TELEPHONE & CABLE
AT&T
PHONE: 888-944-0447

UTILITY LEGEND

	SEWER PIPE
	WATER PIPE
	IRRIGATION SLEEVE
	UNDERGROUND ELECTRIC
	NATURAL GAS PIPE
	SANITARY MANHOLE
	SANITARY CLEANOUT
	WATER METER
	BACKFLOW PREVENTER



09/03/2019



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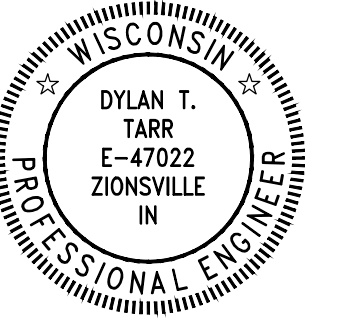
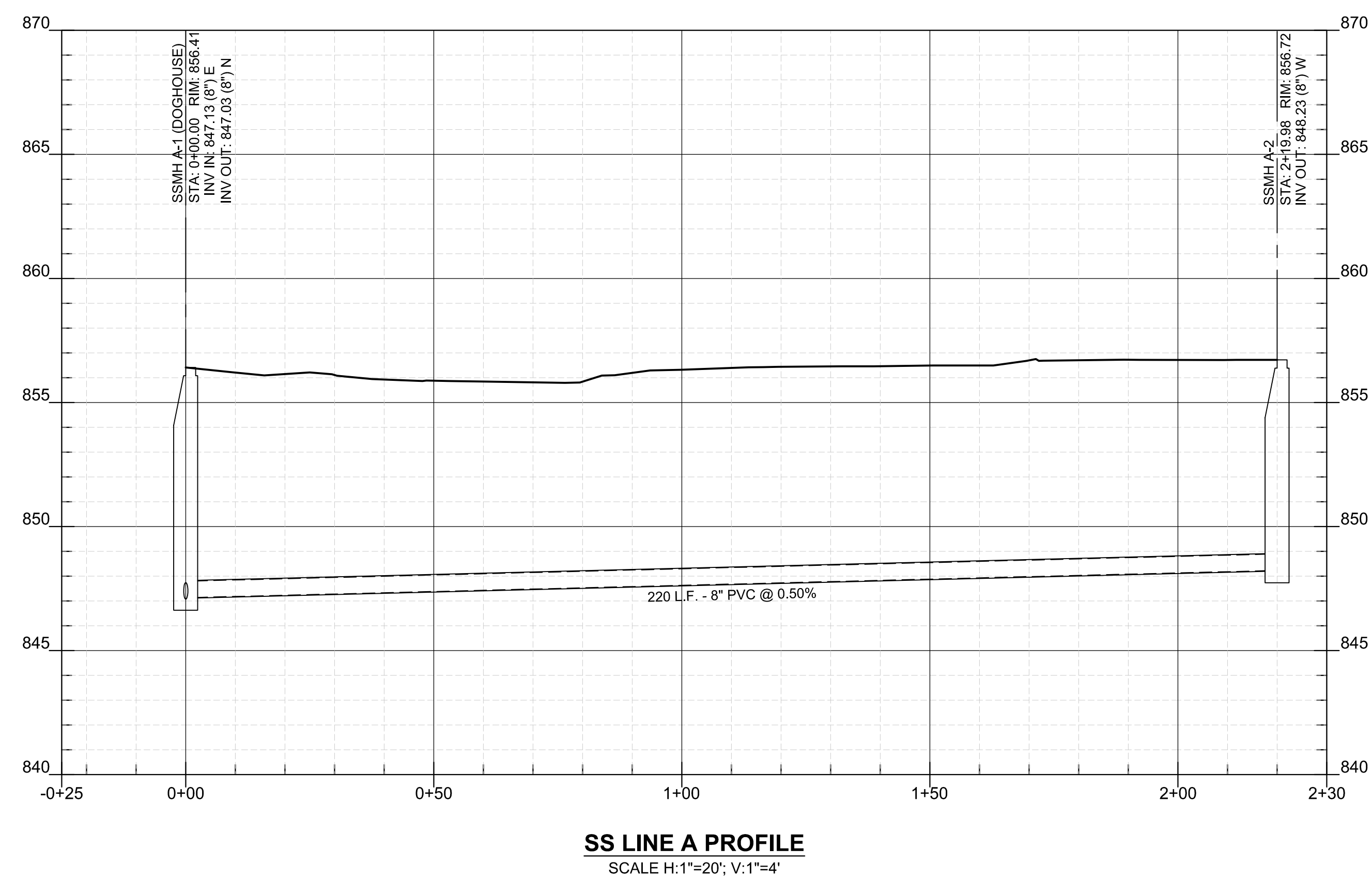
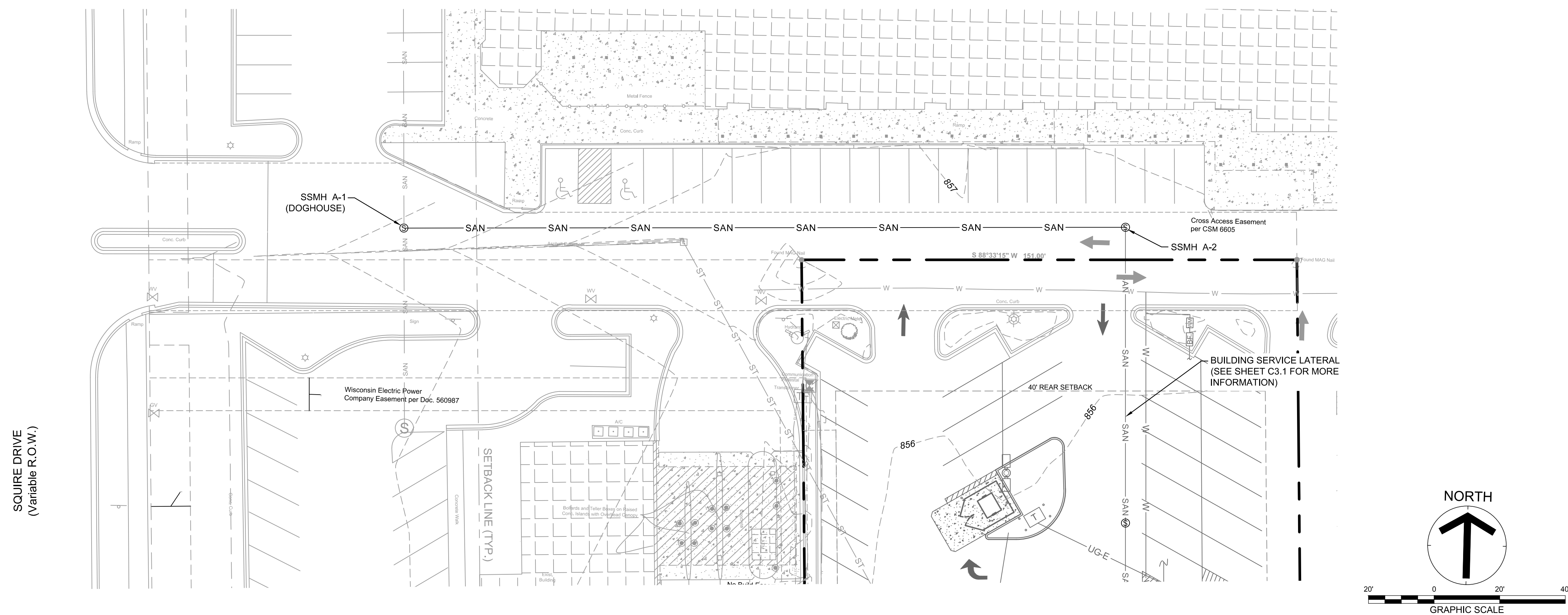
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UTILITY PLAN

C3.1



09/03/2019



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SANITARY SEWER PLAN & PROFILE

C3.2

GRADING AND DRAINAGE NOTES

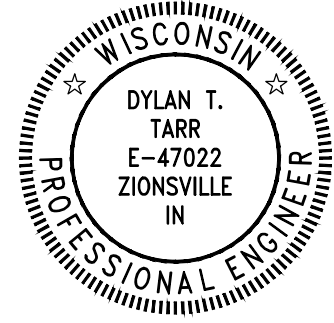
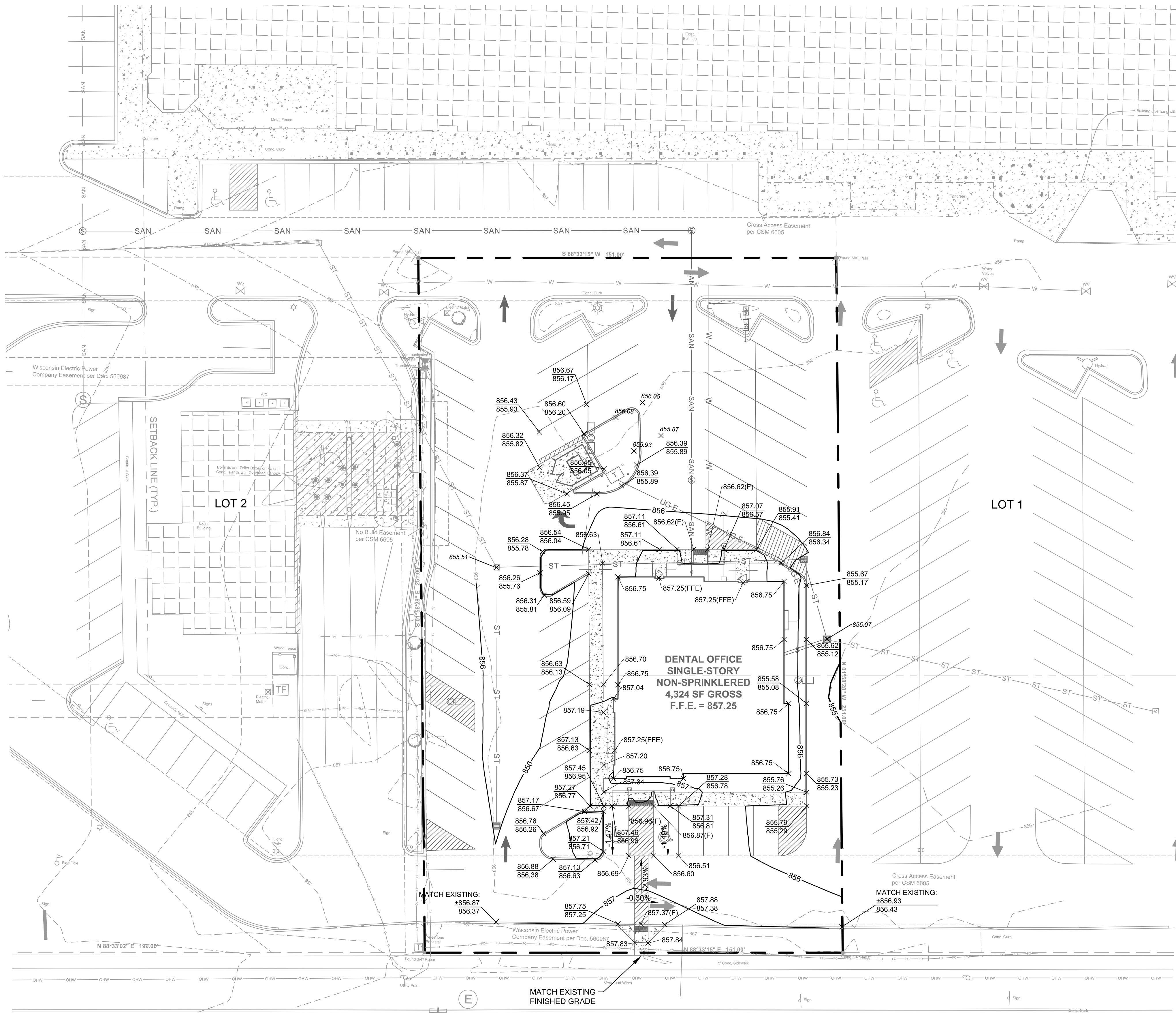
1. TOPSOIL SHALL BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED AND REDISTRIBUTED OVER GRADED AREAS TO A MINIMUM DEPTH OF 6 INCHES. MAKE STOCKPILES FREE DRAINING AND PROVIDE EROSION AND SEDIMENTATION CONTROLS AROUND STOCKPILES
2. SATISFACTORY TOPSOIL IS DEFINED AS SOIL BEING FREE OF SUBSOIL, CLAY LUMPS, STONES, OTHER OBJECTS OVER 1 INCH IN DIAMETER, OR CONTAMINANTS.
3. ALL GRADED AREAS SHALL BE HAVE STABILIZATION APPLIED WITHIN 15 DAYS AFTER GRADING IS COMPLETED.
4. STABILIZED AREAS SHALL HAVE NO BARE SPOTS.
5. ALL SITE OPEN SPACE NOT OTHERWISE PAVED TO BE STABILIZED PER STABILIZATION PLAN L2.1.
6. AFTER STRIPPING TOPSOIL, PROOFROLL SUBGRADE WITH A LOADED DUMP TRUCK WITH A MINIMUM WEIGHT OF 16 TONS.
7. FINISH GRADE TOLERANCES ARE 0.10 FOOT ABOVE OR BELOW DESIGN ELEVATIONS.
8. THE CONTRACTOR SHALL PROTECT ALL TREES DESIGNATED TO REMAIN. DO NOT OPERATE OR STORE HEAVY EQUIPMENT, NOR HANDLE/STORE MATERIALS WITHIN DRIPLINES OF TREES.
9. TOP OF GRATE ELEVATIONS FOR CURB INLETS ARE GIVEN TO THE CENTER OF THE INLETS AT THE FACE OF CURB. THE GRATES SHALL SLOPE LONGITUDINALLY WITH THE PAVEMENT GRADE. ADJUST THE CASTING TO FALL ALONG THE CURB LINE.
10. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, PROTECT UTILITIES TO REMAIN, AND REPAIR CONTRACTOR-CAUSED DAMAGE ACCORDING TO LOCAL STANDARDS AT CONTRACTOR'S EXPENSE.
11. NOTIFY LOCAL UTILITY LOCATOR SERVICE OF INTENDED EXCAVATION/UTILITY TRENCHING OPERATIONS.
12. IN THE EVENT OF ANY DISCREPANCIES FOUND IN THE DRAWINGS OR IF PROBLEMS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
13. THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES AND OBTAIN ALL PERMITS.
14. SPOT ELEVATIONS AND CONTOURS REPRESENT PROPOSED FINISHED GRADE AND TOP OF FINISHED PAVEMENT.
15. CONTRACTORS SHALL VERIFY EXISTING ELEVATIONS AND INVERTS PRIOR TO BEGINNING WORK.
16. EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR OFF THE OWNER'S PROPERTY AT NO ADDITIONAL COST IN ILLEGAL MANNER.
17. CONTOUR LINES AND SPOT ELEVATIONS ARE THE RESULT OF A DETAILED ENGINEERING GRADING DESIGN AND REFLECT THE PLANNED INTENT WITH REGARD TO DRAINAGE. SHOULD THE CONTRACTOR HAVE ANY QUESTION OF THIS INTENT OR ANY PROBLEMS WITH THE CONTINUITY OF GRADES, THE ENGINEER SHALL BE CONTACTED PRIOR TO BEGINNING WORK.
18. ALL CURBS AND SIDEWALKS SHALL BE BACKFILLED FLUSH WITH TOPSOIL, AND SEEDED AND MULCHED UNLESS OTHERWISE NOTED.
19. ALL PIPES UNDER PAVED AREAS SHALL BE BACKFILLED WITH CRUSHED STONE. ALL PIPES UNDER LAWN AREAS SHALL BE BACKFILLED WITH SATISFACTORY MATERIAL, COMPACTED TO 95% MODIFIED PROCTOR PER ASTM D1557.
20. SCREENED EXISTING CONDITIONS ITEMS INDICATE A PRE-CONSTRUCTION TOPOGRAPHIC SURVEY PROVIDED BY DAAR ENGINEERING INC., DATED 06/25/2019
21. MAXIMUM SLOPES IN ALL DIRECTIONS OF HANDICAP PARKING SPACES/AISLES SHALL NOT EXCEED 2%
22. EARTHWORK FILL SHALL INCLUDE STRIPPING TOPSOIL AND PLACING ENGINEERED FILL IN MAXIMUM 8" LOOSE MATERIAL LIFTS AND COMPACTED TO MAXIMUM DRY DENSITY OF 95% OF MODIFIED PROCTOR DENSITY (ASTM D1557).
23. FINISHED GRADE AT EXTERIOR WALLS SHALL BE A MINIMUM OF 6 INCHES BELOW FINISHED FLOOR AT ALL NON PAVED AREAS.
24. ALL HDPE STORM PIPE SHALL BE ADS N-12 ST 18 OR APPROVED EQUAL
25. ALL SUBGRADE PREPARATION WITHIN THE CONSTRUCTION AREA SHALL BE COMPLETED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED BY CGC, INC, PROJECT # CM19083, DATED 06/21/2019.

GRADING LEGEND

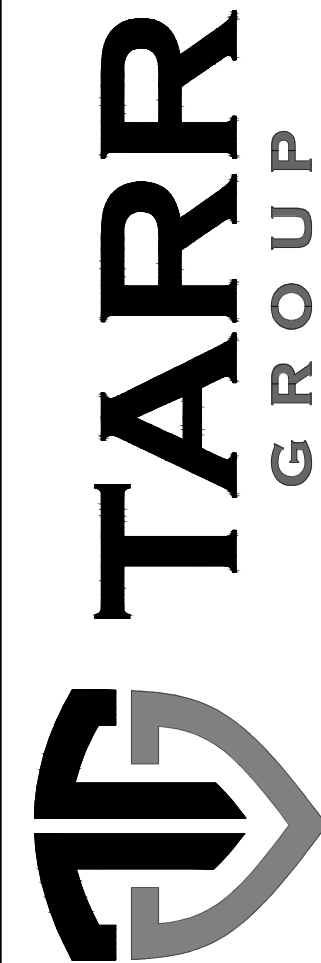
856	MINOR CONTOUR
855	MAJOR CONTOUR
X 856.00	SPOT ELEVATION (FINISHED SURFACE)
X 856.00 (F)	SPOT ELEVATION (FLUSH CONDITION)
X 856.0±	SPOT ELEVATION (MATCH EXISTING FINISHED GRADE)
TC 856.50 X BC 856.00	SPOT ELEVATION (TOP OF CURB / BOTTOM FACE OF CURB)
-1.0%	SLOPE (DOWNHILL)

DATUM INFORMATION

REFER TO EXISTING CONDITIONS, SHEET C1.1
FOR DATUM INFORMATION



09/03/2019



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GRADING PLAN

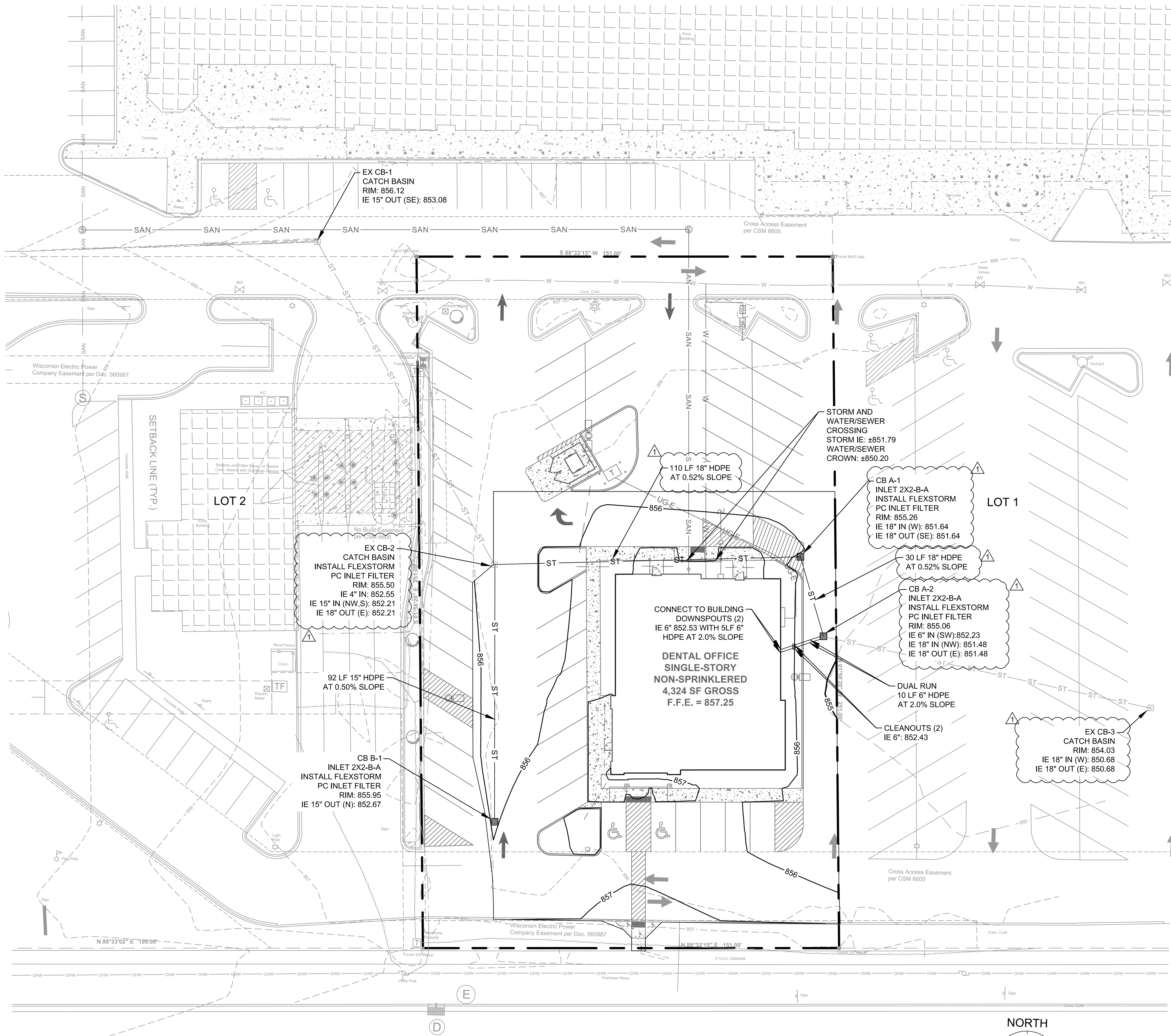
C4.1

GRADING AND DRAINAGE NOTES

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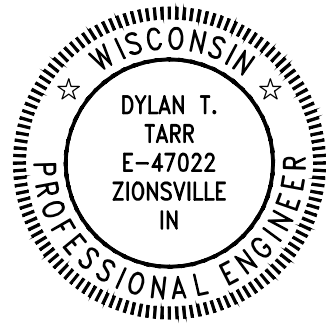
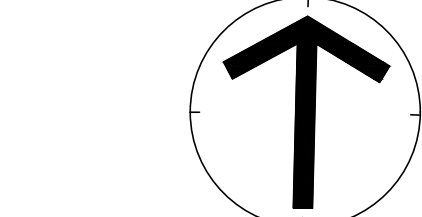
DRAINAGE LEGEND

- | | |
|----|------------------------|
| ST | STORM PIPE (HDPE TYP) |
| | STORM CATCH BASIN (CB) |
| o | STORM CLEANOUT (CO) |

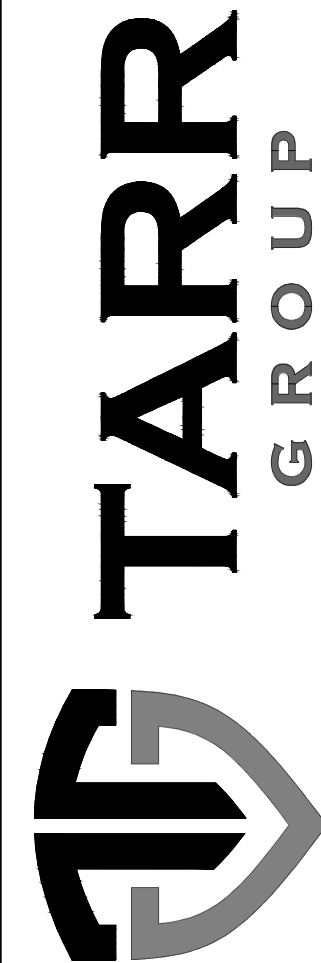


MEQUON ROAD S.T.H. "167"
(VARIABLE R.O.W.)

NORTH



09/03/2019



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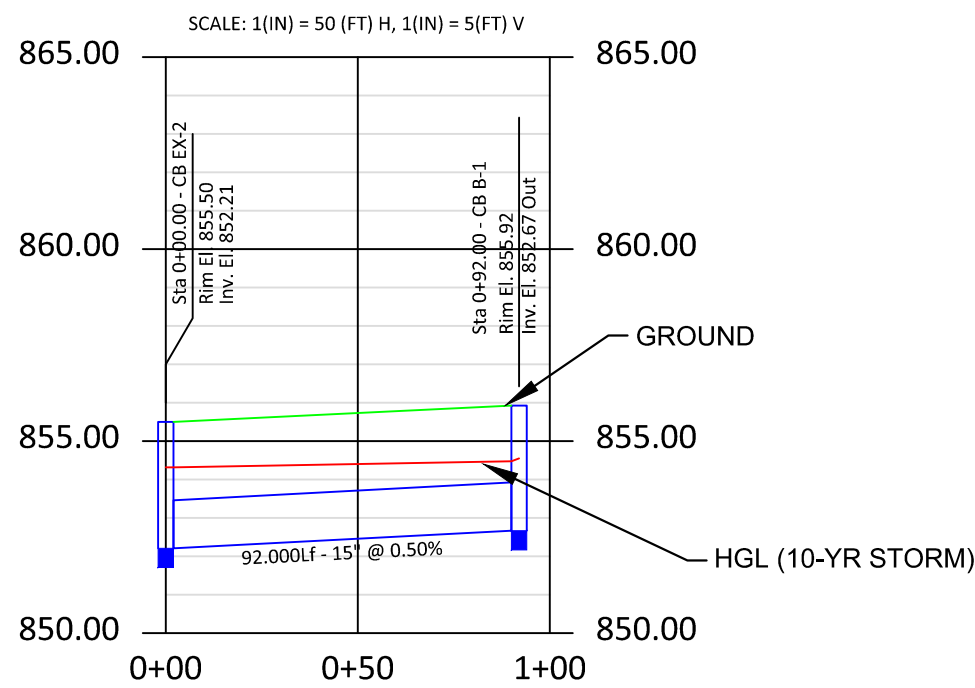
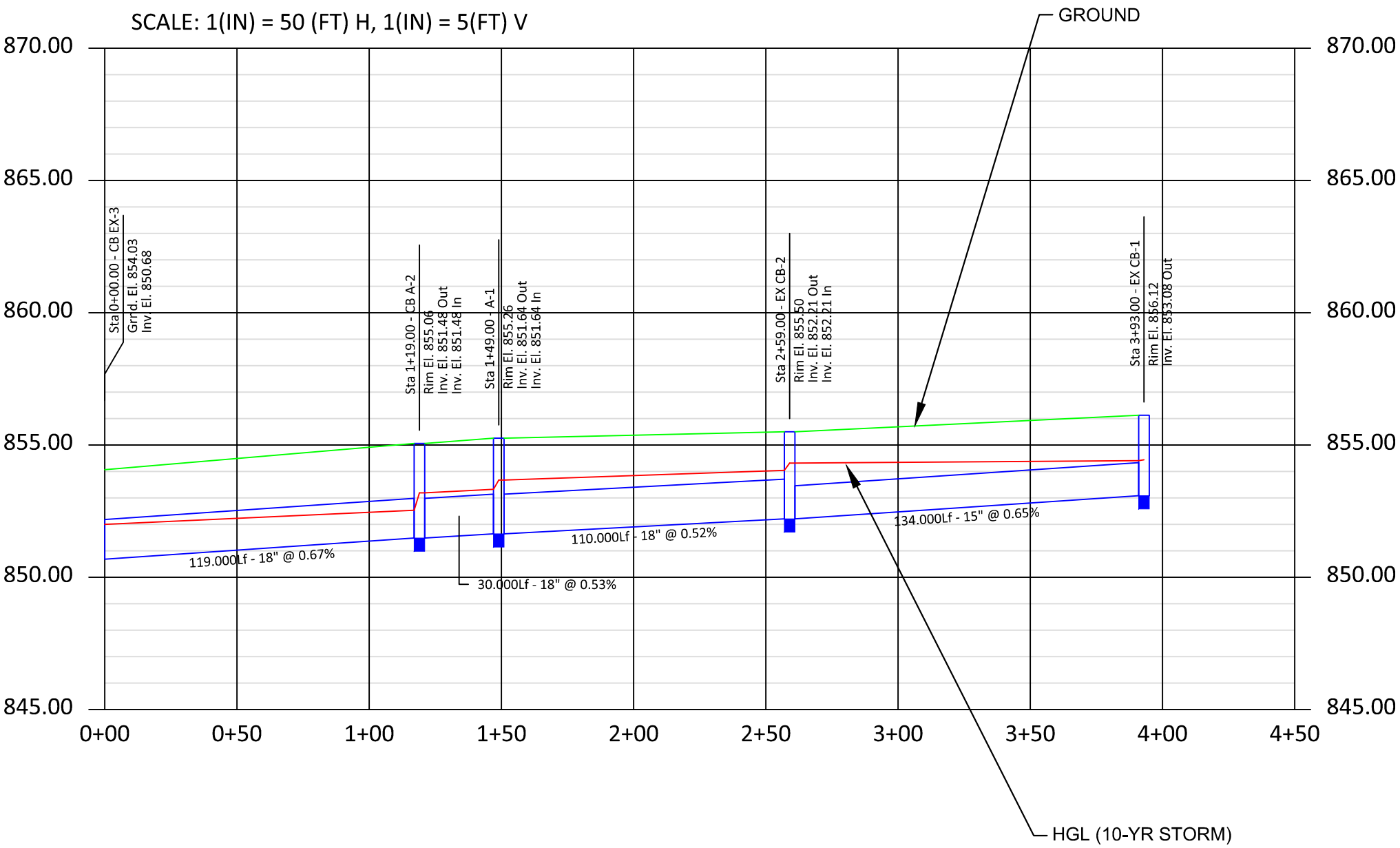
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DRAINAGE PLAN

C4.2



Storm Sewer Summary Report

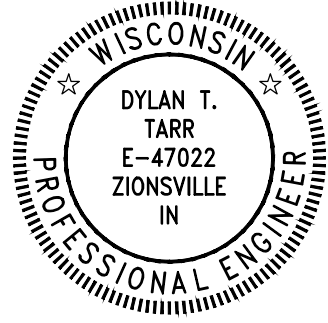
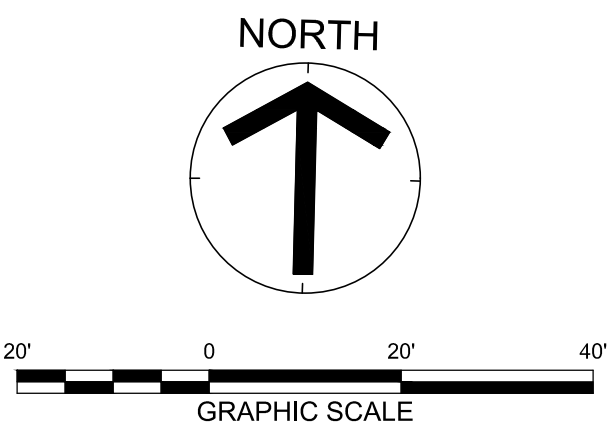
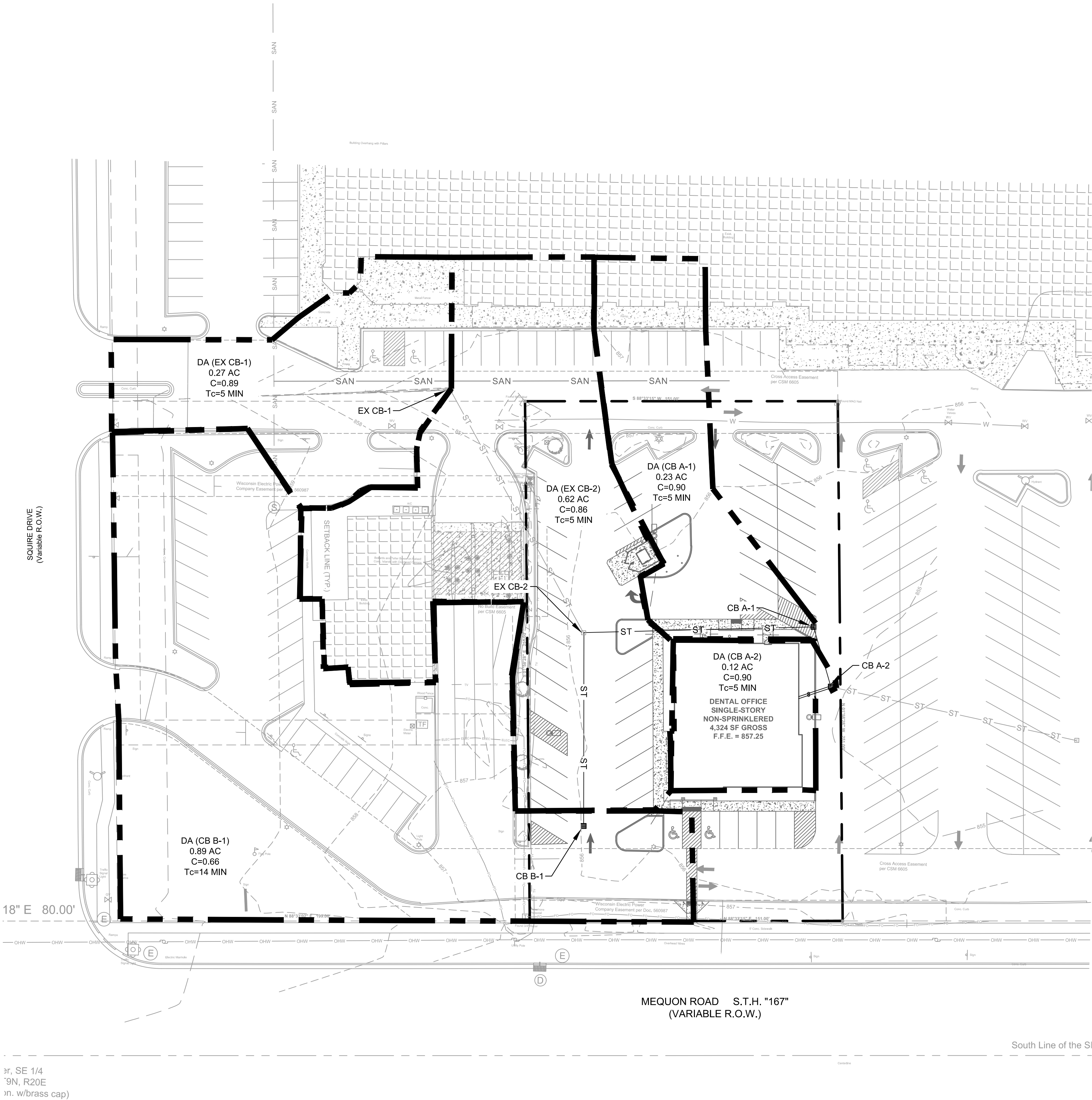
Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1	A-2 TO EX-3	7.29	18	Cir	119.000	850.68	851.48	0.672	852.00	852.53	0.67	853.19	End	DropGrate
2	A-1 TO A-2	6.85	18	Cir	30.000	851.48	851.64	0.533	853.19*	853.32*	0.35	853.67	1	DropGrate
3	EX-2 TO A-1	6.06	18	Cir	110.000	851.64	852.21	0.518	853.67*	854.04*	0.27	854.31	2	DropGrate
4	EX-1 TO EX-2	1.73	15	Cir	134.000	852.21	853.08	0.649	854.31*	854.41*	0.03	854.44	3	DropGrate
5	B-1 TO EX-2	2.68	15	Cir	92.000	852.21	852.67	0.500	854.31*	854.47*	0.07	854.55	3	DropGrate

Project File: Storm Drain Calculations.stm

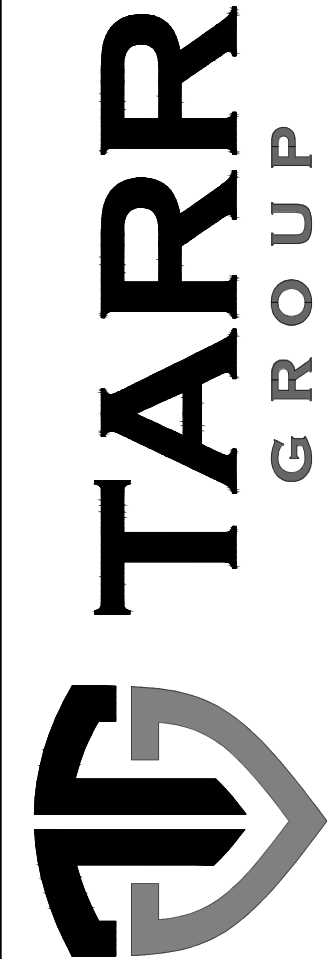
Number of lines: 5

Run Date: 9/3/2019

NOTES: Return period = 10 Yrs. ; *Surcharged (HGL above crown).



09/03/2019



3229 PURPLE ASH DRIVE
ZIONSVILLE, IN 46077
EMAIL: KEVIN@TARR-GROUP.COM
PHONE: 843-633-3579

GERMANTOWN DENTAL OFFICE
WMG DEVELOPMENT, LLC
N112 W16200 MEQUON ROAD (LOT 3)
GERMANTOWN, WISCONSIN

ORIGINAL ISSUE DATE: 07/11/2019

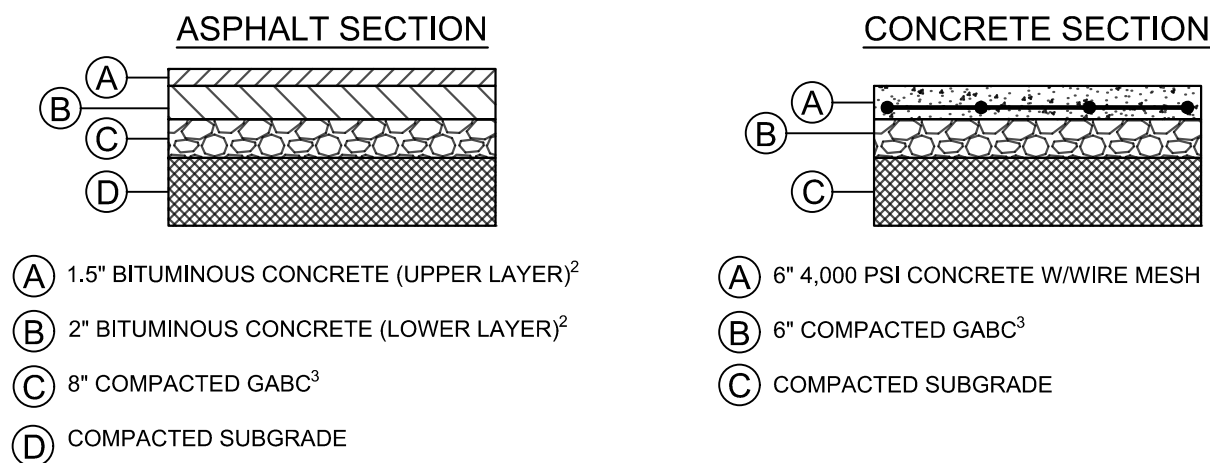
REVISIONS:

PER VILLAGE COMMENTS 09/03/2019

PROJ. NO.: 19015

STORM DRAIN ANALYSIS

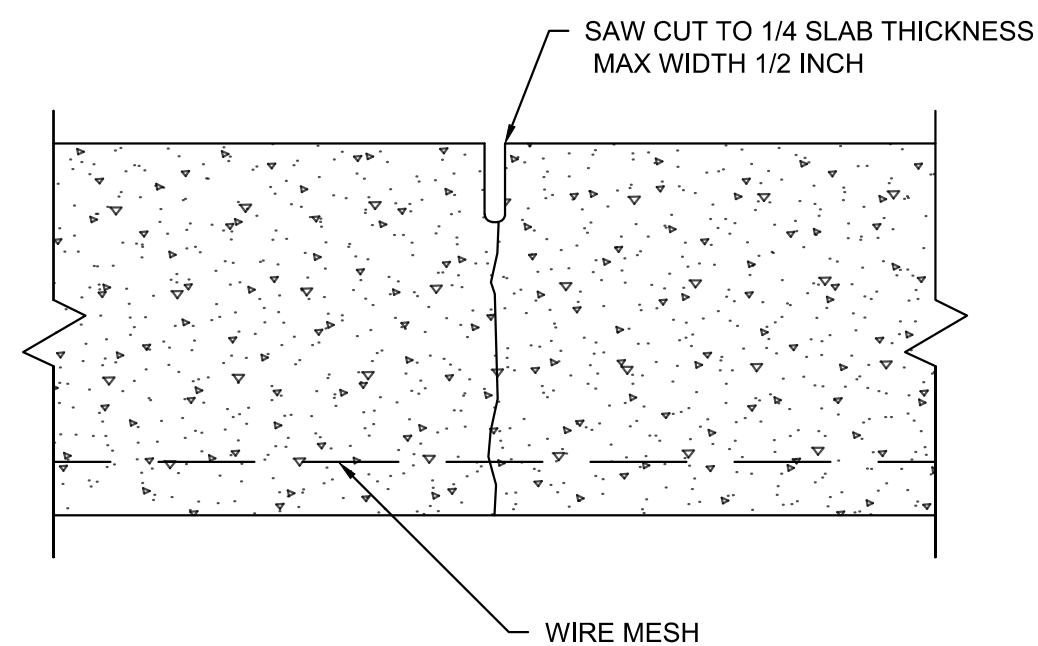
C4.3



- NOTES:
1. REFER TO GEOTECHNICAL REPORT PREPARED BY CGC, INC, PROJECT #CM19083, DATED JUNE 21, 2019.
 2. HMA MATERIALS SHOULD CONFORM TO WISCONSIN DOT SPECIFICATIONS, SECTION 460 (TABLE 460-1).
 3. COMPACT GRADED AGGREGATE BASE COURSE (GABC) SHOULD CONFORM TO WISCONSIN DOT SPECIFICATIONS, SECTION 301 AND 305. GABC SHOULD BE COMPACTED TO 95% MODIFIED PROCTOR.

1 PAVEMENT SECTIONS

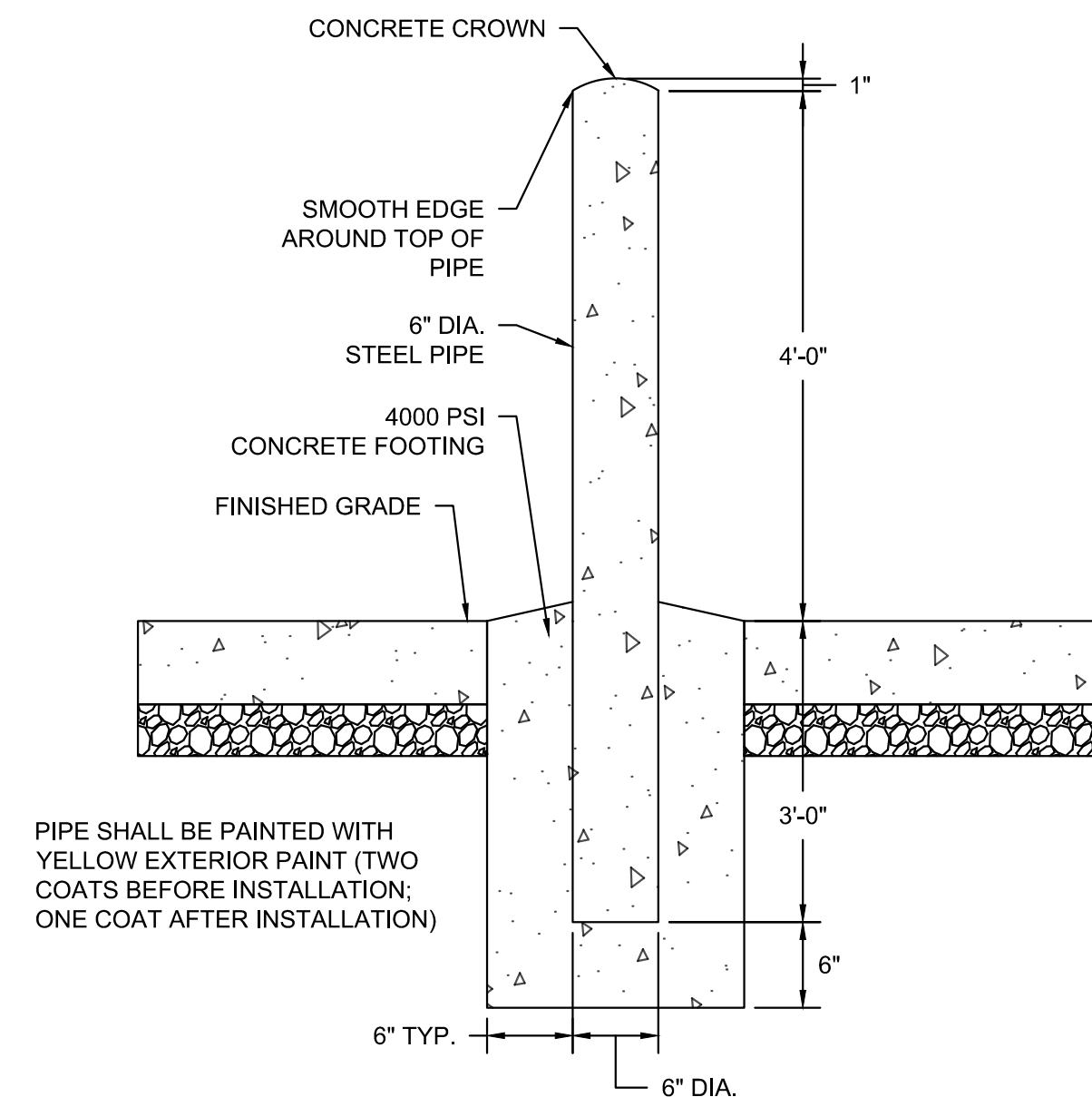
NTS



NOTE: CONTRACTION JOINTS TO BE SPACED EVERY 10'

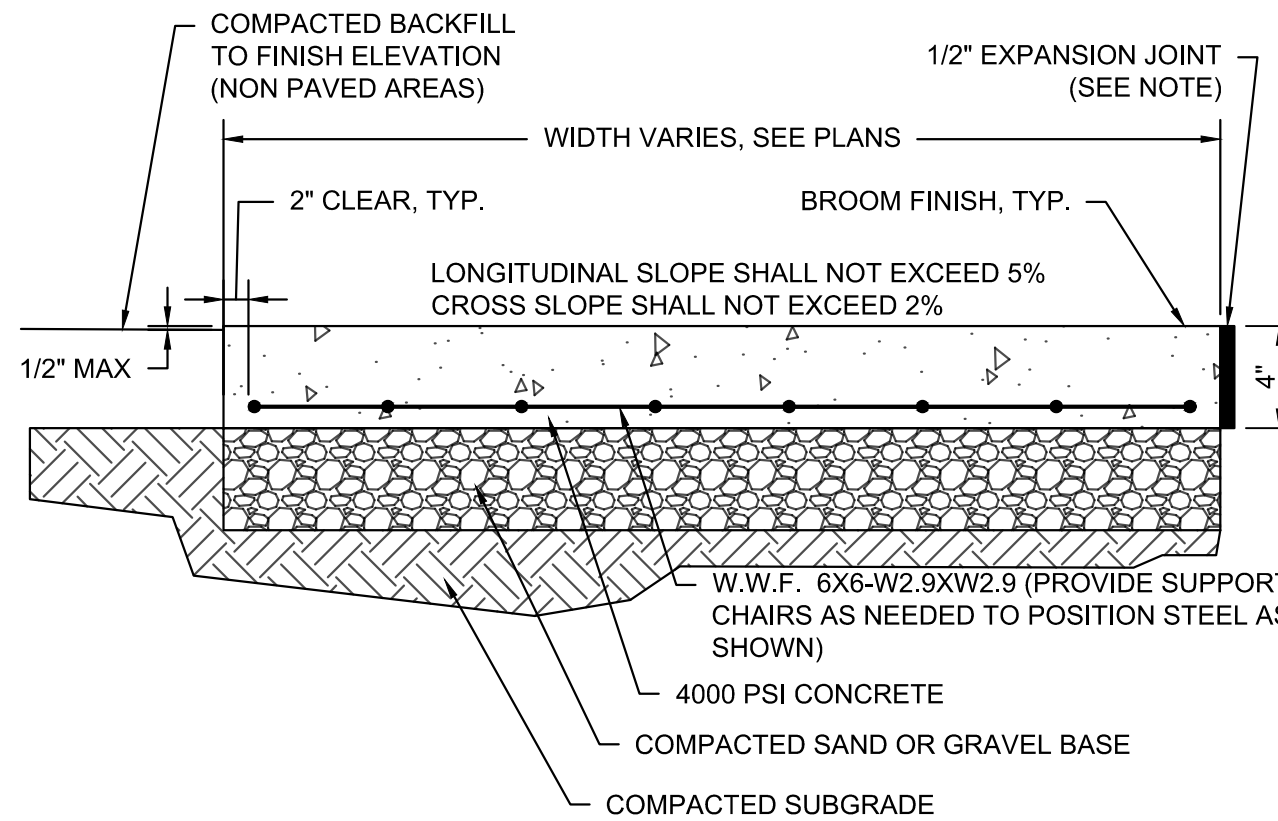
5 CONTRACTION JOINTS IN CONCRETE

NTS



9 BOLLARD

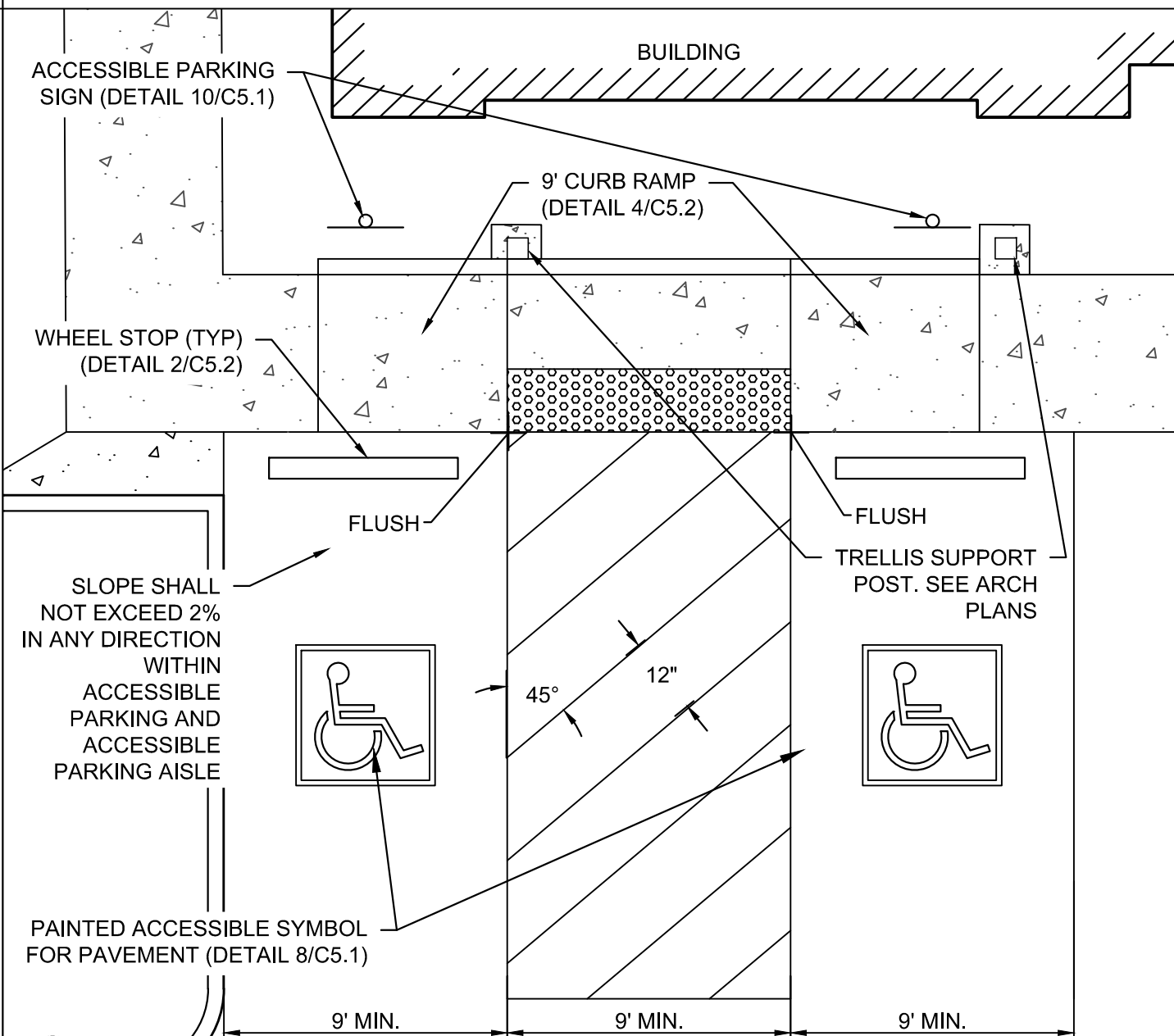
NTS



- NOTES:
1. PROVIDE WEAKENED PLANE (SAW CUT OR TOOLED) CONTROL JOINTS AT 5'-0" ON CENTER.
 2. PROVIDE EXPANSION JOINTS AT 50'-0" (MAX) ON CENTER AND CONTINUOUSLY BETWEEN SIDEWALK AND WALLS OR OTHER STRUCTURES

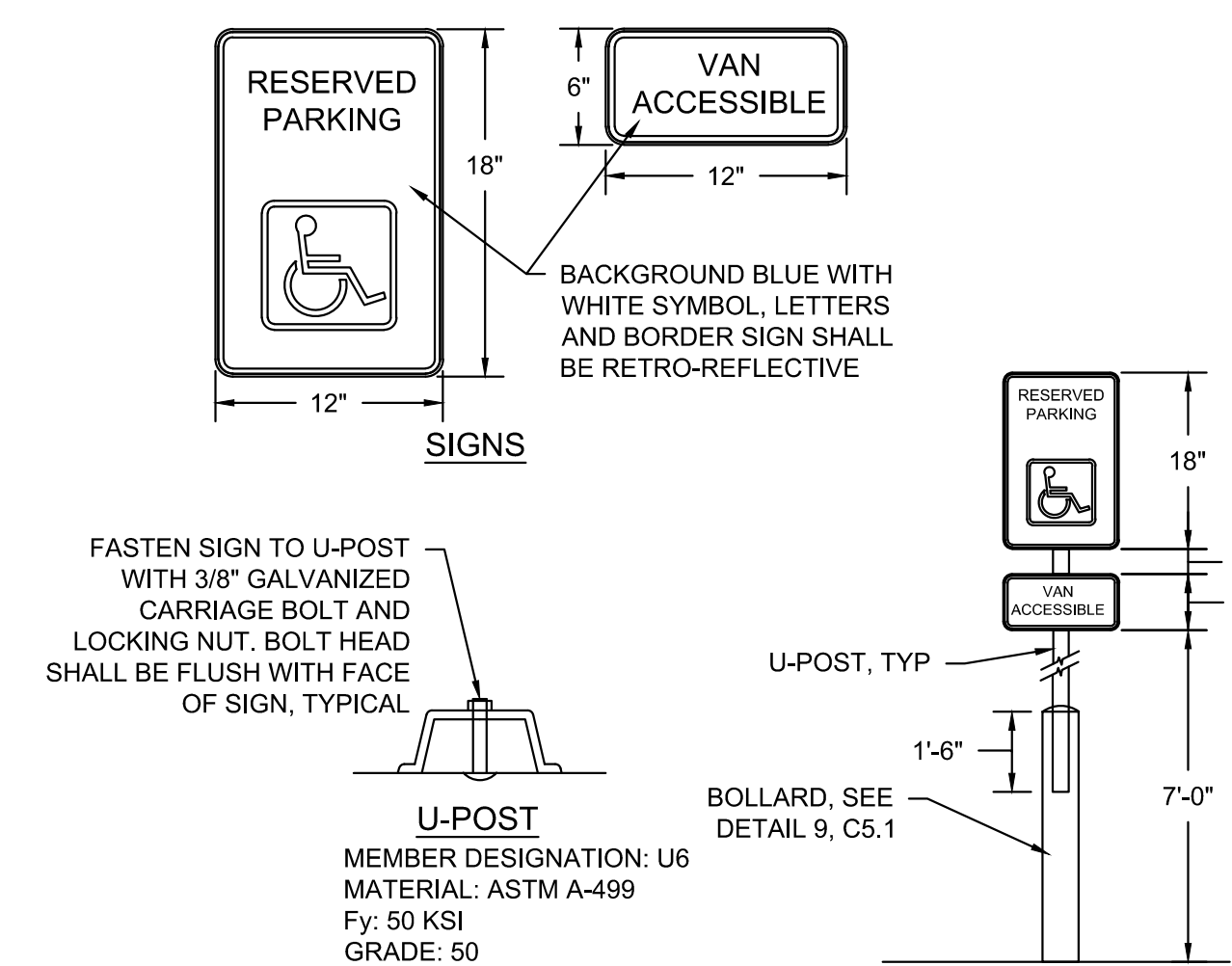
2 CONCRETE SIDEWALK SECTION

NTS



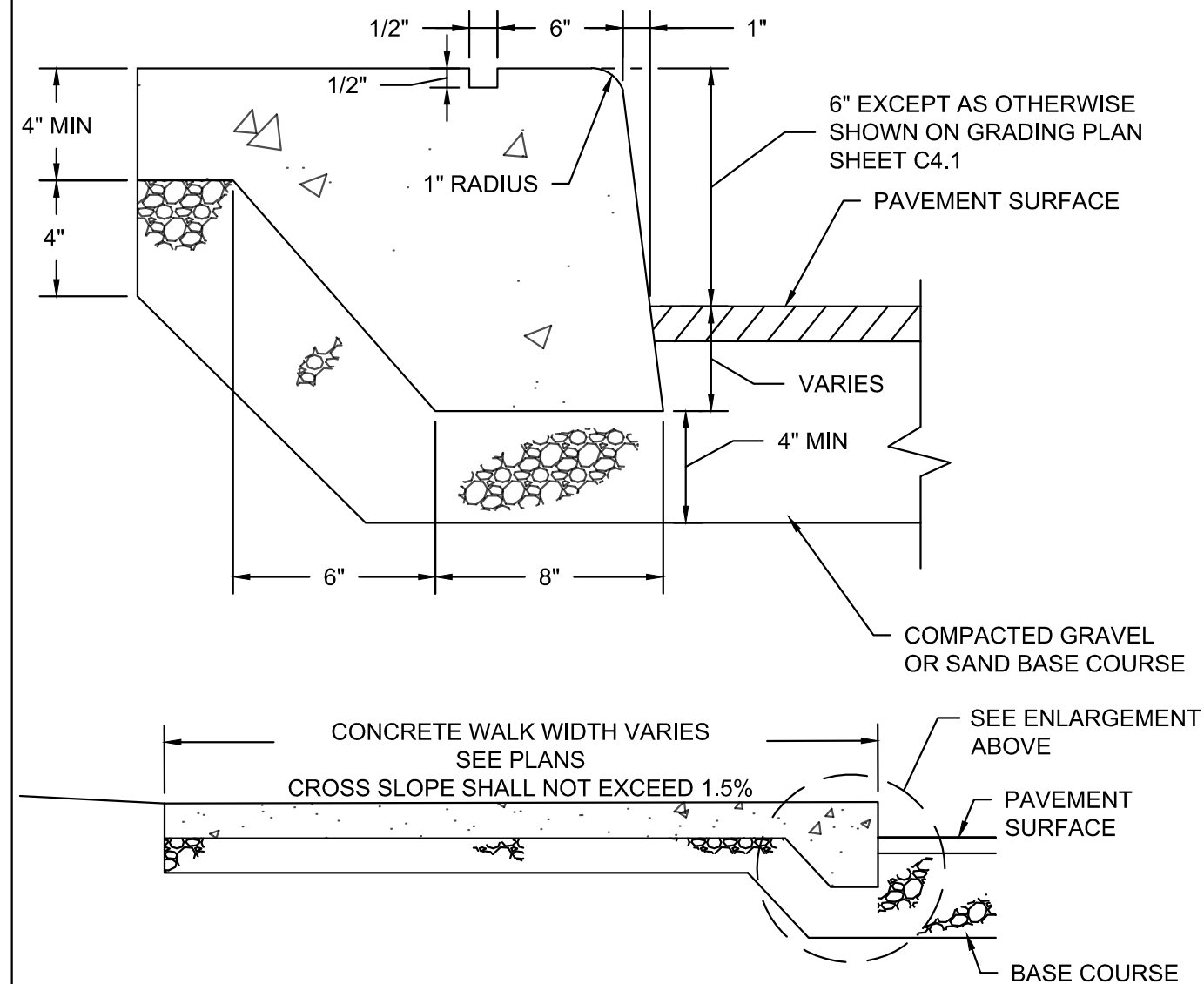
6 ACCESSIBLE PARKING LAYOUT

NTS



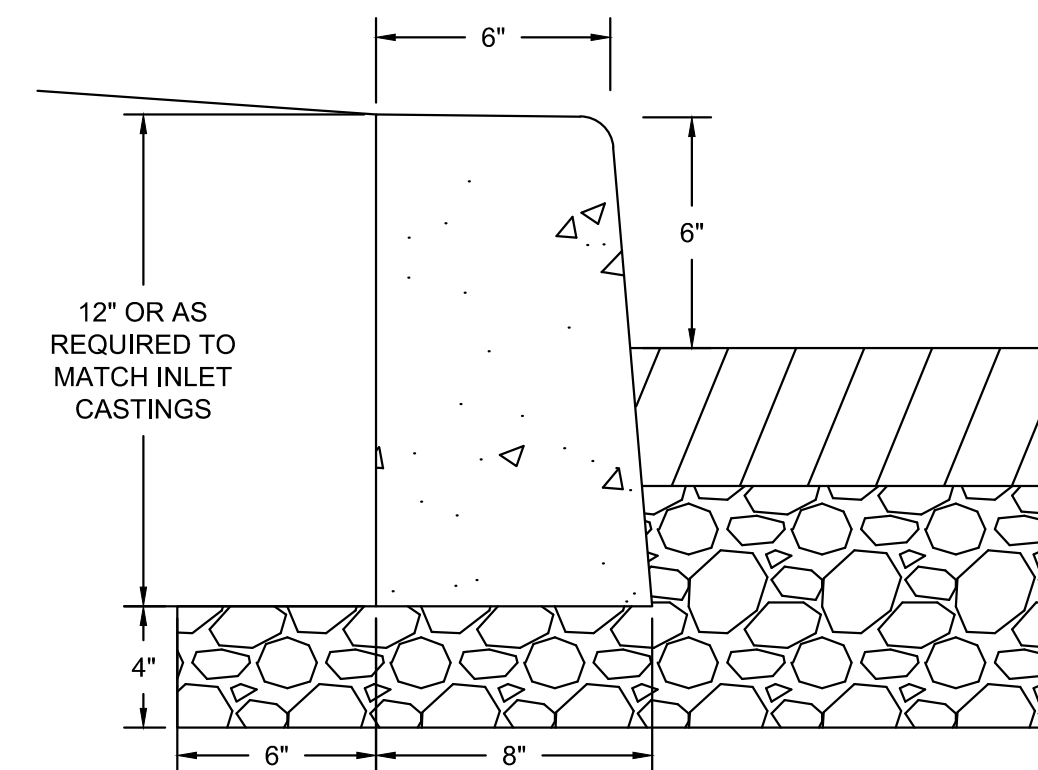
10 ACCESSIBLE PARKING SIGN

NTS



CONCRETE SIDEWALK HEADER SECTION

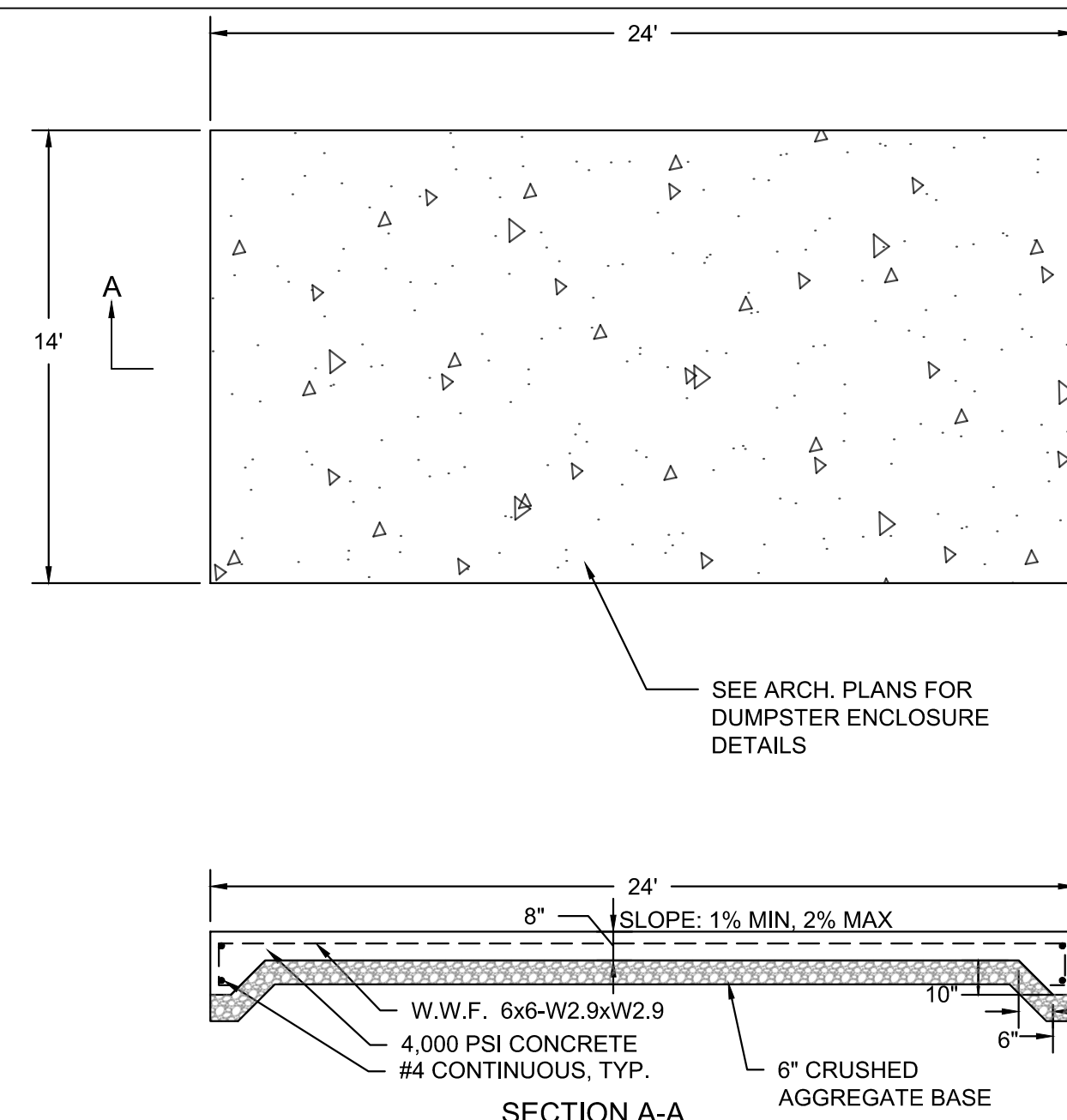
NTS



- NOTES:
1. CURB AND GUTTER SHALL BE CONSTRUCTION IN 10-FOOT LENGTHS, OR EXTRUDED AND THEN SAWCUT AT 10-FOOT INTERVALS TO A DEPTH OF 1-3/4 INCHES.
 2. 1/2-INCH EXPANSION JOINTS SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 50 FEET. AT THE ENDS OF RETURNS AND AT ALL POINTS WHERE THE NEW CURB AND GUTTER ABUTS OTHER CONCRETE STRUCTURES OR INLET CASTINGS.
 3. 10-FOOT LONG TRANSITIONS SHALL BE PROVIDED BETWEEN NORMAL GUTTER AND PITCHED GUTTER, UNLESS OTHERWISE NOTED ON THE PAVING PLANS.
 4. ALL CONCRETE SHALL BE 4,000 PSI (TYP.)
 5. CURB HEIGHT TO BE 6 INCHES UNLESS OTHERWISE NOTED ON GRADING PLAN, SHEET C4.1

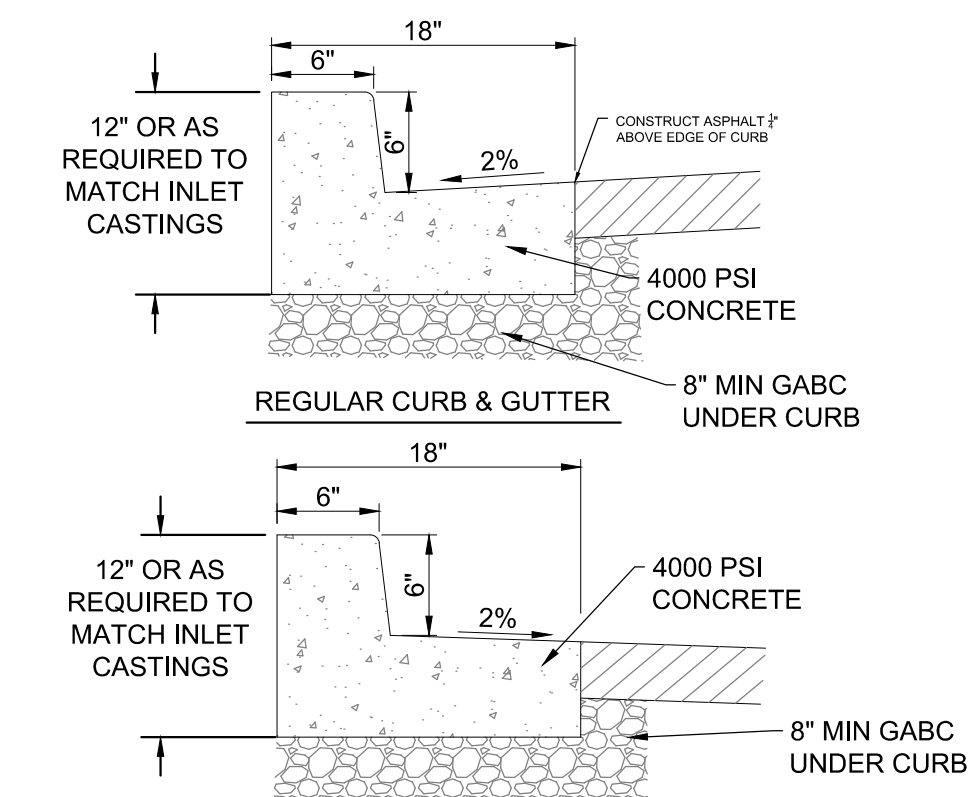
7 CONCRETE POST CURB

NTS



DUMPSTER PAD

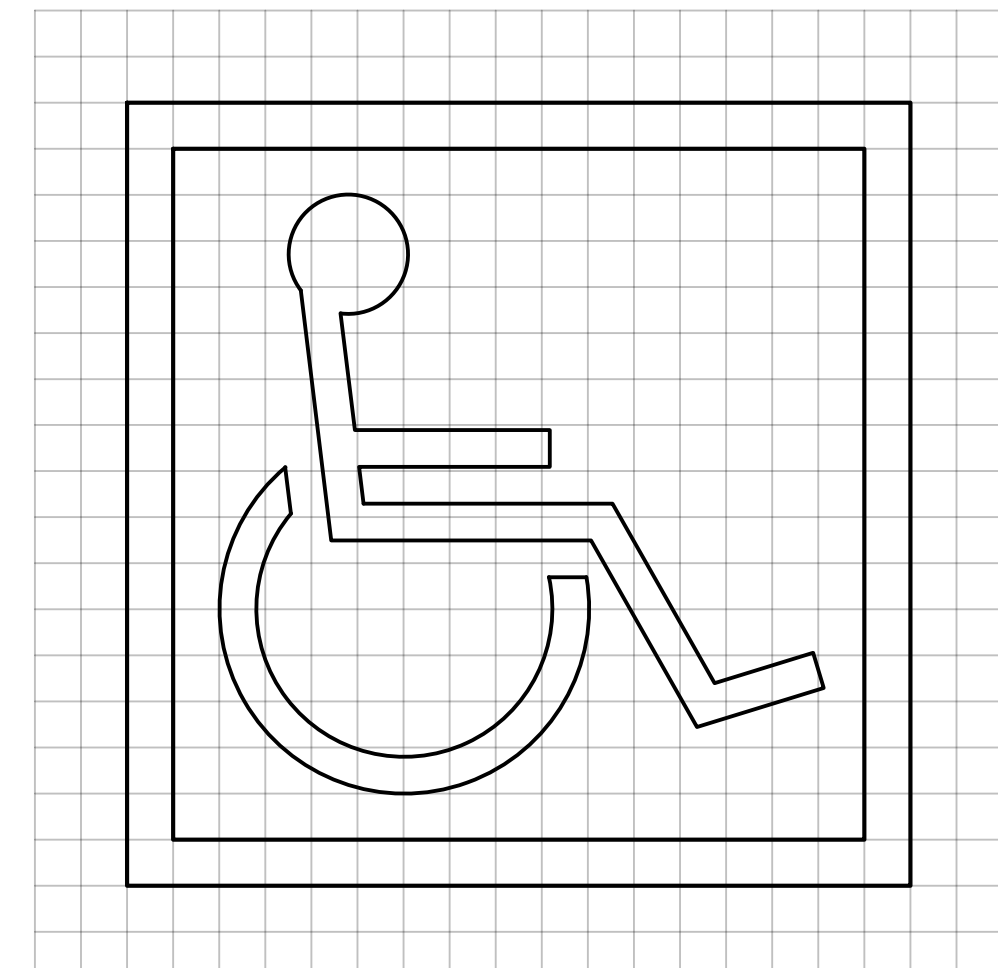
NTS



- NOTES:
1. CURB AND GUTTER SHALL BE CONSTRUCTION IN 10-FOOT LENGTHS, OR EXTRUDED AND THEN SAWCUT AT 10-FOOT INTERVALS TO A DEPTH OF 1-3/4 INCHES.
 2. 1/2-INCH EXPANSION JOINTS SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 50 FEET, AT THE ENDS OF RETURNS AND AT ALL POINTS WHERE THE NEW CURB AND GUTTER ABUTS OTHER CONCRETE STRUCTURES OR INLET CASTINGS.
 3. PITCHED CURB & GUTTER TO BE USED WHERE WATER FLOWS AWAY FROM THE CURB FACE. REFER TO GRADING PLAN, SHEET C3.1. 10-FOOT LONG TRANSITIONS SHALL BE PROVIDED BETWEEN NORMAL AND PITCHED GUTTER.
 4. ALL CONCRETE SHALL BE 4,000 PSI (TYP.)
 5. CURB HEIGHT TO BE 6 INCHES UNLESS OTHERWISE NOTED ON GRADING PLAN, SHEET C3.1

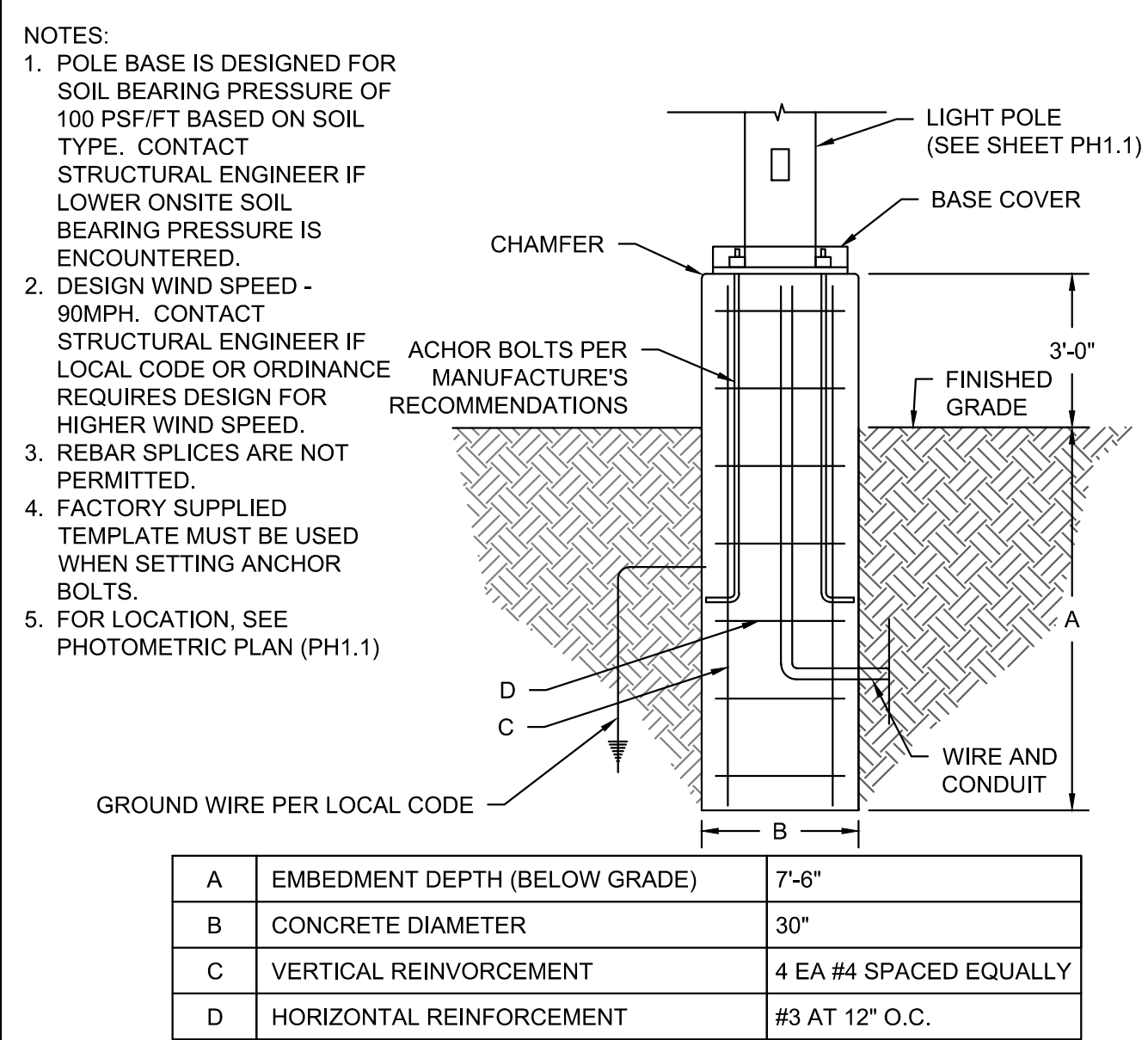
4 CURB AND GUTTER

NTS



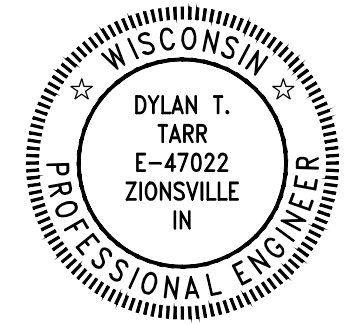
PAINTED ACCESSIBLE SYMBOL FOR PAVEMENT

NTS

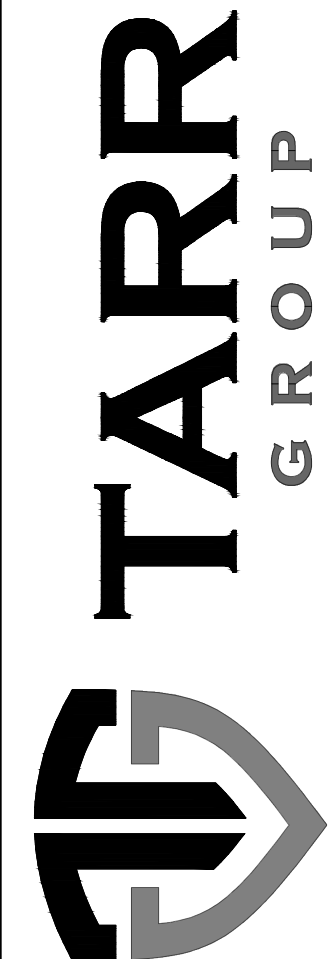


12 LIGHT POLE BASE

NTS



09/03/2019



3229 PURPLE ASH DRIVE
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PHONE: 843-633-3579

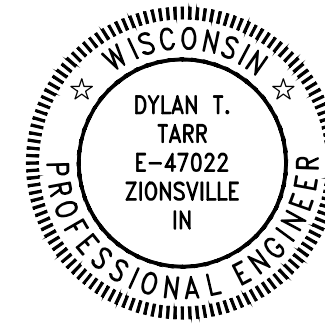
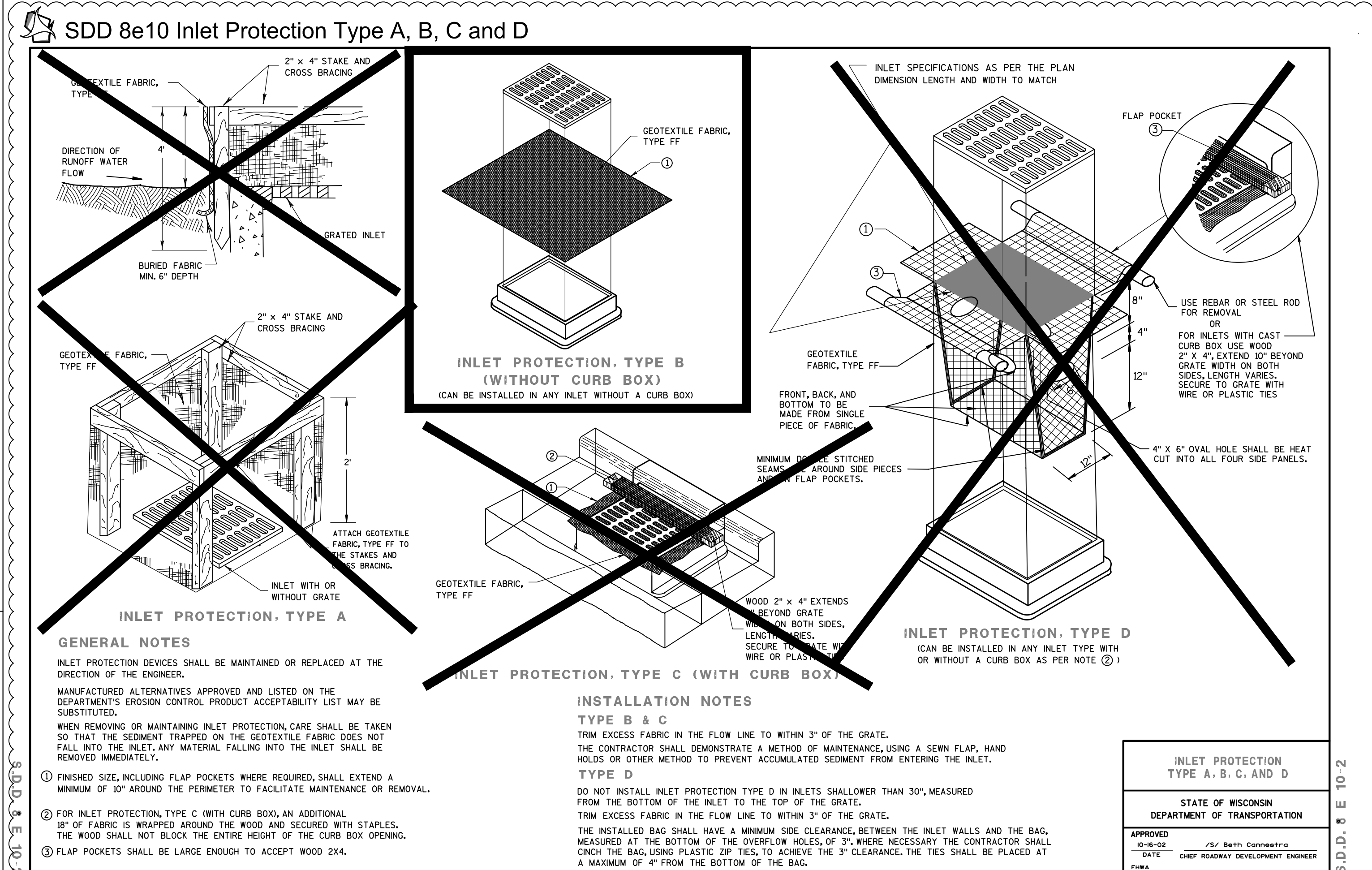
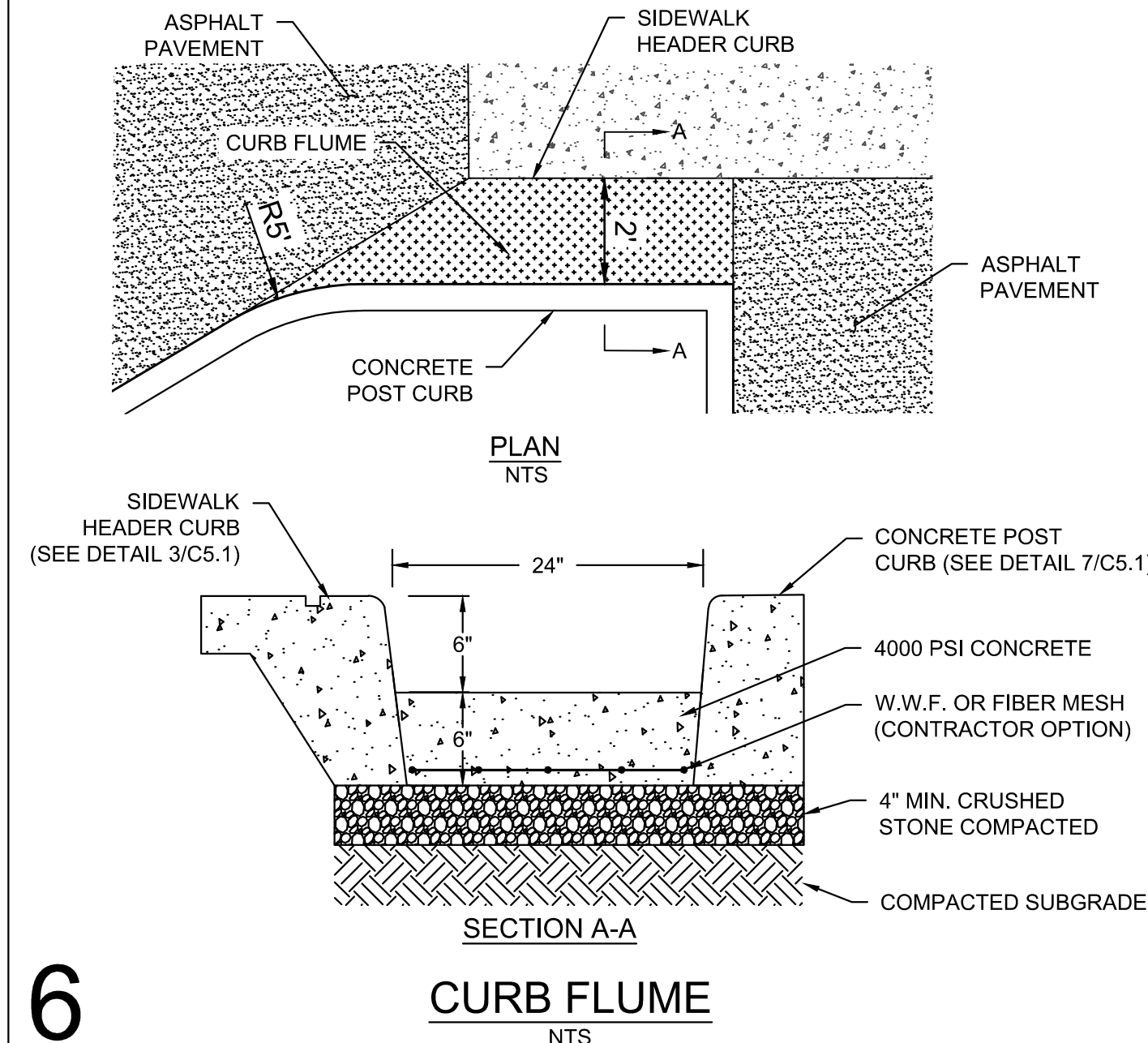
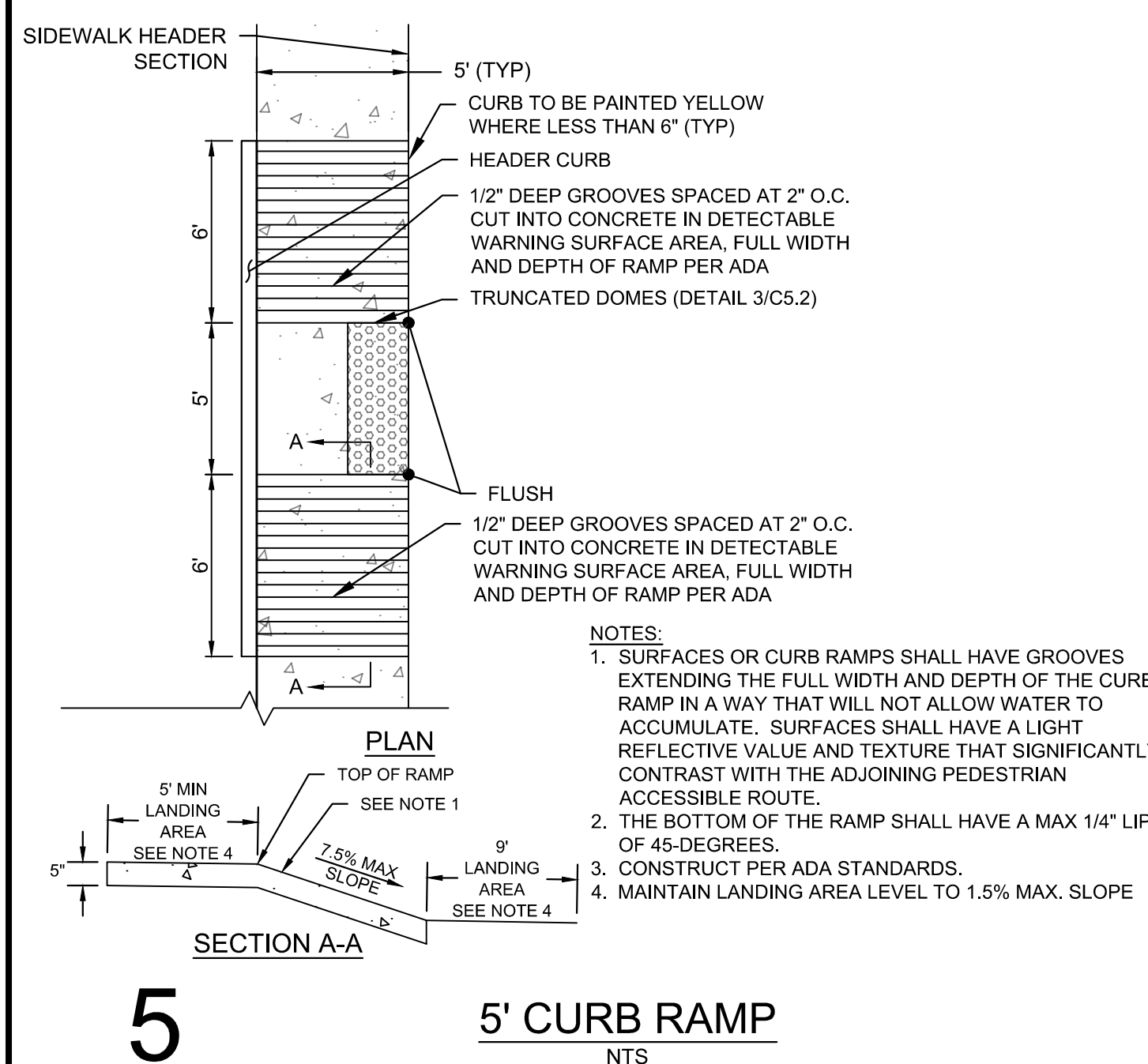
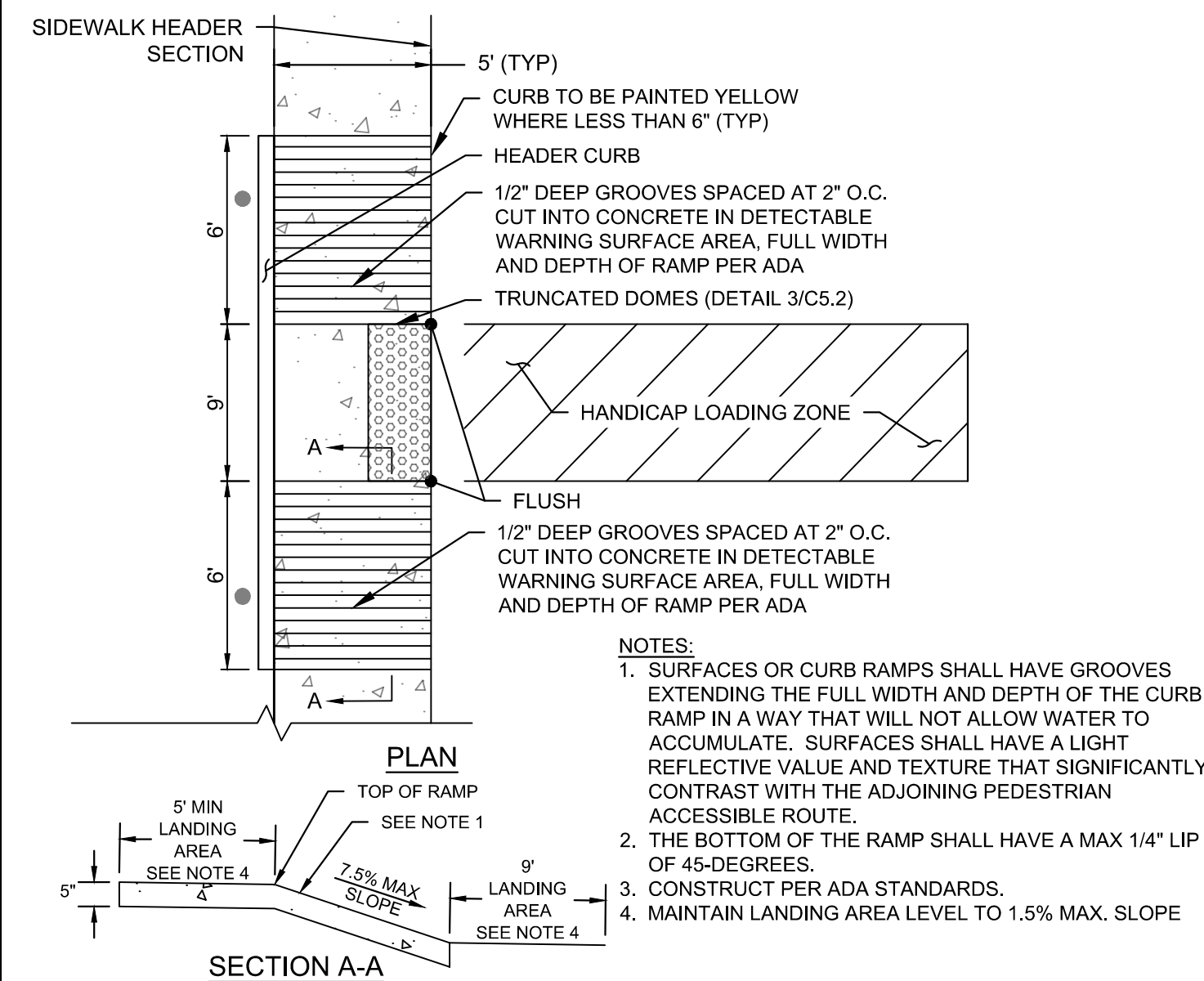
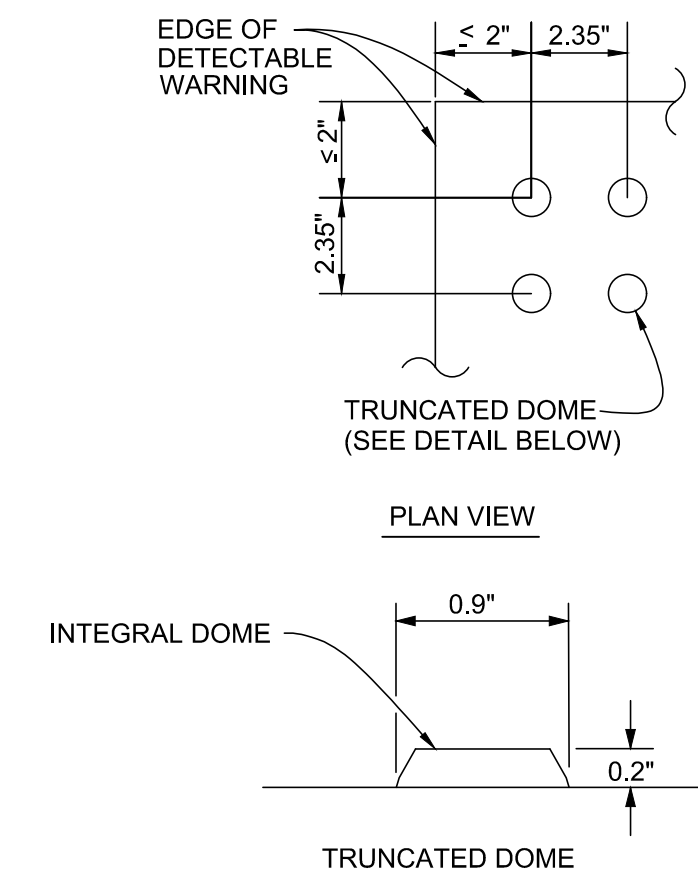
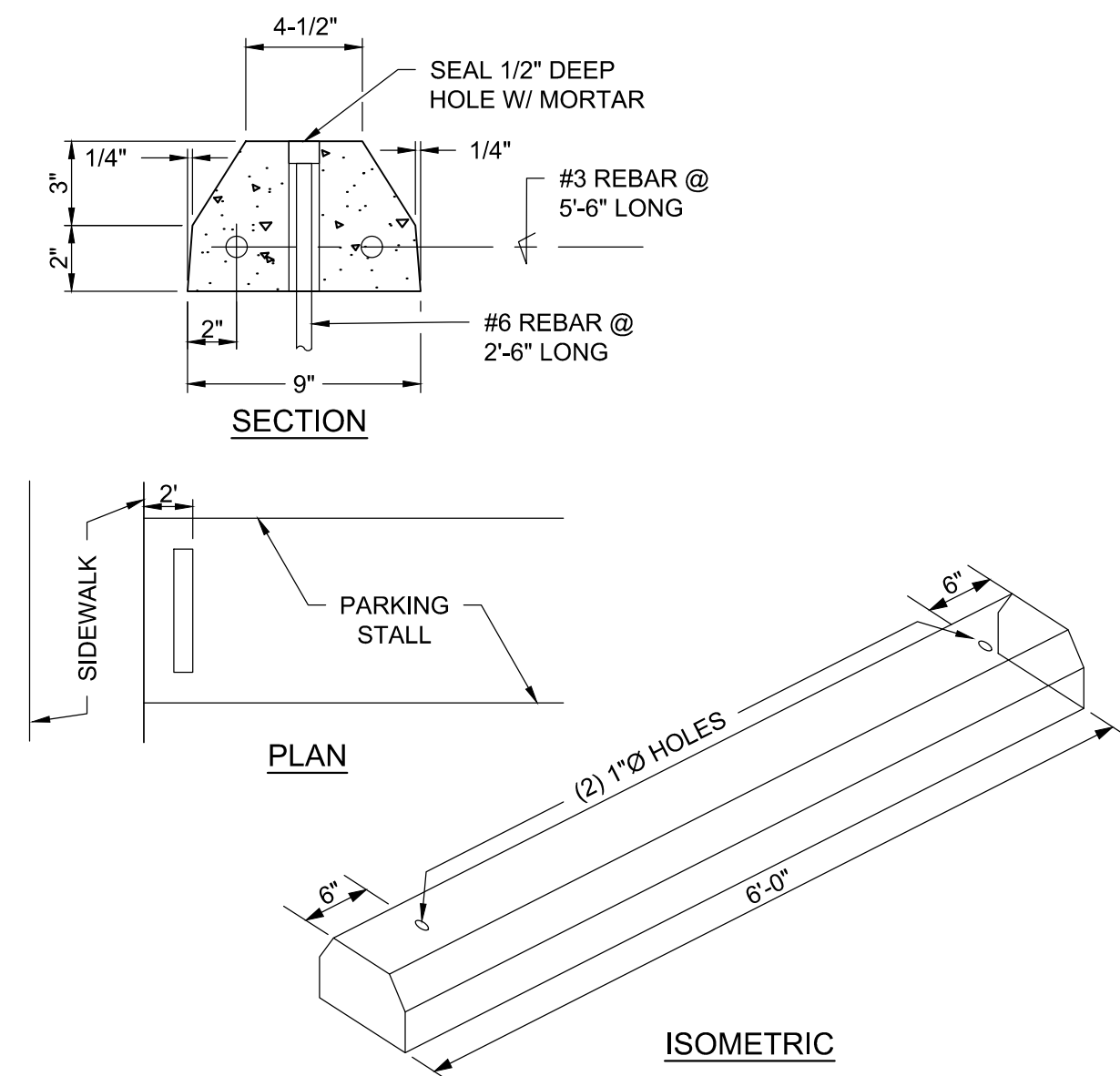
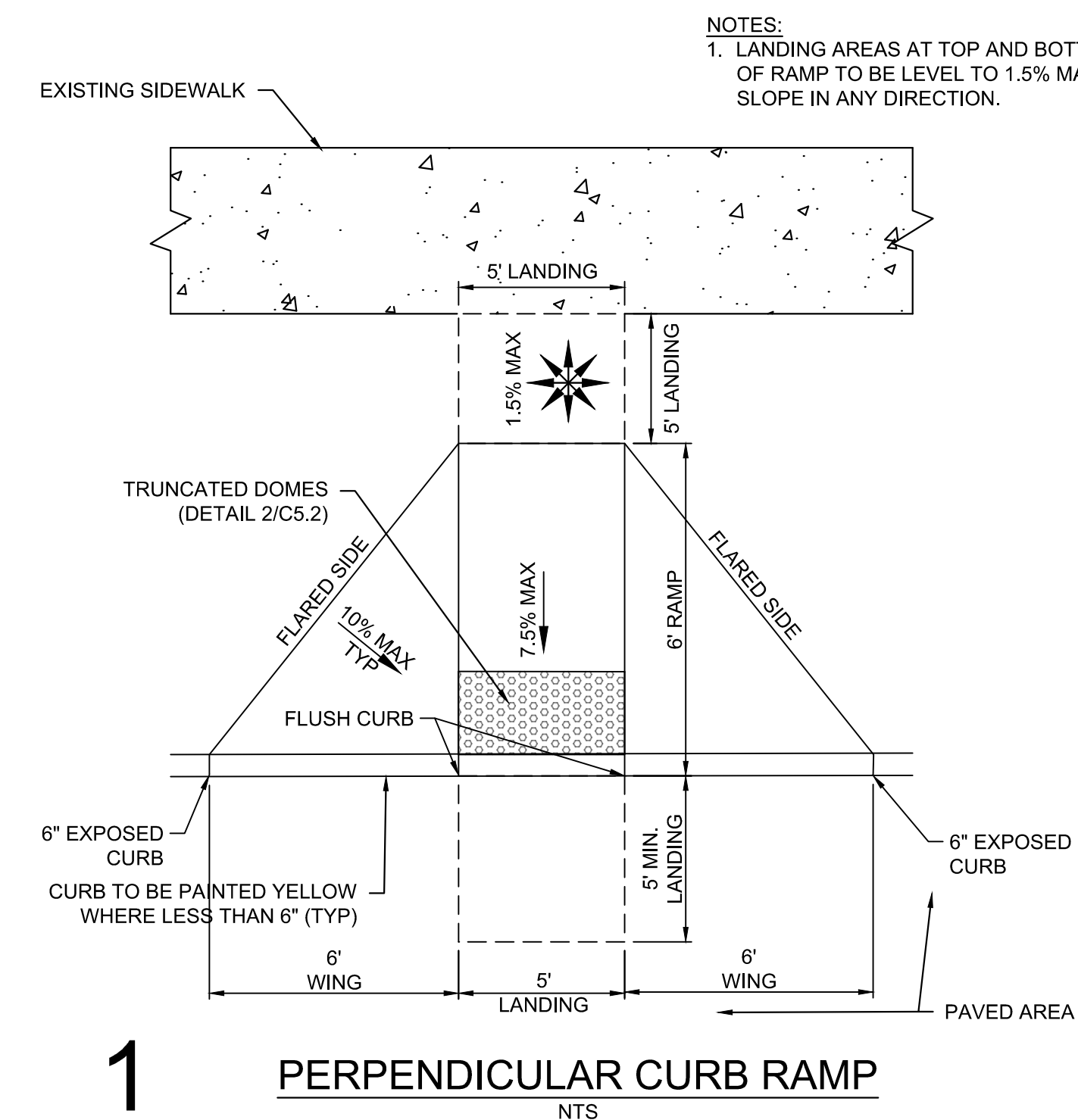
GERMANTOWN DENTAL OFFICE
WMG DEVELOPMENT, LLC
N112 W16200 MEQUON ROAD (LOT 3)
GERMANTOWN, WISCONSIN

ORIGINAL ISSUE DATE: 07/11/2019
REVISIONS:
A PER VILLAGE COMMENTS 09/03/2019

PROJ. NO.: 19015

CIVIL DETAILS

C5.1



09/03/2019



3229 PURPLE ASH DRIVE
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N112 W16200 MEQUON ROAD (LOT 3)
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ORIGINAL ISSUE DATE: 07/11/2019

REVISIONS:

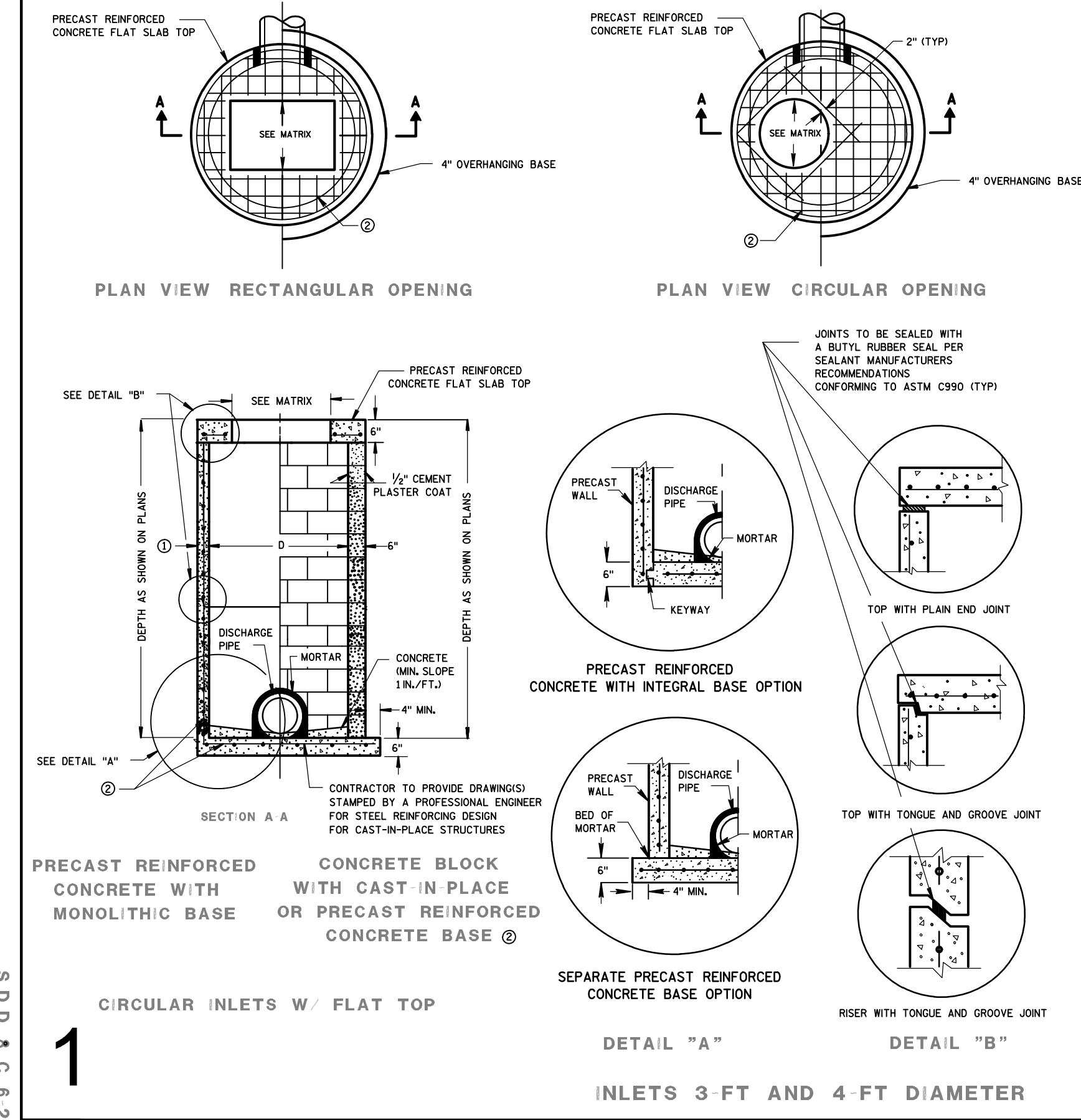
1 PER VILLAGE COMMENTS 09/03/2019

PROJ. NO.: 19015

CIVIL DETAILS

C5.2

SDD 8c6 Inlets 3-FT and 4-FT Diameter



GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

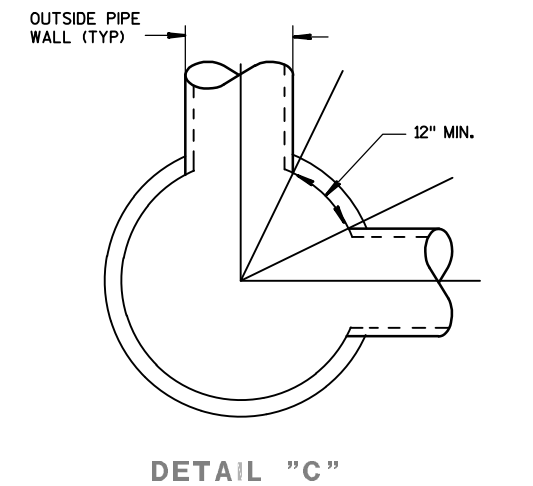
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

INLET SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
3-FT	2 DIA.					X						X
4-FT	2 DIA.	X	X			X			X		X	X
	2X2	X	X					X	X	X	X	
	2X2.5						X	X	X	X	X	
	2X3					X						
	2.5X3					X						



PIPE MATRIX

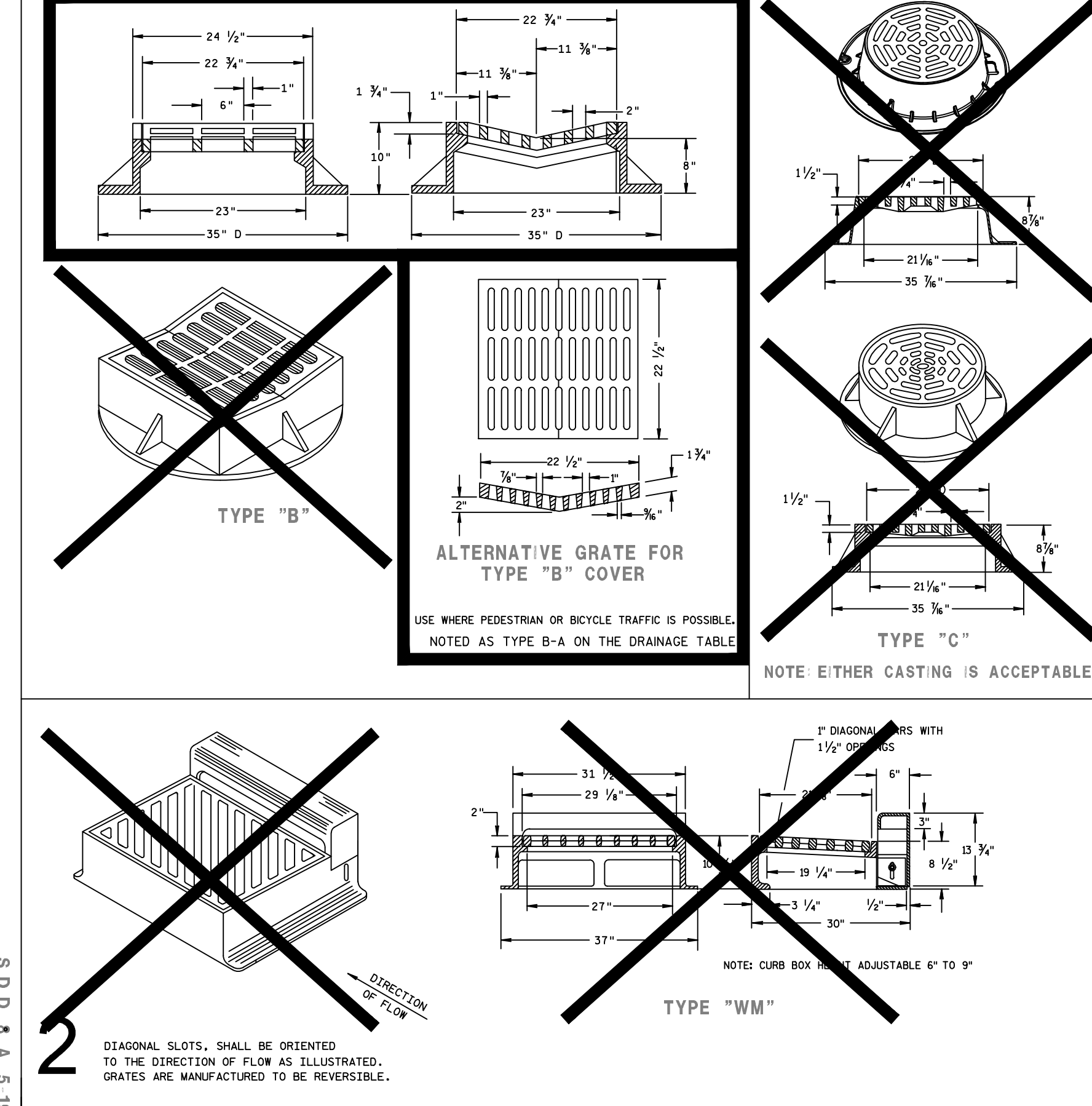
INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT		15	12
4-FT		24	18

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED: 8/27/2008
DATE: 8/27/2008
BY: JERRY H. ZOGG
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

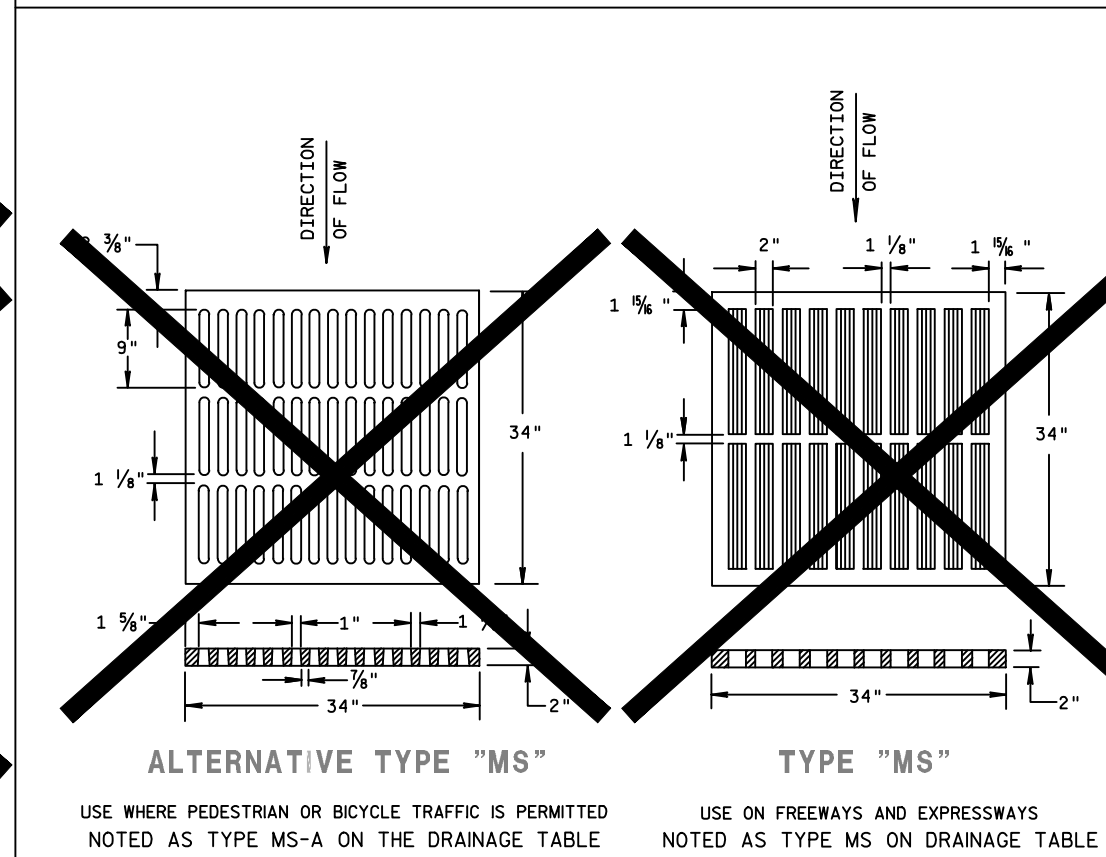
SDD 8a5-b Inlet Covers Type B, B-A, C, MS, MS-A, and WM



GENERAL NOTES

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

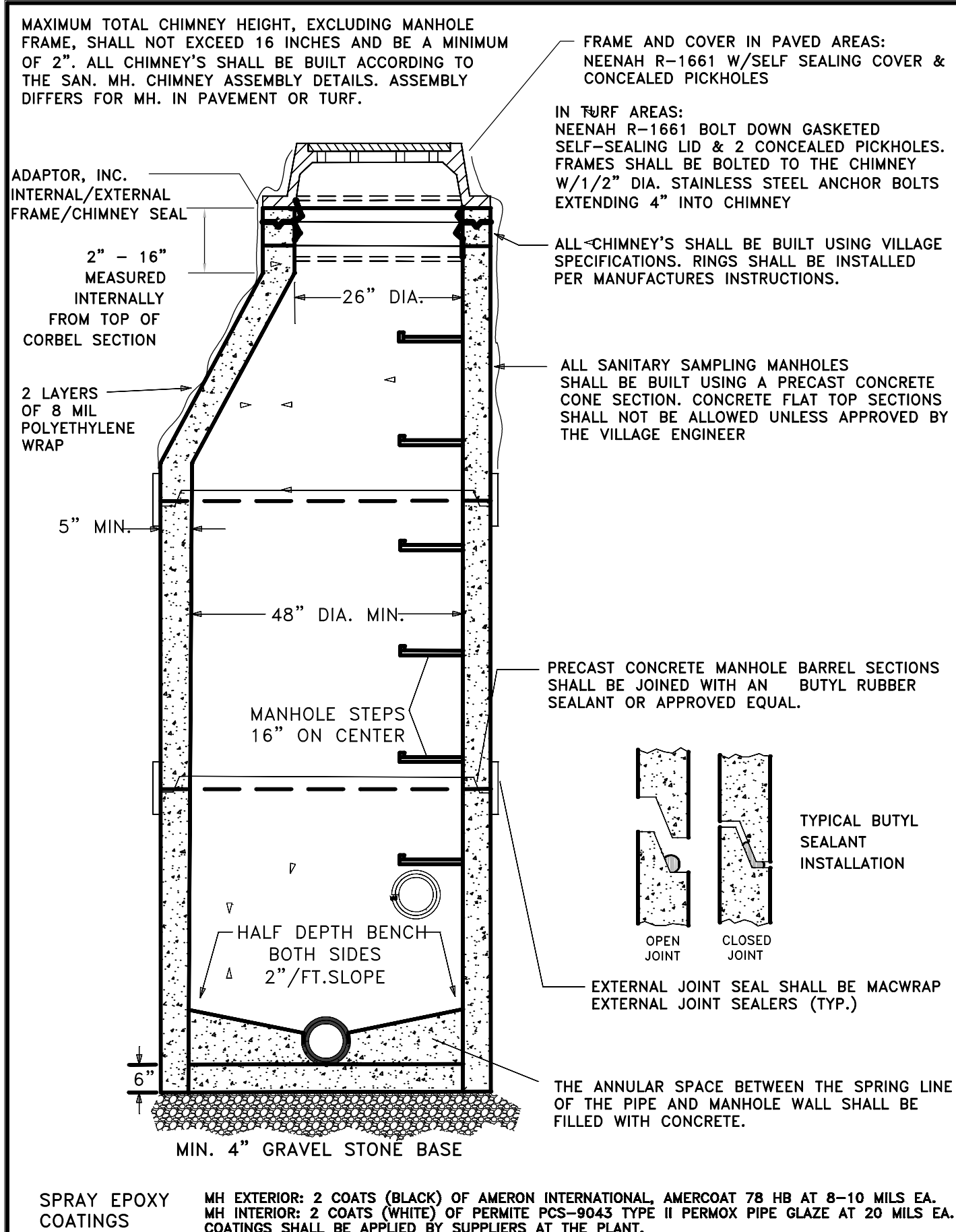
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH. ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED: 8/27/2008
DATE: 8/27/2008
BY: JERRY H. ZOGG
ROADWAY STANDARDS DEVELOPMENT ENGINEER



FILTER BAG OPTIONS

FLEXSTORM offers seven different filter bag options for any of the framing styles. For complete test results visit www.inletfilters.com

FLEXSTORM FILTER BAGS	STANDARD BAG P/N (22" depth)	SHORT BAG P/N (12" depth)
FX: Standard Woven Bag	FX	FX-S
FX+: Woven w/ MyCelx	FXP	FXP-S
FXO: Woven w/ Oil Boom	FXO	FXO-S
PC: Post Construction Bag	PC	PC-S
PC+: PC Bag w/ MyCelx	PCP	PCP-S
LL: Litter and Leaf Bag	LL	LL-S
IL: IDOT NonWoven Bag	IL	IL-S

FILTER BAG TEST RESULTS

FX FILTRATION EFFICIENCY = 82%

† Large scale, 3rd party testing per ASTM D 7351, Standard Test Method for Determination of Sediment Retention Device Effectiveness in Sheet Flow Application using 7% USDA Sandy Loam

PC/PC+ TSS = 99% TPH = 97% ‡

‡ Large scale testing at 90 GPM, 3rd party results using US Silica OK-110 sand at 1750 mg/L measuring TSS per SM 2540D, TPH tested at 243 mg/L used motor oil using EPA Method 1664A.

FILTER BAG SPECIFICATIONS & CAPABILITIES

Bag Type (P/N)	Clean Water Flow Rate (GPM/SqFt)	Min A.O.S. (US Sieve)
Woven (FX)	200	40
Post Construction (PC)	137	140
NonWoven (IL)	145	70
Litter & Leaf Bag (LL)	High	3.5

Total Bypass Capacity:
Bypass capacity will vary with each size drainage structure. Flexstorm designs filter bypass to meet the minimum design flow of the particular drainage structure.

Standard Bag Sizes (match frame sizes) §	Solids Storage Capacity (CuFt)	Filtered Flow Rate at 50% Max (OFS)			Oil Retention (Oz)		
		FX	PC	IL	PC*	PCP**	FX+
Small	1.6	1.2	0.8	0.9	66	155	89
Medium	2.1	1.8	1.2	1.3	96	185	89
Large	3.8	2.2	1.5	1.6	120	209	89
XL	4.2	3.6	2.4	2.6	192	370	178

* PC filter bag at 50% max adsorption capacity
** PC filter bag at 50% capacity and MyCelx skimmer at 100% capacity
§ Bag Sizes match the framing sizes based on clear opening dimensions. Standard bags are 22" in depth. Short bags are 12" in depth, reducing solids storage capacity by approximately 50%.

FLEXSTORM OPERATION AND MAINTENANCE PLAN

FLEXSTORM OPERATION & MAINTENANCE PLAN

Installation Instructions:

1. Remove grate from the drainage structure
2. Clean stone and dirt from ledge (lip) of drainage structure
3. Drop the FLEXSTORM inlet filter through the clear opening such that the hangers rest firmly on the lip of the structure.
4. Replace the grate and confirm it is not elevated more than 1/8", the thickness of the steel hangers.

Frequency of Inspections:

1. Inspection should occur following any rain event >1/8".
2. Post construction inspections should occur 4 times per year. In snowfall affected regions additional inspections should take place before and after snowfall season.
3. Industrial application site inspections (loading ramps, wash racks, maintenance facilities) should occur on a regularly scheduled basis no less than 3 times/year.

Maintenance Guidelines:

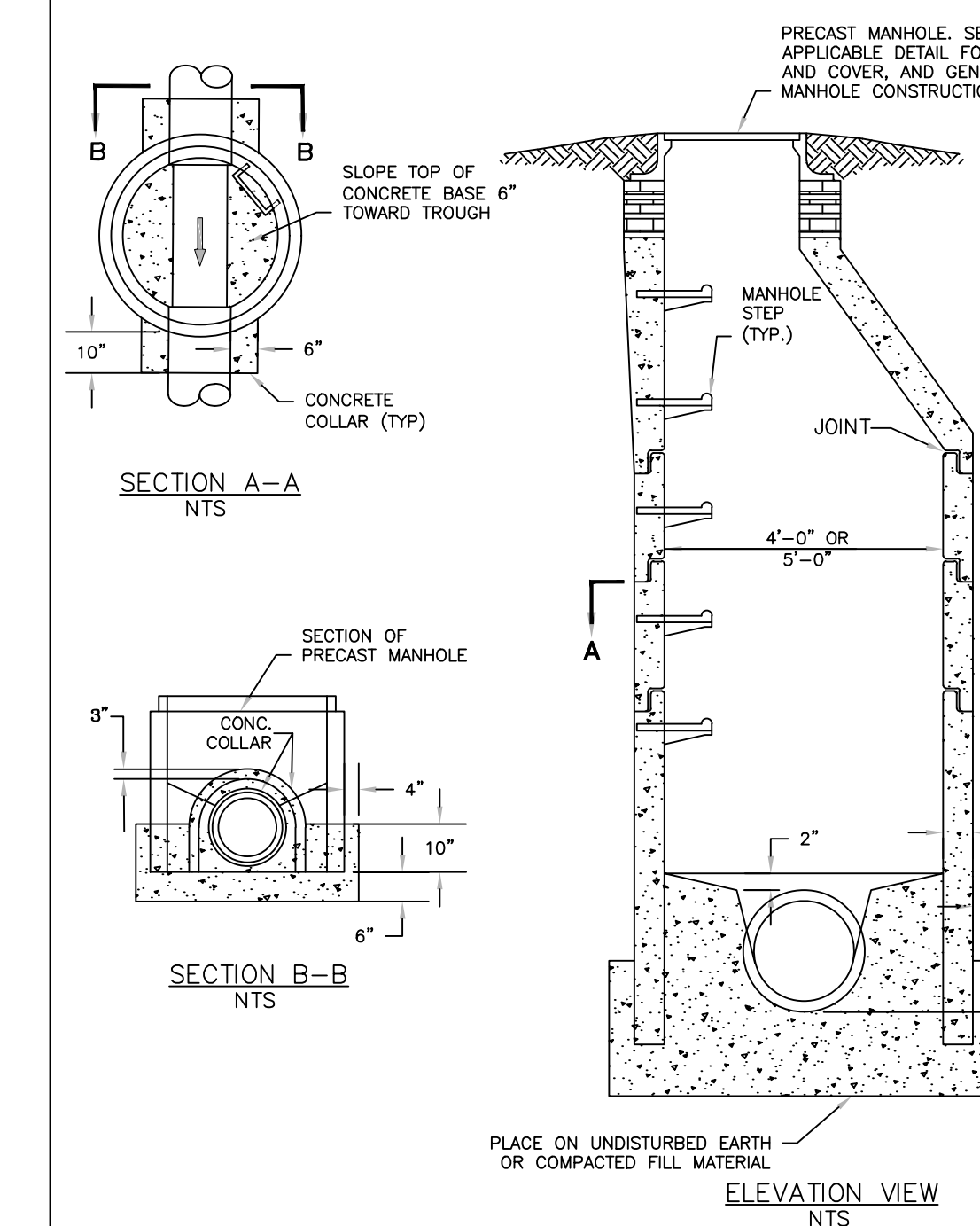
1. Empty the sediment bag if more than half filled with sediment and debris, or as directed.
2. Remove the grate, engage the lifting bars with the FLEXSTORM Removal Tool, and lift from drainage structure.
3. Dispose of sediment or debris as directed by the Engineer or Maintenance contract.
4. An industrial vacuum can be used to collect sediment.
5. Remove caked on silt from sediment bag and flush with Medium spray with optimal filtration.
6. Replace bag if torn or punctured to >1/8" diameter on lower half of bag.

Post Construction PC Bag Maintenance:

1. At 50% saturation the average 2'x2' Adsorb-it lined PC filter will retain approximately 75 oz (4.2 lbs) of oil and should be serviced. To recover the oils the filter can be centrifuged or passed through a wringer.
2. Oil skimmer pouches start to turn black when saturated, indicating time for replacement. Each ClearTec Rubberizer pouch will absorb ~62oz (4 lbs) of oil before needing replacement.
3. Dispose of all oil contaminated products in accordance with EPA guidelines. ClearTec Rubberizer, since a solidifier, will not leach under pressure and can be disposed of in most landfills, recycled for industrial applications, or burned as fuel.

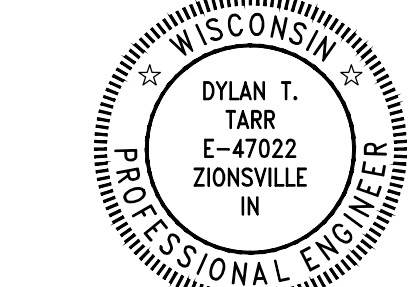
Sediment Bag Replacement:

1. Remove the bag by loosening or cutting off clamping bag.
2. Take new sediment bag and secure worm drive clamping band to the frame channel.
3. Ensure Bag is secure and there is no slack around perimeter.

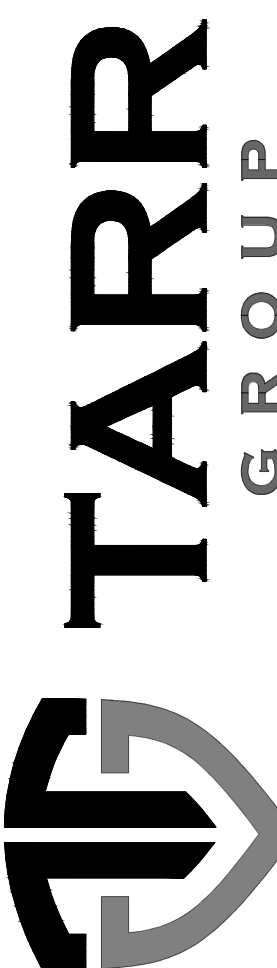


6

DOGHOUSE MANHOLE
N.T.S.



09/03/2019



3229 PURPLE ASH DRIVE
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PHONE: 843-633-3579

GERMANTOWN DENTAL OFFICE
WMG DEVELOPMENT, LLC
N112 W16200 MEQUON ROAD (LOT 3)
GERMANTOWN, WISCONSIN

ORIGINAL ISSUE DATE: 07/11/2019
REVISIONS:
PER VILLAGE COMMENTS 09/03/2019

PROJ. NO.: 19015

CIVIL DETAILS

C5.3

Tracer wire install procedures for sewer and water laterals. As of 6/10/19

- Connect new 12 AWG copper clad steel, high strength 450 lb. break load with a minimum 30mil HDPE coating to existing tracer wire by using a direct bury lug connector running wire along service, green wire for sewer blue wire for water. **DO NOT USE THHN/THWN OR ANY STRANDED WIRE**

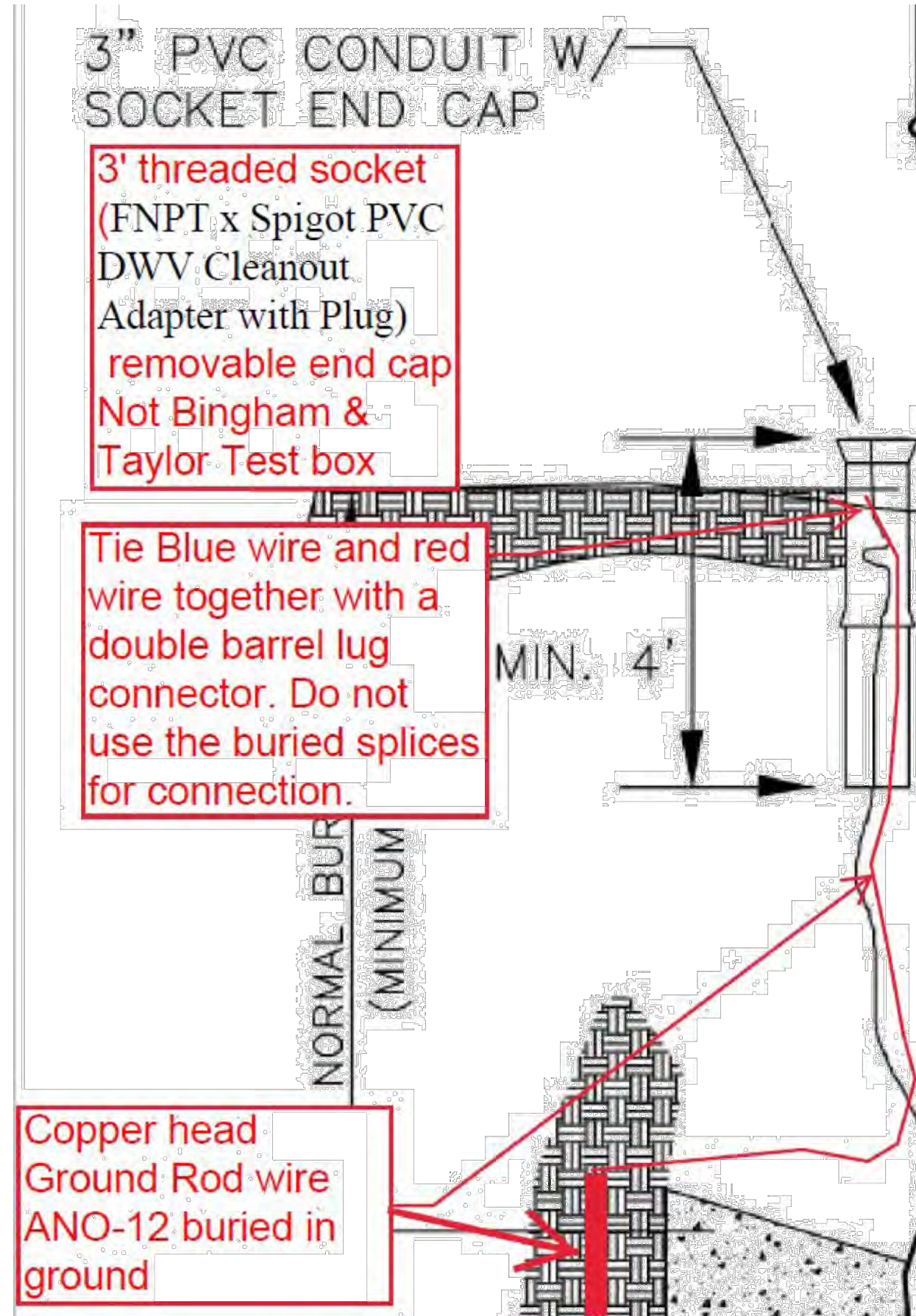


- Run tracer wire to the outside of the building.
- Run tracer wire up to grade on the outside of building, terminate wire by connecting to a termination anode #12 tying both wires in a double barrel lug connector. See example.



- Place the two wires inside 3" x 4" PVC conduit with socket end cap. Leaving 8"-10" of exposed PVC on the street side of the home.
- If there is no existing tracer wire to connect to in the street, start wire in the street by terminating the wire to an anode spliced to the new wire burying the anode in spoil not stone. Run the tracer wire along the lateral up to the outside of the home and follow the PDF example "Tracer wire install for lateral up to the home"
- If the water curb stop to the building ends up in a driveway, the existing curb stop box needs to be installed in a frost sleeve only if the box is in the driveway if it is in the turf area leave it as you found it. Also see attached for the components needed to be installed over the curb box to protect it from being damaged in the driveway road surface.

For any questions please call the Germantown water Utility
262-253-8254



Ferguson-262-691-8890
Core and
Main-262-782-5952

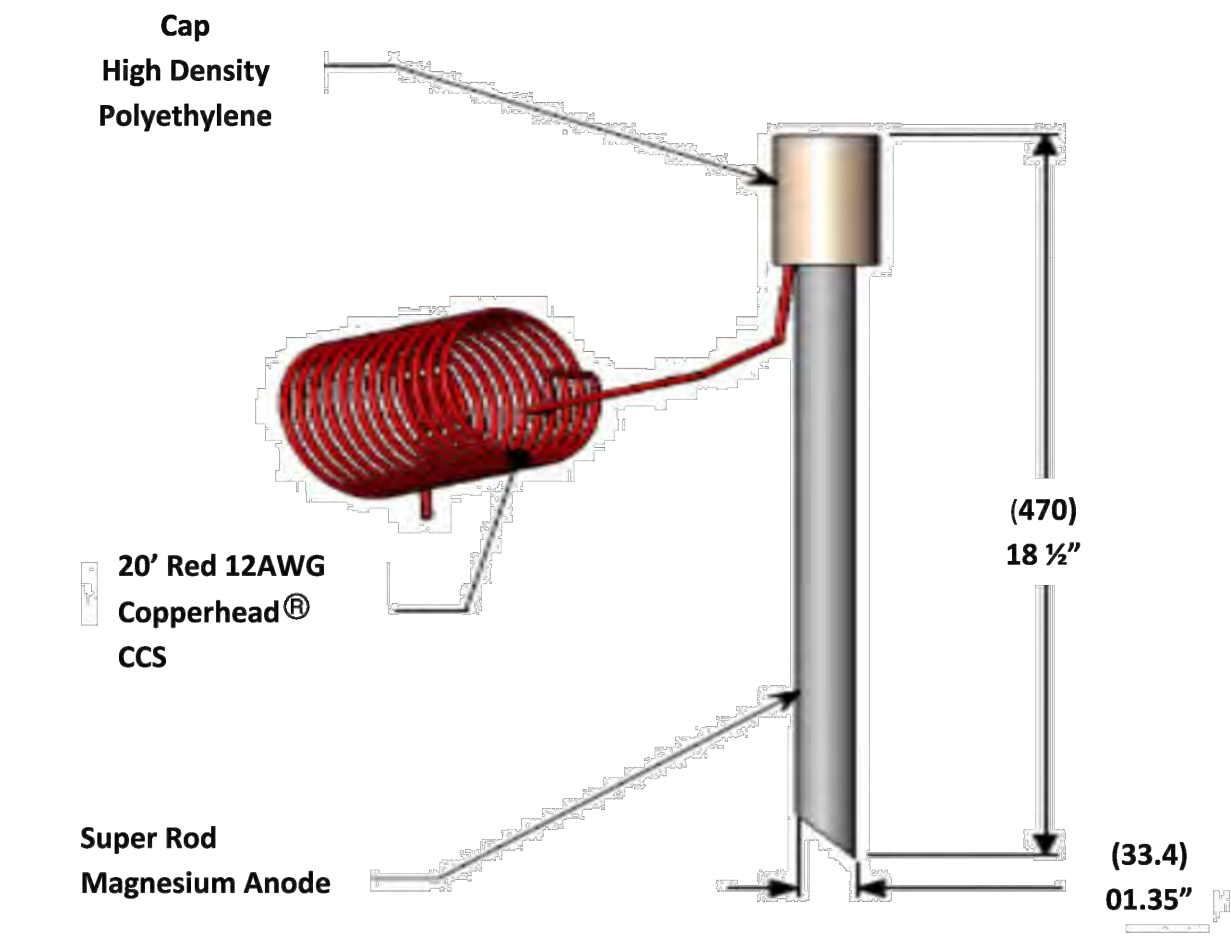


Anode:

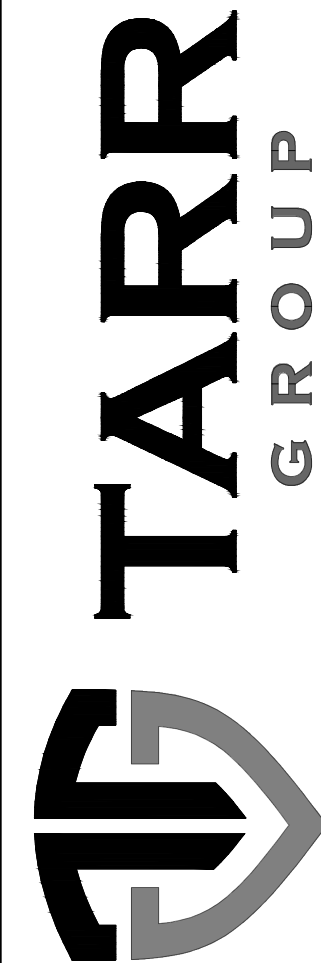
- Use Copperhead® Anode
- Part # **ANO-12**, 1.5# x 1.315"D x 18.5"L, Magnesium Drive in Anode.

Grounding a tracer wire system at all dead end points completes the needed electrical circuit for accurate locates. This will significantly enhance your signal strength and pinpoint your tracer wire to its target.

Your Copperhead Anode includes an HDPE cap and 20' of factory installed Copperhead red 12 AWG copper clad steel tracer wire with minimum 452# break load and 30 mil high-density high molecular weight polyethylene (HDPE) insulation. The factory installed wire is also rated for direct burial use at 30 volts with 21% conductivity. HDPE insulation shall be RoHS compliant and utilize virgin grade material. Package includes one Copperhead SnakeBite™ connector, part # SCB-01-SR, which is filled with non-hardening, dielectric, moisture displacement silicon for corrosion protection. The connector is provided to splice the factory installed anode tracer wire to the mainline tracer wire. The Copperhead Anode described above must be used or a **pre-approved equal** and made in the USA.



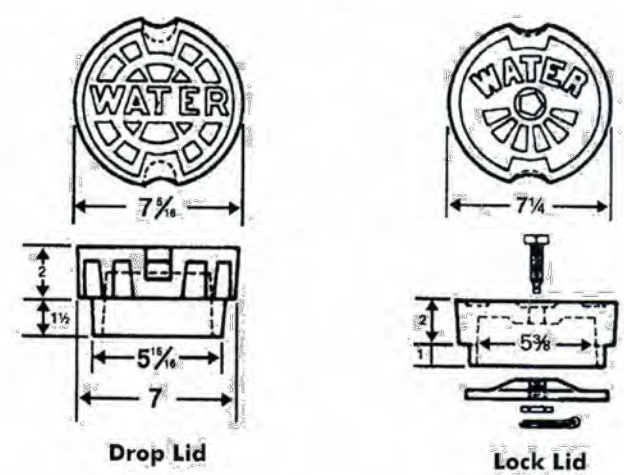
09/03/2019



3229 PURPLE ASH DRIVE
ZIONSVILLE, IN 46077
EMAIL: KEVIN@TARR-GROUP.COM
PHONE: 843-633-3579

GERMANTOWN DENTAL OFFICE
WMG DEVELOPMENT, LLC
N112 W16200 MEQUON ROAD (LOT 3)
GERMANTOWN, WISCONSIN

Ferguson-262-691-8890
Core and Main-262-782-5952

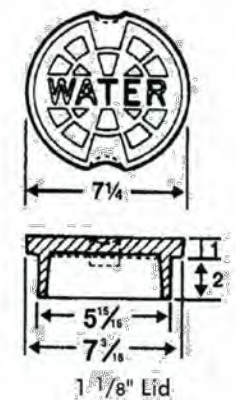


RECLAIMED WATER LID

*ID-HDU/UPCode
670610

458892

NOTE: Square Valve Box Tops for this Lid will be available in 2012. Call Tyler Union for information.
*D=Domestic; HD=Heavy Duty Weight



UPCode Ship
670610 Code Description Wt
144908 S Wrench 0.5

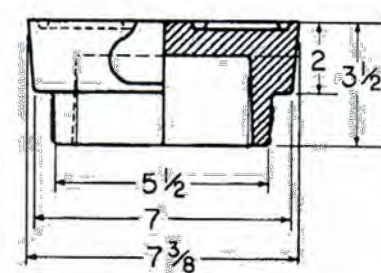
LIDS (WATER)

*ID-HDU/UPCode	Wt	*ND-Sid/UPCode	Wt	*ND-HDU/UPCode	Wt
5/4" Drop Lid	145325	12	136910	9	---
5/4" Lock Lid	145462	11	136866	11	---
1 1/4" Lid**	145509	11	112532	9	---

(Use with 1 1/4" Riser Only)
*NOTE: D=Domestic ND=Non-Domestic HD=Heavy Duty Weight Sid=Standard Weight

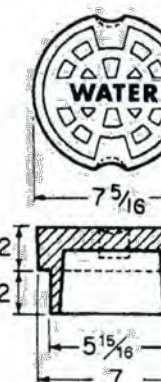
Install when service curb box is in the middle of driveway or concrete surfaces.

CAST IRON - STANDARD, SPECIAL DROP, AND LOCK LIDS



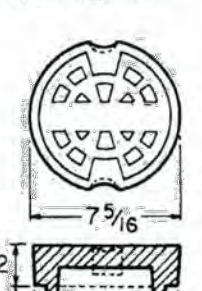
*ID-HDU/UPCode	*ND-HDU/UPCode	Wt
670610	670610	---
145370	136880	12

*D=Domestic; ND=Non-Domestic
HD=Heavy Duty Weight



*ID-HDU/UPCode	*ND-HDU/UPCode	Special	Markings	Wt
670610	670610	---	---	---
145301	136927	**WATER	OMA 12	---

*D=Domestic; ND=Non-Domestic HD=Heavy Duty Wt
**OMA marking is inside lid.



5 1/4" DROP LID W/SPECIAL MARKINGS**

*ID-HDU/UPCode	*ND-Sid/UPCode	Special	Mark
670610	670610	---	---
145332	12	136873	9 GAS
145349	12	136903	9 SEWER
145356	12	136897	9 PLAIN
458975	12	---	---

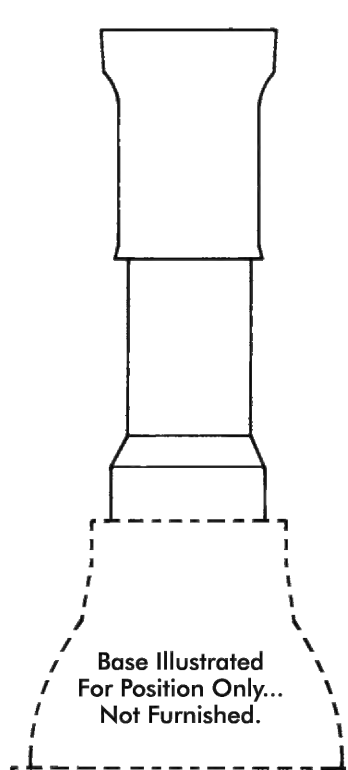
**Lids marked with "WATER" will be shipped unless otherwise specified.

Tyler/Union

New ways to save on valve boxes. Eliminate extra handling by buying pre-assembled units. Save on single parts and accessories. Lower unit cost by purchasing Valu-Paks of 30 to 80 pieces of tops and bottoms in crates. See list price sheet for pricing details.

THREE WAYS TO SAVE 6860 VALVE BOX		
Level 1 Boxes Assembled	Level 2 Individual Parts Not Assembled	Level 3 VALU-PAK Parts Not Assembled
Note: A "BOX" is one top and one bottom		

LEVEL ONE Boxes Assembled/Less Base and Lid

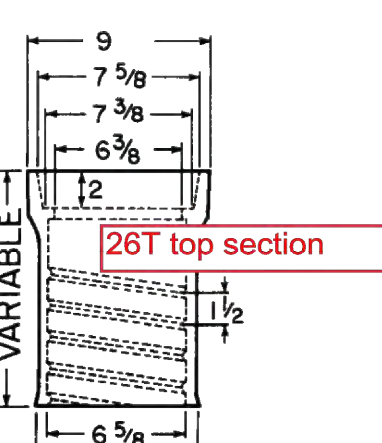


Box Assembled

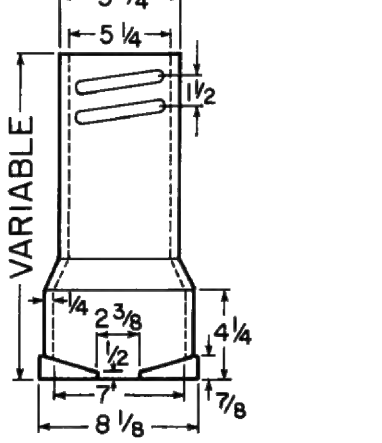
LEVEL ONE: BOXES ASSEMBLED LESS BASES AND LIDS			
Box (Components)	Extension Height	UPC No.	Weight
AA (10T + 12B)	27-37	(Not Offered Assembled)	(Not Offered Assembled)
A (16T + 18B)	33-42	(Not Offered Assembled)	(Not Offered Assembled)
B (16T + 24B)	39-49	145936	69
C (16T + 30B)	45-54	145943	73
CC (16T + 36B)	51-60	145950	75
D (26T + 30B)	45-66	145967	88
DD (26T + 36B)	51-72	145974	90
E (16T + 24B + #60 Ext)	63-72	(Not Offered Assembled)	(Not Offered Assembled)
F (26T + 24B + #60 Ext)	63-84	(Not Offered Assembled)	(Not Offered Assembled)
G (26T + 36B + #60 Ext)	74-94	(Not Offered Assembled)	(Not Offered Assembled)

6860 SERIES CAST IRON THREE-PIECE VALVE BOXES for 3" through 20" valves, 5 1/4" shaft, screw-type (Base required, order separately)

Level Two Top

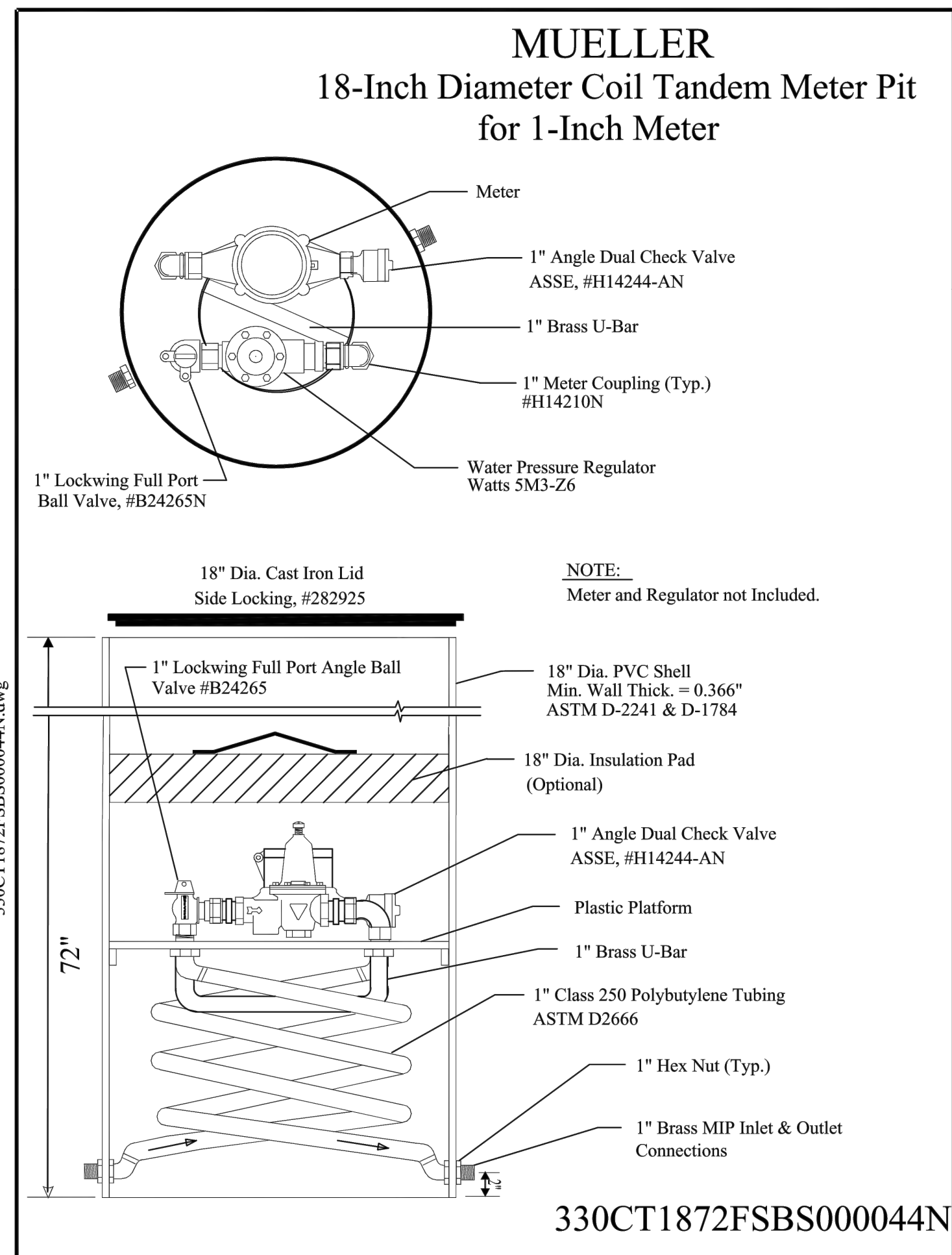


Level Two Bottom



Lids marked "WATER" will ship unless otherwise specified:
Also available 5 1/4" Drop Lids

WATER OMA
SEWER
MAWV
PLAIN
GAS



330CT1872FSBS000044N

ORIGINAL ISSUE DATE: 07/11/2019

REVISIONS:

PER VILLAGE COMMENTS 09/03/2019

PROJ. NO.: 19015

CIVIL DETAILS

C5.4

L2.1-LANDSCAPE.dwg

PLANTLIST

TREES					
QTY	SYM	BOTANICAL NAME	COMMON NAME	CAL.	NOTES
1	AG	Acer griseum	Paperbark Maple	3"	B&B, 7' CLEAR
1	BP	Betula populifolia 'Whitespire'	Whitespire Birch	3"	B&B, 7' CLEAR
4	TO	Thuja occidentalis 'Nigra'	Dark Green Arborvitae	8' MIN HT.	B&B
DECIDUOUS SHRUBS					
QTY	SYM	BOTANICAL NAME	COMMON NAME	CONT	NOTES
14	CAR	Clethra alnifolia 'Ruby Spice'	Ruby Spice Summersweet	5 GAL	24" HEIGHT
12	HAA	Hydrangea arborescens 'Annabelle'	Annabelle Hydrangea	5 GAL	24" HEIGHT
EVERGREEN SHRUBS					
QTY	SYM	BOTANICAL NAME	COMMON NAME	CONT	NOTES
11	BTA	Berberis thunbergii 'Admiration'	Admiration Japanese Barberry	5 GAL.	24" WIDTH
7	CAP	Cotoneaster apiculatus	Cranberry Cotoneaster	5 GAL.	24" WIDTH
13	IGS	Ilex glabra 'Shamrock'	Shamrock Inkberry Holly	5 GAL.	24" WIDTH
11	JCS	Juniperus chinensis 'Sea Green'	Sea Green Juniper	5 GAL.	24" WIDTH
GRASSES					
10	MSA	Miscanthus sinensis 'Adagio'	Adagio Maiden Grass	5 GAL.	24" HEIGHT

LANDSCAPE NOTES

- WHEN APPLICABLE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT EXISTING TREES TO REMAIN. NO HEAVY EQUIPMENT SHOULD BE PERMITTED TO OPERATE OR BE STORED, NOR ANY MATERIALS TO BE HANDLED OR STORED, WITHIN THE DRIPLINES OF TREES OUTSIDE THE LIMIT OF GRADING
 - THE CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES AND TO PROTECT UTILITIES THAT ARE TO REMAIN. THE CONTRACTOR SHALL REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
 - ALL AREAS DISTURBED BY UTILITY TRENCHING, SITE AND BUILDING CONSTRUCTION SHALL BE STABILIZED WITH SODDING AND SEEDING AS SHOWN BY THE PLAN.
 - IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO CONFIRM MATERIAL QUANTITIES. IN THE EVENT OF A DISCREPANCY, THE QUANTITIES SHOWN ON THE PLAN SHALL TAKE PRECEDENCE OVER QUANTITIES SHOWN ON THE PLANT LIST.
 - THE LANDSCAPE INSTALLATION SHALL BE COORDINATED WITH THE IRRIGATION INSTALLATION WHEN APPLICABLE.
 - THE LANDSCAPE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM STRUCTURES AND TAKE SPECIAL CARE TO INSURE THAT BED PREPARATION DOES NOT INHIBIT DRAINAGE.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR BACKFILLING BEHIND THE CURB SO GRADE IS LEVEL WITH TOP OF CURB
 - ALL LAWN AREAS SHALL BE CULTIVATED TO A DEPTH OF 4" PRIOR TO SODDING AND SEEDING. PREPARED SOD AND SEED BEDS SHALL BE FREE FROM STONES OVER 2" DIAMETER AND OTHER DELETERIOUS MATERIAL.
 - THE LANDSCAPE CONTRACTOR SHALL RAKE SMOOTH ALL SEED OR SOD AREAS PRIOR TO INSTALLATION.
 - SODDED AREAS SHALL HAVE NO BARE AREAS. SEEDED AREAS SHALL BE CONSIDERED ACCEPTABLE WHEN FULL COVERAGE OF THE PERMANENT TURFGRASS SPECIES IS ESTABLISHED.
 - THE QUANTITIES INDICATED ON THE PLANT LIST AND PLAN ARE PROVIDED FOR THE BENEFIT OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN QUANTITY CALCULATIONS AND THE LIABILITY WHICH PERTAINS TO THOSE QUANTITIES AND TO ANY RELATED CONTRACT DOCUMENTS AND/OR PRICE QUOTATIONS. QUESTIONS SHOULD BE DIRECTED TO THE LANDSCAPE ARCHITECT.
 - ALL PLANT MATERIALS SHALL BE NURSERY GROWN, UNLESS OTHERWISE NOTED AND SHALL COMPLY WITH THE AMERICAN STANDARD FOR NURSERY STOCK: ANSI Z-60.1; LATEST EDITION, FOR SIZE AND QUALITY.
 - NO SUBSTITUTIONS AS TO TYPE, SIZE, OR SPACING OF PLANT MATERIALS SPECIFIED ON THIS PLAN MAY BE MADE WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT.
 - IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO CONFIRM MATERIAL QUANTITIES. IN THE EVENT OF A DISCREPANCY, THE QUANTITIES SHOWN ON THE PLAN SHALL TAKE PRECEDENCE OVER QUANTITIES SHOWN ON THE PLANT LIST.
 - SOIL USED FOR PLANTING SHALL CONSIST OF 5 PARTS TOPSOIL, 1 PART SAND AND 2 PARTS ORGANIC MATTER, MIXED WITH I POUND OF FERTILIZER PER CUBIC YARD.
 - SAND SHALL BE CLEAN MASONRY SAND.
 - ORGANIC MATTER SHALL BE PEAT MOSS, OR WELL COMPOSTED PINE BARK, OR APPROVED EQUAL AND SHALL BE FINELY GROUND AND FREE OF WEEDS.
 - ALL FERTILIZER SHALL BE 10-10-10 WITH MINOR ELEMENTS. FERTILIZER SHALL HAVE 40-50% OF ITS TOTAL NITROGEN IN A WATER INSOLUBLE FORM.
 - PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO ALL PLANT BEDS AND SOD AREAS PRIOR TO INSTALLATION. TREFLAN OR AN APPROVED EQUAL SHALL BE USED.
 - ALL PLANT BEDS SHALL HAVE A MINIMUM OF 3" DEEP MULCH.

MULCH TYPE 1: MULCH SHALL BE INORGANIC MINERAL MULCH. MULCH TO BE 1.5" ANGULAR ROCK. COLOR: MIX OF BEIGE, GREY,BROWN. SOIL SEPARATOR FABRIC REQUIRED.
 - CUT AWAY ROPES OR WIRES FROM B&B PLANTS. PULL BACK BURLAP FROM TOP OF ROOT BALL. DO NOT ALLOW BURLAP TO BE EXPOSED AT SURFACE. TOTALLY REMOVE BURLAP IF IT IS SYNTHETIC.
 - IF CONTAINER GROWN PLANTS SHOW SIGNS OF BEING ROOT BOUND, SCORE ROOTS VERTICALLY.
 - THE LANDSCAPE CONTRACTOR WILL NOT BE RESPONSIBLE FOR PLANT MATERIAL THAT HAS BEEN DAMAGED BY VANDALISM, FIRE, RELOCATION, WILDLIFE, THEFT, SEVERE WEATHER OR OTHER ACTIVITIES BEYOND THE LANDSCAPE CONTRACTOR'S CONTROL.
 - PRIOR TO FINAL PAYMENT, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER WITH COMPLETE WRITTEN INSTRUCTIONS ON PROPER CARE OF ALL SPECIFIED PLANT MATERIALS.
 - ALL PLANT MATERIAL SHALL BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
 - ALL REPLACEMENTS SHALL BE OF THE SAME TYPE, SIZE, AND QUALITY AS SPECIFIED ON THE PLANT LIST, UNLESS APPROVED OTHERWISE IN WRITING BY THE LANDSCAPE ARCHITECT AND CITY OF SEGUIN.
 - ANY MATERIAL THAT IS DEEMED TO BE 25% DEAD OR MORE SHALL BE CONSIDERED DEAD, AND MUST BE REPLACED AT NO CHARGE. A TREE IS CONSIDERED DEAD WHEN THE MAIN LEADER HAS DIED BACK, OR MORE THAN 25% OF THE CROWN IS DEAD.
 - REPLACEMENTS SHALL BE MADE DURING THE NEXT PLANTING SEASON UNLESS THE LANDSCAPE CONTRACTOR AGREES TO AN EARLIER DATE. FINAL CERTIFICATE OF OCCUPANCY MAY BE WITHHELD UNTIL PLANTING IS COMPLETE.
 - THE LANDSCAPE CONTRACTOR WILL NOT BE RESPONSIBLE FOR PLANT MATERIAL THAT HAS BEEN DAMAGED BY VANDALISM, FIRE, RELOCATION, WILDLIFE, THEFT, OR OTHER ACTIVITIES BEYOND THE LANDSCAPE CONTRACTOR'S CONTROL.
 - THE IRRIGATION SYSTEM IS TO BE DESIGN BUILD AND WILL CONSIST OF DRIP IRRIGATION IN ALL PLANTING BEDS, UNLESS SPECIFIED OTHERWISE. ALL SOD AND NATIVE SEED AREAS SHALL BE IRRIGATED WITH POP-UP OR SPRAY HEADS.
- IRRIGATION NOTES**
- IRRIGATION SYSTEM TO BE DESIGN BUILD BY CONTRACTOR.
 - ALL LATERAL AND SUPPLY LINES SHALL BE CLASS 200 PVC, SIZED FOR FLOW VELOCITIES OF 5 FT./SEC. OR LESS.
 - PROVIDE TWO * QUICK COUPLING VALVES ON SUPPLY LINE.
 - PROVIDE AUTOMATIC DRAIN VALVES AT ALL LOW POINTS ON SUPPLY AND LATERAL LINES.
 - PROVIDE TWO PLASTIC SUPPLY LINE MANUAL DRAIN VALVES.
 - ACCEPTABLE SYSTEM COMPONENTS:
 - SYSTEM CONTROLLER: HUNTER X-CORE SERIES, TORO TMC-212 SERIES, RAIN BIRD RZX SERIES. CONTROLLER SHALL BE LOCATED IN THE RECEIVING AREA NEXT TO THE ELECTRICAL PANEL.
 - ZONE CONTROL VALVES: HUNTER PGV SERIES, TORO 250/260 SERIES, RAIN BIRD DV/DVF SERIES
 - SPRINKLER HEADS: HUNTER SRM AND PRO SPRAY SERIES, TORO 570Z AND 300 SERIES, RAIN BIRD 1800 AND 3500 SERIES
 - RAIN/FREEZE SENSORS: HUNTER RAIN CLIK PLUS HUNTER FREEZE CLIK, TORO TWRFS RAIN/FREEZE SENSOR OR RAIN BIRD WR2 WIRELESS RAIN/FREEZE SENSOR.

LANDSCAPE CALCULATIONS

PARKING LOT:

REQUIRED: PER 20 SPACES:

+ 1 TREE

50 SPACES = 3 MULTIPLIER

PROVIDED:

- 2 CANOPY TREES, 1 EXISTING TREE

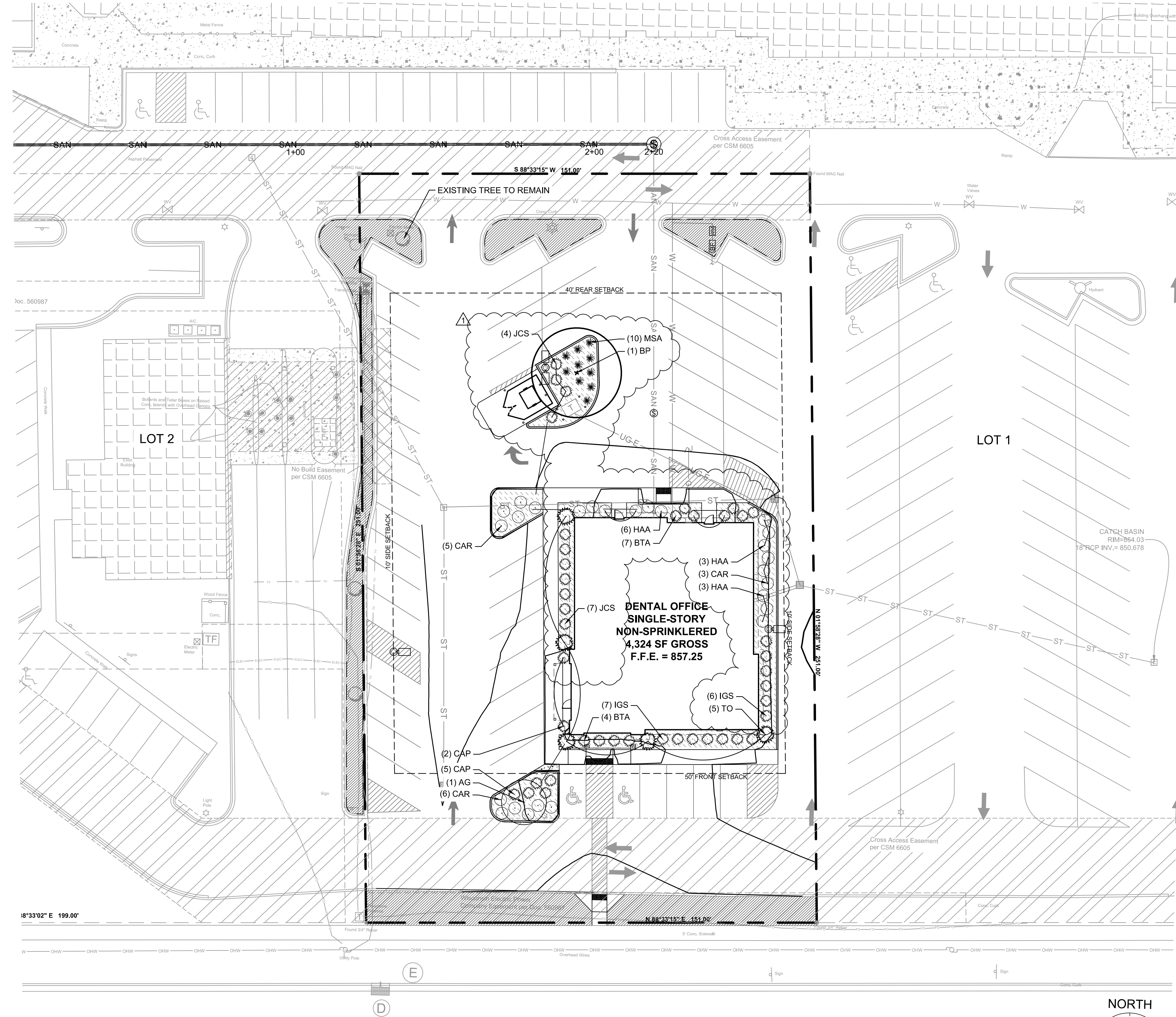
INTERIOR LANDSCAPE:

REQUIRED:

- 5%
26,555 SF x 0.05= 1,328 SF

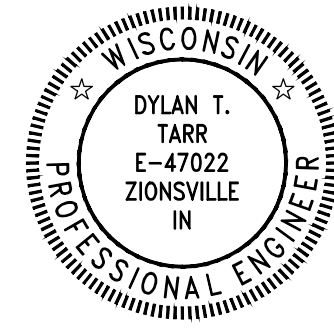
PROVIDED:

-2,250 S.F.

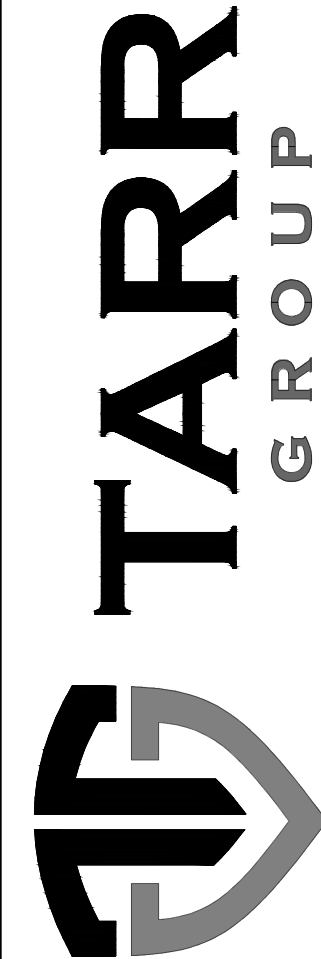


LEGEND

- EXISTING LANDSCAPE AREA TO REMAIN
- MULCH TYPE 1



09/03/2019



3229 PURPLE ASH DRIVE
ZIONSVILLE, IN 46077
EMAIL: KEVIN@TARR-GROUP.COM
PHONE: 843-633-3579

GERMANTOWN DENTAL OFFICE
WMG DEVELOPMENT, LLC
N112 W16200 MEQUON ROAD (LOT 3)
GERMANTOWN, WISCONSIN

ORIGINAL ISSUE DATE: 07/11/2019

REVISIONS:

PER VILLAGE COMMENTS 09/03/2019

PROJ. NO.: 19015

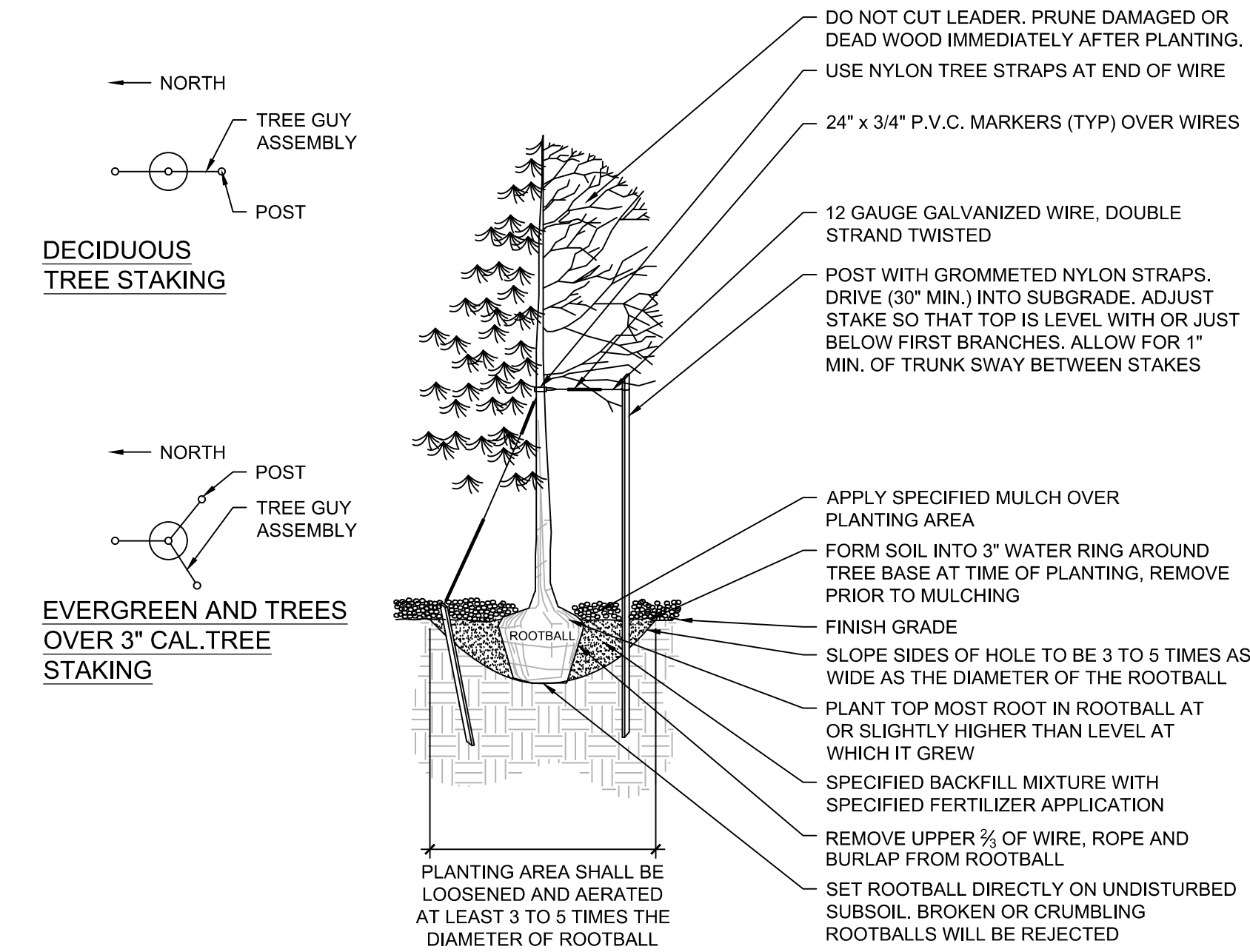
LANDSCAPE PLAN

L2.1

L5.1-LANDSCAPE DETAILS.dwg

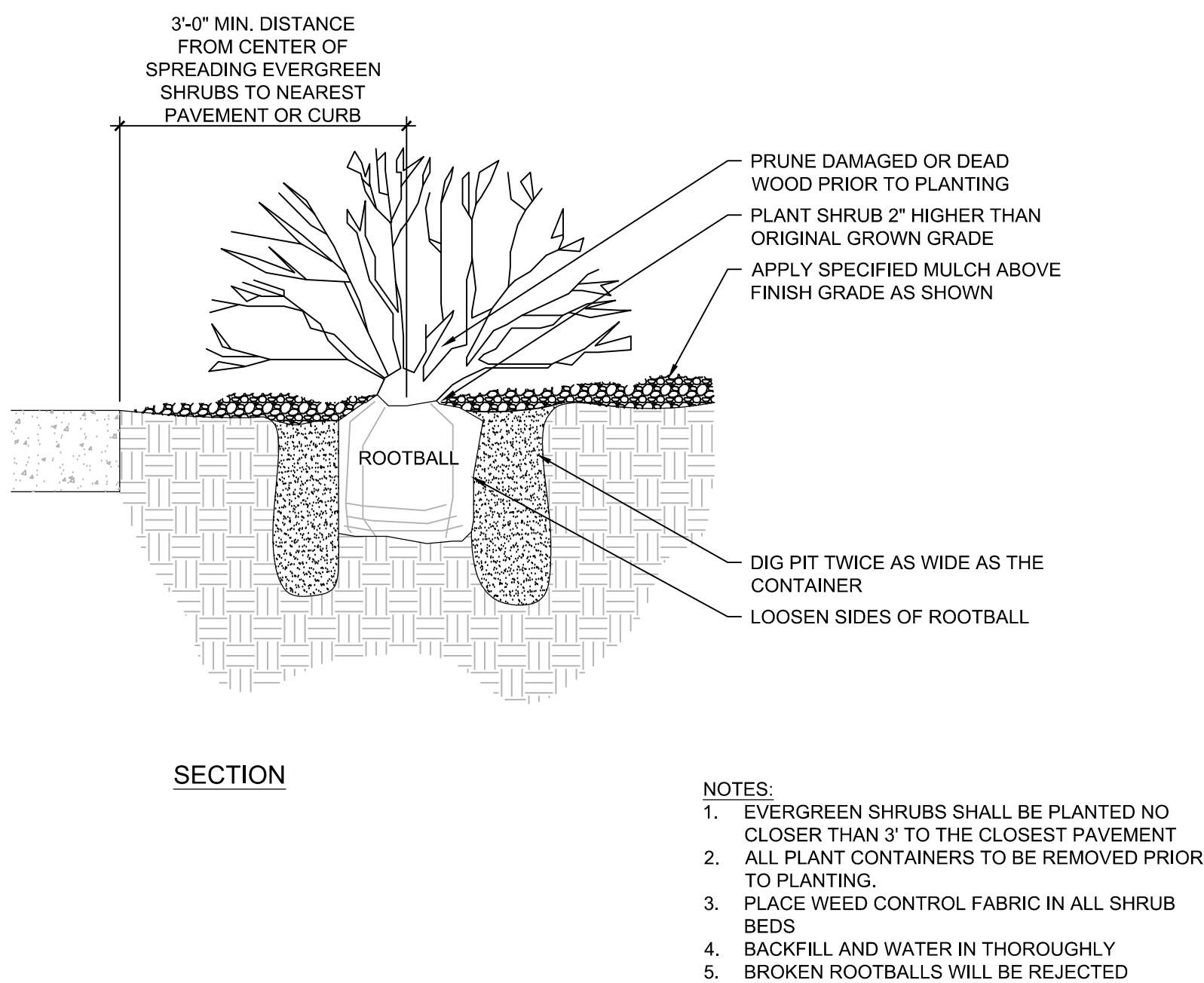
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TREE PLANTING
NTS



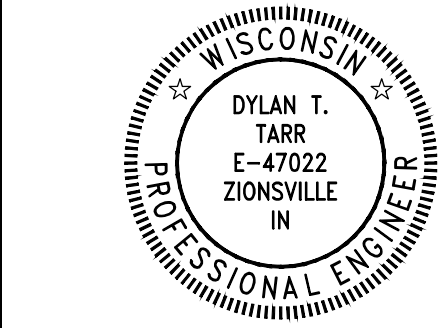
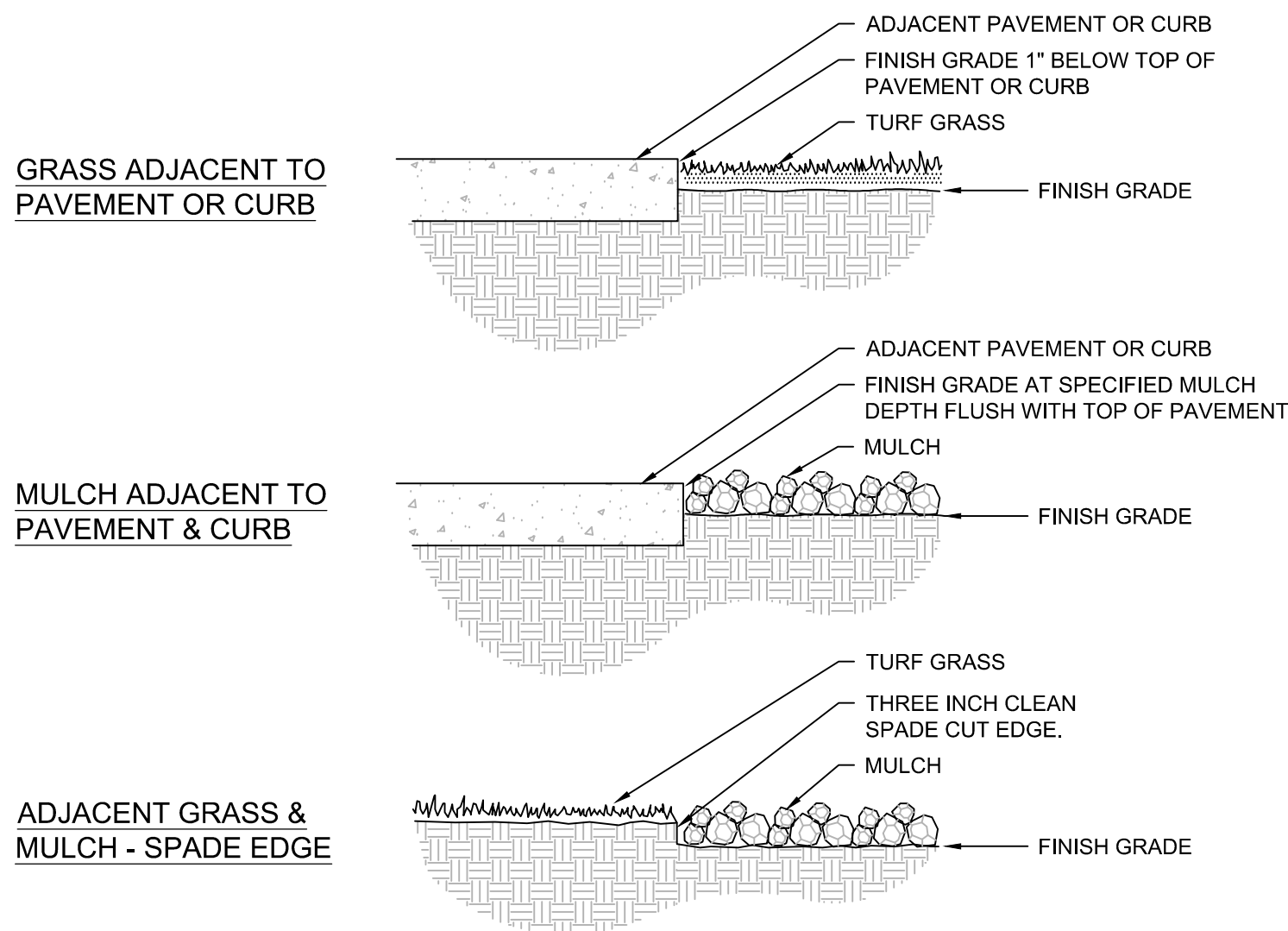
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SHRUB PLANTING
NTS

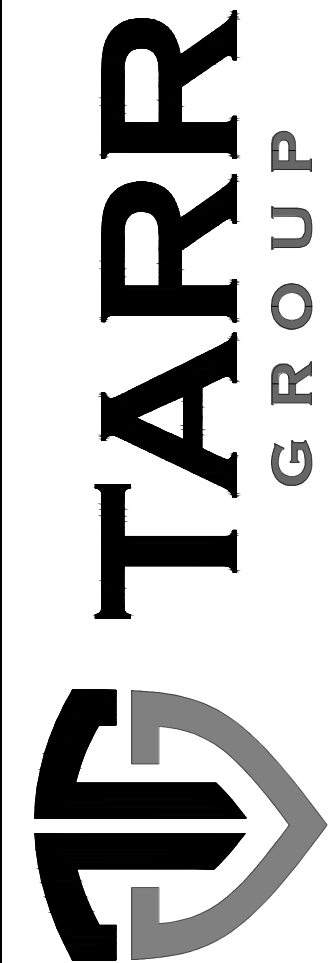


3

EDGING DETAILS
NTS



09/03/2019



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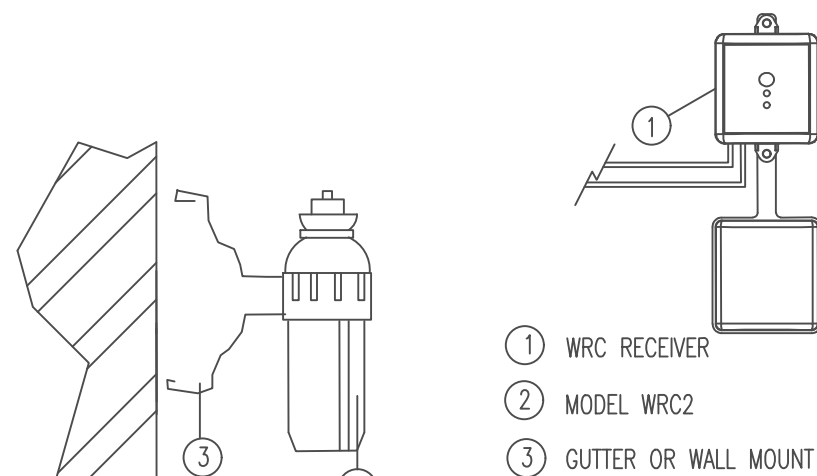
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LANDSCAPE DETAILS

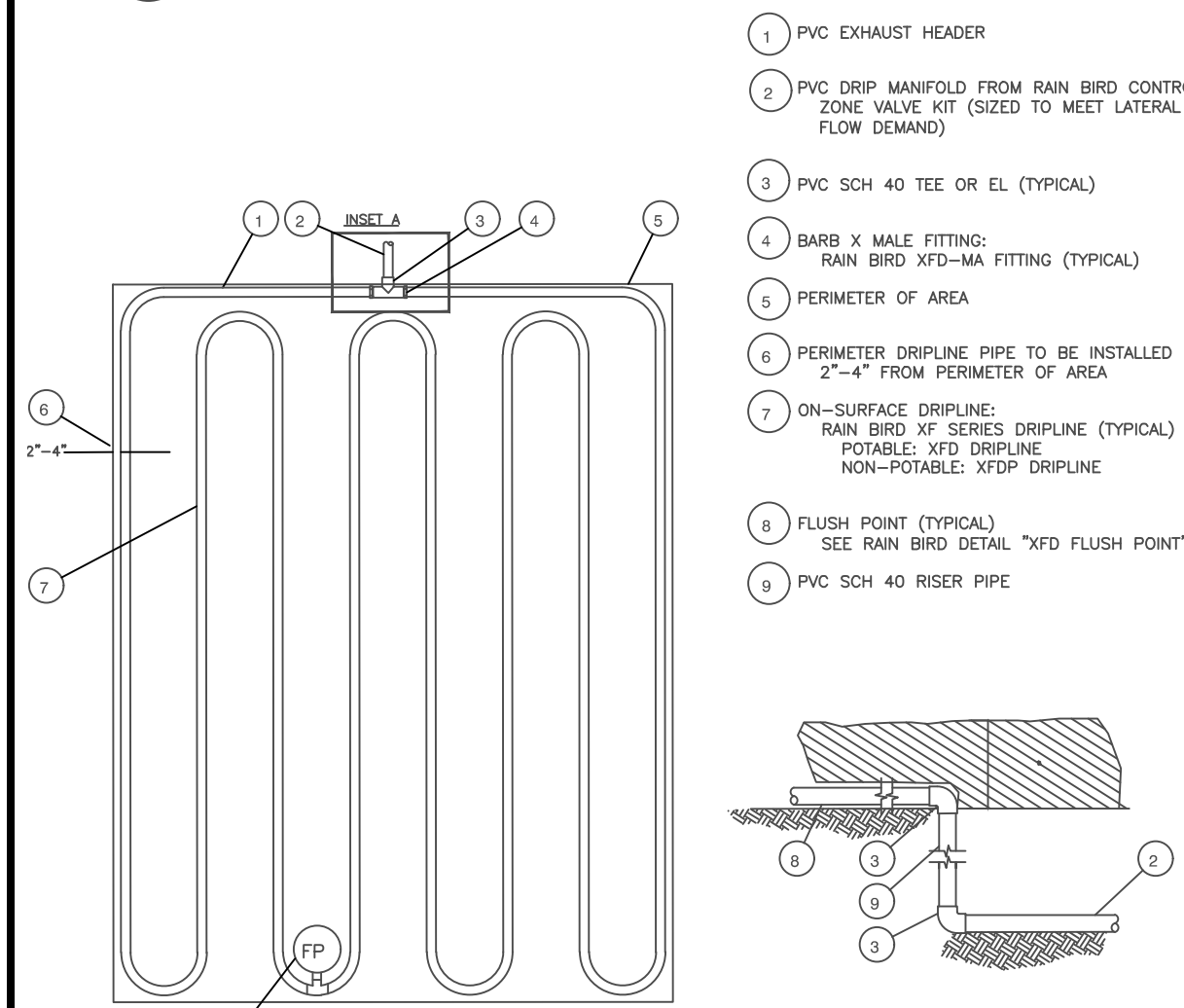
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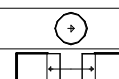
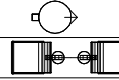
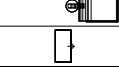
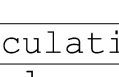
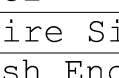
- 1 WALL OF DUMPSTER BIN
- 2 CONCRETE
- 3 OFF RECEPTACLE AND LOCKOUT SWITCH
110V POWER SOURCE FOR IRRIGATION
TIMER. SEE LOCAL CODE.
- 4 IRRIGATION CONTROLLER, MOUNT ON
INSIDE WALL OF BUILDING (NEAR
WALL WITH PVC ELECTRICAL CONDUIT)
WITH LONG SWEEP ELBOWS.
- 5 LONG SWEEP ELBOW, ELECTRICAL
CONDUIT (GRAY) SCH40 PIV. SEE
ELECTRIC CODE.
- 6 WALL BRACKET STAND OFF TO ANCHOR
CONDUIT TO WALL. SEE LOCAL ELEC.
CODES.
- 7 ELECTRICAL CONDUIT (GRAY), SIZE 1/2"
MINIMUM. FOR 110V POWER SUPPLY.
SEE LOCAL ELEC. CODES.
- 8 ELECTRICAL CONDUIT (GRAY) SCH40. FOR
110V POWER SUPPLY. CONDUIT
WIRE TO REMOTE CONTROL ZONE.
WALL. SIZE TWICE THE SIZE OF WIRE
BUNDLE.
- 9 110V



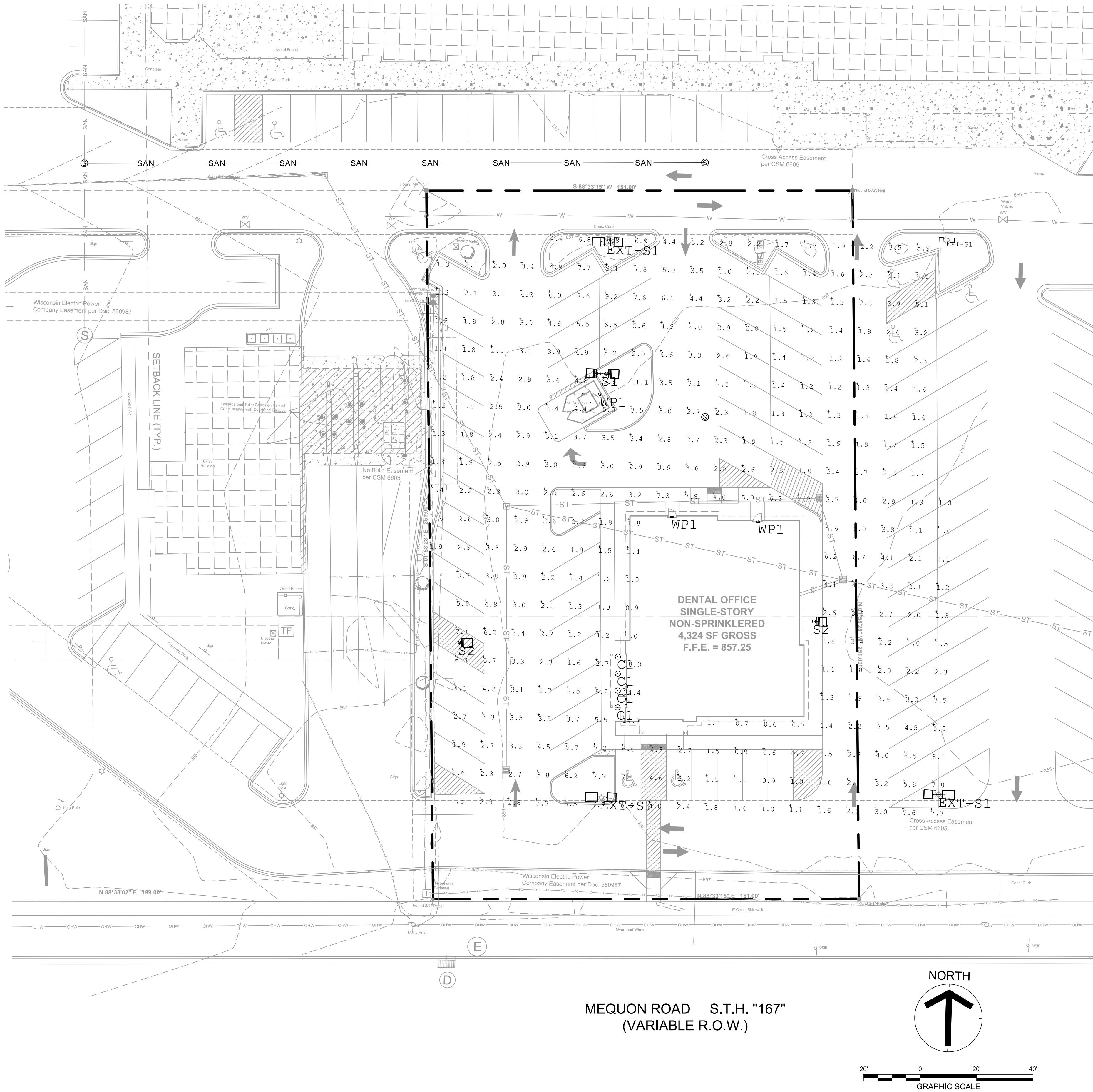
3 RAINBIRD WIRELESS RAIN SENSOR SECTION



LI2.1

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description	Mounting Height
	4	C1	SINGLE	949	1.000	SLIMPRO6-30K-BK	10'
	4	EXT-S1	2 @ 180 DEG (BACK-SINGLE)	32400	0.720	TR20-400MH-SGQ	25'
	2	P	SINGLE	N.A.	0.920	1639SK-LED	8'
	1	S1	2 @ 180 DEG (BACK-SINGLE)	N.A.	0.920	GL2-17-5Q-740	25'
	2	S2	SINGLE	N.A.	0.920	GL2-17-3M-740	25'
	3	WP1	SINGLE	N.A.	0.950	SLIM37N	10'

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	
Entire Site	Illuminance	Fc	3.27	34.4	0.6	5.45	57.33	
Trash Enclosure	Illuminance	Fc	12.28	19.8	8.4	1.46	2.36	



CONTACT:
STANDARD ELECTRIC
RYAN HUNT
860-558-2924
RHUNT@STANDARD ELECTRIC.COM

Project #	Date	Revision #	Rev. #	Description	Rev. Date
13-1977	6/28/2019	XX	R1		
			R2		
			R3		
			R4		
			R5		

STANDARD ELECTRIC
14 Jewel Drive
Wilmington, MA 01897
www.standardelectric.com
978-661-1124
Nations@standardelectric.com

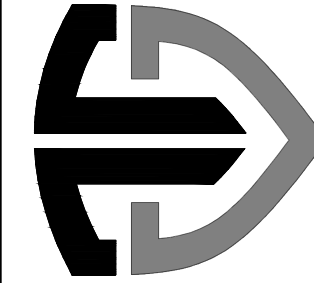
Project:
WMG Development
Heartland Dental Site Lighting
Germantown, WI

Date:
6/28/2019

Revision #:
XX

Rev. #:
ARCH D

Rev. Date:
Page 1 of 1

**TARR**
GROUP

3229 PURPLE ASH DRIVE
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GERMANTOWN DENTAL OFFICE
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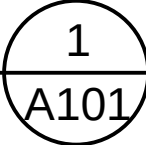
ORIGINAL ISSUE DATE: 07/11/2019

REVISIONS:
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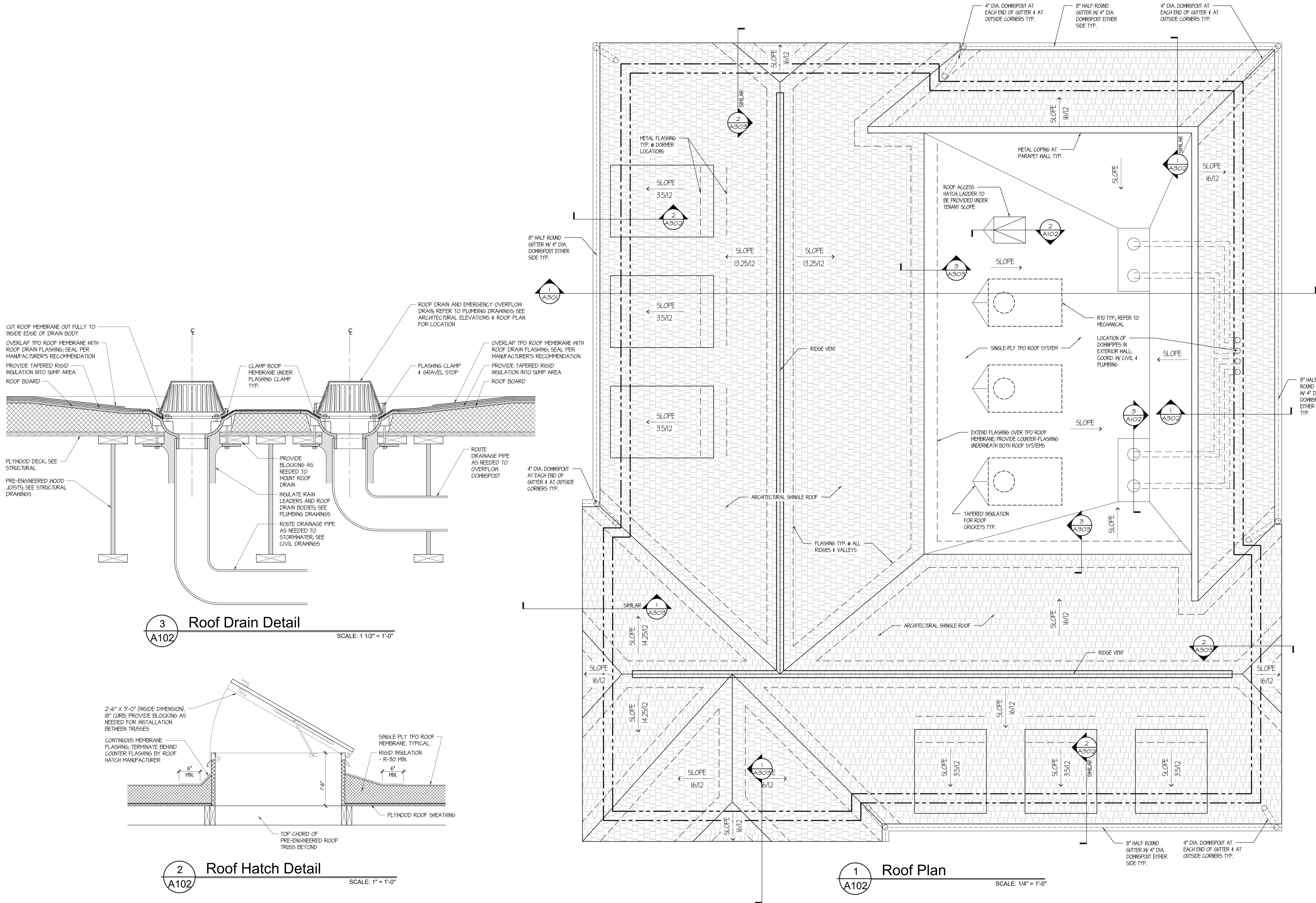
PROJ. NO.: 19015

PHOTOMETRIC PLAN

PH2.1



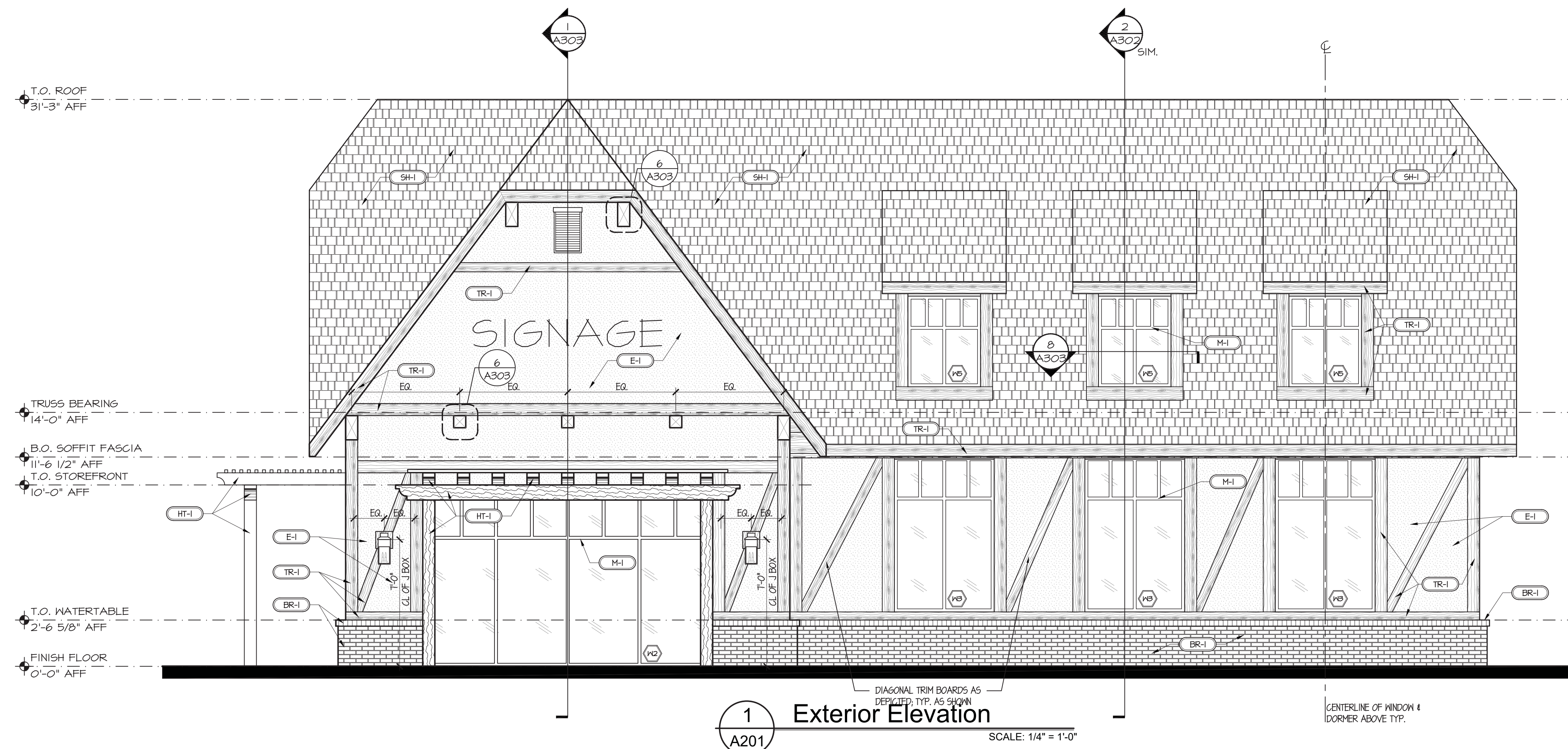
SCALE: 1/4" = 1'-0"



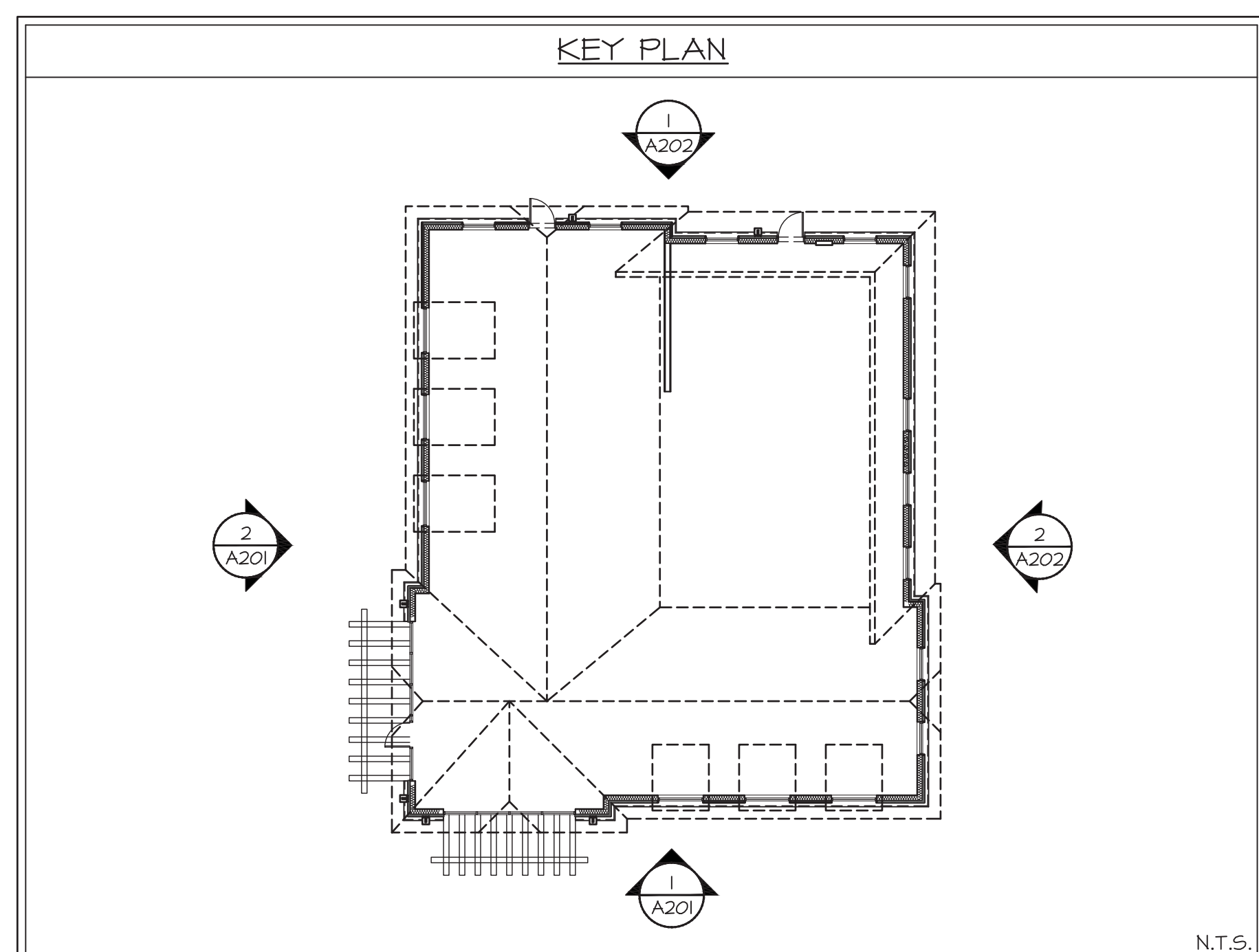




2 Exterior Elevation
SCALE: 1/4" = 1'-0"

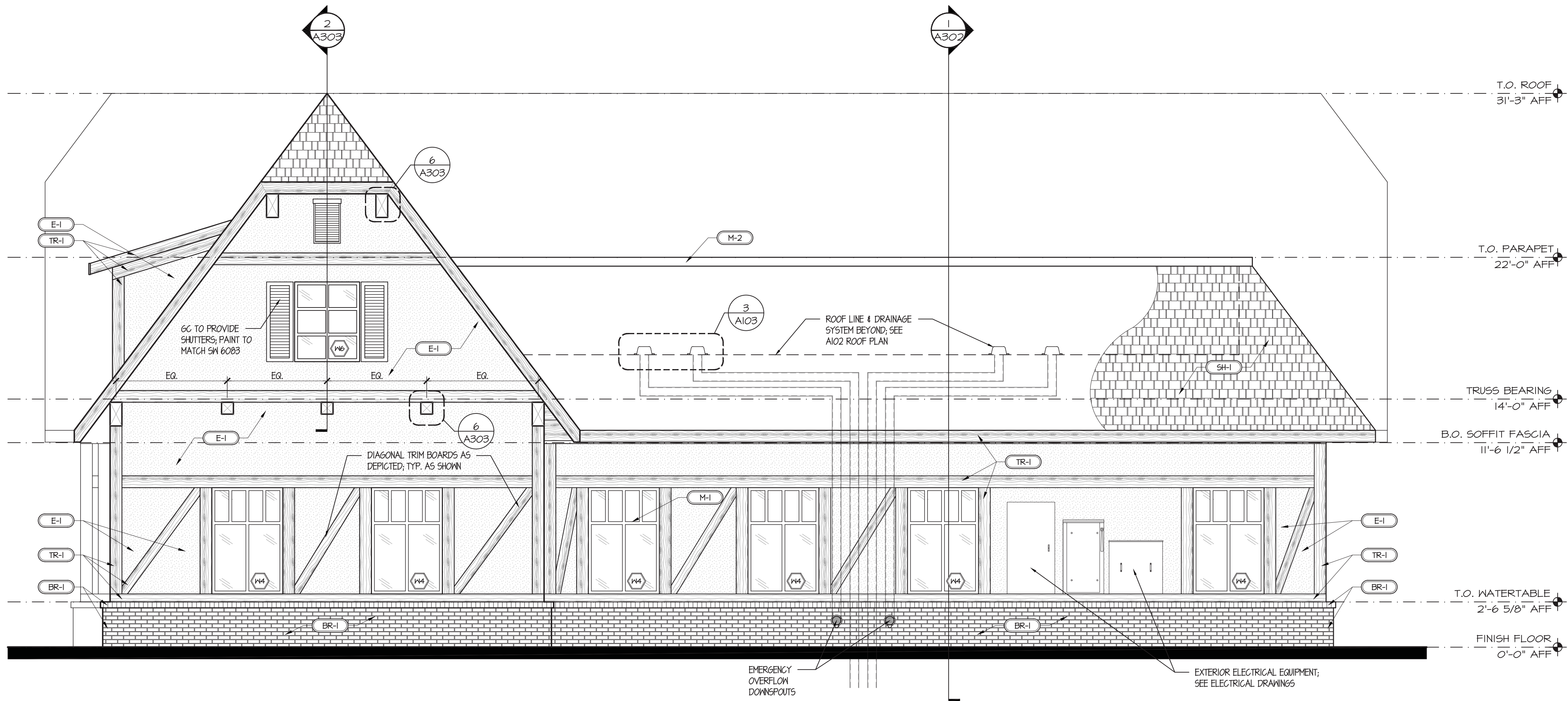


1 Exterior Elevation
SCALE: 1/4" = 1'-0"



N.T.S.

EXTERIOR FINISH SCHEDULE					
SYMBOL	PATTERN	CATEGORY	MANUF.	PRODUCT	NOTES
BR-1		BRICK	GENERAL SHALE	FARRINGTON TUDOR	MORTAR: ARGOS SEASIDE
E-1		EIFS SYSTEM	DRYVIT	9433 STO WHITE	SANDBLAST FINISH - WATER MANAGED EIFS SYSTEM IS REQUIRED
TR-1		TRIM BOARD	NICHHA	5/4 NICHITRIM - CEDAR, PAINTED	COLOR: SW 6083 SABLE
S-1	---	SOFFIT	NICHHA	NICHISOFFIT - NON-VENTED, PAINTED	COLOR: SW 6083 SABLE
M-1	---	STOREFRONT	KANNEER	DARK BRONZE	
M-2	---	COPING, DRIP EDGE, BREAKMETAL, GUTTERS & DOWNSPOUTS	BERRIDGE	DARK BRONZE	
SH-1		ROOF SHINGLES	CERTAINTED	LANDMARK - WEATHERED WOOD	
P-1	---	DOORS & MISC. METALWORK	-----	EXTERIOR GRADE PAINT	COLOR: DARK BRONZE
HT-1		HEAVY TIMBER	-----	HEAVY TIMBER TRELLIS	STAIN TO MATCH SW 6083



TRAFFIC IMPACT ANALYSIS FOR:

**DENTAL OFFICE AT GERMANTOWN
MARKETPLACE**

GERMANTOWN, WISCONSIN

July 2, 2019



PREPARED FOR:

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Exhibit 8	Traffic Capacity/LOS Analysis

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CHAPTER 1 – PROJECT BACKGROUND

PART A – PURPOSE OF REPORT AND STUDY OBJECTIVES

A dental office is proposed to be constructed adjacent to the Associated Bank within the Germantown Marketplace development in the Village of Germantown, Wisconsin. The location of the development site and access driveway in relation to the surrounding roadway system is shown on Exhibit 1. This traffic impact analysis (TIA) report was prepared to determine the existing and future peak hour traffic impact of the proposed development at the Germantown Marketplace driveways to Squire Drive and Mequon Road.

PART B – STUDY AREA

The following intersections are included in the study area for the proposed development:

- Germantown Marketplace driveway & Mequon Road
- Germantown Marketplace driveway & Squire Drive

Exhibit 2 shows the existing transportation system detail for the intersections and roadways within the study area. The exhibit illustrates posted speed limits, intersection geometrics, and traffic control. The study roadways are also described below:

Mequon Road (STH 167) is a four-lane east/west Principal Arterial with a 35-mph speed limit that is divided with a wide raised median. At the Germantown Marketplace driveway, the median is wide enough for at least one vehicle storage and two-stage gap acceptance for turns from the driveway. There are sidewalks located along the north side of Mequon Road through the Germantown Marketplace development. According to the Wisconsin Department of Transportation (WisDOT), the 2016 Annual Average Daily Traffic Volume (AADT) was 15,500 vehicles per day (vpd).

Squire Drive is a two-lane north/south local roadway that provides access to Mequon Road from the residential neighborhood to the south and the commercial development area to the north. North of Mequon Road, Squire Drive is divided with a raised median through the commercial area. There are sidewalks located along both sides of Squire Road north of Mequon Road, but no sidewalks south of Mequon Road.

PART C – DATA COLLECTION

TADI collected weekday turning movement traffic counts at the study intersections on June 13, 2019. Counts were collected from 4:00-6:00 p.m. Based on the traffic counts, the weekday PM peak hour at the Germantown Marketplace driveway intersections were determined to be from 4:30-5:30 p.m. The turning movement traffic count data collected for the study is located in Appendix A. The existing compiled peak hour traffic volumes are shown on Exhibit 3.

CHAPTER 2 – PROPOSED DEVELOPMENT

PART A – DEVELOPMENT SITE PLAN

The site plan for the proposed development is shown on Exhibit 4. The plan shows that a 4,129-square foot dental office is proposed to be constructed on the existing parking lot located on the east side of Associated Bank.

PART B – ON-SITE TRAFFIC FORECASTING

B1. Trip Generation

The expected traffic volumes generated full buildout of the proposed development were calculated based on trip rates or equations published in the ITE *Trip Generation Manual*, 10th Edition. The trip generation table for the proposed development is shown on Exhibit 5. The proposed dental office is expected to generate approximately 71 daily trips and 16 weekday PM peak hour trips (four entering and 12 exiting the site driveways).

B2. Trip Distribution

The trip distribution for the proposed development was determined based on the existing traffic patterns in the study area. The trip distribution is shown on Exhibit 5 and listed below:

- 5% to/from the north on Squire Drive
- 5% to/from the south on Squire Drive
- 45% to/from the west on Mequon Road
- 45% to/from the east on Mequon Road

B3. Trip Assignment

The new trips for the proposed development were assigned to the study intersection based on the trip distribution shown above and on Exhibit 5. The new trips traffic assignment is shown on Exhibit 6.

B4. Build Traffic Volumes

The development new driveway trips were added to the existing traffic volumes to develop the Build traffic volumes evaluated in this study. The Build traffic volumes are shown on Exhibit 7.

CHAPTER 3 – EXISTING & FUTURE OPERATIONS

PART A – LEVEL OF SERVICE DEFINITIONS

Intersection operation is defined by “level of service”. Level of Service (LOS) is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good, represented by LOS ‘A’, to very poor, represented by LOS ‘F’. For the purpose of this study, LOS D was used to define acceptable peak hour operating conditions. Descriptions of the various levels of service are as follows:

LOS A is the highest level of service that can be achieved. Under this condition, intersection approaches appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation. At unsignalized intersections, average delays are less than 10 seconds.

LOS B represents stable operation. At unsignalized intersections, average delays are 10 to 15 seconds.

LOS C still represents stable operation, but periodic backups of a few vehicles may develop behind turning vehicles. Most drivers begin to feel restricted, but not objectionably so. At unsignalized intersections, average delays are 15 to 25 seconds.

LOS D represents increasing traffic restrictions as the intersection approaches instability. Delays to approaching vehicles may be substantial during short peaks within the peak period, but periodic clearance of long lines occurs, thus preventing excessive backups. At unsignalized intersections, average delays are 25 to 35 seconds.

LOS E represents the capacity of the intersection. At unsignalized intersections, average delays are 35 to 50 seconds.

LOS F represents jammed conditions where the intersection is over capacity and acceptable gaps for unsignalized intersections in the mainline traffic flow are minimal. At unsignalized intersections, average delays exceed 50 seconds.

PART B – PEAK HOUR CAPACITY ANALYSIS

The study intersections were analyzed using the Synchro 10 traffic analysis model (outputs based on the Highway Capacity Manual, 6th Edition).

B1. Existing Traffic Operations

The peak hour traffic capacity analysis was completed using the existing geometrics and traffic control at each study intersection. The existing traffic analysis input/output worksheets are located in Appendix B and the table summarizing lane group LOS and 95th percentile queues is shown on Exhibit 8. As shown all lane groups at the study intersection operate acceptably at LOS D or better and with relatively low traffic queues during the peak hours.

B2. Build Traffic Operations

The Build traffic analysis (existing plus new trips from the proposed development) input/output worksheets are located in Appendix C and the table summarizing lane group LOS and 95th percentile queues is shown on Exhibit 8. With the additional traffic from the proposed development, all lane groups at the study intersections are expected to continue to operate acceptably at LOS D or better during the peak hours (only slight changes to the lane group delays and queues are expected).

CHAPTER 4 – SUMMARY AND RECOMMENDATIONS

The study area intersections were analyzed based on the procedures set forth in the *Highway Capacity Manual*, 6th edition (HCM) using Synchro 10. For the purpose of this study, LOS D was used to define acceptable peak hour operating conditions.

The new trips from the buildout of the proposed dental office are expected to be very low (16 weekday PM peak hour trips). These trips are expected to result in only slight changes to delay and queues at the Germantown Marketplace driveways to Mequon Road and Squire Drive. All movements at these driveways are expected to operate acceptably at LOS D or better with both the existing and build traffic volumes. Therefore, no changes to the existing geometrics or traffic control are necessary to accommodate the additional traffic from the proposed dental office.

LEGEND

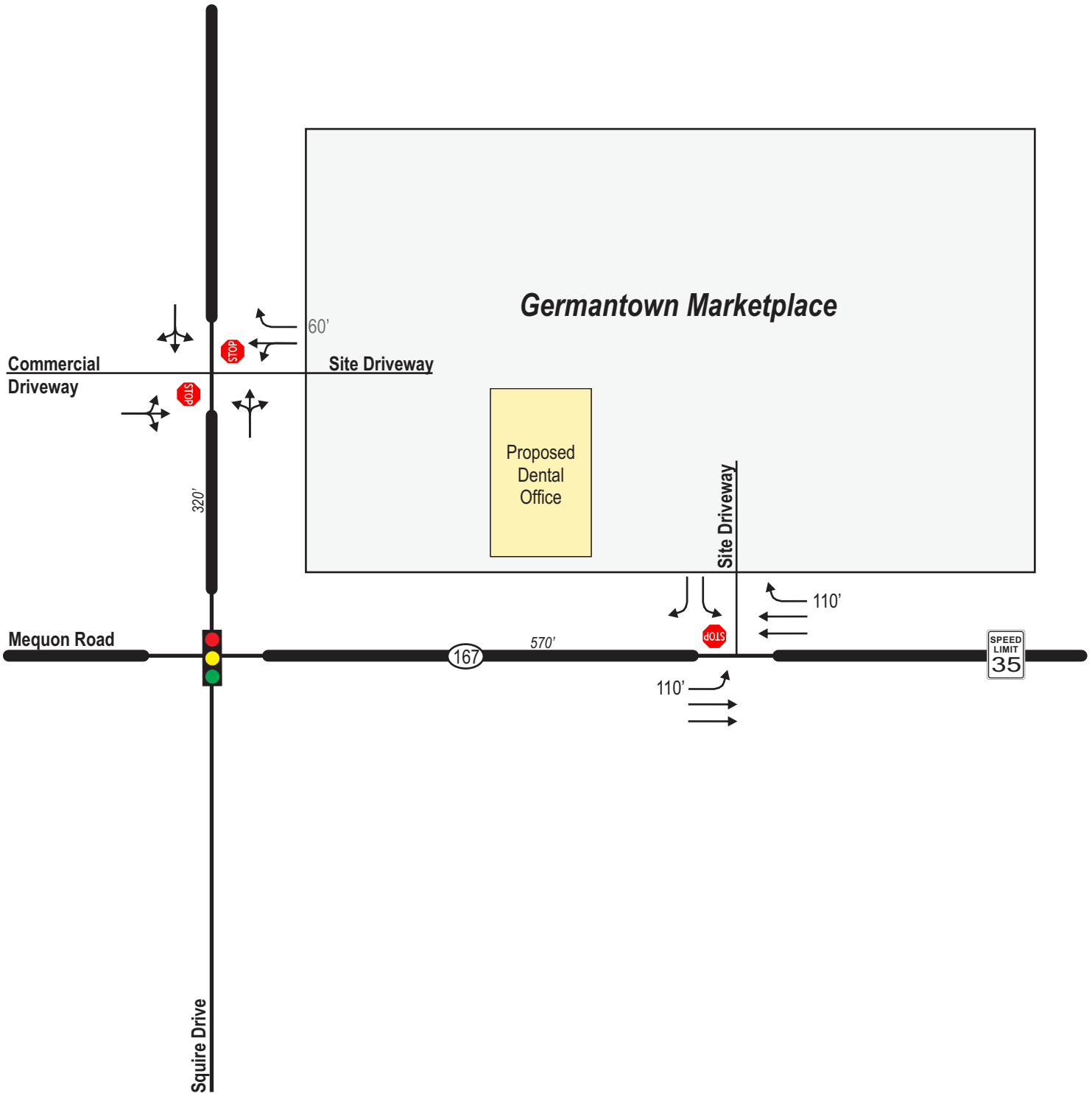
 Proposed Development Site

 Study Intersection



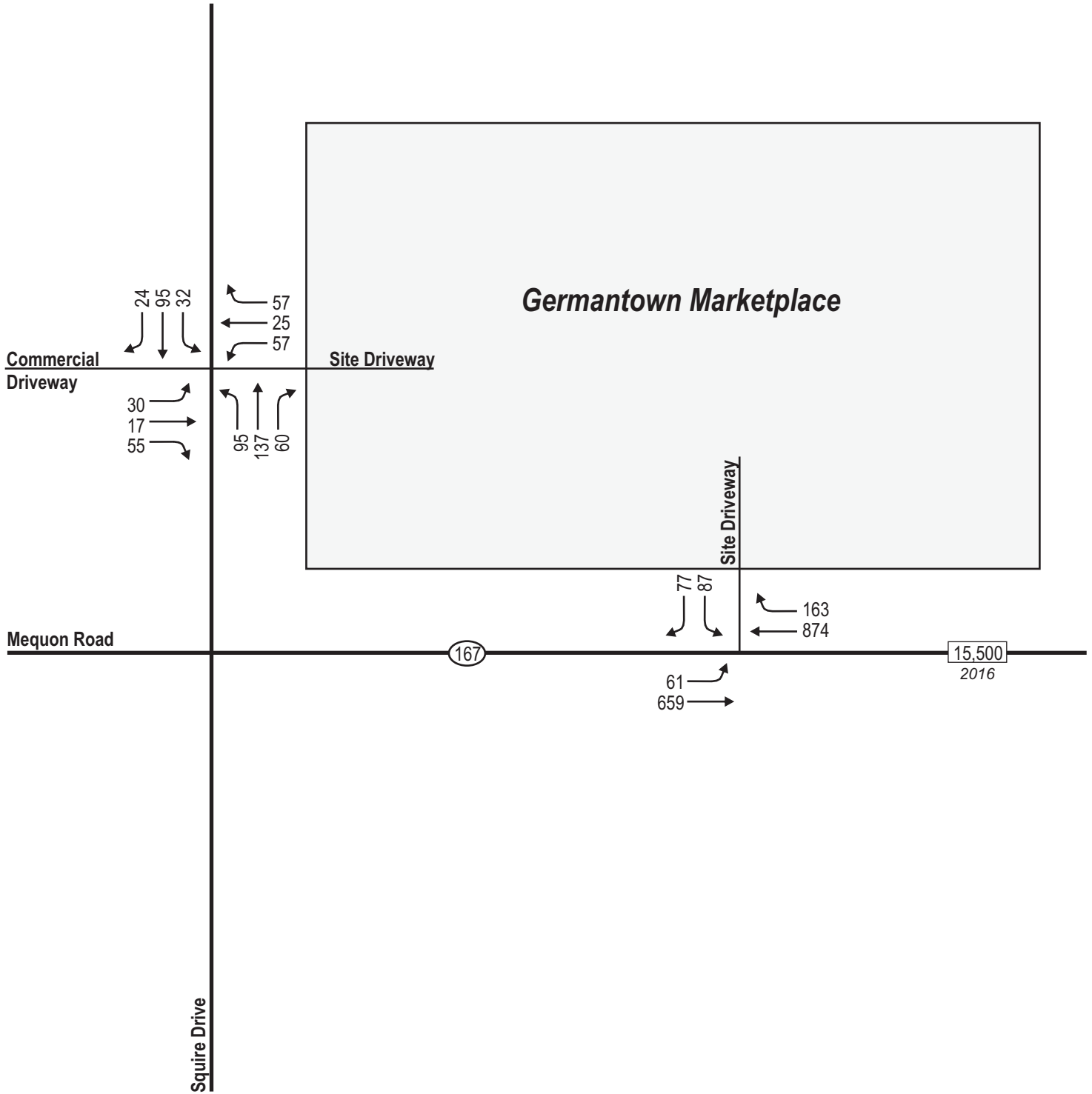
LEGEND

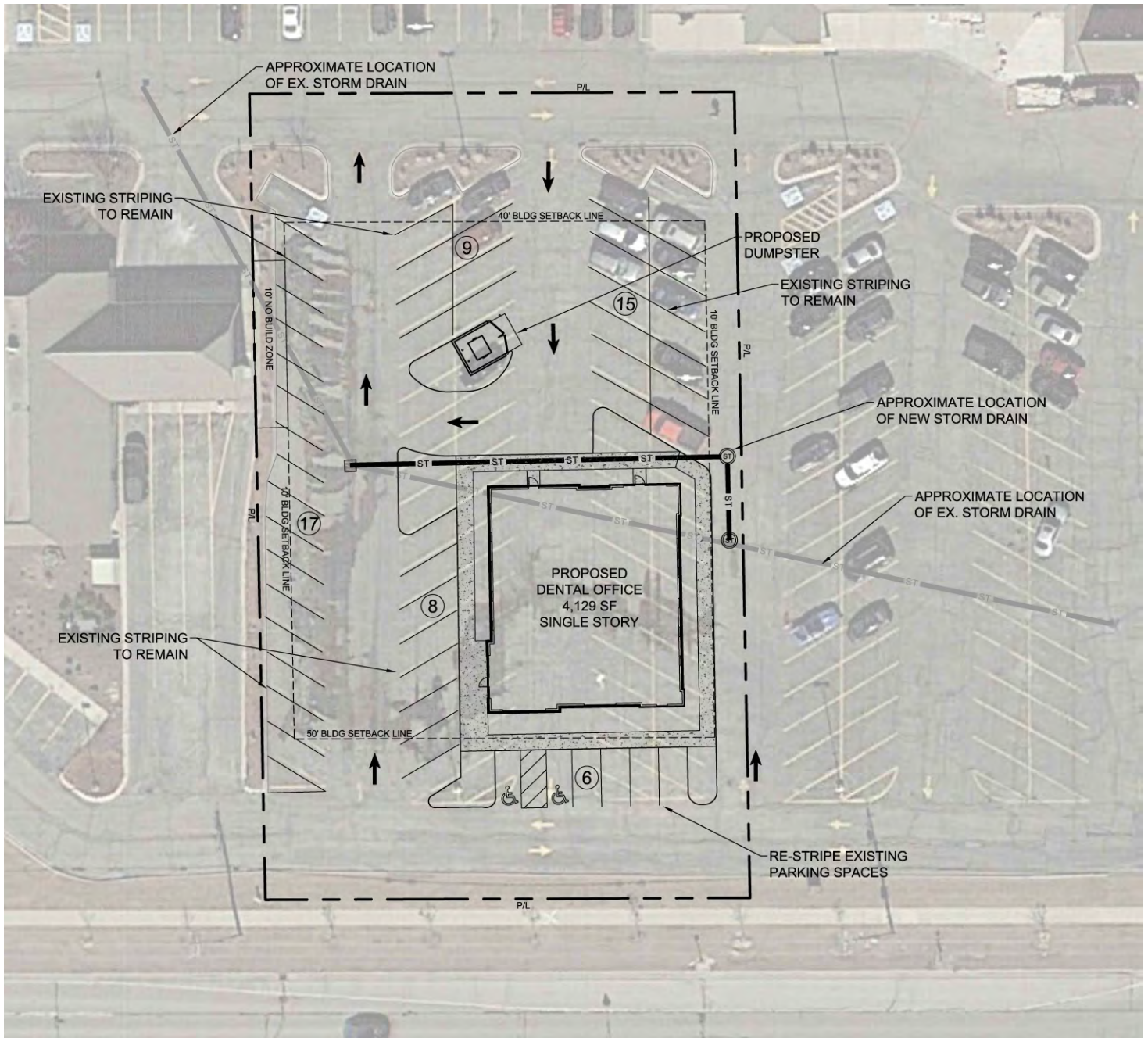
-  Traffic Signal
-  Stop Sign
-  Existing Lane Configuration
-  XX'
-  XX'



LEGEND

- XX Weekday PM Peak Hour (4:30-5:30 PM)
- X,XXX Annual Average Daily Traffic Volumes & Year





LEGEND



Net New Trips - Distribution Percentage

Germantown Marketplace

Proposed
Dental
Office

Commercial
Driveway

Site Driveway

Site Driveway

Mequon Road

167

On-Site Trip Generation Table

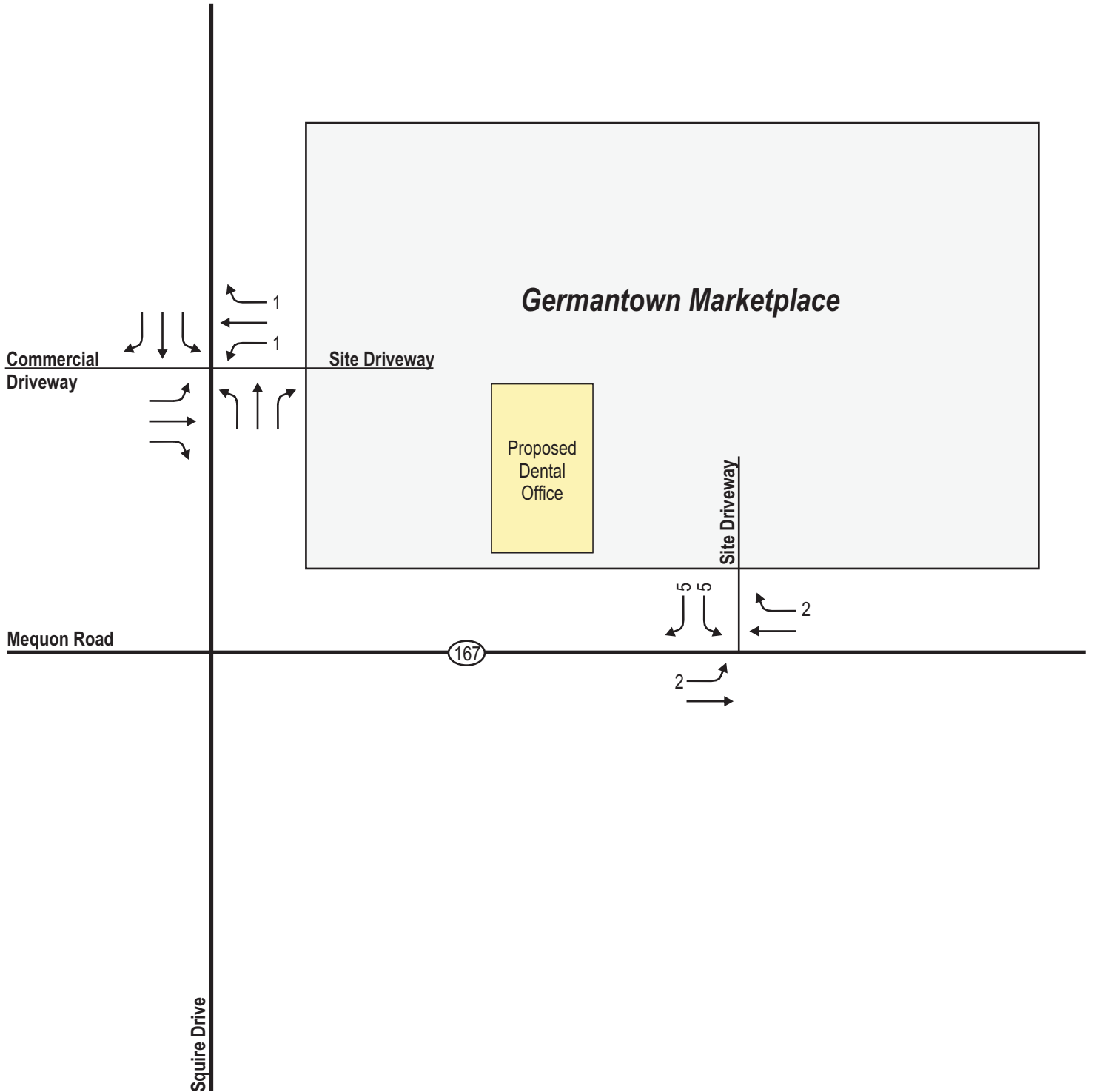
Land Use	ITE Code	Proposed Size	Weekday Daily	PM Peak		
				In	Out	Total
Medical-Dental Office	720	4,129 SF	71 FCE	4 (28%)	12 (72%)	16 FCE
Total New Trips			71	4	12	16

TRIP DISTRIBUTION

N. on Squire Drive	5%	4	0	1
S. on Squire Drive	5%	3	0	1
W. on Mequon Road	45%	32	2	5
E. on Mequon Road	45%	32	2	5
	100%	71	4	12

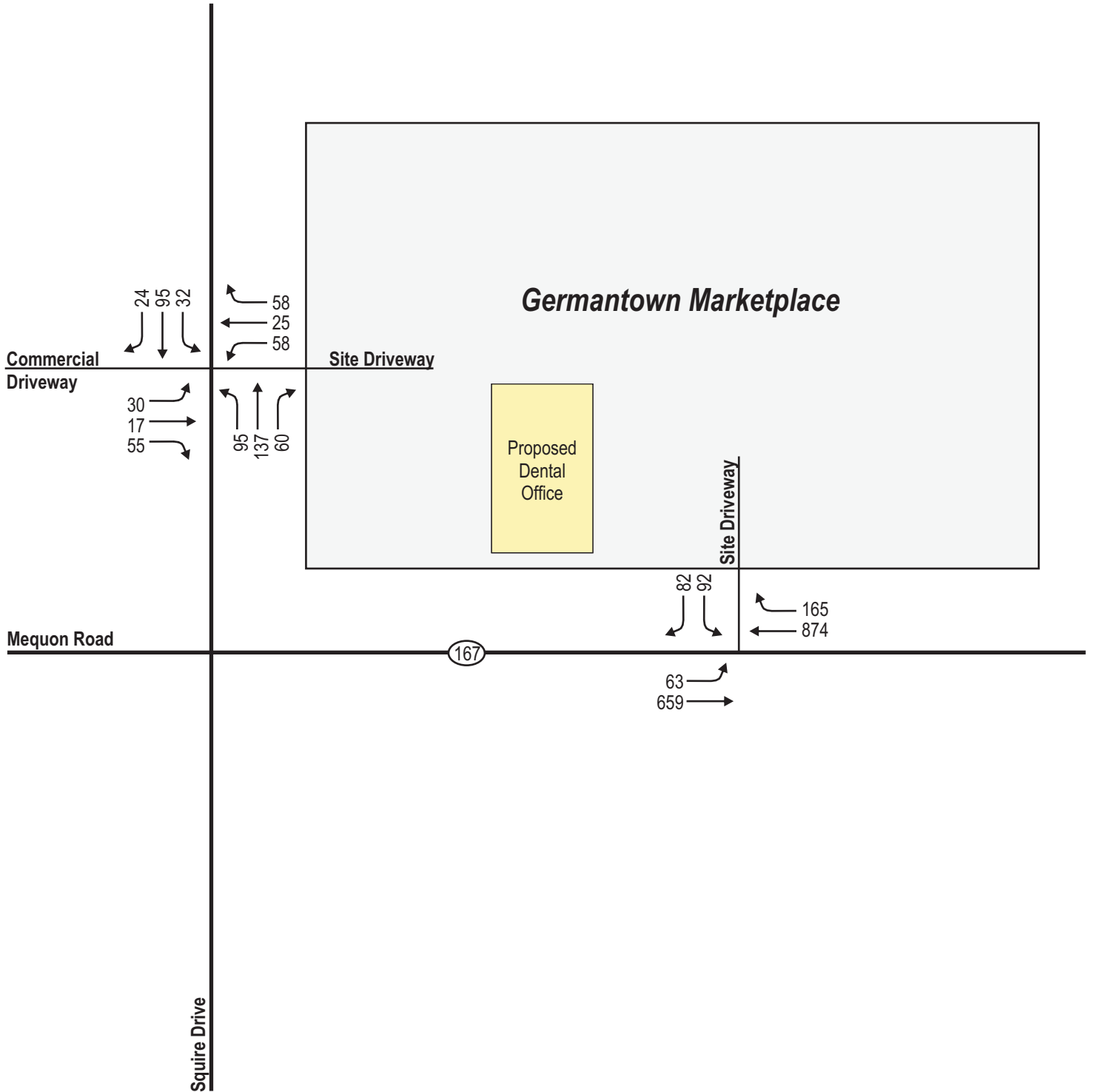
LEGEND

XX Weekday PM Peak Hour (4:30-5:30 PM)



LEGEND

XX Weekday PM Peak Hour (4:30-5:30 PM)



Existing Traffic Operations & Queues

Intersection	Peak Hour		Level of Service per Movement by Approach											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Squire Drive & Site Driveway	PM	LOS	B			C			A			A		
		Queue	20			25			5			5		
Mequon Road & Site Driveway	PM	LOS	B	A	-	-	A	A	-			D	-	B
		Queue	10	0	-	-	0	0	-			50	-	15

(--) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.

Queue is maximum of the 50th & 95th percentile queue, measured in feet, from Synchro output.

Build Traffic Operations & Queues

Intersection	Peak Hour		Level of Service per Movement by Approach											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Squire Drive & Site Driveway	PM	LOS	B			C			A			A		
		Queue	20			25			5			5		
Mequon Road & Site Driveway	PM	LOS	B	A	-	-	A	A	-			D	-	B
		Queue	10	0	-	-	0	0	-			55	-	15

(--) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.

Queue is maximum of the 50th & 95th percentile queue, measured in feet, from Synchro output.

APPENDIX A

Existing Traffic Counts

Intersection Traffic Volume Report

Count Basics		Version 2013.14.1	Page 1 of 13
Start Date:	Thursday, June 13, 2019	Weekday	Schools in Session
Total Number of Hours Counted:	2	Non-Holiday	No Special Events

Base Information, Observed (2) Hour and Estimated (24) Hour Volume Summaries

Intersection of: **Pick N Save Driveway and Mequon Road**

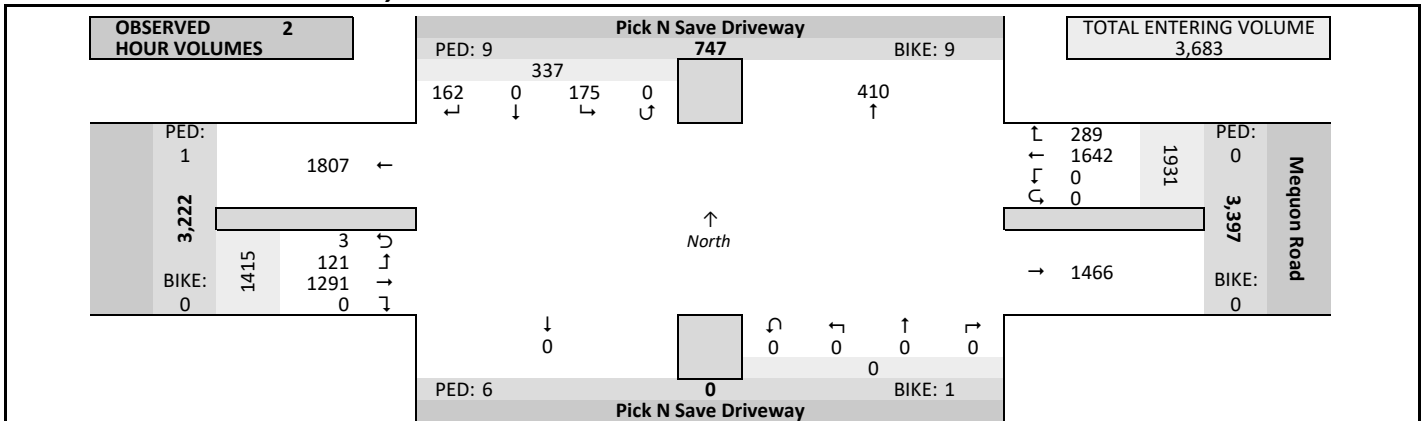
Site Information

Municipality	Village of Germantown		
County	Washington	WisDOT Region	SE
Traffic Control	Partial Stop Control		
Roadway Names		North Direction	↑
North Leg	Pick N Save Driveway		
East Leg	Mequon Road		
South Leg	Pick N Save Driveway		
West Leg			
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
	Pre-school children	None	
	Elementry school age children	None	
	Visually impaired (white cane/helper dog)	None	
	Elderly/disabled (except wheelchairs)	None	
	Wheelchairs/electric scooters	None	
	Other (describe)	None	None

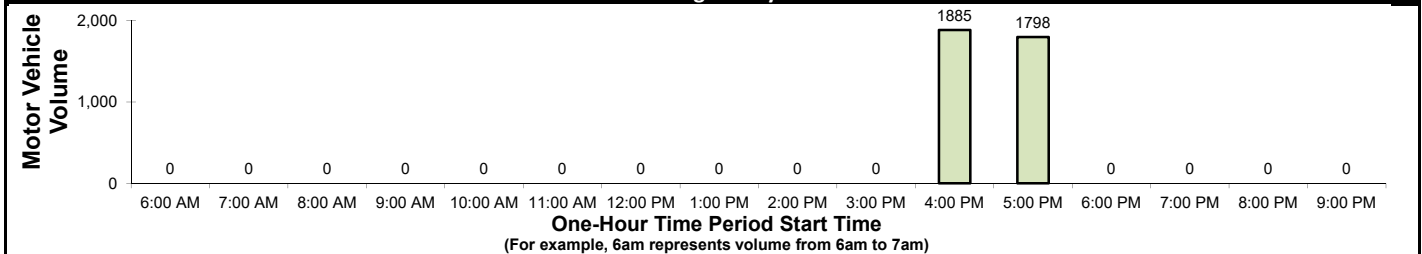
Count Information

Hrs Counted: 4:00 PM-6:00 PM				
1st Day of Count		Thursday, June 13, 2019		Weather
AM Peak Period		Thursday, June 13, 2019		Clear & Dry
Midday Peak Period		Thursday, June 13, 2019		Clear & Dry
PM Peak Period		Thursday, June 13, 2019		Clear & Dry
Calculated Peak Hours				
	AM	MD		PM 4:30-5:30pm
Peak Hours Selected for Analysis				
	AM	MD		PM 4:30-5:30pm
Daily/Seasonal Adjustment Group		(2) Urban Arterials & Collectors		
Count Expansion Group		(2) Urban Arterials & Collectors		
Daily/Seasonal Adjustment Factor		0.845	Count Expansion Factor	5.950
Company Name		TADI, Inc.		Manual Adj. 1.000
Observers	AM Peak Period	None		
	Midday Peak Period	None		
	PM Peak Period	Amy Scheuerlein		
Comments	2017 DOT Seasonal Factors			

Observed 2 Hour Volume Summary



Total Entering Hourly Volume



Estimated 24 Hour AADT



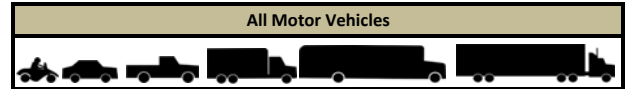
Intersection Traffic Volume Report

Count Basics			Page 3 of 13
Start Date:	Thursday, June 13, 2019	Weekday	Schools in Session
Total Number of Hours Counted:	2	Non-Holiday	No Special Events

Peak Hour Volume Summary

Pick N Save Driveway and Mequon Road

Peak Hour Volumes, Truck Percentages, and PHFs



Thursday, June 13, 2019		From North					From East					From South					From West					
AM Peak Hour	AM Peak Hour	Pick N Save Driveway					Mequon Road					Pick N Save Driveway										
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

N/A		↓ From North					← From East					↑ From South					→ From West					
Midday (MD) Peak Hour	MD Peak Hour	Pick N Save Driveway					Mequon Road					Pick N Save Driveway										
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Thursday, June 13, 2019		↓					←					↑					→						
		From North					From East					From South					From West						
PM Peak Hour	PM Peak Hour	Pick N Save Driveway					Mequon Road					Pick N Save Driveway											
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	
	4:30 PM	12	0	20	0	32	38	214	0	0	252	0	0	0	0	0	0	0	163	19	0	182	466
	4:45 PM	15	0	25	0	40	49	239	0	0	288	0	0	0	0	0	0	0	161	11	2	174	502
	5:00 PM	20	0	19	0	39	35	197	0	0	232	0	0	0	0	0	0	0	158	11	0	169	440
	5:15 PM	30	0	23	0	53	41	224	0	0	265	0	0	0	0	0	0	0	177	20	0	197	515
	Peak Hour Volume	77	0	87	0	164	163	874	0	0	1037	0	0	0	0	0	0	0	659	61	2	722	1923
	Rounded Hourly Volume	75	0	85	0	160	165	875	0	0	1040	0	0	0	0	0	0	0	660	60	0	720	1920
	% Single Unit Trucks	1.3	0.0	3.4	0.0	2.4	0.6	2.2	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	1.6	0.0	2.2	2.1
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.2	0.7
% Trucks (Total)	1.3	0.0	3.4	0.0	2.4	0.6	2.7	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	1.6	0.0	3.5	2.8	
Peak Hour Factor (PHF)	0.64	0.00	0.87	0.00	0.77	0.83	0.91	0.00	0.00	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.76	0.25	0.92	0.93	

Peak Hour Pedestrian and Bicyclist Volumes

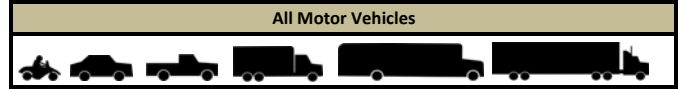
Pedestrians and Bicyclists		Crossing 			Crossing 			Crossing 			Crossing 			Total
 		North Approach 			East Approach 			South Approach 			West Approach 			Ped & Bike
		Pick N Save Driveway			Mequon Road			Pick N Save Driveway						Bike
15-Minute Start Time		Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:30 PM	0	6	6	0	0	0	0	0	0	0	0	0	6
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	3	3	0	0	0	0	1	1	0	0	0	4
	5:15 PM	2	0	2	0	0	0	0	0	0	0	0	0	2
	Total	2	9	11	0	0	0	0	1	1	0	0	0	12

Intersection Traffic Volume Report

Count Basics			Page 5 of 13
Start Date:	Thursday, June 13, 2019	Weekday	Schools in Session
Total Number of Hours Counted:	2	Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

Pick N Save Driveway and Mequon Road



15-Minute Motor Vehicle Data

15-Minute Time Period Start Time	↓ From North						← From East						↑ From South						→ From West						15-Min Totals	Hourly Sum	PHF
	Pick N Save Driveway						Mequon Road						Pick N Save Driveway														
	Right	Thru	Left	U-Tn	Total		Right	Thru	Left	U-Tn	Total		Right	Thru	Left	U-Tn	Total		Right	Thru	Left	U-Tn	Total				
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 PM	20	0	25	0	45	28	206	0	0	234	0	0	0	0	0	0	164	21	0	185	464		1885	0.94		
	4:15 PM	22	0	23	0	45	28	201	0	0	229	0	0	0	0	0	0	171	8	0	179	453		1861	0.93		
	4:30 PM	12	0	20	0	32	38	214	0	0	252	0	0	0	0	0	0	163	19	0	182	466		1923	0.93		
	4:45 PM	15	0	25	0	40	49	239	0	0	288	0	0	0	0	0	0	161	11	2	174	502		1905	0.92		
	5:00 PM	20	0	19	0	39	35	197	0	0	232	0	0	0	0	0	0	158	11	0	169	440		1798	0.87		
	5:15 PM	30	0	23	0	53	41	224	0	0	265	0	0	0	0	0	0	177	20	0	197	515					
	5:30 PM	24	0	20	0	44	41	192	0	0	233	0	0	0	0	0	0	160	11	0	171	448					
	5:45 PM	19	0	20	0	39	29	169	0	0	198	0	0	0	0	0	0	137	20	1	158	395					
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Totals	162	0	175	0	337	289	1642	0	0	1931	0	0	0	0	0	0	1291	121	3	1415	3683						

Peak Hour All Vehicle Volume Summary

Hourly Time Period Start Time	From North					From East					From South					From West					Total Hourly Volume	PHF
	Pick N Save Driveway					Mequon Road					Pick N Save Driveway											
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MD 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM 4:30 PM	77	0	87	0	164	163	874	0	0	1037	0	0	0	0	0	0	659	61	2	722	1923	0.93

Intersection Traffic Volume Report

Count Basics			Page 9 of 13
Start Date:	Thursday, June 13, 2019	Weekday	Schools in Session
Total Number of Hours Counted:	2	Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Pick N Save Driveway and Mequon Road



15-Minute Heavy Vehicle Data

15-Minute Time Period Start Time	From North						From East						From South						From West						15-Min Totals	Hourly Sum
	Pick N Save Driveway						Mequon Road						Pick N Save Driveway													
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total						
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	4:00 PM	0	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	6	0	0	6	11	53			
	4:15 PM	0	0	0	0	0	1	7	0	8	0	0	0	0	0	0	0	2	0	0	2	10	53			
	4:30 PM	0	0	1	0	1	0	9	0	9	0	0	0	0	0	0	0	11	0	0	11	21	54			
	4:45 PM	1	0	1	0	2	1	5	0	6	0	0	0	0	0	0	0	3	0	0	3	11	50			
	5:00 PM	0	0	1	0	1	0	6	0	6	0	0	0	0	0	0	0	4	0	0	4	11	47			
	5:15 PM	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	6	1	0	7	11				
	5:30 PM	2	0	0	0	2	0	9	0	9	0	0	0	0	0	0	0	6	0	0	6	17				
	5:45 PM	0	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	3	0	0	3	8				
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Totals	3	0	3	0	6	2	50	0	0	52	0	0	0	0	0	0	0	41	1	0	42	100				

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period Start Time	↓ From North					← From East					↑ From South					→ From West					Total Hourly Volume
	Pick N Save Driveway					Mequon Road					Pick N Save Driveway										
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 4:30 PM	1	0	3	0	4	1	24	0	0	25	0	0	0	0	0	0	24	1	0	25	54

Intersection Traffic Volume Report

Count Basics		Version 2013.14.1	Page 1 of 13
Start Date:	Thursday, June 13, 2019	Weekday	Schools in Session
Total Number of Hours Counted:	2	Non-Holiday	No Special Events

Base Information, Observed (2) Hour and Estimated (24) Hour Volume Summaries

Intersection of: **Squire Drive and Pick N Save Driveway**

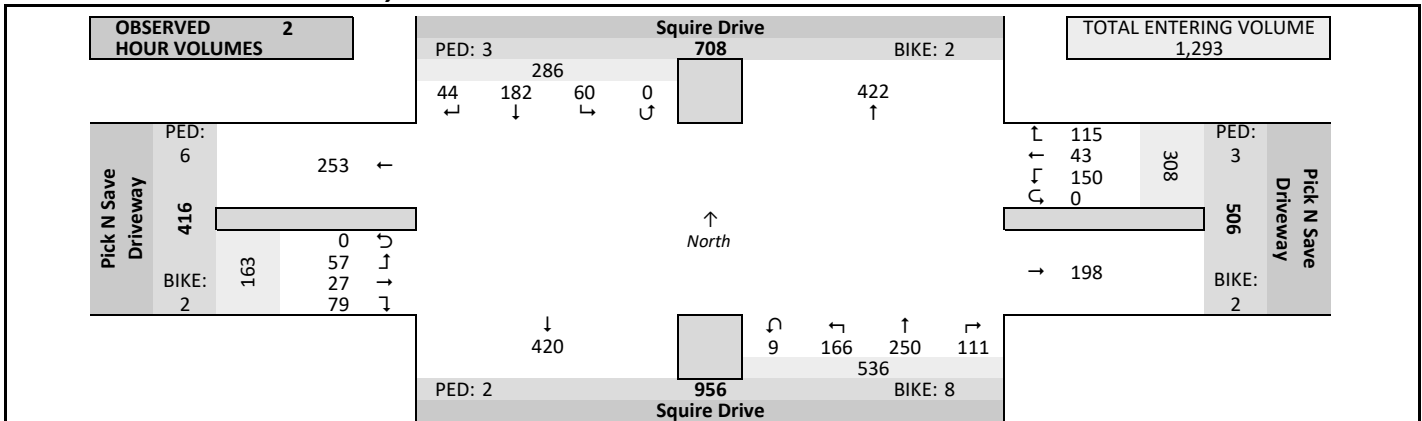
Site Information

Municipality	Village of Germantown		
County	Washington	WisDOT Region	SE
Traffic Control	Partial Stop Control		
Roadway Names		North Direction	↑
North Leg	Squire Drive		
East Leg	Pick N Save Driveway		
South Leg	Squire Drive		
West Leg	Pick N Save Driveway		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
	Pre-school children	None	
	Elementry school age children	None	
	Visually impaired (white cane/helper dog)	None	
	Elderly/disabled (except wheelchairs)	None	
	Wheelchairs/electric scooters	None	
	Other (describe)	None	None

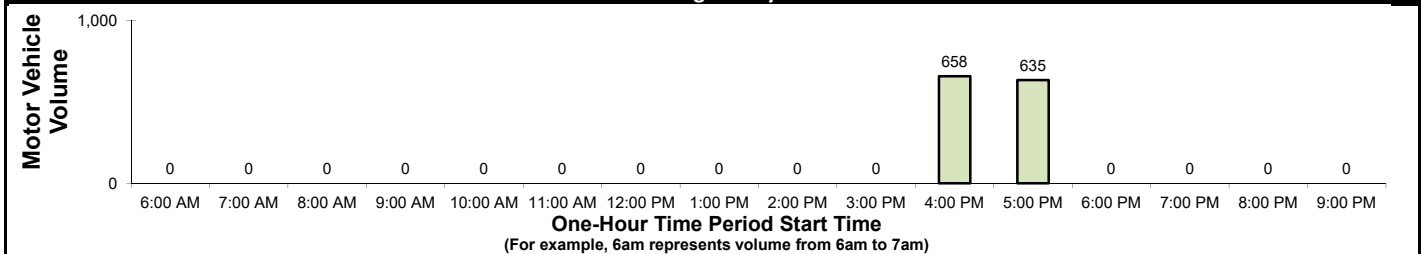
Count Information

Hrs Counted: 4:00 PM-6:00 PM				
1st Day of Count		Thursday, June 13, 2019		Weather
AM Peak Period		Thursday, June 13, 2019		Clear & Dry
Midday Peak Period		Thursday, June 13, 2019		Clear & Dry
PM Peak Period		Thursday, June 13, 2019		Clear & Dry
Calculated Peak Hours				
	AM	MD		PM 4:30-5:30pm
Peak Hours Selected for Analysis				
	AM	MD		PM 4:30-5:30pm
Daily/Seasonal Adjustment Group		(2) Urban Arterials & Collectors		
Count Expansion Group		(2) Urban Arterials & Collectors		
Daily/Seasonal Adjustment Factor		0.845	Count Expansion Factor	5.950
Company Name		TADI, Inc.		Manual Adj. 1.000
Observers	AM Peak Period	None		
	Midday Peak Period	None		
	PM Peak Period	Ted Atwell		
Comments	2017 DOT Seasonal Factors			

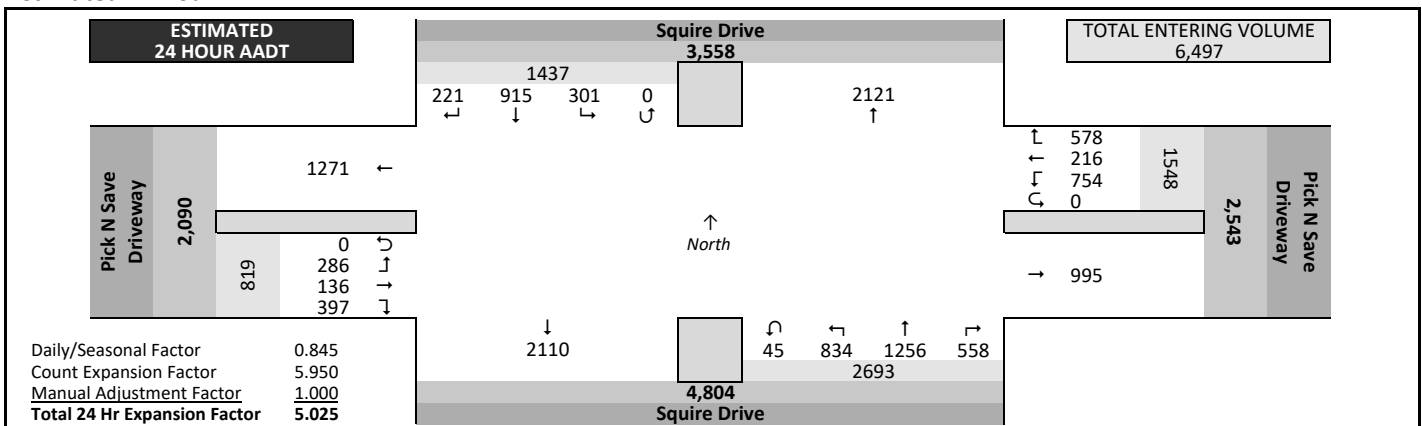
Observed 2 Hour Volume Summary



Total Entering Hourly Volume



Estimated 24 Hour AADT



Intersection Traffic Volume Report

Count Basics			Page 3 of 13
Start Date:	Thursday, June 13, 2019	Weekday	Schools in Session
Total Number of Hours Counted:	2	Non-Holiday	No Special Events

Peak Hour Volume Summary

Squire Drive and Pick N Save Driveway

Peak Hour Volumes, Truck Percentages, and PHFs

Thursday, June 13, 2019		From North					From East					From South					From West						
AM Peak Hour	AM Peak Hour	Squire Drive					Pick N Save Driveway					Squire Drive					Pick N Save Driveway						
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

N/A		From North					From East					From South					From West					
Midday (MD) Peak Hour	MD Peak Hour	Squire Drive					Pick N Save Driveway					Squire Drive					Pick N Save Driveway					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Thursday, June 13, 2019		From North					From East					From South					From West					
PM Peak Hour	PM Peak Hour	Squire Drive					Pick N Save Driveway					Squire Drive					Pick N Save Driveway					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
	4:30 PM	6	29	6	0	41	14	4	20	0	38	13	33	27	0	73	7	6	4	0	17	169
	4:45 PM	5	21	10	0	36	12	7	9	0	28	19	43	25	1	88	15	5	7	0	27	179
	5:00 PM	6	22	7	0	35	14	9	15	0	38	12	18	27	0	57	19	4	10	0	33	163
	5:15 PM	7	23	9	0	39	17	5	13	0	35	16	43	16	2	77	14	2	9	0	25	176
	Peak Hour Volume	24	95	32	0	151	57	25	57	0	139	60	137	95	3	295	55	17	30	0	102	687
	Rounded Hourly Volume	25	95	30	0	150	55	25	55	0	135	60	135	95	5	295	55	15	30	0	100	680
	% Single Unit Trucks	0.0	2.1	3.1	0.0	2.0	1.8	0.0	0.0	0.0	0.7	1.7	1.5	1.1	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.2
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% Trucks (Total)	0.0	2.1	3.1	0.0	2.0	1.8	0.0	0.0	0.0	0.7	1.7	1.5	1.1	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.2	
Peak Hour Factor (PHF)	0.86	0.82	0.80	0.00	0.92	0.84	0.69	0.71	0.00	0.91	0.79	0.80	0.88	0.37	0.84	0.72	0.71	0.75	0.00	0.77	0.96	

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing 			Crossing 			Crossing 			Crossing 			Total
 		North Approach 			East Approach 			South Approach 			West Approach 			Ped & Bike
		Squire Drive			Pick N Save Driveway			Squire Drive			Pick N Save Driveway			Bike
15-Minute Start Time		Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:30 PM	0	0	0	0	0	0	1	4	5	0	0	0	5
	4:45 PM	1	0	1	0	1	1	0	0	0	0	0	0	2
	5:00 PM	0	0	0	0	0	0	0	4	4	1	0	1	5
	5:15 PM	2	0	2	0	1	1	1	0	1	2	0	2	6
	Total	3	0	3	0	2	2	2	8	10	3	0	3	18

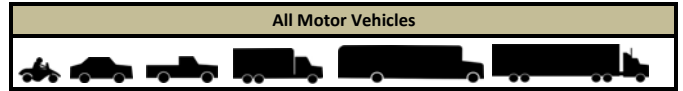
Intersection Traffic Volume Report

15-Minute Motor Vehicle Data

Squire Drive and Pick N Save Driveway

15-Minute Motor Vehicle Data

Count Basics			Page 5 of 13	
Start Date:	Thursday, June 13, 2019	Weekday	Schools in Session	
Total Number of Hours Counted:	2	Non-Holiday	No Special Events	



15-Minute Time Period Start Time	From North					From East					From South					From West					15-Min Totals	Hourly Sum	PHF	
	Squire Drive					Pick N Save Driveway					Squire Drive					Pick N Save Driveway								
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total				
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 PM	3	23	11	0	37	15	6	28	0	49	12	26	21	2	61	5	1	9	0	15	162	658	0.92
	4:15 PM	3	28	4	0	35	12	5	24	0	41	11	33	16	0	60	5	2	5	0	12	148	659	0.92
	4:30 PM	6	29	6	0	41	14	4	20	0	38	13	33	27	0	73	7	6	4	0	17	169	687	0.96
	4:45 PM	5	21	10	0	36	12	7	9	0	28	19	43	25	1	88	15	5	7	0	27	179	666	0.93
	5:00 PM	6	22	7	0	35	14	9	15	0	38	12	18	27	0	57	19	4	10	0	33	163	635	0.90
	5:15 PM	7	23	9	0	39	17	5	13	0	35	16	43	16	2	77	14	2	9	0	25	176		
	5:30 PM	7	20	8	0	35	15	5	18	0	38	10	27	20	3	60	7	4	4	0	15	148		
	5:45 PM	7	16	5	0	28	16	2	23	0	41	18	27	14	1	60	7	3	9	0	19	148		
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Totals	44	182	60	0	286	115	43	150	0	308	111	250	166	9	536	79	27	57	0	163	1293			

Peak Hour All Vehicle Volume Summary

Hourly Time Period Start Time	From North					From East					From South					From West					Total Hourly Volume	PHF
	Squire Drive					Pick N Save Driveway					Squire Drive					Pick N Save Driveway						
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
MD 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PM 4:30 PM	24	95	32	0	151	57	25	57	0	139	60	137	95	3	295	55	17	30	0	102	687	0.96

Intersection Traffic Volume Report

Count Basics			Page 9 of 13
Start Date:	Thursday, June 13, 2019	Weekday	Schools in Session
Total Number of Hours Counted:	2	Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Squire Drive and Pick N Save Driveway



15-Minute Heavy Vehicle Data

15-Minute Time Period Start Time	From North						From East					From South					From West					15-Min Totals	Hourly Sum
	Squire Drive						Pick N Save Driveway					Squire Drive					Pick N Save Driveway						
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total			
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
	4:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
	4:30 PM	0	0	0	0	0	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	3	
	4:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2	
	5:00 PM	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	3	0	4	0	0	0	0	0	5	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		0	4	2	0	6	1	0	0	0	1	1	3	5	0	9	0	0	0	0	0	16	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period Start Time	From North					From East					From South					From West					Total Hourly Volume
	Squire Drive					Pick N Save Driveway					Squire Drive					Pick N Save Driveway					
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 4:30 PM	0	2	1	0	3	1	0	0	0	1	1	2	1	0	4	0	0	0	0	0	8

APPENDIX B

Existing Traffic Operational Analysis Worksheets

HCM 6th TWSC

3: Squire Drive & Marketplace Driveway

Existing
PM Peak Hour

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕ ↗			↕			↕	
Traffic Vol, veh/h	30	17	55	57	25	57	95	137	60	32	95	24
Future Vol, veh/h	30	17	55	57	25	57	95	137	60	32	95	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	2	2	2
Mvmt Flow	31	18	57	59	26	59	99	143	63	33	99	25
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	593	582	112	588	563	175	124	0	0	206	0	0
Stage 1	178	178	-	373	373	-	-	-	-	-	-	-
Stage 2	415	404	-	215	190	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.11	6.51	6.21	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.509	4.009	3.309	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	420	427	947	422	437	871	1469	-	-	1365	-	-
Stage 1	828	756	-	650	620	-	-	-	-	-	-	-
Stage 2	619	603	-	790	745	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	343	384	947	353	393	871	1469	-	-	1365	-	-
Mov Cap-2 Maneuver	343	384	-	353	393	-	-	-	-	-	-	-
Stage 1	764	736	-	600	572	-	-	-	-	-	-	-
Stage 2	508	557	-	706	726	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	13.4		14.4			2.5			1.6			
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	1469	-	-	537 364 871	1365	-	-					
HCM Lane V/C Ratio	0.067	-	-	0.198 0.235 0.068	0.024	-	-					
HCM Control Delay (s)	7.6	0	-	13.4 17.9 9.4	7.7	0	-					
HCM Lane LOS	A	A	-	B C A	A	A	-					
HCM 95th %tile O(veh)	0.2	-	-	0.7 0.9 0.2	0.1	-	-					

HCM 6th TWSC

8: Mequon Road & Marketplace Driveway

Existing
PM Peak Hour

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	61	659	874	163	87	77
Future Vol, veh/h	61	659	874	163	87	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	110	-	-	110	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	4	4	2	2	2	2
Mvmt Flow	66	709	940	175	94	83

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1115	0	0 1427 470
Stage 1	-	-	- 940 -
Stage 2	-	-	- 487 -
Critical Hdwy	4.18	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.24	-	- 3.52 3.32
Pot Cap-1 Maneuver	611	-	- 126 540
Stage 1	-	-	- 340 -
Stage 2	-	-	- 583 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	611	-	- 112 540
Mov Cap-2 Maneuver	-	-	- 226 -
Stage 1	-	-	- 303 -
Stage 2	-	-	- 583 -

Approach	EB	WB	SB
HCM Control Delay, s	1	0	22.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	611	-	-	-	226	540
HCM Lane V/C Ratio	0.107	-	-	-	0.414	0.153
HCM Control Delay (s)	11.6	-	-	-	31.7	12.9
HCM Lane LOS	B	-	-	-	D	B
HCM 95th %tile Q(veh)	0.4	-	-	-	1.9	0.5

APPENDIX C

Build Traffic Operational Analysis Worksheets

HCM 6th TWSC

3: Squire Drive & Marketplace Driveway

Build
PM Peak Hour

Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕			↕	
Traffic Vol, veh/h	30	17	55	58	25	58	95	137	60	32	95	24
Future Vol, veh/h	30	17	55	58	25	58	95	137	60	32	95	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	2	2	2
Mvmt Flow	31	18	57	60	26	60	99	143	63	33	99	25
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	594	582	112	588	563	175	124	0	0	206	0	0
Stage 1	178	178	-	373	373	-	-	-	-	-	-	-
Stage 2	416	404	-	215	190	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.11	6.51	6.21	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.509	4.009	3.309	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	420	427	947	422	437	871	1469	-	-	1365	-	-
Stage 1	828	756	-	650	620	-	-	-	-	-	-	-
Stage 2	618	603	-	790	745	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	343	384	947	353	393	871	1469	-	-	1365	-	-
Mov Cap-2 Maneuver	343	384	-	353	393	-	-	-	-	-	-	-
Stage 1	764	736	-	600	572	-	-	-	-	-	-	-
Stage 2	507	557	-	706	726	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	13.4			14.4			2.5			1.6		
HCM LOS	B			B								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR			
Capacity (veh/h)	1469	-	-	537	364	871	1365	-	-			
HCM Lane V/C Ratio	0.067	-	-	0.198	0.238	0.069	0.024	-	-			
HCM Control Delay (s)	7.6	0	-	13.4	17.9	9.4	7.7	0	-			
HCM Lane LOS	A	A	-	B	C	A	A	A	-			
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.9	0.2	0.1	-	-			

HCM 6th TWSC

8: Mequon Road & Marketplace Driveway

Build
PM Peak Hour

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	62	659	874	165	92	82
Future Vol, veh/h	62	659	874	165	92	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	110	-	-	110	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	4	4	2	2	2	2
Mvmt Flow	67	709	940	177	99	88

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1117	0	0 1429 470
Stage 1	-	-	- 940 -
Stage 2	-	-	- 489 -
Critical Hdwy	4.18	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.24	-	- 3.52 3.32
Pot Cap-1 Maneuver	610	-	- 126 540
Stage 1	-	-	- 340 -
Stage 2	-	-	- 582 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	610	-	- 112 540
Mov Cap-2 Maneuver	-	-	- 226 -
Stage 1	-	-	- 303 -
Stage 2	-	-	- 582 -

Approach	EB	WB	SB
HCM Control Delay, s	1	0	23.5
HCM LOS	C		

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	610	-	-	-	226	540
HCM Lane V/C Ratio	0.109	-	-	-	0.438	0.163
HCM Control Delay (s)	11.6	-	-	-	32.8	13
HCM Lane LOS	B	-	-	-	D	B
HCM 95th %tile Q(veh)	0.4	-	-	-	2.1	0.6

Germantown Dental Office Stormwater Management Plan

**N112 W17001 Mequon Road
Germantown, WI**

07-11-2019



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Introduction

WMG Development is proposing to develop a site located at N112 W17001 Mequon Road, Germantown, WI. This project will consist of a 4,324 SF commercial building along with associated parking, utilities, and landscaping. This site is located on Lot 3 within the Germantown Marketplace shopping center.

Hydrology

Pre-Development Conditions

Lot 3 is an outparcel located within the shopping center parking lot. The lot is mostly asphalt with an impervious area of 0.81 acres with a curve number of 96. Stormwater from the parking lot travels via sheet flow to existing catch basins and outfalls, undetained, to an unnamed tributary of the Menomonee River on the east side of the overall site.

According to the Village of Germantown GIS records, this site is located within the Lake Park sub-watershed of the Menomonee River watershed.

Post-Development Conditions

The developed site will reduce the total amount of impervious area due to the addition of landscape islands. The post-developed impervious area is 0.75 acres with a curve number of 95. New catch basins will be added to the existing stormwater system to improve surface water drainage and a portion of the existing parking lot will be regraded to meet proposed finish floor elevations.

Per Table 2.0 of the Village Storm Water Management Requirements (dated 03-17-2014), the re-grading of a portion of the parking lot triggers the need for this Storm Water Management Plan (SWMP).

Stormwater Management Plan Sections

Table 3.0 – SWMP Runoff Reduction Requirements

This project is located on an existing parking lot that was constructed prior to January 1, 2002. There is no increase in impervious surfaces and the disturbed area for the project is 0.53 acres. According to the three triggers for runoff reduction requirements, this site is exempt from meeting those requirements.

Table 4.0 – SWMP TSS Reduction Requirements

This project is an in-fill of less than 5 acres, therefore an 80% TSS reduction is required for the site. To achieve this requirement a Flexstorm Inlet Filter model PC is being installed on all new and existing catch basins located within the subject property (Lot 3). According to the manufacturer the PC model achieves a TSS reduction of 99%.

Table 5.0 – SWMP Infiltration Requirements

The impervious area of the existing site is 0.81 acres or 93.1% of the site. According to table 5.0 this qualifies as a high impervious site; therefore, infiltration volume reduction is required. According to the geotechnical report (see appendix A) the site consists of a “very stiff to hard lean clay natural and fill soils that are relatively impermeable” to a depth of between 5 and 15 feet. Given these existing soils infiltration on the existing pervious area is minimal. With the depth of natural soils undercutting to introduce more pervious soils is impractical, so specific infiltration measures were not provided. However, to provide some volume reduction benefit the impervious area of the site was reduced to 0.75 acres or 86.2% of the site which is an addition of approximately 2,600 SF of pervious area. This exceeds the required maximum of 2% of the site (760 SF) dedicated to infiltration area.

Table 6.0 – SWMP Analysis Requirements

This section is not required as the site does not trigger the requirements of Table 3.0.

Table 7.0 – Storm Water Management Facility Design Requirements

This section is not required as the site does not trigger the requirements of Table 3.0.

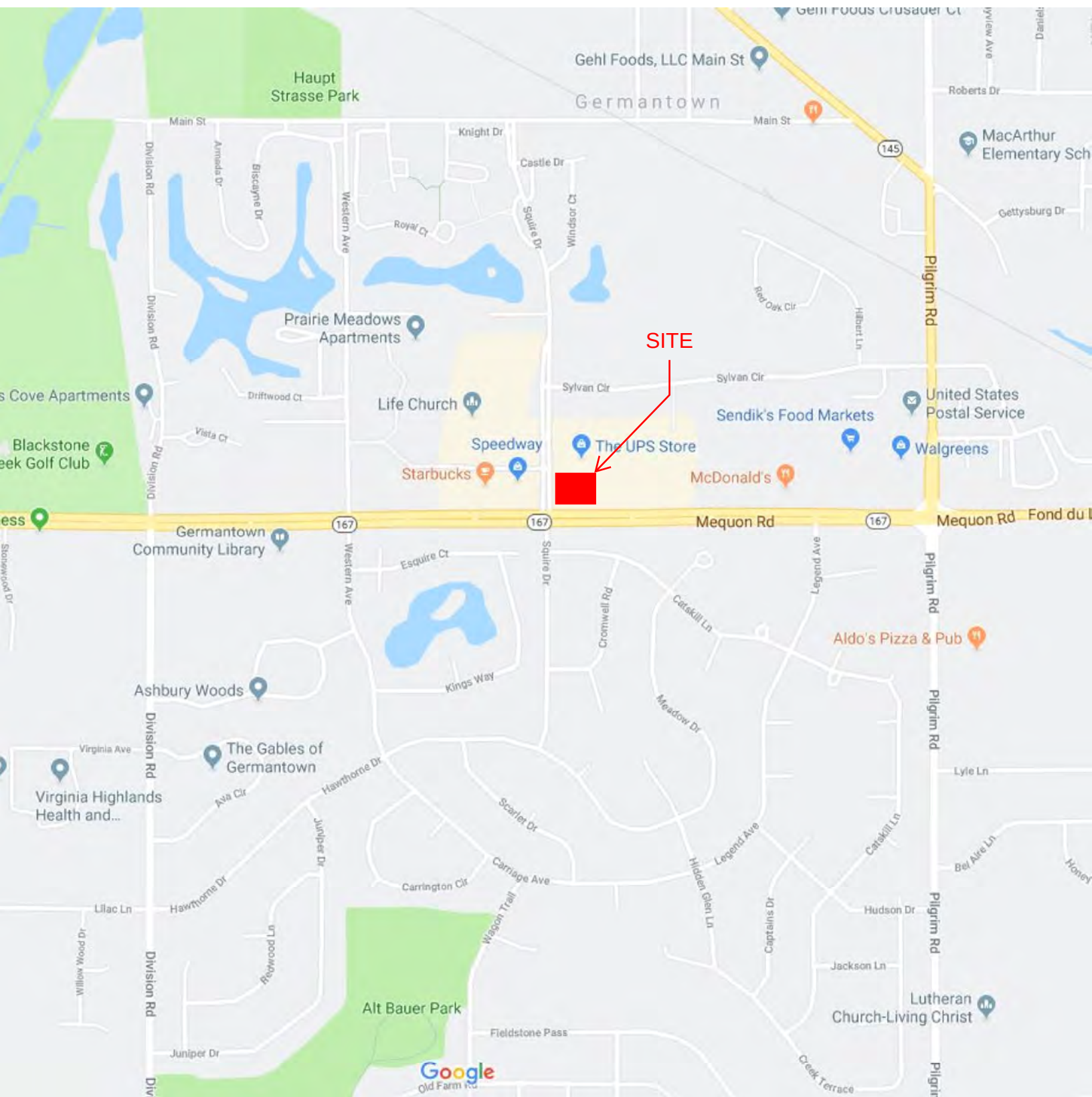
APPENDIX A

Location Map

USGS Quad Map

FEMA FIRMette

National Wetlands Inventory Map





National Flood Hazard Layer FIRMette



Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
MAP PANELS		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

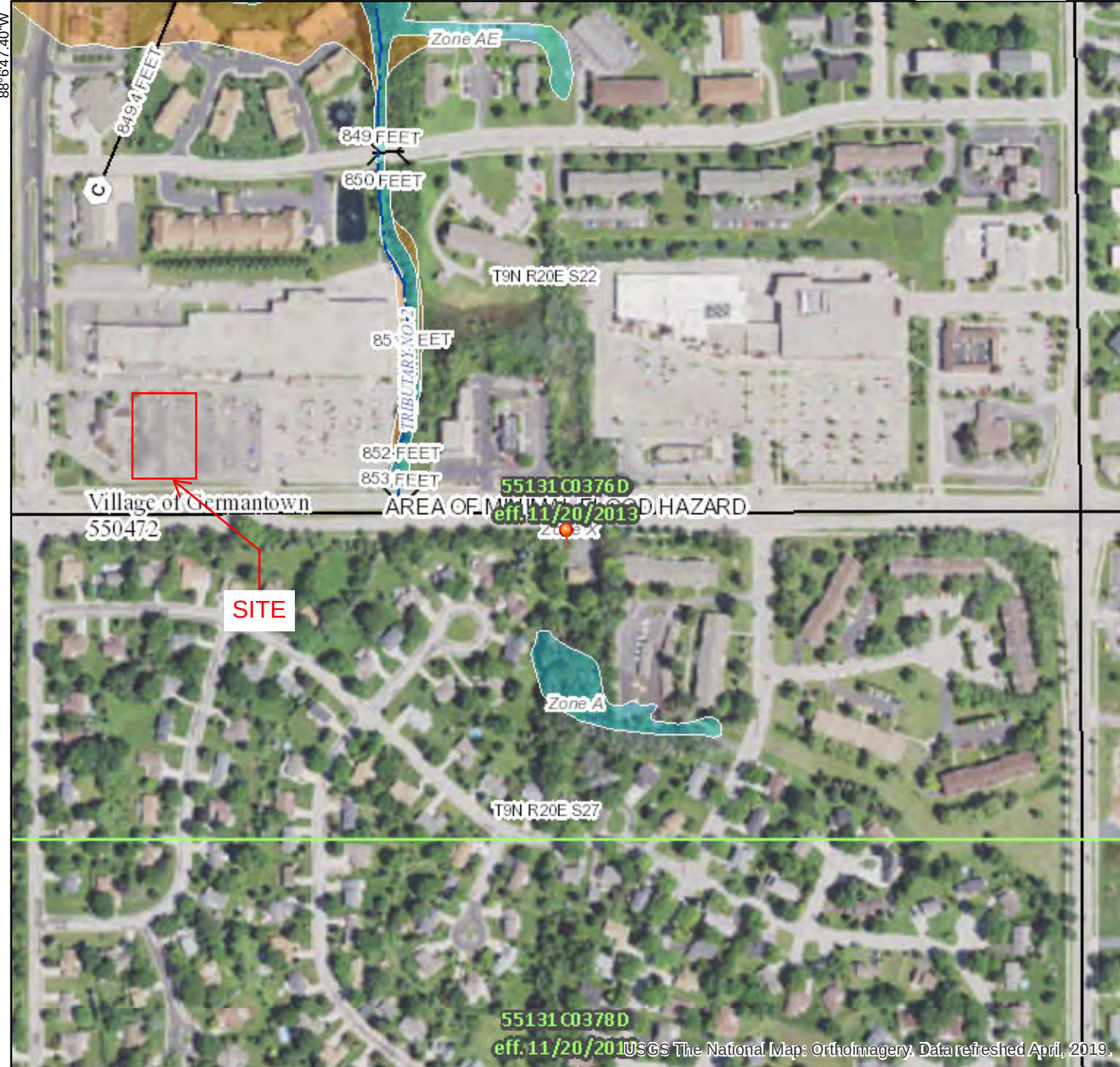


This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/11/2019 at 11:58:12 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

43°13'28.07"N



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

43°13'1.86"N

88°6'9.94"W



U.S. Fish and Wildlife Service

National Wetlands Inventory

Germantown, WI



March 28, 2019

Wetlands

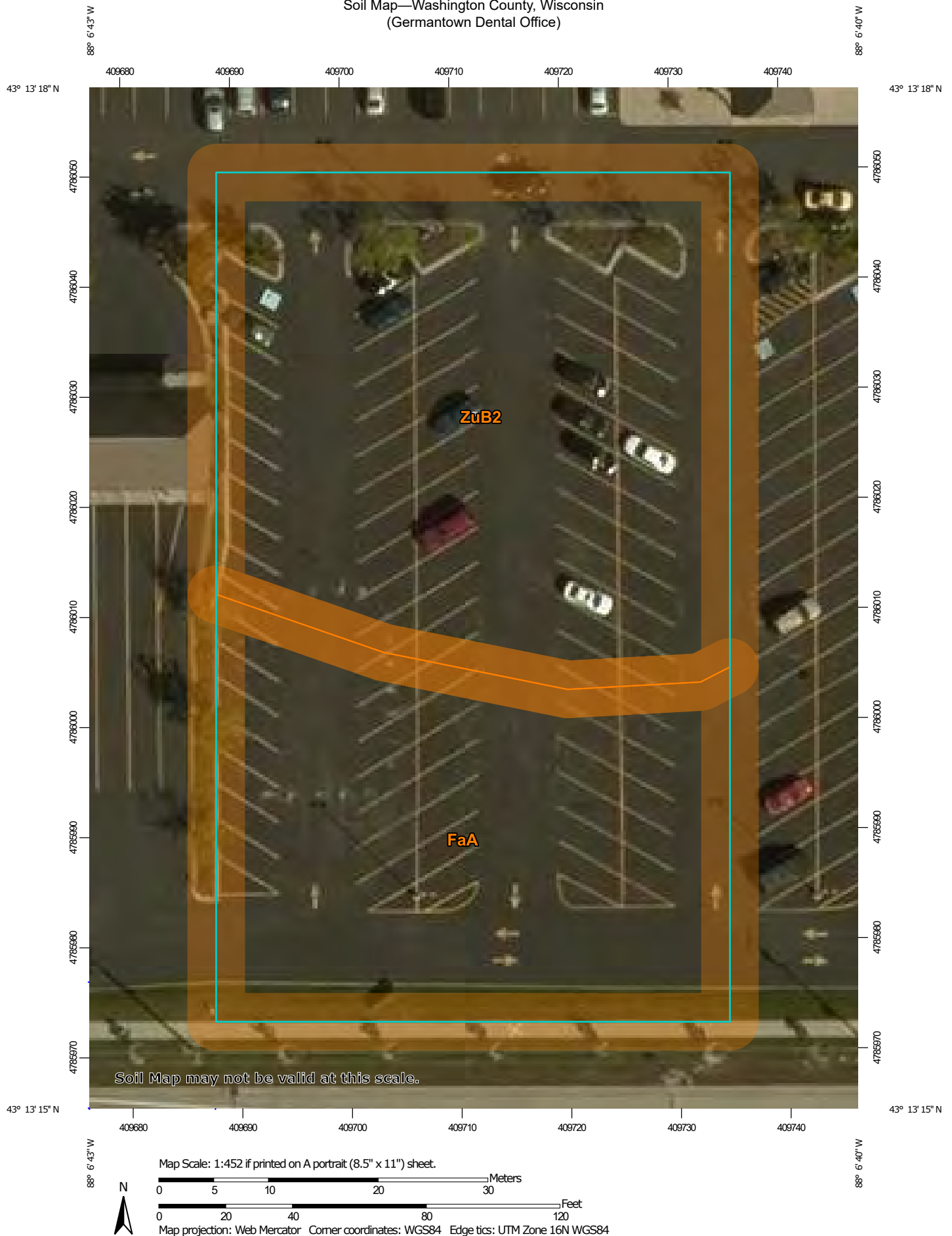
	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

APPENDIX B

NRCS Soils Report
Geotechnical Report

Soil Map—Washington County, Wisconsin (Germantown Dental Office)



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Washington County, Wisconsin

Survey Area Data: Version 18, Sep 12, 2018

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

Date(s) aerial images were photographed: Sep 7, 2014—Sep 22, 2014

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
FaA	Fabius loam, 1 to 3 percent slopes	0.4	42.7%
ZuB2	Zurich silt loam, 2 to 6 percent slopes, eroded	0.5	57.3%
Totals for Area of Interest		0.9	100.0%



Construction • Geotechnical
Consulting Engineering/Testing

June 21, 2018
CM19083

WMG Development, LLC (Owner)
c/o Jamie Linenberg (as agent for Owner)
Tarr Group, LLC
3229 Purple Ash Drive
Zionsville, IN 46077

Re: Geotechnical Exploration
Proposed WMG Dental Office
Mequon Road
Germantown, Wisconsin

Dear Mr. Linenberg:

Construction • Geotechnical Consultants, Inc. (CGC) has completed the subsurface exploration for the proposed WMG Dental Office project on Mequon Road in Germantown, Wisconsin. The purpose of this exploration was to evaluate the subsurface conditions across the site and to provide geotechnical-related recommendations regarding site preparation, foundation, floor slab and pavement design/construction. An electronic copy of this report is being provided for your use.

PROJECT DESCRIPTION

We understand a WMG Dental Office building is planned to be constructed on the north side of Mequon Road, approximately 220 ft west of Squire Drive, in Germantown, Wisconsin. The site currently consists of an asphaltic concrete parking lot and is an out-lot to an existing strip shopping center development. We understand the planned development will include a single-story, slab-on-grade building. The development plans also include reconstruction of the existing parking lot, with new asphalt surface parking lots and drive lanes to the north, west and south of the proposed new building. Although building loads were not provided, based on similar projects, we anticipate that maximum column and wall loads will range between about 50 to 100 kips and 2 to 4 klf, respectively.

The planned finished floor elevation (FFE) for the proposed structure was not provided at the time of this report. Therefore, for the purposes of this geotechnical engineering evaluation and based on review of topographic information included on the Washington County GIS Mapping website, we have based our recommendations on the FFE of the planned building being at EL 856.0 ft and pavement grades will range between about EL 855 and 856 ft. Existing grades within the planned building area currently range between about EL 855 to 856 ft; therefore, only nominal site grading is anticipated, exclusive of site preparation requirements.

WMG Development, LLC (Owner)
c/o Jamie Linenberg (as agent for Owner)
Tarr Group, LLC
June 21, 2019
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The conclusions and recommendations provided in this report are based on the above described descriptions. If our understanding and assumptions of the proposed construction are inaccurate, we ask that we be notified for review and possible modification of the recommendations provided.

EXPLORATION PROGRAM

The subsurface conditions throughout the development site were explored by drilling six (6) Standard Penetration Test (SPT) soil borings. Borings 1 and 2 were drilled within the planned building area and extended to a depth of 15 ft and Borings 3 through 6 were drilled within planned parking lot areas to a depth of 5 ft. The boring locations were determined by CGC and located in the field by J&J Soil Testing, Ltd., although some boring offsets were necessary due to possible underground utilities. The soil borings were drilled by J&J Soil Testing, Ltd. (under subcontract to CGC) on June 3, 2019 utilizing a truck-mounted rotary CME-45 drill rig equipped with hollow-stem augers and an SPT hammer. The ground surface elevations were interpolated from topographic elevations contours obtained from the Washington County GIS Mapping website. The elevations should be considered accurate to within 1 contour interval (1± foot). Specific procedures used for drilling and sampling are described in Appendix A. The approximate boring locations are shown in plan on the Soil Boring Location Map enclosed in Appendix B.

Water level observations were made in each soil boring during and immediately upon completion of the drilling operations. Representative samples of the subsoils were also collected during the field exploration for classification and laboratory testing. The soils were classified by a geotechnical engineer using the Unified Soil Classification System (USCS). Moisture content testing was performed on representative samples collected from the test boring locations. The final logs prepared by the engineer per the USCS procedures are presented in Appendix B. The results of the laboratory testing are included on the test boring logs.

SITE CONDITIONS

A. Surface Conditions

The subject property is located on the north side of Mequon Road, approximately 220 ft east of Squire Drive in Germantown, Wisconsin. The site currently consists of an asphaltic concrete parking lot, associated with the multi-unit shopping center development to the north. An existing bank development is located to the west and a continuation of the parking lot is located

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to the east. Based on review of topographic information included on the Washington County GIS Mapping website, existing site grades within the property range from about EL 855 ft along the eastern property line, sloping up to about EL 857 ft along the western property line. Several curbed parking lot islands are located along the northern and western edges of the property and several light poles are located within the property. We assume that underground utilities associated with the existing development are located within the property boundaries.

To assist in determining the past history of the site, historical aerial photographs were reviewed on the Washington County GIS Mapping website. Between at least 1941 and 1985 the site appears to have been used as farm land. Between 1990 and continuing to the present, the site appears to have been used as a parking lot, similar to the current use.

B. Subsurface Conditions

The subsurface conditions encountered at the test boring locations appear to be fairly uniform and can be described by the following generalized subsoil profile, in descending order:

- Surficial materials consist of about 2 to 3 in. of ***asphaltic concrete pavement*** over 5 to 9 in. of ***crushed limestone base course***; underlain by,
- ***Natural*** brown to gray lean clay with trace to little gravel extending to at least the maximum depths explored, 5 to 15 ft.

Exceptions to the above-described profile occurred and include the following:

- Existing ***fill*** consisting of gray ***fine to coarse sand and gravel*** was encountered below the surface pavement section at Boring 2 (northwest building area) extending to a depth of about 4 ft.
- Existing ***fill and possible fill*** consisting of dark gray to brown and black ***lean clay*** was below the surface pavement sections at Borings 3 and 6, extending to a depth of about 1.5 ft below existing grade.

The predominant encountered cohesive ***natural lean clay*** soils exhibited estimated unconfined compressive strengths (as measured with a hand penetrometer) typically ranging from 2.25 to greater than 4.5 tsf, which corresponds to a very stiff to hard consistency. Natural moisture

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testing performed on representative samples of the natural clayey soils indicated the natural moisture contents range between 14 to 24 percent.

C. Groundwater Conditions

No free groundwater was encountered within any of the borings during or upon completion of the drilling operations. Based on the conditions encountered at the boring locations and soil coloration encountered in the deeper building borings, we believe the long-term groundwater level is at about 8 to 12 ft below the existing ground surface. Considering the generally very stiff to hard lean clay soils, the site is considered to potentially be subject to perched water conditions within the granular fill and base course soils, such as the fill encountered at Boring 2, at least seasonal and/or during periods of heavy precipitation. Water levels can be expected to fluctuate across the site based on such factors as seasonal variations in precipitation, infiltration and surface water runoff.

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

DISCUSSION AND RECOMMENDATIONS

Based on the findings from the exploration, the site generally contains higher strength natural soils and it is our opinion, within the limitations discussed below, that the site can be developed as intended, with the planned structure being supported by conventional spread footings. Recommendations for site preparation, foundation, floor slab and pavement design/construction, are presented in the following subsections. Additional information regarding the conclusions and recommendations presented in this report is discussed in Appendix C.

A. Site Preparation

To prepare for construction, we recommend removal of the existing asphalt pavement section of the parking lot to at least 5 ft beyond the proposed construction areas, including areas required for cuts and fills beyond the new structure limits. We recommend the existing pavement be left in-place as long as possible to serve as a working mat for construction equipment and supplies and to protect the underlying subgrade soils. The existing crushed limestone base course materials could be left in-place if it is below planned new subgrade. Otherwise, this material should be removed and stockpiled nearby for re-use, to allow the underlying proposed subgrade to be evaluated. Any existing utilities located within the planned new development area should

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be removed and/or rerouted, as necessary and the resulting excavations backfilled with engineered fill as discussed later in this report. We recommend all existing utilities located within the new building footprint be completely removed or properly abandoned in-place.

Following the recommended initial site preparation as discussed above, the exposed subgrades are typically expected to consist of generally natural lean clay with some areas of existing fill consisting of lean clay, sand and gravel or the existing base course soils. To evaluate the suitability of these soils as a supporting medium for development of any required fill and/or pavement areas, we recommend the exposed subgrades be evaluated by thoroughly proof-rolling the site with a loaded tri-axle dump truck, scraper or a similar piece of rubber-tired construction equipment. The purpose of proof-rolling is to check the overall stability of the exposed subgrade, as well as for identifying soft or yielding conditions that may require recompaction or undercutting prior to fill placement. If unstable areas are detected, an initial attempt should be made to aerate and densify the subgrade by recompaction where natural moisture contents are at appropriate levels (i.e., on the dry side of optimum moisture content). If this procedure is ineffective, the disturbed soils should be undercut and replaced with compacted fill and/or stabilizing materials such as an imported 3-in. breaker rock. A relatively firm, non-yielding subgrade should be established prior to proceeding with fill placement.

After the subgrade is prepared as recommended, we recommend that fill placement proceed as necessary to establish planned subgrade elevations. The exposed subgrade should be thoroughly compacted with an appropriate piece of construction equipment prior to placement of fills on the site. It is our opinion that the non-organic soils (i.e., fill and/or natural) present across the site may be used to develop building and pavement area subgrades. However, the use of the on-site cohesive soils in structural areas will require close observation on a regular basis during fill placement including the monitoring of moisture contents, compaction levels and the overall stability of the prepared fill subgrade. Selection, placement and compaction of engineered fills should be in accordance with the guidelines presented in our “Recommended Compacted Fill Specifications” included in Appendix D. Engineered fills placed below structures and pavement areas should be compacted to a minimum of 95% modified Proctor (ASTM D1557). Regular field density testing should be conducted during fill placement to confirm that satisfactory compaction levels are being achieved.

B. Foundation Design

Based on the assumed FFE of the planned building at EL 856.0 ft, we anticipate perimeter exterior footings will bear at about EL 851.5 to 852 ft and interior footings will bear at about

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EL 854 ft. Based on the assumed FFE and findings of Borings 1 and 2, drilled within the planned building area, suitable bearing natural very stiff to hard lean clay soils are anticipated at about 1 ft below existing site grades in Boring 1, which corresponds to about EL 854 ft. However, at Boring 2, existing sand and gravel fills were observed to a depth of 4 ft (EL 851.5 ft±). To reduce the risk of increased settlement associated with supporting the planned foundations within the existing fill soils, we recommend that the existing fill materials be undercut vertically and laterally (throughout the foundation influence zone) below the planned foundation bearing grade to expose the underlying suitable bearing natural lean clay soils. We anticipate that undercut depths of up to 0.5 ft for perimeter footings and up to 2.5 ft for interior foundations may be necessary, although deeper undercutting depths may be necessary in unexplored areas of the site. Following site preparation and/or undercutting, as necessary, we recommend the footings either be extended in depth to be supported within suitable bearing natural soils or the undercut excavations be backfilled to the planned shallow foundation bearing grade with lean-mix concrete or engineered fill. If engineered fill is used to backfill undercut excavations, we recommend the fill consist of a non-frost susceptible material such as No. 1 crushed clear stone.

Provided the above recommendations are implemented, it is our opinion that the following parameters can be used for foundation design:

- **Maximum net allowable bearing pressure:** 4,000 psf
- **Minimum foundation widths:**
 - Continuous wall footings: 18 in.
 - Column pad footings: 36 in.
- **Minimum footing depths:**
 - Exterior/perimeter footings: 4 ft
 - Interior footings: no minimum requirement
- **Site Classification for Seismic Design**

In our opinion, the average soil/rock properties in the upper 100 ft of the site (based on unconfined compressive strengths typically greater than 2,000 psf, on average) can be characterized as a very dense soil profile. This characterization would place the site in Site Class C for seismic design according to the International Building Code, current edition (see Table 1613.5.2).

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As discussed above, some nominal undercutting of unsuitable soils below footing grade may be necessary due to existing fill soils. Where undercutting is required, the base of the undercut excavation should be widened beyond the footing edges at least 0.5 ft in each direction for each foot of undercut depth for stress distribution purposes. Granular backfill compacted to at least 95% compaction of the modified Proctor maximum density (ASTM D1557) or No. 1 crushed clear stone can be used to re-establish footing grade. As an alternate to the use of engineered fill, the removal excavations could be backfilled with lean-mix concrete. If lean-mix concrete is used, the foundation excavations should be a minimum of 1 foot wider than the footing (6 in. on each side). CGC should be present during footing excavations to determine whether subgrades are satisfactory for the design bearing pressure and to advise on corrective measures, where necessary.

We recommend using a smooth-edged backhoe bucket for footing excavations. We recommend the subgrades should be hand-trimmed to remove loose soil prior to lean concrete or foundation concrete placement. Provided the foundation design/construction recommendations discussed above are followed, we estimate that total and differential settlements should not exceed 1.0 and 0.5 in., respectively.

C. Floor Slab

After preparing the building pad as described in the Site Preparation section of this report, soils present at floor subgrade should generally be suitable for slab-on-grade construction. Based on the proposed floor slab grade, subgrade soils beneath the slab are expected to consist of a combination of the natural lean clay, existing clayey and granular fill soils or newly-placed engineered granular fills. Prior to slab construction, the subgrades should be recompacted to densify soil that may become disturbed or loosened during construction activities. The design subgrade modulus is based on a recompacted subgrade such that non-yielding conditions are developed. To serve as a capillary break, the final 4 to 6 in. of soil placed below the slab should consist of well-graded sand or gravel with no more than 5 percent by weight passing a No. 200 U.S. standard sieve. (Note that some structural engineers require a 4 to 6 in. layer of dense graded base (e.g., 1¼-in. dense graded base course) below the slab to increase the subgrade modulus immediately below the slab.) A subgrade modulus of 125 pci may be used for slab design on adequately stabilized existing fill soils or newly-placed and compacted granular fill. If 6 in. of 1¼-in. dense graded base is included below the floor slab, the subgrade modulus can be increased to 150 pci. To further minimize the potential for moisture migration, a 10-mil plastic vapor barrier can also be utilized below the slab. The slab should be structurally separate from the foundations and have construction joints and wire mesh for crack control. Fill and drainage

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course material placed below the floor slab should be placed in accordance with the guidelines presented in Appendix D. If crushed clear stone is used as a drainage course material, these materials should be densified until no deflection or settlement is observed under compaction equipment.

D. Pavement Design

Following site stripping and preparation as described earlier in this report, we anticipate subgrade soils to consist of predominantly lean clay soils (i.e., fill and natural) similar to those encountered at the boring locations. Prior to base course placement, pavement subgrades should be proof-rolled/recompacted as described in the Site Preparation subsection of this report to check for soft/loose areas. If soft/loose areas are detected, these areas should be undercut/stabilized with 3-in. dense graded base or replaced with compacted granular fill. For purposes of design, fills placed within pavement areas are assumed to be compacted to a minimum of 95% of modified Proctor (ASTM D1557).

We assume the pavements within the surface parking lots and access drives will be subjected to predominantly automobile traffic with only occasional light truck traffic (i.e., Traffic Class I), with daily ESALs of 1 or less. The clayey soils will control the pavement thickness design. Accordingly, the pavement section tabulated below was selected assuming a clay subgrade with a CBR value of approximately 2 to 4, Wisconsin Asphalt Pavement Association (WAPA) design guidelines and a design life of 15 to 20 years.

Table 1
Recommended Pavement Sections

Material	Thickness (in.)	WisDOT Specification ²
	Light Duty Surface Parking Lots and Drive Lanes (<1 ESALs)	
Bituminous upper layer	1.5	Section 460, Table 460-1, 9.5 mm and 12.5 mm
Bituminous lower layer	2.0	Section 460, Table 460-1, 19.0 mm
Dense graded base (fully- fractured crushed stone)	8.0	Sections 301 and 305, 31.5 mm and 75 mm
Total Thickness	11.5	

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Notes:

1. Wisconsin DOT *Standard Specifications for Highway and Structure Construction*, latest edition, including supplemental specifications, but excluding limitations in Section 460.3.2 relating layer thickness to aggregate size.
2. Compaction requirements:
 - Bituminous concrete: Refer to Section 460.3.3.
 - Base course: 95% modified Proctor (ASTM D1557); also refer to Section 301.3.4.2, Standard Compaction.
3. Type LT (i.e., SuperPave Type E-0.3) or equivalent asphaltic pavement is recommended. Refer to Section 460, Table 460-2 of the *Standard Specifications*.
4. A stabilization/subbase course consisting of coarse aggregate (e.g., 3-in. dense graded base, select crushed material, breaker run stone, etc.) may be required in areas where yielding and/or unstable subsoil conditions may be exposed at pavement subgrade. Alternately, utilization of a biaxial geogrid (i.e., Tensar BX1100 or equivalent) below an increased thickness of base course (i.e., minimum of 12 in.) has also proven successful in addressing variable subgrade conditions and reducing the extent of undercutting of problematic soils.

Note that if traffic volumes are greater than those assumed, CGC should be allowed to review the recommended pavement sections and adjust them accordingly. The pavement design assumes a stable/non-yielding subgrade and a regular program of preventative maintenance. Alternative pavement designs may prove applicable and should be reviewed by CGC. If there is a delay between subgrade preparation and placing the base course, the subgrade should be recompacted.

Pavement areas subjected to concentrated wheel loads (i.e., exit/entrance areas, dumpster pads, etc.) should be constructed of Portland cement concrete. The slab should be a minimum of 6-in. thick, be underlain by a minimum of 6 in. of 1.25-in. dense graded base and should contain mesh reinforcement for crack control. A subgrade modulus of 125 pci should be used for concrete pavement design on proof-rolled/recompacted sandy silt or clay subgrades.

The site is underlain by predominantly very stiff to hard lean clay natural and fill soils that are relatively impermeable. Therefore, we recommend that consideration be given to installing

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pavement underdrains, such as finger drains around catch basins, to reduce the accumulation of water within the subgrade soils and/or base course. The final pavement surface should be constructed to direct surface water off of the existing pavement to suitable drainage infrastructure.

Maintenance and repair, as needed, of the pavement areas should be performed on a regular basis to keep pavements in a serviceable condition. The maintenance program is recommended to be implemented early in the pavement life to be effective. Failure to perform regular maintenance could reduce the service life of the pavement.

CONSTRUCTION CONSIDERATIONS

Due to variations in weather, construction methods and other factors, specific construction problems are difficult to predict. Soil related difficulties which could be encountered on the site are discussed below:

- Considering the presence of existing and potentially variable existing fill across the site and the potential for undercutting being deemed necessary to extend foundation excavations to suitable bearing soils in some areas, some construction difficulties may be experienced.
- Due to the potentially sensitive nature of the on-site silty and clayey soils, we recommend that final site grading activities be completed during dry weather, if possible. Construction traffic should be avoided on prepared subgrades to minimize potential disturbance.
- Contingencies in the project budget for subgrade stabilization with 3-in. dense graded base and/or breaker rock in pavement and slab areas should be increased if the project schedule requires that work proceed during adverse weather conditions.
- Earthwork construction during the early spring or late fall could be complicated as a result of wet weather and freezing temperatures. During cold weather, exposed subgrades should be protected from freezing before and after footing construction. Fill should never be placed while frozen or on frozen ground.
- All excavations extending greater than 4 ft in depth below the existing ground surface should be sloped in accordance with current OSHA standards.

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c/o Jamie Linenberg (as agent for Owner)
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- Based on observations made during the field exploration, groundwater infiltration into footing excavations is not generally expected to be a problem. Water accumulating at the base of open excavations as a result of precipitation or seepage from perched water areas should be quickly removed using pumps operating from filtered sump pits, with means and methods the contractor's responsibility.

RECOMMENDED CONSTRUCTION MONITORING

The quality of the foundation and lower level slab subgrades will be largely determined by the level of care exercised during site development. To check that earthwork and foundation construction proceeds in accordance with our recommendations, the following operations should be monitored by CGC:

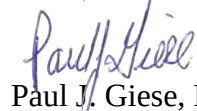
1. Subgrade evaluation following existing pavement removal, subgrade proof-rolling and undercutting;
2. Fill placement and compaction;
3. Foundation excavation; and
4. Concrete placement.

* * * * *

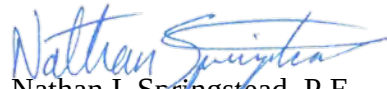
It has been a pleasure to serve you on this project. If you have any questions or need additional consultation, please contact us.

Sincerely,

CGC, INC.

A handwritten signature in blue ink, appearing to read "Paul J. Giese".

Paul J. Giese, P.E.
Senior Consulting Professional

A handwritten signature in blue ink, appearing to read "Nathan I. Springstead".

Nathan I. Springstead, P.E.
Project Engineer



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c/o Jamie Linenberg (as agent for Owner)
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Encl: Appendix A - Field Exploration
Appendix B - Test Boring Location Map
Logs of Test Borings (6)
Log of Test Boring-General Notes
Unified Soil Classification System
Appendix C - Document Qualifications
Appendix D - Recommended Compacted Fill Specifications

APPENDIX A

FIELD EXPLORATION

APPENDIX A

FIELD EXPLORATION

Six (6) Standard Penetration Test (SPT) soil borings were drilled for this exploration to depths of about 5 to 15 ft below existing site grades. Boring 1 and 2 were drilled within the planned building area and extended to a depth of 15 ft and Borings 3 through 6 were drilled within planned parking lot areas to a depth of 5 ft. The boring locations were determined by CGC and located in the field by J&J Soil Testing, Ltd., although some boring offsets were necessary due to possible underground utilities. The borings were drilled on June 3, 2019 by J&J Soil Testing, Ltd. (under subcontract to CGC) using a truck-mounted CME-45 rotary drill rig equipped with hollow-stem augers and an SPT hammer. The ground surface elevations were determined based on the procedures discussed in the text of this report. The boring locations are shown in plan on the Soil Boring Location Map presented in Appendix B.

In each boring, soil samples were obtained at 2.5-foot intervals to a depth of 10 ft and at 5 ft intervals thereafter. The soil samples were obtained in general accordance with specifications for standard penetration testing, ASTM D 1586. The specific procedures used for drilling and sampling are described below.

1. Boring Procedures between Samples

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

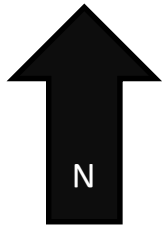
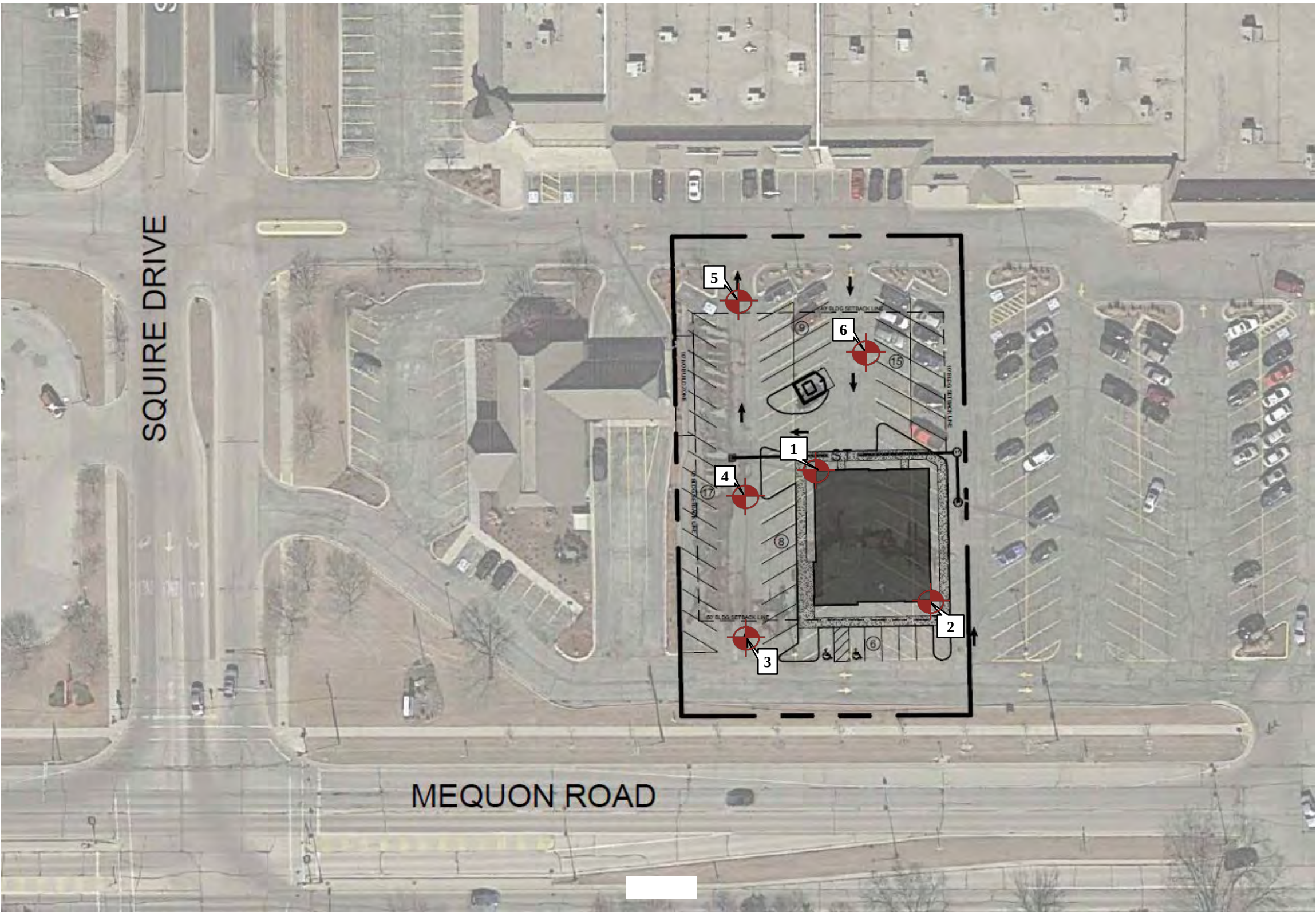
2. Standard Penetration Test and Split-Barrel Sampling of Soils
(ASTM Designation: D 1586)

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

During the field exploration, the driller visually classified the soil and prepared a field log. *Field screening of the soil samples for possible environmental contaminants was not conducted by the drillers as environmental site assessment activities were not part of CGC's work scope.* Water level observations were made in each boring during and after drilling and are shown at the bottom of each boring log. Upon completion of drilling, the borings were backfilled with bentonite (where required) to satisfy WDNR regulations and surface patched with cold-mix asphalt. The soil samples were delivered to our laboratory for visual classification and laboratory testing. The soil samples were visually classified by a geotechnical engineer using the Unified Soil Classification System. The final logs prepared by the engineer and a description of the Unified Soil Classification System are presented in Appendix B.

APPENDIX B

**TEST BORING LOCATION MAP
LOGS OF TEST BORINGS (6)
LOG OF TEST BORING-GENERAL NOTES
UNIFIED SOIL CLASSIFICATION SYSTEM**



Reduced Scale

Legend

 Denotes approximate location and number of soil borings.

Notes

1. Soil borings were conducted by J&J Soil Testing Ltd. (under subcontract with CGC, Inc.).
2. Base map is an excerpt of the *Preliminary Site Layout* (Sheet C-3, dated 4-30-2019) drawing prepared by Tarr Group.

Date: June, 2019		SOIL BORING LOCATION MAP PROPOSED WMG DENTAL OFFICE MEQUON ROAD GERMANTOWN, WISCONSIN 27	
Job No. CM19083			



LOG OF TEST BORING

Project **Proposed WMG Dental Office**
Mequon Road
Location **Germantown, Wisconsin**

Boring No. **1**
Surface Elevation (ft) **855.1 ±**
Job No. **CM19083**
Sheet **1** of **1**

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

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	P200
					2" ASPHALT / 6" BASE COURSE (Gray Crushed Limestone)					
1	18	M	22		Hard, Brown Lean CLAY; Trace Sand and Gravel (CL)	(4.5+)	16.4			
2	18	M	23			(4.5+)	17.3			
3	18	M	24			(4.5+)				
4	18	M	26		Hard, Gray Lean CLAY; Trace Sand and Gravel (CL)	(4.5+)				
5	0	M	50							
					End of Boring at 15 ft Backfilled with Bentonite Chips & Asphalt Patched					
WATER LEVEL OBSERVATIONS						GENERAL NOTES				
While Drilling ☒ NW Upon Completion of Drilling ☒ NW						Start 6/3/19 End 6/3/19				
Time After Drilling _____						Driller J&J Chief JP Rig CME-45				
Depth to Water _____						Logger JP Editor PJG				
Depth to Cave in _____						Drill Method 2.25" HSA				
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.						28				



LOG OF TEST BORING

Project Proposed WMG Dental Office
Mequon Road
Location Germantown, Wisconsin

Boring No. 2
Surface Elevation (ft) 855.5 ±
Job No. CM19083
Sheet 1 of 1

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

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	P200
						2" ASPHALT / 9" BASE COURSE (Gray Crushed Limestone)					
1		6	M	6/6"		FILL: Gray Fine to Coarse Sand and Gravel					
2A/B		14	M	21							
					5	Very Stiff to Hard, Brown Lean CLAY; Trace Sand and Gravel (CL)	(2.25)	23.8			
3		18	M	19			(4.5+)				
4		18	M	14			(2.0)				
					10						
						Very Stiff, Gray Lean CLAY; Trace Sand and Gravel (CL)					
5		18	M	15			(2.5)				
					15						
						End of Boring at 15 ft Backfilled with Bentonite Chips & Asphalt Patched					
					20						
WATER LEVEL OBSERVATIONS						GENERAL NOTES					
While Drilling <u>∇</u> <u>NW</u> Upon Completion of Drilling <u>NW</u>						Start <u>6/3/19</u> End <u>6/3/19</u>					
Time After Drilling _____						Driller <u>J&J</u> Chief <u>JP</u> Rig <u>CME-45</u>					
Depth to Water _____						Logger <u>JP</u> Editor <u>PJG</u>					
Depth to Cave in _____						Drill Method <u>2.25" HSA</u>					
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.											



LOG OF TEST BORING

Project Proposed WMG Dental Office
Mequon Road
Location Germantown, Wisconsin

Boring No. 3
Surface Elevation (ft) 855.9 ±
Job No. CM19083
Sheet 1 of 1

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

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	P200
					3" ASPHALT / 5.5" BASE COURSE (Gray Crushed Limestone)					
1A/B	18	M	7		FILL: Dark Gray Lean Clay, Trace Organic Matter, Trace Sand and Gravel	(2.25)	17.6			
					Very Stiff, Gray Lean CLAY; Trace Fine Roots, Trace Sand and Gravel (CL)					
2	18	M	9		Very Stiff, Gray and Brown Mottled Lean CLAY; Trace Sand and Gravel (CL)	(2.25)				
				5	End of Boring at 5 ft Backfilled with Soil Cuttings & Asphalt Patched					
				10						
				15						
				20						

WATER LEVEL OBSERVATIONS					GENERAL NOTES					
While Drilling	<u>∇</u>	<u>NW</u>	Upon Completion of Drilling	<u>NW</u>	Start	<u>6/3/19</u>	End	<u>6/3/19</u>		
Time After Drilling					Driller	<u>J&J</u>	Chief	<u>JP</u>	Rig	<u>CME-45</u>
Depth to Water					Logger	<u>JP</u>	Editor	<u>PJG</u>		
Depth to Cave in					Drill Method	<u>7" Flight Auger</u>				
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.										



LOG OF TEST BORING

Project Proposed WMG Dental Office
Mequon Road
Location Germantown, Wisconsin

Boring No. 5
Surface Elevation (ft) 856.2 ±
Job No. CM19083
Sheet 1 of 1

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

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	P200
					3" ASPHALT / 5" BASE COURSE (Gray Crushed Limestone)					
1A/B	12	M	22		Hard, Brown Mottled Lean CLAY; Trace Sand and Gravel (CL)	(4.5+)	13.9			
2	18	M	18			(4.5+)				
				5	End of Boring at 5 ft Backfilled with Soil Cuttings & Asphalt Patched					
				10						
				15						
				20						

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ NW Upon Completion of Drilling NW
Time After Drilling _____
Depth to Water _____
Depth to Cave in _____

Start 6/3/19 End 6/3/19
Driller J&J Chief JP Rig CME-45
Logger JP Editor PJG
Drill Method 7" Flight Auger

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



LOG OF TEST BORING

Project Proposed WMG Dental Office
Mequon Road
Location Germantown, Wisconsin

Boring No. 6
Surface Elevation (ft) 855.8 ±
Job No. CM19083
Sheet 1 of 1

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

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	P200
					3" ASPHALT / 6" BASE COURSE (Gray Crushed Limestone)					
1A/B	18	M	14		Hard, Brown and Black Lean CLAY; Trace Sand and Gravel (CL) (POSSIBLE FILL)	(4.5+)	14.7			
					Hard, Brown Mottled Lean CLAY; Trace Sand and Gravel (CL)					
2	18	M	22			(4.5+)				
				5	End of Boring at 5 ft Backfilled with Soil Cuttings & Asphalt Patched					
				10						
				15						
				20						

WATER LEVEL OBSERVATIONS

While Drilling ☒ NW Upon Completion of Drilling NW
Time After Drilling _____
Depth to Water _____
Depth to Cave in _____

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

GENERAL NOTES

Start 6/3/19 End 6/3/19
Driller J&J Chief JP Rig CME-45
Logger JP Editor PJG
Drill Method 7" Flight Auger

LOG OF TEST BORING

General Notes

Descriptive Soil Classification

GRAIN SIZE TERMINOLOGY

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

Plasticity characteristics differentiate between silt and clay.

GENERAL TERMINOLOGY

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

RELATIVE DENSITY

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

RELATIVE PROPORTIONS OF OF COHESIONLESS SOILS

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

CONSISTENCY

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

ORGANIC CONTENT BY COMBUSTION METHOD

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

PLASTICITY

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

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

SYMBOLS

DRILLING AND SAMPLING

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

LABORATORY TESTS

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

WATER LEVEL MEASUREMENT

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

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

CGC, Inc.

Madison - Milwaukee

UNIFIED SOIL CLASSIFICATION SYSTEM

UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART

COARSE-GRAINED SOILS

(more than 50% of material is larger than No. 200 sieve size.)

Clean Gravels (Less than 5% fines)

GRAVELS
More than 50% of coarse fraction larger than No. 4 sieve size



GW

Well-graded gravels, gravel-sand mixtures, little or no fines



GP

Poorly-graded gravels, gravel-sand mixtures, little or no fines

Gravels with fines (More than 12% fines)



GM

Silty gravels, gravel-sand-silt mixtures

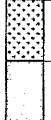


GC

Clayey gravels, gravel-sand-clay mixtures

Clean Sands (Less than 5% fines)

SANDS
50% or more of coarse fraction smaller than No. 4 sieve size



SW

Well-graded sands, gravelly sands, little or no fines



SP

Poorly graded sands, gravelly sands, little or no fines

Sands with fines (More than 12% fines)



SM

Silty sands, sand-silt mixtures



SC

Clayey sands, sand-clay mixtures

FINE-GRAINED SOILS

(50% or more of material is smaller than No. 200 sieve size.)

SILTS AND CLAYS
Liquid limit less than 50%



ML

Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey silts with slight plasticity



CL

Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays



OL

Organic silts and organic silty clays of low plasticity

SILTS AND CLAYS
Liquid limit 50% or greater



MH

Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts



CH

Inorganic clays of high plasticity, fat clays



OH

Organic clays of medium to high plasticity, organic silts

HIGHLY ORGANIC SOILS



PT

Peat and other highly organic soils

LABORATORY CLASSIFICATION CRITERIA

GW $C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3

GP Not meeting all gradation requirements for GW

GM Atterberg limits below "A" line or P.I. less than 4

GC Atterberg limits above "A" line with P.I. greater than 7

Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols

SW $C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3

SP Not meeting all gradation requirements for GW

SM Atterberg limits below "A" line or P.I. less than 4

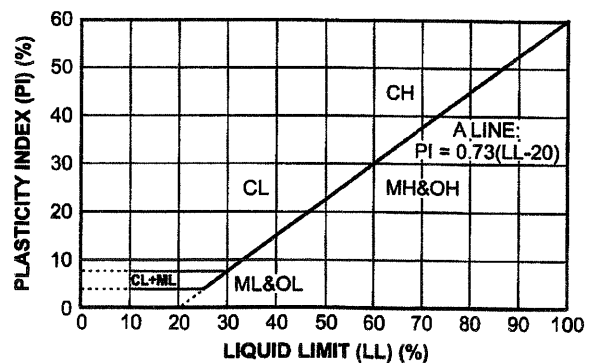
SC Atterberg limits above "A" line with P.I. greater than 7

Limits plotting in shaded zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols.

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

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

PLASTICITY CHART



APPENDIX C

DOCUMENT QUALIFICATIONS

APPENDIX C

DOCUMENT QUALIFICATIONS

I. GENERAL RECOMMENDATIONS/LIMITATIONS

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

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

II. IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING REPORT

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes. While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

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

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

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

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

READ THE FULL REPORT

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

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

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

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

SUBSURFACE CONDITIONS CAN CHANGE

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

MOST GEOTECHNICAL FINDINGS ARE PROFESSIONAL OPINION

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgement to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ - sometimes significantly - from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most

effective method of managing the risks associated with unanticipated conditions.

A REPORT'S RECOMMENDATIONS ARE NOT FINAL

Do not over-rely on the confirmation-dependent recommendations included in your report. *Those confirmation-dependent recommendations are not final*, because geotechnical engineers develop them principally from judgement and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *CGC cannot assume responsibility or liability for the report's confirmation-dependent recommendations if we do not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

A GEOTECHNICAL ENGINEERING REPORT IS SUBJECT TO MISINTERPRETATION

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical engineering report. Confront that risk by having CGC participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

DO NOT REDRAW THE ENGINEER'S LOGS

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

GIVE CONSTRUCTORS A COMPLETE REPORT AND GUIDANCE

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure constructors have sufficient time to perform additional study.* Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

READ RESPONSIBILITY PROVISIONS CLOSELY

Some clients, design professionals, and constructors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic

expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineer's responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

ENVIRONMENTAL CONCERNS ARE NOT COVERED

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

OBTAIN PROFESSIONAL ASSISTANCE TO DEAL WITH MOLD

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; *none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention.* *Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.*

RELY ON YOUR GEOTECHNICAL ENGINEER FOR ADDITIONAL ASSISTANCE

Membership in the Geotechnical Business Council (GBC) of Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with CGC, a member of GBC, for more information.

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Geotechnical Business Council
of the Geoprofessional Business Association
8811 Colesville Road, Suite G 106
Silver Spring, MD 20910

APPENDIX D

RECOMMENDED COMPACTED FILL SPECIFICATIONS

APPENDIX D

CGC, INC.

RECOMMENDED COMPACTED FILL SPECIFICATIONS

General Fill Materials

Proposed fill shall contain no vegetation, roots, topsoil, peat, ash, wood or any other non-soil material which by decomposition might cause settlement. Also, fill shall never be placed while frozen or on frozen surfaces. Rock, stone or broken concrete greater than 6 in. in the largest dimension shall not be placed within 10 ft of the building area. Fill used greater than 10 ft beyond the building limits shall not contain rock, boulders or concrete pieces greater than a 2 sq ft area and shall not be placed within the final 2 ft of finish subgrade or in designated utility construction areas. Fill containing rock, boulders or concrete pieces should include sufficient finer material to fill voids among the larger fragments.

Special Fill Materials

In certain cases, special fill materials may be required for specific purposes, such as stabilizing subgrades, backfilling undercut excavations or filling behind retaining walls. For reference, WisDOT gradation specifications for various types of granular fill are attached in Table 1.

Placement Method

The approved fill shall be placed, spread and leveled in layers generally not exceeding 10 in. in thickness before compaction. The fill shall be placed at a moisture content capable of achieving the desired compaction level. For clay soils or granular soils containing an appreciable amount of cohesive fines, moisture conditioning will likely be required.

It is the Contractor's responsibility to provide all necessary compaction equipment and other grading equipment that may be required to attain the specified compaction. Hand-guided vibratory or tamping compactors will be required whenever fill is placed adjacent to walls, footings, columns or in confined areas.

Compaction Specifications

Maximum dry density and optimum moisture content of the fill soil shall be determined in accordance with modified Proctor methods (ASTM D1557). The recommended field compaction as a percentage of the maximum dry density is shown in Table 2. Note that these compaction guidelines would generally not apply to coarse gravel/stone fill. Instead, a method specification would apply (e.g., compact in thin lifts with a vibratory compactor until no further consolidation is evident).

Testing Procedures

Representative samples of proposed fill shall be submitted to CGC, Inc. for optimum moisture-maximum density determination (ASTM D1557) prior to the start of fill placement. The sample size should be approximately 50 lb.

CGC, Inc. shall be retained to perform field density tests to determine the level of compaction being achieved in the fill. The tests shall generally be conducted on each lift at the beginning of fill placement and at a frequency mutually agreed upon by the project team for the remainder of the project.

Table 1
Gradation of Special Fill Materials

Material	WisDOT Section 311	WisDOT Section 312	WisDOT Section 305			WisDOT Section 209		WisDOT Section 210
	Breaker Run	Select Crushed Material	3-in. Dense Graded Base	1 1/4-in. Dense Graded Base	3/4-in. Dense Graded Base	Grade 1 Granular Backfill	Grade 2 Granular Backfill	Structure Backfill
Sieve Size	Percent Passing by Weight							
6 in.	100							
5 in.		90-100						
3 in.			90-100					
1 1/2 in.		20-50	60-85					100
1 1/4 in.				95-100				
1 in.					100			
3/4 in.			40-65	70-93	95-100			
3/8 in.				42-80	50-90			
No. 4			15-40	25-63	35-70	100 (2)	100 (2)	25-100
No. 10		0-10	10-30	16-48	15-55			
No. 40			5-20	8-28	10-35	75 (2)		
No. 100						15 (2)	30 (2)	
No. 200			2-12	2-12	5-15	8 (2)	15 (2)	15 (2)

Notes:

1. Reference: Wisconsin Department of Transportation *Standard Specifications for Highway and Structure Construction*.
2. Percentage applies to the material passing the No. 4 sieve, not the entire sample.
3. Per WisDOT specifications, both breaker run and select crushed material can include concrete that is 'substantially free of steel, building materials and other deleterious material'.

Table 2
Compaction Guidelines

Area	Percent Compaction (1)	
	Clay/Silt	Sand/Gravel
<u>Within 10 ft of building lines</u>		
Footing bearing soils	93 - 95	95
Under floors, steps and walks		
- Lightly loaded floor slab	90	90
- Heavily loaded floor slab and thicker fill zones	92	95
<u>Beyond 10 ft of building lines</u>		
Under walks and pavements		
- Less than 2 ft below subgrade	92	95
- Greater than 2 ft below subgrade	90	90
Landscaping	85	90

Notes:

1. Based on Modified Proctor Dry Density (ASTM D 1557)

APPENDIX C

Not Included

APPENDIX D

Not Included

APPENDIX E

Not Included

APPENDIX F

Flexstorm Inlet Filter Manufacture's Specifications



FILTER BAG OPTIONS

FLEXSTORM offers seven different filter bag options for any of the framing styles. For complete test results visit www.inletfilters.com

FLEXSTORM FILTER BAGS	STANDARD BAG P/N (22" depth)	SHORT BAG P/N (12" depth)
FX: Standard Woven Bag	FX	FX-S
FX+: Woven w/ MyCelx	FXP	FXP-S
FXO: Woven w/ Oil Boom	FXO	FXO-S
PC: Post Construction Bag	PC	PC-S
PC+: PC Bag w/ MyCelx	PCP	PCP-S
LL: Litter and Leaf Bag	LL	LL-S
IL: IDOT NonWoven Bag	IL	IL-S

FILTER BAG TEST RESULTS

FX FILTRATION EFFICIENCY = 82% †

† Large scale, 3rd party testing per ASTM D 7351, Standard Test Method for Determination of Sediment Retention Device Effectiveness in Sheet Flow Application using 7% USDA Sandy Loam

PC/PC+ TSS = 99% TPH = 97% ‡

‡ Large scale testing at 90 GPM. 3rd party results using US Silica OK-110 sand at 1750 mg/L measuring TSS per SM 2540D. TPH tested at 243 mg/L used motor oil using EPA Method 1664A.

FILTER BAG SPECIFICATIONS & CAPABILITIES

Bag Type (P/N)	Clean Water Flow Rate (GPM/SqFt)	Min A.O.S. (US Sieve)
Woven (FX)	200	40
Post Construction (PC)	137	140
NonWoven (IL)	145	70
Litter & Leaf Bag (LL)	High	3.5

Total Bypass Capacity:

Bypass capacity will vary with each size drainage structure. Flexstorm designs filter bypass to meet the minimum design flow of the particular drainage structure.

Standard Bag Sizes (match frame sizes) §	Solids Stor- age Capacity (CuFt)	Filtered Flow Rate at 50% Max (CFS)			Oil Retention (Oz)		
		FX	PC	IL	PC*	PCP**	FX+
Small	1.6	1.2	0.8	0.9	66	155	89
Medium	2.1	1.8	1.2	1.3	96	185	89
Large	3.8	2.2	1.5	1.6	120	209	89
XL	4.2	3.6	2.4	2.6	192	370	178

* PC filter bag at 50% max adsorption capacity

** PC filter bag at 50% capacity and MyCelx skimmer at 100% capacity

§ Bag Sizes match the framing sizes based on clear opening dimensions. Standard bags are 22" in depth.

Short bags are 12" in depth, reducing solids storage capacity by approximately 50%.

APPENDIX G

Not Included

APPENDIX H

Not Included

APPENDIX I

Not Included

MMSD CHAPTER 13 SURFACE WATER AND STORMWATER REVIEWS STORMWATER MANAGEMENT PLAN SUBMITTAL CHECKLIST

Chapter 13 Surface Water and Storm Water Reviews Storm Water Management Plan Submittal Checklist

Municipality: Village of Germantown Date submitted: 07/11/19
Name of contact person: Jamie Linenberg Telephone number: 765-491-5066
Project name: Germantown Dental Office
☒ New submittal
☐ Resubmittal #: _____

The following items must be provided in a Storm Water Management Plan (SMP) to be considered a complete submittal and initiate the District's Chapter 13 review process:

- ☒ **Transmittal Letter.** Letter must state municipality has reviewed and approved the SMP per the Chapter 13 requirements.
- ☒ **Narrative Description.** Narrative should describe the site and summarize the analysis performed. It should include:
 - Site location (**include watershed and subwatershed**)
 - Description of existing and proposed conditions
 - Methods used for analysis
 - Discussion of the critical duration analysis performed if using the SEWRPC 90th distribution
 - Summary of calculations and results
 - Explanation/Justification of modeling assumptions used if not consistent with TR-55
- ☒ **Site Plan.** Plan should be clearly labeled, drawn at a reasonable scale and contain:
 - Owner's property line
 - District and municipal easements
 - Public streets
 - State plane coordinate reference
 - Watercourses, drainage ways and overflow paths
 - Storm sewers
 - Offsite drainage entry point
 - Offsite drainage watershed delineation
 - Existing detention facilities including those of adjacent properties if affected by drainage from the site
 - Existing natural storage areas
 - Existing buildings and structures
 - Existing contours at a minimum of 2-foot intervals
 - Proposed low impact development (LID) [a/k/a Green Infrastructure (GI)] features (if applicable)
 - Proposed contours at a minimum of 2-foot intervals
 - Proposed impervious areas

- N/A ☐ **Drainage Basin Delineation.** Onsite and offsite areas tributary to the detention basin(s) must be delineated. Flow paths should be clearly marked.
- N/A ☐ **Drainage Basin Data.**
- Basin areas
 - Impervious areas
 - Soil types (source reference)
 - Curve number calculations
 - Time of concentration calculations
- N/A ☐ **Proposed Conditions Hydrograph.**
- N/A ☐ **Proposed Conditions with Detention Hydrograph.**
- N/A ☐ **Critical Duration Analysis (if applicable).**
- N/A ☐ **Detention Basin Design.**
- Elevation versus storage relation for each detention basin
 - Computer model analysis of hydrograph routing through the pond for the 2- and 100-year event or calculations [Note: include model data for 2- and 100-year events or calculations; other storms event can be submitted but will not be reviewed.]
 - Peak outflow versus required unit release rate or presentation of runoff volume during critical time period shown in table or hydrograph plot
- N/A ☐ **Outlet Design.**
- Drawing or sketch
 - Rating curve
 - Calculations
 - If modeling with a free discharge, identify where storm sewer/ditch drains and invert elevation
- N/A ☐ **If porous pavement used**
- Justification of void space used (30-40% is typical)
- N/A ☐ **Computer Model Input and Output or Hydrograph and Routing Calculations.**
- N/A ☐ **LID Quicksheet pages as appropriate to document use of Low Impact Development onsite.**
- ☒ **Maintenance Plan and Responsible Party Designation.**
- Maintenance plan
 - Identification of responsible party
 - Funding source
 - Signed letter

N/A **Additional Items Required when the Volumetric Design Procedure is Used:**

- ☐ **Existing Conditions Hydrograph.**
- ☐ **Flood Volume Calculations.**
 - Critical time period used
 - Computation of existing and proposed flood volume

Additional Items Required when a Multi-site Analysis is Performed:

- ☐ **Use of the Volumetric Design Procedure for Storage Facilities.**
- ☐ **Analysis of Ultimate Development in Tributary Watershed.**
- ☐ **Construction Sequence and Schedule.** Plan must show adequate storm water management will be provided throughout the multiple phases of construction.
- ☐ **Identification of All Responsible Parties.**
- ☐ **Analysis of Required Funding.**
- ☐ **Financial and Legal Documentation.**
- ☐ **Identification of Required Drainage/Conveyance Improvements Between the Developments of the Multi-site Facility.**
- ☐ **Determine Effective Conveyance to Multiple Storage Facilities.**
- ☐ **Multi-jurisdictional Coordination Plan and Necessary Agreements.**

N/A **Items Required for Land Disturbances Greater than 2 Acres and Less than 0.5 Acres of New Impervious Surface:**

- ☐ **Transmittal Letter.** Letter must state community has reviewed and approved the SMP per the Chapter 13 requirements.
- ☐ **Narrative Description.** Narrative should describe the site and summarize the analysis performed. It should include:
 - Site location (include watershed and subwatershed)
 - Description of existing and proposed conditions
 - Methods used for analysis
 - Discussion of the critical duration analysis performed if using the SEWRPC 90th distribution
 - Summary of calculations and results

- ☐ **Site Plan.** Plan should be clearly labeled, drawn at a reasonable scale and contain:
 - Owner's property line
 - District and municipal easements
 - Public streets
 - State plane coordinate reference
 - Watercourses, drainage ways and overflow paths
 - Storm sewers
 - Offsite drainage entry point
 - Offsite drainage watershed delineation
 - Existing detention facilities including those of adjacent properties if affected by drainage from the site
 - Existing natural storage areas
 - Existing buildings and structures
 - Existing contours at a minimum of 2-foot intervals
 - Proposed low impact development (LID) [a/k/a Green Infrastructure (GI)] features (if applicable)
 - Proposed contours at a minimum of 2-foot intervals
 - Proposed impervious areas
 - Proposed areas of land disturbing activity, which includes demolition and construction

- ☐ **Drainage Basin Delineation.** Onsite and offsite areas tributary to the detention basin(s) must be delineated. Flow paths should be clearly marked.

- ☐ **Drainage Basin Data.**
 - Basin areas
 - Impervious areas
 - Soil types (source reference)
 - Curve number calculations
 - Time of concentration calculations

- ☐ **Proposed Conditions Hydrograph.**

- ☐ **Proposed Conditions with Detention Hydrograph.**

- ☐ **Detention Basin Design (if applicable).**
 - Elevation versus storage relation for each detention basin
 - Computer model analysis of hydrograph routing through the pond for the 2- and 100-year event or calculations [Note: include model data for 2- and 100-year events or calculations; other storms event can be submitted but will not be reviewed.]
 - Peak outflow versus required unit release rate or presentation of runoff volume during critical time period shown in table or hydrograph plot

- ☐ **Outlet Design (if applicable).**
 - Drawing or sketch
 - Rating curve
 - Calculations
- ☐ **Computer Model Input and Output or Hydrograph and Routing Calculations.**
- ☐ **LID Quicksheet pages as appropriate to document use of Low Impact Development onsite.**
- ☐ **Maintenance Plan and Responsible Party Designation.**
 - Maintenance plan
 - Identification of responsible party
 - Funding source
 - Signed letter
- ☐ **File Naming if submitting electronically (via email or ESPS portal)**
 - Project name _Cover: Letter from municipality, introduction/tech memo
 - Project name _Plans: All pre and post plans for the site
 - Project name _Model: each storm event needs to be booked marked or can be submitted via separate PDFs. For example: Green Street_2yrProposed.pdf

Submit completed submittal packages to:	Debra Jensen, Planning Services Supervisor Milwaukee Metropolitan Sewerage District 260 West Seeboth Street Milwaukee, WI 53204 District SharePoint Website (Starting January 2016) Email: DJensen@mmsd.com
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RESOLUTION NO. 04-15

ADOPTING CONDITIONS AND RESTRICTIONS FOR THE GERMANTOWN MARKETPLACE PLANNED DEVELOPMENT DISTRICT ("GERMANTOWN MARKETPLACE PDD")

WHEREAS, Perspective Design Inc., agent for Compass Properties LLC, property owner (hereinafter "Developer") has applied for a Planned Development District (PDD) overlay on a 11.6785 acre parcel located on Mequon Road in the Village of Germantown more particularly described in Exhibit A attached hereto (the "PDD Property"); and

WHEREAS, Section 17.27(4) of the Village of Germantown Municipal Code allows for the adoption of conditions and restrictions for Planned Development Districts; and

WHEREAS, the Germantown Plan Commission on November 24, 2014, reviewed the rezoning application and forwarded a positive recommendation for the rezoning and general site plan to the Village Board;

NOW, THEREFORE BE IT RESOLVED that the Village Board of the Village of Germantown hereby adopts the following specific conditions and restrictions for the Germantown Marketplace Planned Development District that shall apply to all/any development on the property:

1. **General Development Plan.** Exhibit B, the detailed site development plan dated November 14, 2014, shall be considered the General Development Plan for the Germantown Marketplace PDD, including the size and orientation of the building, setbacks, and location of access points, parking stalls and layout. Further, because the PDD property contains existing development, including the multi-tenant commercial retail building on Lot 1 and a single-tenant bank on Lot 2, all development and re-development, including any architectural design, exterior material and color and/or any other alterations or improvements affecting the structure or appearance of said buildings, within the PDD property shall be consistent with the General Development Plan in Exhibit B and the specific site development and building plans previously approved for the existing development contained on Lot 1 and Lot 2 (on file in the Village of Germantown Community Development Department). Any new development or revisions to existing development proposed to the Germantown Marketplace PDD property may require review and approval by the Village Plan Commission and/or Village Board pursuant to Village codes and regulations as deemed necessary by the Zoning Administrator.
2. **Certified Survey Map.** A certified survey map (CSM) has been submitted to the Village for approval concurrently with the Germantown Marketplace PDD rezoning. Said CSM is for purposes of dividing the PDD Property into three (3) separate parcels: a 9.67 acre parcel (Lot 1); a 1.15 acre parcel (Lot 2); and a .87 acre parcel (Lot 3).

3. **Land Use and Development Regulations.** The land uses allowed in the Germantown Marketplace PDD shall be as set forth in the B-2: Community Business Zoning District regulations (Zoning Code Section 17.28), except as amended in Exhibit C. All uses and development within the Germantown Marketplace PDD shall comply with all applicable Zoning Code requirements and regulations set forth in Section 17 of the Village Municipal Code except as amended in Exhibit C. The amended requirements and regulations in Exhibit C reflect the current type, amount and relative location of existing development completed prior to the creation of the Germantown Marketplace PDD and comprise the minimum changes to the applicable Zoning Code requirements necessary to ensure code compliance.
4. **Cross-Access and Shared Parking.** Perpetual cross-access and shared parking easement agreements necessary to ensure that all owners, employees and patrons of the businesses on Lots 1, 2 and 3 are able to gain access to their property and utilize parking stalls on and across each of the other lots shall be prepared and submitted to the Village for review and approval prior to recording the certified survey map (CSM).
5. **Architectural Design & Exterior Materials.** The architectural design and exterior materials for the existing buildings cannot be changed without review and approval by the Plan Commission and/or Village Board. Any new development proposed on Lot 3, and, any proposed additions, expansions, or modifications to the existing buildings on Lot 1 and Lot 2 shall contain the same or similar architectural design, exterior materials and colors as the existing buildings unless approved by the Village Plan Commission.
6. **Lot 3 Development Requirements.** On November 24, 2014, the Plan Commission reviewed the proposal to create the Germantown Marketplace PDD. At that time, concern was expressed that the creation and any future development of the .87-acre Lot 3 would likely result in a net reduction of parking stalls available for use by the owner, employees and patrons of all the businesses located on Lots 1, 2 and 3. Further, the Plan Commission expressed concern that the design of the existing access driveway/intersection on Mequon Road is unsafe and inefficient, and, that additional traffic associated with the development of Lot 3 may make the current problems at this driveway worse. Consequently, any development proposal for Lot 3 submitted to the Village shall include a traffic impact, circulation and parking study of the existing and proposed development. Said study shall include, but not be limited to, a level of service and safety assessment of existing and future development traffic at the Mequon Road and Squire Drive access driveways and adjacent roadways to determine what, if any, changes or improvements are necessary to improve traffic circulation and mitigate any potential level of service and/or safety problems at the access driveway intersections. Said study shall also include an assessment of existing and future parking demand and supply for the entire Germantown Marketplace PDD. Changes or improvements deemed necessary by the Village to parking and/or access shall be completed concurrent with or prior to development of Lot 3.

Germantown Marketplace Planned Development District (PDD)
Resolution No. 04-15

Introduced by: Tester Baum

Adopted: January 5, 2015

Vote:


Dean Wolter, Village President

ATTEST:

Deanna Braunschweig
Deanna Braunschweig, Village Clerk

EXHIBIT A

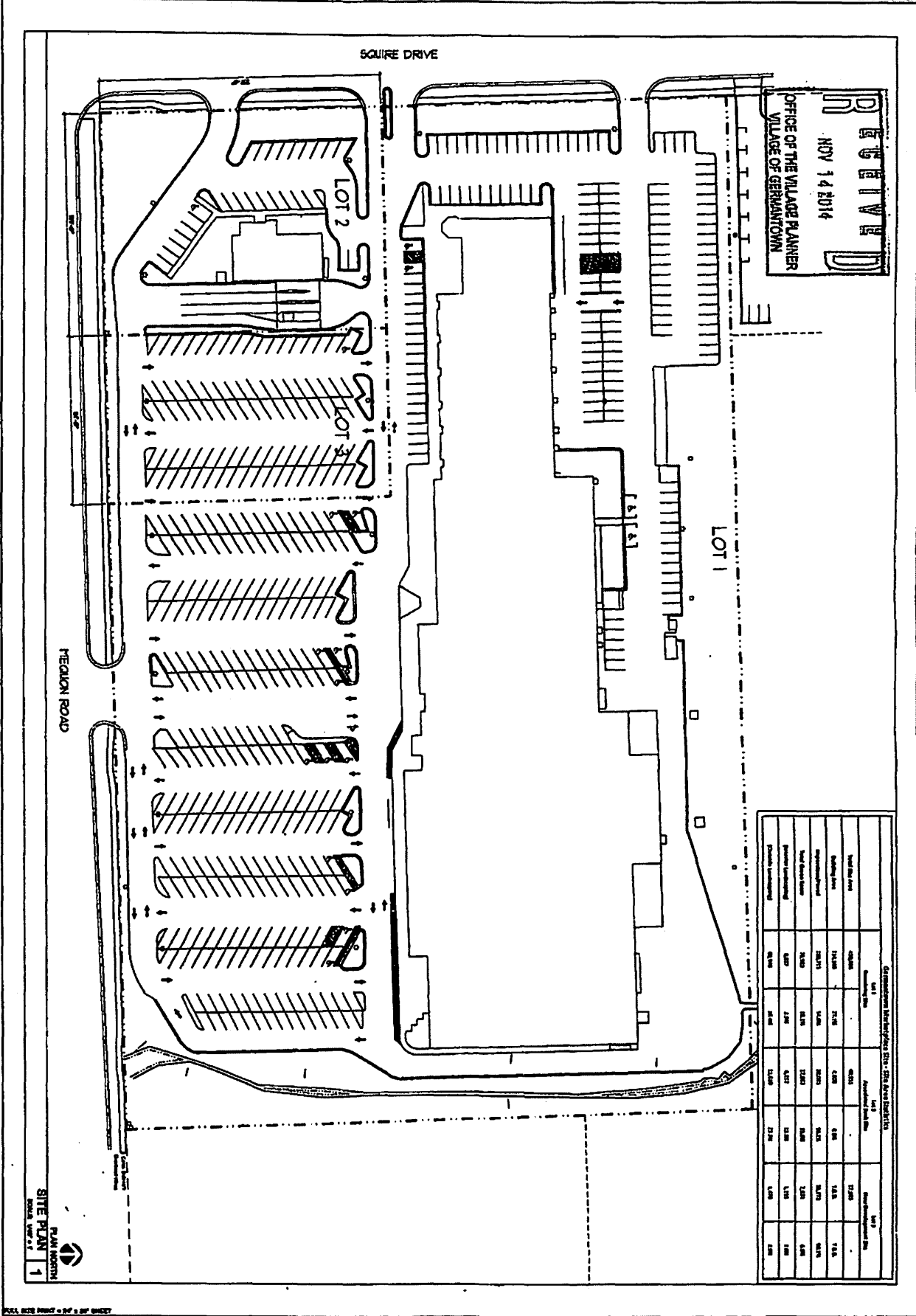
Germantown Marketplace Planned Development District (PDD)
Legal Description

Lot 1 of Certified Survey Map #3414, located in the SW 1/4 of the SE 1/4 of Section 22, Township 9 North, Range 20 East, Village of Germantown, Washington County, Wisconsin, more fully described as follows:

Commencing at the Southwest Corner of said SE ¼ of Section 22; thence N 01°58'25"W., along the west line of the SE ¼, 65.00 feet; thence N 88°33'18"E., 80.00 feet to the east line of Squire Drive, the south line of Mequon Road and the point of beginning; thence continue N 88°33'18"E., along the south line of Mequon Road, 908.34 feet; thence N 01°57'19"W., 560.02 feet; thence S 88°33'18"W., 908.52 feet to the east line of Squire Drive thence S 01°58'25"E., along the east line, 506.02 feet to the point of beginning. Said lands contain 508,716 square feet or 11.6785 acres.

EXHIBIT B

Germantown Marketplace Planned Development District (PDD)
General Development Plan



PERSPECTIVE DESIGN, INC.
11525 W. North Avenue
Wauwatosa, WI 53226
Tel: 414.321-1780 Fax: 414.321-1781

Site Plan For:
Germantown Marketplace PDD
Meadon Road & Squire Drive
Germantown, WI 53022

SP1

DATE: 10/14/14
BY: [Signature]
CHECKED: [Signature]
DATE: 10/14/14

NOT FOR CONSTRUCTION

- PRELIMINARY -
FOR ESTIMATING AND REVIEW ONLY

EXHIBIT C

Germantown Marketplace Planned Development District (PDD)
Amended Zoning Code Requirements and Regulations

CHAPTER 17 ZONING CODE

CHAPTER 17 ZONING CODE ⁽¹⁾

17.29 B-2 COMMUNITY BUSINESS DISTRICT.

The B-2 District is intended to provide for individual or large groups of retail and customer service retail establishments in a "shopping center" setting. This type of district is usually located at or near the intersections of 2 arterial streets or highways, but separated from the traditional "central business district" and designed for the convenience of weekly or monthly one-stop shopping and includes such amenities as increased open space and ample off-street parking and loading areas and architectural screening or landscaping.

(1) **PERMITTED PRINCIPAL USES.** (Rep. & Recr. Ord. #1-95) The following uses and activities:

- (a) Animal hospitals, clinics.
- (b) Antique stores.
- (c) Appliance sales and service.
- (d) Art, dance or music studios.
- (e) Auto accessory sales and service.
- (f) Bakeries, including the baking of goods for local sale.
- (g) Banks, savings and loan associations and other financial institutions.
- (h) Barber and beauty stops.
- (i) Book stores.
- (j) Bowling/pool establishments.
- (k) Business offices.
- (l) Candy and confectionery stores.
- (m) Caterers.
- (n) Clock/watch shops.
- (o) Clothing repair shops.
- (p) Clothing stores.
- (q) Clubs, fraternities, lodges and meeting places of a noncommercial nature.
- (r) Computer sales and service.
- (s) Convenience food stores.
- (t) Delicatessens.
- (u) Dentist, physician or other similar professional health offices.
- (v) Department stores, maximum 50,000 square feet.
- (w) Drug stores.
- (x) Dry cleaning pickup and delivery establishments.
- (y) Electrical supply stores.
- (z) Financial or tax consultants.

CHAPTER 17 ZONING CODE

- (aa) Florists.
- (bb) Furniture stores.
- (cc) Furniture upholstery/repair.
- (dd) Furriers.
- (ee) Garden supplies, horticultural services.
- (ff) Gift stores.
- (gg) Grocery stores.
- (hh) Hardware stores.
- (ii) Heating supply stores.
- (jj) Hobby shops.
- (kk) Indoor health or recreation establishments.
- (ll) Indoor tennis/racket ball establishments.
- (mm) Indoor theaters.
- (nn) Interior decorators.
- (oo) Jewelry stores.
- (pp) Liquor stores.
- (qq) Meat, fish or poultry markets.
- (rr) Museums.
- (ss) Music and musical instrument stores.
- (tt) Optical stores.
- (uu) Paint, glass and wallpaper stores.
- (vv) Pet shops.
- (ww) Photo and film pickup stores.
- (xx) Photo studios.
- (yy) Photographic supplies and camera stores.
- (zz) Plumbing supply stores.
- (aaa) Professional offices.
- (bbb) Quick printing shops.
- (ccc) Radio broadcasting studios.
- (ddd) Real estate and insurance offices.
- (eee) Restaurants. (Am. Ord. #7-04)
- (fff) Self-service carwashes.
- (ggg) Self-service laundries.
- (hhh) Shoe repair shops.
- (iii) Shoe stores.
- (jjj) Soda fountains.

CHAPTER 17 ZONING CODE

- (kkk) Sporting goods stores.
- (lll) Stationery stores.
- (mmm) Variety stores.
- (nnn) Video sales/rental.
- (ooo) Secondhand stores less than 5,000 square feet in area. (Cr. Ord. #26-97)
- (ppp) Home improvement stores. (Cr. Ord. #17-98)
- (qqq) At the time of the creation of this PDD, any store larger than 50,000 square feet.

(2) PERMITTED ACCESSORY USES. (Rep. & Recr. Ord. #1-95)

- (a) Attached garages for storage of vehicles used in conjunction with the operation of a business.
- (b) Off-street parking and loading areas.
- (c) Roof-mounted satellite transmitting and receiving fixtures.
- (d) Drive-through establishments and facilities provided that all such facilities meet the yard requirements set forth herein, any protective canopy shall be located not closer than 10 feet 25 feet to the property line or a 'No-Build Easement', and any parking stall or driveway, shall not be closer than 50 feet to a residential district lot line (per section 17.45(1)(b)). (Cr. Ord. #7-04, Renum. MCC)
- (e) Outdoor vending (see section 17.50). (Cr. Ord. #24-10)

(3) CONDITIONAL USES. (Rep. & Recr. Ord. #1-95) See section 17.42 of this chapter.

- (a) Amusement arcades.
- (b) Any use similar to a permitted principal use.
- (c) Churches, length of duration and permit renewal schedule as determined by the Village Board. (Am. Ord. #16-99; Cr. Ord. #2-01; Am. Ord. #37-04)
- (d) Reserved. (Rep. Ord. #7-04)
- (e) Hotels or motels.
- (f) Parks, leisure or ornamental.
- (g) Petroleum service stations.
- (h) Theaters, assembly halls.
- (i) Transit and car pooling parking areas.
- (j) Transit bus stations.
- (k) Wind energy conversion systems.
- (l) Residential quarters for the owner or proprietor or caretaker/watchman provided that such quarters are in the principal building, not on the ground level floor, and that entrances and exits to such quarters are direct to the exterior of the building. There shall also be a minimum floor area of 400 square feet for an efficiency unit, 600 square feet for a one-bedroom unit and 750 square feet for a 2-bedroom unit. A dwelling unit with more than 2 bedrooms shall not be allowed. Residential quarters in a B-2 District shall be reviewed by the Plan Commission in the same manner provided for in section 17.24 of this chapter.
- (m) Detached accessory buildings.
- (n) Taverns.

- GERMANTOWN, WISCONSIN

CHAPTER 17 ZONING CODE

- (o) Recreational vehicle sales and services.
 - (p) Child care, day care centers or preschool centers licensed by the State and in continuous compliance with all applicable State and local regulations. (Cr. Ord. #34-97)
 - (q) Fenced yards for the sale and storage of goods and materials directly related to a permitted use. (Cr. Ord. #17-98)
 - (r) Any store larger than 50,000 square feet. (Cr. Ord. #27-98)
 - (s) Tattoo and body piercing establishments. (Cr. Ord. #06-09)
 - (t) Off-site parking areas (see section 17.45). (Cr. Ord. #9-10)
- (3a) **TEMPORARY USES.** (Cr. Ord. #32-91) Any use listed as a permitted use within the district of a limited duration as established in section 17.07(2a) of this chapter and as defined in section 17.08(83) of this chapter.
- (4) **LOT, YARD AND BUILDING REQUIREMENTS.** (Rep. & Recr. Ord. #1-95; Am. Ord. #27-98)

Lot frontage at setback	Minimum <u>150 feet</u> 500 ft.
Lot area	Minimum <u>35,000 sq. ft.</u> 390,000 sq. ft.
Principal buildings:	
Front yard	Minimum <u>50 ft.</u> 100 ft.
Side yards	Minimum <u>10 ft. (measured to lot line or no-build easement)</u> 40 ft.
Rear yard	Minimum 40 ft.
Building height	Maximum 45 ft. <u>(At the time of the creation of the PDD, existing building height to be deemed compliant, all future changes to comply with B-2 Zoning)</u>
Accessory buildings:	
Front yard	Minimum 100 ft.
Side yards	Minimum 40 ft.
Rear yard	Minimum 25 ft.
Building height	Maximum 15 ft.

CHAPTER 17 ZONING CODE

Number of stories	Maximum 2
Percent of lot coverage	Maximum <u>90%</u> 75% , including parking and loading
Floor area per store	Minimum 450 sq. ft.

- (5) **PARKING AND LOADING REQUIREMENTS.** See section 17.45 of this chapter.
- (6) **SITE PLAN APPROVAL REQUIRED.** See section 17.43 of this chapter.
- (7) **SCREENING REQUIREMENTS.** Same as for B-1 District. All outdoor storage and trash areas shall be screened from view by an enclosure or by landscape screening, or by a combination of both methods.

17.43 SITE PLAN APPROVAL REQUIREMENTS.

- (1) **PURPOSE AND INTENT.** (Am. Ord. #10-12) For purposes of promoting compatible development and ensuring adequate public facilities, no person shall obtain a building permit or commence a use of land without first obtaining site plan approval from the Village subject to subsection (9). No approval is required for any site improvements or interior or exterior building improvements or remodeling that does not substantially change the appearance, character of use or add substantial floor area (greater than 2,000 square feet). No approval is required for construction in single-family and 2-family districts.
- (2) **PRELIMINARY CONSULTATION.** Prior to the preparation and official submittal of the site plan and supporting data, the applicant shall meet with the Plan Commission and/or its staff for a preliminary consultation. The purpose of this preliminary consultation is to have an informal discussion of the proposed project, a review of the regulations and policies applicable to the project and a discussion of the land use implications of the project.
- (3) **REQUIRED SITE PLAN INFORMATION.** The site plan shall be drawn to a scale not smaller than 30 feet to the inch, certified by a registered land surveyor, professional engineer, planner, architect or landscape architect and shall show the following:
 - (a) The dimensions of the land area and lot lines included in the project and the area of the site or lot(s) included in the project.
 - (b) Existing and proposed grades based on Village datum (U.S.C.G.S.), drainage systems and structures, and topographic contours at intervals not exceeding 2 feet.
 - (c) The shape, size, location, height, floor area and the finished ground and basement floor grades of all proposed buildings and structures.
 - (d) Natural features such as wood lots, streams and lakes or ponds, and man-made features such as existing roads and structures, with indication as to which are to be retained and which are to be removed or altered.
 - (e) Adjacent properties and their uses and zoning classification shall be identified.

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- (f) Proposed sidewalks, paths, streets, driveways, parking spaces and loading spaces showing direction of travel for one-way drives.
 - (g) The width of streets, driveways and sidewalks and the total number of parking spaces shall be shown.
 - (h) Architectural renderings and general floor plans shall be provided for all new buildings. These drawings and plans should show sufficient detail to indicate the architectural design of the proposed building, but all design details are not required at this stage.
 - (i) A lighting plan describing fixtures and designating placement.
 - (j) The size and location of all existing and proposed public and private utilities.
 - (k) A vicinity sketch showing the location of the site in relation to the surrounding street system.
 - (l) The name, address and telephone number of the owner, developer and designer.
 - (m) The anticipated resident population contained within the project or the number of employees anticipated to determine the impact on public utilities, including estimates of average daily quantities of water usage, wastewater discharge and strengths and cooling water volumes, if any.
 - (n) Any other information necessary to establish compliance with this chapter and chapter 14 of this Code.
- (4) **OFFICIAL SUBMITTALS REQUIRED.** Ten copies of the site plan, accompanied by a dated letter of submittal requesting action, shall be submitted to the Plan Commission for its review and action. The site plans shall be submitted to the Plan Commission at least 10 days prior to the Plan Commission meeting at which the site plan will be considered for approval unless an extension of time is mutually agreed upon.
- (5) **LANDSCAPE REQUIREMENTS AND PLAN REVIEW.** (Rep. & Recr. Ord. #32-02)
- (a) In the development of new subdivisions, commercial property, industrial, elderly housing, multifamily and institutional properties, the Village Forester and/or Village Plan Commission will review landscape plans provided by the developer and shall require that street trees be planted, or payment in lieu of planting (to be made in an amount to be determined by the Village Forester per tree), for any of the streets, parking lots, outlots, parks and other public places contained within or abutting lands henceforth developed and/or subdivided.

The developer will submit a tree removal plan that shows exact trees proposed to be removed in the new development, and such removals shall be subject to approval of the Forester and/or the Plan Commission. The developer will also provide a plan specifying methods of protecting trees not listed for removal.
 - (b) All developments subject to this section shall be required to comply with minimum landscaping standards, as follows:
 - 1. *Residential Development.*
 - i. All yards sodded or seeded on at least 4 inches of topsoil.
 - ii. Two trees and/or shrubs per dwelling unit. Trees shall be a minimum of 1½ inches in diameter and shrubs shall be a minimum of 3 years old, with placement according to the plan approved under subsection (a) above.
 - 2. *Nonresidential Development.*
 - i. All yards sodded or seeded on at least 4 inches of topsoil.
 - ii. Trees and shrubbery appropriate for the development, and according to the plan approved under subsection (a) above.

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(c) Parking Lot Landscaping.

1. In parking lots, at least 5% of the interior parking area shall be landscaped with plantings, and one tree of a minimum 2-inch caliper, for each 20 spaces ~~10 spaces~~, all as shall be submitted and approved as part of the plan provided for herein above. Planting required within the parking lot shall be in addition to, and not in lieu of, other planting requirements, such as for street trees.
2. Parking lot street frontage screening and perimeter screening shall be a minimum of 5 feet wide.
3. Parking lot landscaping shall be located in protected areas, such as along walkways, in center islands, at the ends of bays, or between parking stalls. All landscaping in parking areas and on the street frontage shall be placed so that it will not obstruct sight lines and distances.
4. A mixture of hardy flowering and/or decorative evergreen and deciduous trees which shall be selected by the developer from an approved list of types and species of plantings and trees to be provided by the Village, shall be planted. Evergreens shall be used along the perimeter of the lot for screening from adjacent properties, and the deciduous trees for shade within the lot. Areas between trees shall be mulched or planted with shrubs or ground cover. Any landscaped area that will be under the overhang of vehicles shall be mulched or covered with decorative paving material.
5. At the time of the creation of the PDD, existing tree count and configuration shall be deemed compliant until the site is substantially changed or redeveloped, at which time it shall meet the requirements of the underlying zoning of the PDD.
6. At the time of the creation of the PDD, parking lot interior landscaping shall be deemed compliant until the site is substantially changed or redeveloped, at which time it shall meet the requirements of the underlying zoning of the PDD.

(d) Notwithstanding the foregoing, this subsection shall not apply to development of lands and infrastructure by the Village in tax incremental financing districts. In such developments, the tax incremental financing district project plan shall be controlling.

- (6) **DEVELOPERS AGREEMENT.** The Plan Commission may require a bond, letter of credit or a consent and waiver for special assessments, together with a signed developers agreement, in order to assure completion of the improvements provided for in the proposed site plan.
- (7) **REVIEW PROCEDURE.** Upon receipt of the site plan, the Plan Commission shall review it to determine whether it is in proper form, contains all of the required information, shows compliance with this and other ordinances and plans of the Village, and demonstrates the adequacy of utility services. Upon demand by the applicant of the site plan, the Plan Commission shall, within 30 days of its initial submittal, approve it, conditionally approve it or deny approval. Denial of approval shall be limited to any defect in form or required information, or any violation of any provision of this chapter or any ordinance, or the inadequacy of any utility. The Plan Commission's action shall be issued in writing by the Plan Commission Secretary stating, in detail, the reasons for the Plan Commission's actions.
- (8) **APPEAL.** The applicant may appeal any denial to the Board of Zoning Appeals.
- (9) **SITE PLAN REVISIONS.** (Am. Ord. #10-12) Any proposed site improvement or any interior or exterior building improvement to an existing building or developed property that received site plan approval from the Village in the past (except one- and 2-family residential dwellings) must be reviewed and

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approved by the Village prior to issuance of a building or zoning permit. Minor improvements may be approved by the Zoning Administrator with a zoning permit unless the Zoning Administrator determines that a proposed improvement would substantially change the appearance, change the characteristics of the use or integrity of the site or building, add substantial floor area, or otherwise require Plan Commission review and approval. Major improvements (as determined by the Zoning Administrator) shall be reviewed and approved by the Plan Commission.

- (10) **FEES.** Prior to site plan approval, the applicant for a site plan shall pay all professional fees incurred by the Village for review of a site plan by the Village Planner, the Village Attorney or the Engineering Department staff.

(11) **LAPSE OF SITE PLAN APPROVAL; FAILURE TO COMMENCE CONSTRUCTION AND CONTINUE TOWARD COMPLETION.** (Am. Ord. #22-07)

- (a) Except under the following conditions, if construction or other activities necessary to complete a development project and/or land use have not commenced within 12 months from the date site plan approval has been granted and continue toward completion in accordance with the proposed/approved timeframe, or, said construction or other activities have commenced but subsequently are stopped or abandoned for a period of 12 consecutive or cumulative months, site plan approval shall be deemed to have lapsed and all Village permits and/or approvals granted subsequent to such site plan approval shall expire and be null and void.

1. An extension has been granted pursuant to subsection (11a); or
2. Different project-specific commencement and/or completion deadlines have been established as a condition of approval in the site plan approval, in a conditional use permit, or in a PDD condition and restrictions resolution adopted by the Village Board (including but not limited to phased development).

- (b) If construction or other activities necessary to complete a development project and/or land use have not been completed within 2 years from the date site plan approval was granted or other deadlines established pursuant to the conditions under subsections (a)1. and 2. above, the site plan approval shall be deemed to have lapsed and there shall be no further development or construction unless and until a reapplication for the same or revised site plan has been re-approved by the Plan Commission.

- (c) If a site plan approval has lapsed and buildings or other improvements that are part of the development project for which said site plan approval was granted, the Plan Commission may require such buildings and/or improvements to be removed and the site restored to predevelopment conditions.

- (d) If a site plan approval has lapsed and the applicant/property owner has submitted a subsequent application for site plan approval, the Plan Commission may approve the site plan as was originally approved, or, may require revisions or other conditions of approval as deemed necessary. Applications for site plans for which a previous approval has lapsed will be subject to all applicable application fees.

- (11a) **EXTENSION OF DEADLINE FOR CONSTRUCTION COMPLETION.** (Cr. Ord. #22-07) At its discretion, for good cause and following consideration of a written request submitted by the applicant/property owner to the Village prior to expiration of the previous deadline, the Plan Commission (and Village Board in the case of projects being developed in a PDD) may grant one or more extensions of the deadline to complete the project for which site plan approval was granted. The duration of each extension shall be determined by the Plan Commission (or Village Board in the case of PDD projects) but shall not exceed 12 months. A deadline extension request that is received prior to expiration of the current deadline will not be subject to any applicable application fees. Requests received after expiration of the current deadline will be subject to applicable application fees.

(12) **CERTIFICATE OF OCCUPANCY.**

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- (a) *Required.* No certificate of occupancy shall be granted until all improvements shown on an approved site plan have been completed in accordance therewith.
- (b) *Exceptions.* Upon a finding by the Zoning Administrator that certain improvements cannot be completed due to seasonal or other factors beyond the control of the developer and that temporary occupancy prior to completion will involve no health or safety hazard, the Zoning Administrator may issue a temporary certificate of occupancy bearing an expiration date, which date shall allow reasonable time for completion of all required improvements prior to the date of expiration of the temporary certificate of occupancy. No temporary certificate of occupancy shall be granted for a period longer than one year. No permanent certificate of occupancy shall be issued by the Zoning Administrator until all required improvements are completed.

17.45 TRAFFIC, PARKING, LOADING AND ACCESS.

- (1) **PARKING REQUIREMENTS.** In all districts and in connection with every use, there shall be provided at the time any use or building is erected, enlarged, extended or increased, off-street parking stalls for all vehicles in accordance with the following:
 - (a) The size of each parking space shall be not less than 162 square feet ~~180-square-feet~~ exclusive of the space required for ingress and egress.
 - (b) Unless authorized pursuant to section 17.45(5) below, the location of any off-street parking area shall be on the same lot or parcel (i.e., "on-site") as the principal use and no parking stall or driveway, except in residential districts, shall be closer than 50 feet to a residential district lot line; except churches, in which case the distance shall be no closer than 20 feet to a residential district lot line. Berming may be required with possible landscaping, as determined by the Plan Commission. (Am. Ord. #1-02; Am. Ord. #9-10)
 - (c) All open off-street parking areas except parking spaces accessory to single-family and 2-family dwellings shall be surfaced with a bituminous or concrete pavement in accordance with the Village standards and specifications. Such parking areas shall be graded so as to dispose of all surface waters and no significant surface waters shall be allowed to drain across public sidewalks. Such parking areas shall be so arranged and marked to provide for orderly and safe parking and storage of vehicles, and shall be so improved with wheel stops or bumper guards to prevent encroachment into ~~adjacent lots or~~ public ways. All public off street parking areas which are created or redesigned and rebuilt subsequent to the adoption of this section shall be provided with accessory landscape areas totaling not less than 5% of the surfaced parking area. The minimum size of each landscape area shall be not less than 75 square feet. Each such parking area shall be bounded by a greenbelt of at least 8 feet in width between the parking area and all property boundaries (this provision shall not apply to interior lot lines of this PDD). The location of landscape areas and plant materials and the protection afforded the plantings, including curbing and provision for maintenance, shall be subject to approval by the Plan Commission. All plans for such proposed parking areas shall include a topographic survey showing the grade and location of improvements. Existing trees, shrubs and other natural vegetation in the parking area may be included in the required minimum landscape area. All of the requirements of this paragraph, including surfacing, shall be completed within one year after the occupancy permit is issued.

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(d) The following guide shall be used in the provision of parking spaces: (Renum. 3/01 jw)

	Use	Minimum Parking Required
1.	Automobile repair garages and service garages	1 space for each regular employee plus 1 space for each 250 sq. ft. of floor area used for repair work.
2.	Bowling alleys	3 spaces for each alley.
3.	Churches, theaters, auditoriums, community centers, vocational and night schools, and other places of public assembly	1 space for each 3 seats.
4.	Colleges, secondary schools and elementary schools	1 space for each 2 employees plus 1 space for each 5 students of 16 years of age or over.
5.	Financial institutions; business, government and professional offices <u>and retail.</u> <u>(For Storage areas, refer to Item 10.)</u>	1 space for each <u>250 sq. ft.</u> 200 sq. ft. of floor area, plus 1 space for each 2 employees.
6.	Funeral homes	20 spaces for each viewing room
7.	Fuel stations	3 spaces for each indoor stall or similar facility plus 1 space for each attendant.
8.	Hospitals, sanatorium, institutions, rest and nursing homes	1 space for each 3 beds plus 1 space for each 3 employees plus 1 space for each physician.
9.	Lodges and clubs	1 space for each 5 members.
10.	Manufacturing and processing plants (including meat and food processing plants), laboratories and warehouses	1 space for each 500 sq. ft. of principal building area (see exclusions provided in section 17.08(34) of this chapter).
11.	Medical and dental	7 spaces for each doctor.

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12.	Motels and hotels	1 space for each guest room plus 1 space for each 2 employees.
13.	Motor vehicle sales (new and used)	1 space for each 500 sq. ft. of floor area used plus 300 sq. ft. of outdoor display area for each motor vehicle to be displayed. (This requirement does not include service garages. See subpar. 1., above.)
14.	Restaurants, bars, places of entertainment (Am. Ord. #33-98)	1 space for each 150 sq. ft. of floor area plus 1 space for each 2 employees.
15.	Repair shops, retail and service stores (Cr. Ord. #33-98)	1 space for each 200 sq. ft. of floor area plus one space for each 2 employees.
16.	Retirement homes, orphanages, convents, and monasteries	1 space per 1,000 feet of principal floor area.
17.	Rooming and boarding houses, fraternity and sorority houses, dormitories and rectories	1 space per bed.

- (2) **LOADING REQUIREMENTS.** On every lot on which a business, trade or industrial use is hereafter established, space with access to a public street or alley shall be provided on the premises as indicated in the district regulations for the loading and unloading of vehicles.
- (3) **TRAFFIC VISIBILITY.** No obstructions such as structures, automobile parking or vegetation shall be permitted in any district between the heights of 2½ feet and 10 feet above the mean curb grades within the triangular space formed by any 2 existing or proposed intersecting street or alley right-of-way lines and a line joining points on such lines located a minimum of 15 feet from their intersection. In the case of arterial streets intersecting with other arterial streets or railways, the corner cutoff distances establishing the triangular vision clearance space shall be increased from 15 to 50 feet.
- (4) **DRIVEWAYS.** (Am. Ord. #14-10) All driveways installed, altered, changed, replaced or extended after the effective date of this chapter shall meet the following requirements:
- (a) Unless a shared driveway is installed pursuant to subsection (d) below, islands between driveway openings shall be provided with a minimum of 10 feet between all driveways and 5 feet at all lot lines. Except for lots with 200 or more feet of frontage, no more than one driveway shall be permitted for each single-family lot or parcel and no more than 2 driveways for each 2-family lot or parcel. The number and location of driveways located on multifamily, commercial and industrial parcels shall be subject to site plan review, pursuant to section 17.43 of this chapter.
 - (b) Shared Driveways. The joint use of a single driveway may be allowed or required by the Village Plan Commission if such joint use is necessary to protect the public safety and/or maintain the function of the adjacent street or highway. Joint use of a single driveway shall not be granted based solely on the basis of economic gain or loss or self-imposed or created hardship. The installation and use of a shared driveway shall be allowed after a shared driveway easement

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agreement has been reviewed and approved by the Village and subsequently recorded with the county registrar of deeds for the affected properties. Such agreement shall, at a minimum, bind current and future owners of each lot served by the shared driveway to the responsibility for all maintenance, snowplowing and reconstruction of the driveway. Shared driveways shall meet the following:

1. A shared driveway shall serve no more than 2 lots.
 2. The driveway shall not extend more than 300 feet in length from the street right-of-way.
 3. All driveways shall be a minimum of 16 feet in width to the point where the shared driveway splits into individual private driveways.
 4. Driveways shall have a maximum grade of 10% with the grade matching the existing shoulder with a minimum 25-foot landing approach with a grade +/- 2%.
 5. Shared driveways should be designed to prevent significant runoff directly into the public right-of-way.
 6. No parking, storage or other structures shall be located or allowed in the shared driveway easement area.
 7. A permanent address marker listing all the addresses of each property served by a shared driveway shall be placed at the end of the shared driveway adjacent to the public right-of-way in accordance with Village requirements, and, where the shared driveway splits clearly indicating the correct address and location of each separate property.
- (c) Openings for vehicular ingress and egress shall meet County or State requirements where applicable, but in no case shall exceed 25 feet at the right-of-way line and 25 feet at the roadway in residential districts or 50 feet 40-feet at the right-of-way line and 55 feet 45-feet at the roadway in all other districts. (Am. Ord. #38-90)
- (d) Vehicular entrances and exits to drive-in banks, motels, funeral homes and vehicular sales, service, washing and repair stations; garages; or public parking lots shall be not less than 200 feet from any pedestrian entrance or exit to a school, college, university, church, hospital, park, playground, library, public emergency shelter or other place of public assembly.
- (e) The Plan Commission is authorized to vary the above requirements in appropriate situations.
- (5) **OFF-SITE PARKING.** (Cr. Ord. #9-10) When authorized by the Village through the issuance of a conditional use permit and site plan approval, off-street parking requirements for any new or existing commercial, industrial, or institutional use may be satisfied, in whole or in part, through the provision of parking stalls in one or more off-site parking areas (i.e., not located on the same parcel or lot as the subject use). Off-site parking area(s) shall meet the following requirements.
- (a) *Location.*
1. Off-site parking areas cannot be located within a residential zoning district;
 2. Off-site parking areas may be provided on a separate or non-adjacent parcel or lot provided that the parking stalls are located within 1,000 feet of the nearest building entrance used by the persons for whom the parking stalls are provided, and, the path between the parking area and use is not obstructed or unsafe for pedestrians.
- (b) *Ownership or Agreement.*
1. Off-site parking areas shall be held in fee simple ownership by the same owner as the use requiring the off-street parking area, or, under lease, rental, or other form of agreement satisfactory to the Village with respect to ensuring that the off-site parking area will be available for as long as it is needed by the use.
- (c) *Development Standards.*

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1. Off-site parking areas shall be designed, constructed, landscaped, and otherwise developed in accordance with the minimum standards and requirements set forth herein, in section 17.43 (site plan) and as set forth in any conditions of CUP and site plan approval.

(d) *Signage.*

1. The Village may require off-site parking areas to be clearly marked and identified as the exclusive or shared parking for the use(s) it serves. All signage installed in an off-site parking area shall be approved by the Plan Commission.

(6) At the time of the creation of the PDD, existing traffic parking, loading and access shall be deemed compliant until the site is substantially changed or redeveloped, at which time it shall meet the underlying zoning of the PDD.

17.46 SIGNS.

- (1) **INTENT AND PURPOSE.** (Am. Ord. #14-00) The intent of this section is to provide for and regulate the location and safe construction of signs in the Village in a manner that will ensure that signs are compatible with surrounding land uses, and to express the identity of individual proprietors and the community as a whole. No flashing or blinking signs other than traffic signs placed by a public agency shall be placed or erected within the Village. All signs, unless otherwise specified, shall be approved by the Plan Commission.

In considering a sign application, the Plan Commission shall consider the purpose of advertising; the appearance, location, lighting, height and size of the sign; safety of the operators of vehicles upon the adjoining streets and highways; the effect of the sign on property values within the immediate area; and the effect of the sign with respect to the scenic beauty of the vicinity in which the sign is proposed to be located.

- (2) **SIGN PERMIT.** (Am. Ord. #14-00; Am. Ord. #12-09; Am. Ord. #21-09) No sign shall hereafter be located, erected, moved, reconstructed, extended, enlarged, converted, structurally altered, nor shall the face of a sign be changed without a sign permit, except those signs exempted by subsection (3) below, and all signs shall fully conform to the requirements of this section. Applications for sign permits shall be filed with the Zoning Administrator who shall review them for completeness and approval or referral to the Plan Commission for their review and approval as may be required herein. A sign permit for a temporary sign, temporary real estate sign, or home occupation sign may be issued after review and approval by the Zoning Administrator. A sign permit shall become null and void if work authorized under the permit has not been completed within 60 days from the date of issuance (or renewed by the Zoning Administrator).

Applications for sign permits shall be made on forms provided by the Zoning Administrator, shall be submitted along with the necessary fees and removable bond (if applicable) as established by the Village Board, and shall contain or have attached thereto the following information:

- (a) Name, address and telephone number of the applicant and location of the building, structure or lot to which or upon which the sign is to be attached or erected.
- (b) Name of person, firm, corporation or association erecting the sign.
- (c) Written consent of the owner or lessee of the building, structure or land to which or upon which the sign is to be affixed.
- (d) A scale drawing of such sign indicating the dimensions, the materials to be used, the type of illumination, if any, and the method of construction and attachment.
- (e) A scale drawing indicating the location and position of such sign in relation to property lines and to nearby buildings or structures.

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- (f) Copies of any other permit required and issued for said sign, including the written approval by the Building Inspector in the case of illuminated signs. The Building Inspector shall examine the plans and specifications, inspecting all wiring and connections to determine if the same complies with this Code.
 - (g) Additional information as may be required by the Building Inspector or the Plan Commission.
 - (h) A colored rendering, diagram or picture of the proposed sign(s). (Cr. Ord. #21-09)
 - (i) The 15-day time period(s), with beginning and ending dates, during which a temporary sign will be displayed and then removed (list all time periods if applying for multiple permits on one application). (Cr. Ord. #21-09)
- (3) **SIGNS PERMITTED IN INDIVIDUAL ZONING DISTRICTS WITHOUT A SIGN PERMIT.** The following signs are permitted without a sign permit, subject to the following regulations:
- (a) Memorial signs, tables, name of building and date of building erection signs in all zoning districts when cut into any masonry surface or when constructed of metal and affixed flat against a structure, and not illuminated.
 - (b) Name, home occupation, professional home office, on-site traffic control and directional signs, and warning signs in all zoning districts, provided that such signs shall not exceed 3 square feet in area. (Am. Ord. #21-09)
 - (c) Official ground signs such as parking restriction signs, information signs and notices in all zoning districts. Such signs may be placed at the curb line or pavement edge.
 - (d) Real estate signs temporarily advertising the sale, rental or lease of a lot, parcel of land, building, or part thereof, upon which the sign is located in all residential zoning districts, provided that such sign shall not exceed 4 square feet in area. In agricultural, business and industrial zoning districts, such real estate signs shall not exceed 32 square feet in area. All such signs shall be removed no later than 10 days after the date said lot, parcel, building, or part thereof, has been sold, rented or leased. All signs shall be located on private property and not on public property or in any public right-of-way. (Am. Ord. #21-09)
 - (e) Rummage sale signs. The display and placement of rummage sale signs shall comply with the same requirements as election campaign signs as set forth in section 9.19 and section 17.70(4). (Cr. Ord. #21-09)
 - (f) Temporary signs advertising the need for or availability of employment opportunities (e.g., "Welders Wanted—Apply Within") except for residential districts that do not allow major home occupations. (Cr. Ord. #9-10)
- (4) **SIGNS PERMITTED IN ALL ZONING DISTRICTS WITH A SIGN PERMIT.** (Am. Ord. #9-10)
- (a) Bulletin boards, ground signs or wall signs for public, charitable or religious institutions, provided that such signs shall not exceed 8 square feet in area.
 - (b) Temporary signs as provided in section 17.46(7)(e).
- (5) **SIGNS PERMITTED IN ALL AGRICULTURAL DISTRICTS WITH A SIGN PERMIT.** Agricultural ground signs advertising farm products produced on the premises or the sale of farm equipment, stock and personal goods, provided that such signs shall not exceed 16 square feet in area.
- (6) **SIGNS PERMITTED IN RESIDENTIAL DISTRICTS WITH A SIGN PERMIT.** The following signs are permitted in all residential districts with a sign permit, subject to the following regulations:
- (a) Permanent real estate development signs located on private property or within the public right-of-way at entrances or along streets or highways which designate a particular development and which only include the name of the development. If located on private property, such signs shall be at least 5 feet from the outer edge of the street right-of-way. Such signs shall be constructed and properly maintained so as to be aesthetically pleasing to the surrounding development. Prior

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to the issuance of a sign to be located within the public right-of-way, a written agreement shall be provided which places all maintenance responsibility on the developer(s) or owner(s) and exempts the Village from all maintenance responsibilities. Drawings showing the size, location and design of such signs shall be submitted to the Plan Commission for review and approval prior to the issuance of a sign permit. (Am. Ord. #14-10)

- (b) Temporary real estate development signs for the purpose of directing attention to the opening and location of a new building or a new residential subdivision or development, provided that such signs shall not exceed a total of 32 square feet in area, unless approved by the Plan Commission, and provided further that such signs shall be at least 5 feet from the outer edge of the street right-of-way. Sign permits for such signs may be issued by the Zoning Administrator for a period until such time as 90% of all lots, parcels, building or part thereof has been sold, rented or leased. Temporary real estate signs shall require an annual sign permit that is valid for the duration of the current calendar year and renewal for subsequent years provided that it is removed no later than 10 days after the date the lot, parcel, building or part thereof meeting the 90 percent removal requirement has been sold, rented or leased by the original subdivider/developer at least one time. (Am. Ord. #21-09)

(7) SIGNS PERMITTED IN BUSINESS, INDUSTRIAL AND INSTITUTIONAL DISTRICTS WITH A SIGN PERMIT. The following signs are permitted in all business, industrial and institutional districts, subject to the following restrictions:

- (a) Wall signs shall not exceed 1.5 square feet of signage per one linear foot of building frontage, up to 300 square feet for any individual use. Signage is only permitted on building frontage. However, the Plan Commission may approve signage on any facade of a building when deemed appropriate for the use. In addition to signage on a building frontage, the Plan Commission may also permit directional wall signage on any facade of a building when it is necessary and appropriate for the use. Wall signs shall not extend above the ceiling level of the top floor of the building upon which they are located. (Am. Ord. #24-06)
- (b) Projecting signs, awning signs, canopy signs and marquees shall not be externally lighted; shall not exceed 100 square feet in area for any one premises; shall not extend more than 5 feet into any required yard; shall not extend into any public right-of-way; shall be located not less than 10 feet from all side lot lines; shall not exceed a height of 20 feet above the mean center line grade of the abutting street; and shall not be less than 10 feet above the sidewalk nor 15 feet above a driveway or an alley.
- (c) Ground signs shall meet the requirements set forth in Table 1. One ground sign may be allowed along each road the subject property has at least 50 feet of road frontage. All ground signs shall be mounted on a decorative base constructed of the same or similar materials as the principal building, e.g. stone, decorative block. All single-tenant ground signs shall include the street address coordinates for the property mounted on the base of the sign (minimum 5-inch numbering). No ground sign shall be placed closer than 80 feet to another ground sign or projecting, awning, canopy or marquee sign. See also section 17.46(13). Any time the Plan Commission reviews a permit for a ground sign, landscaping shall be required according to the following provisions: (Am. Ord. #5-90; Am. Ord. #10-90; Am. Ord. #24-06; Am. Ord. #02-08)
 - 1. The landscaping shall extend a minimum of 3 feet from the outer edge of the sign base on all sides. Where the area around the base of a sign is insufficient in size to accommodate landscaping, the Plan Commission may permit installation of a portion of the required landscaping at an alternate location on the site or at their discretion waive the landscaping requirement.
 - 2. Ground signs shall be landscaped with small shrubs, ornamental grasses, and perennials a minimum of 2 to 4 feet in height at the time of planting, depending on the height of the sign. Shrubs shall include evergreen varieties to provide green plantings year round.

CHAPTER 17 ZONING CODE

3. The landscaping shall be placed and maintained as to not obstruct the view of an address placed on a monument sign.

TABLE 1. GROUND SIGN REQUIREMENTS

Building Type/Area and No. of Tenants	Maximum Sign Area (square feet)	Maximum Height (feet above mean centerline of adjacent roadway)	Minimum Setback (feet from property line)
Single and Multi-Tenant (< 3 tenants and < 25,000 SF gross building area)	80 SF per side 160 SF total	10 feet	5 feet
Multi-Tenant (4 to 9 tenants and 25,000 to 50,000 SF gross building area)	120 SF per side 240 SF total	15 feet	5 feet or ½ total sign height whichever is greater
Multi-Tenant (> 10 tenants and > 50,000 SF gross building area)	160 SF per side 320 SF total (or as approved by Plan Commission)	20 feet (or as approved by Plan Commission)	5 feet or ½ total sign height whichever is greater-(or as approved by Plan Commission)

- (d) Roof signs shall not exceed 10 feet in height above the roof, shall meet the height requirements for the zoning district in which they are located, and shall not exceed 300 square feet on all sides for any one premises.
- (e) Temporary signs (as defined in section 17.08) shall be permitted subject to the following requirements: (Am. Ord. #3-01; Am. Ord. #11-01; Am. Ord. #07-09; Am. Ord. #15-09; Am. Ord. #21-09)
 1. Signs shall not exceed a total of 32 square feet in area (all sides).
 2. Signs shall not be displayed in public rights-of-way and be at least 5 feet from all property lines and the street right-of-way.
 3. Temporary signs may be displayed for a time period not to exceed 15 consecutive days per permit with a limitation of 12 permits issued per business address per calendar year.

CHAPTER 17 ZONING CODE

4. Signs shall not be attached to a utility pole, traffic sign, living vegetation, motor vehicle, trailer, or other moveable structure or object.
5. Shall not be displayed above the roof line of a building.
6. Signs may be displayed upon issuance of a sign permit and payment of a permit fee established by resolution by the Village Board, except that the fee shall be waived by the Zoning Administrator for nonprofit organizations or nonprofit purposes by organizations and businesses. (Am. Ord. #9-11)
7. Signs shall be made, maintained and displayed in a neat, clean and hazard-free manner. Signs that are not neatly kept or maintained may be required to be repaired, replaced or removed by the Zoning Administrator.
8. Signs should be designed (including the color, lettering style, symbols and material) to be compatible with the design of the establishment's primary sign, abutting properties, and the general streetscape in the immediate vicinity of the establishment.
9. Signs displayed on days not authorized in a permit or without a permit are deemed to be a violation of the Zoning Code and subject to removal and/or municipal citation. Violations of the Zoning Code, terms or conditions of a permit, or complaints received by the Village regarding the use of temporary signs by a business operator or property owner may be grounds for not issuing subsequent temporary sign permits.
10. In addition to the requirements above, "sandwich board" signs are subject to the following:
 - a. Sandwich board signs shall not exceed 2 feet in width and 4 feet in height;
 - b. Only one sandwich board sign shall be displayed per business;
 - c. Signs shall only be displayed during regular business hours for that business and removed overnight and during other nonbusiness hours;
 - d. Signs shall not obstruct the public right-of-way or any sidewalk or walkway;
 - e. Signs shall be freestanding, easily portable and internally weighted so that it is stable and windproof;
 - f. Signs may be temporarily anchored to the ground but shall not be roped, chained or otherwise secured to any pole, post, tree, fire hydrant, railing, or other structure;
 - g. Signs displayed at or within 15 feet of the storefront of the business for which the sign is used shall:
 - (i) Not count against the temporary sign area allowance;
 - (ii) Shall be exempt from the time period limitation imposed above; and
 - (iii) Shall not be subject to a permit fee.
11. In addition to the requirements above, one "grand opening" and one "opening soon" sign shall be allowed for each new business establishment subject to the following:
 - a. "Grand opening" signs may be displayed up to 30 consecutive days within 3 months of the date of issuance of a certificate of occupancy;
 - b. "Opening soon" signs may be displayed up to 30 consecutive days before the first day a business is open for business;
 - c. A permit is required but no permit fee shall apply.
12. Notwithstanding the above allowances and restrictions, the display of temporary signs on the day of all legal holidays and communitywide events, e.g., Maifest, Maxwell Street Days,

CHAPTER 17 ZONING CODE

etc., shall be allowed without a permit provided they are only displayed and removed that same day.

13. Temporary signs shall not include any internal artificial lighting. (Cr. Ord. #4-10)

14. Temporary signs shall not include changeable text or reader boards. (Cr. Ord. #4-10)

(8) **ELECTION CAMPAIGN SIGNS.** See section 9.19 of this Code.

(9) **FACING OF SIGNS.** No sign which is within 100 feet of a residential district shall be permitted to face the residential district unless it is a sign permitted by subsections (3), (4) and (6) above, or unless it is permitted by the Plan Commission.

(10) **LIGHTING, COLOR AND PLACEMENT.** Signs shall not resemble, imitate or approximate the shape, size, form or color of railroad or traffic signs, signals or devices. Signs shall not obstruct or interfere with the effectiveness of railroad or traffic signs, signals or devices. Signs shall not be placed so as to obstruct or interfere with traffic visibility, nor be lighted in such a way as to cause glare or impair driver visibility upon public ways. Signs may be illuminated, but nonflashing.

(11) **RESERVED.** (Rep. Ord. #21-09)

(12) **CONSTRUCTION AND MAINTENANCE STANDARDS.**

- (a) *Wind Pressure and Dead Load Requirements.* All signs and other advertising structures shall be designed and constructed to withstand wind pressure of not less than 40 pounds per square foot of area and shall be constructed to receive dead loads as required in the Building Code or other ordinance.
- (b) *Protection of the Public.* The temporary occupancy of a sidewalk or street or other public property during construction is permitted, provided the space occupied is roped off, fenced off or otherwise isolated to prevent hazard to pedestrians and property.
- (c) *Maintenance.* The owner of any sign shall keep it in good maintenance and repair which includes restoration, repainting or replacement of a worn or damaged sign to its original condition, and shall maintain the premises on which the sign is erected in a clean, sanitary and inoffensive condition, free and clear of all obnoxious substances, rubbish, weeds and grass.
- (d) *Sign Supports.* Supporting members or braces of all signs shall be constructed of galvanized iron, properly treated wood, steel, copper, brass or other non-corrosive incombustible material. All projecting signs, if placed at an angle to the wall or roof of any building, shall be attached by such non-corrosive metal bolts, anchors, cable or other metal attachments as shall ensure permanent and safe construction and shall be maintained free from rust or other defects. Every means or device used for attaching any sign shall extend through a wall or roof of the building should the Building Inspector determine that the safe and permanent support of such sign so requires, and shall be securely anchored by wall plates and nuts to the inside of the wall or to bearings on the underside of 2 or more roof or ceiling joists in accordance with instructions given by the Building Inspector. Small flat signs containing less than 10 feet of area may be attached to a building by the use of lag bolts or other means to the satisfaction of the Building Inspector.
- (e) *Fire Protection Consideration.* No sign or any part thereof or sign anchors, braces or guide rods shall be attached, fastened or anchored to any fire escape, fire ladder or standpipe, and no such sign or any part of such sign or any anchor, brace or guide rod shall be erected, put up or maintained so as to hinder or prevent free ingress or egress through a door, doorway or window or so as to hinder or prevent the raising or placing of ladders against a building by the Fire Department of the Village, as necessity therefor may require.
- (f) *Removal Required.* (Cr. Ord. #21-09) Signs for existing businesses, institutions or other nonresidential operations shall be removed and/or the sign faces replaced, removed or modified within 60 days after said business or operation ceases operation.

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- (13) **EXISTING SIGNS.** (Am. Ord. #21-09) Signs lawfully existing at the time of the adoption or amendment of this section may be continued even though the use, size or location does not conform with the provisions of this section; provided, however, that such signs shall be deemed a nonconforming use or structure where the provisions of section 17.48 of this chapter shall apply except that the replacement of a sign face with the same or nearly identical sign face may be approved with a permit by the Zoning Administrator.

At the time of the creation of the PDD, signs lawfully existing may be continued even though the use, size or location does not conform to the provisions of the underlying zoning of the PDD.

- (14) **METHODOLOGY FOR MEASURING SIGN AREA.** (Cr. Ord. #3-98) The area of a sign shall be determined as follows:

- (a) The height multiplied by the width of any sign cabinet, fixture or placard used to convey any words, letters, figures, numerals, phrases, sentences, emblems or logos to the public.
- (b) Where more than one cabinet, fixture or placard is used, the areas shall be measured by drawing a rectangle enclosing the entire perimeter of all cabinets and/or fixtures.
- (c) Where no cabinet or fixture is used, e.g., individual 3-dimensional letters or symbols attached directly to a wall, the area shall be measured by drawing a single rectangular box around the extreme limits of the advertising message.
- (d) Decoration, framing and other nonstructural embellishments shall not be included in the sign area, provided that no advertising copy or graphics are contained on such embellishments. The total area of the sign structure, including any embellishments, may not exceed twice the area of the sign or 160 square feet, whichever is greater.
- (e) The permit fee shall be based on the area of the entire sign structure.

- (15) **OFF-PREMISES ADVERTISING SIGNS.** (Cr. Ord. #32-99; Am. Ord. #21-09; Am. Ord. #9-11))

- (a) All off-premises advertising signs, including temporary signs and billboards, are prohibited within the Village of Germantown except for the following:
 - 1. Official and temporary signs displayed within the Village for public agencies, charitable organizations and religious institutions;
 - 2. Election campaign signs and rummage sale signs;
 - 3. Temporary directional signs for businesses, residential developments, schools and institutions when adjacent streets are temporarily closed for repairs or similar reasons (subject to any other specific limitations set forth herein or other sections of the Village Code).

SITE PLAN APPLICATION

9/9/19 Plan Commission Meeting

North Shore Bank / GTown Properties, LLC

Village Planner Report

Germantown, Wisconsin

Summary

MSI General Corp., agent for North Shore Bank and GTown Properties LLC, property owner, is requesting approval for site development & building plans for a 2,250 sqft bank on a 0.37 acre out-parcel within the Sendik's Village Centre on Mequon Road.

Location: Sendik's Village Centre on Mequon Road

Agent/

Property Owners:	David Kane	Greg Devorkin
	North Shore Bank	GTown Properties LLC
	15700 W Bluemound Rd	11518 N Port Washington Rd #103
	Brookfield, WI 53005	Mequon, WI 53092

Current Zoning: B-2: Community Business and B-3: General Business

Pending Zoning: B-2: Community Business/Planned Development District (PDD)

Adjacent Land Uses		Zoning
North	Residential	Rm-2
South	Residential/Commercial	Rm-3/B-3
East	Institutional/Commercial	I/B-1
West	Residential/Commercial	Rm-3/B-3



Background/Proposal

MSI General Corp., agent for North Shore Bank and GTown Properties LLC, property owner, is requesting approval for site development & building plans for a 2,250 sqft bank on a 0.37 acre out-parcel within the Sendik's Village Centre on Mequon Road.

In July, the Plan Commission (PC) reviewed and recommended approval of a rezoning application to create the "Sendik's Planned Development District, a special zoning district with an underlying B-2: Community Business District, and a certified survey map (CSM) land division to create a .37-acre out-parcel. In July, the Village Board held a public hearing of the proposed PDD rezoning but tabled action at the property owner's request (pending action by the Plan Commission on the Site Plan application). At that time, the PC and Staff reviewed concept plans for the proposed 2,250 sqft bank and provided feedback to the Applicant regarding code compliance, site development and building design, architecture and material considerations that they would consider prior to taking any action on the proposed bank development.

As presented in the detailed site plans and supporting documents, the proposed bank development includes the following features:

- 2,250 sqft one-story (19'6" max. height) bank w/ drive-through
- Building Exterior: tumbled stone masonry units, sills, headers, and corner/quoins, stone lintels, painted wood shake siding, metal panel shed roof & soffit
- Roof-top mounted HVAC unit w/ metal screen enclosure
- 2-lane drive-through feature w/ a flat metal panel canopy
- 19 parking spaces including one (1) ADA-compliant accessible stall
- Curbed island & foundation landscaping

With regard to the architecture and materials, the Applicant provided the following description of how the exterior appearance has been modified since the original concept renderings in response to the PC's direction for "...an architectural design and materials reflective of and consistent with the Village's Germanic Theme" and surrounding buildings along Mequon Road:

"the massing of the building did not change but we added Germanic architectural details by adding tumbled stone quoins on all the corners, adding tumbled stone window sills and headers, changing the style of the windows to be a more residential look comparable to many old buildings in Germany, changing the color of the windows/doors to a dark bronze to mimic a dark painted wood rather than clear anodized, and we changed the faux timber framing/EIFS to a painted wood shake siding to mimic the wood and shingled roofs of Germany. We feel this would create a very elegant building with a different take on the Germanic influence vs the typical timber framing/EIFS".

Access & Parking.

Access to the bank out-parcel will be from the existing driveway and internal parking areas within an existing ingress/egress easement which extends along the north and west sides of the out-parcel. No new driveway onto Mequon Road is proposed. A total of 19 parking stalls will be provided (available as shared parking with the other users in the Sendik's Village Centre).

Storm Water Management. This site will be served by existing and new on-site storm sewer. The impervious surface on the site will be reduced to 72% of the site with 28% open/green space. This plan meets the maximum impervious surface coverage of 75% that applies in the proposed Sendik's Village Centre B-2/PDD conditions and restrictions (pending Village Board approval).

Landscaping. The proposed development includes a variety of deciduous and evergreen trees and shrubs within curbed islands around and east of the bank, as well as, foundation plantings and around the dumpster station. The dumpster is integrated into the building site (vs. free-standing in the parking lot) on the west side of the building.

Lighting. Exterior lighting of the site and building will include eight (8) existing pole-mounted fixtures (20' fixture height) and the following new fixtures:

- (3) 26W LED 4000K "neutral white" exterior wall pack lights mounted at a height of 9'
- (9) recessed can lighting w/ 6W LED 4000K fixtures mounted at a height of 9' around the building

Signage. No signage is proposed at this time. A separate sign permit application, meeting the requirements of Chapter 17.46, shall be submitted for all proposed signage.

Staff Comments

As discussed in July, this property is located within the "Germanic Theme" Mequon Road corridor, and as such needs to be consistent/compatible with the other buildings in the immediate vicinity and Mequon Road corridor. The Applicant and Property Owners have developed a series of renderings that show how the building architecture, design and materials has evolved in response the PC's comments and reflect their interpretation of the "Germanic Theme" requirements.

While the use of higher quality materials (tumbled stone masonry units vs. EIFS & faux exposed timber framing on the exterior walls) is a fresh alternative, Staff believes that the flat roofs above the west side of the building and drive-through canopy and the higher, flat metal "skillion" or shed roof above the center section of the building are not consistent with the appearance of the other buildings in the corridor, including the McDonald's building next door.

With that said, as the Architectural Review Board, the Plan Commission needs to review and consider the proposed architecture and materials in light of the overall "Germanic Theme" corridor when rendering a decision. If the PC determines that further changes to the exterior design or materials are warranted it would helpful to point out what feature(s) should be changed and how.

As suggested by the PC at the July meeting, additional curbed islands and landscaping has been added east of the building. However, Staff is of the opinion that additional landscaping, i.e. more, bigger and evergreen, in the larger island area immediately east of the drive-through canopy is warranted to create a more instantaneous and more attractive focal point.

The roof-mounted HVAC unit is proposed to be screened; however details for that unit and screening are not available.

Public Works/ Village Engineer/Village Surveyor

A number of technical corrections and issues have been identified by the Village Engineer set forth in a memorandum provided by the Public Works Director dated August 15, 2019 (copy attached). The Applicant has provided revised plans and supplemental information intended to address most of these items, but the Village Engineer has not yet provided a final review nor approval of the revised plans. Additional plan revisions may be required prior to issuance of building permits.

VILLAGE PLANNER RECOMMENDATION

APPROVE the proposal site development & building plans submitted by MSI General Corp. for North Shore Bank for the development of a 2,250 sqft bank on the .37-acre out-parcel 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 following: civil engineering plan set with PC submittal date/revision date 9-6-9; subject to Condition #2 the architecture plan set dated 9-6-19; the lighting sheet dated 7-12-19; the landscaping plan with a submittal/revision date 9-6-19; the site plan application materials dated 7-15-19 and all supporting documents including a 7-6-19 letter from Eric Neumann, MSI General Corp., 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. The architectural plans shall be revised to include an architectural design and exterior materials that are reflective of and consistent with the Village's "Germanic Theme" corridor and other surrounding retail buildings along Mequon Road as recommended and approved by the Village's Architectural Review Board (Plan Commission).
3. All technical issues, corrections and requirements identified by the Village Engineer and Public Works Department (see August 15, 2019 memo) and by the Community Development Director (see August 30, 2019 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 any "early start" site clearing and footing/foundation work approved by the Village and/or WI DSPS).
4. State approved plans and a \$20,000 occupancy bond are required by the Building Inspection Department as part of the building permit application.
5. All landscaping, grading, paving, storm water management, utility and other 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.
6. All proposed exterior signage, including monument and wall-mounted signs, shall be reviewed and approved under a separate application by the Plan Commission.
7. Additional landscaping shall be installed in the large, curbed island east of the drive-through lanes. Said landscaping shall be shown in a revised landscape plan reviewed and approved by the Village Planner prior to issuance of a building permit.
8. Supplemental information showing the proposed roof-top HVAC unit and screening shall be submitted for review and approval by the Village Planner prior to issuance of the occupancy permit but soon as said information is available.



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

August 30, 2019

Eric Neumann
MSI General Corp.
P.O. Box 7
Oconomowoc, WI 53066

RE: North Shore Bank-Sendik's Village Center Site Plan; Staff Review Comments

Eric:

Village Staff has reviewed the application and supporting materials submitted for the Site Plan Review application submitted by MSI. Below are the outstanding items/issues that need to be addressed before this item can be placed on the Plan Commission Agenda for review/approval. Please provide the requested information, corrections and/or revisions as soon as possible. If necessary, Village staff would be happy to meet with you to discuss or clarify any of these items.

Community Development Department

1. Please provide the new elevations/renderings you mention in your July 15 letter. The proposed elevations, noted as being revisions to the conceptual renderings first reviewed by the PC, are not much different. I do not see the "heavy Germanic detail" discussed, nor anything that reflects what the PC members sentiment was at the consultation (i.e. not Germanic and needs to be changed).
2. The landscaping plan is insufficient. The large island being created east of the building has some interesting plants, but the presentation is as if they are 15+ years and full-grown. Add more plantings (including evergreen) and make it the sort of landscaped focal point the Plan Commission suggested. Minimum planting sizes need to be 3" dia. for deciduous trees, 2.5" for ornamental trees, 8' height for evergreen trees, and 5-gal for shrubs.
3. Additional shrubs/plantings are needed in the other island features around the building. Sticking one deciduous ornamental tree in the front islands is insufficient.
4. Do you intend to sign the parking stalls within the property boundary for "bank use only" or will they be available for other store patrons to use?
5. A separate Sign Permit Application will be required for any/all wall or monument signage. All signs must meet the requirements of Chapter 17.46.

Fire Department

No comments at this time.

Eric Neumann, MSI General Corp.
North Shore Bank - Sendik's Village Centre
Site Plan Staff Review Comments
Page 2 of 2

Public Works/Village Engineer

Please see the memorandum from the Director of Public Works dated August 15, 2019.

When submitting revised plans or additional information, please submit (1) digital plan set and fifteen (15) full-size, hard-copy plan sets set to the Community Development 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.

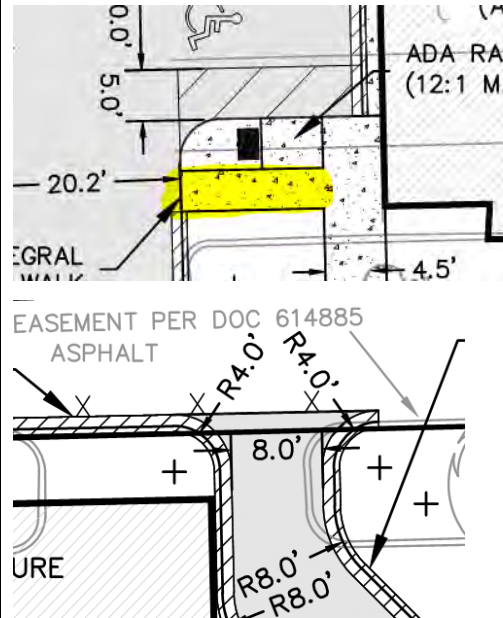
Respectfully,

Jeffrey W. Retzlaff, AICP
Village Planner & Zoning Administrator





3. Recommend removing the portion of the sidewalk to the south of the ADA ramp (highlighted in yellow)
The sidewalk here creates a trip hazard at the edge of the ramp.



4. Show turn movements for a car exiting the drive thru. An 8' wide drive aisle with 4' radii looks very tight.

5. Correct reference to City of Milwaukee in general note #2.

C-103 Grading and Erosion Control Plan

1. Show silt fence along the north property line.

C-104 Utility Plan

1. A sampling manhole is required.
2. Provide invert elevation of sanitary at storm crossing.
3. Prior to connecting to existing sanitary sewer, sewer shall be televised and its condition evaluated.
5. Please provide storm sewer calculations.
6. Water lateral material will be SDR-9
7. The water service to this property has sat so long its condition cannot be guaranteed for operational use. The shut off valve needs to be field tested prior to running the new service and tested for on/off positive shut down and turn on by visually inspecting the water start and stop. The water service curbstop test shall be done by the property owners contractor, field verification will be done by the Water Utility Superintendent or representative. If it does not hold or the valve is in a poor operational condition this portion will be abandoned at the main connection by complete removal and install a new water lateral and Curb stop. Install a tracer wire from the main to the building following our installation guide.
8. If the portion of the water service from the main to the property is usable install a tracer wire from the tie-in point to the building.

C-106 Notes and Details

1. Add Village standard sampling manhole detail.



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**
MSI GENERAL CORP.
c/o ERIC J. NEUMANN V.P.
P.O. Box 7
Oconomowoc, WI 53066

Phone (414) 333-6800

E-Mail eric@msigeneral.com

PROPERTY OWNER

NORTH SHORE BANK FSB
by DAVID KANE V.P.
15700 W BLUEMOUND RD
BROOKFIELD WI 53005

Phone (262) 787-6816

E-Mail DAVID@northshorebank.com

2 **PROPERTY ADDRESS**

Out lot located in Sendik's Village Center
on Mequon Road (GTOWN PROPERTIES, LLC)

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

North <u>RESIDENTIAL</u> <u>RETAIL</u>	South <u>RESIDENTIAL</u> <u>Commercial</u>	East <u>INSTITUTIONAL</u> <u>Commercial</u>	West <u>RESIDENTIAL</u> <u>Commercial</u>
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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!

Eric Neumann 7/11/19
Applicant Date

[Signature] 7/11/19
Owner Date

MEMORANDUM

DATE: July 15, 2019

TO: Jeffrey Retzlaff, Village Planner

RE: North Shore Bank

FROM: Eric J. Neumann, Vice President - Sr Project Executive

Please see the attached application, documents and data required for the proposed North Shore Bank location located on the newly created parcel from the current property owned by Gtown Properties LLC and for placement on the September 8th Plan Commission Agenda.

We are confident we have address all needed and required technical information needed to allow for the approval of the Site Plan requested. We understand there could be some corrections /conditions needed after staff & Plan Commission review and will work with you to update those.

As you will see we have incorporated and adapted a heavy "Germanic" detail to the "branded" and prototypical North Shore Bank architecture after getting the input from the Plan Commission on 7/8/19. This includes building wall details and modifications to the roof.

The Site plan has been modified from conceptual set to include the suggested changes of add more green space in the 6 stalls east of the drive thru lanes and on the south edge of that island a 20' wide section of green space. Please note these are on the other parcel owned by Gtown Enterprises LLC. We also show signage on this plan in a suggested placement but will make a separate submittal for that once all final details are confirmed with North Shore Bank and Sign Company. Lighting and Landscape plans are submitted and help to be consistent with the rest of the Centre.

As discussed with Emily we are turning in the current version of the Elevations that we have revised based on 7/8/19 PC comments. We have also sent these to Commissioner Dave Baum to comment on and reserve the right to pull these elevations from the submittal and replace with a new ones if we receive and believe comments from Dave (and Planning Staff) are strong enough to do so. If we do this we would have new elevations to you by 8/15/19. We look forward to your comments and success in September as the land closing dates are set for soon after that Plan Commission meeting so approval is critical to us.

Thank you,

Eric J. Neumann
Vice President – Sr Project Executive
MSI General Corp.
414-333-6800
eric@msigeneral.com

RESOLUTION NO. R____-19

**ADOPTING CONDITIONS AND RESTRICTIONS
FOR THE SENDIK'S VILLAGE CENTRE PLANNED DEVELOPMENT DISTRICT
("SENDIK'S VILLAGE CENTRE PDD")**

WHEREAS, GTown Properties LLC, property owner (hereinafter the "Property Owner") has applied for the creation of a B-2: Community Business Planned Development District (B-2/PDD) to be applied onto the subject property located in the Village of Germantown as generally described in Exhibit A attached hereto; and

WHEREAS, said B-2/PDD is to be known as the "Sendik's Village Centre PDD" and is intended to facilitate the creation of a .35-acre outparcel for purposes of developing a bank; and

WHEREAS, Section 17.27(4) of the Village of Germantown Municipal Code allows for the adoption of conditions and restrictions for Planned Development Districts (PDD) that modify the basic allowances, limitations, and bulk regulations of the underlying zoning district, as well as, allow for the establishment of specific uses, bulk regulations, density standards, yard setbacks, etc. to ensure proper development, operation and maintenance of the development set forth in the General Development Plan; and

WHEREAS, the Village of Germantown Plan Commission on July 8, 2019, reviewed the proposed rezoning application and forwarded a positive recommendation regarding the proposed creation of the "Sendik's Village Centre PDD", and, the General Development Plan to the Village Board;

NOW, THEREFORE BE IT RESOLVED that the Village Board of the Village of Germantown hereby adopts the following specific conditions and restrictions that shall apply to all development on and the use of property within the PDD:

1. **PURPOSE AND INTENT.** The Sendik's Village Centre PDD ("SVC-PDD") is intended to facilitate the development of proposed Lot 2 and construction of a 2,250 square foot bank building for North Shore Bank. The development sites and buildings within the SVC-PDD will be designed, located and constructed with architecture consistent with the Germanic Theme Corridor, high-quality materials, generous landscaping, and in a manner that does not negatively impact surrounding properties. Further, it is intended that future development, land uses and activities within the SVC-PDD be compatible with adjacent and surrounding residential and commercial development, and, enhance the economic stability and quality of life in the Village of Germantown.
2. **GENERAL DEVELOPMENT PLAN (GDP).** The General Development Plan (Exhibit B dated June 3, 2019) for the SVC-PDD establishes the basic parameters for all existing and future development within the PDD, including the approximate size and orientation of buildings, lot size, and extent of landscaping and buffering. While all future development within the PDD shall be generally consistent with the GDP, the GDP does not grant specific site development or building approval.

3. **SITE PLAN APPROVAL REQUIRED.** Detailed Site Development and Building Plans shall be prepared and submitted to the Village Plan Commission for review and approval prior to the issuance of any building permit(s) consistent with the requirements of Sections 17.43 and 17.27(5) through (7) of the Zoning Code. Proposed modifications and/or revisions to the GDP shall be reviewed consistent with Section 17.27(9) of the Zoning Code.
4. **SITE DEVELOPMENT AND BUILDING REQUIREMENTS.** Except as set forth below, all site development and buildings shall be constructed in accordance with the lot, building and other applicable bulk requirements set forth in the underlying B-2: Community Business Zoning District and other applicable Zoning Code regulations:
 - a. **LOT AND BUILDING REQUIREMENTS**
 - i. Lot Area (minimum) 0.35 acres
 - ii. Lot Width (minimum) 130 feet
 - iii. Lot Frontage (minimum) 130 feet
 - iv. Principal & Accessory Building Setbacks (minimum)
 1. Front/Street yard 50 feet
 2. Side yard 20 feet
 3. Rear yard 5 feet
 - v. Building Height (maximum)
 1. Principal Building 20 feet
 - vi. Parking Setbacks (minimum)
 1. Front/Street yard 2 feet
 2. Side yard 2 feet
 3. Rear yard 2 feet
5. **APPLICABILITY OF MUNICIPAL CODE.** Unless otherwise set forth herein, all other applicable zoning and development regulations contained in the Germantown Municipal Code (e.g. Shoreland-Wetland Zoning, Floodplain Zoning, Subdivision) shall apply to development and land use within the SVC-PDD. In the event a requirement, restriction or limitation set forth herein conflicts with a similar requirement, restriction or limitation found in another section of the Municipal Code, the most stringent requirement, restriction or limitation shall apply.
6. **SIGNAGE.** The use of trailers, cars, trucks, vans, or other motor vehicles for purposes of displaying advertising or permanent or temporary signage for any purpose within the SVC-PDD that is not consistent with and permitted under Section 17.46 of the Zoning Code is prohibited.

Introduced by: _____

Adopted: _____, 2019

Vote: Ayes: ____ Nays: ____

Dean Wolter, Village President

ATTEST:

_____, Village Clerk

EXHIBIT A

**Sendik's Village Centre Planned Development District (PDD)
Boundary Legal Description**

PARCEL 1:

Parcel 1 of Certified Survey Map No. 5098, recorded on May 13, 1999, in Volume 35 of Certified Survey Maps on Pages 246-250, as Document No. 824738 and being a redivision of Parcels 1 and 3 of Certified Survey Map No. 2680, being a part of the southeast 1/4 of the Southeast 1/4 of Section 22, Town 9 North, Range 20 East, in the Village of Germantown, Washington County, State of Wisconsin.

PARCEL 2:

A non-exclusive easement for the benefit of Parcel 1 as created by Declaration of Easement recorded in Volume 1145 of Records, on Page 487, as Document No. 586057 and as amended by Amendment to the Declaration of Easements recorded in Volume 1243 of Records, on Page 37, as Document No. 614885.

PARCEL 3:

A non-exclusive easement for the benefit of Parcel 1 as created in Parking Easement Agreement executed by and between Decade 80-I Ltd., a limited partnership, and McDonald's Corporation, dated October 12, 1992 and recorded on October 15, 1992, in Volume 1243 of Records, on Page 47, as Document No. 614886.

Property Address: N112 W15800 Mequon Road, Germantown, WI
Tax Key No.: GTNV 224-974

EXHIBIT B

**Sendik's Village Centre Planned Development District (PDD)
General Development Plan**

{Attach General Development Plan Dated June 6, 2019}



NORTHWEST VIEW FROM MEQUON RD



NORTHEAST VIEW FROM MEQUON RD



PARKING LOT VIEW FROM SENDIK'S



PARKING LOT VIEW FROM SENDIK'S



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State Submittal / Permit:	
As-Built:	

REVISIONS:	
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PROJECT ADDRESS:

PROJECT NAME
NORTH SHORE BANK - GERMANTOWN
STREET ADDRESS
MEQUON ROAD
CITY/ STATE / ZIP
GERMANTOWN, WI 53022

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

Architect:	Engineer:	Reviewed By:
AMH/-	xxx	xxx

Sheet Title:

EXTERIOR RENDERINGS

Sheet Number:

A-202

Project Number:

P12512

EXTERIOR RENDERINGS

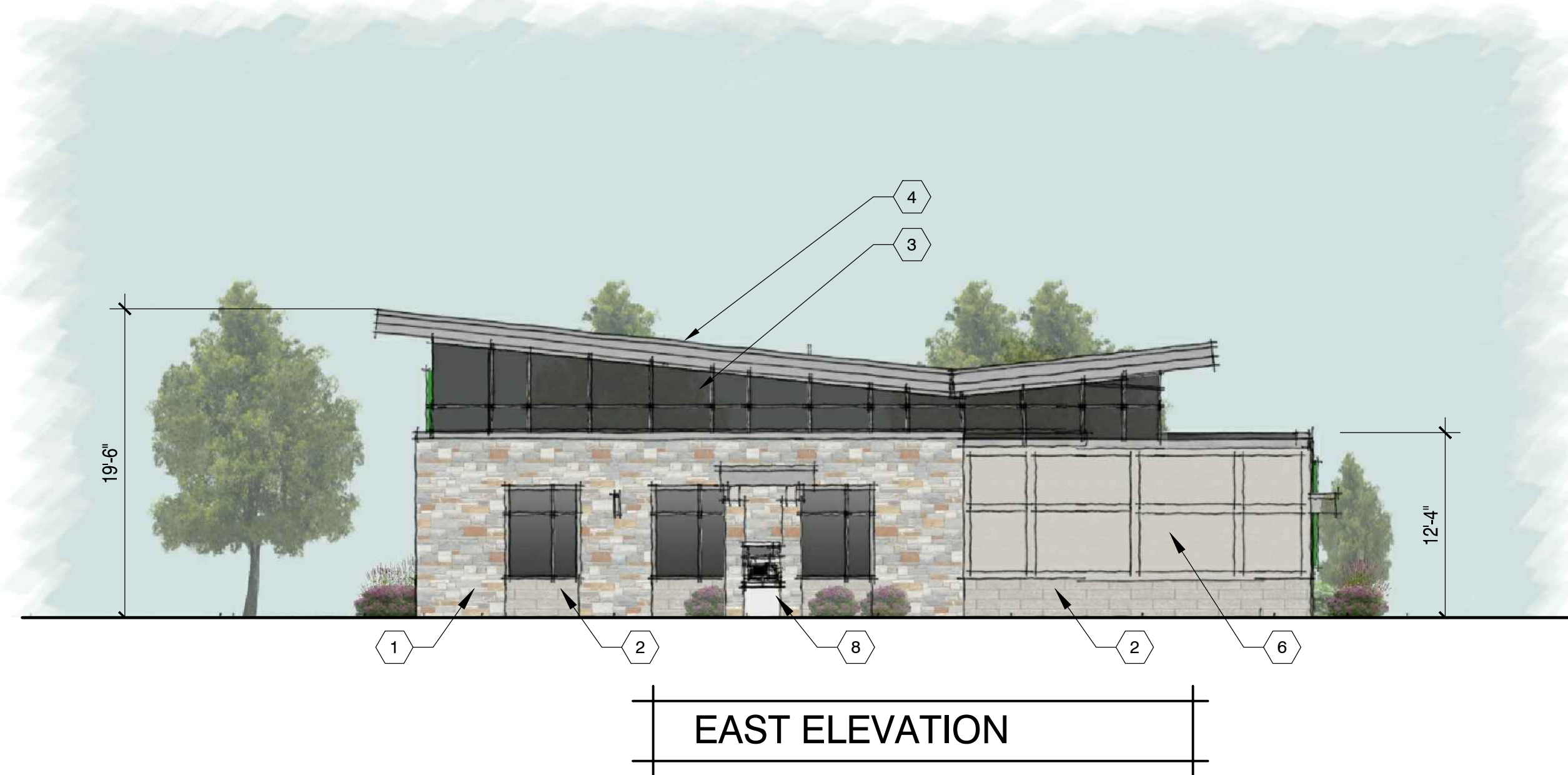
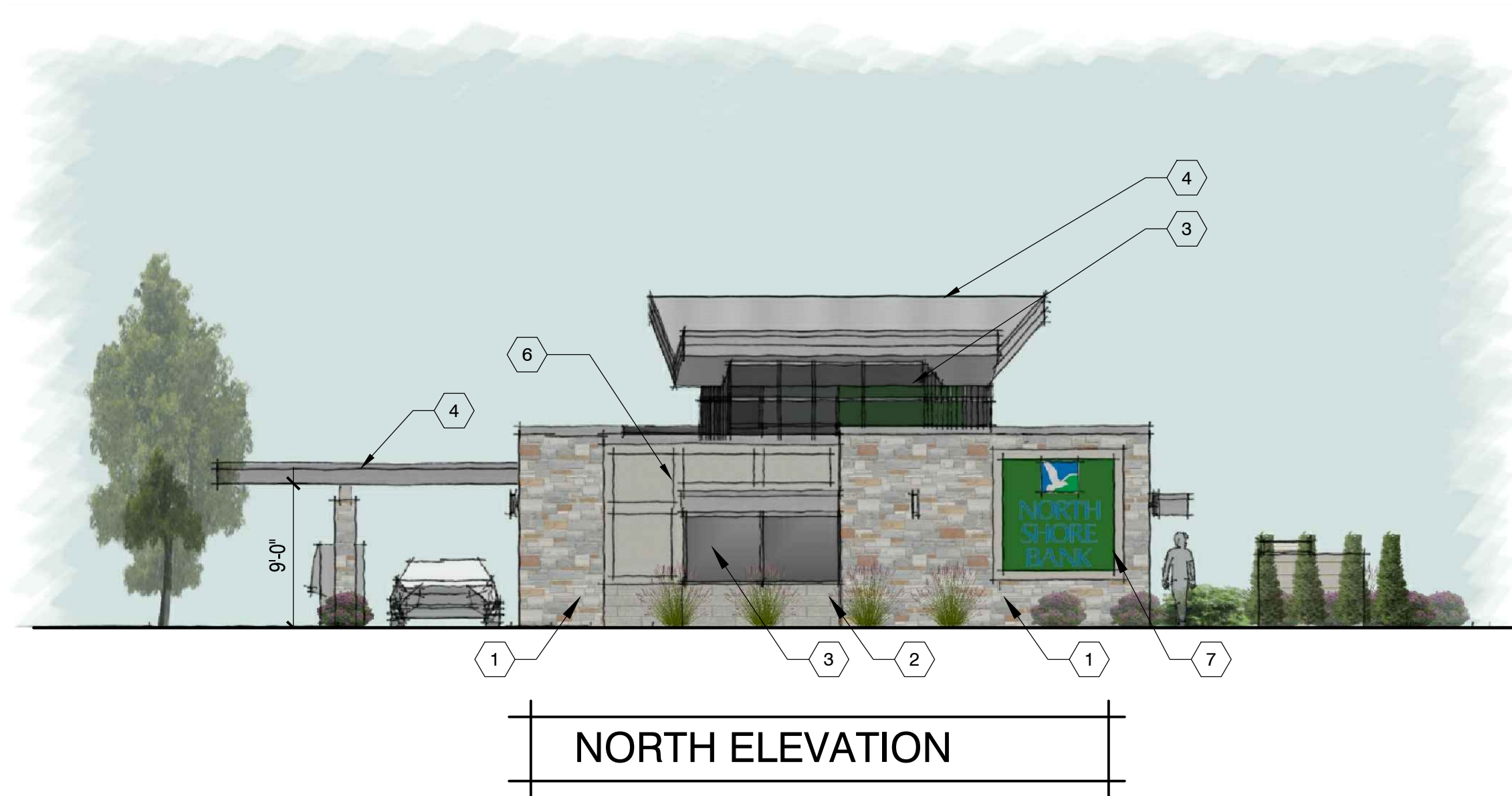
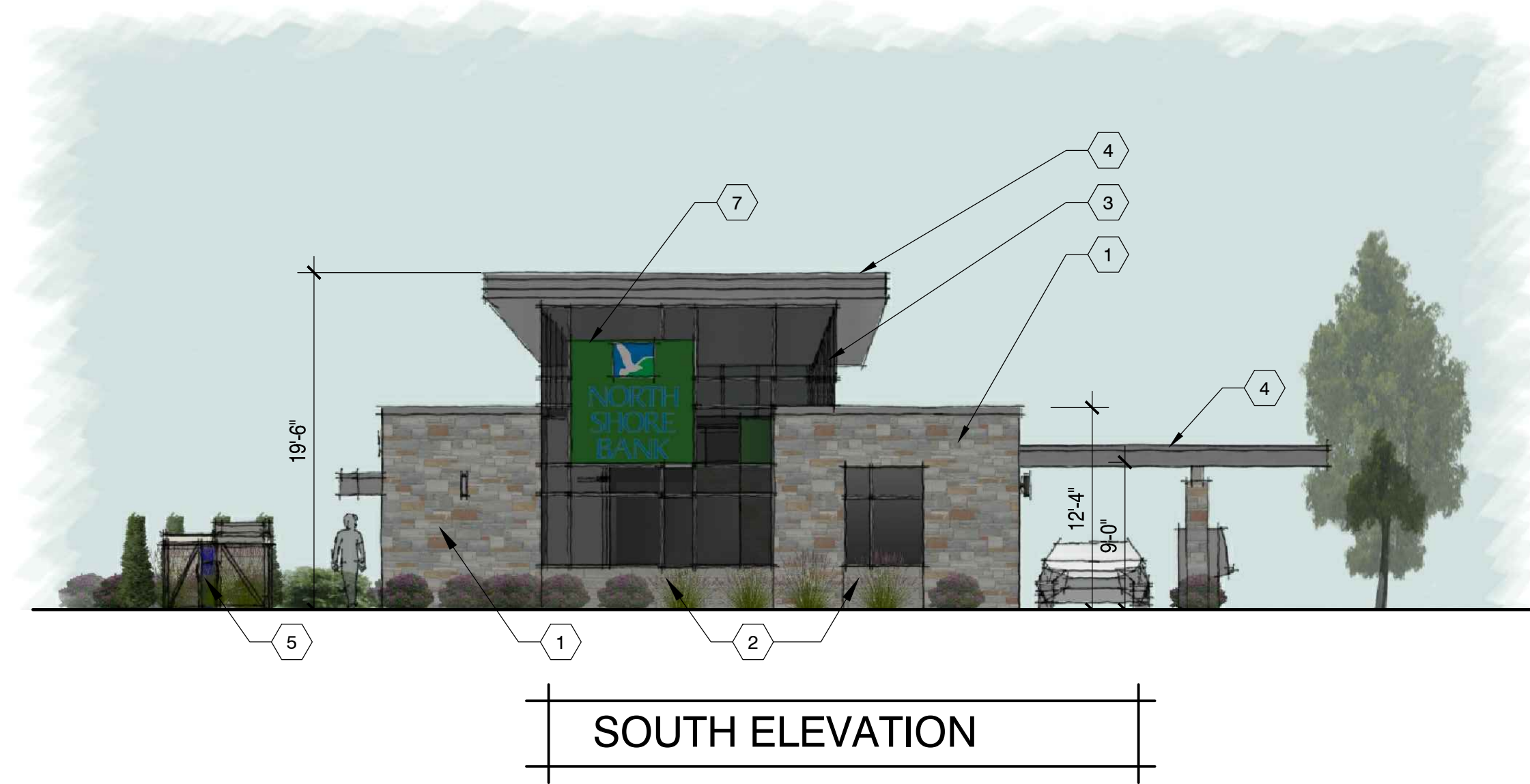
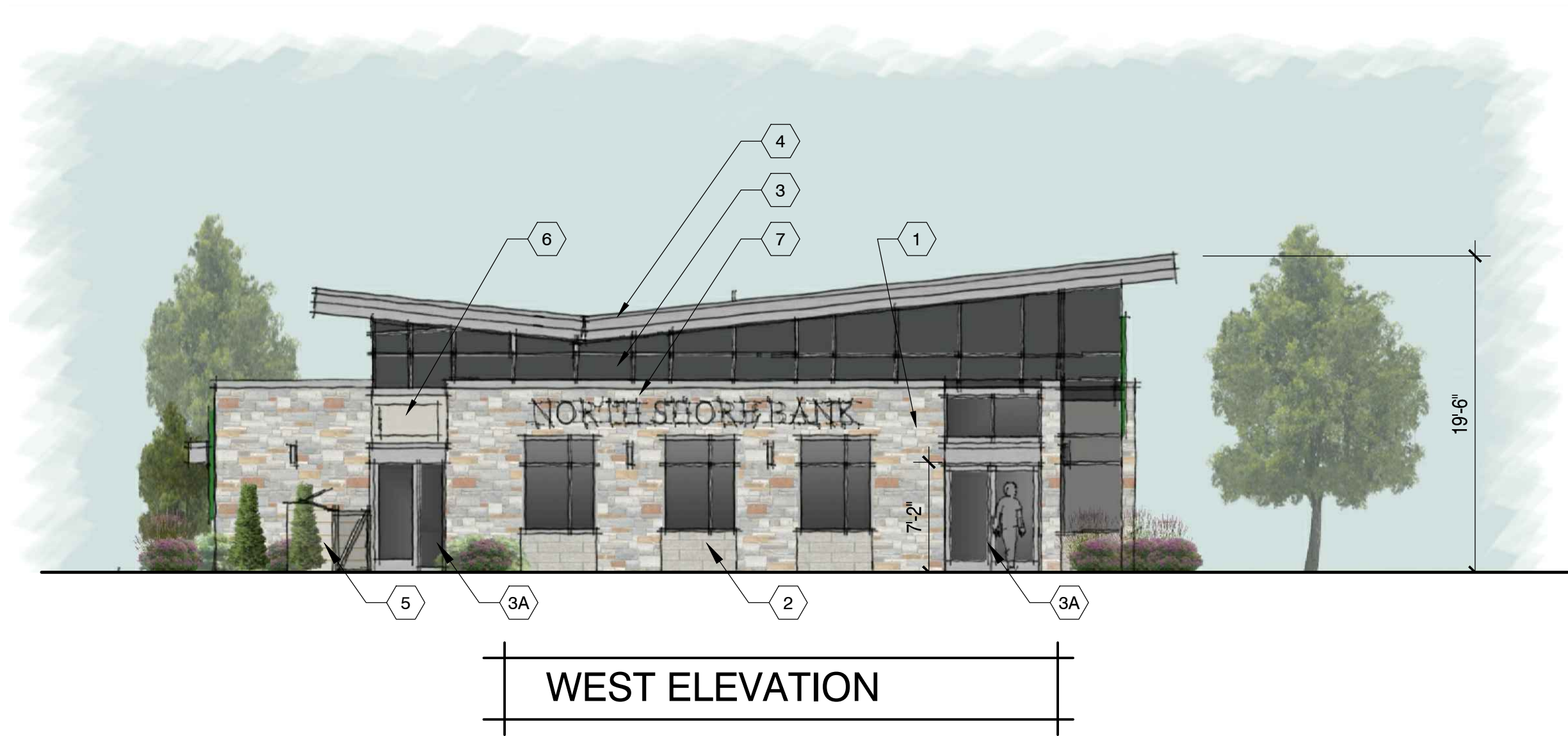
NO SCALE

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS



EXTERIOR MATERIAL KEY NOTES

- 1 HALQUIST STONE, LEDGE COLLECTION - MAPLE RIDGE STONE (USED ON OTHER SIMILAR PROJECTS IN GERMANTOWN)
- 2 NORTHFIELD CORDOVA STONE MASONRY UNITS; COLOR:TBD
- 3 CLEAR ANODIZED ALUMINUM STOREFRONT WINDOW SYSTEM WITH GLAZING
- 3A CLEAR ANODIZED ALUMINUM STOREFRONT ENTRY DOORS WITH GLAZING AND METAL PANEL CANOPY ABOVE
- 4 CLEAR ANODIZED METAL PANEL, FASCIA AND SOFFIT
- 5 PAINTED WOOD TRASH ENCLOSURE WITH GATES; COLOR:TBD
- 6 PAINTED EIFS WITH PAINTED TRIM TO SIMULATE OLD HALF-TIMBERED BUILDING; COLOR:TBD
- 7 POSSIBLE SIGN LOCATION (PROVIDED BY OTHER); SIZE AND MATERIAL TO BE VERIFIED BY OWNER
- 8 DRIVE-THRU ITM MACHINE (PROVIDED BY OWNER)



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Architect: AMH/-- Engineer: xxx Reviewed By: xxx

Sheet Title:

EXTERIOR ELEVATIONS

Sheet Number:

A-201

Project Number: P

P12512

EXTERIOR ELEVATIONS SCALE 1/8" = 1'-0"

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS



NORTHWEST VIEW FROM MEQUON RD



NORTHEAST VIEW FROM MEQUON RD



PARKING LOT VIEW FROM SENDIK'S



PARKING LOT VIEW FROM SENDIK'S



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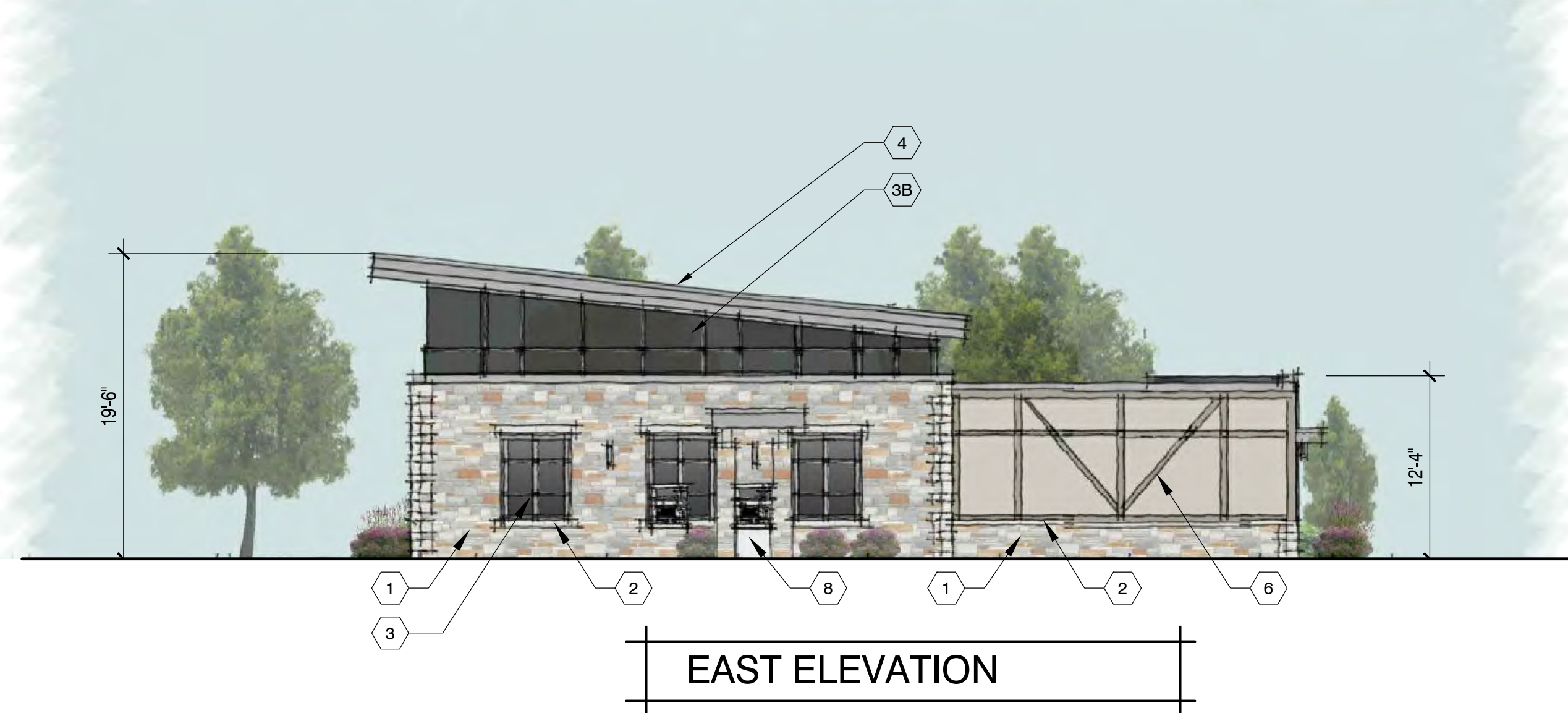
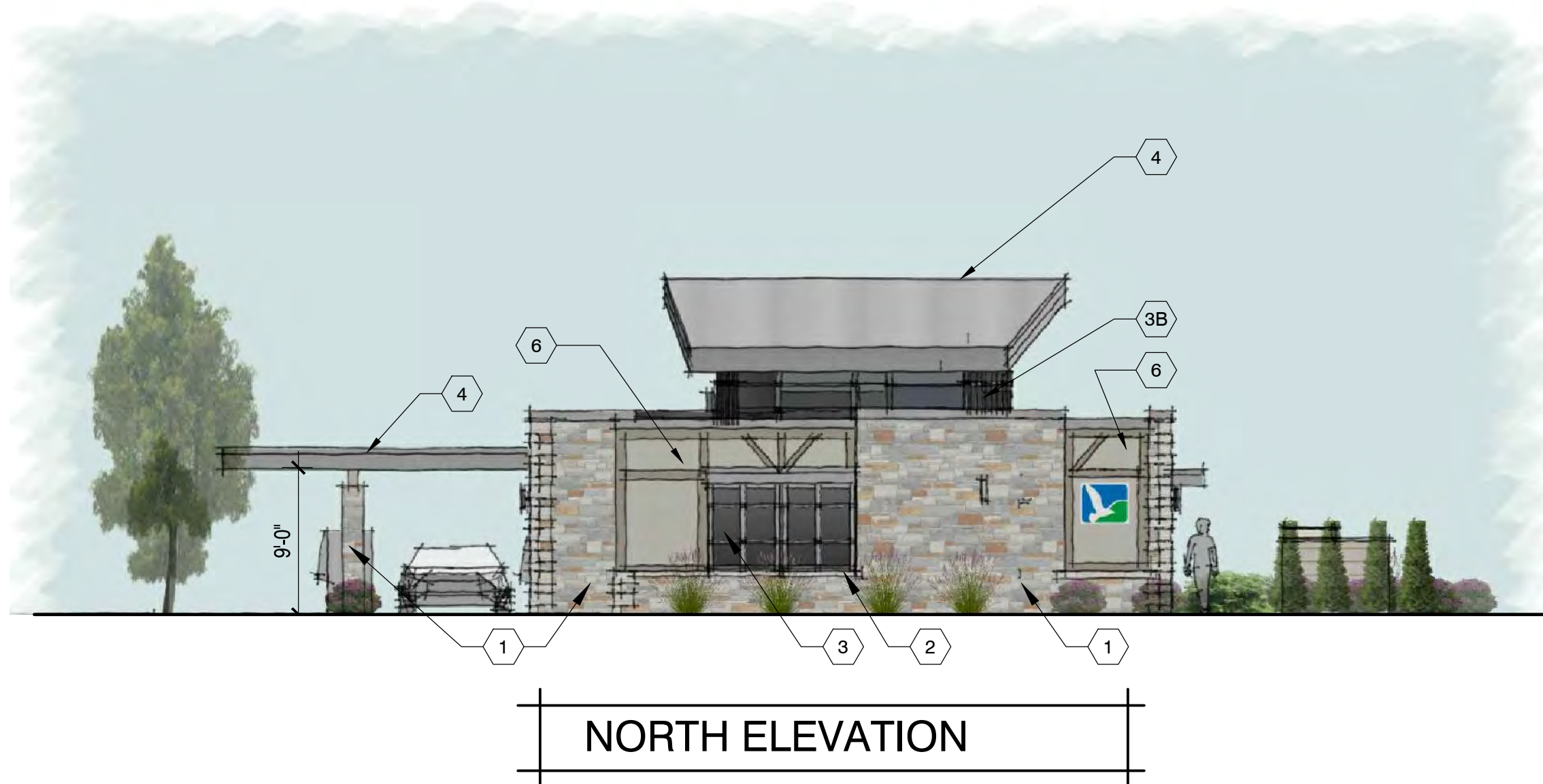
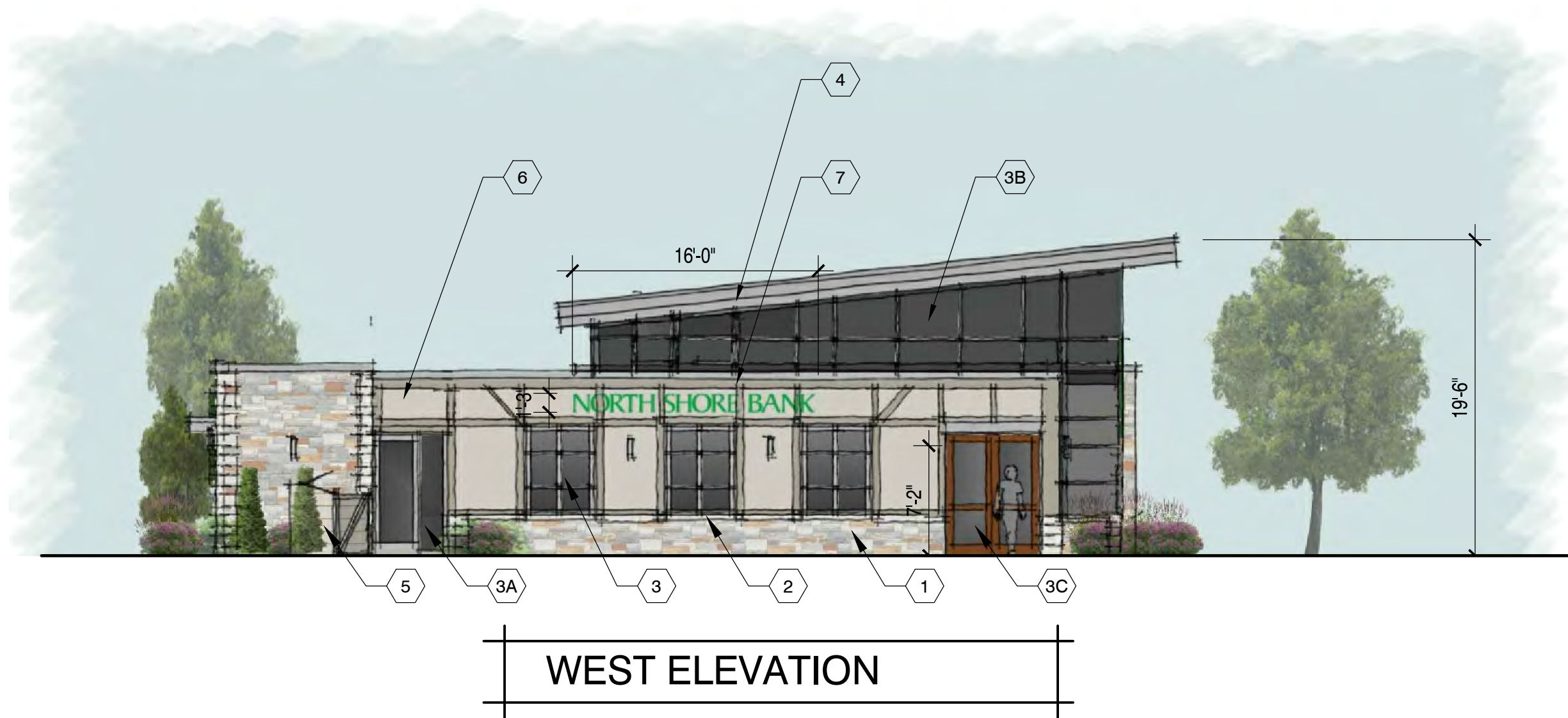
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Architect: AMH/-- Engineer: xxx Reviewed By: xxx

EXTERIOR RENDERINGS

Sheet Number:
A-202
Project Number: P
P12512



MATERIAL EXAMPLES
(METAL SIDING TO BE REPLACED WITH EIFS AND
FAUX TIMBERFRAME AT THE GERMANTOWN LOCATION)

EXTERIOR MATERIAL KEY NOTES

- 1 HALQUIST STONE, LEDGE COLLECTION - MAPLE RIDGE STONE (USED ON OTHER SIMILAR PROJECTS IN GERMANTOWN)
- 2 NORTHFIELD CORDOVA STONE MASONRY UNITS, SILL AND QUOINS; COLOR:TBD
- 3 CLEAR ANODIZED ALUMINUM STOREFRONT WINDOW SYSTEM WITH GLAZING
- 3A CLEAR ANODIZED ALUMINUM STOREFRONT ENTRY DOOR WITH GLAZING AND SIDELITE
- 3B CLEAR ANODIZED ALUMINUM CURTAINWALL SYSTEM WITH GLAZING
- 3C ALUMINUM STOREFRONT ENTRY DOORS WITH GLAZING
- 4 CLEAR ANODIZED METAL PANEL, FASCIA AND SOFFIT
- 5 PAINTED WOOD TRASH ENCLOSURE WITH GATES; COLOR:TBD
- 6 PAINTED EIFS WITH PAINTED TRIM TO SIMULATE OLD HALF-TIMBERED BUILDING; COLOR:TBD
- 7 POSSIBLE SIGN LOCATION (PROVIDED BY OTHER); SIZE AND MATERIAL TO BE VERIFIED BY OWNER
- 8 DRIVE-THRU ITM MACHINE (PROVIDED BY OWNER)



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Architect: AMH/-- Engineer: xxx Reviewed By: xxx

Sheet Title:
EXTERIOR ELEVATIONS

Sheet Number:
A-201

Project Number:
P12512

EXTERIOR ELEVATIONS SCALE 1/8" = 1'-0"

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS



NORTHWEST VIEW FROM MEQUON RD



NORTHEAST VIEW FROM MEQUON RD



PARKING LOT VIEW FROM SENDIK'S



PARKING LOT VIEW FROM SENDIK'S



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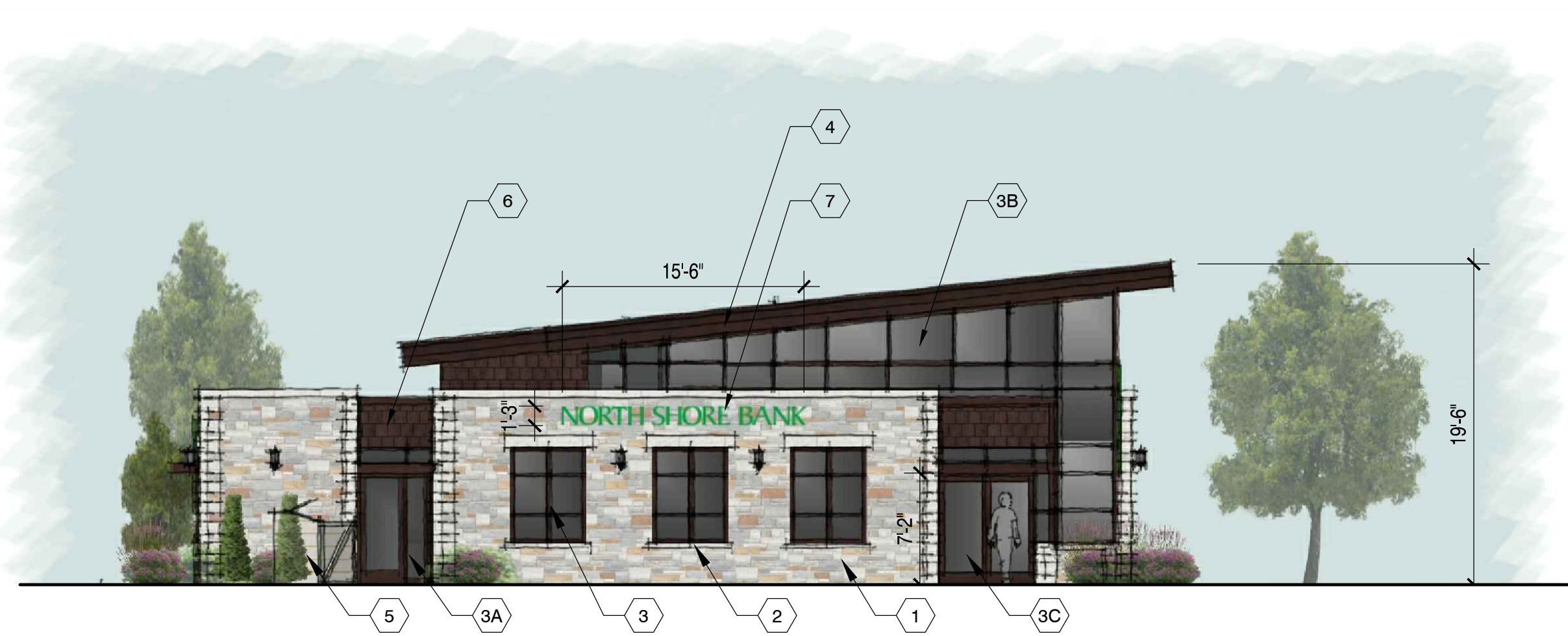
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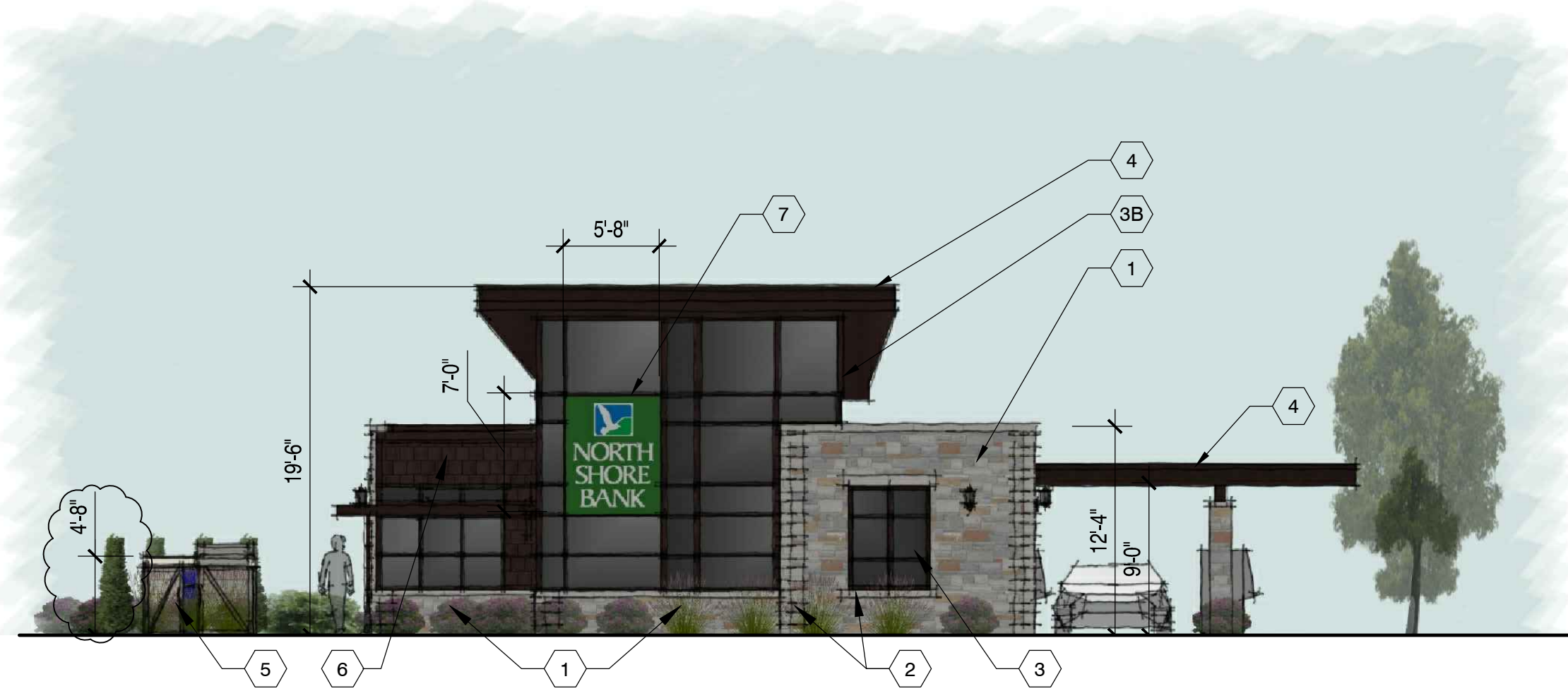
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AMH/--	xxx	xxx

EXTERIOR RENDERINGS

Sheet Number:
A-202
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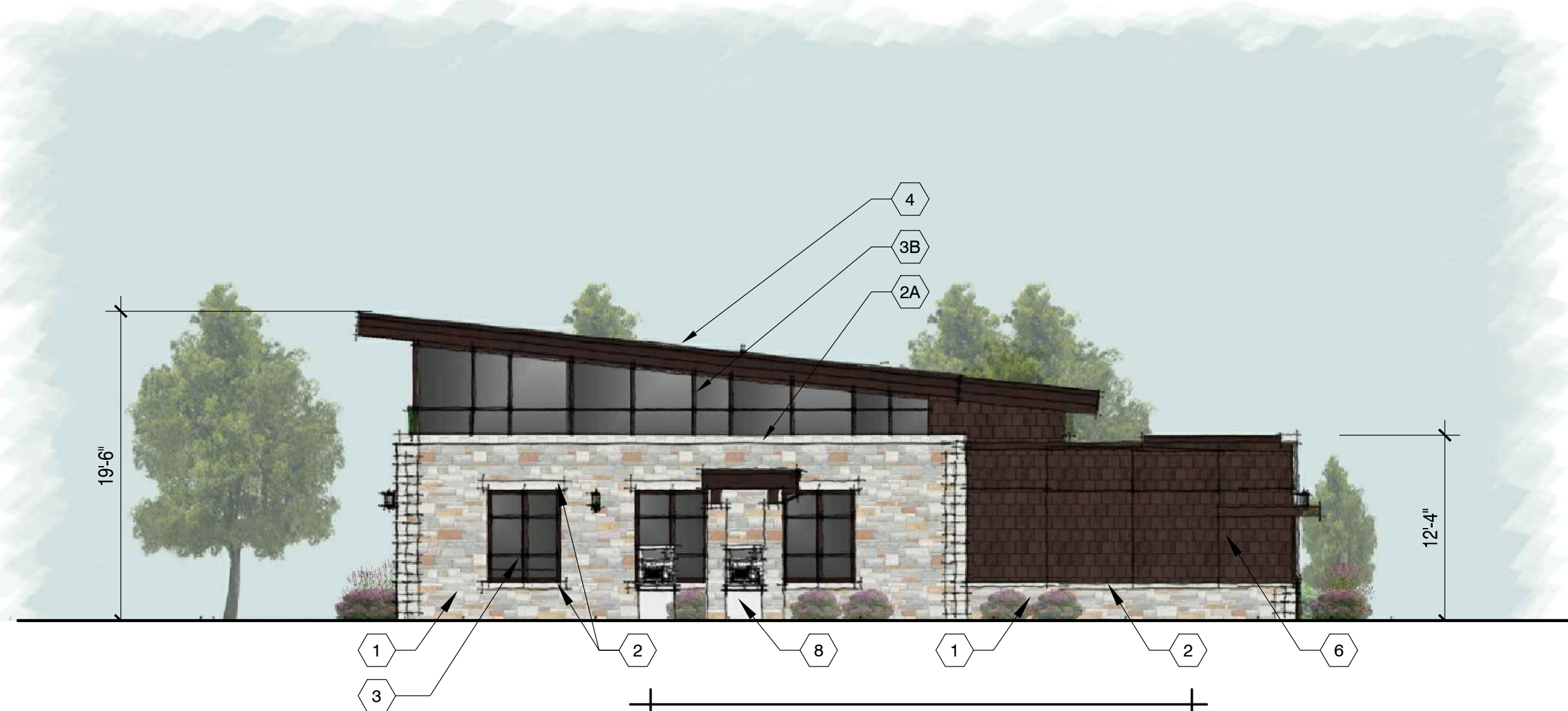
WEST ELEVATION



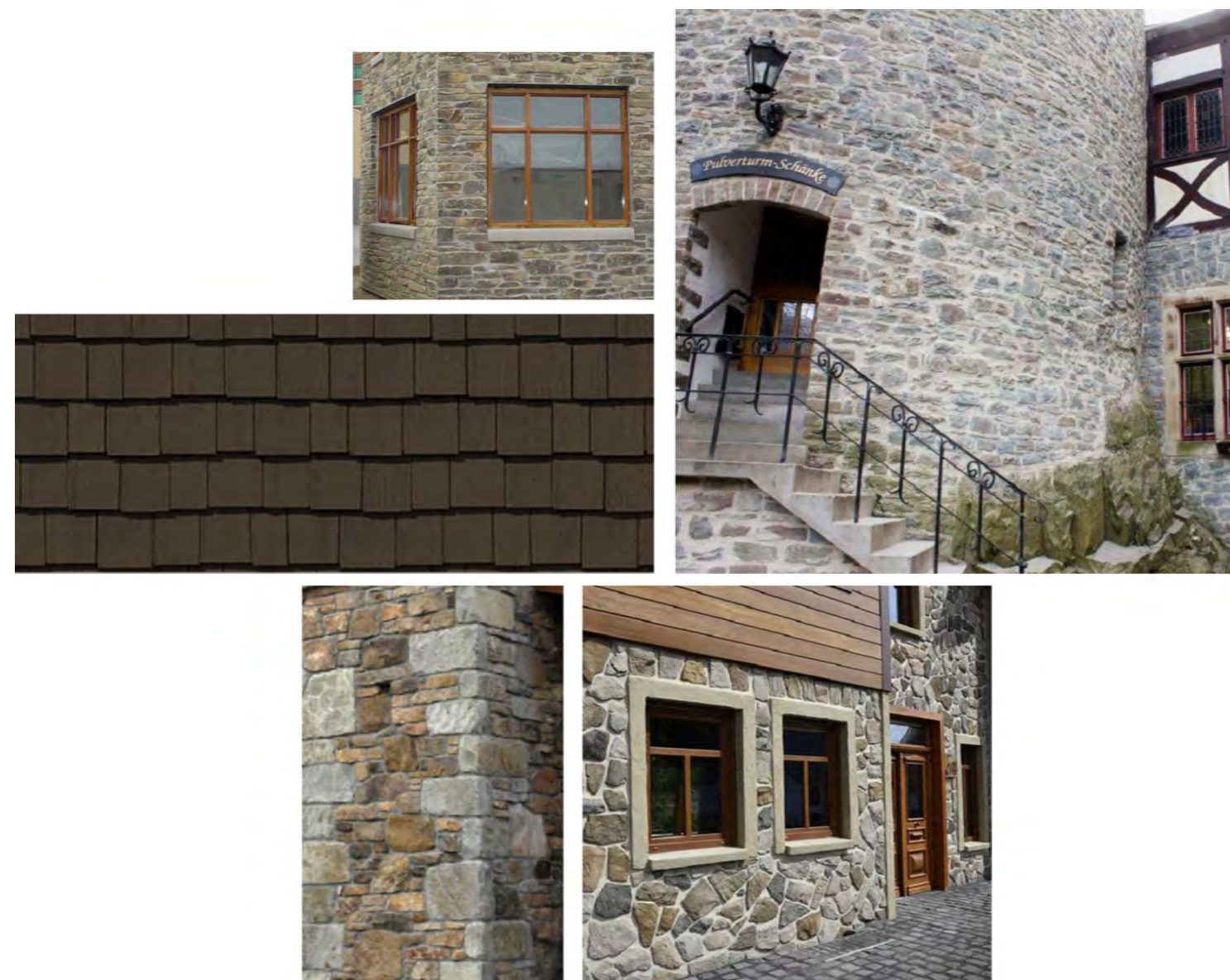
SOUTH ELEVATION



NORTH ELEVATION



EAST ELEVATION



MATERIAL EXAMPLES/
INSPIRATIONAL IDEAS

EXTERIOR MATERIAL KEY NOTES

- 1 HALQUIST STONE, LEDGE COLLECTION - MAPLE RIDGE STONE (USED ON OTHER SIMILAR PROJECTS IN GERMANTOWN)
- 2 ROUGH-FACE TUMBLED STONE MASONRY UNITS: HEADER, SILL AND QUOINS, TYP; COLOR:TBD
- 2A STONE COPING TO MATCH OTHER STONE ON BUILDING
- 3 DARK BRONZE ALUMINUM STOREFRONT WINDOW SYSTEM WITH GLAZING
- 3A DARK BRONZE ALUMINUM STOREFRONT ENTRY DOOR WITH GLAZING AND SIDELITE
- 3B DARK BRONZE ALUMINUM CURTAINWALL SYSTEM WITH GLAZING
- 3C DARK BRONZE ALUMINUM STOREFRONT ENTRY DOORS WITH GLAZING
- 4 DARK BRONZE METAL PANEL, FASCIA, SOFFIT AND ROOF
- 5 PAINTED WOOD TRASH ENCLOSURE WITH GATES; COLOR:TBD
- 6 PAINTED STAGGERED SHAKE SIDING WITH MATCHING TRIM AND COPING
- 7 POSSIBLE SIGN LOCATION (PROVIDED BY OTHER); SIZE AND MATERIAL TO BE VERIFIED BY OWNER
- 8 DRIVE-THRU ITM MACHINE EQUIPMENT (PROVIDED BY OWNER)



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PROJECT ADDRESS:

PROJECT NAME
NORTH SHORE BANK - GERMANTOWN
STREET ADDRESS
MEQUON ROAD
CITY/ STATE / ZIP
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Architect: AMH/-- Engineer: xxx Reviewed By: xxx

Sheet Title:
EXTERIOR ELEVATIONS

Sheet Number:
A-201

Project Number: P

P12512

Project Name

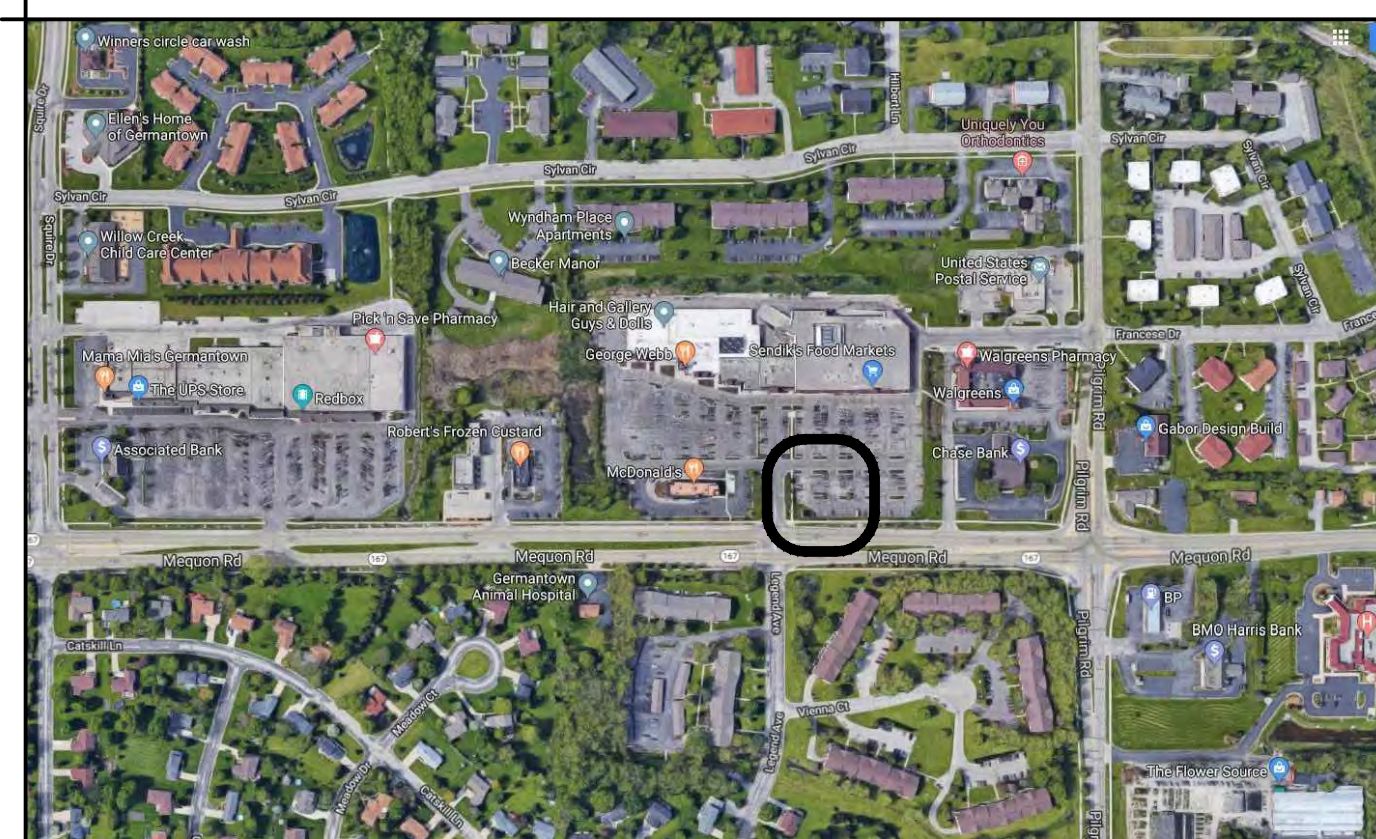
North Shore Bank - Germantown

Project Address

Mequon Road

Germantown, WI 53022

Project Data	
Building	
Occupancy	B (Financial Institution use)
Proposed Building Area	2,250 SF
Fire Protection	Unsprinklered
Construction Type	
Building Code note:	
Wisconsin Building Code utilizing the 2015 International Building Code	
Site	
Site Area	16,339 SF
Total Building Foot Print Area	2,250 SF
Hard Surface Area	11,700 SF
Greenspace Area	4,639 SF or 28.4%
Zoning	B-2 & B-3 to be changed to B-2/PDD
Building Use	Financial Institution
Parking Requirements	
Number of Stalls Required	15 stalls (1 per 200sf + 1 per 2/employees) (4-5 employees per typical shift)
Number of Stalls Provided	19 stalls including 1 handicap accessible stall



Project Location



Architects Seal

Engineers Seal

61 YEARS
OF
DESIGN
EXCELLENCE

SITE PLAN REVIEW SHEET INDEX	
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Architect: Engineer: Reviewed By:

AMH/--	xxx	xxx
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Sheet Title:

COVER SHEET

Sheet Number:

G-001

Project Number: P

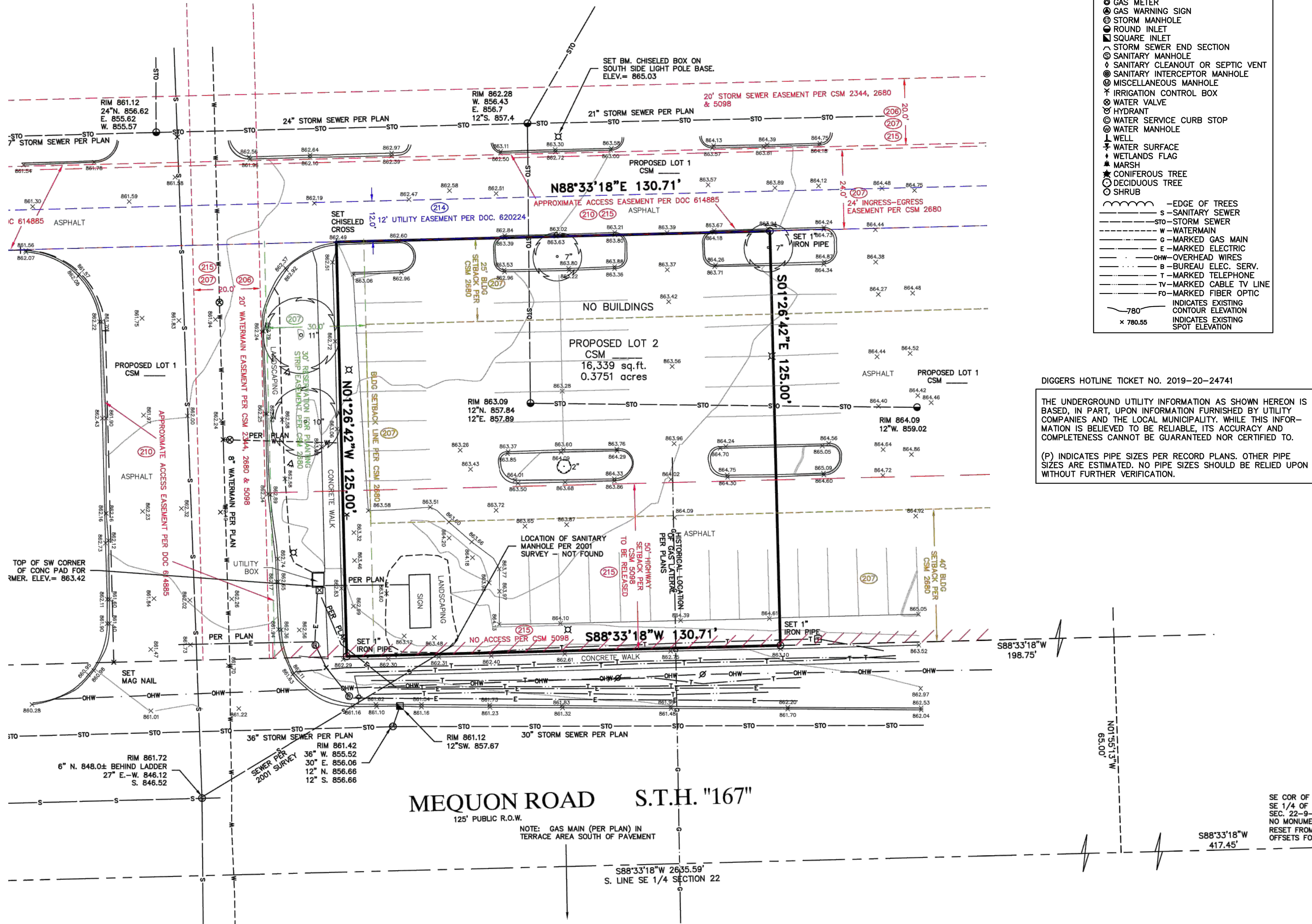
P12512

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS



LEGEND

- BOLLARD
- + SOIL BORING/MONITORING WELL
- ✦ FLAGPOLE
- ✦ MALBOX
- ✦ SIGN
- AIR CONDITIONER
- CONTROL BOX
- ✦ TRAFFIC SIGNAL
- CABLE PEDESTAL
- ✦ POWER POLE
- ✦ GUY POLE
- ✦ GUY WIRE
- ✦ LIGHT POLE
- ✦ SPOT/YARD/PEDESTAL LIGHT
- ✦ HANDICAPPED PARKING
- ELECTRIC MANHOLE
- ELECTRIC PEDESTAL
- ELECTRIC METER
- ELECTRIC TRANSFORMER
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- UTILITY VAULT
- ✦ GAS VALVE
- GAS METER
- GAS WARNING SIGN
- STORM MANHOLE
- ROUND INLET
- SQUARE INLET
- STORM SEWER END SECTION
- SANITARY MANHOLE
- ✦ SANITARY CLEANOUT OR SEPTIC VENT
- SANITARY INTERCEPTOR MANHOLE
- MISCELLANEOUS MANHOLE
- ✦ IRRIGATION CONTROL BOX
- ✦ WATER VALVE
- HYDRANT
- WATER SERVICE CURB STOP
- WATER MANHOLE
- ✦ WELL
- ✦ WATER SURFACE
- ✦ WETLANDS FLAG
- ✦ MARSH
- CONIFEROUS TREE
- DECIDUOUS TREE
- SHRUB
- EDGE OF TREES
- s - SANITARY SEWER
- s - STORM SEWER
- w - WATER MAIN
- g - MARKED GAS MAIN
- e - MARKED ELECTRIC
- ohw - OVERHEAD WIRES
- b - BUREAU ELEC. SERV.
- t - MARKED TELEPHONE
- tv - MARKED CABLE TV LINE
- fo - MARKED FIBER OPTIC
- INDICATES EXISTING
- INDICATES EXISTING
- SPOT ELEVATION

DIGGERS HOTLINE TICKET NO. 2019-20-24741

THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.

(P) INDICATES PIPE SIZES PER RECORD PLANS. OTHER PIPE SIZES ARE ESTIMATED. NO PIPE SIZES SHOULD BE RELIED UPON WITHOUT FURTHER VERIFICATION.

SE COR OF
SE 1/4 OF
SEC. 22-9-20
NO MONUMENT
RESET FROM 1.00'
OFFSETS FOUND

ALTA/NSPS LAND TITLE SURVEY

Situated on Mequon Road, in the Village of Germantown, Washington County, Wisconsin.

Parcel 1 of Certified Survey Map No. 5098, recorded on May 13, 1999, in Volume 35 of Certified Survey Maps on Pages 246-250, as Document No. 824738 and being a subdivision of Parcels 1 and 3 of Certified Survey Map No. 2680, being a part of the Southeast 1/4 of the Southeast 1/4 of Section 22, Town 9 North, Range 20 East, in the Village of Germantown, County of Washington, State of Wisconsin.

TO BE KNOWN AS:

Lot ___ of Certified Survey Map No. _____ recorded in the office of the Register of Deeds for Washington County, Wisconsin, on _____, 2019 in Volume of Certified Survey Maps, at Page _____, as Document No. _____, being a subdivision of Parcel 1 of Certified Survey Map No. 5098, recorded on May 13, 1999, in Volume 35 of Certified Survey Maps on Pages 246-250, as Document No. 824738 and being a subdivision of Parcels 1 and 3 of Certified Survey Map No. 2680, being a part of the Southeast 1/4 of the Southeast 1/4 of Section 22, Town 9 North, Range 20 East, in the Village of Germantown, County of Washington, State of Wisconsin.

Prepared for: North Shore Bank

Survey No. 157634-RMK

A. Basis of Bearings

Bearings are based on the South line of the Southeast 1/4 of Section 22-9-20, which is assumed to bear South 88°33'18" West.

B. Title Commitment

This survey was prepared based on Knight Barry Title, Inc. underwritten by Chicago Title Insurance Company title commitment number 1027770, effective date of April 17, 2019, which lists the following easements and/or restrictions from schedule B-II:

200. Grant of Easement to Wisconsin Gas and Electric Company and other matters contained in the instrument recorded May 14, 1917 as Document No. 114517. Conveyance of Rights in Land by Wisconsin Electric Power Company to the State of Wisconsin, Department of Transportation recorded November 27, 1995 as Document No. 704909. Does not affect site by location - not shown.

201. Grant of Easement to Wisconsin Gas and Electric Company and other matters contained in the instrument recorded May 14, 1917 as Document No. 114518. May affect site by location - property impacted is not described, not shown.

202. Grant of Easement to Wisconsin Gas and Electric Company and other matters contained in the instrument recorded February 7, 1927 as Document No. 137901. Conveyance of Rights in Land by Wisconsin Electric Power Company to the State of Wisconsin, Department of Transportation recorded November 27, 1995 as Document No. 704909. Does not affect site by location - not shown.

203. Grant of Easement to Wisconsin Gas and Electric Company and other matters contained in the instrument recorded February 7, 1927 as Document No. 137902. Conveyance of Rights in Land by Wisconsin Electric Power Company to the State of Wisconsin, Department of Transportation recorded November 27, 1995 as Document No. 704909. Does not affect site by location - not shown.

204. Agreement by and between the Village of Germantown and Heinz Hilbert and other matters contained in the instrument recorded July 25, 1973 as Document No. 345212. Does not affect site by location - not shown.

205. Easement granted to Wisconsin Electric Power Company and other matters contained in the instrument recorded September 5, 1979 as Document No. 420968. Does not affect site by location - not shown.

206. Easements, restrictions and other matters shown on Certified Survey Map No. 2344 recorded December 18, 1980 as Document No. 433227. Does not affect site by location - shown.

207. Easements, restrictions and other matters shown on Certified Survey Map No. 2680 recorded August 10, 1984 as Document No. 470281. Affects site by location - shown.

208. Easement granted to Wisconsin Electric Power Company and other matters contained in the instrument recorded November 8, 1988 as Document No. 535964. Conveyance of Rights in Land by Wisconsin Electric Power Company to the State of Wisconsin, Department of Transportation recorded November 27, 1995 as Document No. 704909. Does not affect site by location - not shown.

209. Grant of Easement to Wisconsin Bell, Inc. and other matters contained in the instrument recorded August 19, 1991 as Document No. 583550. Does not affect site by location - not shown.

210. Declaration of Easement and other matters contained in the instrument recorded October 3, 1981 as Document No. 586057. Amendment to Declaration of Easements and other matters contained in the instrument recorded October 15, 1992 as Document No. 614885. Affects site by location - shown.

211. Village of Germantown Conditional Use Zoning Permit and other matters contained in the instrument recorded November 4, 1991 as Document No. 587893. Does not affect site by location - not shown.

212. Restrictive Covenant and other matters contained in the instrument recorded October 15, 1992 as Document No. 614884. Does not affect site by location - not shown.

213. Parking Easement Agreement and other matters contained in the instrument recorded October 15, 1992 as Document No. 614886. Does not affect site by location - not shown.

214. Grant of Easement to Wisconsin Electric Power Company and other matters contained in the instrument recorded December 11, 1992 as Document No. 620224. Does not affect site by location - not shown.

215. Easements, restrictions and other matters shown on Certified Survey Map No. 5098 recorded May 13, 1999 as Document No. 824738. Affects site by location - shown.

216. Use Restriction Agreement and other matters contained in the instrument recorded September 8, 1999 as Document No. 836854. Affects site by location - use restriction, cannot be plotted.

217. Groundwater Use Restriction and other matters contained in the instrument recorded April 19, 2001 as Document No. 882836. Does not affect site by location - not shown.

218. Easements, restrictions and other matters shown on Certified Survey Map No. _____ recorded _____, 2019 as Document No. _____. Certified Survey Map not record - not shown.

C. Flood Note

According to flood insurance rate map of the Village of Germantown, community panel number 55131C0376D, effective date of November 20, 2013, this site falls in zone X (areas determined to be outside the 0.2% annual chance floodplain)

D. Parking Spaces

There are 41 regular and no handicapped parking spaces marked on this site.

E. Elevations

Elevations refer to NGVD 1929 Datum. Starting BM, Southwest corner of the Southeast 1/4 of Section 22-9-20. Found Aluminum cap Monument elevation = 861.13

F. Municipal Zoning, provided by surveyor

The zoning information listed below is taken from the Village of Germantown GIS website - site is zoned B-2, Community Business District

Front setback - 10'

Side yard setback - 40'

Rear yard setback - 40'

Maximum height - 45'

G. Notes

There is no evidence of recent earth moving work, building construction or building additions observed in the process of conducting the fieldwork.

There is no proposed changes in street right of way lines, if such information is made available to the surveyor by the controlling jurisdiction observed in the process of conducting the fieldwork.

There is no evidence of recent street or sidewalk construction or repairs observed in the process of conducting the fieldwork.

raSmith

16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000

EXISTING SITE PLAN/SURVEY SCALE 1" = 20'-0"



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Plan Commission:	06/03/19
Plan Commission Resubmittal:	08/20/19
Plan Commission Resubmittal:	09/06/19
Proposal:	
Bid:	06/28/19
Contract:	
State Submittal / Permit:	
As-Built:	

REVISIONS:

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PROJECT ADDRESS:

PROJECT NAME
NORTH SHORE BANK - GERMANTOWN
STREET ADDRESS
MEQUON ROAD
CITY/STATE / ZIP
GERMANTOWN, WI 53022

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

Architect: Engineer: Reviewed By:

AMH/- xxx xxx

Sheet Title:

EXISTING SITE PLAN

Sheet Number:

C-001

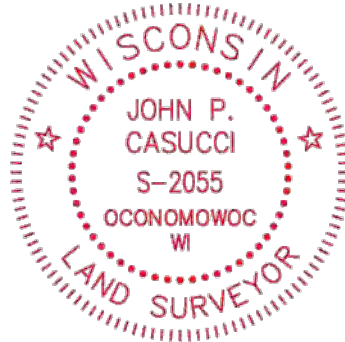
Project Number:

P12512

To: North Shore Bank, FSB; Knight Barry Title, Inc. and Chicago Title Insurance Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS and includes items 1, 2, 3, 4, 5, 6(a), 8, 9, 11, 16, 17, 19 and 20 of Table A thereof. The fieldwork was completed on May 28, 2019.

Date of Plat or Map: May 30, 2019



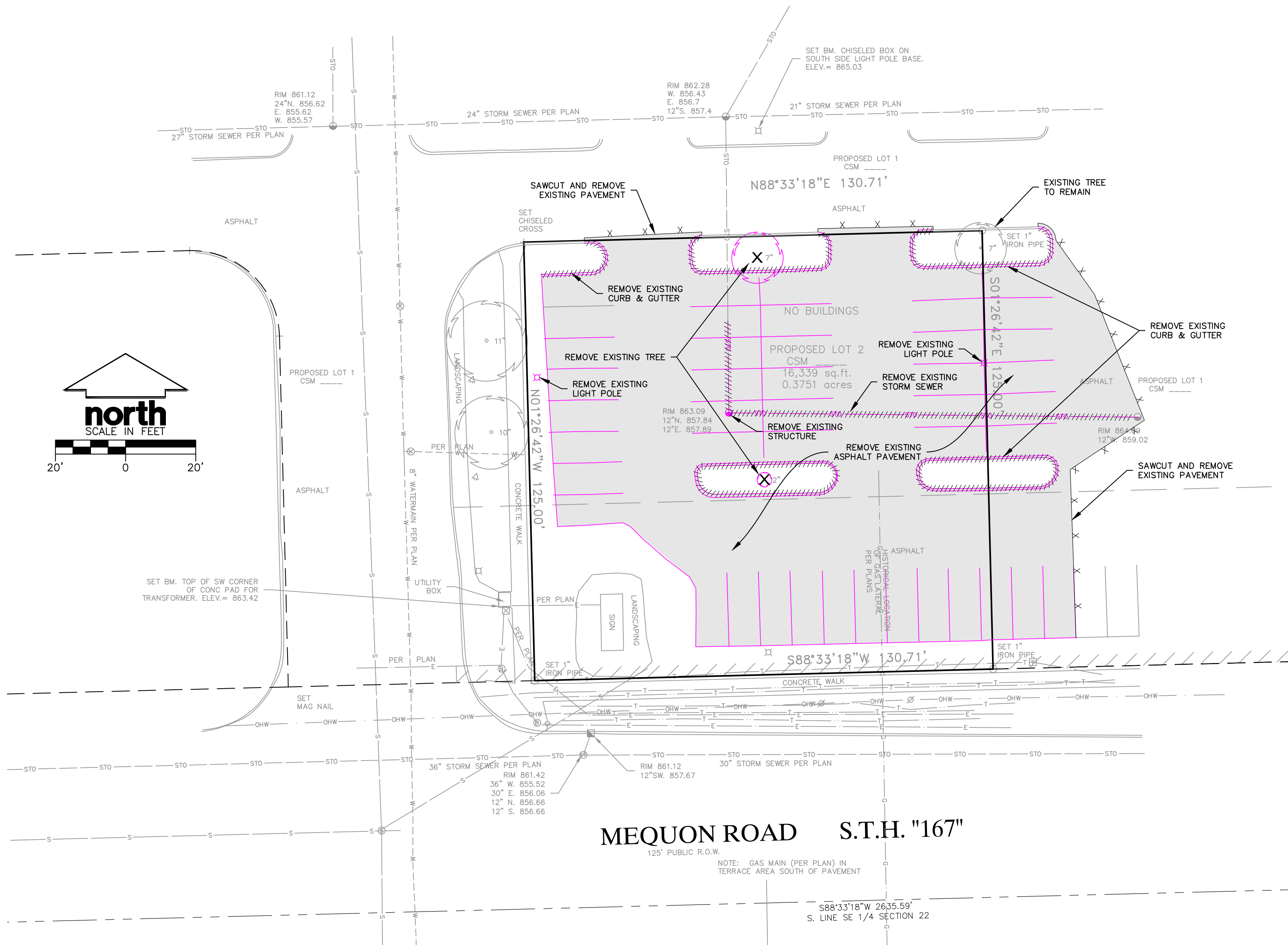
John P. Casucci
Professional Land Surveyor
Registration Number 2055
john.casucci@rasmith.com

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS



SHEET INDEX	
C-101	DEMOLITION PLAN
C-102	PAVEMENT ID & SITE DIMENSION PLAN
C-103	GRADING & EROSION CONTROL PLAN
C-104	UTILITY PLAN
C-105	NOTES & DETAILS
C-106	NOTES & DETAILS

CONTACT INFORMATION

OWNER:
NORTH SHORE BANK
15700 W. BLUEMOUND RD.
BROOKFIELD, WI 53005

ENGINEER:
JSD PROFESSIONAL SERVICES
W238 N1610 BUSSE ROAD – SUITE 100
WAUKESHA, WISCONSIN 53188
262–513–0666



DEMOLITION NOTES

- THIS PLAN INDICATES ITEMS ON THE PROPERTY INTENDED FOR DEMOLITION BASED ON THE CURRENT SITE DESIGN THAT HAVE BEEN IDENTIFIED ON A ALTA LAND TITLE SURVEY PROVIDED BY R.A. SMITH, DATED MAY 30TH, 2019. THERE MAY BE ADDITIONAL ITEMS OF WHICH THE ENGINEER WOULD HAVE NO KNOWLEDGE OR MAY BE A PART OF ANOTHER DESIGN DISCIPLINE. IT IS THE CONTRACTOR'S/BIDDER'S RESPONSIBILITY TO REVIEW THE PLANS, INSPECT THE SITE AND PROVIDE HIS OWN DUE DILIGENCE TO INCLUDE IN HIS BID WHAT ADDITIONAL ITEMS, IN HIS OPINION, MAY BE NECESSARY FOR DEMOLITION. ANY ADDITIONAL ITEMS IDENTIFIED BY THE CONTRACTOR/BIDDER SHALL BE IDENTIFIED IN THE BID AND REPORTED TO THE ENGINEER OF RECORD.
- CONTRACTOR SHALL KEEP ALL STREETS AND PRIVATE DRIVES FREE AND CLEAR OF ALL CONSTRUCTION RELATED DIRT, DUST AND DEBRIS.
- ALL TREES WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED UNLESS SPECIFICALLY CALLED OUT FOR PROTECTION. ALL TREES TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY AND STUMPS SHALL BE GROUND TO PROPOSED SUBGRADE.
- PERFORM TREE PRUNING IN ALL LOCATIONS WHERE PROPOSED PAVEMENT AND/OR UTILITY INSTALLATION ENCR OACH WITHIN THE EXISTING DRIP LINE OF THE TREES TO REMAIN. ALL TRENCING WITHIN THE EXISTING DRIP LINE OF THE TREES TO REMAIN SHALL BE DONE RADIALY AWAY FROM THE TRUNK IF ROOTS IN EXCESS OF 1" DIAMETER ARE EXPOSED. ROOTS MUST BE CUT BY REPUTABLE TREE PRUNING SERVICE PRIOR TO ANY TRANSVERSE TRENCING.
- ALL LIGHT POLES TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY, INCLUDING BASE AND ALL APPURTENANCES, SALVAGE FOR RELOCATION. COORDINATE RELOCATION AND/OR ABANDONMENT OF ALL ELECTRIC LINES WITH ELECTRICAL ENGINEER AND OWNER PRIOR TO DEMOLITION.
- ABANDONED/REMOVED ITEMS SHALL BE DISPOSED OF OFF SITE UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL INSTALL A PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVERNIGHT AS REQUIRED.
- CONTRACTOR TO REPLACE ALL SIDEWALK AND CURB AND GUTTER ABUTTING THE PROPERTY, WHICH IS DAMAGED BY THE CONSTRUCTION, OR ANY SIDEWALK AND CURB AND GUTTER THAT THE CITY ENGINEER DETERMINES NEEDS TO BE REPLACED BECAUSE IT IS NOT AT A DESIRABLE GRADE REGARDLESS OF WHETHER THE CONDITION EXISTED PRIOR TO BEGINNING CONSTRUCTION.
- GRANULAR BACKFILL MATERIALS ARE REQUIRED IN ALL UTILITY TRENCHES UNDER SIDEWALKS AND PROPOSED PAVED AREAS, ALL UTILITY TRENCH BACKFILL SHALL BE COMPACTED PER SPECIFICATIONS.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR:
 - EXAMINING ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.
 - VERIFYING UTILITY ELEVATIONS AND NOTIFYING ENGINEER OF ANY DISCREPANCIES. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCIES ARE RESOLVED.
 - NOTIFYING ALL UTILITIES PRIOR TO THE REMOVAL OF ANY UNDERGROUND UTILITIES.
 - NOTIFYING THE DESIGN ENGINEER AND LOCAL CONTROLLING MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION INSPECTION.
- ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING THE CONSTRUCTION OF THESE IMPROVEMENTS.
- CONTRACTOR TO COORDINATE PRIVATE UTILITY REMOVAL / ABANDONMENT AND NECESSARY RELOCATION WITH RESPECTIVE UTILITY COMPANY. COORDINATION REQUIRED PRIOR TO CONSTRUCTION.
- ALL DEMOLITION SHALL BE IN ACCORDANCE WITH THE APPROVED MUNICIPALITY RECYCLING PLAN.
- ANY CONTAMINATED SOILS SHALL BE REMOVED IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS TO AN APPROVED LANDFILL.
- ALL EXISTING UTILITIES TO BE FIELD LOCATED AND FLAGGED BY CONTRACTOR PRIOR TO CONSTRUCTION.
- SEWER ABANDONMENT SHALL BE IN ACCORDANCE WITH SECTION 3.2.24, OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN WISCONSIN, LATEST ADDITION, AND MUNICIPALITY SPECIFICATIONS.
- WATER ABANDONMENT SHALL BE IN ACCORDANCE WITH SECTION 4.14.0 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN WISCONSIN, LATEST ADDITION, AND MUNICIPALITY SPECIFICATIONS.
- ALL PERIMETER EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF DEMOLITION ACTIVITIES. CONTRACTOR SHALL KEEP ALL STREETS AND PAVEMENT FREE AND CLEAR OF ALL CONSTRUCTION RELATED DIRT, DUST AND DEBRIS.
- CONTRACTOR TO REMOVE EXISTING UTILITY PIPE OR PROVIDE PIPE BACK-FILLING AFTER REMOVAL OF EXISTING UTILITIES WITHIN BUILDING FOOTPRINT USING "LOW DENSITY CONCRETE/FLOWABLE FILL".
- RESTORATION OF THE EXISTING ROADWAY RIGHT-OF-WAYS ARE CONSIDERED INCIDENTAL AND SHOULD BE PART OF THE COST OF THE UNDERGROUND IMPROVEMENTS, DEMOLITION AND REMOVAL. THIS INCLUDES CURB & GUTTER, SIDEWALK, TOPSOIL, SEEDING AND MULCHING.

DEWATERING NOTES

- DEWATERING SHALL BE PUMPED THROUGH A TYPE II GEOTEXTILE FILTER BAG IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061. INSTALL BAGS PER WDNR TECHNICAL STANDARD 1061.
- MAXIMUM PUMPING RATE ALLOWED FOR DEWATERING IS 250 GPM FROM A 3-INCH PUMP. HIGHER RATES REQUIRE LARGER AND/OR MULTIPLE GEOTEXTILE FILTER BAGS. CONTACT ENGINEER IF ADDITIONAL PUMP RATE IS REQUIRED.
- CONTRACTOR TO INSPECT DEVICES AT START AND END OF WORKING DAY AND REPAIR DEVICES AS NEEDED TO MAINTAIN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE.
- SEDIMENT SHALL BE REMOVED FROM DEVICES TO MAINTAIN EFFECTIVENESS. ALL SEDIMENT COLLECTED IN DEWATERING DEVICES SHALL BE PROPERLY DISPOSED OF TO PREVENT SEDIMENT DISCHARGE TO WETLANDS/WATERS OF THE STATE OF WISCONSIN.
- ALL DEWATERING PRACTICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF WDNR TECHNICAL STANDARD 1061

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Proposal:
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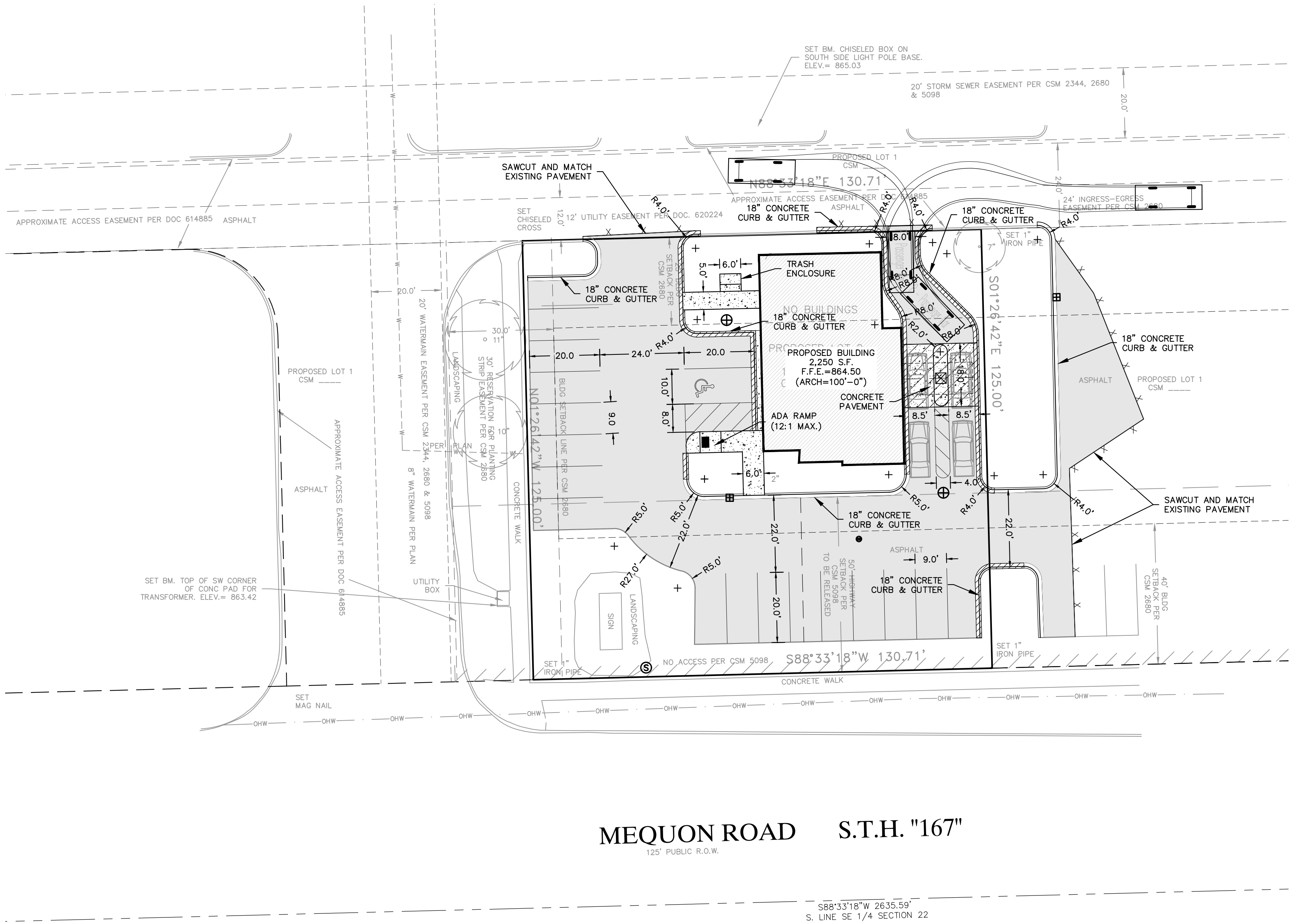
PROJECT ADDRESS:

PROJECT NAME
NORTH SHORE BANK - GERMANTOWN
STREET ADDRESS
MEQUON ROAD
CITY/ STATE / ZIP
GERMANTOWN, WI

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

Architect: AMH
Engineer: --
Reviewed By: --
Sheet Title:
DEMO PLAN

Sheet Number:
C-101
Project Number: P12512
P12512

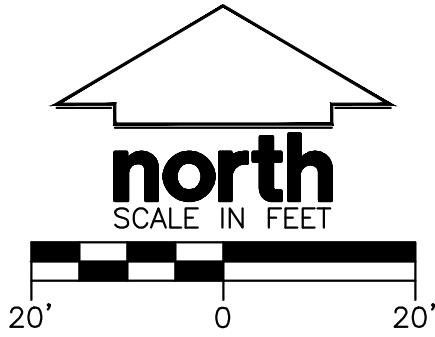


MEQUON ROAD S.T.H. "167"

S88°33'18"W 2635.59'

S. LINE SE 1/4 SECTION 22

SITE PARKING STATISTICS
19 TOTAL PARKING STALLS
1 VAN ACCESSIBLE ADA PARKING STALL



SITE PLAN NOTES

GENERAL

- REFER TO THE LAND TITLE SURVEY PREPARED BY R.A.SMITH FOR EXISTING CONDITIONS NOTES AND LEGENDS.
- ALL PAVING SHALL CONFORM TO "STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION, LATEST EDITION AND APPLICABLE VILLAGE OF GERMANTOWN ORDINANCES.
- ALL DIMENSIONS ARE TO FACE OF CURB AND/OR EDGE OF CONCRETE UNLESS OTHERWISE NOTED.
- ALL RADII ARE TO FACE OF CURB AND/OR EDGE OF CONCRETE UNLESS OTHERWISE NOTED.
- ANY REQUIRED REPLACEMENT OF PUBLIC CURB AND GUTTER SHALL MATCH EXISTING AND MEET THE REQUIREMENTS OF THE MUNICIPALITY.
- MARK AND STRIPE ADA PARKING SPACES APPROPRIATELY.
- 2' X 4' TRUNCATED DOME WARNING DETECTION FIELD SHALL BE PLACED AT ALL ADA RAMP.
- ALL PAVEMENT MARKINGS INCLUDING: STOP BARS, CROSSWALKS, DIRECTIONAL ARROWS, PARKING STALL LINES, ADA STALL MARKINGS, NO PARKING ZONES, DROP-OFF/PICK-UP ZONES SHALL BE PAINTED WITH HIGH VISIBILITY YELLOW LATEX PAINT PER SPECIFICATIONS.
- JSD SHALL BE HELD HARMLESS AND DOES NOT WARRANT ANY DEVIATIONS BY THE OWNER/CONTRACTOR FROM THE APPROVED CONSTRUCTION PLANS THAT MAY RESULT IN DISCIPLINARY ACTIONS BY ANY OR ALL REGULATORY AGENCIES.
- 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.

ASPHALTIC CONCRETE PAVING SPECIFICATIONS

- CODES AND STANDARDS - THE PLACING, CONSTRUCTION AND COMPOSITION OF THE ASPHALTIC BASE COURSE AND ASPHALTIC CONCRETE SURFACE COURSE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 450, 455, 460 AND 465 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, EDITION OF 2005. HEREAFTER, THIS PUBLICATION WILL BE REFERRED TO AS STATE HIGHWAY SPECIFICATIONS.
- WEATHER LIMITATIONS - APPLY TACK COATS WHEN AMBIENT TEMPERATURE IS ABOVE 50° F (10° C) AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35° F (1° C) FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION. DO NOT APPLY WHEN BASE IS WET OR CONTAINS EXCESS OF MOISTURE. CONSTRUCT ASPHALTIC CONCRETE SURFACE COURSE WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40° F (4° C) AND WHEN BASE IS DRY AND WHEN WEATHER IS NOT RAINY. BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30° F (-1° C).
- GRADE CONTROL - ESTABLISH AND MAINTAIN REQUIRED LINES AND ELEVATIONS FOR EACH COURSE DURING CONSTRUCTION.
- CRUSHED AGGREGATE BASE COURSE - THE TOP LAYER OF BASE COURSE SHALL CONFORM TO SECTIONS 301 AND 305, STATE HIGHWAY SPECIFICATIONS.
- BINDER COURSE AGGREGATE - THE AGGREGATE FOR THE BINDER COURSE SHALL CONFORM TO SECTIONS 460 AND 315, STATE HIGHWAY SPECIFICATIONS.
- SURFACE COURSE AGGREGATE - THE AGGREGATE FOR THE SURFACE COURSE SHALL CONFORM TO SECTIONS 460 AND 465, STATE HIGHWAY SPECIFICATIONS.
- ASPHALTIC MATERIALS - THE ASPHALTIC MATERIALS SHALL CONFORM TO SECTION 455 AND 460, STATE HIGHWAY SPECIFICATIONS.

CONCRETE PAVING SPECIFICATIONS

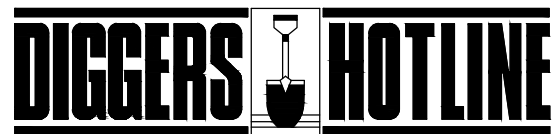
- CONCRETE PAVING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 415 AND 416 OF THE STATE HIGHWAY SPECIFICATIONS.
- CONCRETE PAVEMENT SHALL BE REINFORCED WITH NOVOMESH 950 (OR EQUAL) FIBER REINFORCEMENT AT A RATE OF 5 LBS/CUBIC YARD.
- CURING COMPOUNDS SHALL CONFORM TO SECTION 415 OF THE STATE HIGHWAY SPECIFICATIONS.
- CONTRACTOR SHALL PROVIDE CONTROL JOINTS AND CONSTRUCTION JOINTS OF ONE-QUARTER CONCRETE THICKNESS AT AN EQUAL RATIO OF LENGTH TO WIDTH WHEREVER POSSIBLE WITH A MAXIMUM LENGTH BETWEEN JOINTS OF 8' ON CENTER.
- CONTRACTOR SHALL PROVIDE EXPANSION JOINTS IN SIDEWALKS AT A MAXIMUM 24' ON CENTER.
- EXTERIOR CONCRETE SURFACES SHALL BE BROOM FINISHED.
- ALL CONCRETE SURFACES TO BE SEALED WITH TYPE TK-26UV CONCRETE SEALANT.

PAVEMENT STRUCTURE

	LIGHT DUTY ASPHALT PAVEMENT 8" CRUSHED AGGREGATE BASE COURSE 2.5" HMA BINDER COURSE (3 LT 58-28 S) 1.5" HMA SURFACE COURSE (4 LT 58-28 S)
	CONCRETE PAVEMENT 4" CRUSHED AGGREGATE BASE COURSE 6" CONCRETE
	CONCRETE SIDEWALK 6" CRUSHED AGGREGATE BASE COURSE (1-14" DENSE GRADED LESTONE) 5" CONCRETE

LEGEND (SITE PLAN)

	PROPERTY LINE
	BUILDING SETBACK LINE
	BUILDING OUTLINE
	EDGE OF PAVEMENT
	STANDARD CURB AND GUTTER
	REJECT CURB AND GUTTER



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STREET ADDRESS
MEQUON ROAD
CITY/ STATE / ZIP
GERMANTOWN, WI

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

Architect: AMH Engineer: -- Reviewed By: --

Sheet Title:
PAVEMENT ID & SITE
DIMENSION PLAN
Sheet Number:

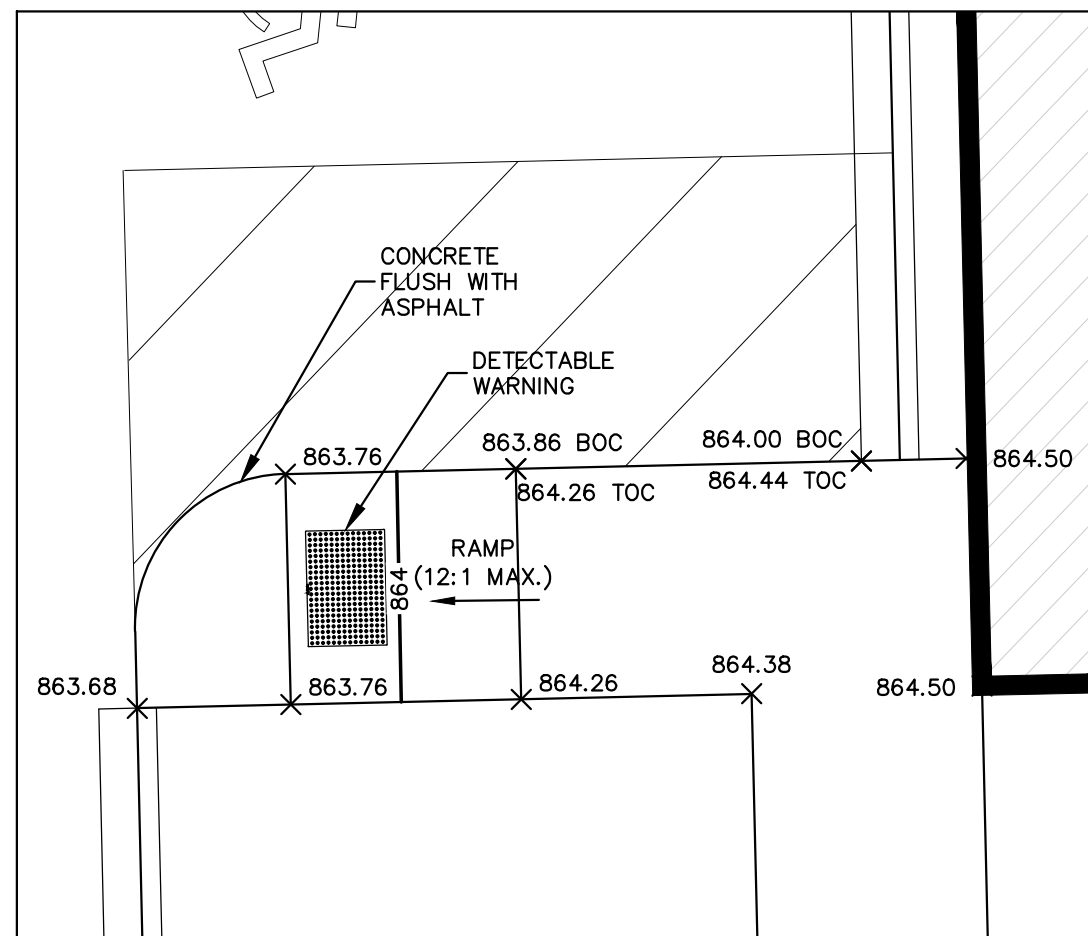
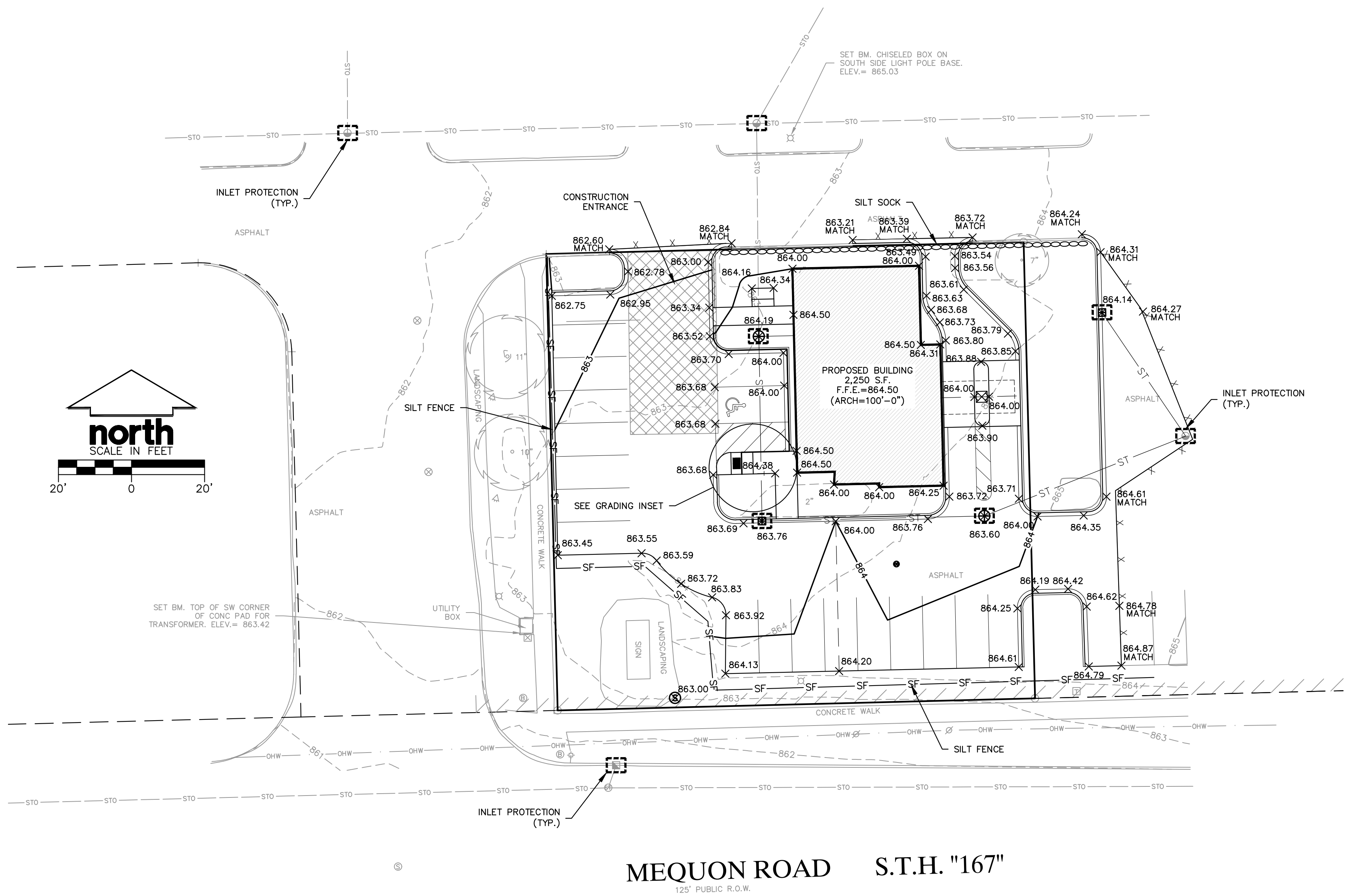
C-102

Project Number:

P12512

P12512

PAVEMENT ID & SITE DIMENSION PLAN 1" = 20'-0"



Grading Inset
Scale: 1"=5'

Grading and Seeding Notes

- 1. All disturbed areas shall be sodded and/or seeded and mulched immediately following grading activities. Sod/seed mix to be in accordance with landscape plan.
- 2. All proposed grades shown are finished grades. Contractor shall verify all grades, make sure all areas drain properly and shall report any discrepancies to the engineer prior to construction.
- 3. Contractor shall protect adjacent properties with silt fencing for erosion control until construction is completed and notice of termination filed.
- 4. Contractor shall water all newly sodded/seeded areas during the summer months whenever there is a 7 day lapse with no significant rainfall.
- 5. Contractor to deep till all compacted pervious surfaces prior to sodding and/or seeding and mulching.
- 6. The contractor shall notify the municipality two (2) working days in advance of any soil disturbing activity.
- 7. If grading activities stop on any portion of land for 14 or more calendar days, the area in question must be temporarily stabilized.
- 8. All slopes 5:1 or greater shall be temporary seeded, mulched, or erosion matted or other means of cover placed on them within 2 weeks of disturbance.

Construction Sequencing

- 1. Install perimeter erosion control measures such as silt fence, existing inlet protection, and construction entrance prior to any construction activities.
 - 2. Conduct site demolition
 - 3. Conduct rough grading efforts
 - 4. Excavate building foundations.
 - 5. Install utility piping and structures. Immediately install inlet protection.
 - 6. Complete final grading, installation of aggregate base course, placement of curbs, pavement, and sidewalks.
 - 7. Place topsoil and immediately stabilize disturbed areas with erosion controls.
- Contractor may modify sequencing after item 1 as need to complete construction if controls are maintained in accordance with the construction site erosion control requirements.

Legend (Grading & Erosion Control Plan)

	PROPERTY LINE		STORM SEWER
	BUILDING SETBACK LINE		SILT FENCE
	BUILDING OUTLINE		INLET PROTECTION, TYPE D
	EDGE OF PAVEMENT		SPOT ELEVATION
	STANDARD CURB AND GUTTER		GRADE BREAK
	REJECT CURB AND GUTTER		
	PROPOSED 1 FOOT CONTOUR		
	PROPOSED 1 FOOT CONTOUR		

General Notes

- 1. REFER TO THE ALTA/NSPS LAND TITLE SURVEY PREPARED BY R.A. SMITH FOR EXISTING CONDITIONS NOTES AND LEGENDS.
- 2. ALL WORK IN THE ROW AND/OR PUBLIC EASEMENTS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN AND THE MUNICIPAL REQUIREMENTS.
- 3. EXISTING GRADE SPOT ELEVATIONS SHOWN FOR INFORMATIONAL PURPOSES. DURING CONSTRUCTION MATCH EXISTING GRADES AT CONSTRUCTION LIMITS.
- 4. NO SITE GRADING OUTSIDE OR DOWNSLOPE OF PROPOSED SILT FENCE LOCATION.
- 5. JSD SHALL BE HELD HARMLESS AND DOES NOT WARRANT ANY DEVIATIONS BY THE OWNER/CONTRACTOR FROM THE APPROVED CONSTRUCTION PLANS THAT MAY RESULT IN DISCIPLINARY ACTIONS BY ANY OR ALL REGULATORY AGENCIES.

Dewatering Notes

- 1. DEWATERING SHALL BE PUMPED THROUGH A TYPE II GEOTEXTILE FILTER BAG IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061. INSTALL BAGS PER WDNR TECHNICAL STANDARD 1061.
- 2. MAXIMUM PUMPING RATE ALLOWED FOR DEWATERING IS 250 GPM FROM A 3-INCH PUMP. HIGHER RATES REQUIRE LARGER AND/OR MULTIPLE GEOTEXTILE FILTER BAGS. CONTACT ENGINEER IF ADDITIONAL PUMP RATE IS REQUIRED.
- 3. CONTRACTOR TO INSPECT DEVICES AT START AND END OF WORKING DAY AND REPAIR DEVICES AS NEEDED TO MAINTAIN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE.
- 4. SEDIMENT SHALL BE REMOVED FROM DEVICES TO MAINTAIN EFFECTIVENESS. ALL SEDIMENT COLLECTED IN DEWATERING DEVICES SHALL BE PROPERLY DISPOSED OF TO PREVENT SEDIMENT DISCHARGE TO WETLANDS/WATERS OF THE STATE OF WISCONSIN.
- 5. ALL DEWATERING PRACTICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF WDNR TECHNICAL STANDARD 1061.

Construction Site Erosion Control Requirements (CSECR) Notes

- 1. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE DESIGNED AND IMPLEMENTED IN ACCORDANCE WITH THE CURRENT DEPARTMENT OF NATURAL RESOURCES EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS WHICH ARE AVAILABLE AT: https://dnr.wi.gov/topic/stormwater/standards/const_standards.html
- 2. INSTALL EROSION CONTROL MEASURES PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIALS AS SHOWN ON PLAN. MODIFICATIONS TO SEDIMENT CONTROL DESIGN MAY BE CONDUCTED TO MEET UNFORESEEN FIELD CONDITIONS IF MODIFICATIONS CONFORM TO WDNR TECHNICAL STANDARDS.
- 3. INSPECTIONS AND MAINTENANCE OF ALL EROSION CONTROL MEASURES SHALL BE ROUTINE (ONCE PER WEEK MINIMUM) TO ENSURE PROPER FUNCTION OF EROSION CONTROLS AT ALL TIMES. EROSION CONTROL MEASURES ARE TO BE IN WORKING ORDER AT THE END OF EACH WORK DAY.
- 4. INSPECT EROSION CONTROL MEASURES AFTER EACH 1/2" OR GREATER RAINFALL. REPAIR ANY DAMAGE OBSERVED DURING THE INSPECTION.
- 5. EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL ALL LAND DISTURBING CONSTRUCTION ACTIVITY AT THE SITE HAS BEEN COMPLETED AND A UNIFORM PERENNIAL VEGETATIVE COVER HAS BEEN ESTABLISHED WITH A DENSITY OF AT LEAST 70% OF THE COVER FOR THE UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES OR THAT EMPLOY EQUIVALENT PERMANENT STABILIZATION MEASURES.
- 6. INSTALL A TRACKING PAD, 50' LONG AND NO LESS THAN 12" THICK BY USE OF 3" CLEAR STONE. TRACKING PADS ARE TO BE MAINTAINED BY THE CONTRACTOR IN A CONDITION WHICH WILL PREVENT THE TRACKING OF MUD OR DRY SEDIMENT INTO THE ADJACENT PUBLIC STREETS AFTER EACH WORKING DAY OR MORE FREQUENTLY AS REQUIRED.
- 7. INSTALL EROSION CONTROLS ON THE DOWNSTREAM SIDE OF STOCKPILES.
- 8. INSTALL CHECK DAMS WITHIN DRAINAGE DITCHES AND IN FRONT OF SILT FENCING IN ANY LOW AREA ALL IN ACCORDANCE WITH WDNR TECHNICAL STANDARDS.
- 9. EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.):
 - A. PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
 - B. BACKFILL, COMPACT, AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
 - C. DISCHARGE TRENCH WATER INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH THE DEWATERING TECHNICAL STANDARD NO. 1061 PRIOR TO RELEASE INTO THE STORM SEWER, RECEIVING STREAM, OR DRAINAGE DITCH.
- 10. APPLY ANIONIC POLYMER TO DISTURBED AREAS IF EROSION BECOMES PROBLEMATIC.
- 11. ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED BY STATE INSPECTORS, LOCAL INSPECTORS, AND/OR ENGINEER SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
- 12. CONTRACTOR/OWNER SHALL FILE A NOTICE OF TERMINATION UPON VEGETATIVE STABILIZATION AND/OR PROPERTY SALE IN ACCORDANCE WITH WDNR REQUIREMENTS.
- 13. CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO CONTROL DUST ARISING FROM CONSTRUCTION OPERATIONS. REFER TO WDNR TECHNICAL STANDARD 1068.
- 14. STABILIZATION PRACTICES:
 - 14.1. * STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. NO MORE THAN SEVEN (7) DAYS SHALL PASS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED UNLESS:
 - THE INITIATION STABILIZATION MEASURES BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY HAS CEASED IS PRECLUDED BY SNOW COVER. IN THAT EVENT, STABILIZATION SHALL BE INITIATED AS SOON AS PRACTICABLE
 - CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN FOURTEEN (14) DAYS FROM WHEN ACTIVITY CEASED, (I.E. THE TOTAL TIME PERIOD THAT THE CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN FOURTEEN (14) DAYS. IN THAT EVENT, STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED
 - STABILIZATION MEASURES SHALL BE DETERMINED BASED ON SITE CONDITIONS AT THE TIME OF CONSTRUCTION ACTIVITY HAS CEASED, INCLUDING BUT NOT LIMITED TO WEATHER CONDITIONS AND LENGTH OF TIME MEASURE MUST BE EFFECTIVE. THE FOLLOWING ARE ACCEPTABLE STABILIZATION MEASURES:
 - ~ PERMANENT SEEDING; IN ACCORDANCE WITH APPROVED CONSTRUCTION SPECIFICATION
 - ~ TEMPORARY SEEDING; MAY CONSIST OF SPRING OATS(100LBS/ACRE) AND/OR WHEAT OR CEREAL RYE (150LBS/ACRE)
 - ~ HYDRO-MULCHING WITH A TACKIFIER
 - ~ GEOTEXTILE EROSION MATTING
 - ~ SODDING

Construction Sequencing

- 1. Install perimeter erosion control measures such as silt fence, existing inlet protection, and construction entrance prior to any construction activities.
 - 2. Conduct site demolition
 - 3. Conduct rough grading efforts
 - 4. Excavate building foundations.
 - 5. Install utility piping and structures. Immediately install inlet protection.
 - 6. Complete final grading, installation of aggregate base course, placement of curbs, pavement, and sidewalks.
 - 7. Place topsoil and immediately stabilize disturbed areas with erosion controls.
- Contractor may modify sequencing after item 1 as need to complete construction if controls are maintained in accordance with the construction site erosion control requirements.



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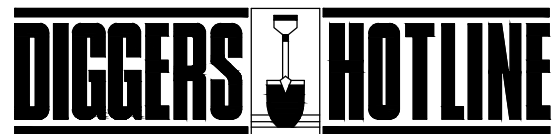
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AMH -- --

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Grading, & Erosion
CONTROL PLAN
Sheet Number:

C-103
Project Number: P12512

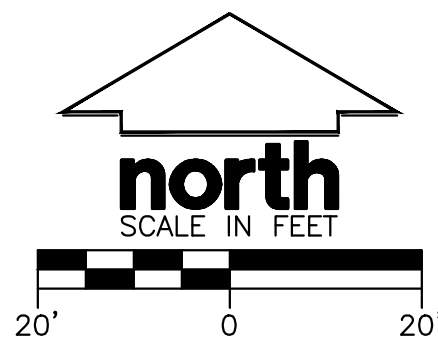
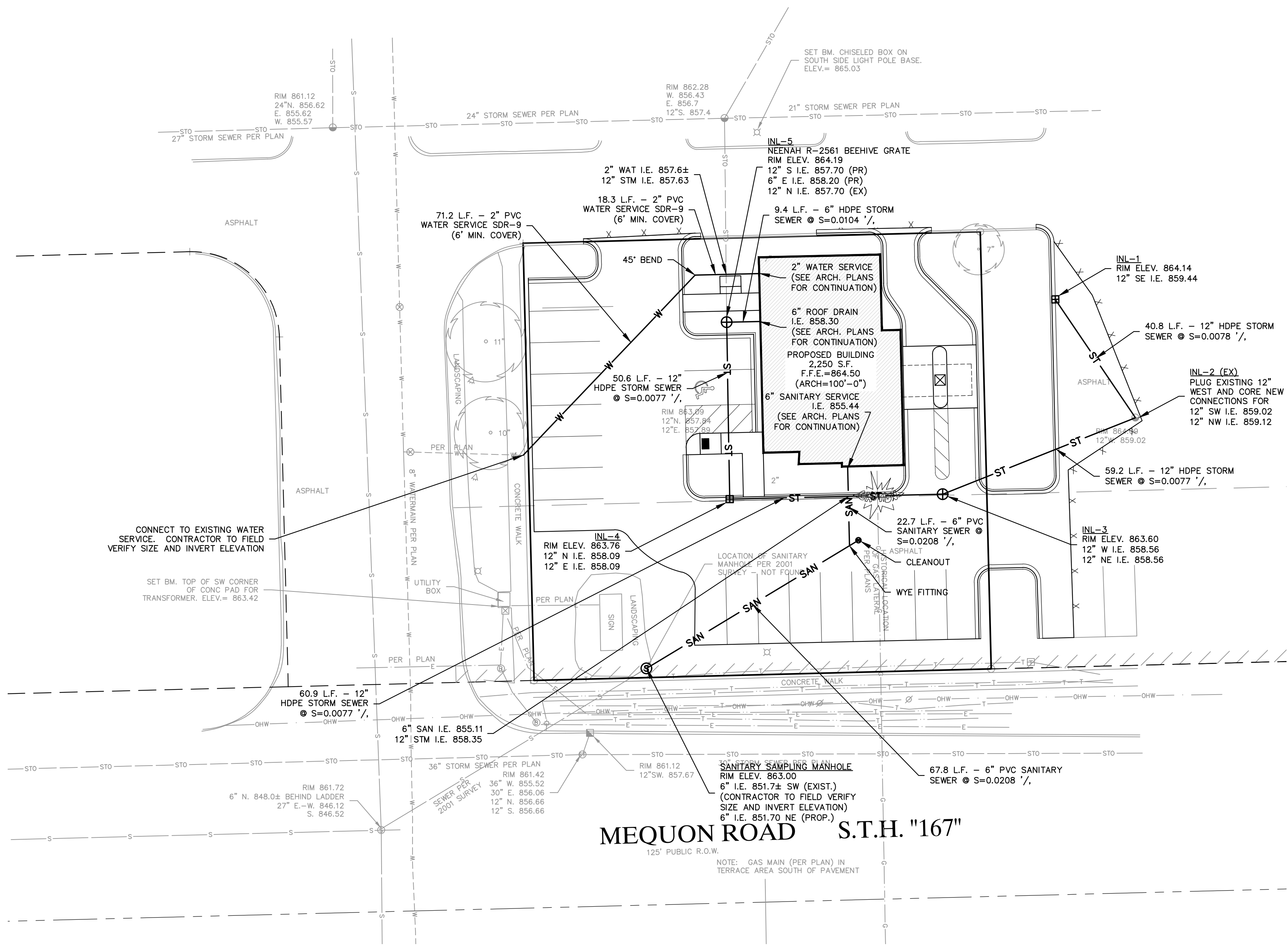
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UTILITY NOTES

- IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS WITHIN THE PLANS BECOME APPARENT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
- LENGTHS OF ALL UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLAN. LENGTHS SHALL BE VERIFIED IN THE FIELD DURING CONSTRUCTION.
- THE CONTRACTOR SHALL INSTALL A PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVER NIGHT AS REQUIRED.
- THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ORDINANCES AND REQUIREMENTS OF THE MUNICIPALITY AND WISDOT, WDSPS, AND WDNR.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR:
 - EXAMINING ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.
 - OBTAINING ALL PERMITS INCLUDING PERMIT COSTS, TAP FEES, METER DEPOSITS, BONDS, AND ALL OTHER FEES REQUIRED FOR PROPOSED WORK TO OBTAIN OCCUPANCY.
 - VERIFYING UTILITY ELEVATIONS AND NOTIFYING ENGINEER OF ANY DISCREPANCY. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS RESOLVED.
 - NOTIFYING ALL UTILITIES PRIOR TO THE INSTALLATION OF ANY UNDERGROUND IMPROVEMENTS.
 - NOTIFYING THE DESIGN ENGINEER AND MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION OBSERVATION.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ENGINEER WITH AS-BUILT CONDITIONS OF THE DESIGNATED IMPROVEMENTS IN ORDER THAT THE APPROPRIATE DRAWINGS CAN BE PREPARED, IF REQUIRED. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE ENGINEER AS WORK PROGRESSES.
- THE PRIME CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CONSTRUCTION WITH OTHER CONTRACTORS INVOLVED WITH CONSTRUCTION OF THE PROPOSED DEVELOPMENT AND FOR REPORTING ANY ERRORS OR DISCREPANCIES BETWEEN THESE PLANS AND PLANS PREPARED BY OTHERS.
- ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING THE CONSTRUCTION OF IMPROVEMENTS.
- CONTRACTOR SHALL CONTACT THE MUNICIPALITY'S PUBLIC WORKS DEPARTMENT A MINIMUM OF 48 HOURS BEFORE CONNECTING TO PUBLIC UTILITIES. CONTRACTOR TO VERIFY SIZE AND DEPTH OF EXISTING UTILITY SERVICES AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONNECTING.
- PRIOR TO CONNECTING TO THE EXISTING SANITARY SEWER, CONTRACTOR SHALL ARRANGE FOR EXISTING SEWER TO BE TELEVISED AND ITS CONDITION EVALUATED.
- PRIOR TO CONNECTING TO THE EXISTING WATER SERVICE, CONTRACTOR SHALL FIELD TEST THE EXISTING SHUT OFF VALVE. VALVE SHALL BE TESTED FOR ON/OFF POSITIVE SHUT DOWN AND TURN ON BY VISUALLY INSPECTING THE WATER START AND STOP. THE WATER SERVICE CURBSTOP TEST SHALL BE CONDUCTED BY THE CONTRACTOR WITH FIELD VERIFICATION PROVIDED BY THE WATER UTILITY SUPERINTENDENT OR REPRESENTATIVE. IF VALVE DOES NOT HOLD OR IS IN POOR OPERATIONAL CONDITION, THE SERVICE SHALL BE ABANDONED AT THE MAIN CONNECTION BY COMPLETE REMOVAL AND INSTALLATION OF A NEW WATER LATERAL TAP AND CURBSTOP.
- CONTRACTOR SHALL INSTALL TRACER WIRE ALONG ALL NEW WATER SERVICE FROM THE POINT OF CONNECTION TO THE BUILDING IN ACCORDANCE WITH VILLAGE OF GERMANTOWN INSTALLATION GUIDE.

PIPE LOCATION		CONTRIBUTING AREA			PIPE FLOW			PIPE DATA				PIPE CAPACITY INFORMATION						DROP	ELEVATIONS			COVER TO CROWN (FT)
UP STRUCT	DOWN STRUCT	ROOF (SQ FT)	PAVED (SQ FT)	GRASS (SQ FT)	AREA RUNOFF (GPM)	TOTAL FLOW		LENGTH (FT)	DIA. (IN)	SLOPE (FT/FT)	Manning's n PVC=0.011 HDPE=0.012 RCP=0.013	ACTUAL FLOW			FULL FLOW (CFS)	THRU STRUCT (FT)	RIM/(F/L) UP	INVERT UP	INVERT DOWN			
						(GPM)	(CFS)					REQD DROP	ACTUAL DROP	PARTS FULL						VEL (FPS)		
INL-1	INL-2 (EX)	0	5,730	1,160	187	187	0.42	40.8	12	0.0078	0.012	0.00	0.32	0.18	2.98	3.42	0.10	864.11	859.44	859.12	3.57	
INL-2 (EX)	INL-3	0	12,460	4,010	422	609	1.36	59.2	12	0.0077	0.012	0.07	0.46	0.45	4.16	3.39	0.00	864.09	859.01	858.56	3.98	
INL-3	INL-4	0	3,140	1,265	109	718	1.60	60.9	12	0.0077	0.012	0.10	0.47	0.50	4.31	3.39	0.00	863.60	858.56	858.09	3.94	
INL-4	INL-5	0	1,670	1,300	64	782	1.74	50.6	12	0.0077	0.012	0.10	0.39	0.53	4.38	3.39	0.00	863.76	858.09	857.70	4.57	
INL-5	EX MH	0	140	220	6	875	1.95	58.3	12	0.0051	0.012	0.15	0.30	0.72	3.90	2.76	0.00	864.19	857.70	857.40	5.39	
ROOF	INL-5	2,240	0	0	86	86	0.19	9.4	6	0.0104	0.012	0.01	0.10	0.47	3.10	0.62	0.00	864.50	858.30	858.20	5.65	

NOTE: STORM SEWER SIZING CALCULATIONS PERFORMED ACCORDING TO DSPS METHOD

LEGEND (UTILITY PLAN)

- PROPERTY LINE
- RIGHT-OF-WAY
- EASEMENT LINE
- BUILDING OUTLINE
- BUILDING OVERHANG
- EDGE OF PAVEMENT
- STANDARD CURB AND GUTTER
- REJECT CURB AND GUTTER
- ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- SAN SANITARY SEWER
- W WATER MAIN
- ST STORM SEWER

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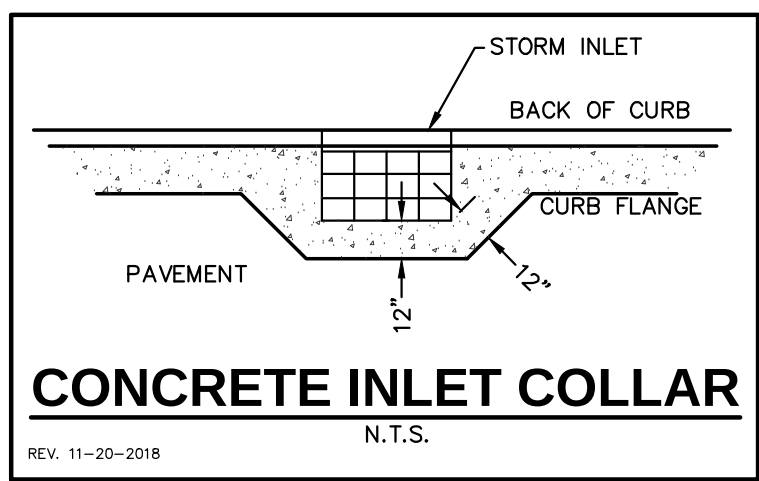
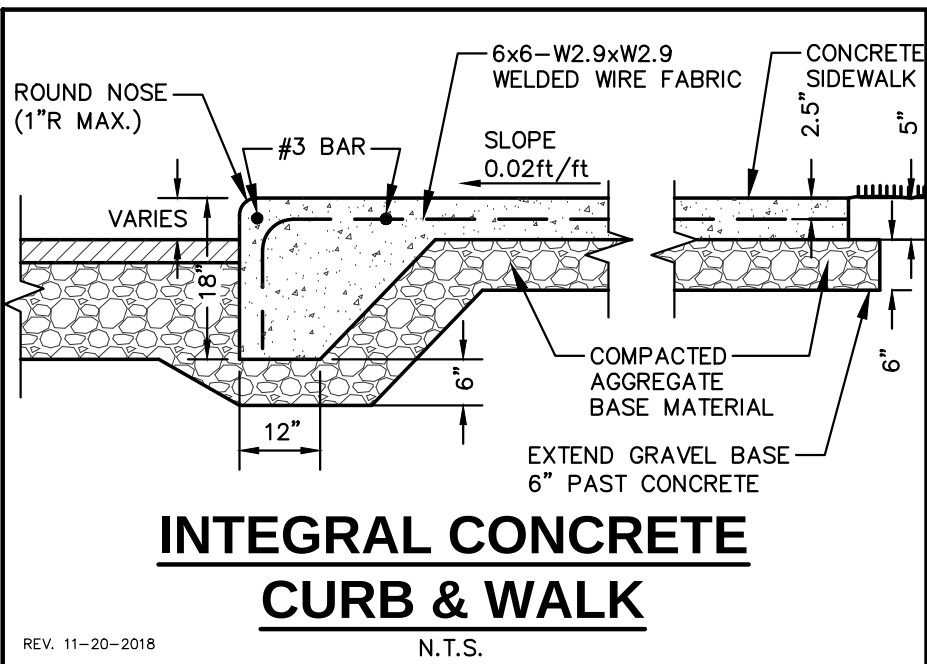
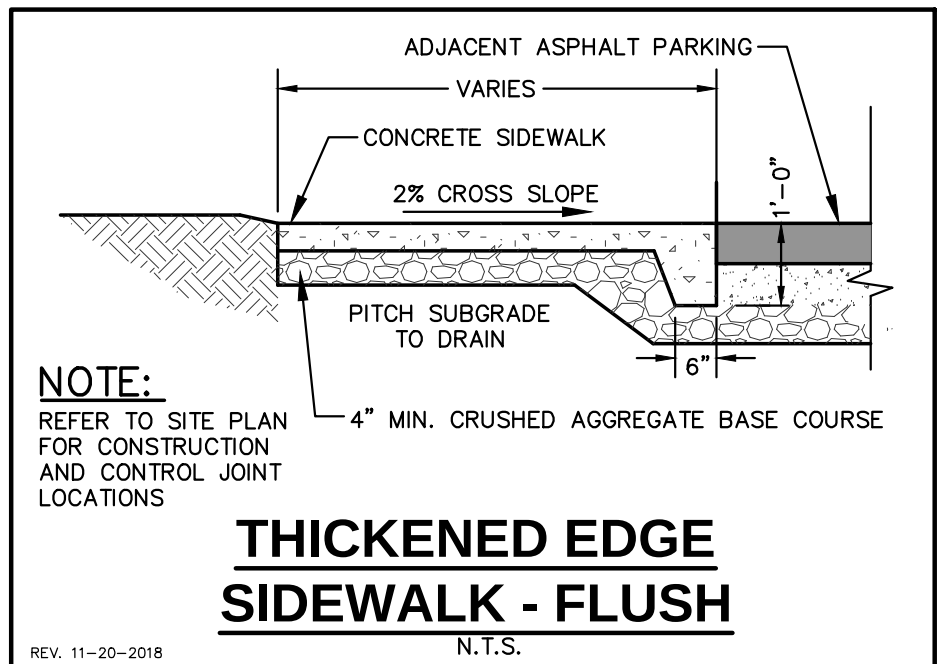
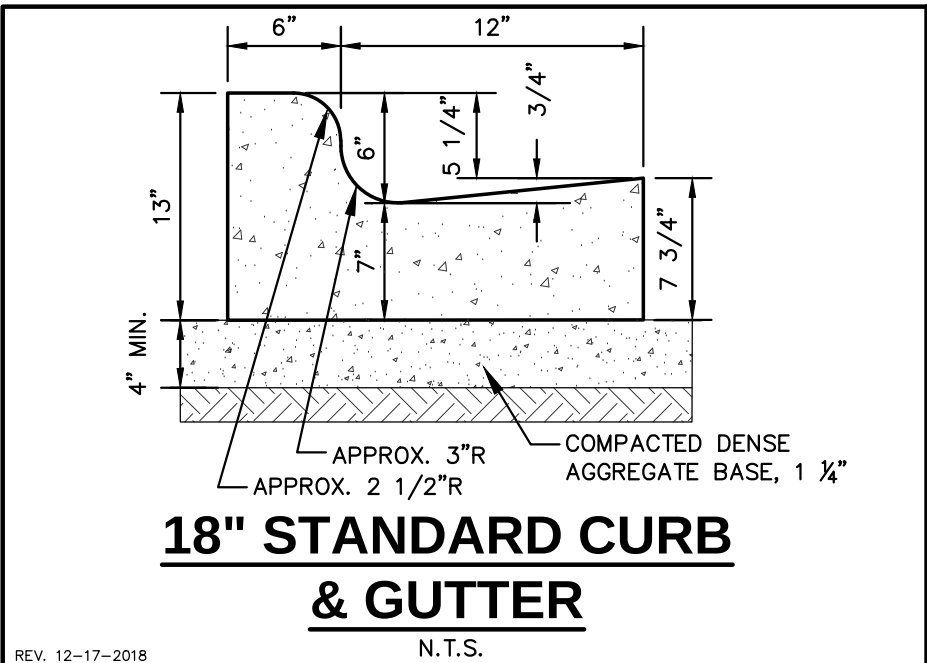
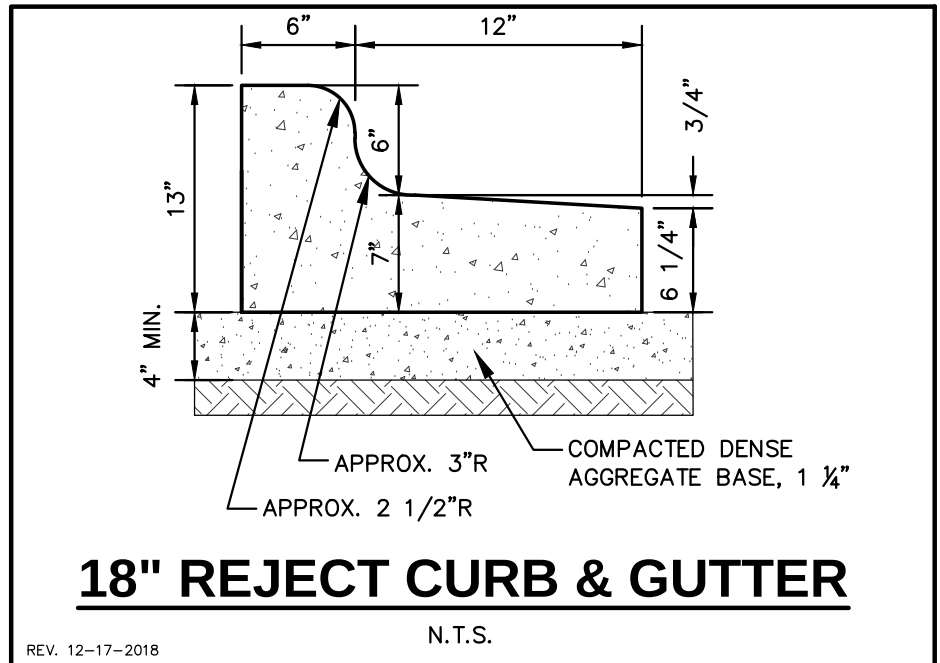
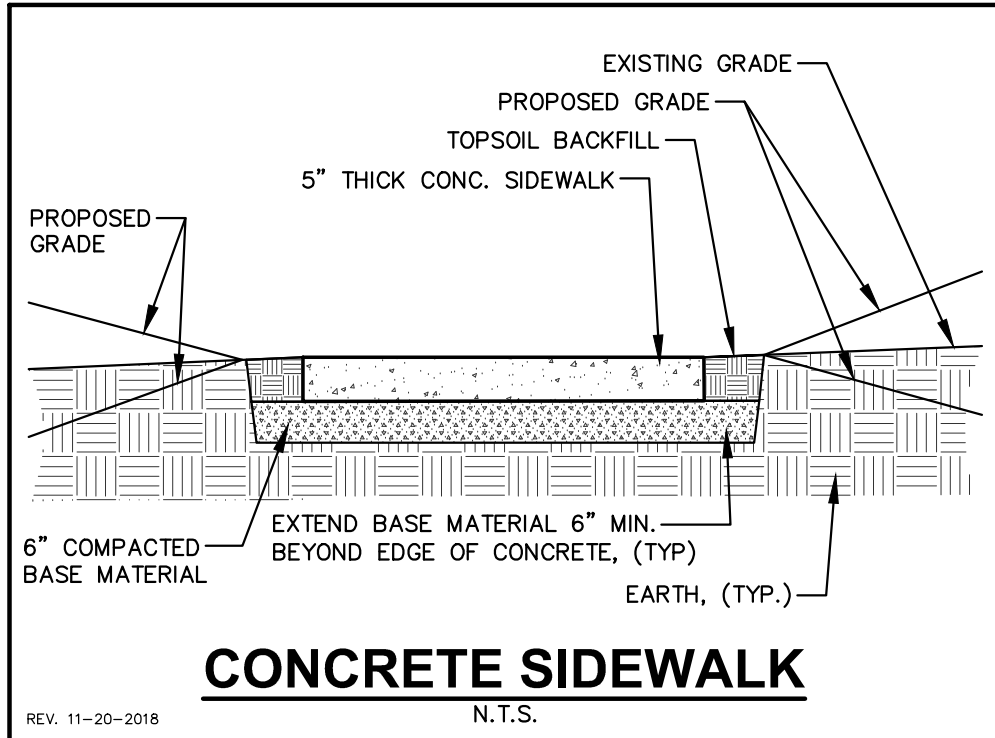
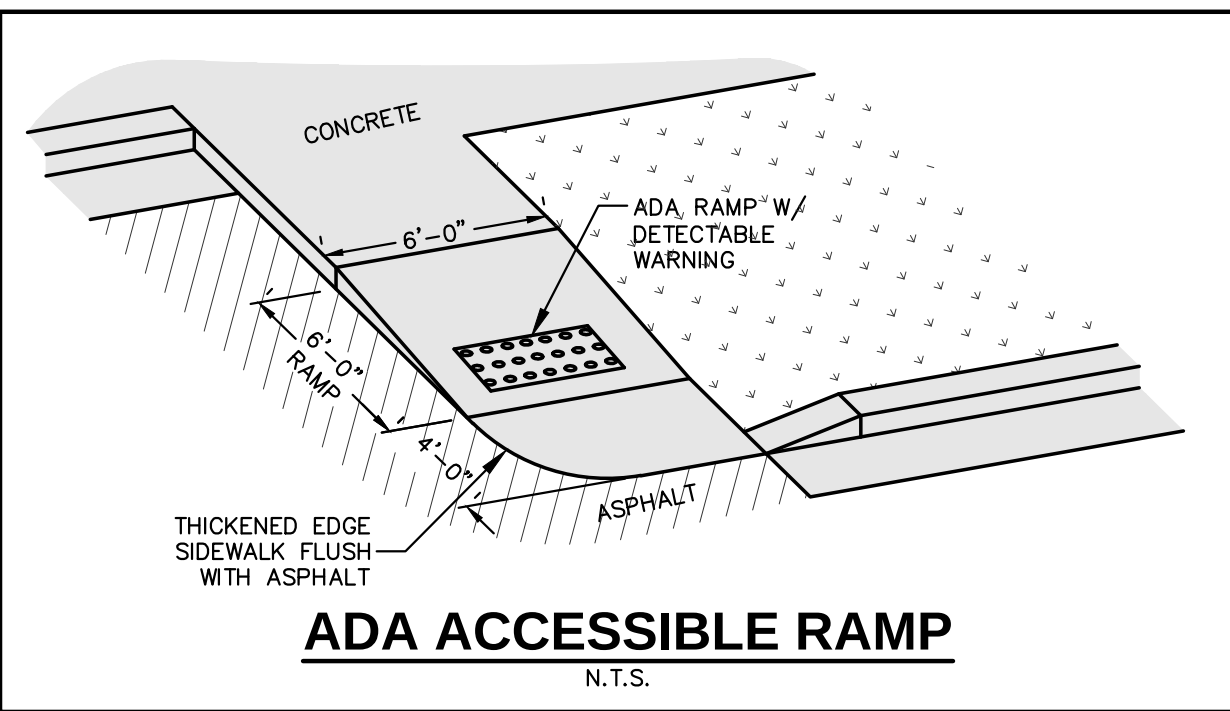
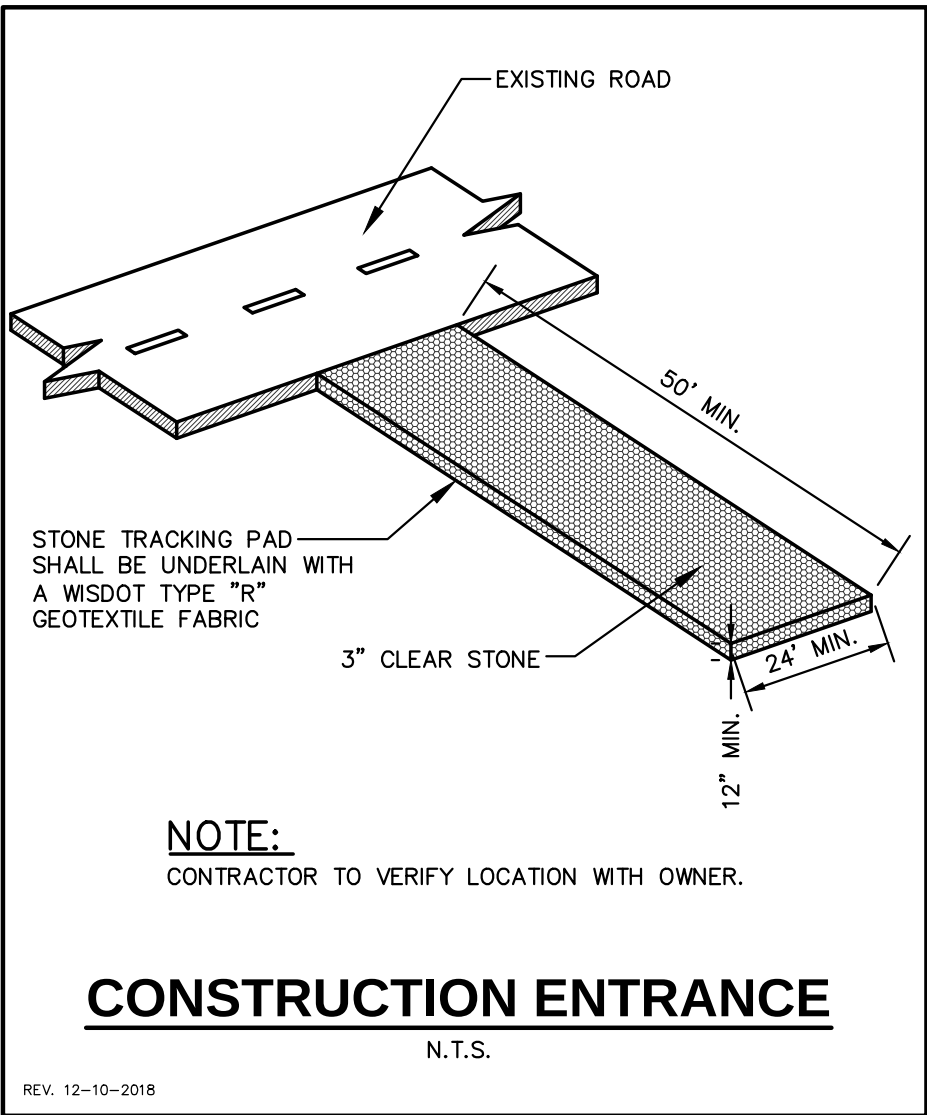
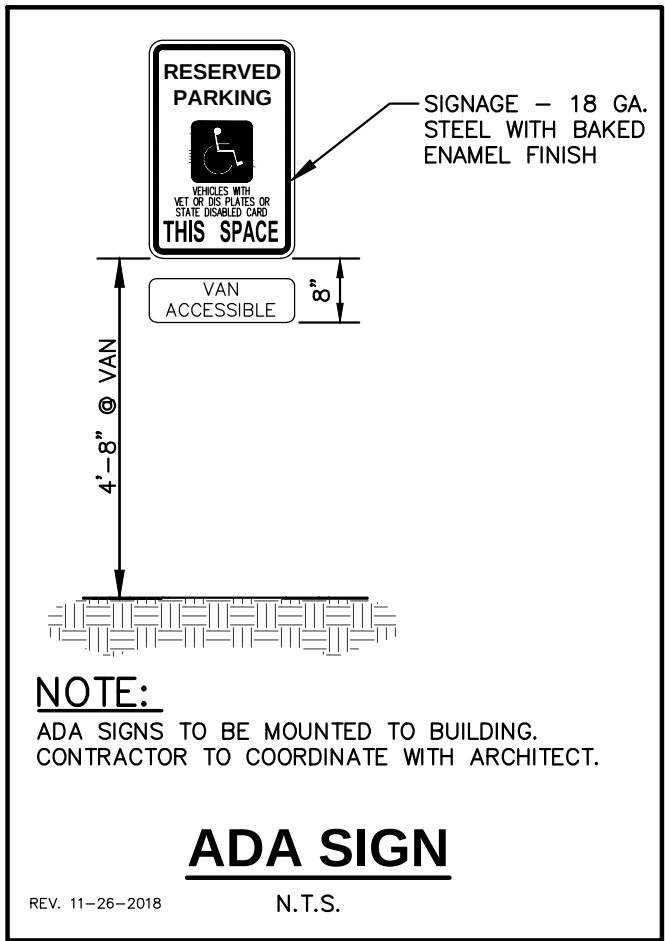
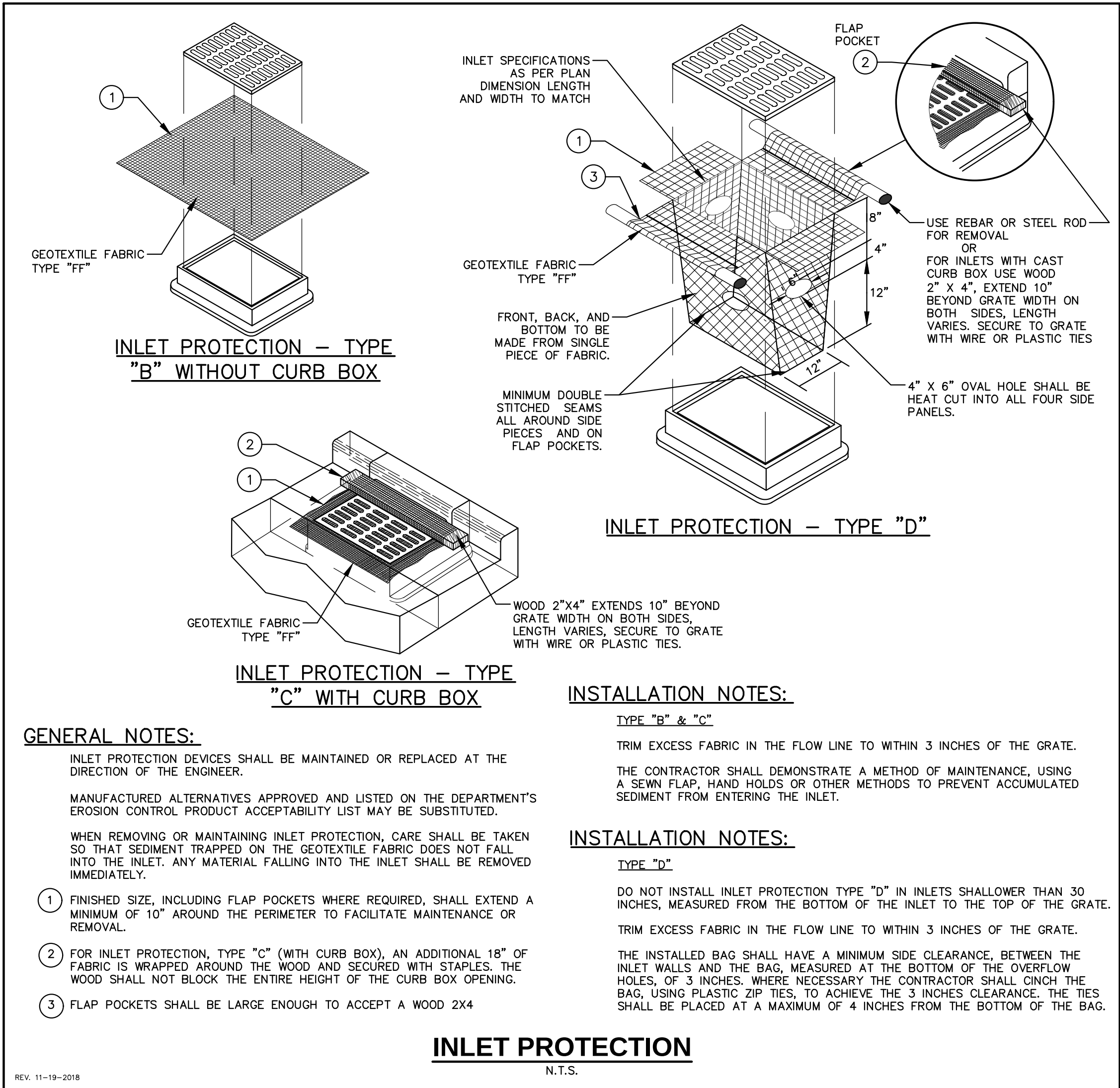
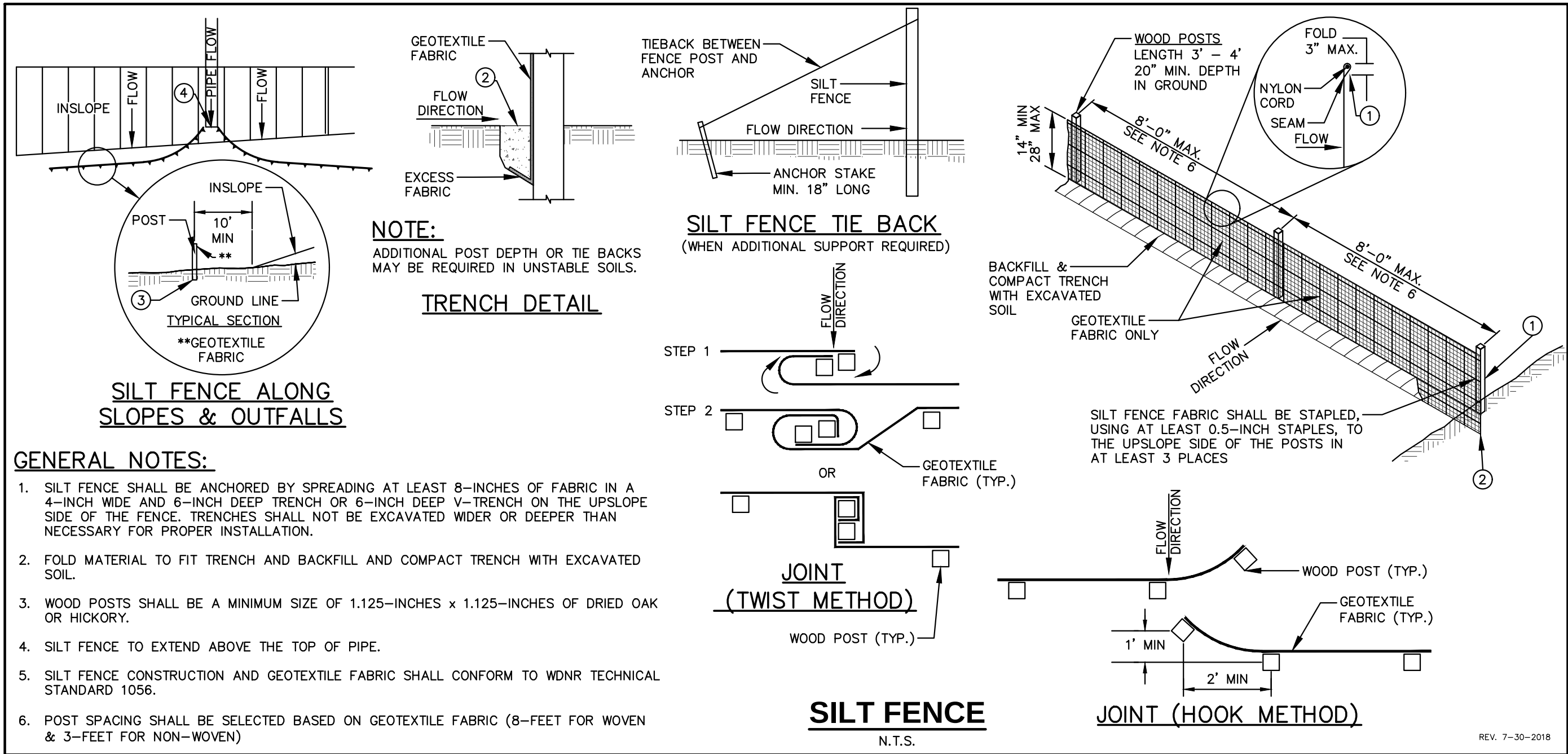
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Engineer: --
Reviewed By: --
Sheet Title:
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Sheet Number:
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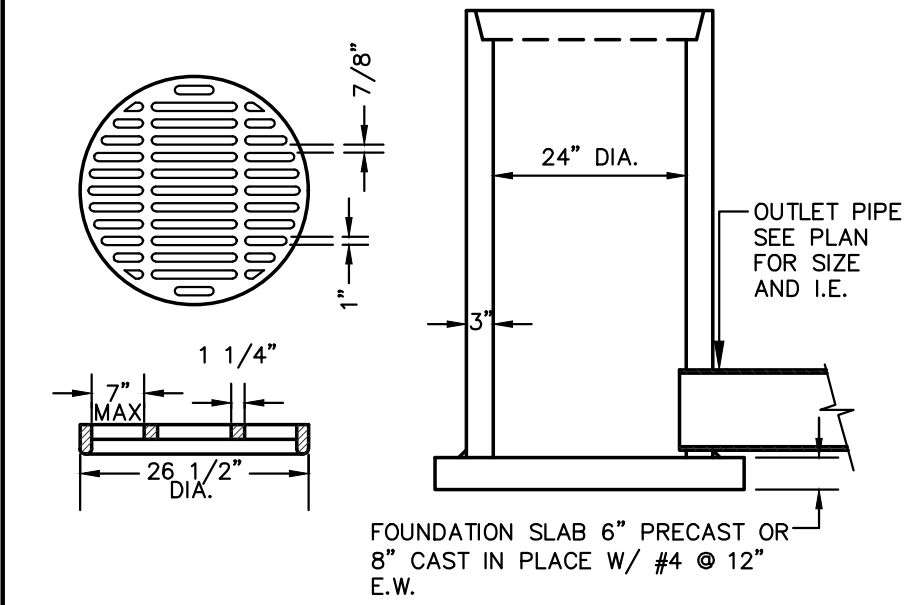
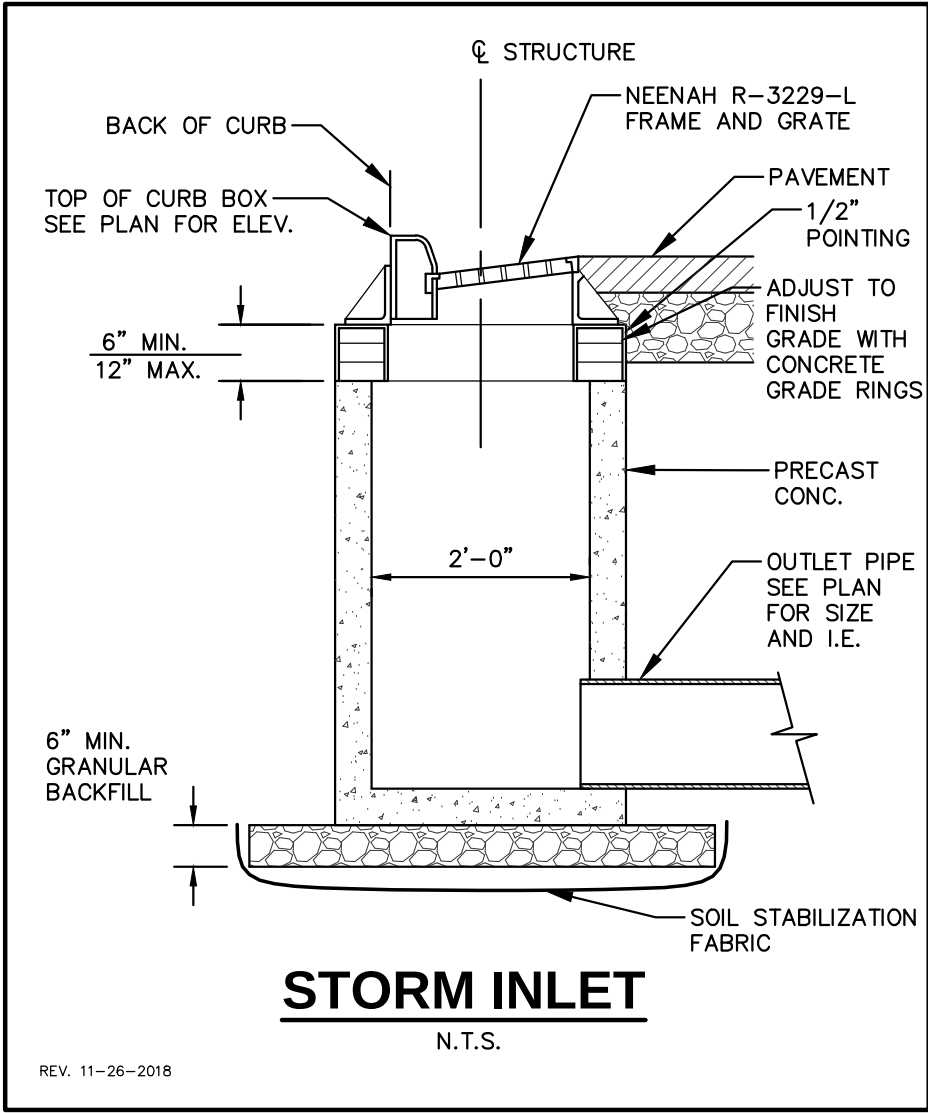
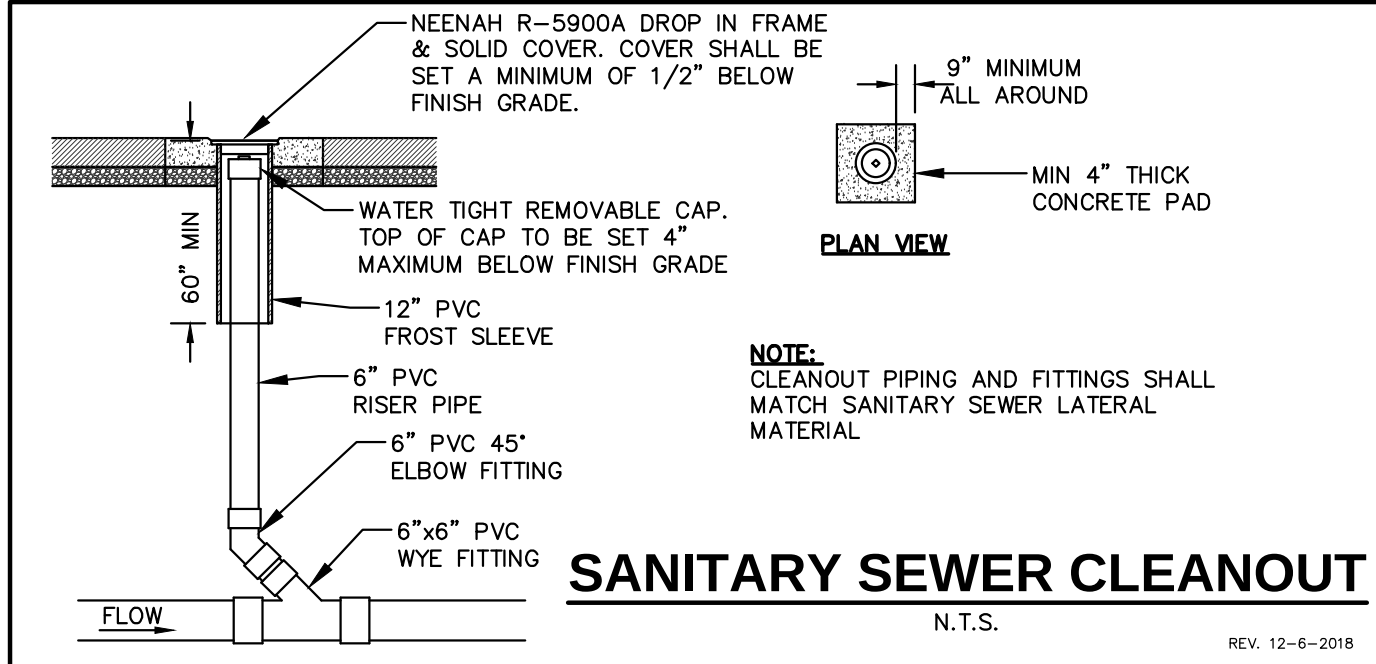
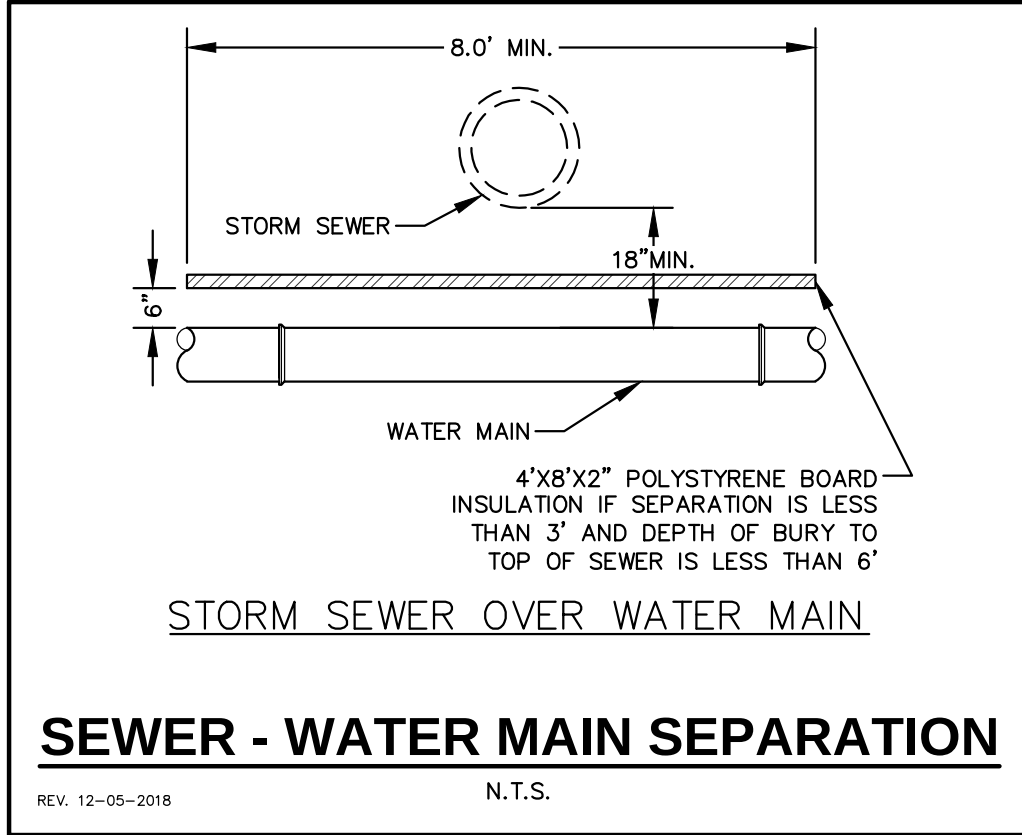
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ENGINEERS

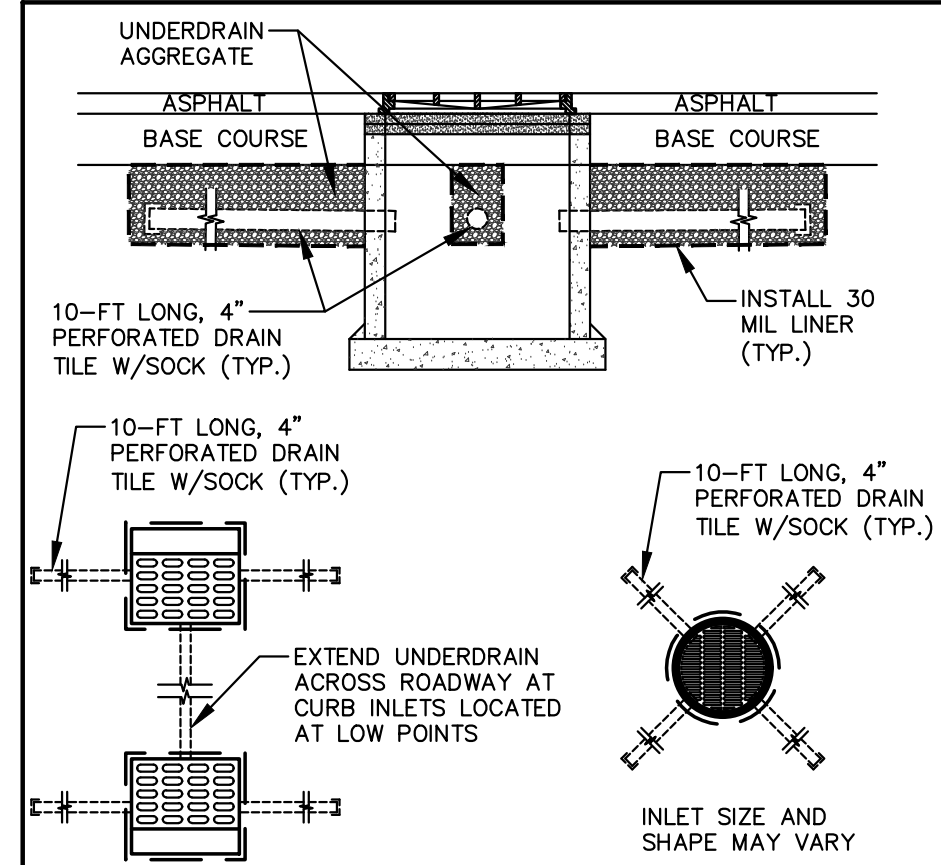
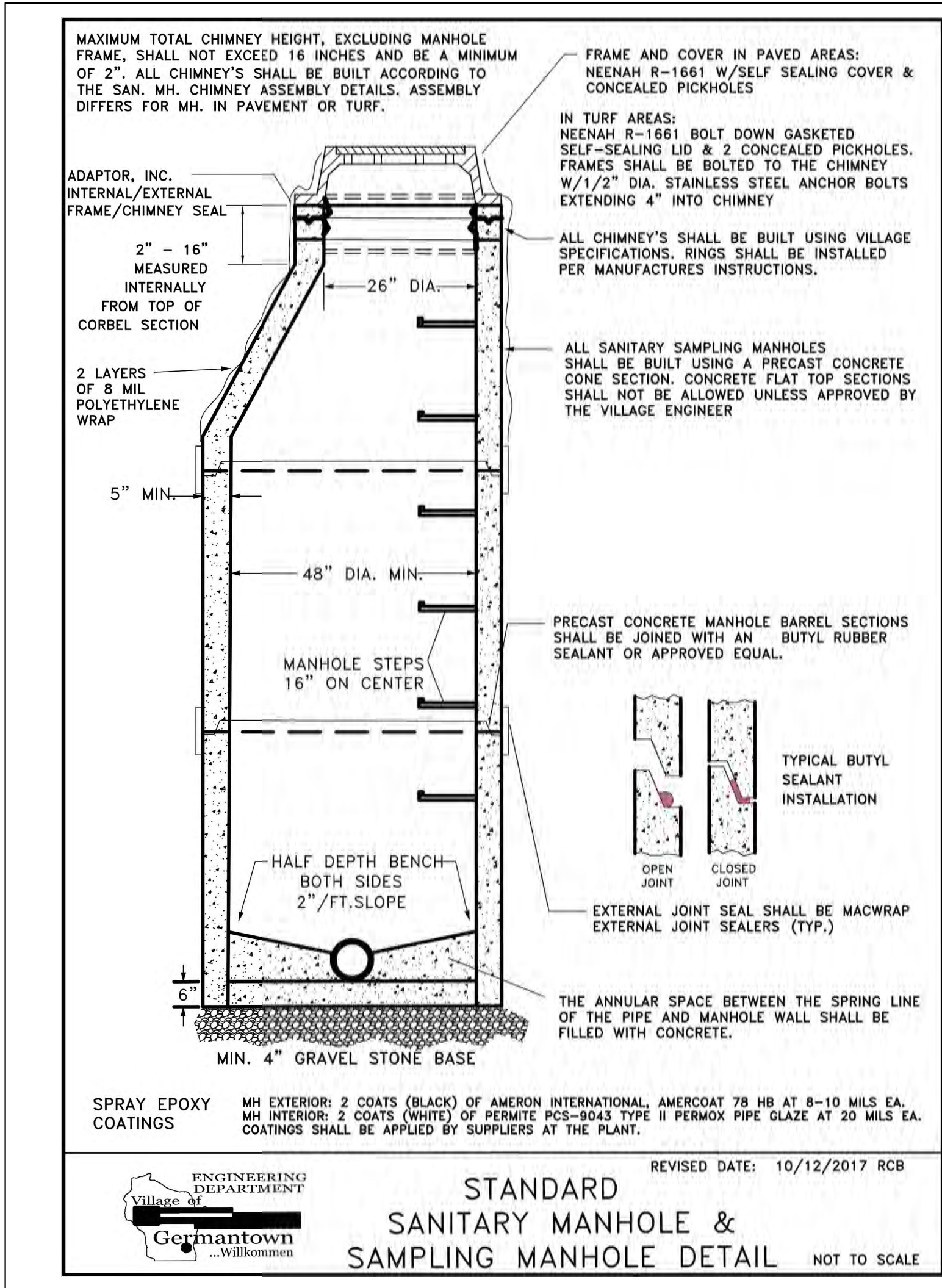
CONTRACTORS

ARCHITECTS



- GENERAL NOTES:**
1. GRATE SHALL BE IN BELL FITTING TO THE PRECAST STRUCTURE SPECIFICATIONS
 2. GRATES SHALL BE AASHTO H20 LOAD RATED
 3. GRATE SHALL SET FLUSH WITH TOP OF CATCH BASIN BELL
 4. PRECAST REINFORCED CONCRETE CATCH BASIN IS MANUFACTURED TO MEET ASTM C-478 AND AASHTO M199 SPECIFICATIONS
 5. STANDARD CATCH BASIN BOTTOM SECTION HEIGHTS: 2'-6", 3'-6" AND 4'-6"
 6. STANDARD CATCH BASIN BARREL HEIGHTS: 0'-6", 1'-0", 2'-0", 3'-0" AND 4'-0"
 7. STOCK 24" DIA. CATCH BASIN HAS NO BASE, BUT MAY BE ORDERED WITH A 6" THICK INTEGRAL BASE OR AS SPECIFIED
 8. CATCH BASIN JOINT MATERIAL: CONSEAL CS-102 AND/OR CS-202 AS MANUFACTURED BY CONCRETE SEALANTS INC., WHICH MEETS OR EXCEEDS REQUIREMENTS OF FEDERAL SPECIFICATION SS-S-210 (210A), AASHTO M-198B AND ASTM C-990
 9. PIPE TO CATCH BASIN CONNECTORS: KOR-N-SEAL AS MANUFACTURED BY NPC INC., WHICH MEETS OR EXCEEDS REQUIREMENTS OF ASTM C-923

24" DIA. STORM INLET



- GENERAL NOTES:**
1. UNDERDRAINS SHALL BE INSTALLED ON ALL INLET/CATCH BASINS LOCATED WITHIN IMPERVIOUS PAVEMENTS.
 2. UNDERDRAIN CONNECTIONS SHALL BE CORED ONSITE.
 3. UNDERDRAIN VERTICAL LOCATION MAY VARY DEPENDING ON STORM SEWER PIPE LOCATION.
 4. ALTERNATIVE DESIGN MAY BE SUBSTITUTED IF SHOP DRAWINGS ARE SUBMITTED AND APPROVED BY VILLAGE OF GERMANTOWN.

CATCH BASIN/INLET UNDERDRAIN

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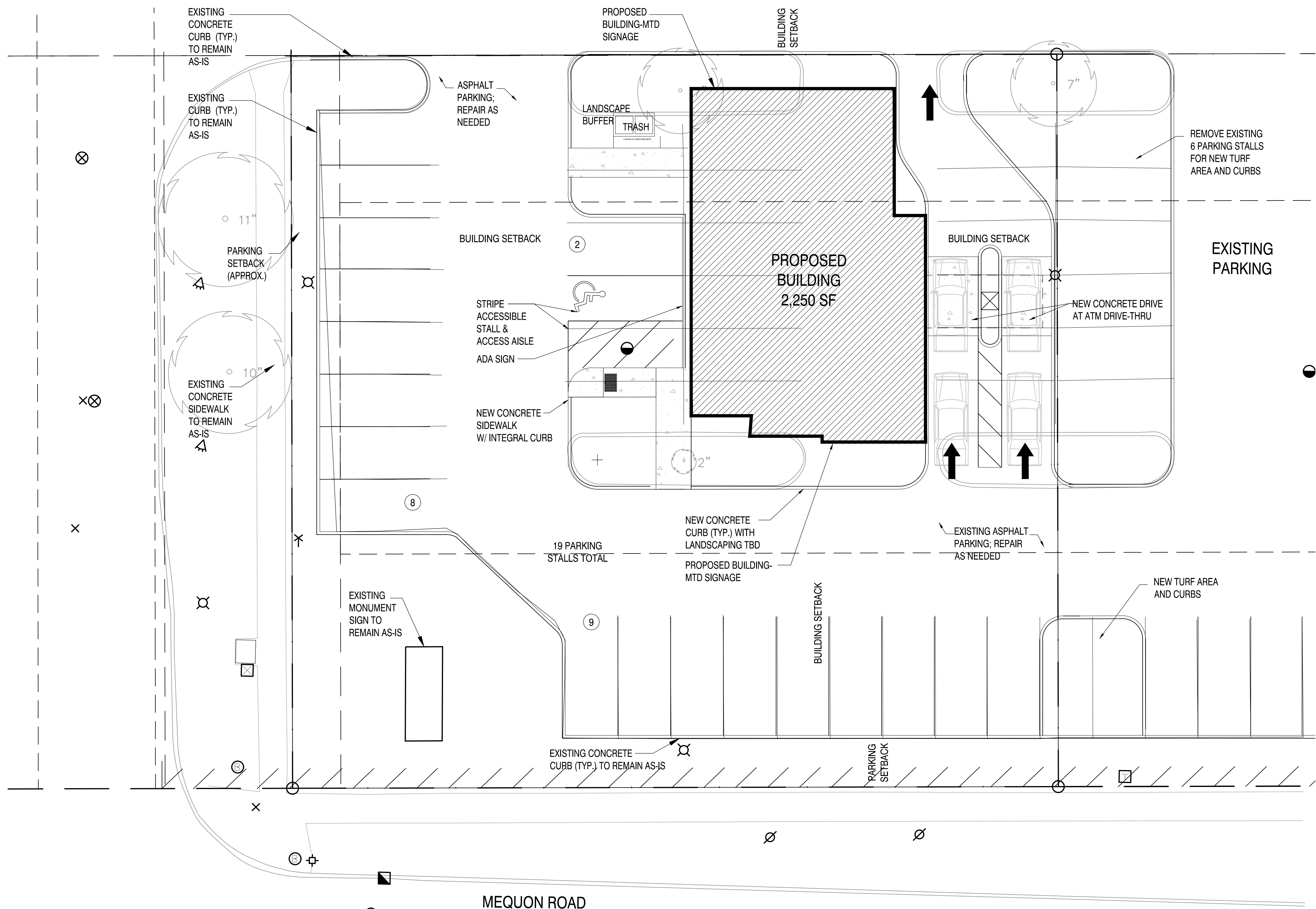
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Reviewed By: --
Sheet Title:
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Project Number: P12512
P12512



SITE PLAN NOTES

SITE STATISTICS	
ZONING	EXISTING B-2 & B-3 REQUESTED TO BE CHANGED TO B-2/PDD (ADJACENT ZONING OF B-2 AND B-3 WITH COMMERCIAL USE)
LOT SIZE	16,339 SF (.3751 ACRE)
BUILDING FOOTPRINT	2,250 SF (PROPOSED)
PAVING	9,450 SF (APPROXIMATELY; VERIFY WITH CIVIL ENGINEER)
TOTAL IMPERVIOUS SURFACES	11,700 SF (.2686 ACRE, APPROXIMATELY; VERIFY WITH CIVIL ENGINEER)
TOTAL GREENSPACE	4,639 SF OR 28.4% OF SITE (MINIMUM REQUIRED OF 5%)
PARKING SPACES	18 STANDARD STALLS + 1 ACCESSIBLE STALLS = 19 TOTAL SPACES (1 STALL PER 200 SF + 1 STALL PER 2/EMPLOYEE REQUIRED = 15 STALLS) BANK PARKING ONLY; NOT SHARED WITH SHOPPING CENTER; CROSS ACCESS AGREEMENT ONLY FOR VEHICULAR TRAFFICE
# OF EMPLOYEES	2 MINIMUM TO 8 MAXIMUM STAFF PERSONS ON SITE AT ONE TIME
PARKING	TOTAL OVERALL LOSS OF PARKING STALLS FOR PDD = 43 STALLS; WHICH INCLUDE 19 STALLS FOR THE BANK PARKING



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PROJECT ADDRESS:

PROJECT NAME
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STREET ADDRESS
MEQUON ROAD
CITY/ STATE / ZIP
GERMANTOWN, WI 53022

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

Architect: AMH/-/ Engineer: xxx Reviewed By: xxx

Sheet Title:

ARCH. SITE PLAN

Sheet Number:

C-107

Project Number:

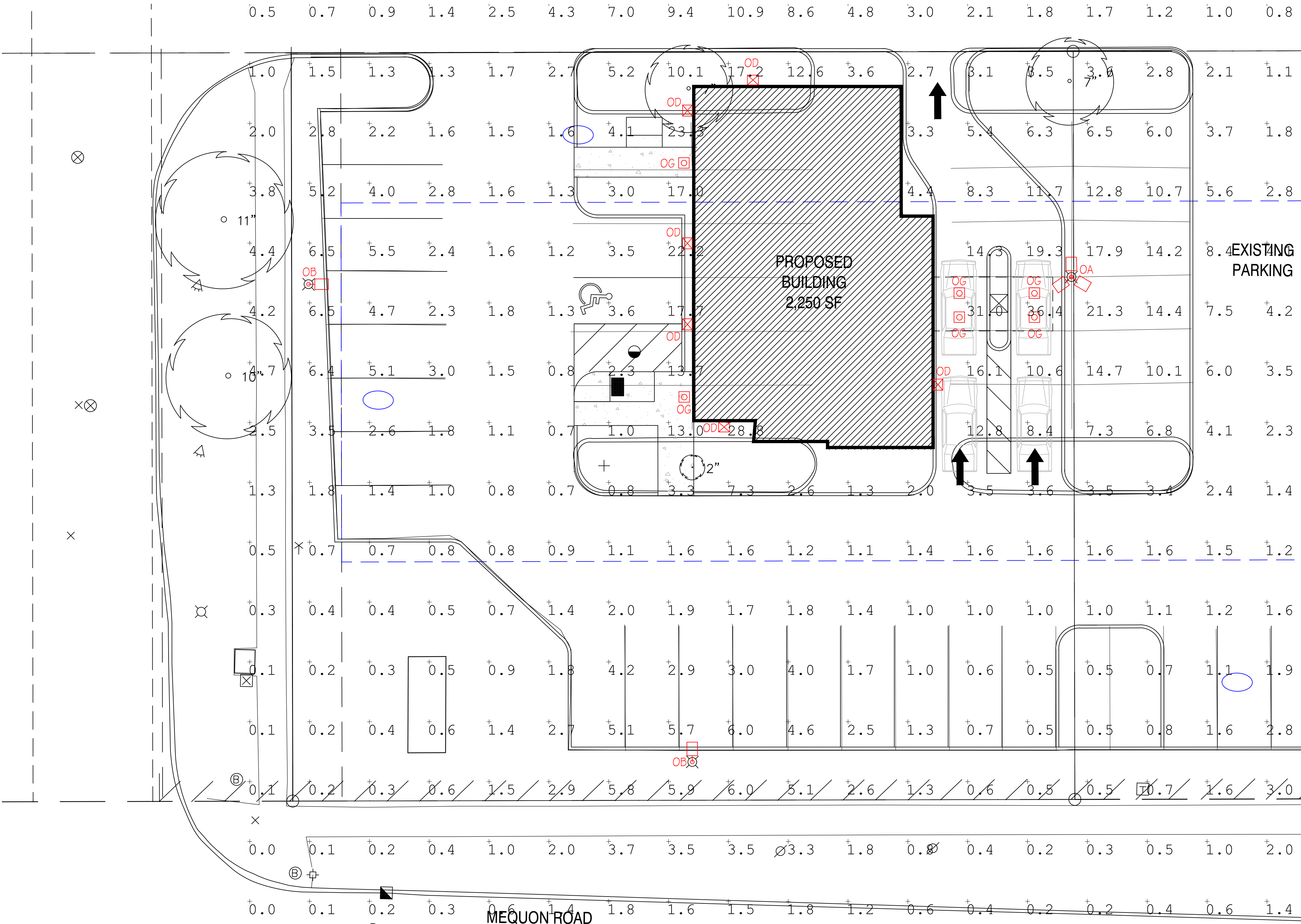
P12512

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS



NSB GERMANTOWN FIXTURE SCHEDULE LIGHTING FIXTURE CATALOG NO.									
QTY	SYMBOL/TYPE	DESCRIPTION	MAKE	LAMP DATA	QTY	CEILING TYPE	MOUNTING HEIGHT	VOLTAGE	SEE NOTE
5	OA	EXISTING LIGHT POLE (3 HEADS)	EXISTING				20'-0" A.F.G.		
3	OB	EXISTING LIGHT POLE (1 HEAD)	EXISTING				20'-0" A.F.G.		
3	OD	WALL PACK	RAB	WPLED26N	3		9'-0" A.F.G.		
9	OG	RECESSED CAN	PATHWAY	6VLED11004K6VLEDSCLPFGIW	9		9'-0" A.F.G.		

Calculation Summary									
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min		
CalcPts_1	Illuminance	Fc	3.31	36.4	0.0	N.A.	N.A.		

DISCLAIMER: CALCULATIONS HAVE BEEN PERFORMED ACCORDING TO IESNA & CIE STANDARDS AND GOOD PRACTICE. SOME DIFFERENCES BETWEEN MEASURED VALUES AND CALCULATED RESULTS MAY OCCUR DUE TO TOLERANCES IN CALCULATION METHODS, TESTING PROCEDURES, COMPONENT PERFORMANCE, MEASUREMENT TECHNIQUES AND FIELD CONDITIONS SUCH AS VOLTAGE AND TEMPERATURE VARIATIONS. INPUT DATA USED TO GENERATE THE ATTACHED CALCULATIONS SUCH AS ROOM DIMENSIONS, REFLECTANCES, FURNITURE AND ARCHITECTURAL ELEMENTS SIGNIFICANTLY AFFECT THE LIGHTING CALCULATIONS. IF THE REAL ENVIRONMENT CONDITIONS DO NOT MATCH THE INPUT DATA, DIFFERENCES WILL OCCUR BETWEEN MEASURED VALUES AND CALCULATED VALUES.

REVISIONS SCHEDULE		
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No.	Revision	Date



- LANDSCAPE ARCHITECTURE
- DESIGN & CONSTRUCTION
- LANDSCAPE MAINTENANCE
- TREE CARE & REMOVAL

12217 W. Watertown Plank Rd.
Wauwatosa, WI 53226

Phone: 414-258-5525
Fax: 414-258-9739

hawkslandscape.com
info@hawkslandscape.com

North Shore Bank
MEQUON RD - GERMANTOWN, WI 53022

This plan is the property of Hawks Landscape and cannot be used without written permission.

ALEX MATHISON

Designed By

7/1/10

Date

1/8" = 1'

Scale

Revisions:

Date: By: Description:

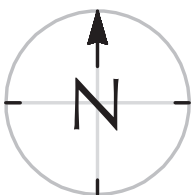
7/1/10

8/5/10 GU Add'l plants

8/6/10 GU Revise plants

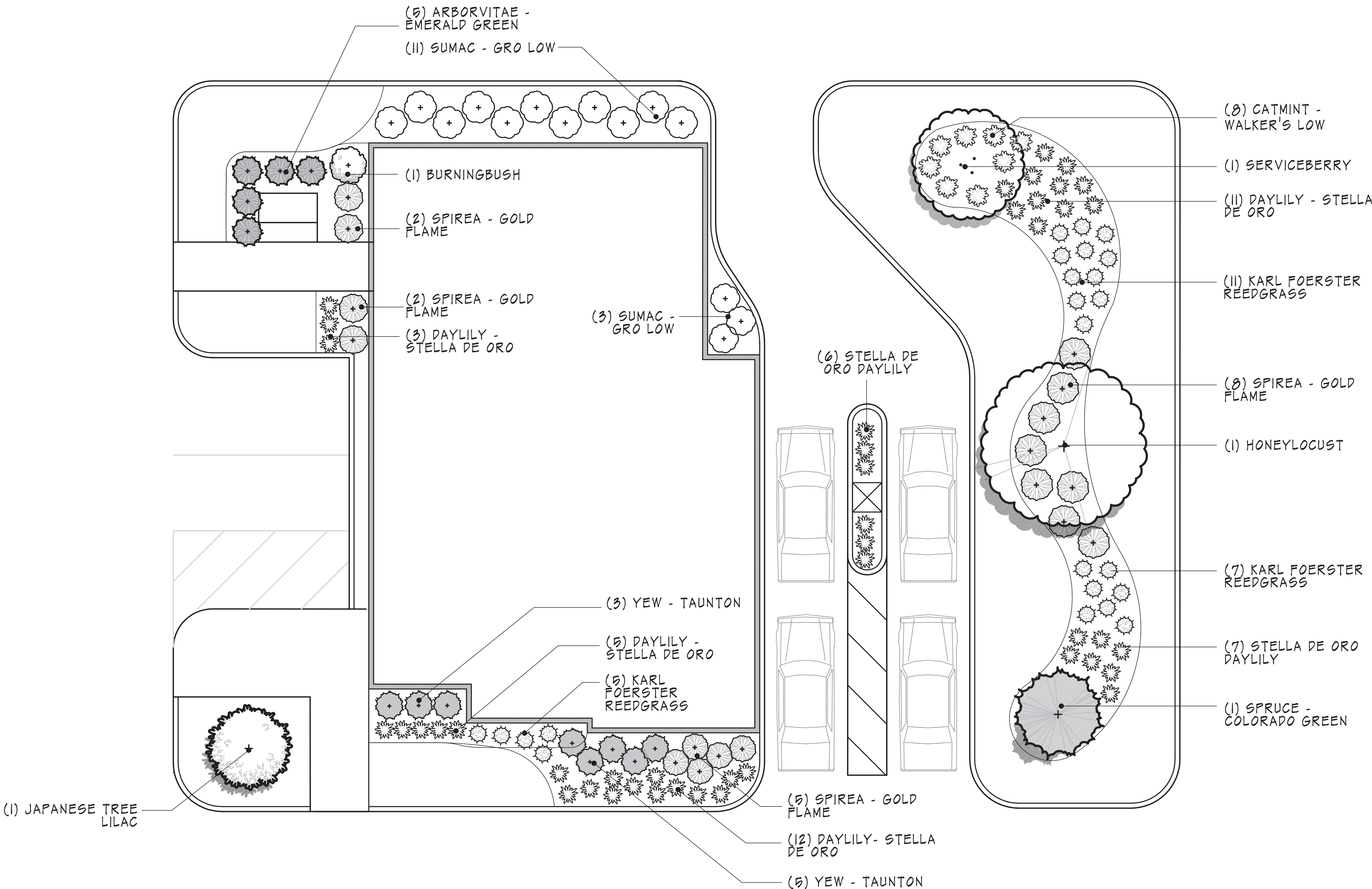
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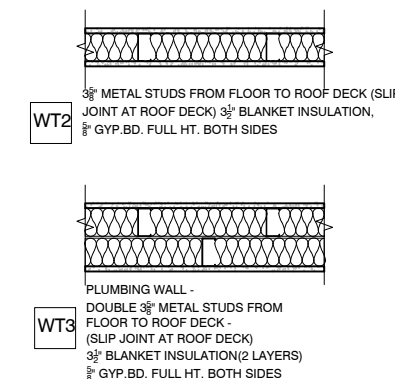
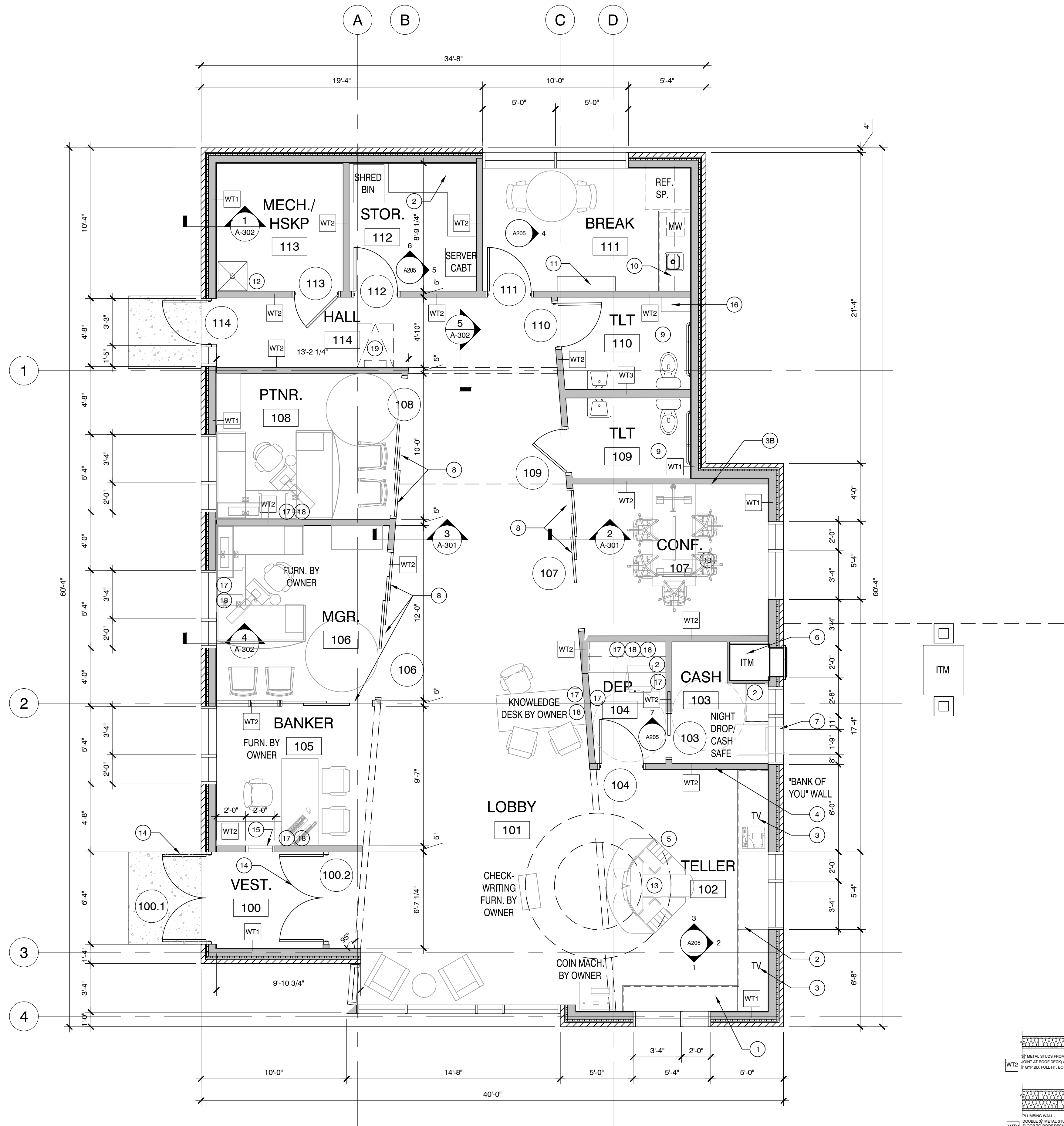
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* NOTE: ALL PLANTS
SHOWN AT STANDARD
80% OF MATURE SIZE

PLANT SCHEDULE				
QUANTITY	COMMON NAME	BOTANICAL NAME	TYPE	INSTALLED SIZE
1	HONEYLOCUST - SKYLINE	Gleditsia triacanthos 'Skyline'	Deciduous Tree	3"
1	LILAC - JAPANESE TREE	Syringa reticulata	Deciduous Tree	2.5"
1	SERVICEBERRY - AUTUMN BRILLIANCE	Amelanchier x grandiflora 'Autumn Brilliance'	Deciduous Tree	7-8'
1	SPRUCE - COLORADO GREEN	Picea pungens	Evergreen Tree	7-8'
6	ARBORVITAE - EMERALD GREEN	Thuja occidentalis 'Smaragd'	Upright Evergreen	5-6'
1	BURNINGBUSH	Euonymus alatus 'Compacta'	Deciduous Shrub	24-30" 5 gallon min.
17	SPIREA - GOLDFLAME	Spiraea japonica 'Goldflame'	Deciduous Shrub	18-24" 5 gallon min.
14	SUMAC - GRO LOW	Rhus aromatica 'Gro Low'	Deciduous Shrub	15-18" 5 gallon min.
8	YEW - TAUNTONII	Taxus x media 'Tauntonii'	Evergreen Shrub	18-24" 5 gallon min.
8	CATMINT - WALKER'S LOW	Nepeta racemosa 'Walker's Low'	Flowering Perennial	1 Gallon
44	DAYLILY - STELLA D'ORO	Heemerocallis 'Stella D'Oro'	Flowering Perennial	1 Gallon
25	KARL FOERSTER REEDGRASS	Calamagrostis acutiflora 'Karl Foerster'	Ornamental Grass	1 Gallon





FLOOR PLAN NOTES

- 42" HIGH PLAM CABINETS WITH DRAWERS AND STORAGE CABINETS WITH LOCKS
- 34" HIGH PLAM STORAGE CABINETS WITH LOCKS
- ELECTRICAL ROUGH-IN AND WOOD BLOCKING FOR A WALL-MTD TELEVISION PROVIDED BY OWNER; CUSTOM PLAM PANEL SURROUND FOR WALL-MTD TV
- ELECTRICAL AND DATA ROUGH-IN AND WOOD BLOCKING FOR A WALL-MTD TELEVISION PROVIDED BY OWNER
- LEVEL 5 FINISH ON GYP. BD. WALL TO RECEIVE LARGE WALL VINYL GRAPHIC "THE BANK OF YOU" MURAL
- CUSTOM CURVED PLAM. TELLER POD WITH UNDERCOUNTER STEEL CABINET FROM FENCO; SEE A-203 AND A-204 FOR ADDITIONAL DETAILS
- PROVIDE RECESS FOR ITM PROVIDED BY OWNER
- RECESSED NIGHT DROP; SEE DETAIL SHEET FOR ADDITIONAL INFORMATION
- 7'-0" HIGH INTERIOR STACKING ALUMINUM FRAMING SYSTEM WITH GLAZING AND DOOR; DORMA HSW SLIDING GLASS WALL SYSTEM IN CLEAR ANODIZED FINISH IN A PARALLEL STACK OR APPROVED ALTERNATE
- ACCESSIBLE TOILET ACCESSORIES. SEE A-503 FOR ADDITIONAL DETAILS. TOWEL DISPENSER: GEORGIA PACIFIC ENMOTION WALL MOUNT AUTOMATED IN SPLASH BLUE, GOJO 5150-06 1250ML DOVE GRAY MANUAL HAND SOAP DISPENSER
- PLAM. 34" H BASE CABINETS, COUNTER WITH SINK, AND UPPER CABINETS WITH MICROWAVE SHELF
- COAT HOOKS WITH SHELF ABOVE
- JANITOR'S SINK
- FLOOR DATA AND POWER RECEPTACLE
- DOOR AUTO OPENER
- HM PAINTED WINDOW FRAME WITH GLAZING
- 12" D X 34" H X 24" W PLAM CABINET WITH LOCK FOR PAPER STORAGE
- ELECTRICAL RECEPTACLE
- DATA RECEPTACLE
- ROOF HATCH WITH HIGH LADDER

NOTES:
SEE FINISH SCHEDULE ON I-601 FOR ALL INTERIOR FINISHES.
ALL FURNITURE SHOWN FOR ILLUSTRATION PURPOSES ONLY; ALL FURNITURE (FFE) TO BE PROVIDED BY OWNER.
WINDOW SHADES ON ALL WINDOWS BY OWNER
TELEVISIONS BY OWNER
PROVIDE STANDARD CONVENIENCE ELECTRICAL RECEPTACLES BEYOND THOSE SHOWN ON PLAN.



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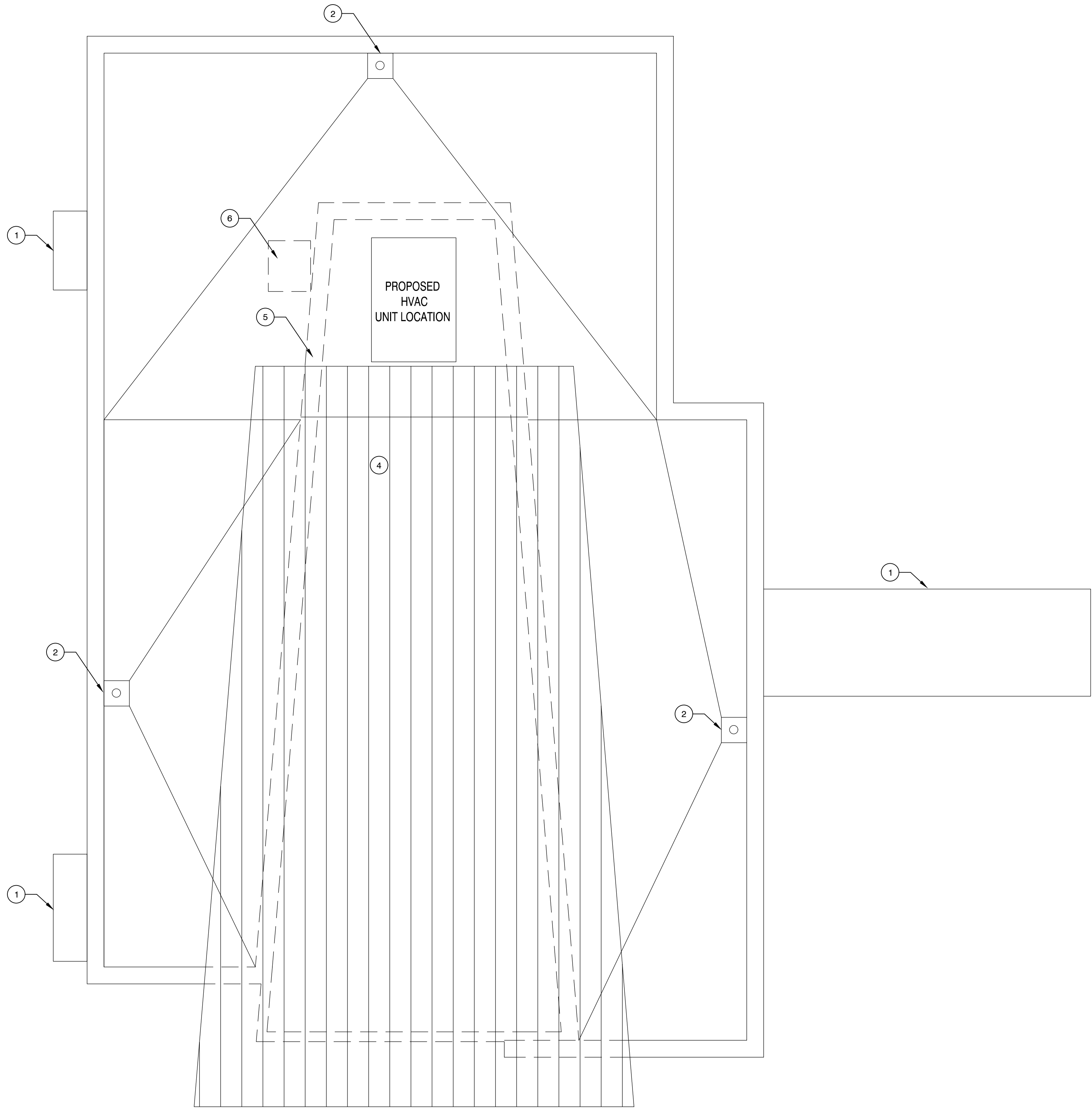
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Architect:	Engineer:	Reviewed By:
AMH/-	xxx	xxx
Sheet Title:		
FLOOR PLAN		
Sheet Number:		
A-101		
Project Number:		
P12512		



- ROOF PLAN NOTES
- 1

CANOPY EDGE BELOW
- 2

ROOF DRAIN
- 3

METAL SOFFIT WITH LED DOWN LIGHT
- 4

SNOW GUARDS ON METAL ROOF
- 5

ROOF SCREEN; COLOR AND MATERIAL TBD TO MATCH PROPOSED SIDING
- 6

ROOF HATCH



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AMH/--	xxx	xxx
Sheet Title:		
ROOF PLAN		
Sheet Number:		
A-102		
Project Number:		
P12512		



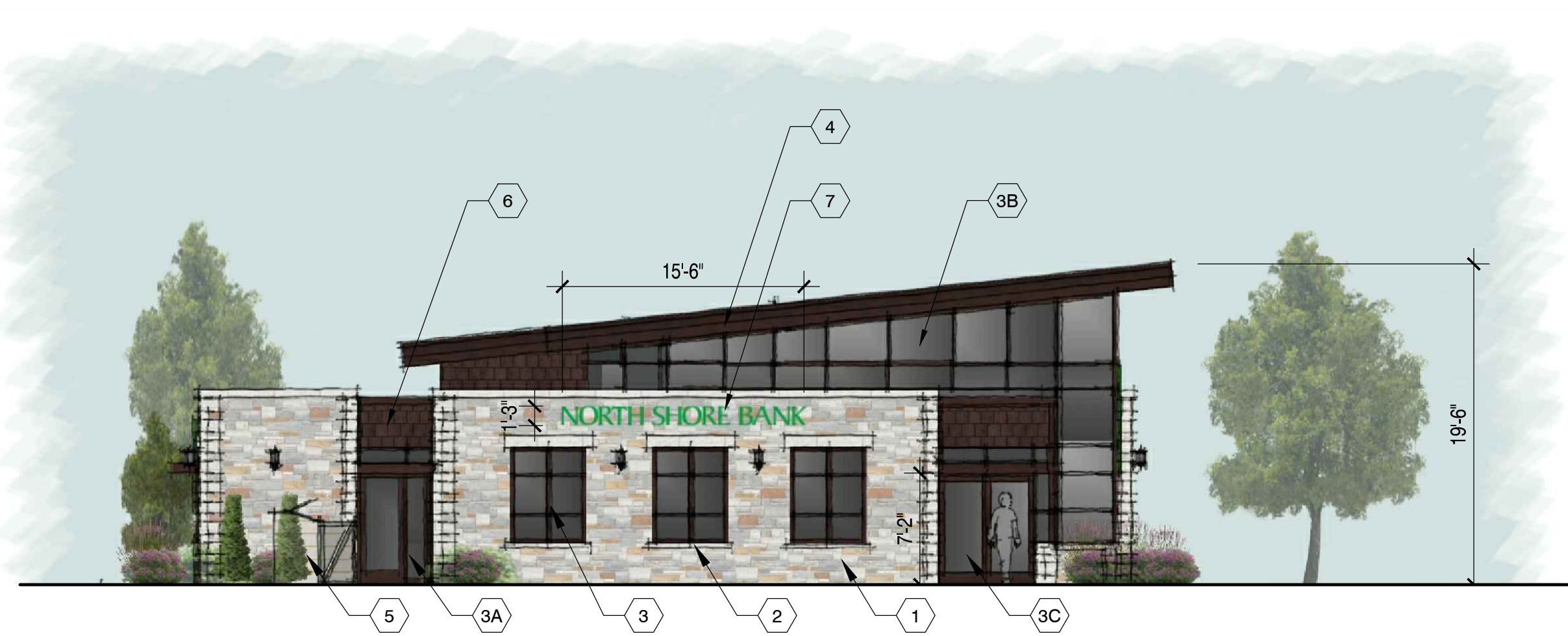
ROOF PLAN 1/8"= 1'-0"

MANAGERS

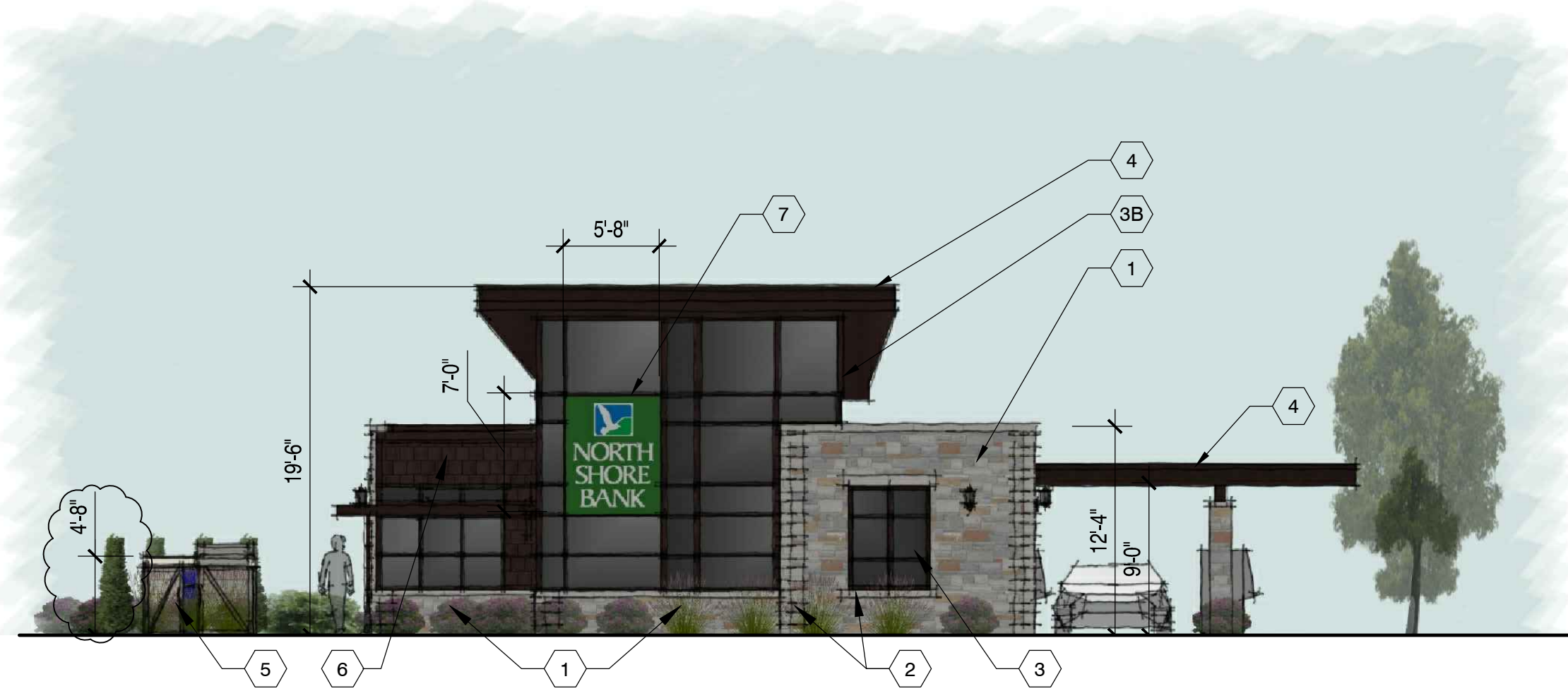
ENGINEERS

CONTRACTORS

ARCHITECTS



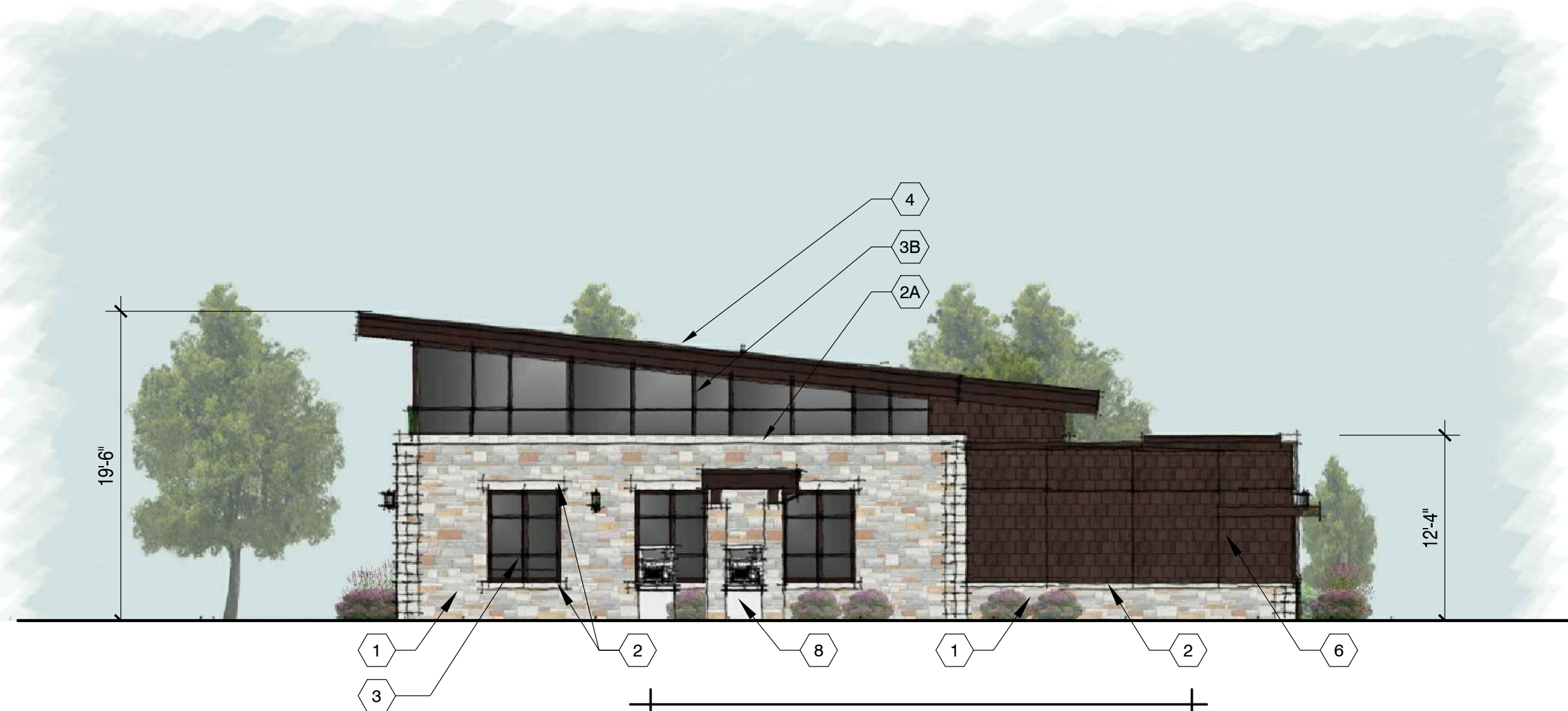
WEST ELEVATION



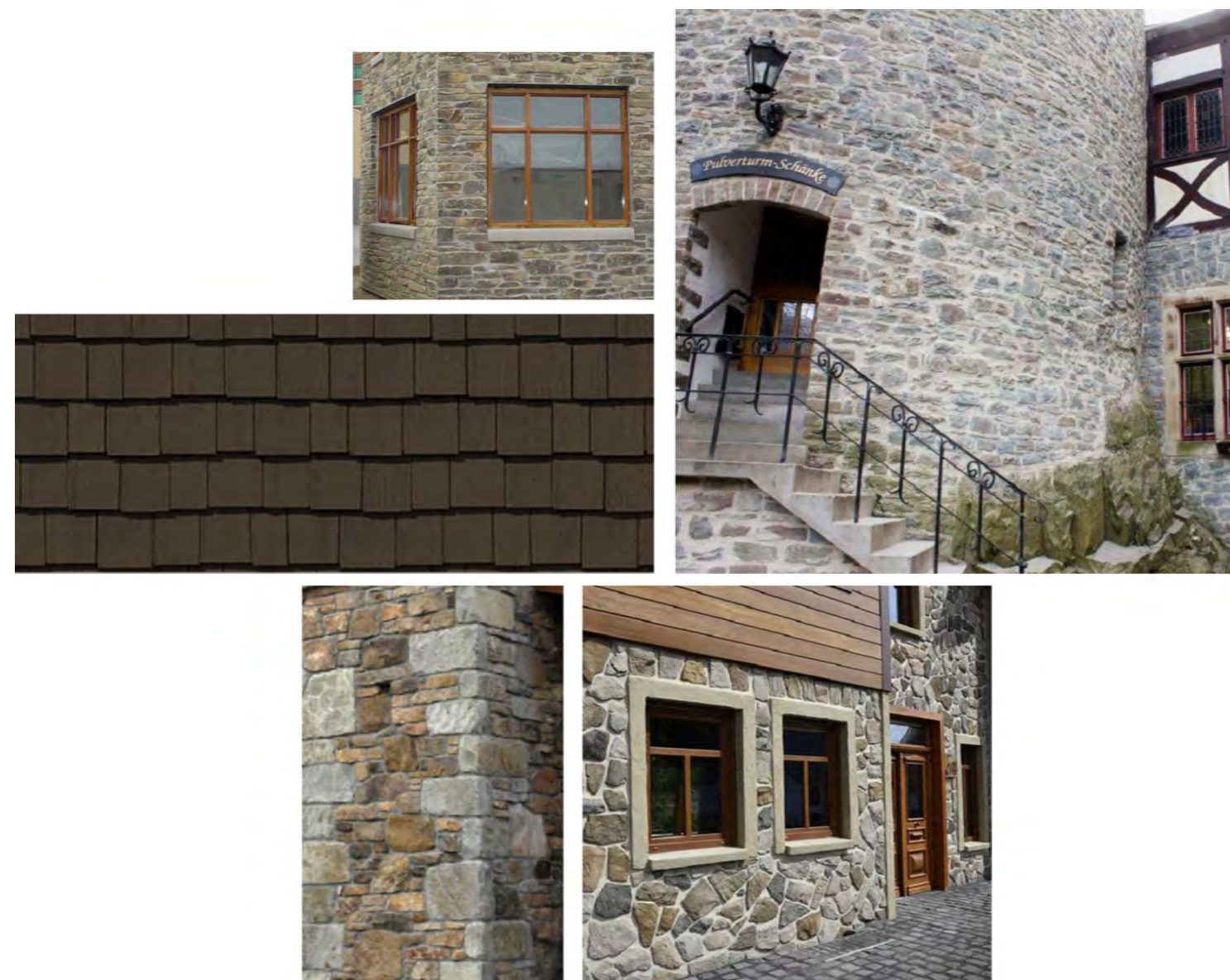
SOUTH ELEVATION



NORTH ELEVATION



EAST ELEVATION



MATERIAL EXAMPLES/
INSPIRATIONAL IDEAS

EXTERIOR MATERIAL KEY NOTES

- 1 HALQUIST STONE, LEDGE COLLECTION - MAPLE RIDGE STONE (USED ON OTHER SIMILAR PROJECTS IN GERMANTOWN)
- 2 ROUGH-FACE TUMBLED STONE MASONRY UNITS: HEADER, SILL AND QUOINS, TYP; COLOR:TBD
- 2A STONE COPING TO MATCH OTHER STONE ON BUILDING
- 3 DARK BRONZE ALUMINUM STOREFRONT WINDOW SYSTEM WITH GLAZING
- 3A DARK BRONZE ALUMINUM STOREFRONT ENTRY DOOR WITH GLAZING AND SIDELITE
- 3B DARK BRONZE ALUMINUM CURTAINWALL SYSTEM WITH GLAZING
- 3C DARK BRONZE ALUMINUM STOREFRONT ENTRY DOORS WITH GLAZING
- 4 DARK BRONZE METAL PANEL, FASCIA, SOFFIT AND ROOF
- 5 PAINTED WOOD TRASH ENCLOSURE WITH GATES; COLOR:TBD
- 6 PAINTED STAGGERED SHAKE SIDING WITH MATCHING TRIM AND COPING
- 7 POSSIBLE SIGN LOCATION (PROVIDED BY OTHER); SIZE AND MATERIAL TO BE VERIFIED BY OWNER
- 8 DRIVE-THRU ITM MACHINE EQUIPMENT (PROVIDED BY OWNER)



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Sheet Title:
EXTERIOR ELEVATIONS

Sheet Number:
A-201

Project Number: P

P12512



NORTHWEST VIEW FROM MEQUON RD



NORTHEAST VIEW FROM MEQUON RD



PARKING LOT VIEW FROM SENDIK'S



PARKING LOT VIEW FROM SENDIK'S



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AMH/--	xxx	xxx

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EXTERIOR RENDERINGS

Sheet Number:

A-202

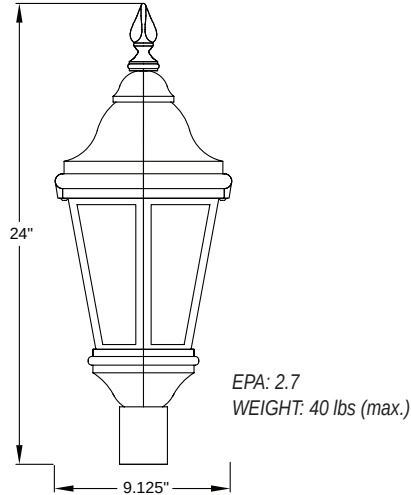
Project Number:

P12512



RADIANT™

CARL3



Specifications and Features:

Radiant™ LED

- Conformal Coating LED light engine
- CCT: 2700, 3000, 4000, 5000
- IP66

Distribution

- Types II, III, IV, V

Electrical

- Electronic Driver, 120-277V, 50/60Hz or 347/480V, 50/60Hz
- 0-10V Dimmable Driver
- Surge Protection included
 - surge protection device meets IEEE C62.41 2002 C High 10kA

Controls (Optional)

- Button eye photo control (PC)
- House Side Shield (H)

Housing

- Cast aluminum cage, roof and 3" slip fitter*

Finish

- Super durable polyester powder coat finish. Custom finishes available, including patinas and all RAL colors.

Listings & Ratings

- ETL listed to UL 1598 standard for wet location and IP66

Warranty

- 5 year limited warranty

ORDERING FORMAT

Example: CARL3-FA-40W4K-U-5-J-N-N-BK



Model	Globe/Lens	LED Module	Voltage	Distribution
CARL3=Carlsbad Radiant™ Taller CARL1 also available 34"	CA=Clear Acrylic WA=White (Opal) Acrylic PA=Double Pattern Acrylic FA=Frosted Acrylic DA=Seeded Acrylic	FP=Frosted Polycarbonate CP=Clear Polycarbonate TG=Clear Tempered Glass FG=Frosted Tempered Glass	See Chart - LED Light Engine Specifications. U=120-277V H=347/480V	2=Type II 3=Type III 4=Type IV 5=Type V
Finial	Mounting	Options	Finish	
J=GF10 Standard B=GF2, C=GF3, D=GF4, F=GF6, G=GF7, H=GF8, I=GF9, K=GF12 O=GF17, P=GF18, V=GF24 N=None	WM=Wall Mount (Must Select Arm) PEN1=Pendant Mount with leveler PEN2=Pendant Mount for chain hanging (Must Select Chain) PEN3=Pendant Mount for stem hanging (Must Select Stem) PEN4=Pendant Mount for use with arm (Must Select Arm)	FS=Fuse, Single PC=Button eye photo control H= House Side Shield N= None	Standard Colors BK=Black BZ=Bronze DBZ=Dark Bronze WH=White Standard Colors GR=Green SM=Silver Metallic GY=Light Grey TBK=Textured Black CC=Custom (Consult Factory)	



RADIANT™



6" Radiant™



8" Radiant™

6" & 8" Radiant Lumen Chart

Initial lumen data

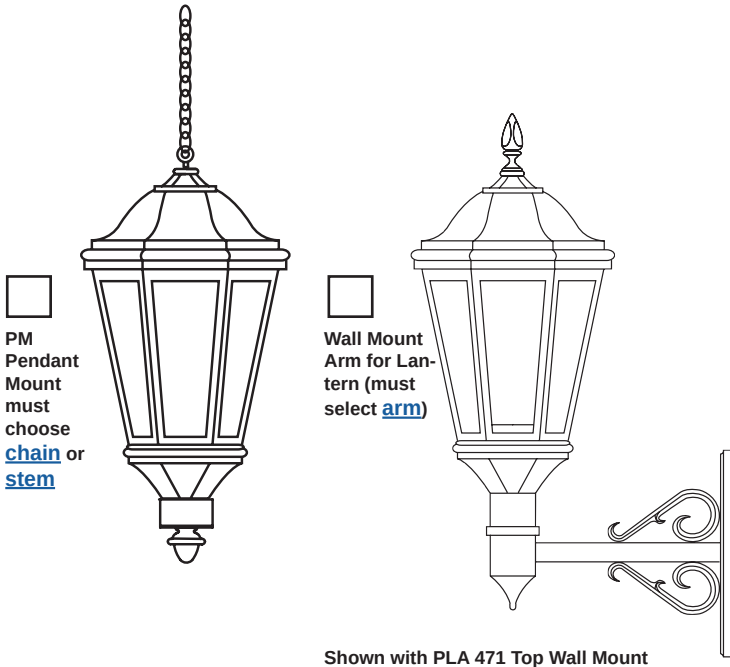
CCT	LED Module	Input Watts	Type 2	Type 3	Type 4	Type 5
5K	10W5K	10	1217	1186	1204	1190
	15W5K	15	1826	1780	1806	1785
	20W5K	20	2434	2373	2408	2380
	30W5K	30	3651	3559	3612	3570
	40W5K	40	5091	5100	4925	5202
	50W5K	50	6311	6314	6076	6367
4K	60W5K	60	7012	6884	6756	7201
	10W4K	10	1175	1145	1162	1148
	15W4K	15	1762	1717	1743	1723
	20W4K	20	2349	2290	2324	2297
	30W4K	30	3524	3435	3486	3445
	40W4K	40	4913	4922	4753	5020
3K	50W4K	50	6090	6093	5863	6144
	60W4K	60	6767	6643	6520	6949
	10W3K	10	1132	1103	1120	1107
	15W3K	15	1698	1655	1680	1660
	20W3K	20	2264	2207	2240	2213
	30W3K	30	3396	3310	3360	3320
27K	40W3K	40	4735	4743	4580	4838
	50W3K	50	5869	5872	5651	5921
	60W3K	60	6521	6402	6283	6697
	10W27K	10	1098	1070	1086	1073
	15W27K	15	1647	1605	1629	1610
	20W27K	20	2196	2141	2172	2147
27K	30W27K	30	3294	3211	3259	3220
	40W27K	40	4392	4281	4345	4294
	50W27K	50	5490	5351	5431	5367
	60W27K	60	6588	6422	6517	6441

This chart indicates INITIAL LUMENS. Globe/Lens choice will affect lumen output.

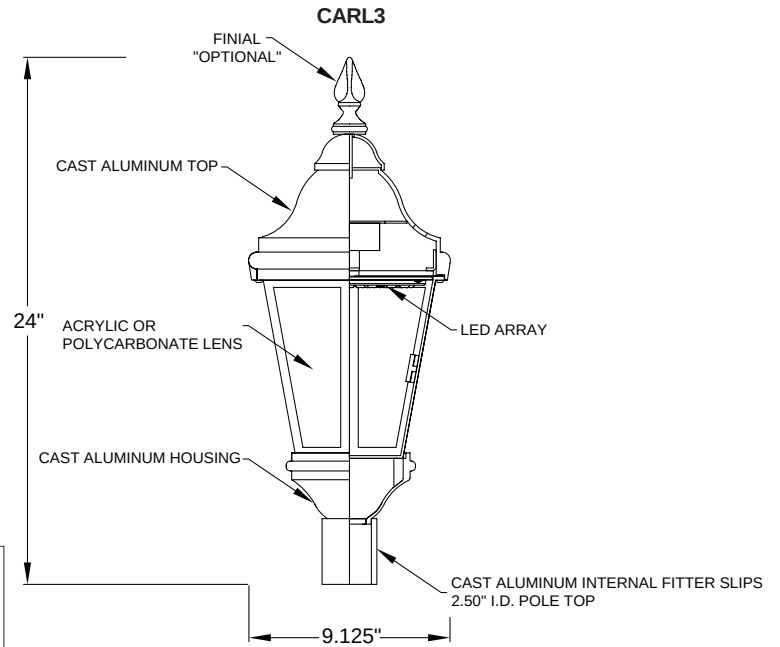


RADIANT™

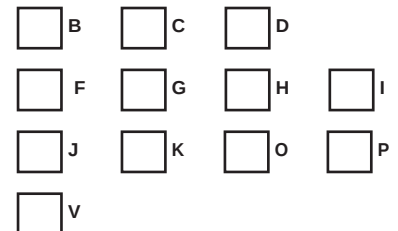
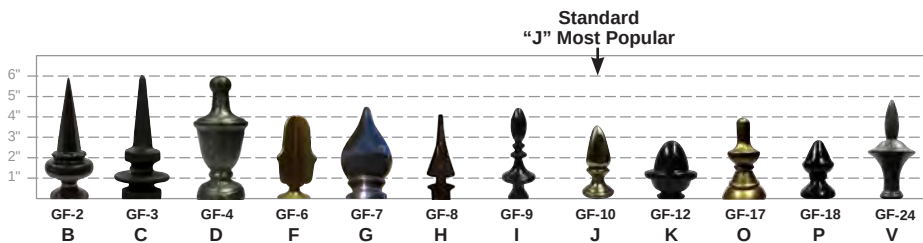
Mounting Options:



Dimensions:



Finial:





12, 18 and 26 Watt SLIM wall packs are ultra efficient and deliver impressive light distribution with a compact low-profile design that's super easy to install as a downlight or uplight.

Color: Bronze

Weight: 4.8 lbs

Project:

NSB Germantown

Type:

OD

Prepared By:

Date:

Driver Info

Type	Constant Current
120V	0.27A
208V	0.15A
240V	0.15A
277V	0.13A
Input Watts	29.9W
Efficiency	87%

LED Info

Watts	26W
Color Temp	4000K (Neutral)
Color Accuracy	74 CRI
L70 Lifespan	100,000
Lumens	3,524
Efficacy	117.9 LPW

Technical Specifications

Listings

UL Listing:

Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

ADA Compliant:

SLIM™ is ADA Compliant

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. DLC Product Code: P96TPDJK

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in 40°C (104°F)

Housing:

Precision die-cast aluminum housing

Mounting:

Heavy-duty mounting bracket with hinged housing for easy installation

Recommended Mounting Height:

Up to 22 ft

Lens:

Tempered glass lens

Reflector:

Specular thermoplastic

Gaskets:

High-temperature silicone

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

LED Characteristics

LED:

Multi-chip, long-life LED

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5-year period

Technical Specifications (continued)

LED Characteristics

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Other

Patents:

The design of the SLIM™ is protected by patents in U.S. Pat D681,864, and pending patents in Canada, China, Taiwan and Mexico.

HID Replacement Range:

Replaces 175W Metal Halide

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical

BUG Rating:

B1 U0 G0

Electrical

Driver:

Constant Current, Class 2, 100-277V, 50/60 Hz., 6KV surge protection, 120V: 0.28A, 208V: 0.16A, 240V: 0.14A, 277V: 0.12A

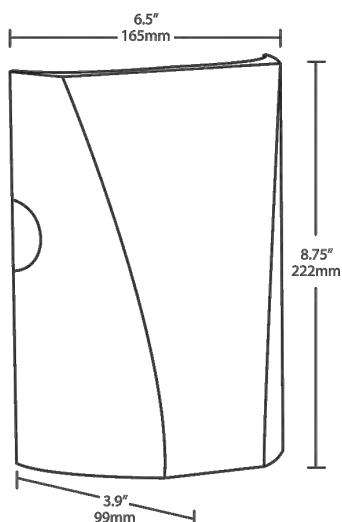
THD:

7.6% at 120V, 17.6% at 277V

Power Factor:

99.1% at 120V, 90.5% at 277V

Dimensions



Features

- Full cutoff, fully shielded LED wall pack
- Can be used as a downlight or uplight
- Contractor friendly features for easy installation
- 100,000-hour LED Life
- 5-Year, No-Compromise Warranty

Ordering Matrix

Family	Wattage	Color Temp	Finish	Driver	Options
SLIM	26	N			
	12 = 12W 18 = 18W 26 = 26W	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Bronze W = White	Blank = Standard (120-277V) /D10 = Dimmable	Blank = No Option /PC = 120V Button /PC2 = 277V Button /LC = Lightcloud® Controller

DESCRIPTION

6 inch LED recessed narrow, medium, or wide beam downlight with 50° cut off specially designed for LED technology. Two-stage reflector system produces smooth distribution with excellent light control and low aperture brightness. Lumen packages include 1000, 1500, 2000 and 3000 lumens with color temperatures of 2700K, 3000K, 3500K, 4000K. Available with dim-to-warm technology – similar to halogen at full power, the 3000K LED warms smoothly as dimmed to 1850K creating a rich warm glow within the space.

SPECIFICATION FEATURES

Lower Shielding Reflector

Self-flanged, spun .050" thick aluminum lower reflector in combination with a lensed upper optical chamber provides superior lumen output with minimal source brightness. Available in all Portfolio Alzak® finishes.

Trim Retention

Lower reflector is retained with two torsion springs holding the flange tightly to the finished ceiling surface.

Plaster Frame / Collar

New Construction Housing: Die cast aluminum 1-1/2" deep collar accommodates ceiling materials up to 2".

Universal Mounting Bracket

Accepts 1/2" EMT, C channel and bar hangers and adjusts 5" vertically from above and below the ceiling.

Junction Box

(4) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Listed for (8) #12 AWG (four in, four out) 90°C conductors and feed thru branch wiring.

Thermal

Extruded aluminum heat sink conducts heat away from the LED module for optimal performance and long life.

LED

LED system contains a plurality of high brightness white LED's combined with a high reflectance upper reflector and convex transitional lens producing even distribution with no pixilation. Rated for 50,000 hours at 70% lumen maintenance. Auto resetting, thermally protected, LED's are turned off when safe operating temperatures are exceeded. Color variation within 3-step MacAdam ellipses. Flexible disconnect allows for tool-less replacement of LED engine from below ceiling. Available in 80 or 90 CRI.

D2W™ – dim-to-warm shifts CCT from 3000K to 1850K as fixture dims mimicking halogen sources.

Driver

Combination 120-277V 0-10V or 120V trailing edge phase cut driver provides flicker free dimming from 100% to 10%. Optional 1% 0-10V, Fifth Light, DMX or

Catalog #	LD6A20D010TEERM6A	Type
Project	NSB Germantown	OG
Comments		Date
Prepared by		

Lutron® Ecosystem. Driver can be serviced from above or through the aperture.

Code Compliance

Thermally protected and cULus listed for protected wet locations. IP66 rated when used with IP66 gasket kit accessory. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits. Non-IC rated - Insulation must be kept 3" from top and sides of housing. RoHS Compliant. Photometric testing completed in accordance with IES LM 79 standards. LED life testing completed in accordance with LM 80 standards.

Warranty

5-year warranty on LED housings, LED Modules and LED Trims.

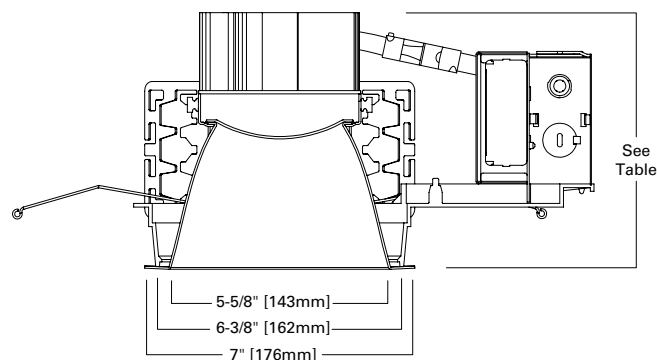


LD6A10 LD6A15 LD6A20 LD6A30 6L

1000, 1500 Lumen LED
2000, 3000 Lumen LED

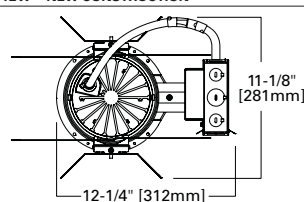
6-Inch
Narrow, Medium, or Wide Beam
Downlight
New Construction

D2W™

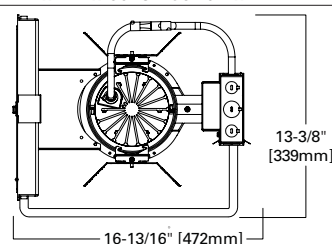


Distribution	Lumens	Height
Narrow	1000/1500	6-3/16"
Medium	1000/1500	6-9/16"
Wide	1000/1500	5-5/8"
Narrow	2000/3000	8-3/16"
Medium	2000/3000	8-9/16"
Wide	2000/3000	6-1/2"

TOP VIEW - NEW CONSTRUCTION



TOP VIEW - NEW CONSTRUCTION WITH BATTERY



Showerlight



Refer to ENERGY STAR® Qualified Products List.



powered by
fifthlight
technology

ORDERING INFORMATION

EXAMPLE: LD6A15D010TE ERM6A15835 6LM0LI=6" LED Medium Beam Reflector, 1500 Lumen 3,500 K Color with Universal 120 - 277V, 0 - 10 Driver

Housing	Lumens ¹	Driver	Options ^{3,4}	Power Module	Lumens ¹	CRI	Color
LD6A=6" Aperture, LD6ACP=6" Aperture	10=1000 Lumens 15=1500 Lumens 20=2000 Lumens 30=3000 Lumens	1000, 1500, 2000 and 3000 Lumen D010TE=120-277V 0-10V 10% Dimming or Trailing Edge 120V Dimming D5LT=Fifth Light* (DALI) 0% Dimming DE010=0 to 100% Dimming, 120-277V 50/60Hz, 0-10V DL3=1 to 100% Dimming, 120-277V Lutron® Hi-Lume, Ecosystem or 3 Wire DLT=Hi-Lume Forward Phase 2-wire Dimming 120V DMX=DMX 0% Dimming 1000, 1500 and 2000 Lumen D010TR=120-277V 0-10V 10% Dimming or Leading Edge 120V Dimming	EMBOD=7W Bodine® Emergency Module with Remote Test Switch IEMBOD=7W Bodine® Emergency Module with Integral Test Switch ⁵ EM7=7W Emergency Module with Remote Test Switch ⁴ EM14=14W Emergency Module with Remote Test Switch ⁴ IEM7=7W Emergency Module with Integral Test Switch ^{5,4} IEM14=14W Emergency Module with Integral Test Switch ^{5,4}	ERW6A=6", For Wide Beam Reflector ERM6A=6", For Medium Beam Reflector ERN6A=6", For Narrow Beam Reflector	10=1000 Lumens 15=1500 Lumens 20=2000 Lumens 30=3000 Lumens	8=80 CRI 9=90 CRI	27=2700° K 30=3000° K 35=3500° K 40=4000° K 27CP=2700° K, Chicago Plenum 30CP=3000° K, Chicago plenum 35CP=3500° K, Chicago Plenum 40CP=4000° K, Chiago Plenum 30D2W= Dim to warm 3000° K to 1850° K (2000 lumen and below, 90 CRI)

Reflector	Finish	Options	Accessories
Narrow Beam (25°) ⁶ 6LN0=White Polymer Trim Ring 6LN0E=White Polymer Trim Ring, for Integral Emergency 6LN1=Self-flanged 6LN1E=Self-flanged, for Integral Emergency Medium Beam (50°) ⁶ 6LM0=White Polymer Trim Ring 6LM0E=White Polymer Trim Ring, for Integral Emergency 6LM1=Self-flanged 6LM1E=Self-flanged, for Integral Emergency Wide Beam (75°) ⁶ 6LW0=White Polymer Trim Ring 6LW1=Self-flanged	LI=Specular Clear H=Semi-Specular Clear WMH=Warm Haze G=Specular Gold WH=Wheat WHH=Wheat Haze GP=Graphite GPH=Graphite Haze B=Specular Black W=Gloss White 6LM0, 6LM0E, and 6LW0 Only BB=Black Baffle WB=White Baffle	Self-flanged Only WF=White Painted Flange	HB26=C-channel Bar Hanger, 26" Long, Pair HB50=C-channel Bar Hanger, 50" Long, Pair RMB22=Wood Joist Bar Hanger, 22" Long, Pair H347=347 To 120V Step Down Transformer, 75VA PORLWTPD1=LumaWatt Pro Wireless Sensor Kit (0-10V only) H347200=347 to 120V Step Down Transformer, 200VA Housings, Specify Slope HSA6=Slope Adapter for 6" Aperture Housings, Specify Slope TRM6=Metal Trim Ring, Specify Color ² TRR6=Rimless Trim Ring ² DT6=Deco Trim ² LGSKT6IP66= P66 Gasket Kit

- Notes:** 1 Nominal Lumens will vary depending on selected color, driver and reflector finish.
2 Order trim with polymer trim ring (Consult specification sheet for color ordering information and options).
3 Not available with Chicago Plenum.
4 Not CSA approved.
5 For use with narrow or medium beam.
6 With LI finish.

ENERGY

ENERGY DATA			
Sound Rating: Class A standards			
(Values at non-dimming line voltage)			
Minimum Starting Temperature: -30°C (-22°F)			
EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer)			
Input Voltage: UNV (120V - 277V)			
Power Factor: >0.90 (at nominal input 120-277 VAC & 100% of Rated Output Power)			
3000 Lumen D010TE		2000 Lumen D010TE	
Input Power: 43.6W	THD: <17%	Input Power: 31.5W	THD: <20%
120V Input Current: .37A	277V Input Current: .16A	120V Input Current: .27A	277V Input Current: .12A
Maximum Non-IC Ambient Continuous		Maximum Non-IC Ambient Continuous	
Input Frequency: 50/60Hz		Input Frequency: 50/60Hz	
1500 Lumen D010TE		1000 Lumen D010TE	
Input Power: 22.4W	THD: <20%	Input Power: 14.1W	THD: <20%
120V Input Current: .12A	277V Input Current: .09A	120V Input Current: .12A	277V Input Current: .06A
Maximum Non-IC Ambient Continuous		Maximum Non-IC Ambient Continuous	
Input Frequency: 50-60Hz		Input Frequency: 50-60Hz	

Lumens	120V		277V	
	Inrush (A)	Duration (ms)	Inrush (A)	Duration (ms)
900/1000	0.486	0.4	0.848	0.182
1300/1500	0.717	1.58	0.531	1.24
1800/2000	0.832	0.405	1.25	0.788
2800/3000	1.09	0.3	1.23	0.294

PHOTOMETRICS

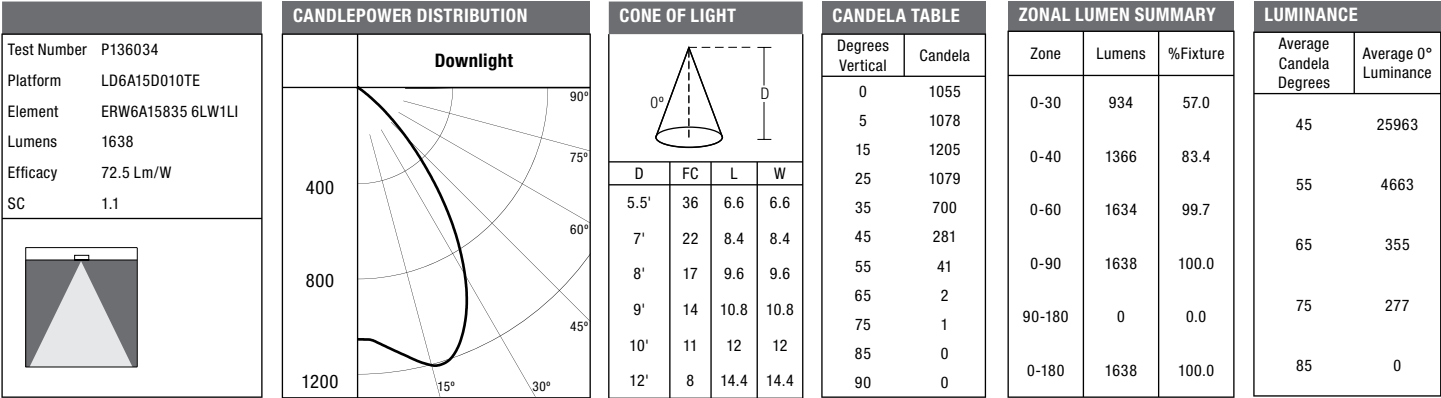
		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	Platform	Downlight		0°		Degrees Vertical	Candela	Zone	Lumens	%Fixture	Average Candela Degrees	Average 0° Luminance
P135434	LD6A15D010TE					0	1549	0-30	969	68.2	45	11339
Element	ERM6A15835 6LM1H					5	1514	0-40	1280	90.1	55	3048
Lumens	1421					15	1306	0-60	1410	99.2	65	1220
Efficacy	62.9 Lm/W					25	1023	0-90	1421	100.0	75	403
SC	0.9					35	493	90-180	0	0.0	85	0
						45	123	0-180	1421	100.0		
						55	27					
						65	8					
						75	2					
						85	0					
						90	0					

Test Number	Platform	CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	Platform	Downlight		0°		Degrees Vertical	Candela	Zone	Lumens	%Fixture	Average Candela Degrees	Average 0° Luminance
P135314	LD6A15D010TE					0	2195	0-30	1286	80.8	45	3072
Element	ERM6A15835 6LM1LI					5	2219	0-40	1550	97.4	55	489
Lumens	1592					15	1968	0-60	1590	99.9	65	170
Efficacy	70.4 Lm/W					25	1176	0-90	1592	100.0	75	277
SC	0.8					35	409	90-180	0	0.0	85	0
						45	33	0-180	1592	100.0		
						55	4					
						65	1					
						75	1					
						85	0					
						90	0					

Test Number	Platform	CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	Platform	Downlight		0°		Degrees Vertical	Candela	Zone	Lumens	%Fixture	Average Candela Degrees	Average 0° Luminance
P135490	LD6A30D010TE					0	2882	0-30	1804	68.2	45	21101
Element	ERM6A30835 6LM1H					5	2818	0-40	2382	90.1	55	5664
Lumens	2644					15	2431	0-60	2623	99.2	65	2269
Efficacy	58.2 Lm/W					25	1903	0-90	2644	100.0	75	731
SC	0.9					35	918	90-180	0	0.0	85	0
						45	229	0-180	2644	100.0		
						55	50					
						65	15					
						75	3					
						85	0					
						90	0					

Test Number	Platform	CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	Platform	Downlight		0°		Degrees Vertical	Candela	Zone	Lumens	%Fixture	Average Candela Degrees	Average 0° Luminance
P133453	LD6A15D010TE					0	4459	0-30	1236	80.8	45	4355
Element	ERN6A15835 6LN1LI					5	3856	0-40	1478	96.6	55	364
Lumens	1530					15	1782	0-60	1529	99.9	65	170
Efficacy	67.7 Lm/W					25	869	0-90	1530	100.0	75	0
SC	0.4					35	394	90-180	0	0.0	85	0
						45	47	0-180	1530	100.0		
						55	3					
						65	1					
						75	0					
						85	0					
						90	0					

PHOTOMETRICS



EM MULTIPLIER DATA

LUMENS	EM MULTIPLIER	
	7	14
900/1000	0.50	0.99
1300/1500	0.29	0.57
1800/2000	0.22	0.44
2800/3000	0.16	0.32

Revisions to Exterior Elevations Narrative for NSB Germantown

First Changes (from conceptual submittal 06/03/19 to original PC Submittal 071519)

- added tumbled stone quoins on all the corners
- added tumbled stone window sills and headers
- changed the style of the windows to be a more residential/casement style comparable to many old buildings in Germany
- added faux timber framing/EIFS details
- added wood-look entry doors
- removed smoother face stone at base of building
- removed portion of double-winged roof

Second changes (from original PC submittal 071519 to revised PC Submittal 082119)

- added tumbled stone quoins on all the corners
- added tumbled stone window sills and headers
- changed the style of the windows to be a more residential/casement style comparable to many old buildings in Germany
- changed the color of the windows/doors to a dark bronze to mimic a dark painted wood rather than clear anodized
- changed the faux timber framing/EIFS to a dark painted wood shake siding to mimic the wood and shingled roofs of Germany
- more traditional lantern-style exterior light fixtures



Design Build
Since 1957

September 6, 2019

Mr. Jeffrey Retzlaff, Village Planner and Zoning Administrator
Mr. Lawrence Ratayczak, P.E., Director of Public Works
Village of Germantown
N112 W17001 Mequon Road
Germantown, WI 53022

Mr. Brad Seubert
Harwood Engineering Consultants
255 North 21st Street
Milwaukee, WI 53233

RE: North Shore Bank
MSI General Proposal #12512

Jeff, Larry & Brad:

Here are our responses to the staff review comments. Please note Brad and I discussed these items in detail yesterday and confirmed that it makes sense to acknowledge them now, provide corrections to the drive isle width and add some of the notes on the plan we resubmit. That said – we have a few weeks of work to do AFTER we get approval for the project to actually complete the plan to a point that is it ready to be re-reviewed by Staff.

In the meantime these comments to your memo below should provide our answer, solution, question/concern and understanding that our team will work with staff to correctly address them in an efficient and time sensitive manner once we know we have approval and access to the site to do some of the work (currently not owned by North Shore Bank).

Engineering Department Memorandum Responses

General Comments –

1. See replies below
2. Understood
3. Plumbing plans will be submitted to state. As for Infiltration – we are not sure what is meant and how as the site is currently a parking lot draining to a regional pond. We are decreasing the impervious surface.
4. Understood
5. Understood
6. Understood
7. Understood

C-102 Pavement ID & Site Dimension Plan

1. See new site plan with correction
2. See new site plan with correction
3. See new site plan with correction
4. See new site plan with correction
5. See new site plan with correction

MSI General

Corporation

P.O. Box 7

Oconomowoc

Wisconsin

53066

262.367.3661

Fax 262.367.7390

www.msigeneral.com

Mr. Jeffrey Retzlaff
Mr. Lawrence Ratayczak
Mr. Brad Seubert
September 6, 2019

C-103 Grading and Erosion Control Plan

1. Our intent is to start construction by 11/1/19. That said we will only remove the asphalt for the building pad in order to build the bank building. We will also do some storm sewer protection and provide needed catch basin screens and surface type erosion socks, hay bales or needed items in the flow pattern areas going off of our site. The small area exposed will help decrease silt issues. In spring (and when asphalt plants open) we will then do the remaining site work and pavement removal/grading/Utilities. We can consult the Village DPW staff at that time to determine our timing/sequence and confirm our game plan. (Note any areas opened up or utilities installed would be the width of a needed trench only and backfilled with clear stone.

C-104 Utility Plan

1. There is a man hole on site currently – we would like to inspect it and get Village confirmation that we can use it, or determine repairs, replacement. We would like to do this AFTER North Shore owns the property. We do understand we need a manhole that meets Village standards
2. New Utility plan will show this.
3. We will do this work as part of the work we are doing for item #1. Understood.
4. NO NOTE on Memo
5. Those are completed (Also see note #3 from General Comments). We can attach that chart to the updated plan set.
6. Understood
7. Understood. We will do this as part of items #1 & 3 above. Again after NSB owns the property.
8. Understood as in conjunction with item #7 above.

C-106 Notes and Details

1. This will be provided in the updated set after site inspections, testing & excavation/exploration are completed.

8/30/19 Memo from Jeffrey W Retzlaff

Community Development Department Responses

1. Progression elevations, details from coordination and design critiques have been sent along with a Germanic Designed Building using more high quality materials than other surrounding buildings by use of stone and true architectural materials in lieu of stucco, EIFS and fake wood timbers that surround this location.
2. See updated Landscape Plan
3. See updated Landscape Plan
4. This was discussed at PDD hearing. Please refer to those notes and approval comments. No signage planned as we believe we can all coexist.
5. This will be a separate submittal by Sign Vendor once project Architecture is approved and vendor is engaged.

Fire Department Responses

No comments.

Mr. Jeffrey Retzlaff
Mr. Lawrence Ratayczak
Mr. Brad Seubert
September 6, 2019

We trust these replies are satisfactory to the Village and request some consultation and collaboration with Staff to close up these items in an effective and efficient manner noting the current status of project approvals and ownership of the property.

Respectfully,

MSI GENERAL CORPORATION

Eric J. Neumann
Vice President – Sr. Project Director

EJN:kf

SITE PLAN APPLICATION

9/9/19 Plan Commission Meeting

Krenz & Company, Inc.

Village Planner Report

Germantown, Wisconsin

Summary

Adam Hertel, American Architectural Group, agent for Krenz & Company, Inc. and Petersen Global, LLC, property owner, is seeking approval of site development and building plans for a 24,461-square-foot addition to the existing building located on the 9.27-acre parcel at W132 N10940 Eisenhower Drive. This property is located within the Germantown Business Park.

Property Location: 1/3 mile west of Wasaukee Road and 1/4 mile south of Mequon Road (Germantown Business Park)

Applicant/

Property Owner:

Adam Hertel

American Architectural Group

3350 South River Road

West Bend, WI 53095

Ryan Petersen

Petersen Global, LLC

W132 N10940 Eisenhower Drive

Germantown, WI 53022

Current Zoning: M-1: Limited Industrial

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



Proposal

Adam Hertel, American Architectural Group, agent for Krenz & Company, Inc. and Petersen Global, LLC, property owner, is seeking approval of site development and building plans for a 24,461-square-foot addition to the existing building located on the 9.27-acre parcel at W132 N10940 Eisenhower Drive. This property is located within the Germantown Business Park. The proposed addition includes the following:

- 24,461-square-foot addition to the east side of the existing building for additional factory and storage space
 - o Insulated precast concrete panel walls formed with split-faced block liner to mimic the existing building texture and colors.
 - o Windowsills, smooth horizontal reveals, and white medallions will be used
 - o 8,168 square feet of asphalt and a concrete pad on the north side of the addition for access to five (5) overhead doors and one (1) man door (west facing)
 - o Two (2) man doors on the east elevation of the addition leading to 5' by 5' concrete stoops
- Eight (8) additional parking spaces located on the west side of the building

Krenz & Company, Inc. has been designing, engineering, and manufacturing transformer cooling fans and accessories for over 80 years. The existing 43,420 square-foot Krenz & Company building was constructed on the subject property in 2009, when the business relocated from the Germantown Industrial Park to the Germantown Business Park.

Access & Parking. The development will be served by the existing driveway that accesses the northwest corner of the site off Eisenhower Drive. Eight (8) additional parking stalls will be added to the north side of the existing parking area bringing the total number of stalls to 58. Parking spaces are required to be a minimum of 180 square feet in size. The site plan should be updated to show that the proposed parking spaces meet this minimum size requirement.

Storm Water Management. The subject property will contain total of 2.71 acres (29.2%) of impervious surfaces with the proposed additions, leaving 6.5 acres (70.8%) of pervious surface on the site. This site is served with storm sewer and the regional stormwater basin located to the southwest of the subject property.

Landscaping. There are two planting areas proposed on the south side of the proposed addition. These planting areas are approximately 400 square feet in size and include two (2) deciduous trees, 82 deciduous shrubs and 16 perennials. The site contains existing deciduous trees along the south property line, which will also help to screen the new addition to the building.

Lighting. Exterior lighting to be added to the building addition includes:

- (6) 107W LED 4000K "neutral white" cut-off fixtures sconces wall-mounted above the three (3) man doors and near the five (5) overhead doors

Signage. No new signage is proposed at this time. Any future proposed signage must meet the requirements of Chapter 17.46 of the Village code.

Staff Comments

Planning & Zoning

The additional eight (8) parking stalls to be added to the site will the total number of stalls up to 58 for the site. The Village code recommends approximately 137 parking stalls for a building of this size (1 stall per 500 square feet). However, much of the existing building and the addition is warehouse storage space. No additional employees will be added at this time. The approximately 40 current employees are divided between two shifts, leaving ample parking during both shifts. Additional parking may be added on the east side of the property if needed in the future.

The applicant anticipates construction of the addition will take place starting fall of 2019 through spring of 2020.

Engineering

The Village Engineer and Public Works Department staff have identified plan corrections (see August 7, 2019 Public Works Director memo) pertaining to storm water management and erosion control. All items in this memo have been addressed on the plan sheets which are awaiting final approval by the Village Engineering Department Staff.

VILLAGE PLANNER RECOMMENDATION

APPROVE the site development and building plans submitted by Krenz & Company for the proposed 24,461-square-foot addition to the existing building located on Lot 43 in the Germantown 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, landscaping, and electrical plan sheets dated 7-12-19 unless said plan sheets are revised pursuant to revisions required under the specific conditions of approval included by the Plan Commission.
2. State approved plans and a \$20,000 occupancy bond are required by the Building Inspection Department as part of the building permit application
3. Proposed parking spaces must meet the minimum size of 180 square feet as required by the Village Code. The site plan shall be updated to reflect appropriate dimensions.
4. 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.
5. All technical issues and plan corrections identified by the Village Engineer and Public Works Department staff (see August 7, 2019 memo from the Public Works Director) 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.



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

August 29, 2019

Adam Hertel
American Architectural Group
3350 South River Road
West Bend, WI 53095

RE: Krenz & Company, Inc. Site Plan Review Application; Staff Review Comments

Mr. Hertel:

Village Staff has reviewed the application and supporting materials submitted for the Site Plan Review application submitted by American Architectural Group. Below are the identified outstanding items/issues that need to be addressed before this item can be placed on the Plan Commission Agenda for review/approval. Please provide the requested information, corrections and/or revisions as soon as possible. If necessary, Village staff would be happy to meet with you to discuss or clarify any of these items.

Community Development Department

1. What is the proposed timeline for construction?
2. Two established landscaping clusters will be removed at the NE corner/parking lot entrance to make room for additional parking stalls. Will these features be replaced elsewhere on the property?
3. Eight (8) parking stalls are proposed to be added to the 50 existing parking stalls. The Village's parking guidelines call for 1 stall per 500 sqft of building area. With a total building area of approximately 68,500 sqft including the addition, a total of 137 parking stalls. Also, the project description (Statement of Design Intent) dated July 12 states that there are 40 full-time employees plus more seasonal employees, and, the "proposed addition brings the potential to hire even more". Please explain how the 58 parking stalls proposed after the addition are adequate to serve the operation.
4. Are there any roof-top mechanicals proposed? No roof plan is included.

Fire Department

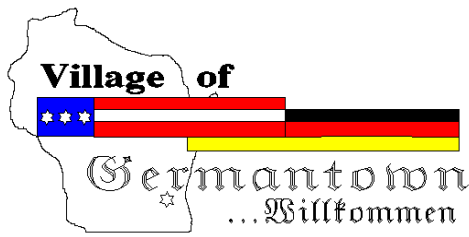
No comments at this time.

Public Works/Village Engineer

Please see the memorandum from the Director of Public Works dated August 7, 2019.

When submitting revised plans or additional information, please submit (1) digital plan set and fifteen (15) full-size, hard-copy plan sets set to the Community Development 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



Engineering Department Memorandum

To : Jeffrey W. Retzlaff, AICP, Planning Director/Zoning Administrator
From : Lawrence Ratayczak, P.E., Director of Public Works
Date : August 7, 2019
Re : Krenz & Company Building Addition

Items Reviewed:

1. Civil Plan Set C-101 – C-103 (3 pages)

Dated: 07-12-19

General Comments:

1. Please respond to each item below. **A written response addressing each item shall be included in your submittal.**
2. The submitted plans have been reviewed for general conformance with State and Village design guidelines. Additional comments could arise as a result of the plan completion and modifications. The items listed below will need to be fully resolved before the Engineering Dept. can recommend a formal approval of the plans and permit for construction.
3. This project will require a WRAPP/NOI from the DNR. Please submit a copy of the approved permit prior to final approval.
4. 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. 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.

C103 Grading And Erosion Control Plan

1. Add a note at the storm sewer outfall from the building that the outlet shall be graded / constructed to direct runoff east into the existing swale and not out to the ROW.
2. Revise the erosion control notes to include the following
 - A copy of the approved erosion control plan shall be kept on-site at all times.
 - Contractor shall complete inspection reports per WDNR standards. A copy of the reports shall be kept on-site and made available upon request.
 - Add a note to require areas that will remain in-active for 14 days or longer to be temporarily stabilized.
 - Add a note that areas shall be stabilized within 7 days of reaching final grade.
 - Revise dates listed on the schedule.



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 \$2,220 *J.* DATE 7/12/2019 *7-15-19*

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

Adam Hertel
American Architectural Group
3350 South River Road
West Bend, WI 53095

Phone (262) 334-3811
E-Mail adam@teamaag.net

PROPERTY OWNER

Ryan Petersen
Petersen Global, LLC
PO Box 187
W132N10940 Eisenhower Drive
Germantown, WI 53022

Phone (262) 255-2310
E-Mail ryan@krenzvent.com

2 PROPERTY ADDRESS

W132N10940 Eisenhower Drive
Germantown, WI 53022

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

North American Enterprises International Industrial	South Ellsworth Adhesives - Industrial	East Technitrol, Inc. - Industrial	West KitPackers, LLC - Industrial
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4 READ AND INITIAL THE FOLLOWING:

- X I am aware of the Village of Germantown ordinance requiring fire sprinklers in most new construction.
- X I understand that all new development is subject to Impact and/or Connection Fees that must be paid before building permits will be issued.
- X I understand that an incomplete application will be withdrawn from the Plan Commission agenda and that all resubmissions to the Plan Commission are subject to a new application fee.

5 SIGNATURES – ALL APPLICATION MUST BE SIGNED BY OWNER!

Adam Hertel 7/12/2019
Applicant Date

Ryan Petersen *7-12-19*
Owner Date



July 12, 2019

Village of Germantown
N112 W17001 Mequon Road
P.O. Box 337
Germantown, WI 53022-0337

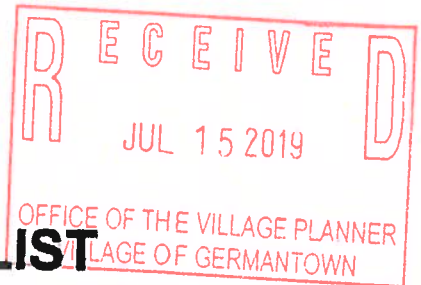


RE: Statement of Design Intent

Krenz & Company has been successfully designing and manufacturing transformer cooling fans for over 80 years which has led to the need to expand their current facility. The proposed project is a 24,000 sf addition to their existing 44,000 sf facility, and would accommodate their ever growing storage and manufacturing needs. The company currently employs approximately 40 full time employees, and even more during seasonal times of the year. The proposed addition brings the potential to hire even more employees. The existing building is built of load bearing masonry walls and steel girders and joists. Aesthetically the existing building is extremely well detailed with the use of split face and smooth CMU, pilasters, stone sills, cornices, and meaningful cast stone medallions.

The design intent is to provide a similar aesthetic to the original building while adding a few new elements to tie the entire building together. The proposed exterior walls will be insulated precast concrete panel formed with a split-faced block liner to mimic the existing building texture. Many of the same decorative elements such as sills below the windows, smooth horizontal reveals, and white medallions will be used. The goal is to match the existing colors as closely as possible. Like the existing building, we will be including the same style windows and 4" pilasters along the main elevation, but we are also proposing new features at the corners and at mid-wall of the East elevation. These new features will tie the addition to the existing office building with the similar cornice detail and add a few new large windows to enhance the interior daylighting.

The existing site is 9.27 acres of which Krenz & Company currently only uses about 2.7 acres. The balance of the property is open green space that has the potential for future building, driveway, and parking lot expansions. Eight new parking stalls are proposed to accommodate the additional seasonal help and allow for future growth of full-time employees. Site lighting at the parking lot and building will be accomplished by matching new fixtures with the existing LED fixtures, and all existing landscaping will remain except for two planting beds where new parking stalls are being added. The new planting beds are similar to the ones on the South side of the building and will be a nice addition to the existing tree line the Owner has established along the entire West and South sides of the property.



SITE PLAN REVIEW CHECKLIST

Pursuant to Section 17.43 of the Municipal Code

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

GENERAL INFORMATION

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

EXISTING SITE INFORMATION

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

ARCHITECTURAL PLANS

- ☒ Existing building location
- ☒ Existing building elevations/materials
- ☒ Proposed use (use list from Section 17.45)
- ☒ Statement of design intent (narrative)
- ☒ Proposed floor plans (dimension)
- ☒ Square footage (total and individual rooms/stores)
- ☒ Proposed elevations (dimension)
- ☒ Proposed building height

- ☒ Proposed materials and colors (material sample board required for new construction)
- ☐ Proposed signage (elevations, color, square footage, height, construction material, lighting)
- ☐ Details of any special features

PROPOSED SITE PLAN

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

LIGHTING PLAN

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

LANDSCAPING PLAN

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

MODEL SUBMITTAL INCLUDES THE FOLLOWING PLANS:

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

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

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



September 4, 2019

Village of Germantown
N112 W17001 Mequon Road
P.O. Box 337
Germantown, WI 53022-0337

RE: Krenz & Company, Inc. Site Plan Review; Response Staff Review Comments

In this letter and the accompanying submittal drawings please find responses to the comments provided in the Staff Review Comments letter dated August 29, 2019.

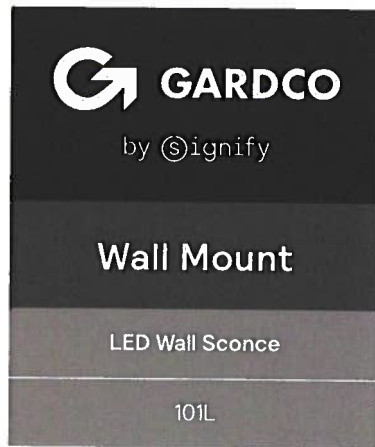
Community Development Department

1. What is the proposed timeline for construction?
The proposed timeline for construction is 10/1/2019 – 5/1/2020.
2. Two established landscaping clusters will be removed at the NE corner/parking lot entrance to make room for additional parking stalls. Will these features be replaced elsewhere on the property?
They will not. The area around the existing parking lot is heavily landscaped and it is difficult to find a location to relocate the two features. There are landscaping beds around the existing parking lot and trees along Eisenhower Ave. Furthermore, the owner has gone above and beyond the original landscape plan by planting 40 extra trees along their property – Ellsworth Drive and Washington Drive.
3. Eight (8) parking stalls are proposed to be added to the 50 existing parking stalls. The Village's parking guidelines call for 1 stall per 500 sq ft of building area. With a total building area of approximately 68,500 sqft including the addition, a total of 137 parking stalls. Also, the project description (Statement of Design Intent) dated July 12 states that there are 40 full-time employees plus more seasonal employees, and, the "proposed addition brings the potential to hire even more". Please explain how the 58 parking stalls proposed after the addition are adequate to serve the operation.
The existing employee count is approximately 40 employees, but they are split between 1st and 2nd shift. Therefore, during either of the two shifts there is nearly twice the amount of parking available than needed. Also, while the addition does allow for the potential for more employees, the current plan is for the addition to be used as additional warehouse space which will not cause a large number of new employees. If a time comes where employees exceed available parking, land is available to the East where additional parking can be accommodated.
4. Are there any roof-top mechanicals proposed? No roof plan is included.
There is a make-up air unit planned for the roof. A roof plan (A-102) has been included showing the approximate location of the unit.

Civil Plan Set

C103 Grading and Erosion Control Plan

1. Added note to storm sewer outfall. Please see revised C103.
2. Revised erosion control notes. Please see revised C103.



Project: **Krenz**

Location:

Cat No:

Type: **OC**

Lamps: Qty:

Notes:

Gardco 101 LED wall sconces feature a low-profile design that provides wide flexibility in high performance exterior wall illumination. Full cutoff performance, usable illumination patterns, and powerful wattages combine into a compact and architecturally pleasing design. 101L sconces are available in Type 2, 3, and 4 distributions, and provide output of up to 9500 lumens. Energy saving control options increase energy savings and offer California Title 24 compliance. Emergency Battery Backup option available for path of egress.

Ordering guide

example: 101L-32L-700-NW-G1-3-120-IMRI2-BZ

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Distribution	Emergency	Voltage	Options	Electrical	Finish
101L									
101L 101L LED Wall Sconce	16L 16 LEDs (1 module)	530 530mA 650 650mA ¹ 700 700mA 1000 1000mA 1200 1200mA	CW-G1 Cool White 5700K, 70 CRI Generation 1 NW-G1 Neutral White 4000K 70 CRI Generation 1 WW-G1 Warm White 3000K, 70 CRI Generation 1	2 Type 2 3 Type 3 4 Type 4	EBPC Emergency Battery Pack Cold Weather ^{1,4,6,12} Leave blank to omit an emergency option	UNV 120-277V HVU 347-480V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	DD 0-10V Dimming Driver ^{5,6} DCC Dual Circuit Control ^{6,7,8} DynaDimmer: Automatic Profile Dimming CS50 Safety 50% Dimming (7 hours) ^{7,9,10} CM50 Median 50% Dimming (8 hours) ^{7,9,10} CE50 Economy 50% Dimming (9 hours) ^{7,9,10} DA50 All Night 50% Dimming ^{7,9,10} Photoelectric/Receptacle systems (Twist Lock Receptacle) PCB Photocontrol Button ^{5,10,11,12} TLRD5 Twist Lock Receptacle 5-Pin ¹³ TLRD7 Twist Lock Receptacle 7-Pin ¹³ TLRPC Twist Lock Receptacle w/ Photocell ^{11,12,16} Infrared Motion Response systems IMRI2 Integral with #2 lens ^{9,12,14} IMRI3 Integral with #4 lens ^{9,12,14} Network system (SiteWise) SW SW Integral module ^{4,17} Wireless system LLC2 Integral module with #2 lens ^{5,7,9,15} LLC3 Integral module with #3 lens ^{5,7,9,15}	Fusing F1 Single (120, 277, 347VAC) ¹² F2 Double (208, 240, 480VAC) ¹² F3 Canadian Double Pull (208, 240, 480VAC) ¹²	Textured BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray Customer specified RAL Specify optional color or RAL (ex OC-LGP or OC-RAL7024) CC Custom color (Must supply color chip for required factory quote)

- 650mA only available with Emergency Battery Pack Cold Rated (EBPC) option
- 32L rated for 30°C at 1000mA
- Available for use with 16L and 32L in 530mA or 650mA only Rated for -20°C to 35°C
- Available in 120 or 277V only
- Not available with Dual Circuit Control (DCC) option
- EBPC is not available with DCC
- Not available with Dimming Driver (DD) option

- Available in 32L with 530mA. Consult technical support center for use with photocell and CS/CM/CE/DA
- Available in 120-277V (UNV) only
- Not available with LLC, TLR and DCC
- Not available with 480V
- Must specify input voltage
- TLRD5/7 option not available with LLC, PCB, DCC. Works with 3 or 5 pin NEMA photocell dimming. Dimming will not be connected to TLR if ordering with DD, CS/CM/CE/DA and IMRI
- Not available with DD, DCC or LLC

- LLC2/3 Not available with TLR, PCB, IMRI, CS/CM/CE/DA Ships with WS accessory attached to wireless module. Not for use with LLCR accessory
- Not available with PCB, TLRD5/7, DCC, LLC
- SW option is not available with any other control options with the exception of IMRI2, IMRI3 motion response options

101L Sconce LED

Wall Mount

Luminaire Accessories (order separately)

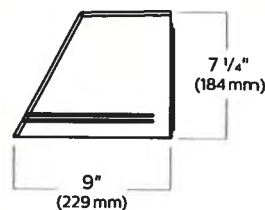
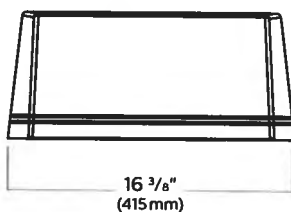
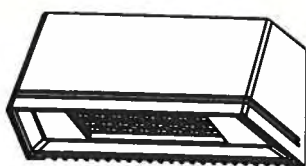
Mounting accessories	
Wall Mount	
WS	Wall Mounted Box for Surface Conduit

System accessories	
Wireless system remote mount module	
LLCR2-(F)	#2 lens - specify finish in place of (F)
LLCR3-(F)	#3 lens - specify finish in place of (F)
Central Remote Motion Response (used connected to SiteWise main panel)	
MS2-A-FVR-3	
MS2-A-FVR-7	

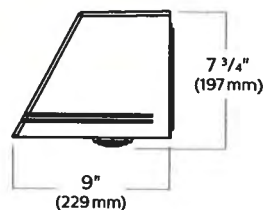
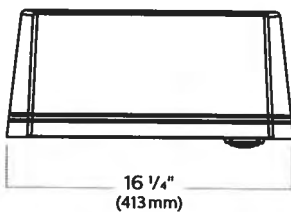
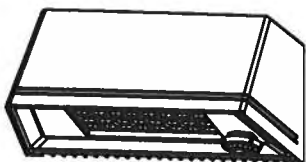
Wireless system remote controller accessory

Wireless system offers a remote radio/sensor module that allows to connected to a Limelight system (sold by other). Remote module can be mounted to wall or pole with j-box supplied. May be specified by choosing one of two different lenses to accommodate a variety of mounting heights/sensor detection ranges. Must specify option DD on luminaires that are planned to be used with remote mount controllers. See page 4 for Wireless system details.

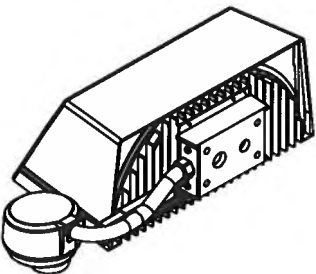
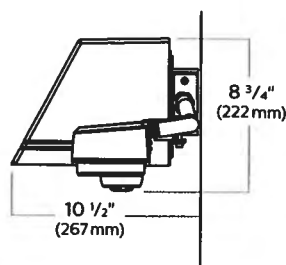
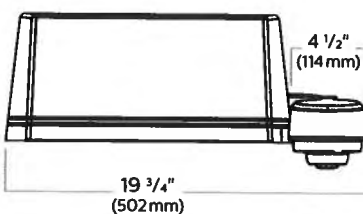
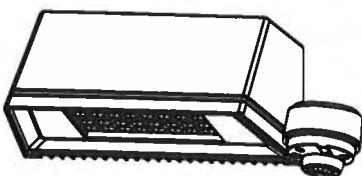
Dimensions



Motion Response



Wireless Controls



Luminaire Weights	
LED Wall Sconce 101L	Weight
Luminaire	13.5 lbs
Luminaire - EBPC (EM battery pack)	17.0 lbs
Luminaire - Integrated system controls	16.3 lbs

101L Sconce LED

Wall Mount

LED Wattage and Lumen Values

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts ¹	Type 2			Type 3			Type 4		
					Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)	Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)	Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)
101L-16L-530-NW-G1	16	530	4000K	28	2944	B1-U0-G0	106	2687	B1-U0-G1	97	2747	B1-U0-G1	99
101L-16L-700-NW-G1	16	700	4000K	37	3789	B1-U0-G1	103	3458	B1-U0-G1	94	3535	B1-U0-G1	96
101L-16L-1000-NW-G1	16	1000	4000K	55	5050	B1-U0-G1	92	4609	B1-U0-G1	84	4712	B1-U0-G1	86
101L-16L-1200-NW-G1	16	1200	4000K	65	5744	B2-U0-G1	89	5242	B1-U0-G2	81	5359	B1-U0-G2	83
101L-32L-530-NW-G1	32	530	4000K	52	5698	B2-U0-G1	110	5200	B1-U0-G2	100	5316	B1-U0-G2	102
101L-32L-700-NW-G1	32	700	4000K	70	7242	B2-U0-G1	103	6609	B1-U0-G2	94	6757	B1-U0-G2	96
101L-32L-1000-NW-G1	32	1000	4000K	107	9797	B2-U0-G1	92	8941	B2-U0-G2	84	9140	B2-U0-G2	86

LED Wattage and Lumen Values (Emergency Mode)³

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Ave. System Watts (charging mode)	Type 2	Type 3	Type 4
101L-16L-NW-EBPC	16	N/A	4000K	14	1345	1228	1255
101L-32L-NW-EBPC	32	N/A	4000K	14	1754	1600	1636

- 1 Wattage and lumen output may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
- 2 Lumen values based on photometric tests performed in compliance with IESNA LM-79.
- 3 For emergency EBPC option, publish values are based on initial lumens.

Luminaire options

DD: 0-10V dimming driver with leads supplied through back of luminaire (for secondary dimming controls by others).

Dynadimmer Automatic Profile Dimming: Automatic dimming profiles (CS50/CM50/CE50) offer safety, median, or economy settings, for shorter or longer duration. Dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. 50% dimming is standard. DA50 offers 50% instantaneous dimming all night (during all dark hours). Other dimming settings are also available if different light levels are required (contact Technical Support for details).

Profile	Dimming		
	Schedule	Duration	Level
Economy	9 PM - 6 AM	9 hours	50%
Median	10 PM - 6 AM	8 hours	50%
Safety	11 PM - 6 AM	7 hours	50%
Reactive 50	all night	dynamic	50%

TLRD5: Twist Lock Receptacle with 5 pins enabling dimming, can be used with a twistlock photoelectric cell or a shorting cap. Can also be used with third party control system.

TLRD7: Twist Lock Receptacle with 7 pins enabling dimming and additional functionality, can be used with twistlock photoelectric cell or a shorting cap. Can also be used with third party control system.

TLRDPC: Receptacle with twistlock photoelectric cell (must specify voltage). Receptacle located on top of luminaire housing.

IMRI2, IMRI3: Infrared Motion Response Integral (IMRI). IMRI module is mounted integral to the luminaire door and is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges (see charts for approximate detection patterns). Motion response used in combination of Dynadimmer and SiteWise are not programmable and used to override controllers schedule when motion is detected. When used not combined with any controller, IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to 100% light output. Dimming on low is factory set to 50% with 5 minute default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50% of the normal constant wattage reducing the light level. IMRI can also be specified with automatic profile dimming for the added benefit of a combined dimming profile with sensor detection, where the PIR sensor will override the dimming profile when occupancy is detected. Passive infrared (PIR) motion sensor, WattStopper FSP-211, equipped with lens choice specified. Available from 120V to 277V input only. Motion sensor off state power is 0.0 watts. The FSP-211 can also be reprogrammed with WattStopper's FS1R-100 remote programming tool accessory.

DCC: Dual Circuit Control permits separate switching of 32L models only, where a quantity of (2) 16 LED modules are controlled independently by use of two sets of leads, one for each module.

SW

SiteWise option is a fully integrated controller that connects to SiteWise system in order to offer a complete area lighting management system. The communication signal is based on patented central dimming technology. SiteWise delivers it deliver optimal energy savings using your site's existing cabling. No additional wiring required, installation and commissioning are simple. An intuitive, mobile app makes it easy for authorized users to set schedules to meet site specific lighting needs, local regulations, and energy codes.

Wireless system: 101L luminaires are available with optional wireless controllers ready to be connected to a Limelight system (sold by other). The system allows you to Wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely.

Based on a high density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless System can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor.

101L Sconce LED

Wall Mount

Luminaire options (continued)

F1: Fusing Single (for 120, 277 or 347VAC)

F2: Fusing Double (for 208, 240 or 480VAC)

F3: Fusing Canadian Double Pull (for 208, 240 or 480VAC)

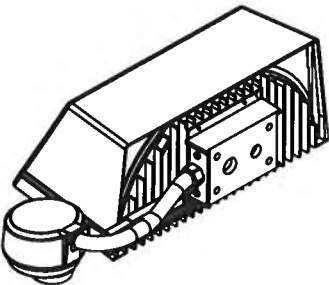
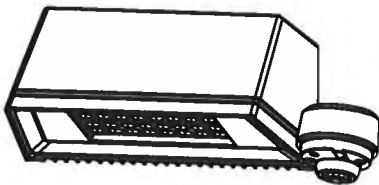
EBPC: Emergency battery pack is cold weather rated down to -20C (-4F) and integral to the luminaire, allowing for a consistent look between emergency and non-emergency sconces. A separate surface mount accessory box is not required. Dual light engines (32L) are wired in parallel, both operating in emergency mode to meet various redundancy lamp

requirements. Also available with single light engine (16L). Secondary driver with relay immediately detects AC power loss and powers luminaire for a minimum of 90 minutes from the time power is lost.

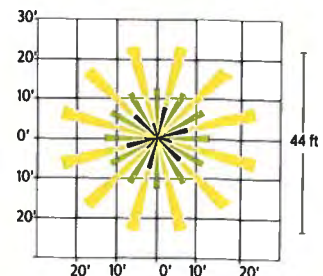
Infrared Motion Response and Wireless system sensor coverage patterns

LLC2/3 Luminaire mounted controller

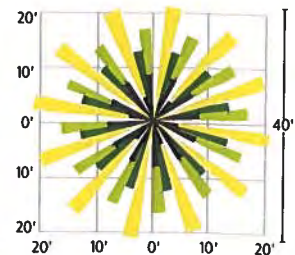
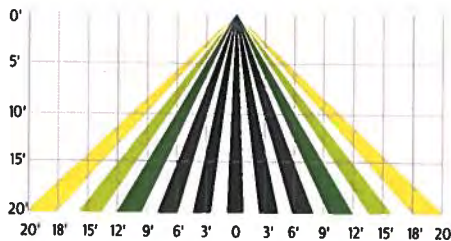
Controller attached to luminaire and includes radio, photocell and motion sensor with #2 or #3 lens for 8-20' mounting heights



IMR12/LLC2/LLCR2

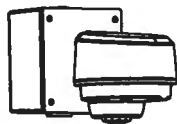


IMR13/LLC3/LLCR3

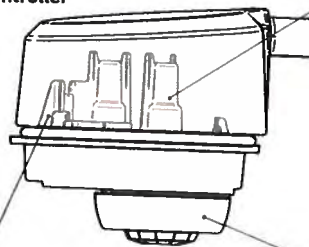


Remote Mount Wireless Controller

Used to extend the communication on site, to extend motion response and add other luminaires that are not pole mounted. Consult factory for more information.



Controller



Wireless Radio

- 1.8 Watts max (no load draw)
- Operating voltage 120-277 VAC RMS
- Communicates using the ZigBee protocol
- Carries out dimming commands from Gateway
- Reports ambient light readings to 1500 Ft-Cd
- Transmission Systems Operating within the band 2400-2483.5Mhz
- ROHS Compliant

Photocell

- Ambient light photocell on every wireless radio that averages the light levels of up to 5 controllers for an accurate reading and optimal light harvesting activity
- Reports ambient light readings to 1500 Fc.

Motion Response

- Detects motion through passive infrared sensing technology with three different lens configurations
- Motion sensor coverage can be adjusted from a narrow to a wide detection range, which helps reduce false triggers to further increase energy savings
- Sensing profiles can be updated to adapt to activity levels in the environment, such as occupancy level, wind, and mounting height

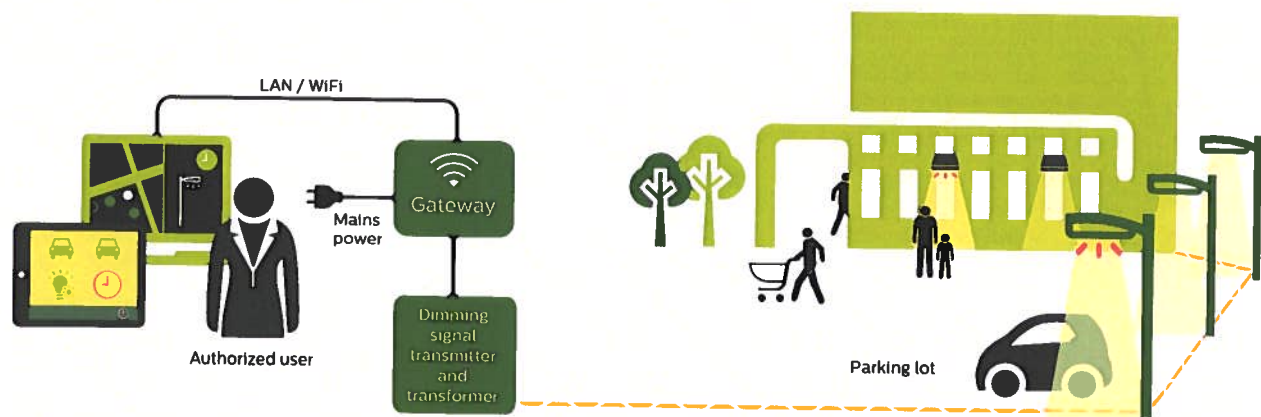
101L Sconce LED

Wall Mount

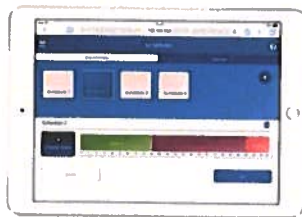
SiteWise system

SiteWise is a complete area lighting management system including a luminaire integrated controller, dimming signal transmitter cabinet, and locally accessible user interface. Installation and commissioning are simple. The cabinet communicates with the luminaires using a patented central dimming technology. The control signal is embedded on the existing electrical line – no new cabling is required. An intuitive, locally accessible interface makes it easy for authorized users to set schedules in order to meet site specific lighting needs, local regulations, and energy codes.

SiteWise system diagram



SiteWise system interface



SiteWise has an intuitive user interface that makes it easy to plan, edit, and implement lighting schedules for your site. Authorized users can access the interface via a local app.

To ensure that only authorized users can access your lighting, SiteWise offers two user types, each with different permissions. An advanced user, or administrator, can set and edit schedules using the ten pre-set scenes, assign those schedules to calendar days, and check system status.

For everyday use, a basic user can manually override a schedule that is currently running but cannot create or edit schedules.

SiteWise system specifications

The SiteWise system includes both luminaires and controls. The controls used for SiteWise are circuit load dependent. Required for a complete installation are the following SiteWise components: user interface, control kit, dimming signal transmitter cabinet, and dimming signal receiver located in the luminaire (SW option). Optional luminaire-integrated or external motion sensors may also be specified as required. Within the electrical closet, the control kit and dimming signal transmitter cabinet are installed into the electrical system between the existing breaker panel and the site luminaires. New LED luminaires containing the dimming signal receiver are installed on the site. Once completed, use of the interface allows for scheduling and override capabilities. Wireless access point and tablet should be supplied by others. Complete information on the control system can be found on the SiteWise website at philips.com/sitewise

101L Sconce LED

Wall Mount

Specifications

Housing

Main body cast housing and back plate made of a low copper die cast Aluminum alloy for a high resistance to corrosion, 0.100" (2.5mm) minimum thickness. Hinged door allows access to driver and LED compartment.

Mounting

Mounting is completed through integral back plate that features a separate recessed feature for hook and lock quick mount plate that secures with two set screws from bottom of luminaire. Mounting plate is located in the center of the luminaire width and 3.5" above the luminaire bottom (lens down position). Luminaire ships fully assembled, ready to install.

Light Engine

Composed of 4 main components: Heat Sink / LED Module / Optical System / Driver. Electrical components are RoHS compliant. IP66 sealed light engines. LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines extrapolations in accordance with IESNA TM-21. Metal core board ensures greater heat transfer and longer lifespan.

Heat Sink

Integral door/heat sink design made of low copper die cast Aluminum alloy for a high resistance to corrosion.

LED Module

Composed of high performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000K nominal (+/- 275K), CRI 70 Min. Available in other color temperatures including Cool White, 5700K and Warm White, 3000K.

SiteWise Network System

SiteWise system includes a controller fully integrated in the luminaire that enables the luminaires to communicate with a dimming signal transmitter cabinet located on site using patented central dimming technology. A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. SiteWise is available with motion response options in order to bring the light back to 100% when motion is detected. Additional functionalities are available such as communication with indoor lighting and connection to BMS systems.

Hardware

All exposed screws shall be stainless and/or corrosion resistant and captive.

Optical System

The advanced LED optical systems provide IES Types 2, 3, 4. Composed of high performance UV stabilized optical grade polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance. Dark sky compliant with 0% uplight and U0 per IESNA TM-15.

Driver

High power factor of 90% min. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC or 347 to 480 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

Surge Protection

Each luminaire is provided as standard with surge protector (designed SP1) tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/5kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid State Street Lighting Consortium) Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High Test Level 10kV / 5kA.

Wiring (supplied by others)

Splices must be made in the junction box.

Finish

Five standard colors offered in textured black, white, bronze, dark gray and medium gray. Color in accordance with the AAMA 2604 standard. Application of polyester powder coat paint 2.5 mils minimum. The thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. RAL and custom color matching available.

LED Products Manufacturing Standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with EC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

LED Useful Life

Luminaire Useful Life accounts for LED lumen maintenance. Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, LED LM-80/TM-21, expected to reach 100,000 + hours with >L70 lumen maintenance @ 25°C.

Certifications and Compliance

cULus Listed for Canada and USA suitable for wet locations when mounted downward facing. cULus Listed for Canada and USA suitable for damp locations when inverted upward facing when mounted in covered ceiling application. Emergency Battery Pack option is tested and listed to UL924 and CSA C22.2 No. 141-10 DesignLights Consortium qualified on models as listed on DLC QPL. Luminaire is rated for operation in ambient temperature of -40°C (-40°F) up to +40°C (+104°F).

Limited Warranty

5-year limited warranty. See [philips.com/warranties](https://www.philips.com/warranties) for details and restrictions. Visit our eCatalog or contact your local sales representative for more information.

101L Sconce LED

Wall Mount

LED Performance

Predicted lumen depreciation data ¹				
Ambient Temperature (°C)	Driver mA	Calculated L ₇₀ hours ^{1,2}	L ₇₀ per TM-21 ^{2,3}	Lumen Maintenance % @ 60,000 hours
25°C	up to 1200 mA	>100,000	>60,000	88%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours.



PROPOSED ADDITION:

KRENZ & COMPANY, INC.

W132N10940 EISENHOWER DRIVE
VILLAGE OF GERMANTOWN, WASHINGTON COUNTY

AMERICAN
CONSTRUCTION SERVICES, INC.



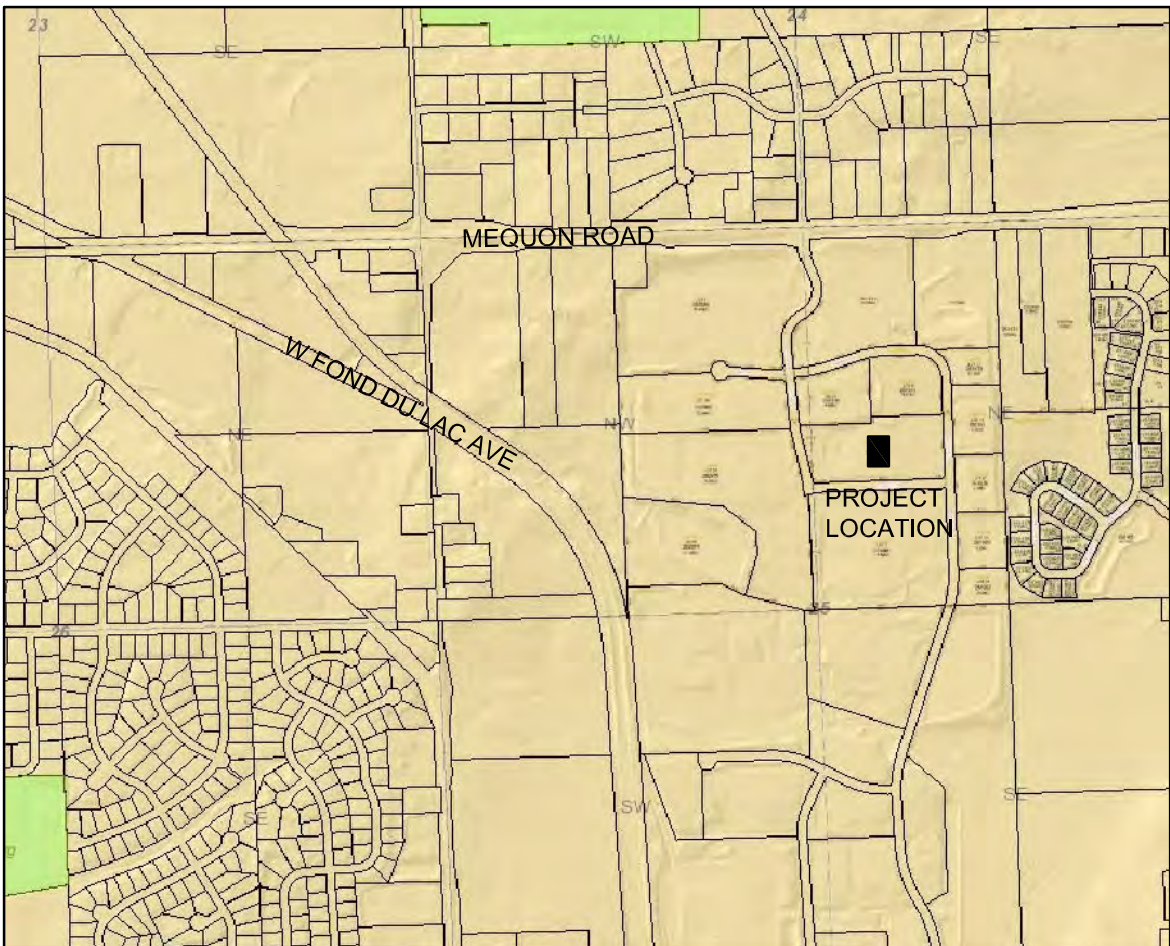
3350 SOUTH RIVER ROAD
WEST BEND, WI 53095-7884
(262) 334-3811 FAX: (262) 334-4990

AMERICAN
ARCHITECTURAL GROUP, INC.



3350 SOUTH RIVER ROAD
WEST BEND, WI 53095-7884
(262) 334-3811 FAX: (262) 334-4990

Stamp



PROJECT LOCATION: W132N10940 EISENHOWER DRIVE

LOCATION MAP

BUILDING CODE INFORMATION:

APPLICABLE CODES AND REGULATIONS:

BUILDING CODE: 2015 IBC
PLUMBING CODE: 2015 IBC CHAPTER 29
ACCESSIBILITY: 2009 ANSI A117.1
ENERGY CODE: 2015 IECC

CHAPTER 3 - USE AND OCCUPANCY CLASSIFICATION:

OCCUPANCY: GROUP F-2 - FACTORY LOW
GROUP S-1 - STORAGE LOW

CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREA:

TABLE 504.3
ALLOWABLE HEIGHT: 75'-0"
ACTUAL HEIGHT: 27'-4"

TABLE 504.4
ALLOWABLE STORIES: 4 STORIES
ACTUAL STORIES: 1 STORY

TABLE 506.2
ALLOWABLE AREA: 92,000 SF
ACTUAL EXISTING AREA: 44,077 SF
PROPOSED ADDITION:
F-2 FACTORY: 20,445 SF
S-1 STORAGE: 3,875 SF

TOTAL BUILDING AREA: 68,397 SF

SEPARATED OCCUPANCY (508.4)
1 HOUR SEPARATION BETWEEN GROUP F-2 AND GROUP S-1

CHAPTER 6 - TYPE OF CONSTRUCTION:

TABLE 601
CLASS OF CONSTRUCTION: TYPE IIB - NON-COMBUSTIBLE

CHAPTER 9 - FIRE PROTECTION SYSTEMS:

AUTOMATIC SPRINKLER SYSTEM (903.3) - FULL - NFPA 13

SHEET INDEX:

GENERAL	TITLE SHEET/ PROJECT DATA
G-100	
CIVIL	
C-101	EXISTING CONDITIONS PLAN
C-102	PROPOSED SITE PLAN
C-103	GRADING & EROSION CONTROL PLAN
ELECTRICAL / LANDSCAPING	
E-100	SITE LIGHTING PLAN
L-100	LANDSCAPE PLAN
L-101	LANDSCAPE SCHEDULE AND DETAILS
ARCHITECTURAL	
A-101	FLOOR PLAN
A-102	ROOF PLAN
A-201	EXTERIOR ELEVATIONS - OVERALL
A-202	EXTERIOR ELEVATIONS
A-203	PERSPECTIVES

PROJECT TEAM

OWNER CONTACT:	Ryan Petersen Krenz & Company, Inc. W132N10940 Eisenhower Drive PO Box 187 Germantown, WI 53022 EMAIL: ryan@krenzvent.com	ARCHITECT:	Adam Hertel American Architectural Group, Inc. 3350 South River Road West Bend, WI 53095 PH: (262) 334-3811 EMAIL: adam@teamaag.net
CIVIL:	Kevin Parish Quam Engineering, LLC 122 Wisconsin Street West Bend, WI 53095 PH: (262) 338-6841 EMAIL: kparish@quamengineering.com	CONTRACTOR:	Todd Weyker American Construction Services, Inc. 3350 South River Road West Bend, WI 53095 PH: (262) 334-3811 EMAIL: todd@teamacs.net

Issue:

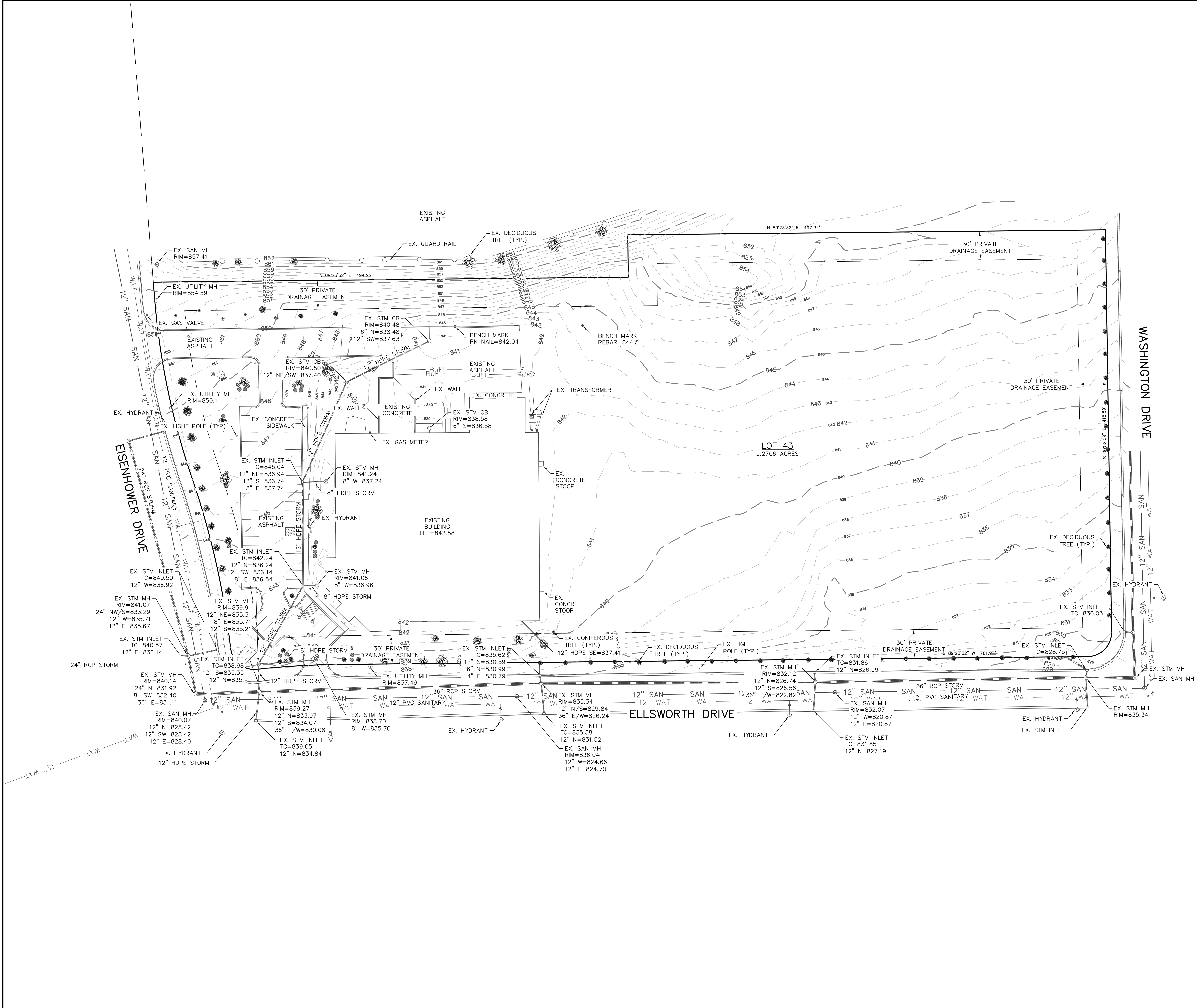
Document Date
04 SEPTEMBER 2019

Project Number
19015

Sheet Title
TITLE SHEET AND
CODE INFORMATION

Sheet Number

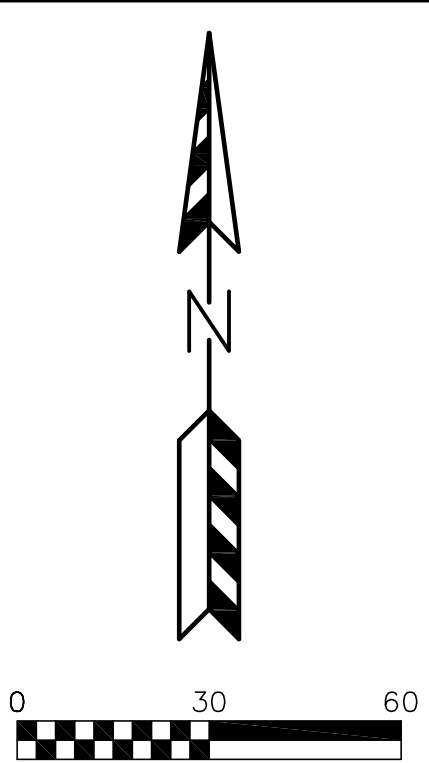
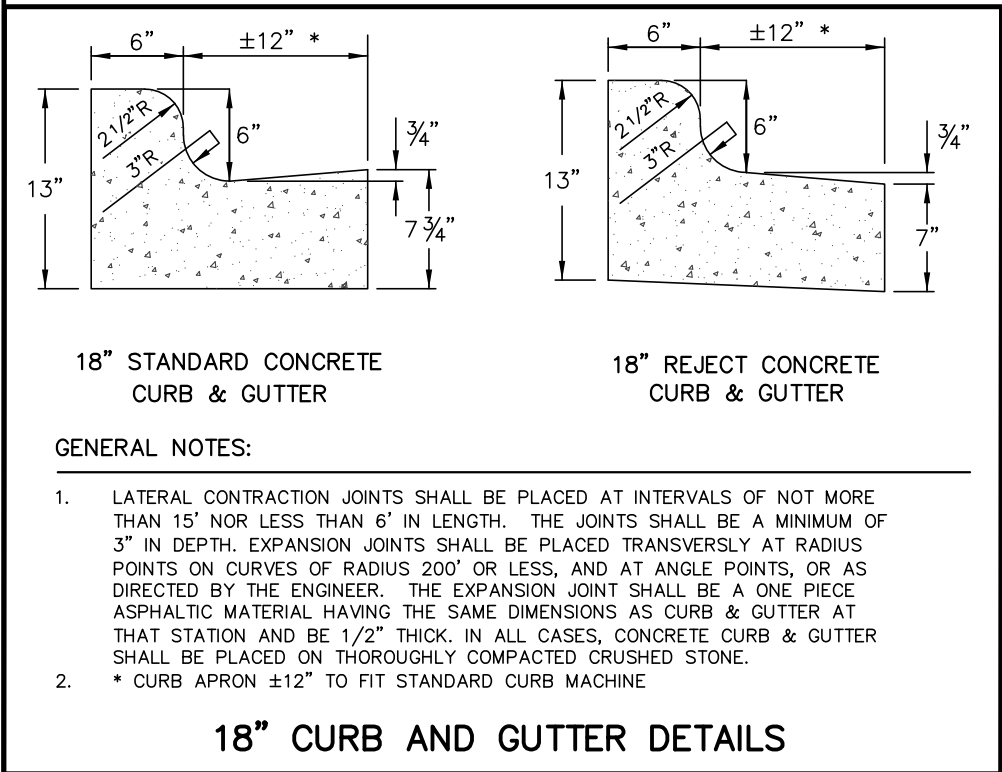
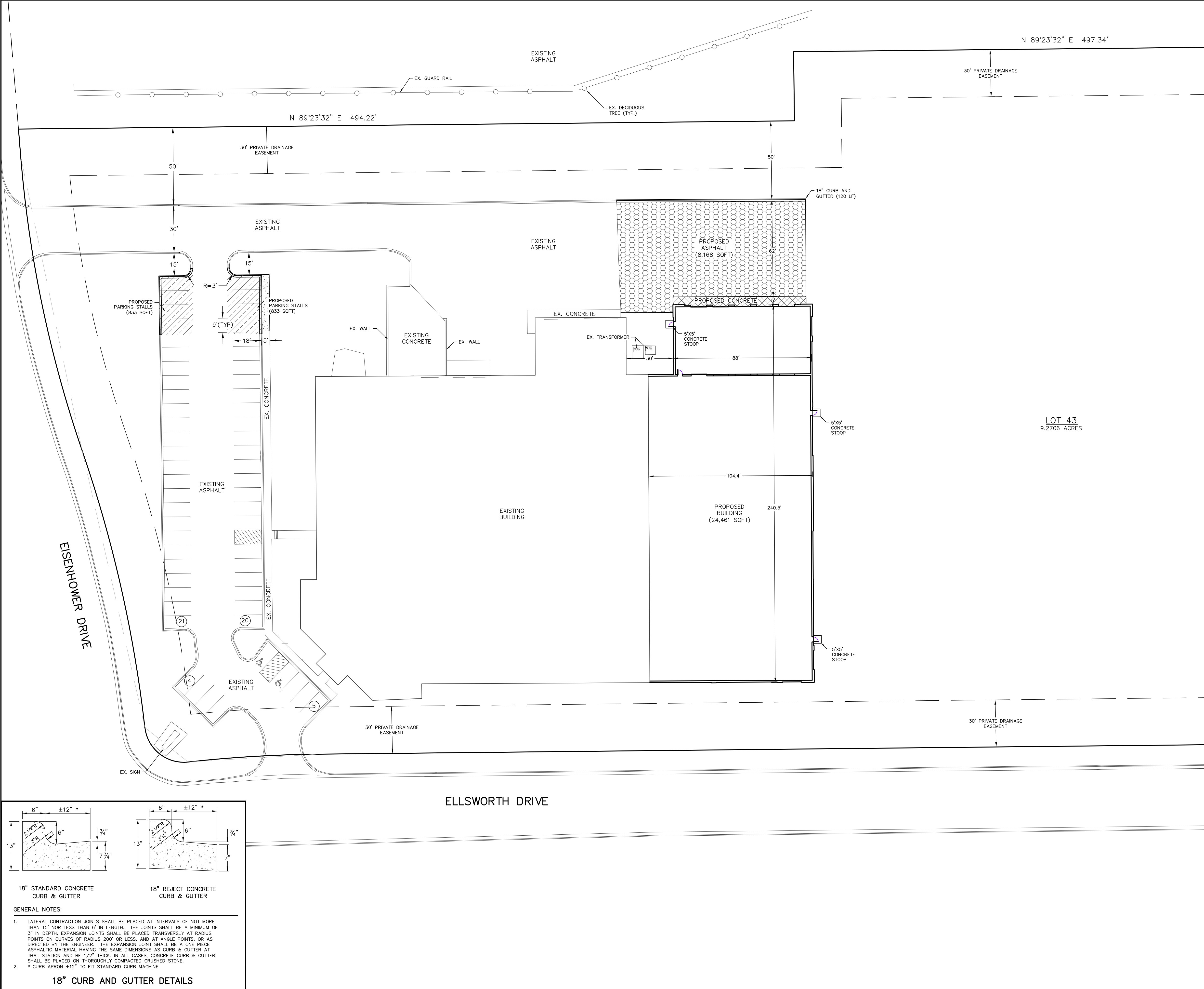
G-100



- LEGEND:
- 702 — — — — — EXISTING MINOR CONTOUR.
 - 700 — — — — — EXISTING MAJOR CONTOUR.
 - OHEL — — — — — OVERHEAD ELECTRIC LINE.
 - BuEl — — — — — BURIED ELECTRIC LINE.
 - BuTel — — — — — BURIED TELEPHONE LINE.
 - FO — — — — — FIBER OPTIC LINE.
 - GAS — — — — — GAS LINE.
 - SAN — — — — — SANITARY SEWER MAIN OR LATERAL.
 - WAT — — — — — WATER MAIN OR SERVICE.
 - — — — — STORM SEWER LINE.
 - ELEC — — — — — ELECTRIC METER.
 - GAS — — — — — GAS METER.
 - GV — — — — — GAS VALVE.
 - FH — — — — — FIRE HYDRANT.
 - PP — — — — — POWER POLE.
 - SN — — — — — SANITARY SEWER MANHOLE.
 - ST — — — — — STORM SEWER MANHOLE.
 - SI — — — — — STORM SEWER INLET.
 - TP — — — — — TELEPHONE PEDESTAL.
 - TRAN — — — — — TRANSFORMER.
 - WV — — — — — WATER VALVE.

KRENZ & COMPANY-BUILDING ADDITION
EXISTING CONDITIONS PLAN
DATED: JUNE 24, 2019

C-101



PAVING LEGEND

	HEAVY DUTY PAVEMENT 10" CRUSHED AGGREGATE BASE COURSE 2-1/4" ASPHALTIC BINDER 3 LT 58-28 S (2-3" LIFTS) 1-3/4" ASPHALTIC SURFACE 4 LT 58-28 S
	LIGHT DUTY PAVEMENT 8" CRUSHED AGGREGATE BASE COURSE 1-1/2" ASPHALTIC BINDER 3 LT 58-28 S (2-3" LIFTS) 1-1/2" ASPHALTIC SURFACE 4 LT 58-28 S
	HEAVY DUTY CONCRETE 6" CRUSHED AGGREGATE BASE COURSE 6" 4,000 PSI PORTLAND CEMENT CONCRETE
	LIGHT DUTY CONCRETE 4" CRUSHED AGGREGATE BASE COURSE 4" 4,000 PSI PORTLAND CEMENT CONCRETE

NOTES:

ALL PAVING SHALL CONFORM TO "STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION" AND APPLICABLE VILLAGE OF GERMANTOWN ORDINANCES.

SITE INFORMATION BLOCK

Site Address	W132 N10940 EISENHOWER DR.
Site acreage (total)	9.27 ACRES
Current Zoning	M-1
Number of Parking stalls provided:	
Car	56
Accessible	2
Total	58
Surface Coverage:	
Existing Impervious	1.95 Acres
Existing Pervious	7.32 Acres
Proposed Impervious	2.71 Acres
Proposed Pervious	6.55 Acres
Proposed Total	9.27 Acres
Impervious Percentage	29.2%

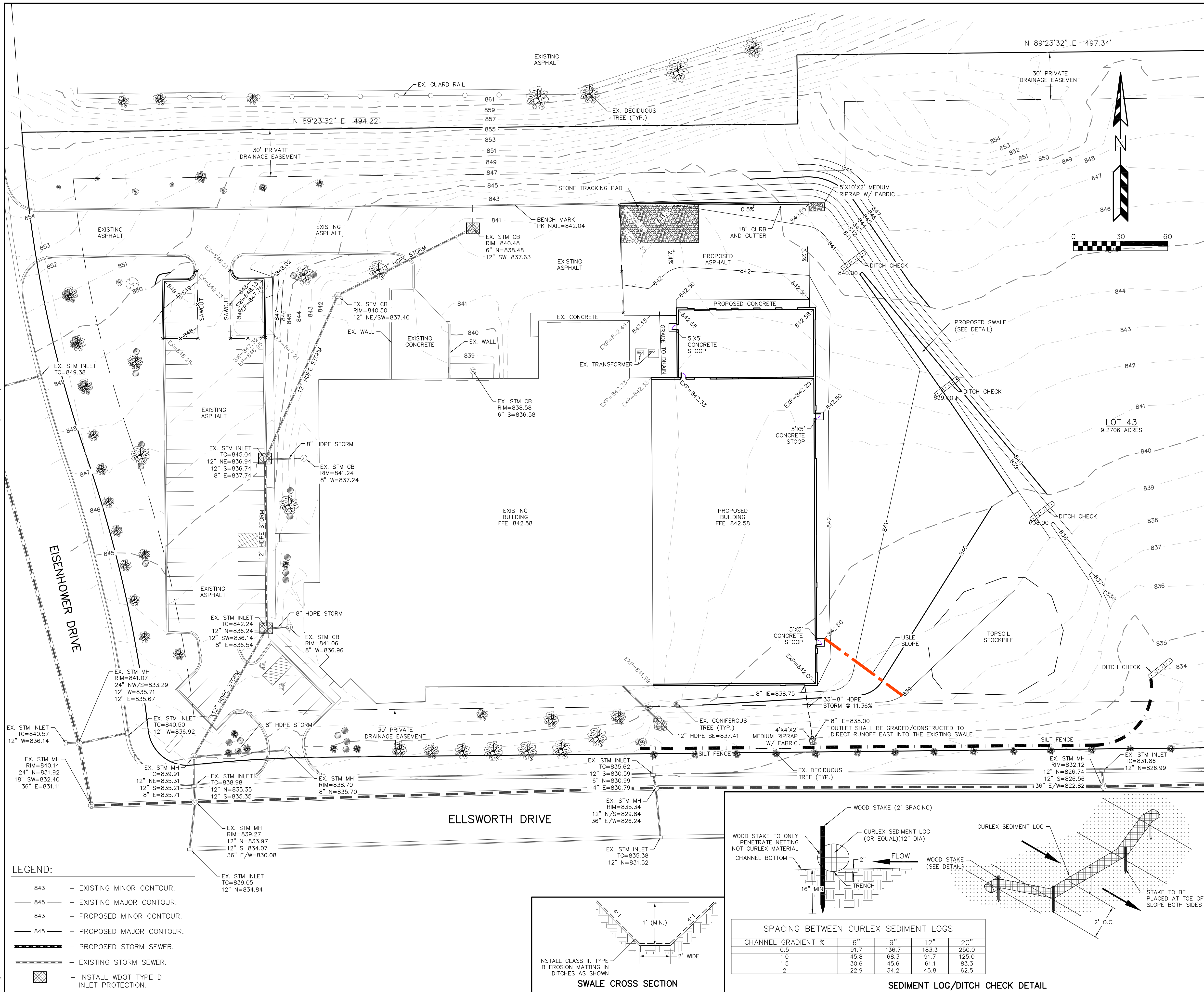
SITE PLAN NOTES:

- DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
- WHERE CURB ENDS AT CONNECTIONS SMOOTHLY TRANSITION FROM FULL CURB HEIGHT TO ZERO CURB HEIGHT WITHIN A 3' LENGTH.
- ALL STRIPING AND SIGNAGE SHALL COMPLY WITH THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

KRENZ & COMPANY-BUILDING ADDITION

PROPOSED SITE PLAN
DATED: JULY 10, 2019

C-102



EROSION NOTES:

THE STONE TRACKING PAD SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION. THE TRACKING PAD IS TO BE MAINTAINED BY THE CONTRACTOR IN A CONDITION, WHICH WILL PREVENT THE TRACK OF MUD OR DRY SEDIMENT ONTO THE ADJACENT PUBLIC STREETS. SEDIMENT REACHING THE PUBLIC ROAD SHALL BE REMOVED BY STREET CLEANING (NOT HYDRAULIC FLUSHING) BEFORE THE END OF EACH WORKDAY.

SOIL STOCKPILES SHALL BE LOCATED A MINIMUM OF 75 FEET FROM LAKES, STREAMS, WETLANDS, DITCHES, DRAINAGE WAYS, CURBS AND GUTTERS OR OTHER STORMWATER CONVEYANCE SYSTEM, UNLESS OTHERWISE APPROVED BY THE ENGINEER. MEASURES SHALL BE TAKEN TO MINIMIZE EROSION AND RUNOFF FROM ANY SOIL STOCKPILES THAT WILL LIKELY REMAIN FOR MORE THAN FIVE WORKING DAYS. ANY MATERIAL THAT REMAINS FOR MORE THAN 30 DAYS SHALL BE COVERED OR TREATED WITH STABILIZATION PRACTICES SUCH AS TEMPORARY OR PERMANENT SEEDING AND MULCHING.

EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO GRADING OPERATIONS AND SHALL BE PROPERLY MAINTAINED FOR MAXIMUM EFFECTIVENESS UNTIL VEGETATION IS ESTABLISHED. ALL EROSION CONTROL MEASURES AND STRUCTURES SERVING THE SITE MUST BE INSPECTED AT LEAST WEEKLY OR WITHIN 24 HOURS OF A 0.5 INCH RAIN EVENT. ALL MAINTENANCE WILL FOLLOW AN INSPECTION WITHIN 24 HOURS.

CUT AND FILL SLOPES SHALL BE NO GREATER THAN 3:1.

EROSION CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ACCEPTANCE OF THIS PROJECT. EROSION CONTROL MEASURES AS SHOWN SHALL BE THE MINIMUM PRECAUTIONS THAT WILL BE ALLOWED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECOGNIZING AND CORRECTING ALL EROSION CONTROL PROBLEMS THAT ARE A RESULT OF CONSTRUCTION ACTIVITIES. ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED IN WRITING BY THE STATE OR LOCAL INSPECTORS, OR THE DEVELOPER'S ENGINEER, SHALL BE INSTALLED WITHIN 24 HOURS.

ALL DISTURBED SLOPES OF 4:1 OR GREATER AND DRAINAGE SWALES SHALL BE STABILIZED WITH CURLEX EROSION CONTROL FABRIC (INSTALL PER MANUFACTURER'S SPECIFICATIONS).

A COPY OF THE APPROVED EROSION CONTROL PLAN SHALL BE KEPT ON SITE AT ALL TIMES.

THE CONTRACTOR SHALL COMPLETE INSPECTION REPORTS PER WDMR STANDARDS. A COPY OF THE REPORTS SHALL BE KEPT ON SITE AND MADE AVAILABLE UPON REQUEST.

ALL AREAS THAT REMAIN INACTIVE FOR 14 DAYS OR LONGER SHALL BE TEMPORARILY STABILIZED.

ALL AREAS SHALL BE STABILIZED WITHIN 7 DAYS OF REACHING FINAL GRADE.

TIME SCHEDULE:

OCTOBER 1-14, 2019 INSTALL INITIAL EROSION CONTROL DEVICES.

OCTOBER 15, 2019 - APRIL 15, 2020 CONSTRUCT PROPOSED BUILDING ADDITION, PARKING STALLS, DRIVE AND UTILITIES.

APRIL 16 - MAY 1, 2020 COMPLETE FINAL LANDSCAPING AND RESTORE ALL PERVIOUSLY DISTURBED AREAS.

RESTORATION NOTES:

ALL DISTURBED AREAS, EXCEPT STREET PAVEMENT AND SIDEWALK AREAS, SHALL RECEIVE A MINIMUM OF FOUR (4) INCHES OF TOPSOIL, FERTILIZER, SEED AND MULCH. RESTORATION WILL OCCUR AS SOON AFTER THE DISTURBANCE AS PRACTICAL. LAWN AREAS WITH SLOPES GREATER THAN 4:1 SHALL BE SEED WITH OLDS "NOMOW" MIX OR EQUAL. ALL OTHER DISTURBED AREAS SHALL BE SEED WITH MADISON PARKS MIX OR EQUAL. MIXTURES SHALL BE IN ACCORDANCE WITH SECTION 630 OF D.O.T. SPECIFICATIONS.

AN EQUAL AMOUNT OF ANNUAL RYEGRASS SHALL BE ADDED TO THE MIX. SEED MIXTURES SHALL BE APPLIED AT THE RATE OF FOUR (4) POUNDS PER 1,000 SQUARE FEET. FERTILIZER SHALL BE APPLIED AT THE RATE OF FOUR (4) POUNDS PER 1,000 SQUARE FEET. FERTILIZER SHALL MEET THE MINIMUM REQUIREMENTS THAT FOLLOW: NITROGEN, NOT LESS THAN 16%; PHOSPHORIC ACID, NOT LESS THAN 6%; POTASH, NOT LESS THAN 6%.

ALL FINISH GRADED AREAS SHALL BE SEED AND MULCHED BY SEPTEMBER 15TH. IF THE SITE DOES NOT HAVE FINISH GRADED AREAS COMPLETED BY OCTOBER 15TH, ALL DISTURBED AREAS SHALL BE RESTORED WITH TEMPORARY SEEDING (COVER CROP). AREAS NEEDING PROTECTION DURING PERIODS WHEN PERMANENT SEEDING IS NOT APPLIED SHALL BE SEED WITH ANNUAL SPECIES FOR TEMPORARY PROTECTION. SEE TABLE 1 OF THE WISCONSIN DNR CONSERVATION PRACTICE STANDARD 1059. FOR SEEDING RATES OF COMMONLY USED SPECIES, THE RESIDUE FROM THIS CROP MAY EITHER BE INCORPORATED INTO THE SOIL DURING SEEDBED PREPARATION AT THE NEXT PERMANENT SEEDING PERIOD OR LEFT ON THE SOIL SURFACE AND THE PLANTING MADE AS A NO-TILL SEEDING.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SATISFACTORY STAND OF GRASS ON ALL SEEDER AREAS FOR ONE YEAR AFTER THE PROJECT'S FINAL ACCEPTANCE.

OWNER:
PETERSEN GLOBAL LLC.
P.O. BOX 187
GERMANTOWN, WI 53022

ENGINEER:
QUAM ENGINEERING, LLC
ATTN: KEVIN PARISH
122 WISCONSIN STREET
WEST BEND, WI 53095

STONE TRACKING PAD INSTALLATION SHALL CONFORM TO WISCONSIN DNR TECHNICAL STANDARD #10677

STONE PER WDMR TECHNICAL STANDARD #1057

STONE TRACKING PAD DETAIL

SILT FENCE INSTALLATION SHALL CONFORM TO WISCONSIN DNR TECHNICAL STANDARD #1056

4' x 2" x 2" (MIN.) WOOD POST
FILTER FABRIC
SHEET FLOW
2' MIN.
EXTEND FABRIC TO 4" BELOW SURFACE

SILT FENCE CONSTRUCTION (SHEET FLOW)

KRENZ & COMPANY-BUILDING ADDITION
GRADING AND EROSION CONTROL PLAN
DATED: SEPTEMBER 3, 2019

C-103

QUAM ENGINEERING, LLC
Residential and Commercial Site Design Consultants

122 Wisconsin Street; West Bend, Wisconsin 53095
Phone (262) 338-6641; www.quamengineering.com

LEGEND:

- 843 - EXISTING MINOR CONTOUR.
- 845 - EXISTING MAJOR CONTOUR.
- 843 - PROPOSED MINOR CONTOUR.
- 845 - PROPOSED MAJOR CONTOUR.
- PROPOSED STORM SEWER.
- EXISTING STORM SEWER.
- INSTALL WDOT TYPE D INLET PROTECTION.

SWALE CROSS SECTION

INSTALL CLASS II, TYPE B EROSION MATING IN DITCHES AS SHOWN

4:1
1" (MIN.)
2" WIDE

SEDIMENT LOG/DITCH CHECK DETAIL

WOOD STAKE (2' SPACING)
CURLEX SEDIMENT LOG (OR EQUAL) (12" DIA)
WOOD STAKE TO ONLY PENETRATE NETTING NOT CURLEX MATERIAL CHANNEL BOTTOM
TRENCH
FLOW
WOOD STAKE (SEE DETAIL)
STAKE TO BE PLACED AT TOE OF SLOPE BOTH SIDES
2' O.C.

SPACING BETWEEN CURLEX SEDIMENT LOGS				
CHANNEL GRADIENT %	6"	9"	12"	20"
0.5	91.7	136.7	183.3	250.0
1.0	45.8	68.3	91.7	125.0
1.5	30.6	45.6	61.1	83.3
2	22.9	34.2	45.8	62.5

KRENZ ADDITION

Designer
DJA
Date
6/14/2019
Customer
MCR Services

N 89°23'32" E 494.22'

NEW
ASPHALT

EXISTING
ASPHALT

8 PROPOSED
PARKING STALLS

PROPOSED
ADDITION

EISENHOWER DRIVE

EISENORTH DRIVE

Note

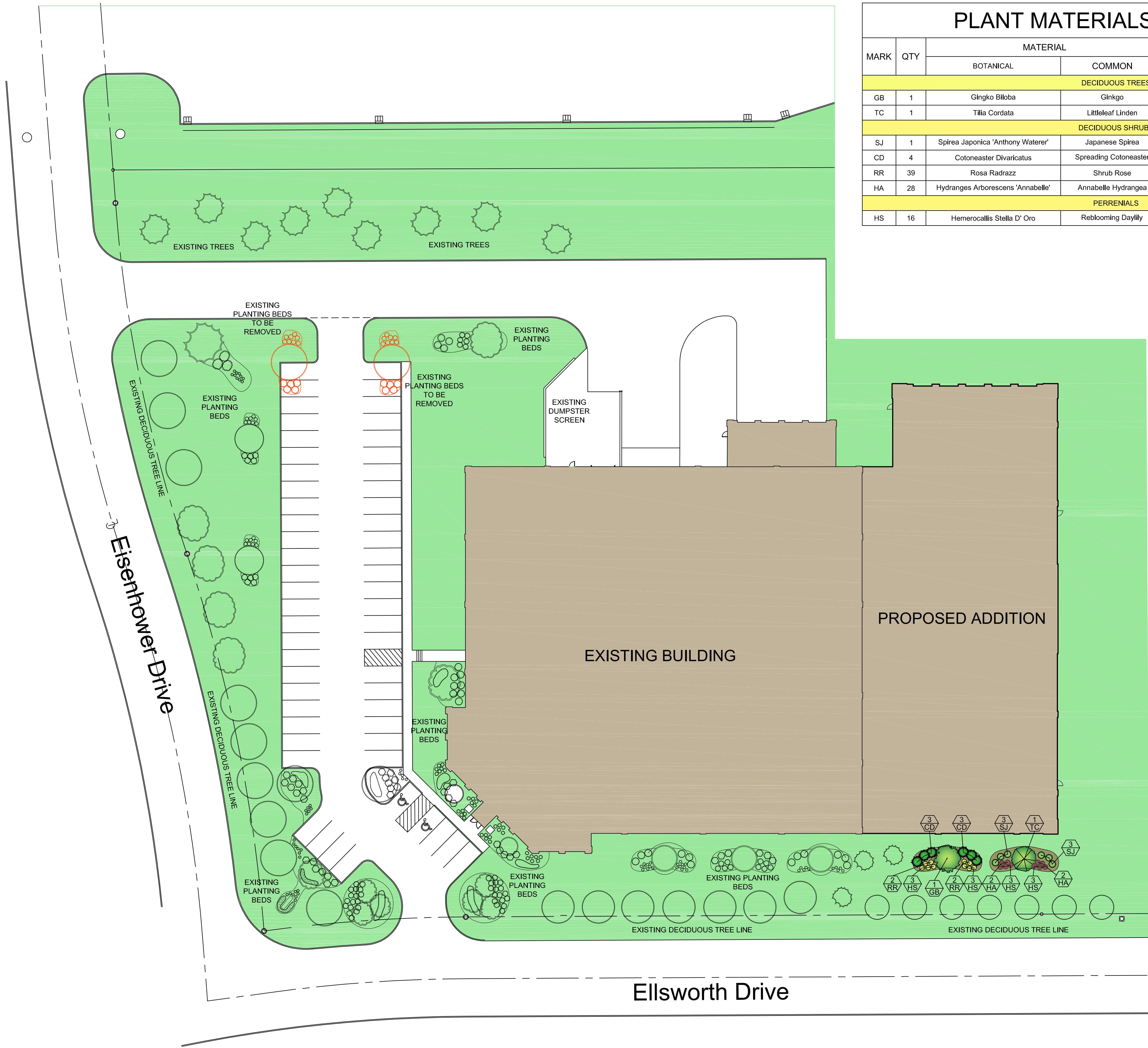
Existing light calculation are
approximate levels. IES files were
matched as closely as possible.

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Existing	+	1.9 fc	23.6 fc	0.0 fc	N/A	N/A
New	+	2.1 fc	10.5 fc	0.0 fc	N/A	N/A

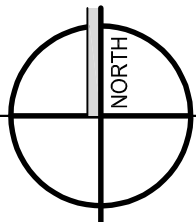
Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens per Lamp	LLF	Wattage
○	OC	6	SIGNIFY GARDCO	101L-32L-1000-NW-G1-3	100 LINE LED SCNCE	(2) LEDGINE 3.1 LIGHT ARRAYS OF 16 LEDs (LUXEON T) AT 107W	1	101L-32L-1000-NW-G1-3.ies	8941	0.9	106.8
□	OAE	3	PHILIPS GARDCO	ECA18-3H-250PSMH-HS	ECOLUME	CLEAR HORIZONTAL 250PSMH RATED FOR 22000 LUMENS	1	ECA18-3H-250P-HS.IES	22000	0.9	291
□	OA1E	2	PHILIPS GARDCO	ECA18-3H-250HPS	ECOLUME	CLEAR HORIZONTAL 250HPS RATED FOR 28000 LUMENS	1	ECA18-3H-250H.IES	28000	0.9	295
□	OBE	2	Duraguard	D-250w-PSMH-LWPCO	LWPCO WITH 250 WATT MH LAMP	250W METAL HALIDE LAMP	1	D-250w-PSMH-LWPCO.ies	22000	0.9	276.4
□	OCE	3	Duraguard	D-150w-PSMH-LWPCO	LWPCO	150W VENTURE UNI-FORM PULSE START LAMP RATED AT 13,000 LUMENS	1	D-150w-PSMH-LWPCO.ies	13000	0.9	175
○	OFE	5	DURAGUARD	D-100w-PSMH-DTRBAAL	DTRBAAL BOLLARD WITH LOUVERS AND CLEAR POLYCARBONATE LENS	100W VENTURE UNI-FORM PULSE START LAMP, CLEAR, RATED AT 9,000 LUMENS	1	D-100w-PSMH-DTRBAAL.ies	9000	0.9	100
○	OEE	8	PHILIPS CAPRI SPEX	S82H32PLT U T8 2HPLT CSS	CAPRI 8-INCH APERTURE OPEN DOWNLIGHT, HORIZONTAL LAMPS W/ CLEAR SEMI-SPECULAR TRIM.	(2) 32W CFL 4-PIN G24Q-3 BASE CFL LAMP 827K	2	PD8H242E-82HC_32TTT.ies	2400	0.9	69.3



PLANT MATERIALS SCHEDULE					
MARK	QTY	MATERIAL		SIZE	
		BOTANICAL	COMMON	PLANTED	MATURE
DECIDUOUS TREES					
GB	1	Ginkgo Biloba	Glnkgo	1.5"-2"	40'
TC	1	Tilia Cordata	Littleleaf Linden	2"-2.5"	50'
DECIDUOUS SHRUBS					
SJ	1	Spirea Japonica 'Anthony Waterer'	Japanese Spirea	15"-18" wide	2'-3' high 3'-4' wide
CD	4	Cotoneaster Divaricatus	Spreading Cotoneaster	30"-36"	5'-6" high 6'-8" wide
RR	39	Rosa Radrazz	Shrub Rose	18-24"	3'-4" high 3'-4" wide
HA	28	Hydranges Arborescens 'Annabelle'	Annabelle Hydrangea	18"-24"	3'-5' high 4'-6" wide
PERRENIALS					
HS	16	Hemerocallis Stella D' Oro	Reblooming Daylily	#1 container	2'-3'

LANDSCAPE PLAN



1" = 30.00'

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PROPOSED BUILDING
Krenz & Company, Inc.
W132 N10940 EISENHOWER DRIVE
VILLAGE OF GERMANTOWN, WASHINGTON COUNTY

Issue:
7/12/2019

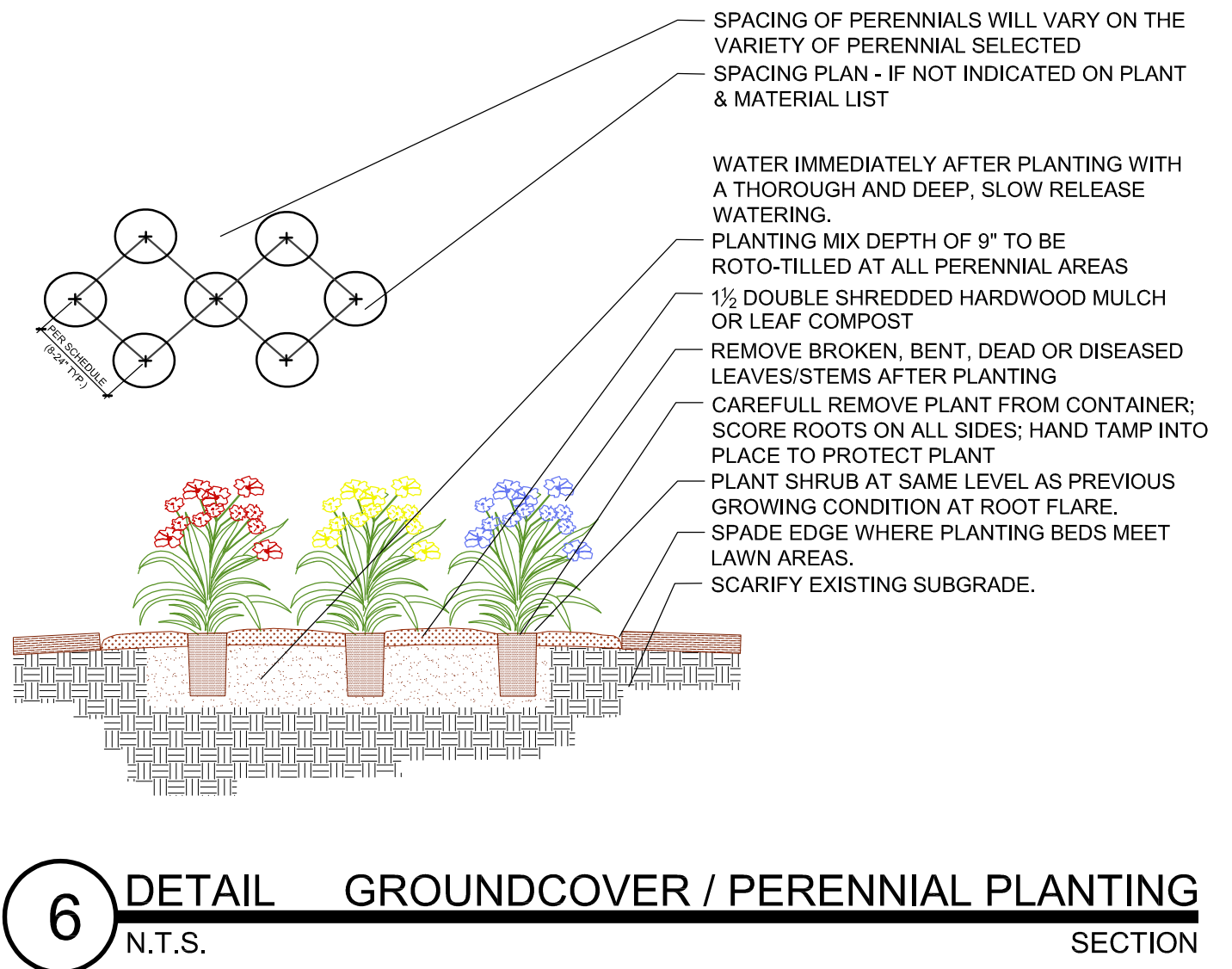
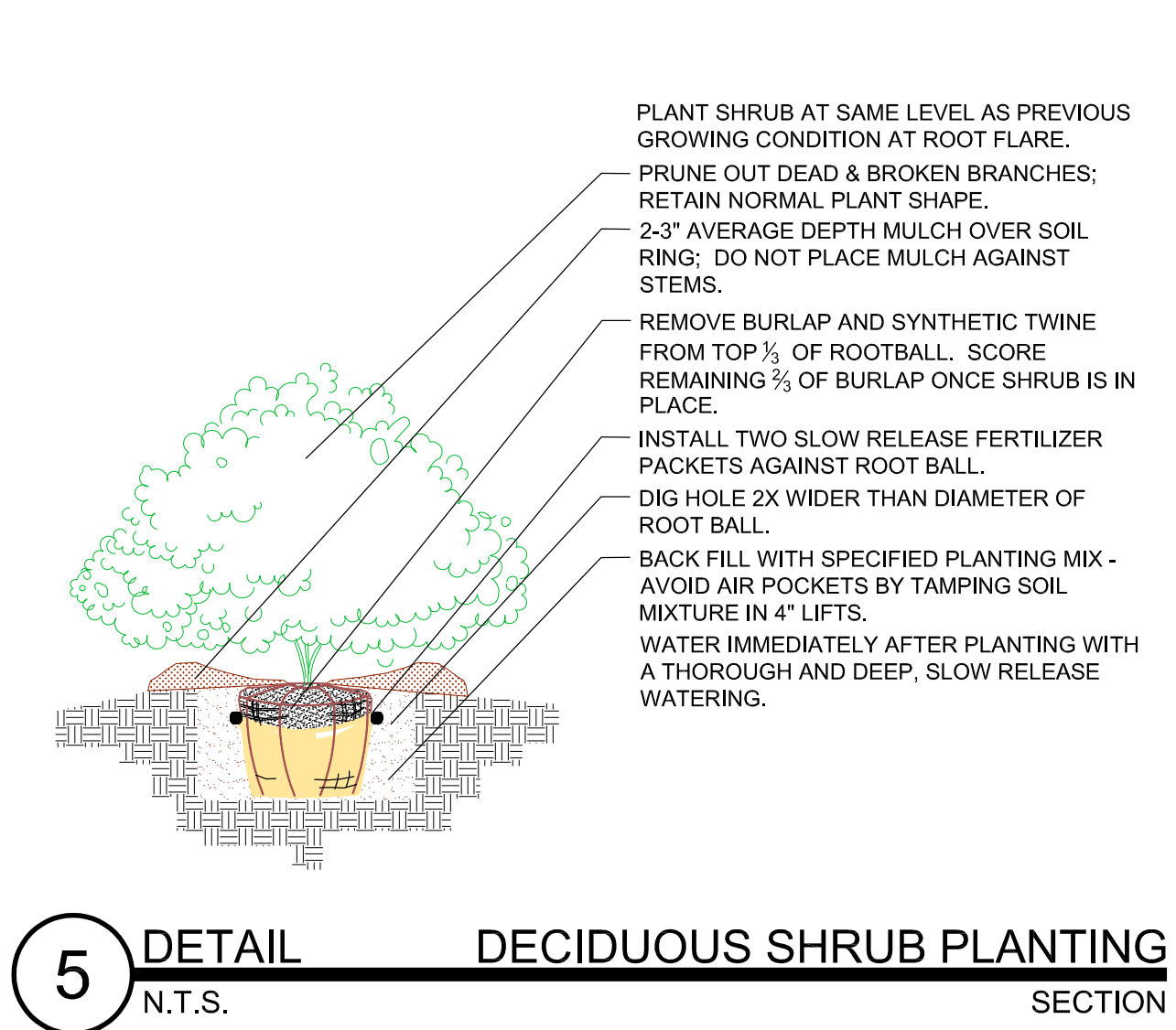
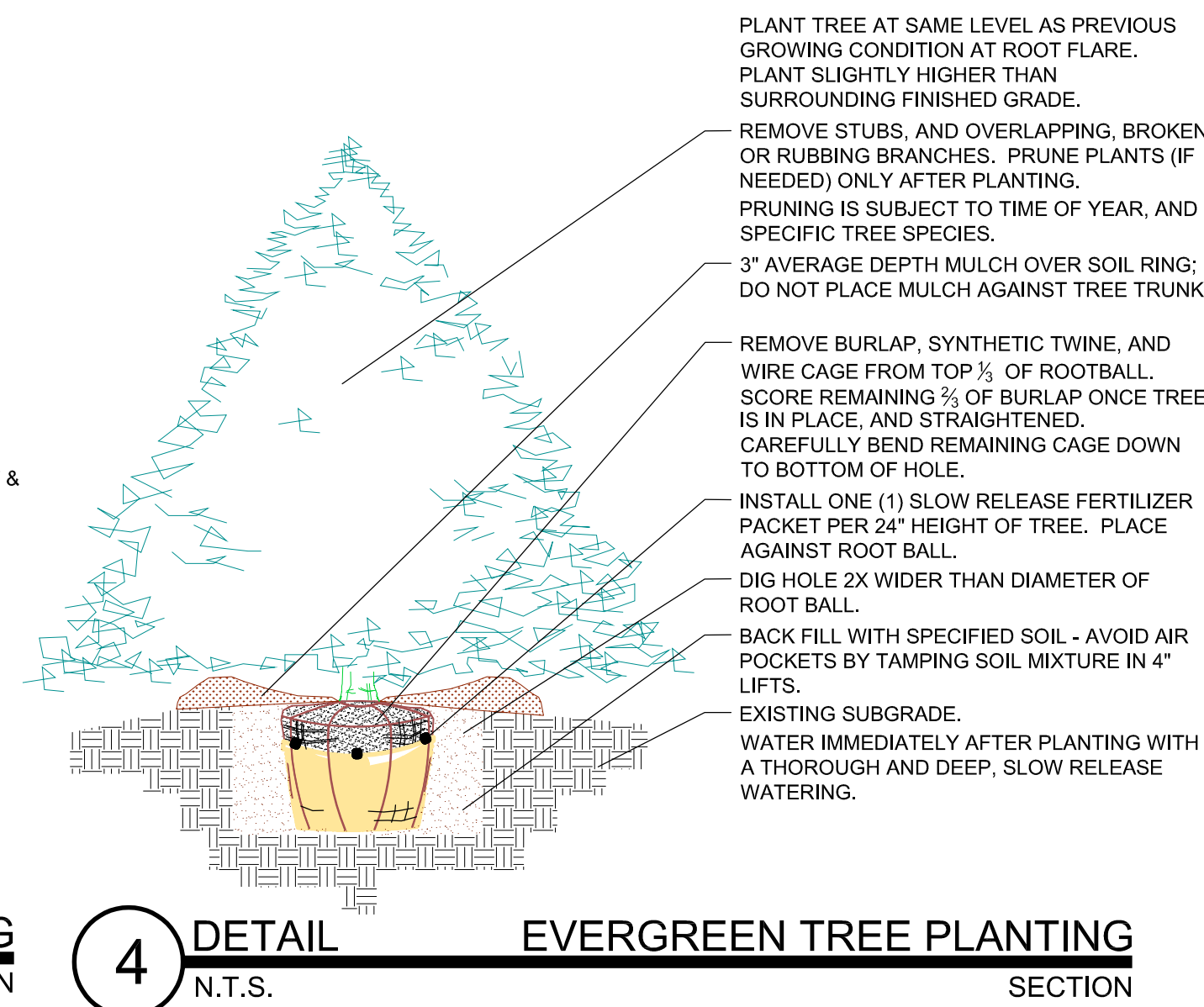
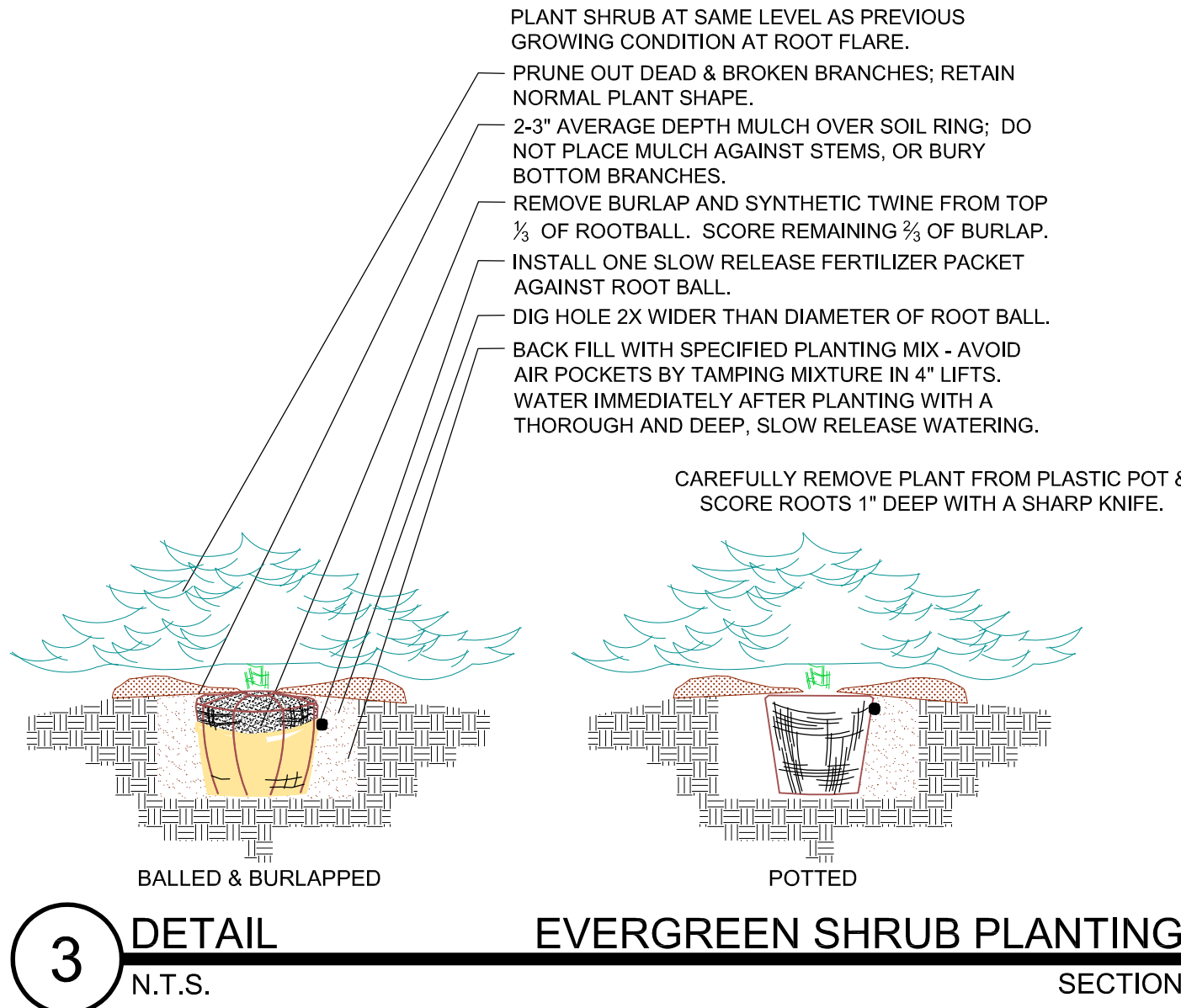
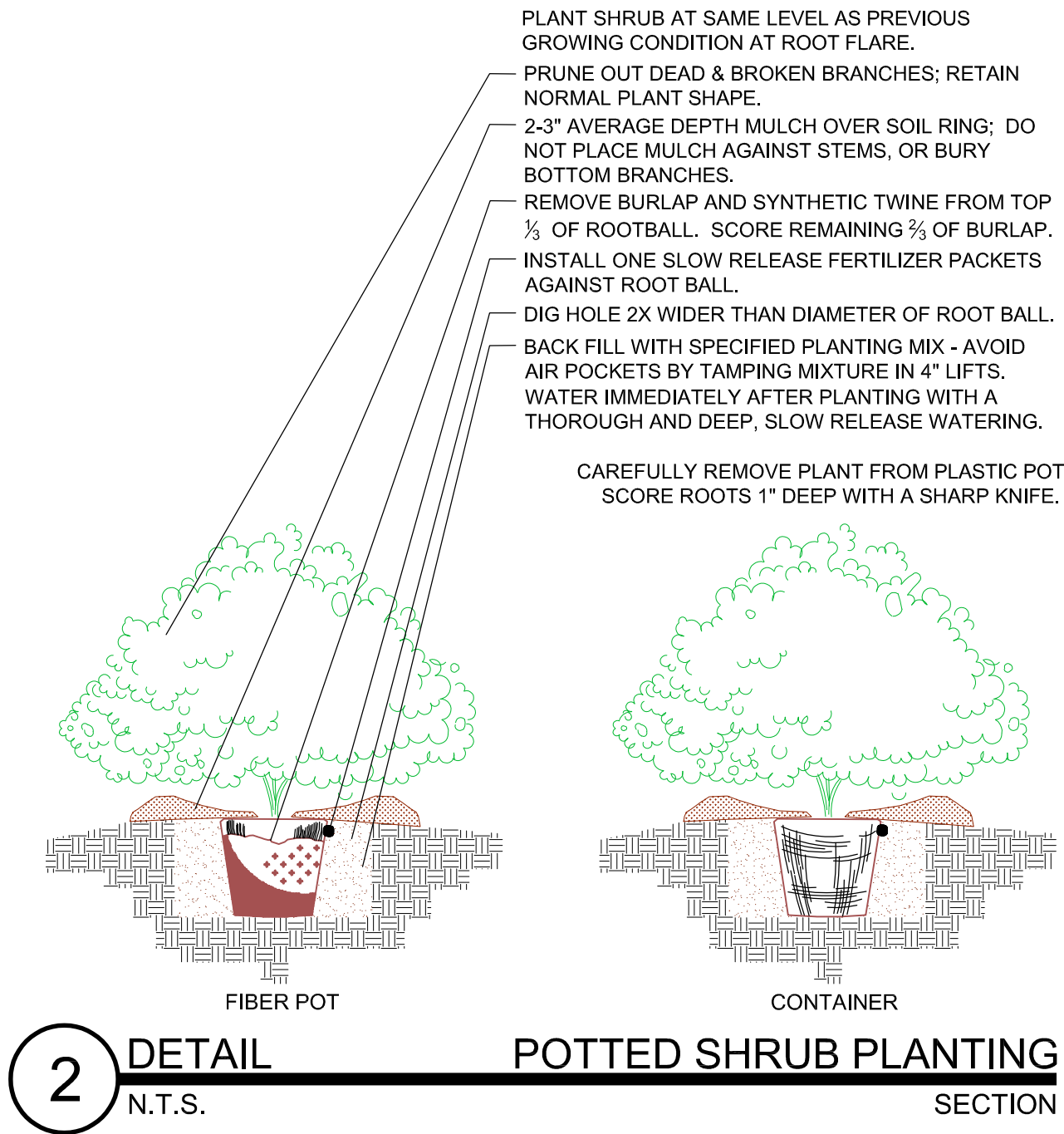
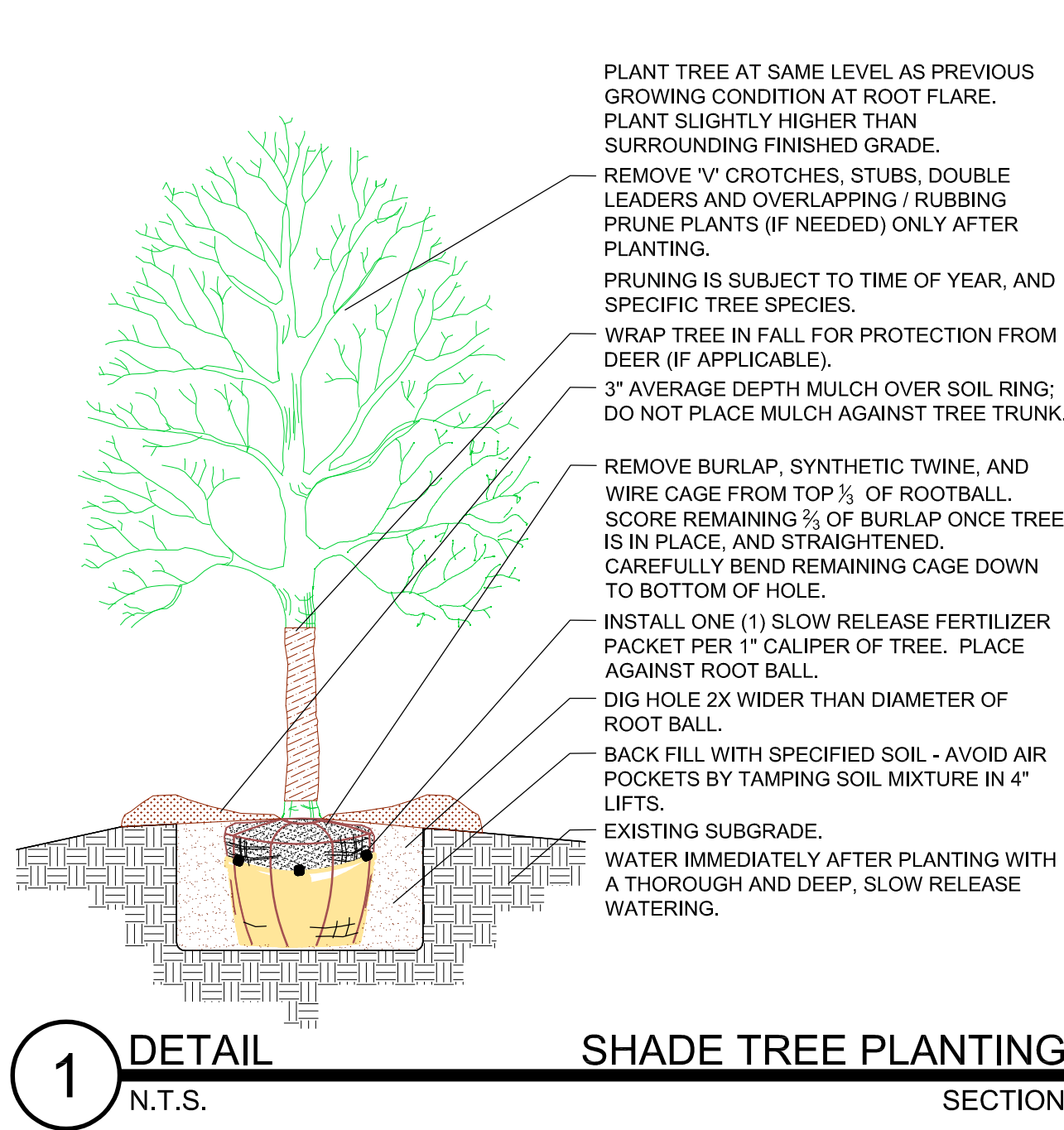
Document Date:
12 JULY 2019

Project Number:
19015

Sheet Title:
LANDSCAPE PLAN

Sheet Number:

L-100



LANDSCAPE NOTES

- Contractor shall contact Diggers Hotline (800-242-8511) to have site marked prior to excavation and planting.
- Contractor shall verify all plant quantities listed on Plant Materials Schedule and report any discrepancies to contractor.
- Plantings shall comply with standards as described in American Standard of Nursery Stock - Z60.1 ANSI (latest version). No sub-standard "B Grade" or "Park Grade" plant materials will be accepted. Plant materials shall originate from nursery(ies) with a similar climate as the planting site.
- Planting substitutions must be approved by the Owner. All plants must be installed as per sizes indicated on Plant Materials Schedule unless approved by the Owner. Any changes in sizes shown on plan must be approved by Owner in writing prior to installation.
- All planting beds shall be backfilled with topsoil to a minimum depth of 18" to insure long-term plant health. Topsoil shall be placed within 3" of finish grade by General Contractor during rough grading operations. Landscape Contractor shall be responsible for the final grading of all disturbed areas, planting bed areas and lawn areas.
- Plant all trees slightly higher than finished grade at the root flare. Remove excess soil from top of root ball, if needed. Remove and discard non-biodegradable ball wrapping and support wire. Remove biodegradable burlap and wire cage from the top third of the root ball and carefully bend remaining wire down to bottom of the hole. When tree has been placed and will no longer be moved, score remaining two-thirds of burlap and remove twine. Provide one slow-release fertilizer packet per 1" caliper of each tree planted.
- Backfill tree planting holes with 80% existing soils removed from excavation and 20% soil amendments (see specification below). Avoid air pockets. Do not tamp soil. Discard any gravel, rocks, heavy clay or concrete. Water tree thoroughly when hole is two-thirds full. Allow water to soak in before filling remainder of hole. Water again to fully soak the new planting. Each tree shall receive a 3" deep 4-5" diameter shredded hardwood bark mulch ring/saucer. Do not build up mulch onto trunk of any tree. Incorrectly installed trees shall be replaced at the expense of the Landscape Contractor.
- All shrubs shall be planted in groupings indicated on the Landscape Plan. Install shrubs with an equal mix of Soil Amendments and blended, pulverized topsoil. Install topsoil into all plant beds as needed to achieve proper grade and to displace undesirable soils. Remove gravel, clay and stones from plant beds prior to planting. Water thoroughly when holes are two-thirds backfilled and allow to soak in before proceeding. Provide slow-release fertilizer packets at the rate of 1 per 24" height/diameter of shrub at planting.
- All tree rings shall receive a 3" deep layer of high-quality un-pigmented shredded hardwood bark mulch. All shrub and perennial planting bed areas shall receive a 2-3" layer of shredded hardwood bark mulch. Groundcover areas shall receive a 1-2" layer of the same mulch. Do not allow mulch to contact plant stems and tree trunks.
- All planting beds shall be edged with a 4" deep spade edge using a flat landscape spade or a mechanical edger. A clean definition between landscape beds and lawn is required. Pack mulch against lawn edge to hold in place.
- Perennial and groundcover areas shall receive a blend of organic soil amendments prior to installation. Roto-till the following materials at the following ratios into existing soil beds or installed topsoil beds to a depth of 8-10". Containerized and balled & burlapped plant material should be backfilled with amended soil.
 - SOIL AMENDMENT COMPOSITION per 100 sq.ft. of BED AREA
 - 1/2 cu.yd. Peat Moss or Mushroom Compost
 - 1/4 cu.yd. blended/pulverized topsoil
 - 1/4 cu.yd. composted manure
 - 2 lbs. Starter Fertilizer (roto-tilled bed only)
- Remove/kill unwanted vegetation at seeded areas prior to seeding. Prepare topsoil and seed bed by removing all surface stones 1" or larger. Apply 20-10-5 starter fertilizer and specified seed uniformly at the specified rate. Provide mulch covering suitable to germinate and establish turf. Submit seed and fertilizer specifications to Owner prior to installation. Erosion control measures shall be used in swales and on slopes steeper than 1:3 where applicable. Methods of installation may vary at the discretion of the Landscape Contractor to establish and guarantee a smooth, uniform, quality turf. A minimum of 2" of blended, prepared and non-compacted topsoil is required for all lawn areas. If straw mulch is used as a covering, a tackifier shall be used to prevent wind dispersal of mulch covering.. Marsh hay containing reed canary grass is NOT an acceptable mulch covering.
- An acceptable quality seed installation is defined as having:
 - No bare spots larger than 1 sq.ft.
 - No more than 10% of the total area with bare areas larger than 1 sq.ft.
 - Uniform coverage through all turf areas

- All plantings shall be watered thoroughly at the time of planting, through construction and upon completion of the project as needed. Trees, Evergreens and Shrubs (deciduous and evergreen) shall be guaranteed (100% replacement) for a minimum of one year from the date of project completion. Perennials, groundcovers and ornamental grasses shall be guaranteed for a minimum of one growing season. Perennials, groundcover and ornamental grasses planted after September 15 shall be guaranteed through May 31 of the following year. Only one replacement per plant will be required during the warranty period except for losses or replacements due to failure to comply with the specified requirements. Watering and ongoing maintenance instructions are to be supplied to the Owner by the Landscape Contractor upon completion of the project.
- Landscape Contractor is responsible for watering and maintenance of all landscape areas for a period of 45 days after substantial completion of the landscape installation. This shall include all trees, shrubs, evergreens, perennials, ornamental grasses, turf grass, no-mow grass and native prairie seed mix / stormwater seed mix. Work also includes weeding, edging, mulching, fertilizing, trimming, removal of grass clippings, pruning and deadheading.
- Landscape Contractor shall conduct a final review of the project with the Owner and General Contractor to answer questions, provide written care instructions and insure that all specifications have been met.

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PROPOSED BUILDING

Krenz & Company, Inc.

W132 N10940 EISENHOWER DRIVE
VILLAGE OF GERMANTOWN, WASHINGTON COUNTY

Issue:
7/12/2019

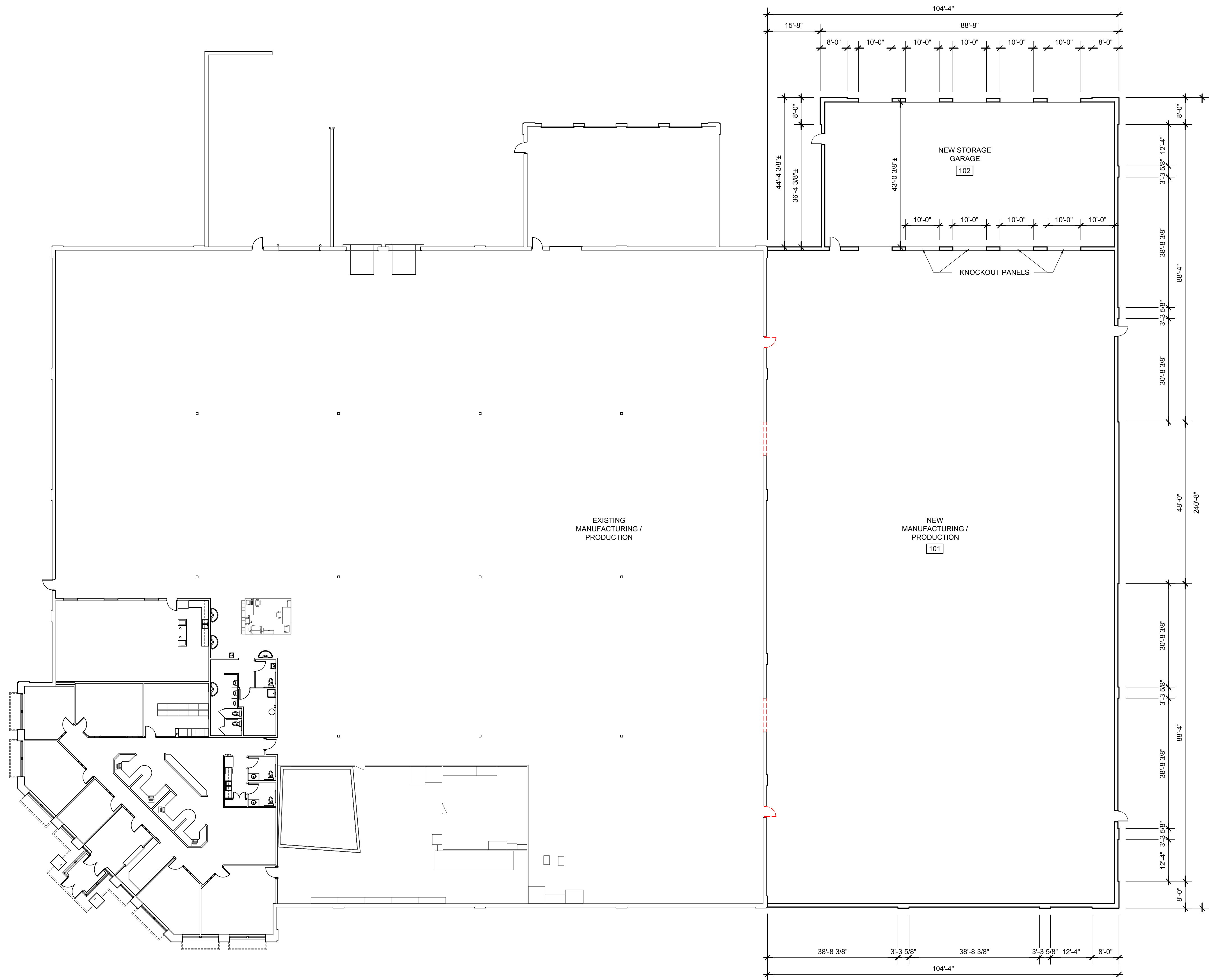
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12 JULY 2019

Project Number:
19015

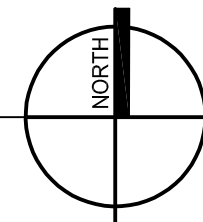
Sheet Title:
LANDSCAPE SCHEDULE
AND DETAILS

Sheet Number:

L-101



FLOOR PLAN - 24,320 SQ. FT.



1/16" = 1'-0"

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PROPOSED BUILDING
Krenz & Company, Inc.
W132 N10940 EISENHOWER DRIVE
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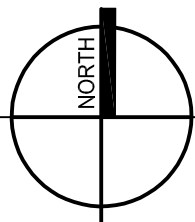
Sheet Title:
FLOOR PLAN

Sheet Number:

A-101



ROOF PLAN



1/16" = 1'-0"

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PROPOSED BUILDING
Krenz & Company, Inc.
W132 N10940 EISENHOWER DRIVE
VILLAGE OF GERMANTOWN, WASHINGTON COUNTY

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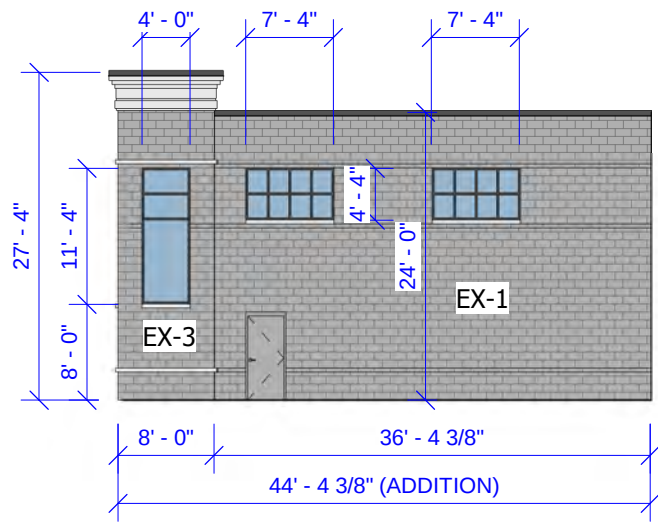
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04 SEPTEMBER 2019

Project Number:
19015

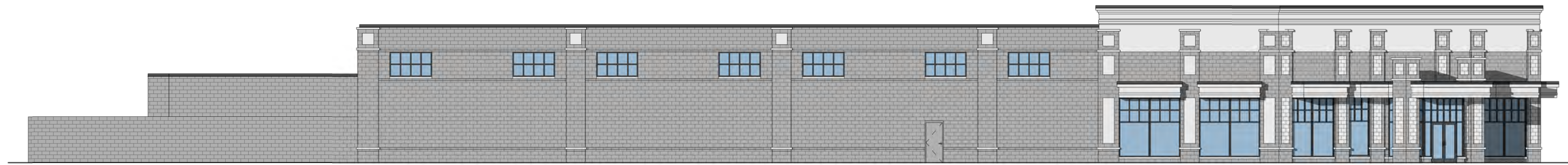
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ROOF PLAN

Sheet Number:

A-102



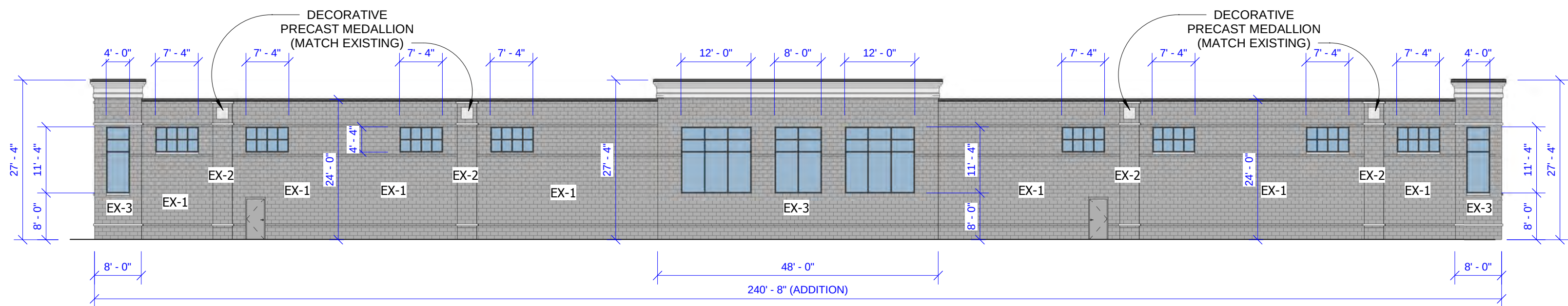
5
A-201 WEST BUILDING ELEV.
SCALE: 1/16\"/>



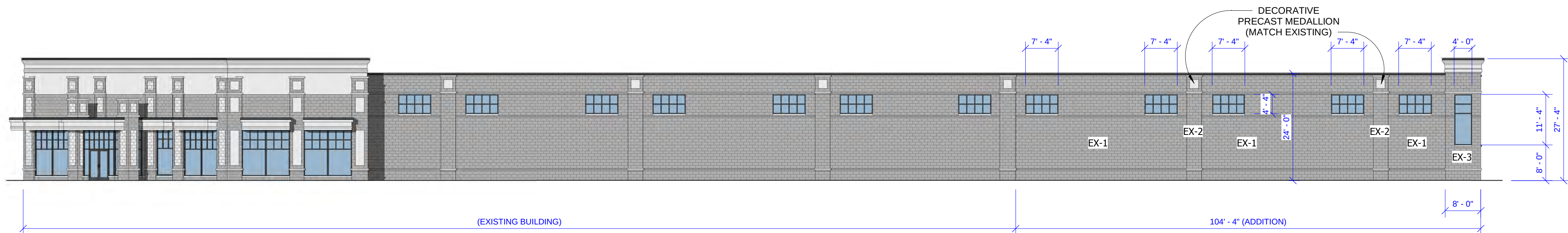
4
A-201 WEST BUILDING ELEVATION (EXISTING)
SCALE: 1/16\"/>



3
A-201 NORTH BUILDING ELEVATION
SCALE: 1/16\"/>



2
A-201 EAST BUILDING ELEVATION
SCALE: 1/16\"/>



1
A-201 SOUTH BUILDING ELEVATION
SCALE: 1/16\"/>

PROPOSED ADDITION
Krenz & Company, Inc.
W132N10940 EISENHOWER DRIVE
VILLAGE OF GERMANTOWN, WASHINGTON COUNTY

Issue:

Document Date:
12 JULY 2019

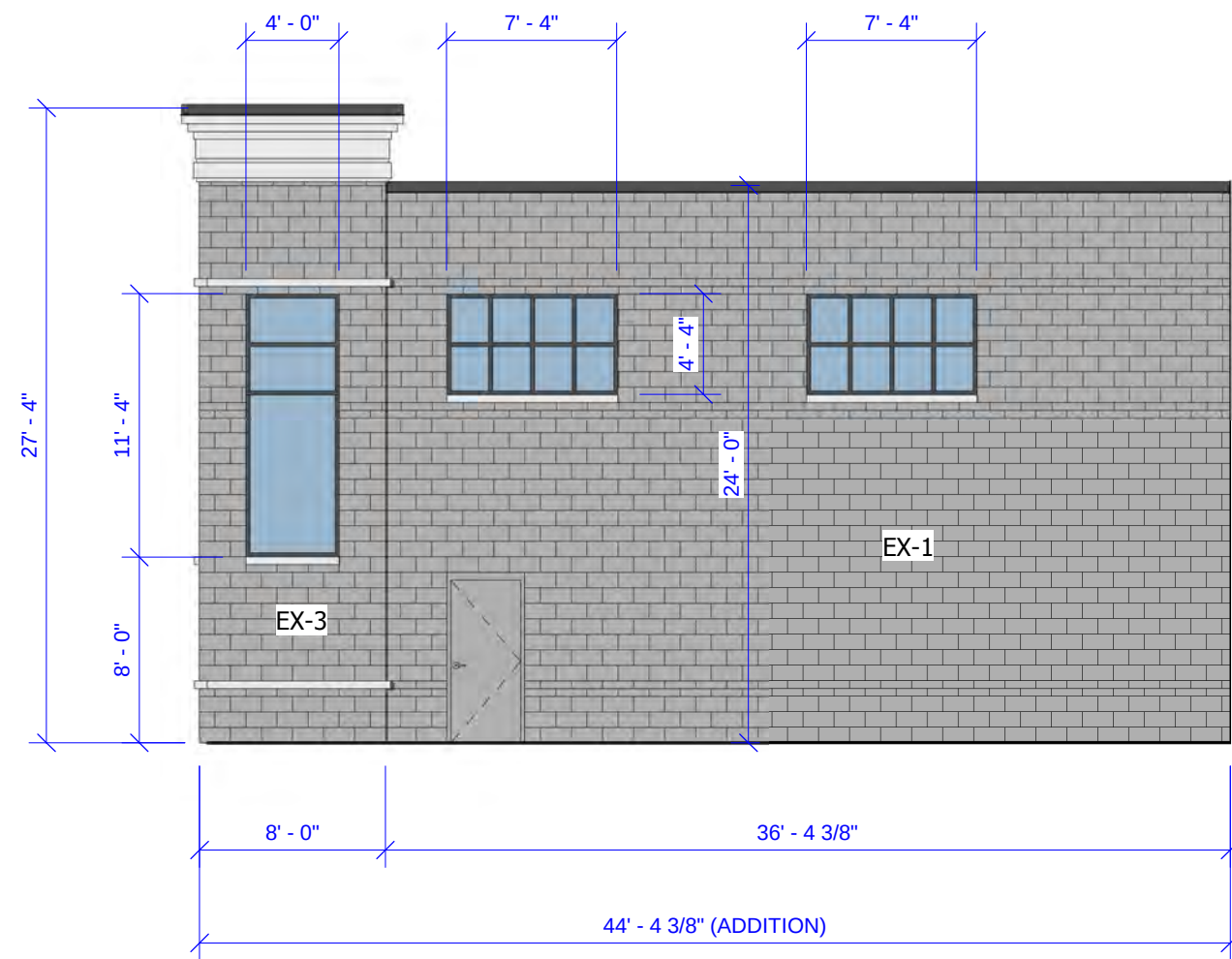
Project Number:
19015

Sheet Title:
EXTERIOR ELEVATIONS
- OVERALL

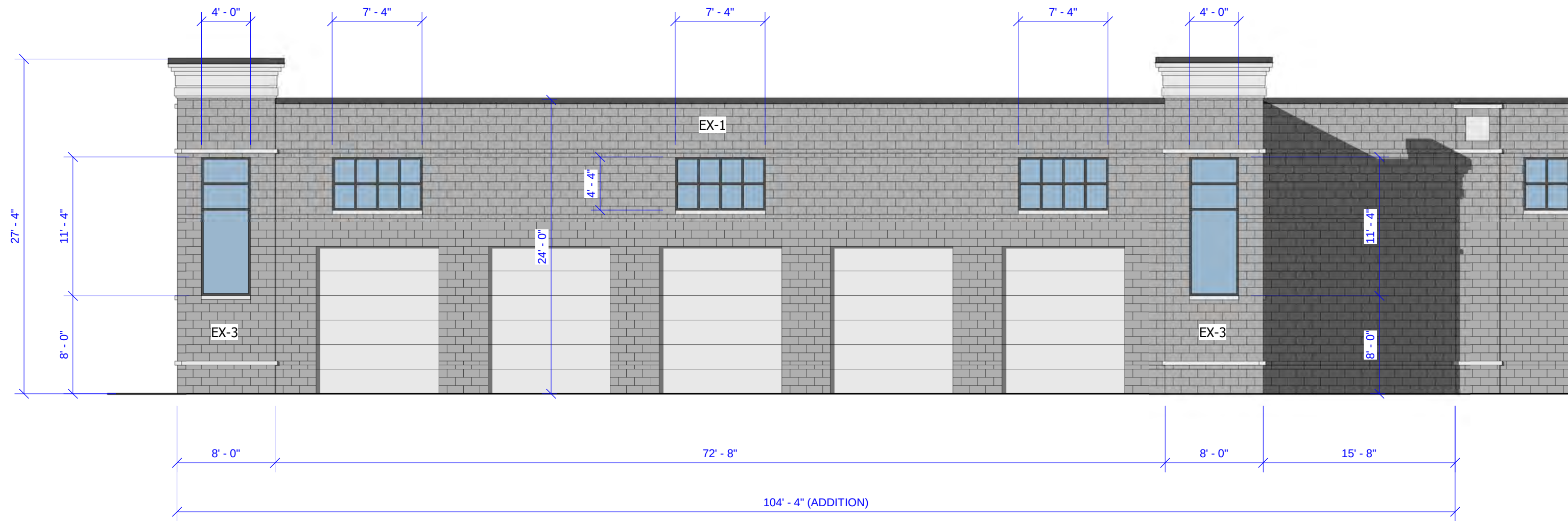
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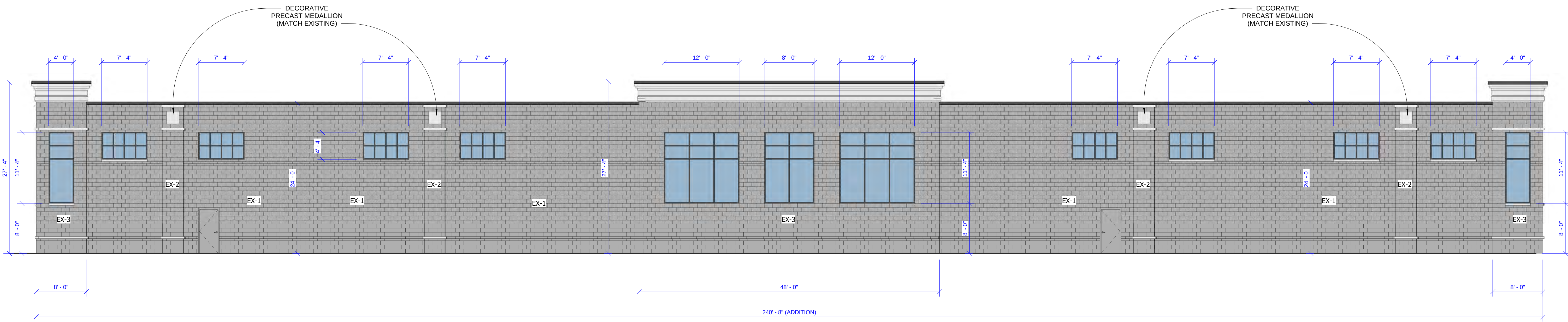
7/10/2019 2:14:22 PM



4 WEST ELEVATION
A-202 SCALE: 1/8" = 1'-0"



3 NORTH ELEVATION
A-202 SCALE: 1/8" = 1'-0"



2 EAST ELEVATION
A-202 SCALE: 1/8" = 1'-0"

MATERIALS LEGEND:

EX-1: 24" HIGH INSULATED PRECAST PANEL.
(COLOR: MATCH EXISTING)
24" SPLIT-FACE
4" SPLIT-FACE
4" SMOOTH
136" SPLIT-FACE
4" SPLIT-FACE
4" SMOOTH
56" SPLIT-FACE
4" SMOOTH
4" SPLIT-FACE
40" SPLIT-FACE
8" SMOOTH

EX-2: 23'-8" HIGH COLUMNS
(COLOR: MATCH EXISTING)
24" SPLIT-FACE
4" SPLIT-FACE
4" PRECAST CONCRETE BULLNOSE BAND
(COLOR: WHITE)
200" SPLIT-FACE
4" SPLIT-FACE
4" PRECAST CONCRETE BULLNOSE BAND
(COLOR: WHITE)
40" SPLIT-FACE
4" PRECAST CONCRETE BULLNOSE BAND

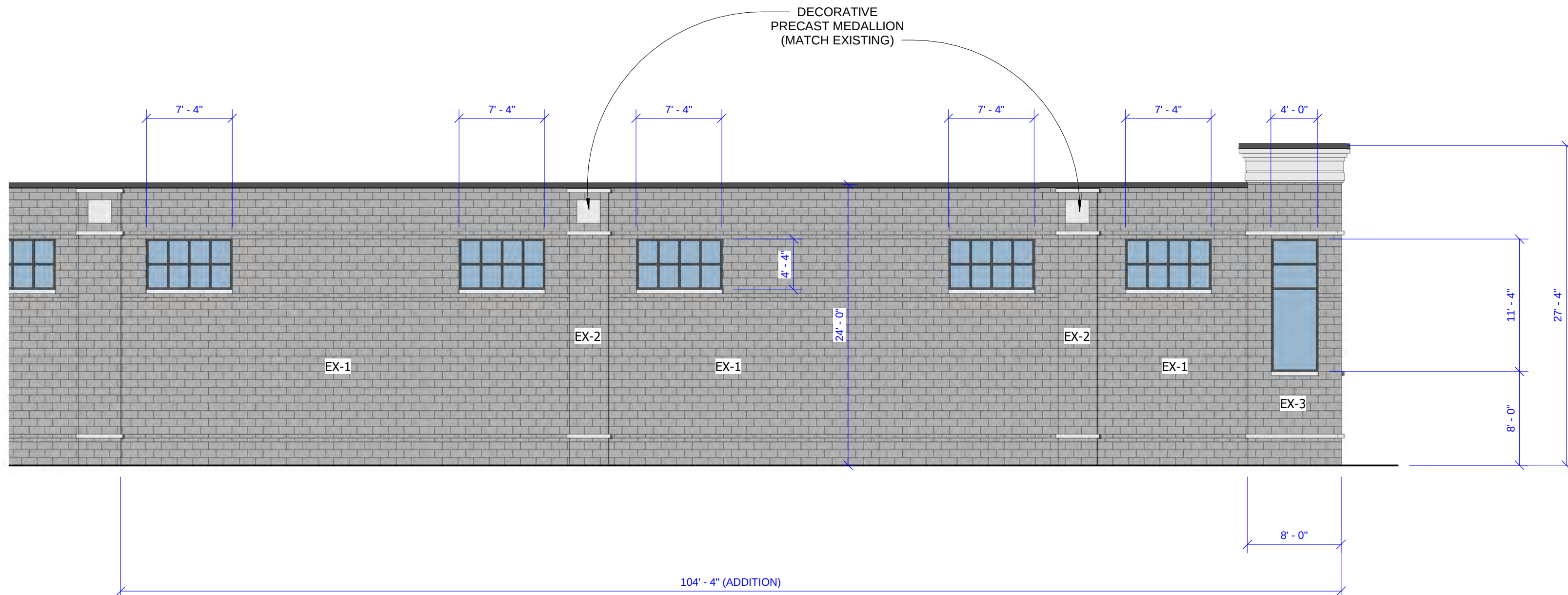
EX-3: 27'-4" HIGH CORNER AND MIDDLE EAST
(COLOR: MATCH EXISTING)
24" SPLIT-FACE
4" SPLIT-FACE
4" PRECAST CONCRETE BULLNOSE BAND
(COLOR: WHITE)
136" SPLIT-FACE
4" SPLIT-FACE
4" SMOOTH
4" PRECAST CONCRETE BULLNOSE BAND
(COLOR: WHITE)
40" HIGH E.I.F.S. CORNICE (MATCH EXISTING)

DOOR NOTES:

(3) INSULATED FLUSH PANEL HOLLOW
METAL DOOR IN HOLLOW METAL FRAME.
(COLOR: MATCH OF ADJACENT MATERIAL)
(5) INSULATED STEEL OVERHEAD
(COLOR: WHITE)

WINDOW NOTES:

THERMALLY BROKEN BRONZE ANODIZED
ALUMINUM STOREFRONT SYSTEM w/
ARGON FILLED low-e GLAZING + 4" PRECAST
CONCRETE BULLNOSE SILL (COLOR: WHITE)



1 SOUTH ELEVATION
A-202 SCALE: 1/8" = 1'-0"

Issue:

Document Date:
12 JULY 2019

Project Number:
19015

Sheet Title:
EXTERIOR ELEVATIONS

Sheet Number:

A-202



3 NW CORNER
A-203 SCALE:



2 NE CORNER
A-203 SCALE:



1 SE CORNER
A-203 SCALE:

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WEST BEND, WI 53095-7884
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PROPOSED ADDITION
Krenz & Company, Inc.
W132N10940 EISENHOWER DRIVE
VILLAGE OF GERMANTOWN, WASHINGTON COUNTY

Issue:

Document Date:
12 JULY 2019

Project Number:
19015

Sheet Title:
PERSPECTIVES

Sheet Number:

A-203

CERTIFIED SURVEY MAP (CSM) APPLICATION

9/9/19 Plan Commission Meeting

Waste Management of Wisconsin Inc.

Village Planner Report

Germantown, Wisconsin

Summary

Aaron Schroeder, CQM Inc., agent for Waste Management of WI, property owner, is requesting approval of a Certified survey Map (CSM) to combine a total of four (4) parcels totaling 45.8 acres as a prerequisite for the development and operation of a 35,035 sqft truck maintenance facility from the property located at N96 W13840 County Line Road.

Location: N96 W13840 County Line Road

Applicant/

Property Owner:

Aaron Schroeder
CQM Inc.
Green Bay, WI

Thomas Beaulieu
Waste Management of WI
Chicago, IL

Zoning: M-2: General Industrial

Adjacent Land Uses		Zoning
North	Agricultural/Industrial	A-1/M-2
South	Industrial (Menomonee Falls)	n/a
East	Industrial (retired landfill)	M-2
West	Residential/Business	Rd-2/Rs-1/B-3



History/Proposal

Aaron Schroeder, CQM Inc., agent for Waste Management of WI, property owner, is requesting approval of a Certified survey Map (CSM) to combine a total of four (4) parcels totaling 45.8 acres as a prerequisite for the development and operation of a 35,035 sqft truck maintenance facility from the property located at N96 W13840 County Line Road.

In March, the Village board and Plan Commission approved a conditional use permit (CUP) and Site Plan applications for the development and operation of the proposed truck maintenance facility. The 35,035 sqft pre-engineered metal building will serve as a new location for existing waste and recycling hauling operations that will relocate from the existing Menomonee Falls facility located at W124 N8925 Boundary Road.

As discussed previously, WM planned to combine the four (4) parcels under their ownership pending approval of the CUP and Site Plans. While not required in order to commence site preparation and development, WM was required to file a certified survey map (CSM) for purposes of combining their parcels within (90) days after Village Board action on the CUP application.

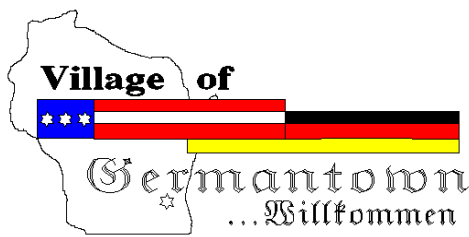
Public Works/Village Surveyor

The Village Surveyor has identified a few technical issues and corrections that will need to be addressed prior to recording the CSM in a July 16, 2019 memo (copy attached).

VILLAGE PLANNER RECOMMENDATION

APPROVE the site development and building plans for a 35,035 sqft truck maintenance facility from the property located at N96 W13840 County Line Road subject to the following conditions:

1. All technical corrections and requirements identified by the Village Surveyor in a July 16, 2019 memo shall be addressed and reflected in a revised CSM approved by the Surveyor prior to recording the CSM.
2. WM shall prepare and submit to the Village an updated wetland delineation for the property to ensure site development does not encroach into any wetland or the Village's 25' wetland setback. The wetland delineation shall be submitted to the Village within (90) days after Village Board approval of the CUP. In the event development encroaches into a wetland or 25' wetland setback, WM shall obtain the necessary WisDNR and Village permits, or, modify the site development accordingly.



Engineering Department Memorandum

To: Jeff Retzlaff Village Planner

CC:

From: Bob Beilfuss, PLS, Village Surveyor

Date: July 16, 2019

Re: Waste Management CSM

Jeff,

Here are my review comments for the CSM received 7-8-2019.

Certified Survey Map

Applicant or Owner: Aaron Schroeder PLS for Waste Management

Land Surveyor/Firm: Aaron Schroeder, PLS, CQM, Inc

1. The area or right of way being vacated need bearings and distances around the perimeter. To vacate this R/W, the owner of the property needs to send a letter to the Director of Public Works requesting the vacation which will be brought in front of the Public Works Committee for a recommendation and approval by the Village Board. That resolution number needs to be added to the CSM on sheet 1 of 3
2. A notary signature block is required for all signatures including Village plan commission and Board approval certificates. Please add the notary signature blocks as needed.
3. Add the statement "This instrument prepared by Arron P. Schroeder, PLS" to the bottom of each sheet.
4. The dot pattern hatching is over a line of unknown type. The limits of the wetland delineation should be line connected and the 25' wetland setback line is offset from the delineation line.
5. The adjoining plat status of the adjoining parcels is screened too lightly and need to be darkened up so it is readable once the document is scanned at the Register of Deeds Office.

No further review comments.

Document Approval and Recording

For this CSM to be approved by the Village Board and recorded at the Washington County Register of Deeds, the document must be provided to the Village Clerk's office in a completed format including all original signatures of the owner and lending institution, original seals of the professional land surveyor on the recordable media the Wednesday prior to the scheduled Village Board meeting.

This includes the CADD file.

Any documents or digital files not submitted by the due date or contain outstanding technical review comments that have not be addressed, will be moved to the next scheduled Village Board meeting agenda.

Document Submittals and Data Conversion

As of October 2005, the Village of Germantown requires a digital copy of all Certified Survey Maps, Condominium Plats and Subdivision Plats in addition to the documents as required by Wisconsin Statute and Village Ordinances as part of the land division approval.

Prior to Recording the Certified Survey Map or Subdivision Plat, The professional land surveyor is responsible for submitting a copy of the AutoCad drawing file (.dwg) of the document in version 2018 on compact disk (CD) or via email to the Village Surveyor.

All digital professional land surveyor seals and signatures will be purged from the digital copy prior to submittal.

The model space of the drawing will be done in Wisconsin State Plane Coordinate System, South Zone (NAD 1927 datum) and the Grid Bearing basis.

Prior to Recording the Certified Survey Map or Final Subdivision Plat, the Village Engineering Department will verify that the boundary markers have been installed as described on the submitted map. All boundary corners are to be clearly marked in the field by the professional land surveyor of record.



Village of
Germantown
Willkommen

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

Paid 8 Date 7-8-19

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

Aaron Schroeder PLS

CQM, INC

2679 Continental Dr

Green Bay, WI 54311

Phone (920) 362-6971

Fax ()

E-Mail schroeder@cqminc.com

PROPERTY OWNER

WM of WI Inc.

Thomas Beaulieu

PO BOX 1450

Chicago, IL 60690

Phone (262) 250-8700

PROPERTY ADDRESS OR GENERAL LOCATION

TAX KEY NUMBER

2 N96W13840 COUNTY LINE RD

GTNV_363996, GTNV_363986

3 PURPOSE OF LAND SPLIT

Waste Management Truck Maintenance Facility;
Conditional Use Permit (CUP) & Site & Building Plan
Combination of parcels

Will the land split require rezoning?

From

To

4 READ AND INITIAL THE FOLLOWING:

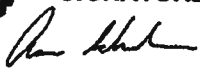
Y I understand that the Certified Survey Map is not valid until recorded at the Washington County Register of Deeds. The Village will record the document and charge the applicant all applicable recording fees.

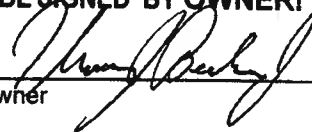
Y I understand that the Map will not be placed on the Village Board agenda until all the technical corrections to the CSM are made, the payment of any outstanding impact fees are paid to the Village Clerk's Department, and the original signed and stamped copy of the Map is submitted on the proper paper.

Y 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.

Y 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!

 6-24-19
Applicant Date

 7-1-19
Owner Date

Being a Combination of Lot 2 CSM 4247, CSM 455, a Parcel described by Warranty Deed in Volume 786, Page 273, and a Parcel described by Warranty Deed in Volume 747, Page 264 - Excepting Document No. 1185031, all being recorded in the Washington County Register of Deeds, and all being in Section 36, T09N-R20E, Village of Germantown, Washington County, Wisconsin.

Fond Du Lac Ave.

SW Corner
Sec. 36 T09N, R20E
(Monument w/Brass Cap)
440,308.62N
2,511,158.76E

South Line SW 1/4 Sec. 36

County Line Road

P.O.B. D.T.T.P.

S 1/4 Corner
Sec. 36 T09N, R20E
(Monument w/Brass Cap)

WD
N786.P

Survey data and bearings shown on the map include:
 - N02°05'18"W
 - S87°54'47"W (R)
 - S87°54'45"W
 - N02°04'15"W
 - N87°54'45"E
 - Distances: 204.00', 118.75', 640.77', 846.99', 2645.15', 618.75', 618.43', 1179.73', 60.00', 60.00', 60.00', 8'

COMBINATION CERTIFIED SURVEY MAP

Being a Combination of Lot 2 CSM 4247, CSM 455, a Parcel described by Warranty Deed in Volume 786, Page 273, and a Parcel described by Warranty Deed in Volume 747, Page 264 - Excepting Document No. 1185031, all being recorded in the Washington County Register of Deeds, and all being in Section 36, T09N-R20E, Village of Germantown, Washington County, Wisconsin.

More Particularly Described as Follows:

Commencing at the Southwest Corner of said Section 36; Thence N87°54'45"E, 846.99 feet along the South line of the Southwest ¼ of Said Section 36 to the Point of Beginning; Thence N02°04'15"W, 60.00 feet to the South Right of Way of County Line Road; Thence S87°54'45"W, 640.77 feet along said South Right of Way to the Westerly line of Lot 2 of CSM 4247; Thence N02°05'18"W, 204.05 feet along the Westerly line of said Lot 2; Thence N06°33'17"E, 222.39 feet along the Westerly line of said Lot 2; Thence N87°54'42"E, 230.09 feet along a Northerly line of said Lot 2; Thence N05°04'51"E, 255.59 feet along a Westerly line of said Lot 2; Thence N21°31'55"E, 181.50 feet along a Westerly line of said Lot 2; Thence N88°33'58"E, 206.91 feet along the North line of said Lot 2 to the East line of said Lot 2; Thence N02°04'15"W, 1084.23 feet along the East line of Lot 1 of CSM 4247, Lot 1 of CSM 3028, and Unplatted Lands described in Volume 1356-Page 243, Washington County Records; Thence N88°14'45"E, 205.75 feet along the South line of Unplatted Lands described in Document No. 1185030, Washington County Records; Thence N32°13'41"E, 795.90 feet along the Easterly line of Unplatted Lands described in Document No. 1185030, Washington County Records, to the South line of Lot 1 of CSM 5028; Thence N88°14'37"E, 124.33 feet along the South line of said Lot 1 of CSM 5028 to the Westerly line of Lot 1 of CSM 2622; Thence S01°45'51"E, 1241.07 feet along the Westerly line of said Lot 1 of CSM 2622, Thence S87°54'15"W, 80.00 feet along a Northerly line of said Lot 1 of CSM 2622; Thence S01°45'51"E, 1400.09 feet along the Westerly line of said Lot 1 of CSM 2622, to the South line of the Southwest ¼ of Said Section 36; Thence S87°54'45"W, 618.43 feet along the Southwest ¼ of Said Section 36, to the point of beginning. Subject to any easements, covenants, or restrictions of record. Parcel contains 1,994,793± Square Feet or 45.79± Acres total including 37,115± Square Feet or 0.85± Acres dedicated to the public for road purposes.

Surveyor's Certificate

I, Aaron P. Schroeder, Registered Land Surveyor, hereby certify: that in full compliance with the provisions of chapter 236.34 of the Wisconsin Statutes and the survey requirements of Chapter 18 of the Village of Germantown Subdivision and Platting Regulations, and under the direction of Waste Management of Wisconsin, Inc., owners of said land, I have surveyed, dedicated, and mapped this certified survey map, and that such map correctly represents all exterior boundaries of the land surveyed and the division of that land

Aaron P. Schroeder
PLS 2839

Date:



Owners's Certificate:

As owner, I hereby certify that I have caused the land described herein to be surveyed, dedicated, and mapped as represented on this Certified Survey Map. We also certify that this Certified Survey Map is required to be submitted to the Village of Germantown for approval or objection.
As owner, I hereby dedicate that part of County Line Road to the Village of Germantown for public road purposes as represented on Sheet 1 of 3 of this Certified Survey Map.

Dated this ____ day of _____, 2019.

Thomas Beaulieu,
President, WM of WI Inc.
PO Box 1450
Chicago, IL 60690
(262) 806-6039

Date

Personally came before me this ____ day of _____, 2019, the above named owner to me known to be the persons who executed the foregoing instrument and acknowledged the same.

Notary Public
Washington County, Wisconsin
My Commission Expires

STATE OF WISCONSIN]
] SS
COUNTY OF BROWN]

COMBINATION CERTIFIED SURVEY MAP

Being a Combination of Lot 2 CSM 4247, CSM 455, a Parcel described by Warranty Deed in Volume 786, Page 273, and a Parcel described by Warranty Deed in Volume 747, Page 264 - Excepting Document No. 1185031, all being recorded in the Washington County Register of Deeds, and all being in Section 36, T09N-R20E, 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 _____, 2019.

Dean Wolter, Chairman

Date _____

Laura A. Johnson, Secretary

Date _____

Village of Germantown Board Approval

This Certified Survey Map, being a combination of Lot 2 CSM 4247, CSM 455, a Parcel described by Warranty Deed in Volume 786, Page 273, and a Parcel described by Warranty Deed in Volume 747, Page 264 - Excepting Document No. 1185031, all being recorded in the Washington County Register of Deeds, and all being in Section 36, T09N-R20E, Village of Germantown, Washington County, Wisconsin, having been approved by the Planning Commission being the same, is hereby approved and the dedication of that part of County Line Road for public road purposes as shown on Sheet 1 of 3 is hereby accepted by the Village Board of Trustees of the Village of Germantown on this ____ day of _____, 2019.

Dean Wolter, Village President

Date _____

Deanna Boldrey, Village Clerk

Date _____

Aaron P. Schroeder
S-2839

PLAN COMMISSION CONSULTATION

9/9/19 Plan Commission Meeting

Shaffer Development, LLC – The Farm

Village Planner Report

Germantown, Wisconsin

Summary

Cindy Shaffer of Shaffer Development, LLC, agent for John B Kohl Survivors Trust, property owner, has requested a consultation with the Plan Commission to obtain feedback concerning a proposed rezoning and creation of a Planned Development District (PDD) for a 240-unit multi-family residential development on 42.30 acres located west of US Highway 41, east of Townline Road and North of Freistadt Road.

Property Location: West of US Highway 41, east of Townline Road, and north of Freistadt Road

Agent/

Property Owner:

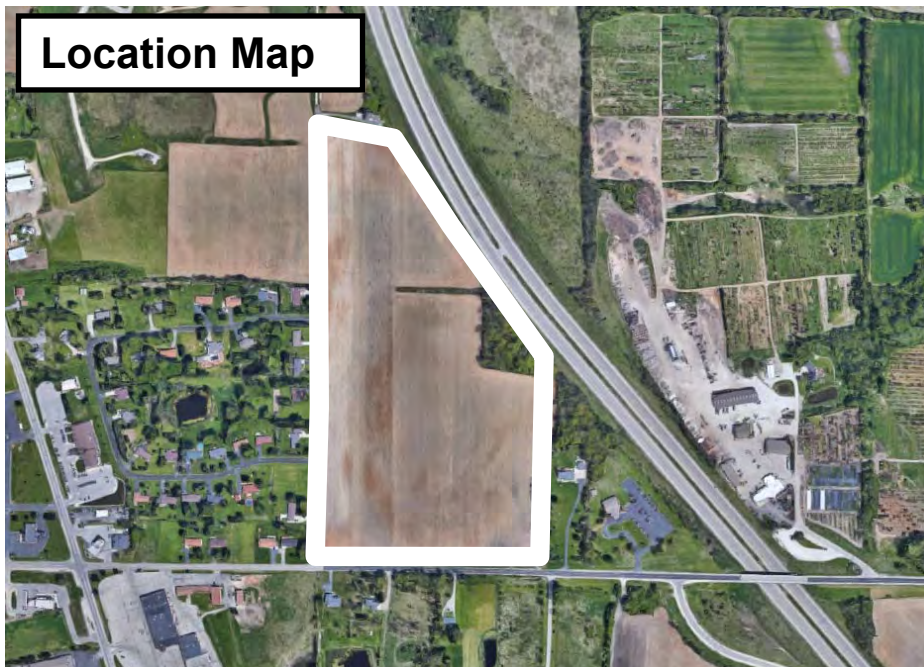
Cindy Shaffer
Shaffer Development, LLC
10046 N Sheridan Drive
Mequon, WI 53092

John B. Kohl Survivors Trust-
Terry Kohl
1412 State Hwy 175
Hubertus, WI 53033

Current Zoning: A-1: Agricultural

Adjacent Land Uses		Zoning
North	Residential	Rd-2
South	Residential	Rs-2 / Rs-3 / A-1
East	Residential/Institutional	Rs-3 / I
West	Residential/Agriculture	Village of Richfield

Location Map



Proposal

Cindy Shaffer of Shaffer Development, LLC, agent for John B Kohl Survivors Trust, property owner, has requested a consultation with the Plan Commission to obtain feedback concerning a proposed rezoning and creation of a Planned Development District (PDD) for a 240-unit multi-family residential development on 42.30 acres located west of US Highway 41, east of Townline Road and North of Freistadt Road.

As detailed in the attached narrative and exhibits, the proposed development is an agricultural neighborhood of approximately 240 rental units located within fifteen (15) two-story, 16-unit, multi-family buildings. Detached covered parking is also provided for both residents and guests. The development would include a working farm, a public market and a farm kitchen. A farm-to-table restaurant is planned for the southwest corner of the site and would be available for residents and the general public. A clubhouse would also be available for residents and include a gathering area, pool, and exercise room.

Shaffer is currently working with single-family home builders to possibly add some single-family and/or two-family owner-occupied buildings on the west side of the property along Townline Road.

Shaffer has provided the following website links to information about the agriculture neighborhood concept and successful projects in the United States:

<https://www.mercurynews.com/2019/01/30/housing-with-a-side-of-veggies-unique-development-approved-in-santa-clara/>

<https://www.multihousingnews.com/post/agrihoods-a-food-real-estate-symbiosis/>

<https://www.desmoinesregister.com/story/money/business/2019/02/14/iowa-agrihood-cumming-des-moines-country-rural-urban-real-estate-home-purchase-land-farm-middlebrook/2702330002/>

<https://www.livecannerydavis.com>

Staff Comment

This area is not served by Village sewer and water utilities and is not a part of the Sewer Service Area (SSA) expansion plan at this time. Shaffer is requesting that the Village create a Tax Increment District for the site to fund the expansion of public water and sewer to the site for this project. Shaffer indicated that the project is not economically feasible if sewer and water are not extended to the site.

The proposed development would require the following permits/approvals by the Village Plan Commission/Board:

- a. 2020 Land Use Plan map amendment
- b. Planned Development District (PDD) Zoning Application

-
- c. Certified Survey Map (CSM)
 - d. Site Plan approval (site development & building plans)

A wetland delineation will also be required given the navigable stream and known wetlands on adjacent parcels and within/near the southeast corner of the subject parcel.

While no formal action is required, Shaffer Development is looking for feedback on the proposed agricultural neighborhood. Issues the Plan Commission should consider and discuss include:

1. Multi-family residential development in this area of the Village (west of and adjacent to US Highway 41)
2. The extension of public water and sewer utilities west of US Highway 41 in this part of the Village and the proximity to the Village of Richfield
3. Viability of an agricultural neighborhood, mixed-used development in the Village



Village of



Germantown

Willkommen

FEES MUST BE PAID AT TIME OF APPLICATION

- ☒ \$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: 7-15-19 Received by: [Signature]

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

Shaffer Development, LLC
Cindy Shaffer
10046 N Sheridan Drive
Mequon, WI 53092

Phone (414) 405-0860

Fax ()

E-Mail cindy@shafferdevelopment.com

PROPERTY OWNER

John B. Kohl Survivors Trust
Terry Kohl
1412 State Hwy 175
Hubertus, WI 53033

Phone (262) 305-1952

2 PROPERTY ADDRESS OR GENERAL LOCATION

NW-SW, Sect. 18, T9N, R20E AND SW-SW, Sect. 18, T9N, R20E

TAX KEY NUMBER

183988 and 183994

3 REZONING REQUEST

FROM Agriculture,
Undeveloped

TO
PUD

4 METES AND BOUNDS LEGAL DESCRIPTION OF PROPERTY – REQUIRED

Attach pages as necessary

NW SW Lying W of HWY 41 (EXC CSM 646+CSM 5396) V1421 P300
SW SW (WXC V179 P185+EXC CSM 3468) V1421 P299

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.

The Farm, A Legacy to The Kohl Family is an agricultural neighborhood that will incorporate two story multi family stacked ranch buildings with single family residential units. A working farm will be part of this multi generational neighborhood. A large Farm House with a commercial kitchen will be used for farm to table dinning, open to the residents of The Farm and the surrounding community.

6 SUPPORTING DOCUMENTATION:

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

7 READ AND INITIAL THE FOLLOWING:

CS 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.

CS 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 be sufficient cause to deny the petition.

CS 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!

[Signature]
Applicant _____ Date
7/14/2019

Termy Kohl 7-14-19
Owner _____ Date
TRUSTEE
Thomas Kohl 7-14-19



September 3, 2019

Jeffrey W. Retzlaff, AICP Director
Village Planner & Zoning Administrator
N112W17001 Mequon Road P.O. Box 337
Germantown, WI 53022

RE: The Farm – A Kohl Family Legacy – Response to Staff Review Comments

Dear Mr. Retzlaff:

Thank you for your review and comments on our application for The Farm. Please see responses below.

1. We are looking for the Village to extend and provide water and sewer to the site. Attached please find a valuation of the project which would generate \$154,469 in yearly property tax revenue. On site wells and community-type wastewater treatments are not economically feasible for this project.
 2. The stacked ranch two story multi - family buildings would be rental units. We are working with some single-family home builders to possibly add some single family or two-family owner-occupied buildings on the west side of the property along Townline Road. These could be single family homes or side by side condominiums.
 3. The market and farm kitchen would be for the residents and also open to the general public. The concept is to have a farm to table restaurant adjacent to the club house that would be open to the general public as well as residents. The club house would be for residents only and would include a gathering area, pool and exercise room.
 4. The food generated from the gardens will be available to the public through the farmers market that will be on site during the summer months and potentially inside if possible.
- 5-7 To be completed based on feedback from consultation.

Sincerely,

Cindy Shaffer

Cindy Shaffer

Owner

Shaffer Development LLC

COLLABORATIVE COMMUNITY DEVELOPMENT SINCE 2001



A SHAFFER DEVELOPMENT COMMUNITY



Collaborative Community Development Since 2001.



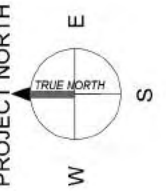
- a** entrance gateway with stone bridge
- b** lower rain garden dry pond area and butterfly garden
- c** upper wet retention pond area
- d** community active play area, dog runs, childrens play, walking trail

- e** community activity building, indoor market, farm kitchen, public parking, and clubhouse with pool
- f** outdoor seating, seasonal fresh restaurant, and fruit tree orchard
- g** CSA style gardens , chicken coop, covered pavilion, and operations

- h** 16 Family Apartments with covered parking for 8 stalls
- i** 8 or 16 stall covered remote and visitor parking
- j** existing hardwood grove, Kohl forest nature trails

- k** vegetable farming, edible crops, wildflower meadows
- l** perimeter native habitat and seasonal flowers,
- m** pocket parks, play structures, resident gardens (perennial and vegetable)

Scheme A Plan





View looking North



Entrance view



Street view with porch entries



Street scene with garages



Typical 16 Family Building

