City of Fitchburg
Planning/Zoning Department
5520 Lacy Road
Fitchburg WI 53711
Phone (608) 270-4200

ADR-24-19

Architectural Design Review Feedback Letter

Issued to: Tara Miller
Issued Date: August 30, 2024
Location: 2747 S SEMINOLE HWY , Fitchburg

This feedback letter contains the comments from our internal departments in regards to your recently submitted Architectural Design & Review Application.
Please read through the feedback and attach any adjusted materials to the form in our OpenGov portal.
Also submit an explanation of the changes you've made in a separate attachment.

We require response to feedback to be submitted within 1 week of issuing of this letter.

Only feedback with a status of Open needs a response.

Planning & Zoning Comments

Submitted by	Date	Status	Comment
Planning	August 2, 2024	**Open**	1. Be prepared to provide an overview of your proposal to the Plan Commission and to be available for questions. In- person or virtual attendance for applicants is permitted. Be sure to contact Deanna Schmidt or Zack Jones in the Planning office for virtual attendance registration in advance of the meeting. Understood. 2. Per the conditional use question as well, how many additional employees/daily customers may be generated by this addition at peak shift? Ten (10) employees at peak operating hours for normal operations, with 75-100 patrons. During tournaments we could have up to 15 employees with 150-200 patrons. 3. Is a shared access path between the site and the Hop Haus site possible/has it been explored? Even a bicycle/pedestrian access would be desirable for connectivity. If possible, a preliminary path shown on the site plan even if "possible path" label, should be explored. We are open to a bicycle/pedestrian path between properties. We will work with the owners of the Hop Haus (whom we spoke to about this earlier this year but did not finalize anything) and include this in our plan. 4. A direct linkage to the Badger State trail is desirable. Will you be exploring that possibility? We would like a linkage to the Badger State trail, we will explore this possibility during the negotiations for the purchase agreement with the developer. 5. When will the potential future sidewalk to be installed to connect to the new multi-use path on Seminole? Consider how neighbors can access the site without auto travel.

This will be explored with the final design plans for staff review and consideration. Court and Cork is dependent on Newcomb's development planning for this given they have a building positioned in front of our building.

6. It could be a beneficial feature to have an attractive path adjacent to the proposed stormwater pond, and some design features to simulate something of a dual facade if direct access is anticipated.
At this time we do not have any plans to add an additional path.

7. Can landscaping be provided along the driveway from Seminole back to this site? Some form of plantings would be desirable to the extent allowable by Public Works.
This will be explored with the final design plans for staff review and consideration in conjunction with Newcomb as the developer of the adjacent buildings and shared driveway.

8. Lighting shall be full cut off or dark sky compliant.
Understood.

9. The patio lighting in the table shows an average FTC of 3 and max of 9. Is that accurate? Lighting should not intrude upon neighboring properties. Understood, we will plan accordingly and update.

10. At 28' mounting height, the parking lot lighting fixtures seem quite tall in comparison with the building height.
Please review.
The mounting height will be lowered.

11.Specify and describe any lighting on the building facade. This will be provided with the final design plans for staff review and consideration

12 Provide cut sheets for the light fixtures. This will be provided with the final design plans for staff review and consideration

13 Can stone be incorporated into the facade similar to the Hop House? We will make an effort to consider the aesthetics of both the Hop Haus and the Newcomb development in selections for the building exterior and landscaping What are the pentagon/floral details shown on the East facade? Can you provide some additional information regarding the precast concrete finish texture? A photo? The details shown on the East façade are imprints of a pickleball into metal material. We intend to add some back lighting behind these imprints which will shine through the holes in the metal.

14 What is the seating capacity of the outdoor patio? This will be provided with the final design plans for staff review and consideration

15 Will public works require a right turn lane into the site? Would a turn lane be necessary coming out of the site? Newcomb is working with Fitchburg Traffic and the traffic engineer to answer this question

16 A shared parking agreement will be needed for the

neighboring undeveloped multi-family property. A shared agreement may also be necessary if the stub in the access drive is utilized by another adjacent neighbor at a later time. Understood

17 Provide bike racks compliant with APBP standards. Understood

18 Where is the detail on page C400? Wade to show

19 The dumpster enclosure shall be of similar materials and design as the building. Provide specifications and elevations. This will be provided with the final design plans for staff review and consideration

20 Landscape Plan: Quaking Aspen is not appropriate tree. Understood

21 City Building and Fire approvals will need to be obtained prior to building permits being issued. Contact mark.mlekush@fitchburgwi.gov Understood

22 Confirm with Public Works if right-of-way and erosion control permits are required. Understood

23 Signage must comply with City Chapter 26 sign code and be similar to what is shown in the plans. Understood

24 Subdivision Improvement Agreement is required. Coordinate with Tracy Foss. This will be provided with the final design plans for staff review and consideration in conjunction with Newcomb as the developer of the adjacent buildings and shared driveway.

25 CSM must be recorded prior to building permit. This is understood.

26 Per Sec. 24-14, a building permit may not be issued prior to substantial completion of public infrastructure.

27

Administration Comments Assessing

Comments

Econ Dev Comments

Finance Comments

July 24, 2024 **Open**

Fire Comments

Parks Comments

Parks	July 24, 2024	**Open**	Parks has no comment on this request at this time. Thank you Scott

PW - General Comments

Tracy Foss	August 2, 2024	**Open**	1. Other than early start permits, building permits for this project may

not be released until the public improvements are substantially complete as defined in State Statutes.
Understood.

2. A 10 foot wide public path along Seminole Hwy is required as part of the public improvements and needs to be labeled on the drawings.

3. Please confirm if the taper lanes are needed on Seminole Hwy. If they are not needed, please remove them. Pending traffic study
4. Add a general note that a r/w permit is required for all work within the right-of-way. All work within the r/w shall conform with the latest edition of the City of Fitchburg Standard Specifications for Public Works Construction.
5. Please discuss the alignment of the proposed driveway in reference to Minong with the City's Transportation Engineer. Adjustments may be required based on this discussion. This will be explored with the final design plans for staff review and consideration in conjunction with Newcomb as the developer of the adjacent buildings and shared driveway.

6. Per City Ordinance private streets need to be at least 24' in width (flow line to flow line) and have either standard C&G or ribbon C&G. In addition, it they need to meet the City's minimum typical street standards in regards to materials and thicknesses.

PW - Stormwater/Erosion Control Comments

Ben Schulte	August 2, 2024	**Open**	The plan shows rerouting stormwater from the S. Seminole Hwy ditch through private property (P-31 to P-30). Means of conveyance across the driveway shall be kept in City ROW. This will be explored with the final design plans for staff review and consideration in conjunction with Newcomb as the developer of the adjacent buildings and shared driveway.

PW - Transportation Comments PW -

Utilities Comments

Tracy Foss	August 2, 2024	**Open**	1. Water impact fees will need to be paid prior to release of any building permits. These fees will be included with the permit fee. Understood, request information or contact for information on these fees. Please provide the total number of employee hours per week at this facility and a detailed description of what this facility will be used for. Total number of employee hours per week is 1,260 (facility is open 7 days week from 7:00am – 10:00pm) Court & Cork's core business will be renting pickleball courts, hosting open play, offering lessons/clinics, and hosting leagues and tournaments. The facility will be open and staffed from 7:00 a.m. to 10:00 p.m. to allow adequate access to the courts. Current plans include 10-12 courts for play, with one championship court that will be used for the final match of tournaments/competitions. There will be seating around the courts and on top of a mezzanine for viewing the courts/play. The facility is designed with uplighting, windows, and garage doors to keep the atmosphere bright and inviting. Leaning in on the social nature of pickleball, Court & Cork will also provide amenities like healthy(er) food options and beverages (alcoholic and non-alcoholic) in a fun and inviting lounge with patio ("Uncorked") where

you can watch play live or catch a game (of any sport) on TV with friends and family. Court & Cork will host leagues, youth programs, fun events, fundraisers, and tournaments.

2. Submit plan and profile drawings for the public water main and sanitary sewer, separate from this submittal, for review and approval. Public water main and sanitary sewer plans will need to be submitted to MMSD and the DNR for approval. Update ADR drawings to reflect the approved public utility plan and profile drawings once they are approved. Understood

3. Label the sizes of all water main, services, and hydrant leads on the plans. Understood

4. Confirm private hydrant needs with the Fire Department. If a private hydrant is required, the mains between the public water main and the private hydrant shall be 8". In addition, private water main between public water main and private hydrants are required to be installed per the latest edition of the City of Fitchburg Standard Specifications for Public Works Construction. Newcomb Company intends to set up a meeting with the fire department to address this as the developer of the adjacent buildings and shared driveway and parking lot.

5. Change General Note 6 on the Utility Sheet (C300) to include "per the latest edition of the".

6. Note the existing house will need to be located on a lot, not an outlot, to remain and be services with municipal sewer. If a lot is created, MMSD fees and Seminole Hwy Interceptor fees will be due for this lot. Regardless, the septic system needs to be abandoned. If this house is unsewered, it will need to be removed. According to Newcomb, “the existing home will be abandoned (no one living in it) upon closing on the site. We will be removing the house at some point in the near future. We have no intention of creating a lot for the house”

7. The City is strongly encouraging property owners to find ways to reduce chloride levels in their wastewater. Costly wastewater treatment plant upgrades will be required if the peak chloride levels are not reduced. MMSD has a grant program available for water softening. For more information in regards to this grant program please visit https://www.madsewer.org/Programs-Initiatives/Chloride-Reduction.

8. Provide the following general notes on Sheet C300:
   a. Per City Ordinance, Contractors are not allowed to operate City owned valves. The Contractor shall call the Fitchburg Utility at 270- 4270 for operation of these valves.
   b. Safe sample results need to be provided to the Fitchburg Utility prior to pressure testing the private water mains.
   c. It is the contractor's responsibility to verify that the existing valves will hold the pressure test prior to connection. The City is not

responsible for any costs incurred due to the contractor not verifying that the existing valve will hold the pressure test prior to connection. If a new valve is required, the applicant will be required to install one at their expense at the point of connection.

City of Fitchburg
Planning/Zoning Department
5520 Lacy Road
Fitchburg WI 53711
Phone (608) 270-4200

CDUS-24-10

Conditional Use Feedback Letter

Issued to: Tara Miller
Issued Date: August 30, 2024
Location: 2747 S SEMINOLE HWY , Fitchburg

This feedback letter contains the comments from our internal departments in regards to your recently submitted Conditional Use Application.
Please read through the feedback and attach any adjusted materials to the form in our OpenGov portal.
Also submit an explanation of the changes you've made in a separate attachment.

We require response to feedback to be submitted within 1 week of issuing of this letter.

Only feedback with a status of Open needs a response.

Planning & Zoning Comments

Submitted by	Date	Status	Comment
Planning	August 2, 2024	**Open**	1. Be prepared to provide an overview of your proposal to the Plan Commission and to be available for questions. In-person or virtual attendance for applicants is permitted. Be sure to contact Deanna Schmidt or Zack Jones in the Planning office for virtual attendance registration in advance of the meeting. Understood. 2. Has a neighborhood meeting been held for the property? Newcomb Construction Co. met with Alders to share an overview of the facility. Court & Cork owners have had conversations with residents. 3. What are the proposed uses? Mentioned during the rezone including social spaces including alcohol sales and potential food service. Will a full kitchen be provided? Full details and provisions should be described in a CUP narrative. Please see updated CUP narrative. Proposed uses are indoor recreation, food & beverage including wine, beer, and canned alcoholic beverages, indoor area for dining and socializing, and an outdoor patio for dining and socializing. Kitchen equipment will include pizza ovens, food prep stations, dishwashers, freezer/coolers, fast cook ovens, and wine & beer dispensers. 4. Will outdoor space be a component of the CUP? Will there be outdoor music, food trucks, yard games, or other such events? Yes; the facility will include an outdoor patio for dining and socializing, including yard games. Owners intend to contract one food truck during tournaments or large events. No live music is anticipated on the outdoor patio. 5. What type of traffic, noise or disturbance to the residential neighbors can be expected with this scale of operation? Court times will be staggered to reduce any sudden influx of players/vehicular traffic. Noise and other disturbances

are not anticipated.
6. What will be the number of employees at peak shift? What will be the number of patrons at peak? What can be expected in regards to parking for both employees and patrons?
Ten (10) employees at peak operating hours for normal operations, with 75-100 patrons. During tournaments we could have up to 15 employees with 150-200 patrons. A need for street parking or an agreement for shared parking with neighboring businesses is anticipated for these times. We are working with Newcomb Construction on methods to increase the number of parking stalls.
7. Describe any available lighting and or security measures existing or proposed on site.
The lighting plan includes fixtures around the building, entry, patio, and parking lot per ordinance. A security and monitoring system will be installed including cameras and alarms.
8. Applicants responsibility to comply with all Public Works and Fire Department requirements.
Understood.
9. Any outstanding fees and assessments must be paid prior to issuance of permits.
Understood.
10. Provide updated site plan for this application.
C100 is resubmitted with this application.

Administration Comments

Assessing Comments

Econ Dev Comments

Finance Comments

	July 24, 2024	**Open**	NO OUTSTANDING

Fire Comments

Parks Comments

Parks	July 24, 2024	**Open**	Parks has no comments on this request at this time. Thank you Scott
Parks	August 5, 2024	**Open**	Parks has no comment on this request at this time. Thank you Scott

PW - General Comments

PW - Stormwater/Erosion Control Comments

PW - Transportation Comments

PW - Utilities Comments

City of Fitchburg Planning/Zoning Department 5520 Lacy Road Fitchburg, WI 53711 (608-270-4200)	**ARCHITECTURAL & DESIGN REVIEW APPLICATION**

Applicant/Contact Person: Pam Hegg

Address: _____ **Phone Number of Contact Person:** 608-628-0058

City, State, Zip Code: _____ **Email of Contact Person:** pam.hegg2@gmail.com

Project Address: 2747 S Seminole Highway **Lot:** _____ **Subdivision:** _____

Project Type: _____ **Multi-Family** X **Commercial** _____ **Industrial** _____ **Other**

_____ **New** _____ **Addition**

Impervious Surface Ratio (ISR): 52% (City Standard: maximum 65% ISR)

All items listed below must be included with the application to be considered complete. If an item is not included with the application, the applicant must provide in writing the basis for not including it. Building and site plans submitted to the Fitchburg Plan Commission for architectural and design review shall contain the following information:

Site Data:

- [X] 1. Lot or property dimensions.
- [X] 2. Orientation (to north).
- [X] 3. Adjacent highways, roads, drive, etc.
- [X] 4. Existing natural features (rivers, ponds, wetlands).
- [X] 5. Existing buildings and/or improvements.
- [X] 6. Existing and proposed site drainage.
- [X] 7. Utility plans, including main/lateral sizes and existing fire hydrants on site or within 300 feet of the site
- [X] 8. ISR shall be indicated on all plans.
- [X] 9. Stormwater management plans and details, including grading plan.
- [X] 10. Lighting plan in footcandles and light fixture cut sheets.

Building:

- [X] 1. Building size, configuration and orientation.
- [X] 2. Distance from lot lines.
- [X] 3. Distance from other buildings, improvements and natural features.
- [X] 4. Location of well, septic tank, drainfield, etc. (if applicable)
- [X] 5. Additional proposed additions or new structures, including trash/recycling enclosure(s).
- [X] 6. Construction type (wood frame, structural steel, etc.).
- [X] 7. Foundation type (full basement, slab on grade, etc.).
- [X] 8. Number of levels.
- [X] 9. Siding/exterior covering type, color, texture, etc.
- [X] 10. Roof type (gable, hip, shed, flat, etc.) and pitch.
- [X] 11. Roofing material type, color, texture, etc.
- [X] 12. Exterior door and window location, size, type, etc.
- [X] 13. Fire protection sprinklers or fire alarm systems.

Ingress, Egress, Parking:

- [X] 1. Location of highway and road access points.
- [X] 2. Location, size, configuration of drivers and walks.
- [X] 3. Number, size, location of parking spaces.
- [X] 4. Location of handicapped parking and accessible building entrances.
- [X] 5. Bicycle rack(s).

Landscaping:

- [x] 1. Location, species, size of existing trees, shrubs, and plantings.
- [x] 2. Location, species, size of proposed plantings.
- [x] 3. Location and size of all paved, seeded/sodded and gravelled areas.
- [x] 4. Location of all retaining walls, fences, berms and other landscape features.

***It is highly recommended that an applicant hold at least one neighborhood meeting prior to submitting an ADR application to identify any concerns or issues of surrounding residents.**

The preceding information is considered to be the minimum information for submission, and the City may require additional information for its review. Any interpretations provided by city officials as the result of submitting the attached information are based on the submitted plans, and any plan changes, may affect the interpretations.

It is the responsibility of the owner/applicant to insure compliance with all local and state requirements. The below signed applicant acknowledges the above information and hereby submits the attached information for the City's Architectural and Design Review Process.

Signed: _____ **Date:** 7/22/24
Applicant or Authorized Agent

***** Application shall be accompanied by one (1) sets of full-size plans, two (2) sets no larger than 11"x17", and one (1) pdf document of the complete submittal to planning@fitchburgwi.gov. Applications are due at least 4 weeks prior to the desired Plan Commission Meeting. The time frame assumes a complete set of plans is provided, and if it is not provided the Plan Commission date will be adjusted.**

FOR CITY USE ONLY

Date Received: _____ **Plan Commission Date:** _____

Comments:

NEWCOMB

Letter of Intent
June 18, 2024

New CSM and Zoning Change Proposal

Proposed and prepared by

Gus Newcomb
999 Fourier Drive
Madison, WI 53717

(608) 833 5220

Civil Engineer / Surveyor	Wyser Engineering 300 E. Front St. Mount Horeb WI 53572

COURT & CORK

Conditional Use Application

City of Fitchburg

June 25, 2024

ADDRESS: *609 Prairie Grass Rd, Oregon, Wi. 53575*

PHONE: *608-628-0058* | **E-MAIL:** *pam.hegg2@gmail.com*

Company Overview

Court & Cork will be a premier pickleball facility in the Madison area. It will provide indoor pickleball courts, programming, and social experiences for the community. Court & Cork will offer memberships and drop-in pickleball court time for people of all ages and skill levels, from avid players looking for competition to casual players looking for a fun and social environment.

Leaning in on the social nature of pickleball, Court & Cork will also provide amenities like healthy(er) food options and beverages (alcoholic and non-alcoholic) in a fun and inviting lounge where you can watch play live or catch a game (of any sport) on TV with friends and family. Court & Cork will be the place to go because of the creative programming, fun events and tournaments, and clean, comfortable environment. There will also be space for wellness service offerings, providing members/customers access to the latest health and fitness trends.

Court & Cork will be more than just a place to play pickleball. It's the…

- **The connection between wellness and recreation—**paddle sports like pickleball are physically engaging but also promote overall wellness. They are a fun way to stay active, improve health, and enhance social interaction.
- **Space for socializing—**Players can enjoy the sports and socialize, connect, and build relationships; it's a great place to meet and have a glass of wine or beer on tap, snack, and relax while watching live play or a game on TV or conversing with others.
- **Commitment to the community—**Our focus is creating a space for the community to gather, host events, learn/develop new skills, and raise money for charity. We will bring people together through league play, member events**,** and youth after-school and summer camp programs.
- **Team Building –** an opportunity for local organizations such as Promega, Sub Zero, Tri-north and others to bring teams in and build camaraderie, teamwork, and support wellness.

Newcomb Builders has met with alders to share a brief overview of their plans, including the Court & Cork facility. Conversations between the Court & Cork owners and residents have resulted in excitement for this facility in the neighborhood.

Indoor Recreation

We strive to provide a vibrant and inclusive space where individuals of all ages and skill levels can engage in active play, enhance their physical well-being, and foster meaningful connections with others. Court & Cork's core business will be renting pickleball courts, hosting open play, offering lessons/clinics, and hosting leagues and tournaments. The facility will be open and staffed from 7:00 a.m. to 10:00 p.m. to allow adequate access to the courts. Current plans include 10-12 courts for play, with one championship court that will be used for the final match of tournaments/competitions. There will be seating around the courts and on top of a mezzanine for viewing the courts/play. The facility is designed with uplighting, windows, and garage doors to keep the atmosphere bright and inviting.

Food and Beverage

The sale of food and beverages is an essential amenity for the business and one of five revenue streams. The building design includes around 2,400 sq/ft of kitchen and dining space, referred to as “Uncorked,” Court & Cork's lounge. The kitchen will make and serve flatbread pizzas, cheese bread, cheese boards, snack bento boxes (veggies, fruit, humus/dips, pita chips, crackers, etc.), and smoothies.

In other parts of the country, it is very common for pickleball facilities to provide food and beverage service, and it has been reported to account for up to 30% of the revenue by pickleball business owners. Based on this, the kitchen is being designed to enable the additional food menu options that can be cooked in a pizza oven or convection oven, which could include (but are not limited to) wings, chicken fingers, open-faced sandwiches, and other frozen foods. These food items would be added based on demand.

The kitchen will be open during core operating hours, 11:00 a.m. – 9:00 p.m., Tuesday – Sunday. There will be grab-and-go snack food and non-alcoholic drinks available for sale during regular business hours, 7:00 a.m. – 10:00 p.m. Offering this amenity sets Court & Cork apart from other pickleball facilities in the area.

Alcohol Sales

The owners of Court & Cork intend to sell wine, beer, and canned/bottled alcoholic beverages during core operating hours, 11:00 a.m.—9:00 p.m., Sunday through Saturday. The sale of mixed drinks would be made available during events and peak hours (M-F 5:00-9:00; S-S 11:00-9:00).

Wine and beer will be sold in self-serve dispensers located within view of the bar and reception desk. Access to the dispensers is only made possible by using an electronic card (like a credit card), which customers will receive after showing an I.D. to a licensed bartender on staff and providing a credit card for payment. The sale of alcohol will only be allowed when the lounge is staffed with a licensed bartender to monitor consumption.

Outdoor Patio

The outdoor patio will include furniture for dining and socializing, a fire pit, and yard games like bag toss. During tournaments or large events, the owners intend to contract one food truck.

Traffic, Noise, Or Disturbance to The Residential Neighbors

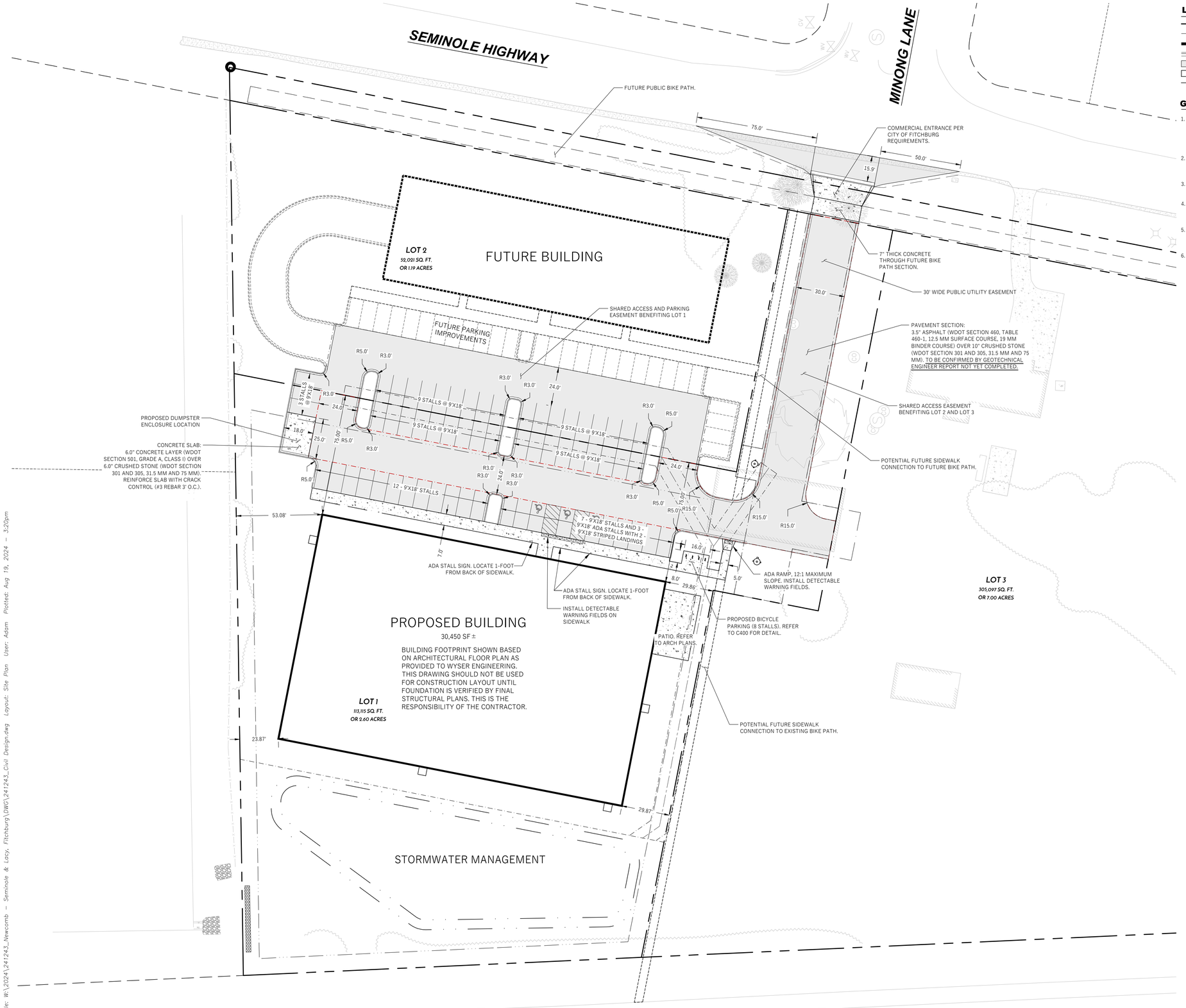
To minimize traffic and noise disturbance, the owners of Court & Cork will stagger the scheduling of court times. This will reduce the sudden influx of players to the facility, which will help the business run more efficiently. The facility is planned to have 12 courts. With four players per court, there could be 48 people playing at once. During open play hours, when there can be six players per court, there could be 52 people playing at once (based on plans to limit to four courts for open play).

Parking, Lighting and Security

Newcomb Builders has dedicated 60 parking stalls for Court & Cork in a shared parking lot with 80 stalls in their site plan. At peak times, as many as ten employees would be working, and the assumption is

that there could be 75-100 patrons (if court utilization is 100% and at least 50% of players stay to enjoy food and beverage before/after play). We anticipate the need for street parking or an agreement with other local businesses to share parking. A request has been made to Newcomb Builders to determine how they might increase the number of parking stalls for the shared parking lot.

The electrical subcontractor's proposed plan accounts for outdoor lighting, which includes fixtures around the building, entryway, patio, and parking lot. A security system and monitoring will be installed, including cameras and alarms



LEGEND (PROPOSED)

- PROPOSED PROPERTY BOUNDARY
- EASEMENT
- BUILDING FOOTPRINT
- 18" CURB AND GUTTER
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- STORMWATER TREATMENT FACILITY

NORTH

GENERAL NOTES

1. UNDERLYING SITE CONTOURS AND INFORMATION BASED ON TOPOGRAPHIC & UTILITY DATA AS SURVEYED BY WYSER ENGINEERING ON JUNE 6, 2024. WYSER ENGINEERING SHALL NOT BE HELD RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY ARISE AS A RESULT OF ERRONEOUS OR INCOMPLETE INFORMATION PROVIDED BY OTHERS. CONTRACTOR TO CONFIRM ALL ELEVATIONS, GENERAL DRAINAGE AND EARTHWORK REQUIREMENTS PRIOR TO CONSTRUCTION.
2. THE BENCHMARK LOCATIONS ARE SHOWN FOR REFERENCE ONLY ON THIS PLAN. THE BENCHMARKS SHALL BE VALIDATED BY LICENSED LAND SURVEYOR PRIOR TO CONSTRUCTION. CONTRACTOR ASSUMES RISK ASSOCIATED WITH BENCHMARK ELEVATIONS UNTIL CONFIRMED.
3. CONTRACTOR TO OBTAIN APPROPRIATE PERMITS FOR STREET OPENINGS & TO WORK WITHIN THE CITY'S LAND IF REQUIRED.
4. WYSER ENGINEERING SHALL BE HELD HARMLESS AND DOES NOT WARRANT ANY DEVIATIONS BY THE OWNER OR CONTRACTOR FROM THE APPROVED CONSTRUCTION PLANS THAT MAY RESULT IN DISCIPLINARY ACTIONS BY REGULATORY AGENCIES.
5. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS WITHIN THE PLAN BECOME APPARENT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
6. ALL MUNICIPAL UTILITY CONNECTIONS, WORK IN ROW, PUBLIC OUTLOTS AND PUBLIC EASEMENTS SHALL BE IN ACCORDANCE WITH CITY OF FITCHBURG STANDARD SPECIFICATIONS.

SITE INFORMATION BLOCK (LOT 1):

SITE ADDRESS: SEMINOLE HIGHWAY
SITE ACREAGE: 113,115 SQ.FT. (2.60 AC)
USE OF PROPERTY: INDOOR RECREATION
ZONING: GENERAL BUSINESS DISTRICT (B-G)

SETBACKS:
FRONT YARD: 20 FEET
REAR YARD: 10 FEET
SIDE YARD: 10 FEET

PARKING REQUIRED: 50
12 COURTS X 2.67 PARKING GENERATION AT PEAK HOUR = 32 (PER ITE LAND USE CODE 490 PARKING GENERATION RATE)
2,900 SQ.FT CAFE/BAR (6 STALLS PER 1,000 SQ.FT.) = 18

TOTAL NUMBER OF PARKING STALLS PROVIDED: 60 (18 SHARED)
NUMBER OF STALLS DESIGNATED ACCESSIBLE: 3

TOTAL NUMBER OF BIKE STALLS: 8

EXISTING IMPERVIOUS SURFACE AREA: 0 SQ.FT.

NEW IMPERVIOUS SURFACE AREA (FUTURE): 56,058 SQ.FT. (57,005 SQ.FT.)
ROOFTOP: 30,450 SQ.FT.
PAVED (FUTURE): 25,608 SQ.FT. (26,555 SQ.FT.)
PARKING: 22,208 SQ.FT.
SIDEWALK: 3,400 SQ.FT.
FUTURE: 947 SQ.FT.

MAXIMUM IMPERVIOUS SURFACE: 75% (84,836 SQ.FT.)
PROPOSED IMPERVIOUS SURFACE: 50%

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

WYSER ENGINEERING

COURT AND CORK PICKLEBALL
CITY OF FITCHBURG, DANE COUNTY, WI
SEMINOLE HIGHWAY
FITCHBURG, WI 53719

Sheet Title: SITE PLAN

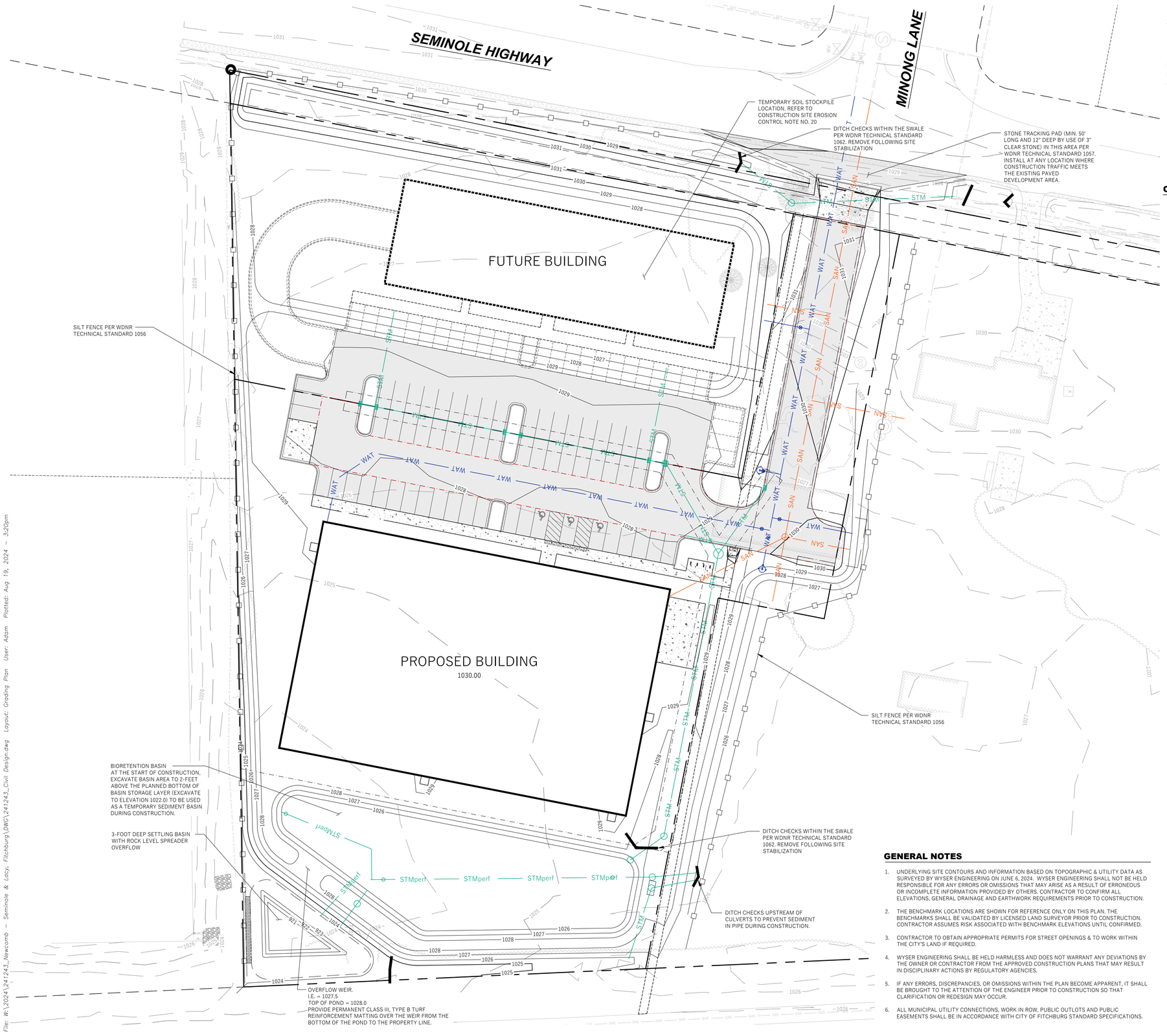
Revisions:

No.	Date:	Description:

Graphic Scale: 0' 20' 40' 60'

Wyser Number	24-1243
Set Type	REVIEW
Date Issued	08/20/2024
Sheet Number	C100

File: W:\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\DWG\241243_Civil Design.dwg Layout: Site Plan User: Adam Plotted: Aug 19, 2024 - 3:20pm



LEGEND (PROPOSED)

- PROPERTY BOUNDARY
- EASEMENT
- BUILDING FOOTPRINT
- 18" CURB AND GUTTER
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- 1180 PROPOSED MAJOR CONTOUR
- 1181 PROPOSED MINOR CONTOUR
- STM PROPOSED STORM SEWER
- SILT FENCE
- INLET PROTECTION
- DITCH CHECK
- 1181.25 EP SPOT GRADE
- DRAINAGE GRADE BREAK
- 1.0% DRAINAGE ARROW

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CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS

1. POST WDNR CERTIFICATE OF PERMIT COVERAGE AND MUNICIPAL EROSION CONTROL PERMITS ON SITE AND MAINTAIN UNTIL CONSTRUCTION ACTIVITIES HAVE CEASED, THE SITE IS STABILIZED, AND A NOTICE OF TERMINATION IS FILED WITH WDNR.
2. KEEP A COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
3. ENGINEER / AUTHORITIES WITH JURISDICTION HAVE THE RIGHT TO REQUIRE CONTRACTOR TO IMPLEMENT ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY.CONTRACTOR MUST NOTIFY THE CITY OF FITCHBURG BUILDING INSPECTOR TWO (2) WORKING DAYS IN ADVANCE OF ANY SOIL DISTURBANCE ACTIVITIES.
4. SUBMIT PLAN REVISIONS OR AMENDMENTS TO THE WDNR AT LEAST 5 DAYS PRIOR TO FIELD IMPLEMENTATION.
5. THE SITE CONTRACTOR IS RESPONSIBLE FOR ROUTINE SITE INSPECTIONS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER. KEEP INSPECTION REPORTS ON-SITE AND MAKE THEM AVAILABLE UPON REQUEST.
6. INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
7. WHEN POSSIBLE: PRESERVE EXISTING VEGETATION (ESPECIALLY ADJACENT TO SURFACE WATERS), MINIMIZE LAND-DISTURBING CONSTRUCTION ACTIVITY ON SLOPES OF 20% OR MORE, MINIMIZE SOIL COMPACTION, AND PRESERVE TOPSOIL.
8. REFER TO THE WDNR STORMWATER CONSTRUCTION TECHNICAL STANDARDS AT http://dnr.wi.gov/topic/stormwater/standards/const_standards.html.
9. INSTALL PERIMETER EROSION CONTROLS AND ROCK TRACKING PAD CONSTRUCTION ENTRANCE(S) PRIOR TO ANY LAND-DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRUBBING. USE WDNR TECHNICAL STANDARD STONE TRACKING PAD AND TIRE WASHING #1057 FOR ROCK CONSTRUCTION ENTRANCE(S).
10. INSTALL INLET PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON INLET INSTALLATION. COMPLY WITH WDNR TECHNICAL STANDARD STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES #1060 AND DANE COUNTY REQUIREMENTS FOR FRAMED INLET PROTECTION.
11. CONTRACTOR TO PROVIDE SOLID LID OR METAL PLATE ON ALL OPEN MANHOLES DURING CONSTRUCTION TO MINIMIZE SEDIMENT FROM ENTERING THE STORM SEWER SYSTEM.
12. STAGE CONSTRUCTION GRADING ACTIVITIES TO MINIMIZE THE CUMULATIVE EXPOSED AREA. CONDUCT TEMPORARY GRADING FOR EROSION CONTROL PER WDNR TECHNICAL STANDARD TEMPORARY GRADING PRACTICES FOR EROSION CONTROL #1067.
13. PERMITTING OF GROUNDWATER DEWATERING IS THE RESPONSIBILITY OF THE CONTRACTOR. GROUNDWATER DEWATERING IS SUBJECT TO A DNR WASTEWATER DISCHARGE PERMIT AND A DNR HIGH CAPACITY WELL APPROVAL IF CUMULATIVE PUMP CAPACITY IS 70 GPM OR MORE.
14. PROVIDE ANTI-SCOUR PROTECTION AND MAINTAIN NON-EROSIVE FLOW DURING DEWATERING. PERFORM DEWATERING OF ACCUMULATED SURFACE RUNOFF IN ACCORDANCE WITH WDNR TECHNICAL STANDARD DE-WATERING #1061.
15. COMPLETE AND STABILIZE SEDIMENT BASINS/TRAPS OR WET PONDS PRIOR TO MASS LAND DISTURBANCE TO CONTROL RUNOFF DURING CONSTRUCTION. REMOVE SEDIMENT AS NEEDED TO MAINTAIN 3 FEET OF DEPTH TO THE OUTLET, AND PROPERLY DISPOSE OF SEDIMENT REMOVED DURING MAINTENANCE (REFER TO NR 528). CONSTRUCT AND MAINTAIN THE SEDIMENT BASIN PER WDNR TECHNICAL STANDARD SEDIMENT BASIN #1064 AND SEDIMENT TRAP # 1063.
16. INSTALL AND MAINTAIN SILT FENCING PER WDNR TECHNICAL STANDARD SILT FENCE #1056. REMOVE SEDIMENT FROM BEHIND SILT FENCES AND SEDIMENT BARRIERS BEFORE SEDIMENT REACHES A DEPTH THAT IS EQUAL TO ONE-HALF OF THE FENCE AND/OR BARRIER HEIGHT.
17. REPAIR BREAKS AND GAPS IN SILT FENCES AND BARRIERS IMMEDIATELY. REPLACE DECOMPOSING STRAW BALES (TYPICAL BALE LIFE IS 3 MONTHS). LOCATE, INSTALL, AND MAINTAIN STRAW BALES PER WDNR TECHNICAL STANDARD DITCH CHECKS #1062.
18. INSTALL AND MAINTAIN FILTER SOCKS IN ACCORDANCE WITH WDNR TECHNICAL STANDARD INTERIM MANUFACTURED PERIMETER CONTROL AND SLOPE INTERRUPTION PRODUCTS # 1071.
19. IMMEDIATELY STABILIZE STOCKPILES AND SURROUND STOCKPILES AS NEEDED WITH SILT FENCE OR OTHER PERIMETER CONTROL IF STOCKPILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
20. IMMEDIATELY STABILIZE ALL DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR LONGER. BETWEEN SEPTEMBER 15 AND OCTOBER 15: STABILIZE WITH MULCH, TACKIFIER, AND A PERENNIAL SEED MIXED WITH WINTER WHEAT, ANNUAL OATS, OR ANNUAL RYE, AS APPROPRIATE FOR REGION AND SOIL TYPE OCTOBER 15 THROUGH COLD WEATHER: STABILIZE WITH A POLYMER AND DORMANT SEED MIX, AS APPROPRIATE FOR REGION AND SOIL TYPE.
21. STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.
22. SWEEP/CLEAN UP ALL SEDIMENT/TRASH THAT MOVES OFF-SITE DUE TO CONSTRUCTION ACTIVITY OR STORM EVENTS BEFORE THE END OF THE SAME WORKDAY OR AS DIRECTED BY THE AUTHORITIES WITH JURISDICTION. SEPARATE SWEPT MATERIALS (SOILS AND TRASH) AND DISPOSE OF APPROPRIATELY.
23. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST PER WDNR TECHNICAL STANDARD DUST CONTROL ON CONSTRUCTION SITES # 1068.
24. PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, OR OTHER CONSTRUCTION MATERIALS) AND DO NOT ALLOW THESE MATERIALS TO BE CARRIED BY RUNOFF INTO THE RECEIVING CHANNEL.
25. COORDINATE WITH THE AUTHORITIES WITH JURISDICTION TO UPDATE THE LAND DISTURBANCE PERMIT TO INDICATE THE ANTICIPATED OR LIKELY DISPOSAL LOCATIONS FOR ANY EXCAVATED SOILS OR CONSTRUCTION DEBRIS THAT WILL BE HAULED OFF-SITE FOR DISPOSAL. THE DEPOSITED OR STOCKPILED MATERIAL NEEDS TO INCLUDE PERIMETER SEDIMENT CONTROL MEASURES (SUCH AS SILT FENCE, HAY BALES, FILTER SOCKS, OR COMPACTED EARTHEN BERMS).
26. FOR NON-CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, PROVIDE CLASS CLASS I TYPE B EROSION CONTROL MATTING. INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD NON-CHANNEL EROSION MAT #1052.
27. FOR CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED AREAS, PROVIDE CLASS II TYPE B EROSION CONTROL MATTING UNLESS OTHERWISE SPECIFIED ON THE PLAN. INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD CHANNEL EROSION MAT #1053.
28. MAKE PROVISIONS FOR WATERING DURING THE FIRST 8 WEEKS FOLLOWING SEEDING OR PLANTING OF DISTURBED AREAS WHENEVER MORE THAN 7 CONSECUTIVE DAYS OF DRY WEATHER OCCUR.
29. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE WDNR REMEDIATION AND WASTE MANAGEMENT REQUIREMENTS FOR HANDLING AND DISPOSING OF CONTAMINATED MATERIALS. SITE-SPECIFIC INFORMATION FOR AREAS WITH KNOWN OR SUSPECTED SOIL AND/OR GROUNDWATER CONTAMINATION CAN BE FOUND ON WDNR'S BUREAU OF REMEDIATION AND REDEVELOPMENT RACKING SYSTEM (BRRTS) PUBLIC DATABASE AT: http://dnr.wi.gov/botw/
30. INSTALL AND MAINTAIN A CONCRETE WASHOUT BASIN PER EPA 833-F-11-006: https://www3.epa.gov/npdes/pubs/concretewashout.pdf. REQUIRE USE BY ALL CONCRETE CONTRACTORS. LIQUID MAY BE REUSED IN CONCRETE MIXING, EVAPORATED, OR DISPOSED OF AS WASTEWATER.

GENERAL NOTES

1. UNDERLYING SITE CONTOURS AND INFORMATION BASED ON TOPOGRAPHIC & UTILITY DATA AS SURVEYED BY WYSER ENGINEERING ON JUNE 6, 2024. WYSER ENGINEERING SHALL NOT BE HELD RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY ARISE AS A RESULT OF ERRONEOUS OR INCOMPLETE INFORMATION PROVIDED BY OTHERS. CONTRACTOR TO CONFIRM ALL ELEVATIONS, GENERAL DRAINAGE AND EARTHWORK REQUIREMENTS PRIOR TO CONSTRUCTION.
2. THE BENCHMARK LOCATIONS ARE SHOWN FOR REFERENCE ONLY ON THIS PLAN. THE BENCHMARKS SHALL BE VALIDATED BY LICENSED LAND SURVEYOR PRIOR TO CONSTRUCTION. CONTRACTOR ASSUMES RISK ASSOCIATED WITH BENCHMARK ELEVATIONS UNTIL CONFIRMED.
3. CONTRACTOR TO OBTAIN APPROPRIATE PERMITS FOR STREET OPENINGS & TO WORK WITHIN THE CITY'S LAND IF REQUIRED.
4. WYSER ENGINEERING SHALL BE HELD HARMLESS AND DOES NOT WARRANT ANY DEVIATIONS BY THE OWNER OR CONTRACTOR FROM THE APPROVED CONSTRUCTION PLANS THAT MAY RESULT IN DISCIPLINARY ACTIONS BY REGULATORY AGENCIES.
5. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS WITHIN THE PLAN BECOME APPARENT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
6. ALL MUNICIPAL UTILITY CONNECTIONS, WORK IN ROW, PUBLIC OUTLOTS AND PUBLIC EASEMENTS SHALL BE IN ACCORDANCE WITH CITY OF FITCHBURG STANDARD SPECIFICATIONS.

GRADING, SEEDING & RESTORATION NOTES

1. ALL GRADES SHOWN ARE FINAL FINISHED SURFACE GRADES.
2. AREAS TO BE SEEDED SHALL HAVE A MINIMUM 6 INCHES TOPSOIL UNLESS OTHERWISE NOTED.
3. AREAS NOT RESTORED WITH EROSION MATTING OR OTHER STABILIZATION MEASURES SHALL BE STABILIZED WITH MULCH.
4. APPLY ANIONIC POLYMER TO DISTURBED AREAS IF EROSION BECOMES PROBLEMATIC.
5. CONTRACTOR SHALL CHISEL-PLOW OR DEEP TILL WITH DOUBLE TINES THE STORMWATER MANAGEMENT FACILITY JUST PRIOR TO SEEDING AND MULCHING TO PROMOTE INFILTRATION.
6. MULCH SHALL BE WEED-FREE STRAW AND SHALL BE INSTALLED AT THE RATE OF 2 TONS PER ACRE PER SECTION 627 OF "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION" (WISDOT 2014)
7. PERMANENT SEEDING SHALL NOT OCCUR BETWEEN SEPTEMBER 15TH AND APRIL 15TH. ALTERNATE SEEDING/PLANTING METHODS AND/OR EROSION PROTECTION MAY BE NECESSARY FOR SEEDING/PLANTING THAT OCCURS DURING THAT TIME. COORDINATE WITH THE OWNER AS NECESSARY.
8. TEMPORARY STABILIZATION SHALL CONSIST OF ONE OR MORE OF THE FOLLOWING OPTIONS:
   a. TEMPORARY SEEDING CONSISTING OF ANNUAL RYE GRASS APPLIED AT A RATE OF 1.5 LBS PER 1000 SQUARE FEET,
   b. WISDOT PAL CLASS I TYPE B URBAN EROSION CONTROL MAT.

WYSER ENGINEERING

SEMINOLE HIGHWAY
FITCHBURG, WI 53719

COURT AND CORK PICKLEBALL

CITY OF FITCHBURG, DANE COUNTY, WI

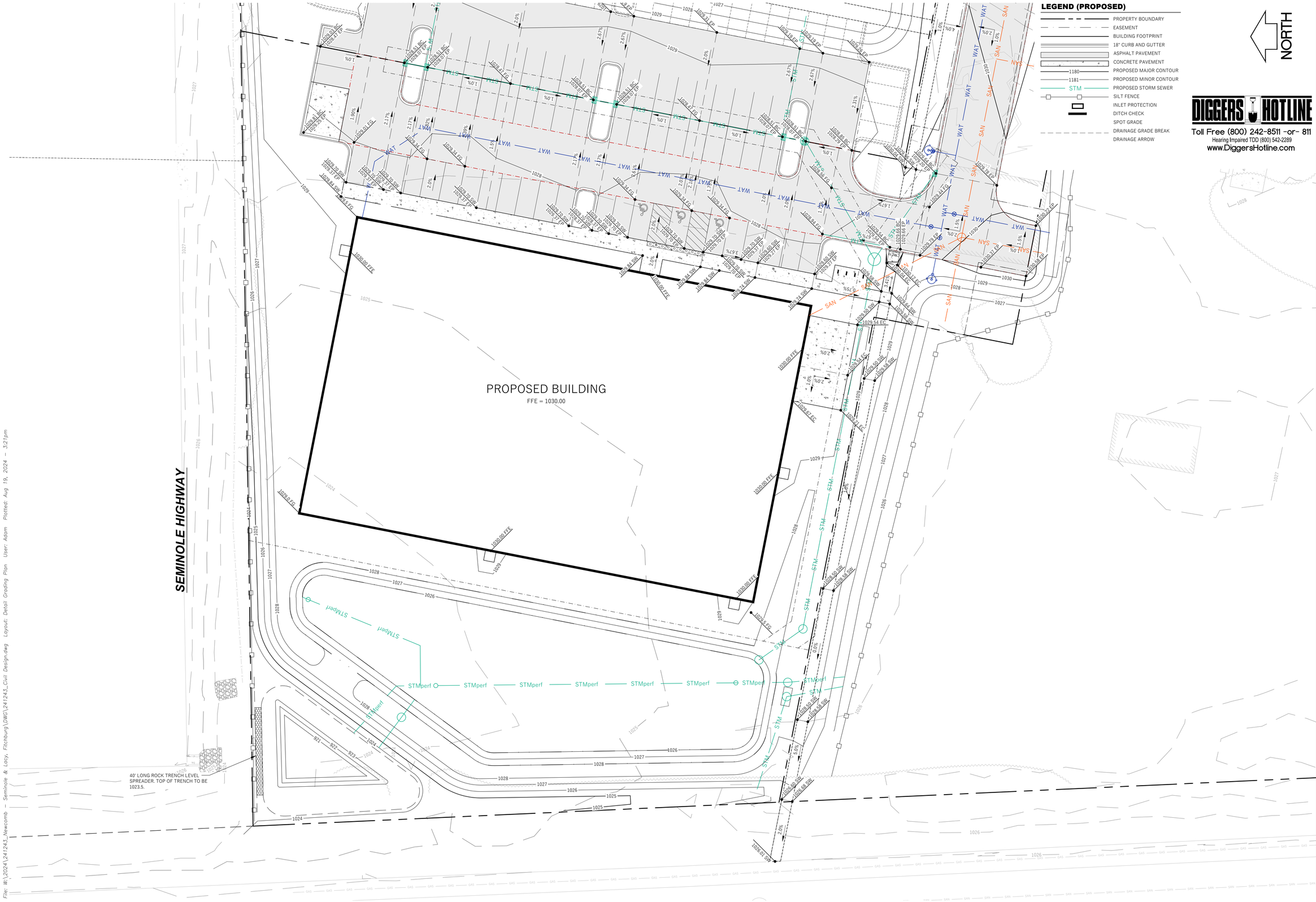
Sheet Title: GRADING & EROSION CONTROL PLAN

Revisions:

No.	Date:	Description:

Graphic Scale	0' 20' 40' 60'
Wyser Number	24-1243
Set Type	REVIEW
Date Issued	08/20/2024
Sheet Number	C200

File: W:\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\DWG\241243_Civil Design.dwg Layout: Grading Plan User: Adam Plotted: Aug 19, 2024 - 3:20pm



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WYSER ENGINEERING
SEMINOLE HIGHWAY
FITCHBURG, WI 53719

COURT AND CORK PICKLEBALL
CITY OF FITCHBURG, DANE COUNTY, WI

Sheet Title: DETAIL GRADING PLAN

Revisions:

No.	Date:	Description:

Graphic Scale	0' 20' 40' 60'
Wyser Number	24-1243
Set Type	REVIEW
Date Issued	08/20/2024
Sheet Number	C201

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SEMINOLE HIGHWAY

FUTURE BUILDING

NOTE: ANY FUTURE DISCHARGE TO THE STORM SEWER SYSTEM MUST BE ABOVE ELEVATION 1028 TO MAINTAIN PRESSURE FLOW AWAY FROM THE BUILDING. CONNECTION BELOW THAT ELEVATION ARE SUBJECT TO BACKFLOW FROM THE REGIONAL STORMWATER BASIN.

PROPOSED BUILDING
FFE = 1030.00

LEGEND (PROPOSED)

- PROPERTY BOUNDARY
- EASEMENT
- BUILDING FOOTPRINT
- 18" CURB AND GUTTER
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- 1180 — PROPOSED MAJOR CONTOUR
- 1181 — PROPOSED MINOR CONTOUR
- STM — PROPOSED STORM SEWER
- SILT FENCE
- INLET PROTECTION
- DITCH CHECK
- 1181.25 EP — SPOT GRADE
- DRAINAGE GRADE BREAK
- 1.0% — DRAINAGE ARROW

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WYSER ENGINEERING

COURT AND CORK PICKLEBALL

CITY OF FITCHBURG, DANE COUNTY, WI

SEMINOLE HIGHWAY
FITCHBURG, WI 53719

Sheet Title:
DETAIL GRADING PLAN

Revisions:

No.	Date:	Description:

Graphic Scale 0' 20' 40' 60'

Wyser Number	24-1243
Set Type	REVIEW
Date Issued	08/20/2024
Sheet Number	C202

File: W:\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\DWG\241243_Civil Design.dwg Layout: Detail Grading Plan (2) User: Adam Plotted: Aug 19, 2024 - 3:21pm

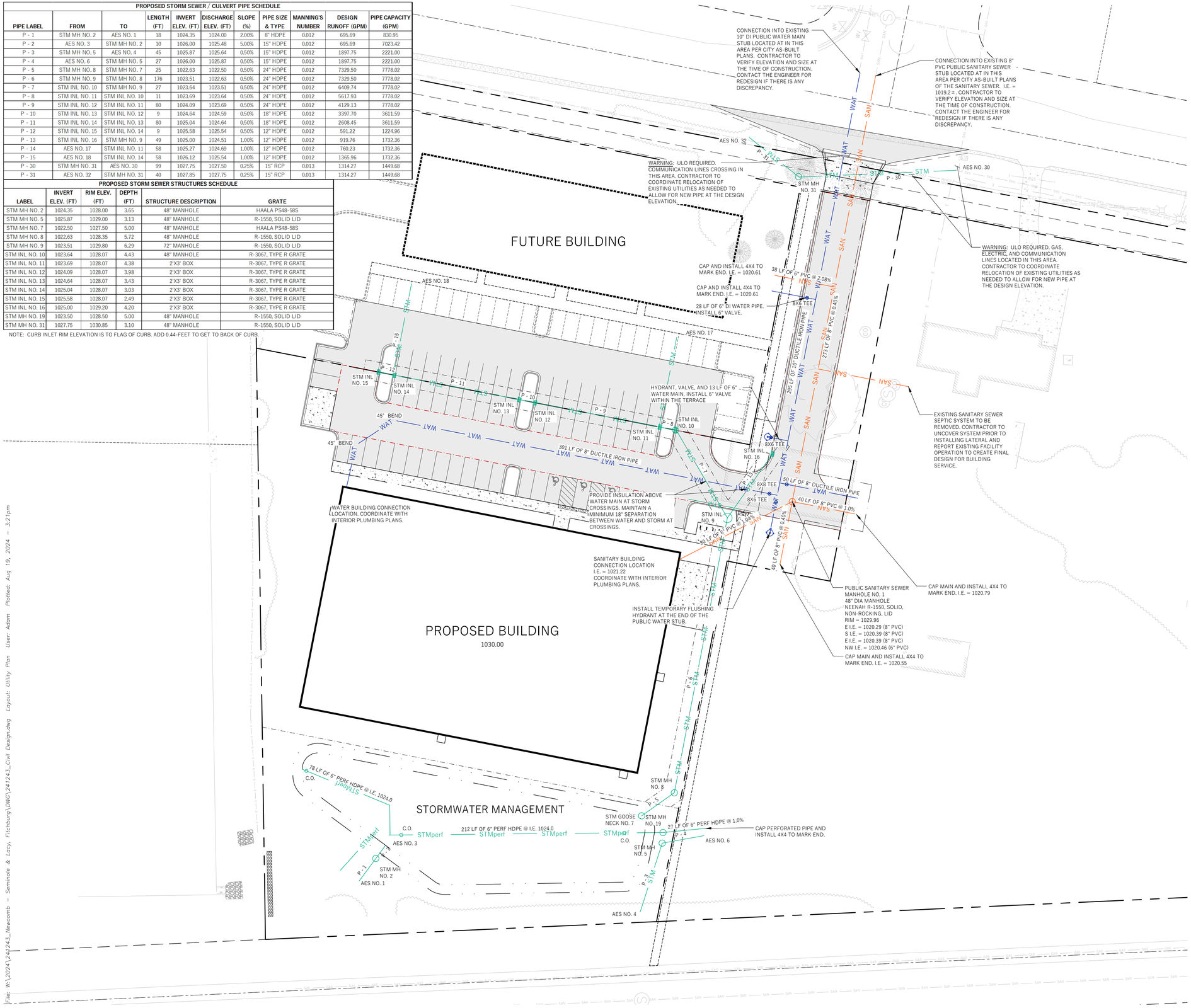
PROPOSED STORM SEWER / CULVERT PIPE SCHEDULE

PIPE LABEL	FROM	TO	LENGTH (FT)	INVERT ELEV. (FT)	DISCHARGE ELEV. (FT)	SLOPE (%)	PIPE SIZE & TYPE	MANNING'S NUMBER	DESIGN RUNOFF (GPM)	PIPE CAPACITY (GPM)
P - 1	STM MH NO. 2	AES NO. 1	18	1024.35	1024.00	2.00%	8" HDPE	0.012	695.69	830.95
P - 2	AES NO. 3	STM MH NO. 2	10	1026.00	1025.48	5.00%	15" HDPE	0.012	695.69	7023.42
P - 3	STM MH NO. 5	AES NO. 4	45	1025.87	1025.64	0.50%	15" HDPE	0.012	1897.75	2221.00
P - 4	AES NO. 6	STM MH NO. 5	27	1026.00	1025.87	0.50%	15" HDPE	0.012	1897.75	2221.00
P - 5	STM MH NO. 8	STM MH NO. 7	25	1022.63	1022.50	0.50%	24" HDPE	0.012	7329.50	7778.02
P - 6	STM MH NO. 9	STM MH NO. 8	176	1023.51	1022.63	0.50%	24" HDPE	0.012	7329.50	7778.02
P - 7	STM INL NO. 10	STM MH NO. 9	27	1023.64	1023.51	0.50%	24" HDPE	0.012	6409.74	7778.02
P - 8	STM INL NO. 11	STM INL NO. 10	11	1023.69	1023.64	0.50%	24" HDPE	0.012	5617.93	7778.02
P - 9	STM INL NO. 12	STM INL NO. 11	80	1024.09	1023.69	0.50%	24" HDPE	0.012	4129.13	7778.02
P - 10	STM INL NO. 13	STM INL NO. 12	9	1024.64	1024.59	0.50%	18" HDPE	0.012	3397.70	3611.59
P - 11	STM INL NO. 14	STM INL NO. 13	80	1025.04	1024.64	0.50%	18" HDPE	0.012	2608.45	3611.59
P - 12	STM INL NO. 15	STM INL NO. 14	9	1025.58	1025.54	0.50%	12" HDPE	0.012	591.22	1224.96
P - 13	STM INL NO. 16	STM MH NO. 9	49	1025.00	1024.51	1.00%	12" HDPE	0.012	919.76	1732.36
P - 14	AES NO. 17	STM INL NO. 11	58	1025.27	1024.69	1.00%	12" HDPE	0.012	760.23	1732.36
P - 15	AES NO. 18	STM INL NO. 14	58	1026.12	1025.54	1.00%	12" HDPE	0.012	1365.96	1732.36
P - 30	STM MH NO. 31	AES NO. 30	99	1027.75	1027.50	0.25%	15" RCP	0.013	1314.27	1449.68
P - 31	AES NO. 32	STM MH NO. 31	40	1027.85	1027.75	0.25%	15" RCP	0.013	1314.27	1449.68

PROPOSED STORM SEWER STRUCTURES SCHEDULE

LABEL	INVERT ELEV. (FT)	RIM ELEV. (FT)	DEPTH (FT)	STRUCTURE DESCRIPTION	GRATE
STM MH NO. 2	1024.35	1028.00	3.65	48" MANHOLE	HAALA PS48-58S
STM MH NO. 5	1025.87	1029.00	3.13	48" MANHOLE	R-1550, SOLID LID
STM MH NO. 7	1022.50	1027.50	5.00	48" MANHOLE	HAALA PS48-58S
STM MH NO. 8	1022.63	1028.35	5.72	48" MANHOLE	R-1550, SOLID LID
STM MH NO. 9	1023.51	1029.80	6.29	72" MANHOLE	R-1550, SOLID LID
STM INL NO. 10	1023.64	1028.07	4.43	48" MANHOLE	R-3067, TYPE R GRATE
STM INL NO. 11	1023.69	1028.07	4.38	2'X3' BOX	R-3067, TYPE R GRATE
STM INL NO. 12	1024.09	1028.07	3.98	2'X3' BOX	R-3067, TYPE R GRATE
STM INL NO. 13	1024.64	1028.07	3.43	2'X3' BOX	R-3067, TYPE R GRATE
STM INL NO. 14	1025.04	1028.07	3.03	2'X3' BOX	R-3067, TYPE R GRATE
STM INL NO. 15	1025.58	1028.07	2.49	2'X3' BOX	R-3067, TYPE R GRATE
STM INL NO. 16	1025.00	1029.20	4.20	2'X3' BOX	R-3067, TYPE R GRATE
STM MH NO. 19	1023.50	1028.50	5.00	48" MANHOLE	R-1550, SOLID LID
STM MH NO. 31	1027.75	1030.85	3.10	48" MANHOLE	R-1550, SOLID LID

NOTE: CURB INLET RIM ELEVATION IS TO FLAG OF CURB. ADD 0.44-FEET TO GET TO BACK OF CURB.



LEGEND (PROPOSED)

- PROPOSED PROPERTY BOUNDARY
- EASEMENT
- BUILDING FOOTPRINT
- 18" CURB AND GUTTER
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- WAT — PROPOSED WATER MAIN
- SAN — PROPOSED SANITARY SEWER
- STM — PROPOSED STORM SEWER
- GAS — PROPOSED GAS SERVICE (DESIGN BY OTHERS)
- E — PROPOSED ELECTRIC SERVICE (DESIGN BY OTHERS)
- STORMWATER TREATMENT FACILITY
- DRAINAGE GRADE BREAK
- 1.0% — DRAINAGE ARROW

NORTH

GENERAL NOTES

1. UNDERLYING SITE CONTOURS AND INFORMATION BASED ON TOPOGRAPHIC & UTILITY DATA AS SURVEYED BY WYSER ENGINEERING ON JUNE 6, 2024. WYSER ENGINEERING SHALL NOT BE HELD RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY ARISE AS A RESULT OF ERRONEOUS OR INCOMPLETE INFORMATION PROVIDED BY OTHERS. CONTRACTOR TO CONFIRM ALL ELEVATIONS, GENERAL DRAINAGE AND EARTHWORK REQUIREMENTS PRIOR TO CONSTRUCTION.
2. THE BENCHMARK LOCATIONS ARE SHOWN FOR REFERENCE ONLY ON THIS PLAN. THE BENCHMARKS SHALL BE VALIDATED BY LICENSED LAND SURVEYOR PRIOR TO CONSTRUCTION. CONTRACTOR ASSUMES RISK ASSOCIATED WITH BENCHMARK ELEVATIONS UNTIL CONFIRMED.
3. CONTRACTOR TO OBTAIN APPROPRIATE PERMITS FOR STREET OPENINGS & TO WORK WITHIN THE CITY'S LAND IF REQUIRED.
4. WYSER ENGINEERING SHALL BE HELD HARMLESS AND DOES NOT WARRANT ANY DEVIATIONS BY THE OWNER OR CONTRACTOR FROM THE APPROVED CONSTRUCTION PLANS THAT MAY RESULT IN DISCIPLINARY ACTIONS BY REGULATORY AGENCIES.
5. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS WITHIN THE PLAN BECOME APPARENT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
6. ALL MUNICIPAL UTILITY CONNECTIONS, WORK IN ROW, PUBLIC OUTLOTS AND PUBLIC EASEMENTS SHALL BE IN ACCORDANCE WITH CITY OF FITCHBURG STANDARD SPECIFICATIONS.

UTILITY NOTES

1. DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
2. 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.
3. CONTRACTOR SHALL VERIFY ALL ELEVATIONS, LOCATIONS, AND SIZES OF SANITARY, WATER AND STORM LATERALS AND CHECK ALL UTILITY CROSSINGS FOR CONFLICTS.
4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH ENGINEERING PLANS DESIGNED TO MEET ORDINANCES AND REQUIREMENTS OF THE MUNICIPALITY AND WISDOT, WISDSPS, AND WDNR.
5. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR:
   - EXAMINING ALL SITES 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.
9. 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.
10. ANY SANITARY SEWER , SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE. NO BLASTING IS ALLOWED WITHIN 30 FEET OF EXISTING UTILITIES.
11. ALL PRIVATE INTERCEPTOR WATER MAIN AND WATER SERVICES SHALL BE INSTALLED WITH A 6' MINIMUM BURY. PROVIDE INSULATION ABOVE PIPES WITH LESS THAN 5' OF GROUND COVER.
12. GRANULAR BACKFILL MATERIALS ARE REQUIRED IN ALL UTILITY TRENCHES UNDER SIDEWALKS AND PROPOSED PAVED AREAS (UNLESS OTHERWISE SPECIFIED BY A GEOTECHNICAL ENGINEER). ALL UTILITY TRENCH BACKFILL SHALL BE COMPACTED PER SPECIFICATIONS. ALL PAVEMENT PATCHING SHALL COMPLY WITH THE CITY OF FITCHBURG STANDARD SPECIFICATIONS. ADDITIONAL PAVEMENT MILLING AND OVERLAY MAY BE REQUIRED BY PERMIT.
13. CONTRACTOR SHALL NOTIFY THE MUNICIPAL PUBLIC WORKS DEPARTMENT A MINIMUM OF 48 HOURS BEFORE CONNECTING TO PUBLIC UTILITIES.
14. ALL NON-METALLIC BUILDING SEWER AND WATER SERVICES MUST BE ACCOMPANIED BY MEANS OF LOCATING UNDERGROUND PIPE. TRACER WIRE VALVE BOXES SHALL BE INSTALLED ON ALL LATERALS AND AS INDICATED ON THESE PLANS.
15. ALL, EXTERIOR CLEANOUTS SHALL BE PROVIDED WITH A FROST SLEEVE IN ACCORDANCE WITH SPS 382.34(5)(a)b AND SPS 384.30(2)(c).
16. ALL PRIVATE PLUMBING MATERIALS SHALL CONFORM TO SPS 384.30.
17. ALL PRIVATE PIPE JOINTS SHALL BE INSTALLED PER SPS 384.40.
18. ALL PRIVATE WATER PIPE, INCLUDING DEPTH AND SERRATION REQUIREMENTS, SHALL BE IN ACCORDANCE WITH SPS 382.40(8).
19. THE CONTRACTOR SHALL ALLOW 10 WORKING DAYS FOR THE CONSTRUCTION OF GAS MAINS WHEN SCHEDULING THE WORK AND SHALL NOT RESTRICT ACCESS TO THE GAS MAIN CONTRACTOR OR OTHER UTILITY COMPANIES.
20. INLET CASTINGS SHALL BE SET TO GRADE PRIOR TO AND SEPARATE FROM THE POURING OF THE CONCRETE CURB AND GUTTER. IS IS REQUIRED THAT THREE FEET OF CONCRETE CURB AND GUTTER ON EACH SIDE OF THE INLET SHALL BE POURED BY HAND, NOT THROUGH THE USE OF A CURB MACHINE. THE INLET CASTING SHALL BE SET TO GRADE ON A BED OF MORTAR WHICH SHALL BE A MINIMUM OF TWO INCHES THICK. THE INLET SHALL BE PLACED ON THE MORTAR BED AND SHALL BE ADJUSTED TO GRADE BY APPLYING DIRECT PRESSURE TO THE CASTING. ONCE THE CASTING ADJUSTMENT IS COMPLETE, THREE FEET OF CURB AND GUTTER ON EACH SIDE OF THE CASTING SHALL BE POURED BY HAND.
21. CONTRACTOR SHALL VERIFY AND COORDINATE ALL UTILITY CONNECTIONS WITH THE BUILDING PRIOR TO CONSTRUCTION.
22. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO BE IN CONFORMANCE WITH THE CITY EROSION CONTROL AND STORMWATER ORDINANCE, AND DNR ADMINISTRATIVE RULE NR 216 AT ALL TIMES.

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FITCHBURG, WI 53719

COURT AND CORK PICKLEBALL
CITY OF FITCHBURG, DANE COUNTY, WI

Sheet Title: UTILITY PLAN

Revisions:

No.	Date:	Description:

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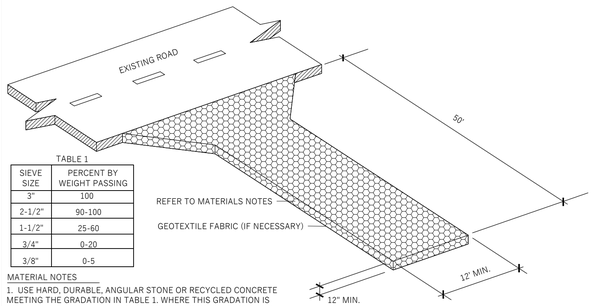


TABLE 1

SIEVE SIZE	PERCENT BY WEIGHT PASSING
3"	100
2-1/2"	90-100
1-1/2"	25-60
3/4"	0-20
3/8"	0-5

MATERIAL NOTES

1. USE HARD, DURABLE, ANGULAR STONE OR RECYCLED CONCRETE MEETING THE GRADATION IN TABLE 1. WHERE THIS GRADATION IS NOT AVAILABLE, MEET THE GRADATION IN WISCONSIN DEPARTMENT OF TRANSPORTATION (DOT) STANDARD SPECIFICATION, SECTION 312 SELECT CRUSHED MATERIAL. USE MATERIAL SUBSTANTIALLY FREE FROM DIRT, DEBRIS, STEEL, VEGETABLE MATTER, AND OTHER DELETERIOUS MATERIAL. PLACE THE AGGREGATE IN A LAYER AT LEAST 12 INCHES THICK.

2. THE TRACKING PAD SHALL BE UNDERLAIN WITH A WDOT TYPE R GEOTEXTILE FABRIC WHERE WARRANTED BASED ON SOIL TYPE OR HIGH GROUNDWATER.

INSTALLATION NOTES

1. INSTALLATION SHALL CONFORM WITH THE REQUIREMENTS OF WDNR CONSERVATION PRACTICE STANDARD 1057.

2. INSTALL THE TRACKING PAD ACROSS THE FULL WIDTH OF THE ACCESS POINT, OR RESTRICT EXITING TRAFFIC TO A DEDICATED EGRESS LANE WITH A DRIVING SURFACE AT LEAST 12 FEET WIDE.

3. DIMENSIONS OF THE TRACKING PAD SHALL BE MINIMUM AS NOTED ON THE FIGURE ABOVE.

4. DIVERT SURFACE FLOWS AWAY FROM TRACKING PADS OR CONVEY FLOW UNDER AND/OR AROUND USING CULVERTS AND SWALES. DIRECT RUNOFF FROM TRACKING PADS TO SEDIMENT CONTROL PRACTICES.

5. DO NOT COMPACT AGGREGATE PRIOR TO USE. COMPACTION, GROUTING, OR OTHER MEANS OF CREATING A SMOOTH SURFACE COMPROMISE THE EFFECTIVENESS OF THE TRACKING PAD.

6. TRACKING PAD SHALL BE REMOVED OR INCORPORATED INTO GRAVEL DRIVEWAY ONLY AFTER CONSTRUCTION IS COMPLETE AND THE SITE HAS BEEN STABILIZED.

INSPECTION & MAINTENANCE NOTES

1. STONE TRACKING PADS SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24 HOUR PERIOD.

2. MONITOR AND MAINTAIN DEVICES TO MINIMIZE SHIFTING, RUTTING OF ADJACENT SURFACES, AND STRUCTURAL FAILURE. MAINTAIN A LOOSENED, ROUGH SURFACE BY SCRAPING, LOOSENING, OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.

2. ADDITIONAL AGGREGATE SHALL BE PLACED IF THE TRACKING PAD BECOMES BURIED OR IF SEDIMENT IS NOT BEING REMOVED EFFECTIVELY FROM THE VEHICLE TIRES.

3. A MINIMUM 30-FEET WIDE BY 50-FEET LONG BY 12-INCH THICK PAD SHALL BE MAINTAINED AT ALL TIMES. ADD STONE AS NEEDED TO MAINTAIN THE MINIMUM PAD THICKNESS.

4. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.

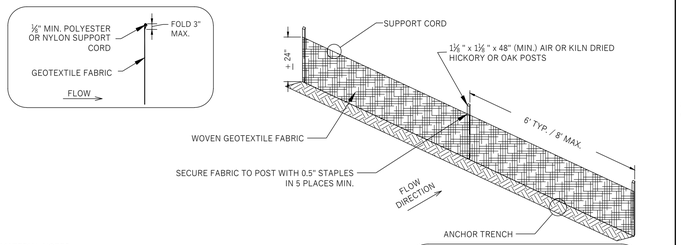
5. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING AT THE END OF EACH WORKING DAY.

6. REMOVE STONES LODGED BETWEEN THE TIRES OF DUAL WHEEL VEHICLES PRIOR TO LEAVING THE CONSTRUCTION SITE.

7. MAINTENANCE SHALL BE COMPLETED AS SOON AS POSSIBLE WITH CONSIDERATION FOR SITE CONDITIONS.

8. REPLACE DAMAGED OR CRUSHED CULVERTS UNDER TRACKING PAD.

CONSTRUCTION ENTRANCE (STONE TRACKING PAD)



MATERIAL NOTES

1. GEOTEXTILE FABRIC SHALL BE WOVEN AND SHALL CONFORM TO THE MATERIAL REQUIREMENTS LISTED IN SECTION 628 OF THE WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, 2003 EDITION.

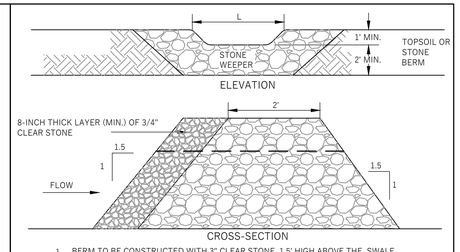
INSTALLATION NOTES

1. INSTALLATION SHALL CONFORM WITH THE REQUIREMENTS OF WDNR CONSERVATION PRACTICE STANDARD 1056.
2. CONSTRUCT THE SILT FENCE IN AN ARC WITH THE ENDS POINTING UPSLOPE TO AVOID EROSION AROUND THE ENDS OF THE FENCE.
3. FAILURE TO PROPERLY ANCHOR SILT FENCE COULD RESULT IN WATER AND SEDIMENT RELEASE BENEATH THE SILT FENCE. PROPERLY SECURE THE SILT FENCE INTO THE ANCHOR TRENCH.
4. CONSTRUCT THE FENCE FROM A CONTINUOUS ROLL OF GEOTEXTILE TO AVOID JOINTS. WHERE JOINTS ARE NECESSARY, OVERLAP TO THE NEXT POST OR WRAP ADJOINING FABRICS TOGETHER AROUND THE JOINT POST AND TIGHTLY FASTEN.
5. SILT FENCE SHALL NOT BE USED IN AREAS OF CONCENTRATED FLOW.

INSPECTION & MAINTENANCE NOTES

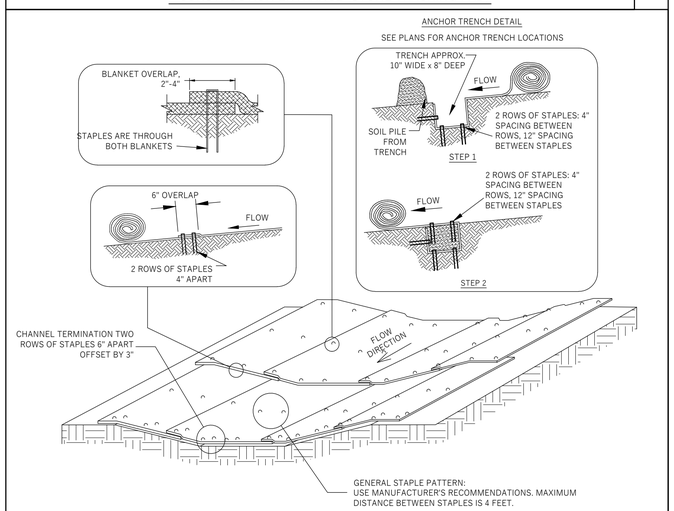
1. AT A MINIMUM, PERFORM INSPECTIONS WEEKLY AND WITHIN 24 HOURS OF PRECIPITATION EVENTS PRODUCING 0.5 INCHES OR MORE OF RAINFALL.
2. INSPECT FENCES FOR DAMAGE TO STAKES AND FABRIC, UNDERCUTTING, EXCESSIVE SEDIMENT ACCUMULATION (GREATER THAN ½ OF THE FENCE HEIGHT), AND INDICATIONS OF SCOUR AROUND THE EDGES.
3. REPAIR OR REPLACE SILT FENCE WITHIN 24 HOURS OF IDENTIFYING AND DEFICIENCIES.

SILT FENCE



1. BERM TO BE CONSTRUCTED WITH 3" CLEAR STONE, 1.5' HIGH ABOVE THE SWALE BOTTOM AND LEVEL WITH THE CREST.
2. EXTEND BERM ACROSS SWALE TO MEET SWALE SIDE SLOPES GRADES. WHERE SWALE IS LESS THAN 1.5' DEEP, REDUCE BERM HEIGHT TO 1.0', WITH A 4' LENGTH.
3. INSTALL GEOTEXTILE FABRIC SAS UNDER CLEAR STONE.

DITCH CHECK



MATERIAL NOTES

1. ONLY PRODUCTS LISTED IN THE WISCONSIN DEPARTMENT OF TRANSPORTATION EROSION CONTROL PRODUCT ACCEPTABILITY LIST (PAL) ARE ACCEPTABLE FOR USE.
2. STAPLES USED FOR CLASS I TYPES A & B MATS SHALL BE 1-2 INCH WIDE, U-SHAPED, MADE OF NO.11 (3.05mm) OR LARGER DIAMETER STEEL WIRE, AND NOT LESS THAN 6 INCHES LONG FOR FIRM SOILS AND 12 INCHES LONG FOR LOOSE SOILS.

INSTALLATION NOTES

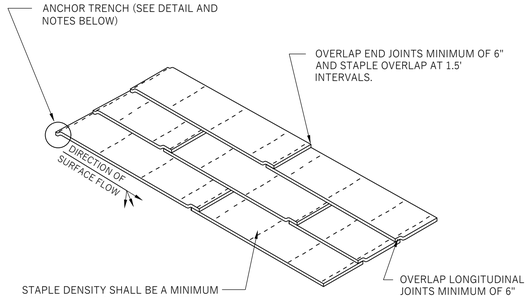
1. EROSION CONTROL REVEGETATIVE MATS (ECRM) SHALL BE INSTALLED AFTER TOPSOIL AND SEED HAVE BEEN PLACED.
2. INSTALLATION OF ECRM SHOULD BE COORDINATED WITH PERMANENT RESTORATION PRACTICES.
3. INSTALLATION SHALL CONFORM WITH WDNR CONSERVATION PRACTICE STANDARD 1053.
4. ALL PRODUCTS SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. THIS STANDARD DETAIL IS AN EXAMPLE OF TYPICAL INSTALLATION GUIDANCE.
5. MATS SHALL BE IN FIRM AND CONTINUOUS CONTACT WITH THE SOIL.
6. IF SECTIONS OF ECRM NEED TO BE OVERLAPPED, ENSURE THAT THE OVERLAP IS FACING DOWNSTREAM TO PREVENT WATER FROM FLOWING BENEATH THE ECRM.

INSPECTION & MAINTENANCE NOTES

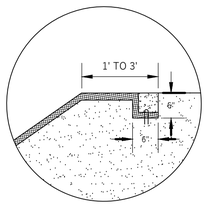
1. INSTALL ADDITIONAL ANCHORING IN AREAS OF OBSERVED RILLING AND CONCENTRATED FLOW BENEATH THE EROSION MAT. IF RILLING IS SEVERE ENOUGH TO PREVENT VEGETATION ESTABLISHMENT, REMOVE EROSION MAT, REGRADE, COMPACT, RE-SEED, AND REPLACE THE SECTION OF MAT.
2. IF PRODUCTS WITH PLASTIC NETTING ARE USED, REMOVE NETTING OR REPLACE MAT IF SEPARATION OF THE NETTING FROM THE MAT IS OBSERVED.
3. ALL MAINTENANCE ACTIVITIES SHOULD OCCUR AS SOON AS POSSIBLE WITH CONSIDERATION OF SITE CONDITIONS.

EROSION CONTROL MAT (CHANNELS)

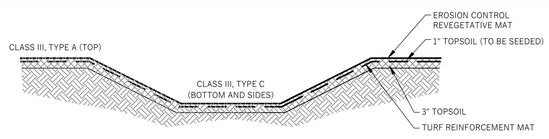
EROSION CONTROL BLANKET(SEEDED AREAS) ON SIDE SLOPES OF 3:1 OR GREATER.
BIO-DEGRADABLE, DOUBLE NETTED, LIGHT DUTY (WisDOT CLASS 1 TYPE B)



ANCHOR TRENCH
1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT
5. BLANKET LENGTH SHALL NOT EXCEED 100' WITHOUT AN ANCHOR TRENCH



EROSION CONTROL BLANKET INSTALLATION



NOTE: VARIATION ON INSTALLATION PROCEDURES MAY OCCUR. REFER TO MANUFACTURER'S RECOMMENDED INSTALLATION GUIDELINES.

TURF REINFORCEMENT INSTALLATION DETAIL

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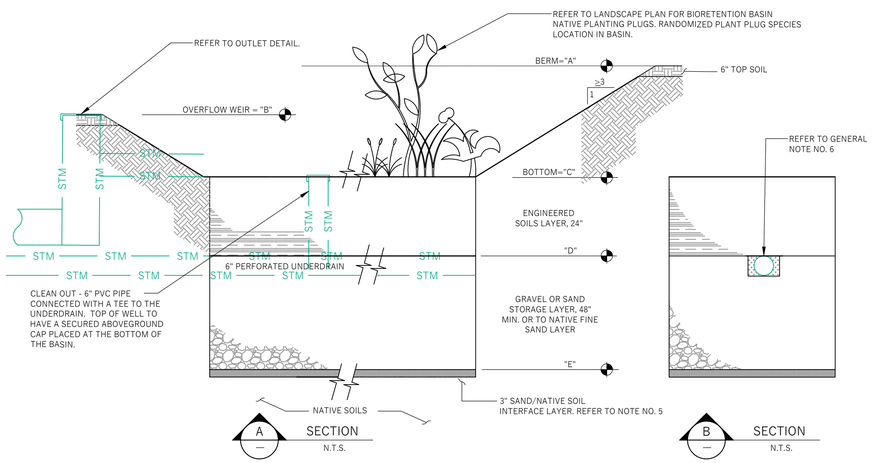


	REFERENCE	SOIL DEPTH	SOIL TYPE	INFILTRATION RATE	LIMITING LAYER
BIORETENTION BASIN 1	TP-3	1020.5-1016.8	Fine Sand	0.5	NONE

	BIORETENTION BASIN 1
A	1028.0
B	1027.5
C	1026.0
D	1024.0
E	1020.0

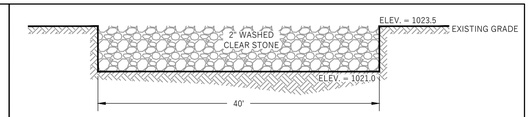
GENERAL NOTES:

1. ALL CONSTRUCTION PRACTICES SHALL MEET THE SPECIFICATIONS OF THE WDNR TECHNICAL STANDARD 1004 - BIORETENTION FOR INFILTRATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF THIS STANDARD AND CONSTRUCT THE BIORETENTION DEVICE IN ACCORDANCE WITH THE REQUIREMENTS OUTLINED THEREIN.
2. CONTRACTOR SHALL INSTALL NATIVE PLANT PLUGS IN THE BASIN AND INSTALL A CLASS II EROSION CONTROL MAT (OVERLAPPED AND ANCHORED WITH MIN. 6" LONG HARDWOOD STAKES). CUT AN "X" IN THE MATTING AND AUGER DOWN TO PLACE APPROPRIATE PLANTING PLUGS EVERY 12 INCHES ON CENTER.
3. CONTRACTOR SHALL INSTALL 24" OF ENGINEERED SOIL CONSISTING OF: 70% ASTM C33 SAND AND 30% CERTIFIED COMPOST (SEE GENERAL NOTE 4).
4. CERTIFIED COMPOST SHALL CONSIST OF: >40% ORGANIC MATTER, <60% ASH CONTENT, pH OF 6-8, AND MOISTURE CONTENT OF 35-50% BY WEIGHT.
5. SAND/NATIVE SOIL INTERFACE LAYER SHALL BE FORMED BY A LAYER OF SAND 3 INCHES DEEP, WHICH IS VERTICALLY MIXED WITH THE NATIVE SOIL TO A DEPTH OF 2-4 INCHES. A CONSTRUCTION REPRESENTATIVE MUST BE ON SITE DURING OVER EXCAVATION TO APPROVE OF THE DEPTH AND SOIL TYPES.
6. FILTER FABRIC SHALL BE PLACED ABOVE THE PERFORATED PIPE, BETWEEN THE PEA GRAVEL AND THE ENGINEERED SOIL, A WIDTH OF 4 FEET CENTERED OVER THE FLOW LINE OF THE PIPE.
7. ANNUAL RYE GRASS SHALL BE SEEDED AT 40 LB/ACRE WITH THE SEED MIX IN THE AREAS SURROUNDING THE BASIN, ON SIDE SLOPES, AND OVER ANY LAND THAT DISCHARGES INTO THE BASIN FOR EROSION CONTROL WHEN BASIN IS BROUGHT ON-LINE. ROOTSTOCK AND PLUGS ARE REQUIRED TO ESTABLISH VEGETATION AT THE INVERT OF THE BASIN.
8. RUNOFF MUST INFILTRATE THOUGH THE ENTIRE BASIN WITHIN 48-HOURS AND ALL STANDING WATER DISSIPATED WITHIN 24-HOURS. BASINS UNABLE TO MAINTAIN THESE RATES MUST BE DEEP TILLED, REGRADED, AND IF NECESSARY REPLANTED TO RESTORE ORIGINAL INFILTRATION RATES.
9. ALL WORK TO BE CONDUCTED IN CONFORMANCE WITH APPLICABLE LOCAL, REGIONAL, AND STATE STORMWATER STANDARDS FOR THE PROJECT SITE AS APPROVED BY THE REGULATORY ENGINEER.
10. REFER TO LANDSCAPE PLAN FOR PLANTING REQUIREMENTS.

INFILTRATION DEVICES ARE DESIGNED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR), COUNTY, MUNICIPALITY, AND ENGINEERING STANDARD OF CARE. ALL DESIGNATED INFILTRATION AREAS (e.g. RAIN GARDENS, INFILTRATION BASINS, BIORETENTION DEVICES) SHALL BE FENCED PRIOR TO CONSTRUCTION AND REMAIN UNDISTURBED AND PROTECTED DURING THE CONSTRUCTION OF PROPOSED SITE IMPROVEMENTS. PROPOSED BIORETENTION DEVICES SHALL NOT BE CONSTRUCTED UNTIL THE DEVICE'S CONTRIBUTING WATERSHED AREA MEETS ESTABLISHED VEGETATION REQUIREMENTS SET FORTH WITHIN THE RESPECTIVE WDNR TECHNICAL STANDARDS. IF THE LOCATION OF THE INFILTRATION AREA CONFLICTS WITH CONSTRUCTION STAGING AND/OR CONSTRUCTION TRAFFIC AND IS DISTURBED, COMPACTION MITIGATION WILL BE REQUIRED AT THE CONTRACTOR'S EXPENSE.

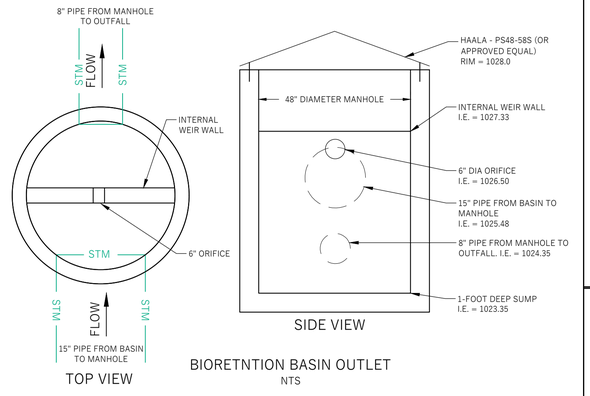
THE CONTRACTOR IS REQUIRED TO PROVIDE QUALIFIED STAFF FOR INSPECTION AND OBSERVATION OF THE CONSTRUCTION ACTIVITIES RELATING TO ALL JOB SITE REGULATORY COMPLIANCE INCLUDING THE PROTECTION AND CONSTRUCTION OF ALL STORMWATER MANAGEMENT FEATURES. ANY OBSERVATION OF PLAN OR SITE DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

BIORETENTION DEVICE



NOTE: TRENCH TO HAVE A 2' WIDE FLUSH TOP AT ELEVATION 1023.35

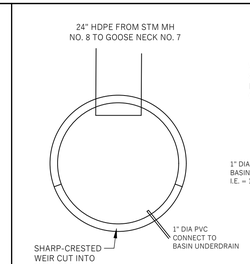
LEVEL SPREADER

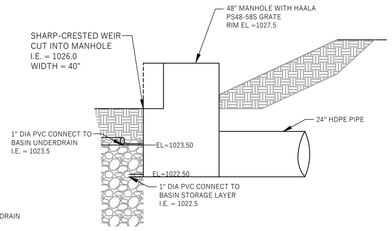


BIORETNTION BASIN OUTLET
NTS

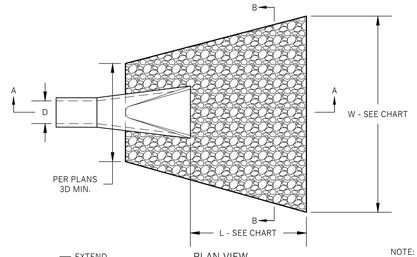
NOTE: OVERFLOW SHALL BE REINFORCED WITH TURF REINFORCED MAT (TRM) - CLASS III, TYPE C BY PYRAMAT OR APPROVED EQUAL. TRM SHALL BE INTALLED PER MANUFACTURER'S RECOMMENTDATIONS.

BIORETENTION BASIN OVERFLOW WEIR
NTS

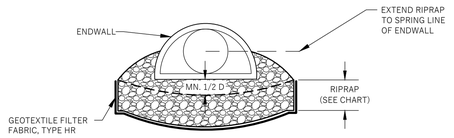




STORM SEWER GOOSE NECK NO. 7



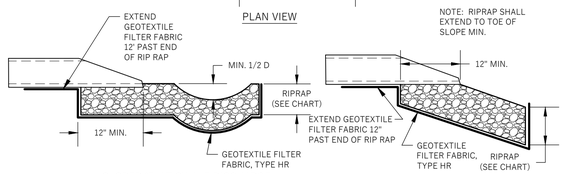
PLAN VIEW



CROSS SECTION B-B

STRUCTURE	W	L	DEPTH	TYPE
STM AE NO. 1	3.8'	2.67'	1.5'	LIGHT RIPRAP
STM AE NO. 4	7.1'	5.0'	1.5'	LIGHT RIPRAP
STM MH NO. 7	11.3'	8.0'	1.7'	LIGHT RIPRAP
STM AE NO. 30	7.1'	5.0'	1.5'	LIGHT RIPRAP

RIP RAP AND ENDWALL



SLOPED/FLAT SWALE DISCHARGE AND FLAT POND DISCHARGE

SLOPED POND DISCHARGE

CROSS SECTION A-A

1) JOINT TIES SHALL BE INSTALLED AT THE LAST (DOWNSTREAM) TWO JOINTS ON ANY PIPE RUN ENDING IN AN APRON ENDWALL

WYSER ENGINEERING

SEMINOLE HIGHWAY
FITCHBURG, WI 53719

COURT AND CORK PICKLEBALL
CITY OF FITCHBURG, DANE COUNTY, WI

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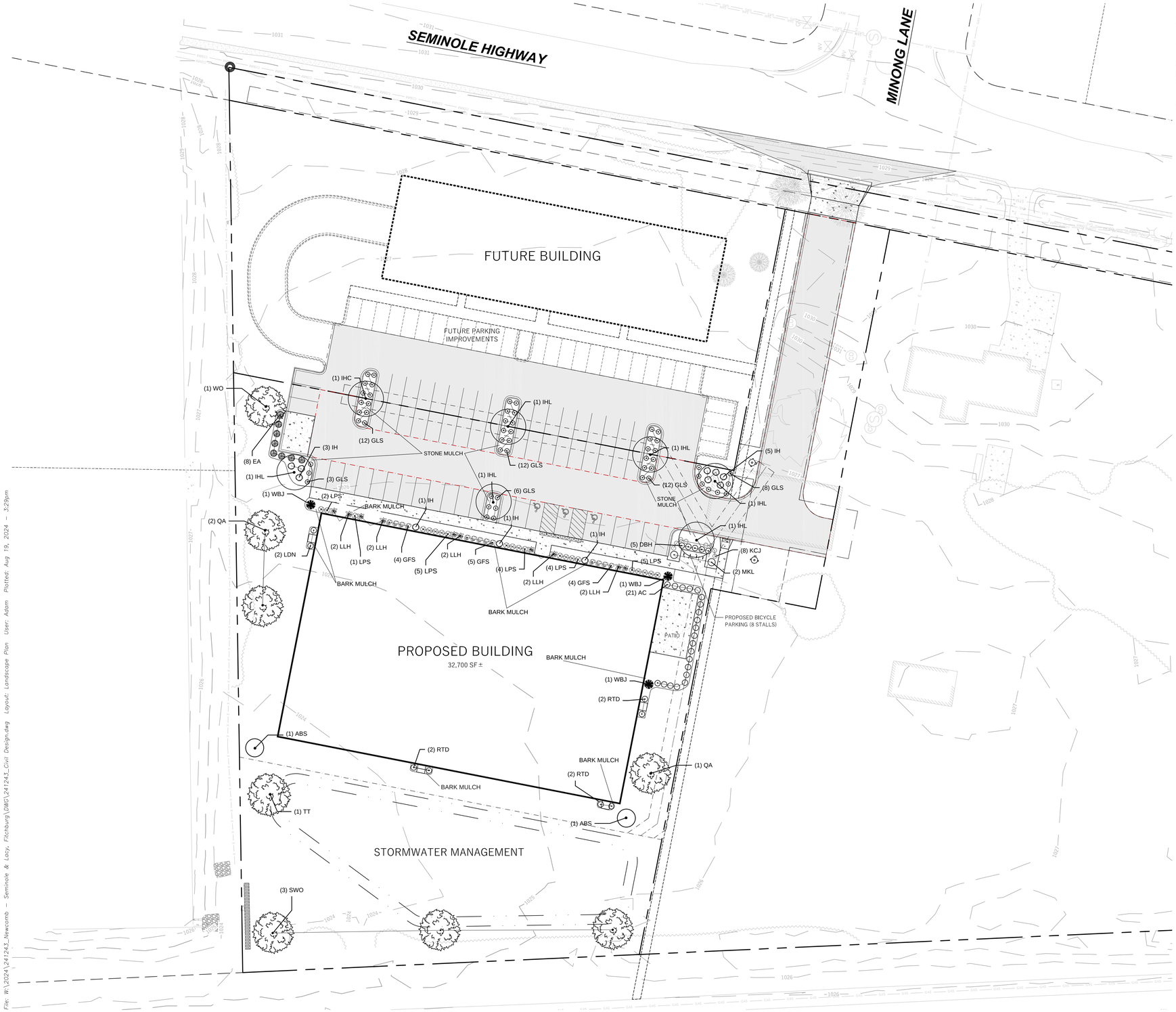

LEGEND (PROPOSED)

- PROPOSED PROPERTY BOUNDARY
- EASEMENT
- BUILDING FOOTPRINT
- 18" CURB AND GUTTER
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- STORMWATER TREATMENT FACILITY

NORTH

GENERAL NOTES

1. UNDERLYING SITE CONTOURS AND INFORMATION BASED ON TOPOGRAPHIC & UTILITY DATA AS SURVEYED BY WYSER ENGINEERING ON JUNE 6, 2024. WYSER ENGINEERING SHALL NOT BE HELD RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY ARISE AS A RESULT OF ERRONEOUS OR INCOMPLETE INFORMATION PROVIDED BY OTHERS. CONTRACTOR TO CONFIRM ALL ELEVATIONS, GENERAL DRAINAGE AND EARTHWORK REQUIREMENTS PRIOR TO CONSTRUCTION.
2. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS WITHIN THE PLAN BECOME APPARENT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
3. ALL MUNICIPAL UTILITY CONNECTIONS, WORK IN ROW, PUBLIC OUTLOTS AND PUBLIC EASEMENTS SHALL BE IN ACCORDANCE WITH CITY OF FITCHBURG STANDARD SPECIFICATIONS.

SITE INFORMATION BLOCK:

SITE ADDRESS: SEMINOLE HIGHWAY
SITE ACREAGE: 2.60 AC
USE OF PROPERTY: INDOOR RECREATION
ZONING: GENERAL BUSINESS DISTRICT (B-G)

SETBACKS:
FRONT YARD: 20 FEET
REAR YARD: 10 FEET
SIDE YARD: 10 FEET

PARKING REQUIRED: 50
12 COURTS X 2.67 PARKING GENERATION AT PEAK HOUR = 32
(PER ITE LAND USE CODE 490 PARKING GENERATION RATE)
2,900 SQ.FT CAFE/BAR (6 STALLS PER 1,000 SQ.FT.) = 18

TOTAL NUMBER OF PARKING STALLS PROVIDED: 42
NUMBER OF STALLS DESIGNATED ACCESSIBLE: 3

TOTAL NUMBER OF BIKE STALLS: 8

EXISTING IMPERVIOUS SURFACE AREA: 0 SQ.FT.

NEW IMPERVIOUS SURFACE AREA:
ROOFTOP: 15,500 SQ.FT.
FUTURE: 2,000 SQ.FT.
PAVED: 31,500 SQ.FT.
FUTURE: 2,950 SQ.FT.

MAXIMUM IMPERVIOUS SURFACE: 75%

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WYSER ENGINEERING

SEMINOLE HIGHWAY
FITCHBURG, WI 53719

COURT AND CORK PICKLEBALL

CITY OF FITCHBURG, DANE COUNTY, WI

Sheet Title: LANDSCAPE PLAN

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Date Issued	08/20/2024
Sheet Number	L100

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COURT AND CORK PICKLEBALL

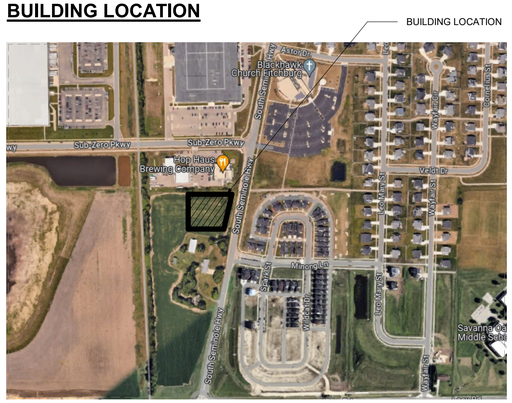
2747 SEMINOLE HWY
FITCHBURG, WI

SHEET INDEX

SHEET NUMBER	SHEET NAME	REVISIONS MARK	REVISIONS DATE
GENERAL			
G001	COVER SHEET		
CIVIL			
C100	SITE PLAN		
C200	GRADING & EROSION CONTROL PLAN		
C201	DETAIL GRADING PLAN		
C202	DETAIL GRADING PLAN		
C300	UTILITY PLAN		
C400	DETILS		
C401	DETILS		
EXTERIOR ELECTRICAL			
ES101	SITE LIGHTING PLAN		
LANDSCAPE			
L100	LANDSCAPE PLAN		
ARCHITECTURAL			
A101	FIRST FLOOR PLAN		
A202	EXTERIOR COLOR ELEVATIONS		
PRESENTATION			
A921	EXTERIOR 3D VIEWS		

PROJECT LOCATION

BUILDING LOCATION



PROJECT CONTACTS:

OWNER:
BRAD HEGG
PAM HEGG

CONTACT:
PAM OWNER

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MIGUEL REA DESIGNER
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999 FOURIER DR. #102
MADISON, WI. 53517

CONTACT:
BRET NEWCOM PRESIDENT
608-833-5220

DESIGN REVIEW

Sketchworks architecture llc

NEWCOMB

COURT AND CORK PICKLEBALL

NEW FACILITY
2747 SEMINOLE HWY
FITCHBURG, WI

Project Status

PROJ. #: 24001-01

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COVER SHEET

G001

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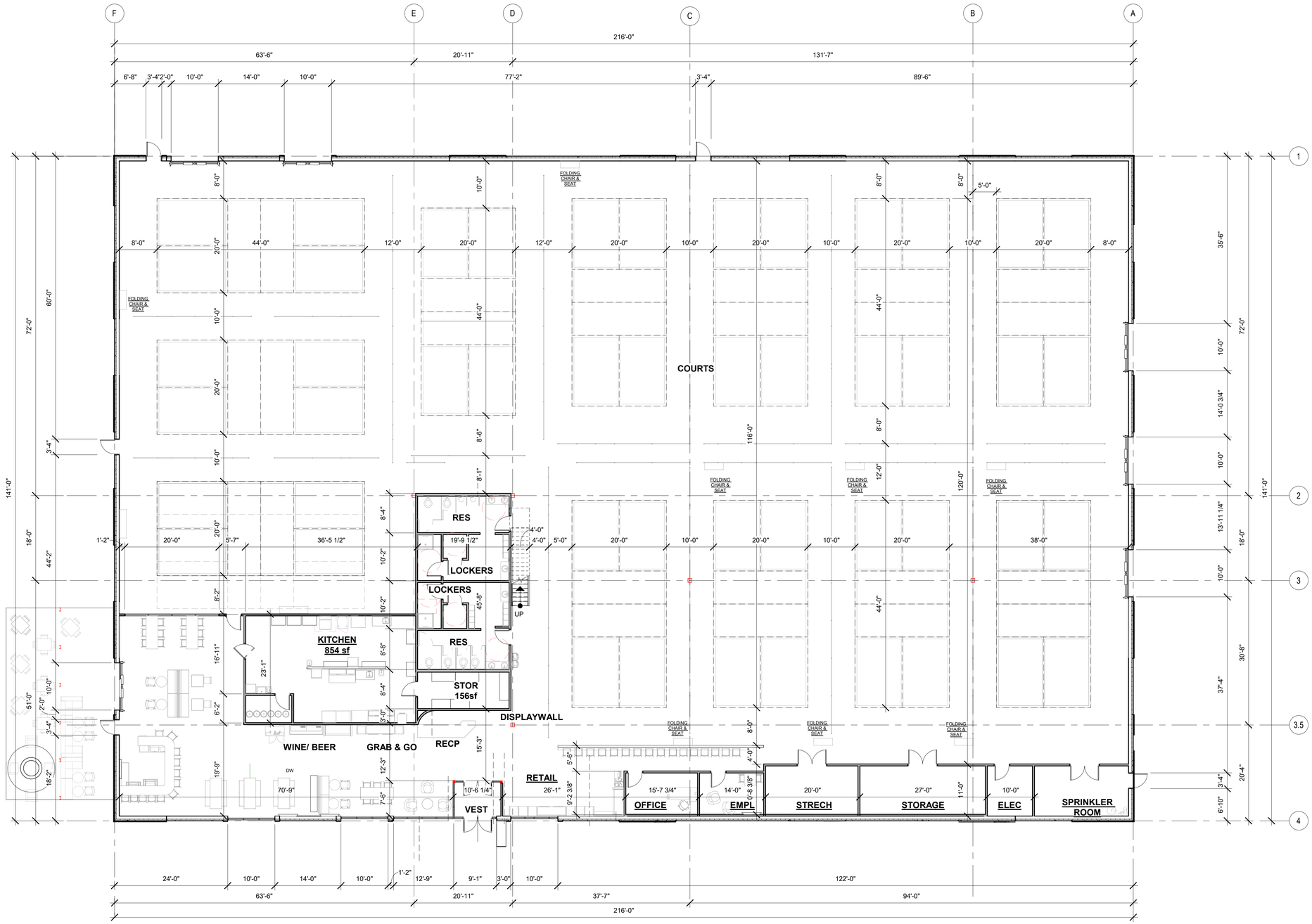

A1 FIRST FLOOR PLAN
3/32" = 1'-0"

DESIGN REVIEW

Sketchworks architecture llc

NEWCOMB

COURT AND CORK PICKLEBALL

NEW FACILITY
2747 SEMINOLE HWY
FITCHBURG, WI

Project Status

PROJ. #:	24001-01

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PLAN NORTH
TRUE NORTH ROTATION

0' 4' 8' 16'
0' 3/8" 3/4" 1 1/2"
SCALE: 3/32" = 1'-0"

FIRST FLOOR PLAN

A101

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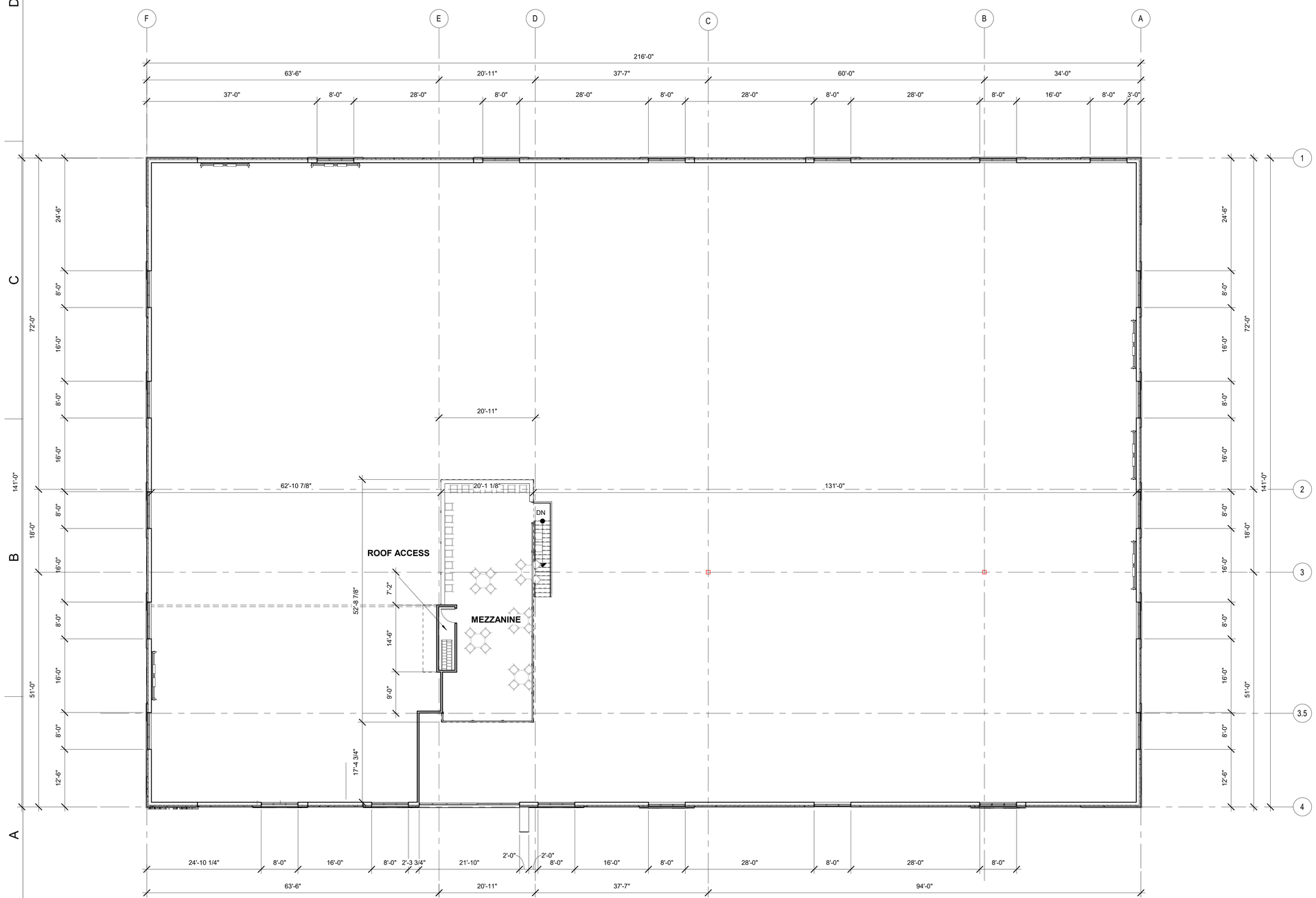

A1 MEZZANINE
3/32" = 1'-0"

DESIGN REVIEW

Sketchworks architecture llc

NEWCOMB

COURT AND CORK PICKLEBALL

NEW FACILITY
2747 SEMINOLE HWY
FITCHBURG, WI

Project Status

PROJ. #:	24001-01

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ARCHITECTURE 2024

PLAN NORTH
TRUE NORTH ROTATION

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0' 3/8" 3/4" 1 1/2"
SCALE: 3/32" = 1'-0"

MEZZANINE PLAN

A102

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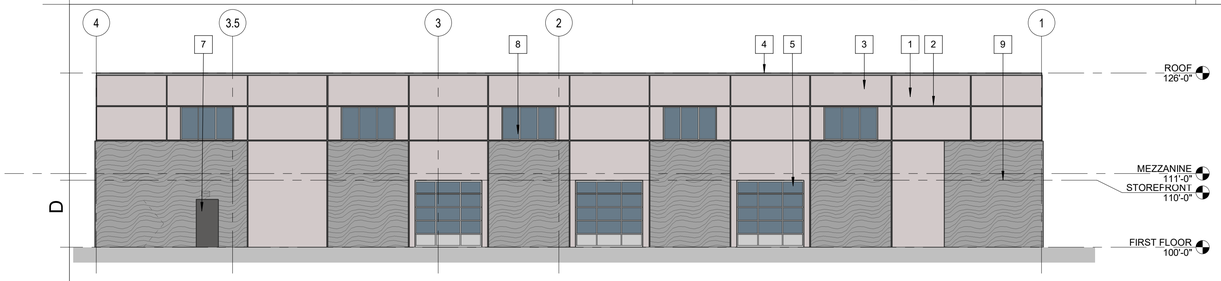
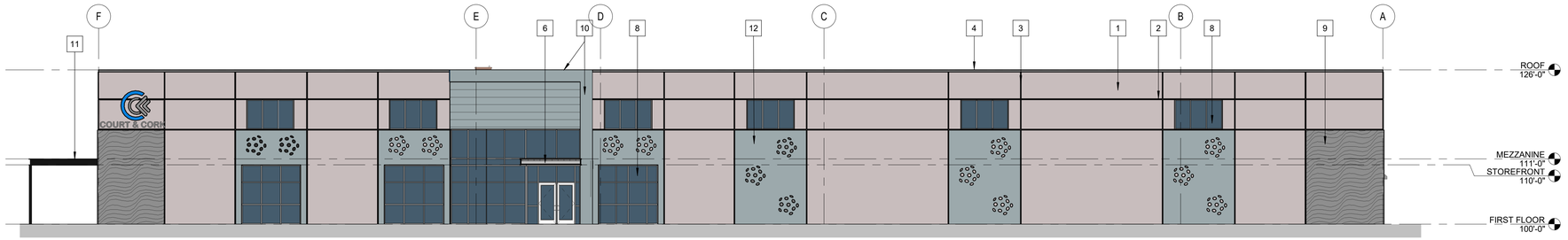


EXTERIOR ELEVATIONS KEYNOTE SCHEDULE

#	DESCRIPTION	MANUFACTURER	TYPE/STYLE	COLOR	HEIGHT	WIDTH	COMMENTS
1	CONCRETE TILT-UP	TBD	PAINTED	-	-	-	USED MANUFACTURER RECCOMENDED APPLIED FINISH
2	DEEP REVEAL	TBD	-	-	-	-	
3	PANEL JOINT	TBD	-	-	-		
4	METAL ROOF EDGE	TBD	ALUMINUM	TBD			
5	OVERHEAD GLASS DOOR	TBD					
6	METAL CANOPY		ALUMINUM	BLACK			
7	INSULATED EXTERIOR DOOR						
8	ALUMINUM STOREFRONT SYSTEM	KAWNEER (OR EQUAL)	ALUMINUM	BLACK FRAME			
9	PRECAST CONCRETE FINISH TEXTURE	<varies>	<varies>	<varies>			
10	METAL PANEL BUMPOUT	TBD					
11	METAL PERGOLA	TBD	STEEL	BLACK			
12	DECORATIVE METAL PANEL	TBD	ALUMINUM	TBD			
13	COLOR PAINT -1 BLUE	TBD					
14	COLOR PAINT -2 GRAY	TBD					

D1 COLOR NORTH ELEVATION

3/32" = 1'-0"



C1 COLOR EAST ELEVATION

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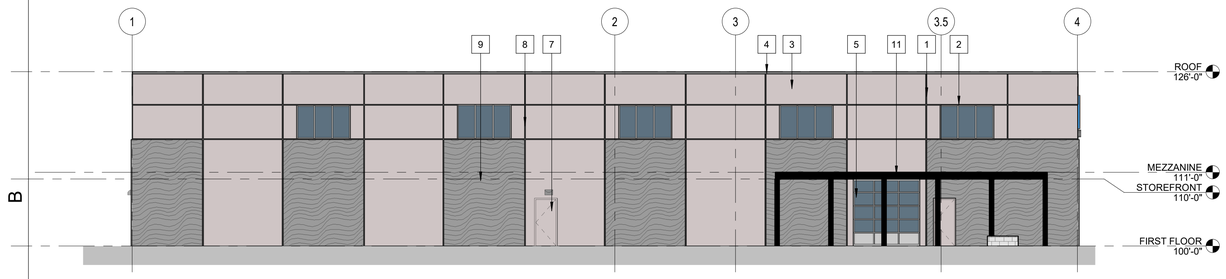

B1 COLOR SOUTH ELEVATION

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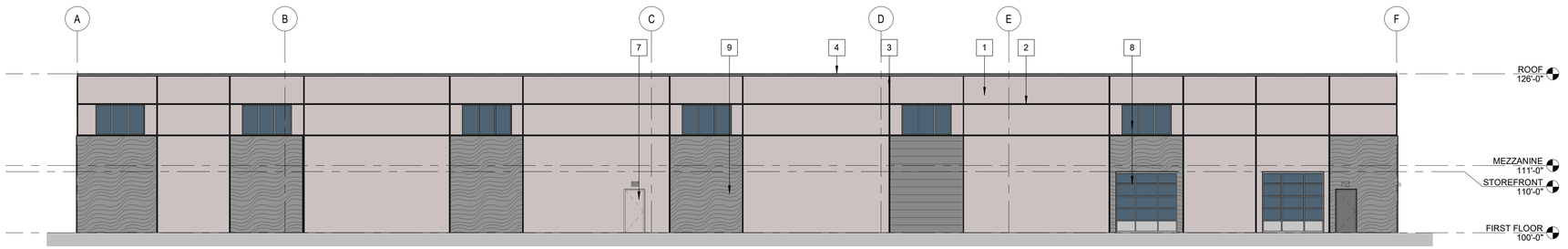

A1 COLOR WEST ELEVATION

3/32" = 1'-0"

DESIGN REVIEW

Sketchworks architecture llc

NEWCOMB

COURT AND CORK PICKLEBALL

NEW FACILITY

2747 SEMINOLE HWY
FITCHBURG, WI

Project Status

PROJ. #:	24001-01

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0' 2' 4' 8'
0' 1/4" 1/2" 1"
SCALE: 1/8" = 1'-0"

EXTERIOR COLOR ELEVATIONS

A202

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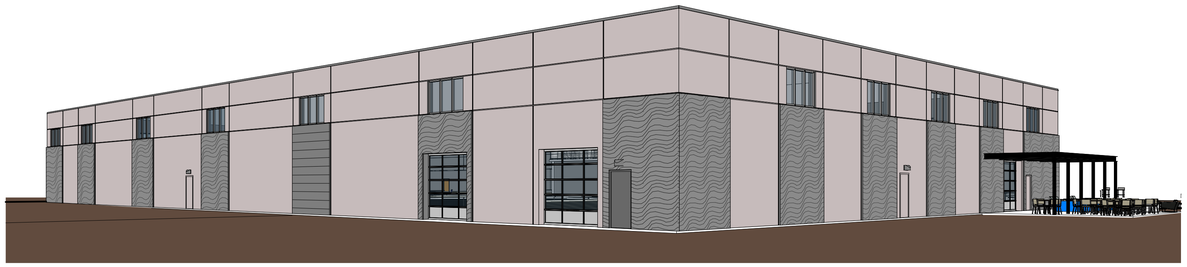
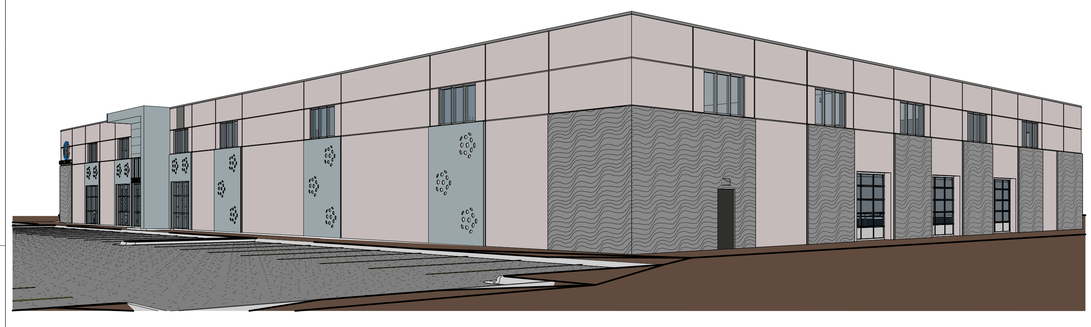
C1 EXTERIOR 3D SOUTH WEST



C2 EXTERIOR 3D SOUTH EAST



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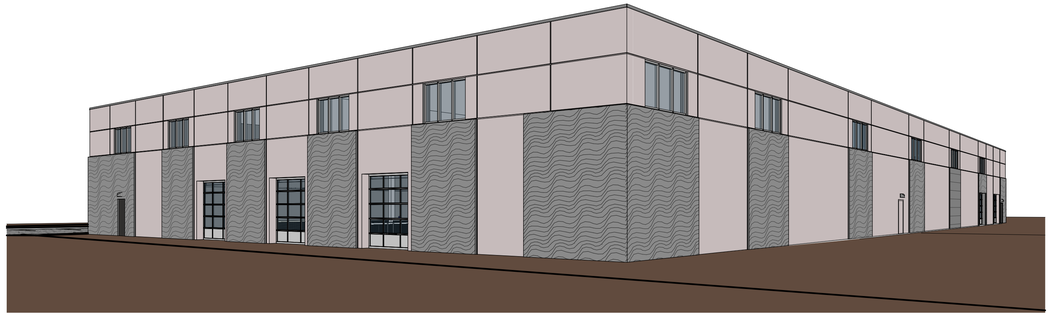

A2 EXTERIOR 3D NORTH EAST

DESIGN REVIEW

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COURT AND CORK PICKLEBALL

NEW FACILITY
2747 SEMINOLE HWY
FITCHBURG, WI

Project Status

PROJ. #:	24001-01

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0' 2' 4' 8'
0' ¼" ½" 1"
SCALE: 1/8" = 1'-0"

EXTERIOR 3D VIEWS

A921-B

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NORTHEAST VIEW

NORTHWEST VIEW

SOUTHEAST VIEW

SOUTHWEST VIEW

DESIGN REVIEW

Sketch works
architecture llc

NEWCOMB

COURT AND CORK PICKLEBALL

NEW FACILITY
2747 SEMINOLE HWY
FITCHBURG, WI

Project Status

PROJ. #:	24001-01

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ARCHITECTURE 2024

0' 2' 4' 8'
0' ¼" ½" 1"
SCALE: 1/8" = 1'-0"

EXTERIOR 3D VIEWS

A921

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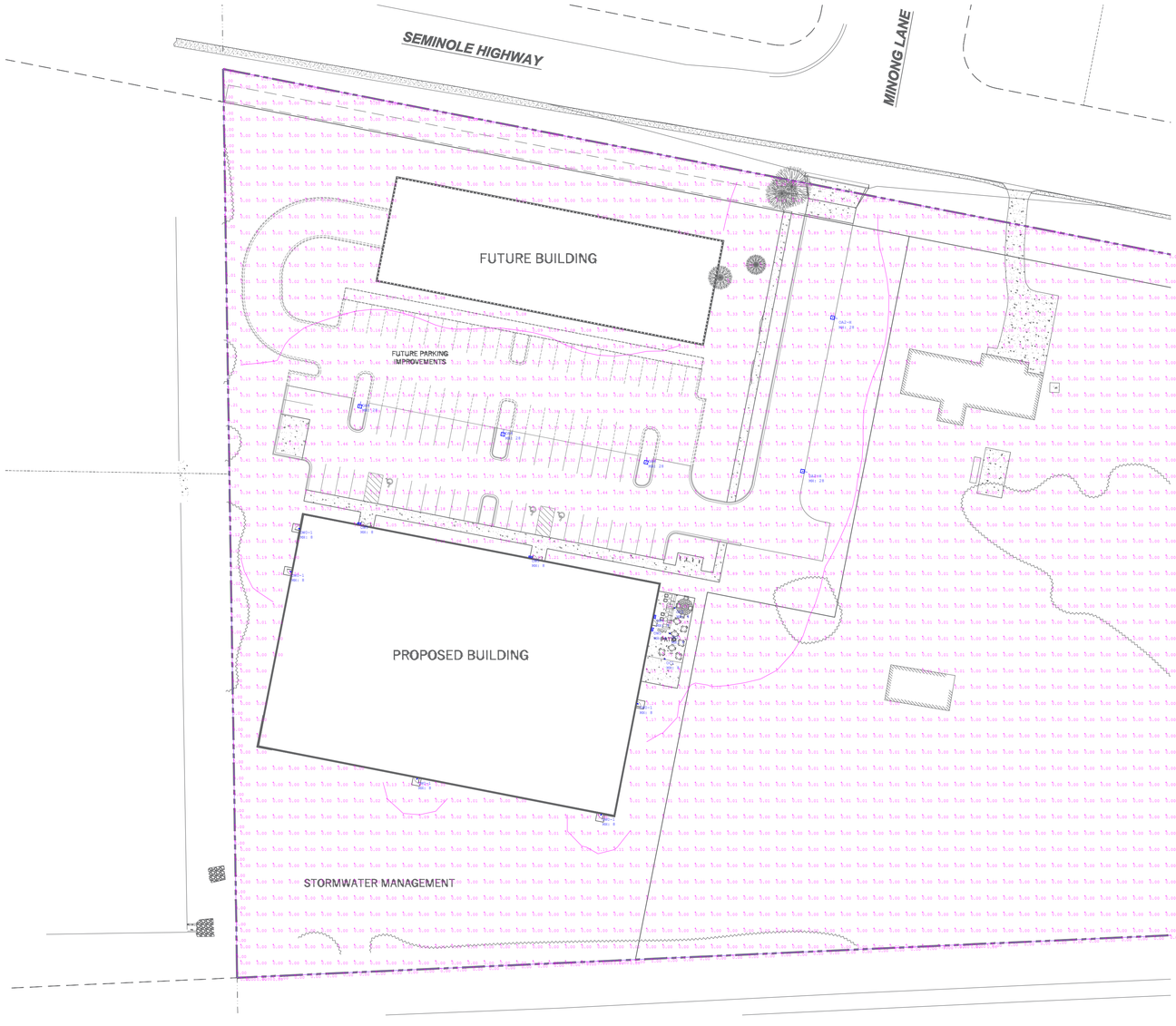
NOTES:

- Customers are responsible for confirming mounting heights, fixture suspension types/ lengths, color temperature, CRI, linear fixture lengths, pole lengths, and bollard heights/ lengths prior to ordering.
- Mounting height (MH) is measured from the bottom of the fixture to the floor.
- This Lighting layout assumes the following unless values are specified and must be confirmed by the customer prior to ordering.
  - Color Temperature is 4000K
  - Room reflectance of 80, 50, 20 for standard ceilings and 50, 50, 20 for exposed ceilings
  - Wall sconces are mounted at 7 feet for calculations.



Calculation Summary							
Label	**CalcType**	**Units**	**Avg**	**Max**	**Min**	**Avg/Min**	**Max/Min**
PROPERTY LINE	Illuminance	Fc	0.03	0.37	0.00	N.A.	N.A.
SITE	Illuminance	Fc	0.26	9.83	0.00	N.A.	N.A.
DRIVES	Illuminance	Fc	1.45	1.9	0.6	2.42	3.17
PARKING LOT	Illuminance	Fc	1.36	1.9	0.6	2.27	3.17
PATIO	Illuminance	Fc	3.08	9.8	0.4	7.70	24.50

Luminaire Schedule								
Qty	**Label**	**Arrangement**	**LLF**	**MFR**	**Description**	**Lum. Watts**	**Total Watts**	**Lum. Lumens**
2	OA2-H	SINGLE	0.950	LITHONIA	DSX1 LED P3 xxK 70CRI T2M (Voltage) (Mounting) HS (Finish) -25FT POLE -3FT BASE	102.17	204.34	11804
3	OA4	SINGLE	0.950	LITHONIA	DSX1 LED P3 xxK 70CRI T4M (Voltage) (Mounting) (Finish) -25FT POLE -3FT BASE	102.17	306.51	13967
3	OC1	SINGLE	0.950	FC OUTDOOR	FCC400-10-SF-9xx-10L-(Finish)-72-LD	11.58	34.74	1035
5	OW0-1	SINGLE	0.950	LITHONIA	WPX0 LED ALO-1 SWW2 MVOLT PE DDBXD	6.0096	30.048	829
4	OW5	SINGLE	0.950	G-LIGHTING	GL-6550-E4-(Finish)	13	78	489

ENTERPRISE Lighting & Control

REVISIONS						
#						
DATE						
COMMENTS						

DRAWN BY : DC

DATE : JULY 23, 2024

SCALE : 1" = 40'-0"

COURT AND CORK PICKLEBALL

FITCHBURG, WISCONSIN

SITE LIGHTING PLAN

STORMWATER MANAGEMENT REPORT & EROSION CONTROL PLAN

Court and Cork Pickleball

July 23, 2024

Prepared For: Newcomb

Wyser Engineering Project No.: 24-1243

WYSER ENGINEERING 300 E. Front Street Mt. Horeb, WI 53572 (608) 437-1980

www.wyserengineering.com

TABLE OF CONTENTS

1.0 Introduction
2.0 Existing Conditions
3.0 Design Criteria
4.0 Stormwater Management Analysis / Design
    4.1 Stormwater Discharge Quality
    4.2 Stormwater Discharge Quantity
5.0 Erosion Control Analysis / Design
6.0 Conclusion

APPENDICIES

Appendix A Existing Conditions Map
Appendix B Soils Information
Appendix C Proposed Construction Plans
Appendix D Pre-development Hydrologic Modeling
Appendix E Post Development Hydrologic Modeling
Appendix F Water Quality and Infiltration Modeling
Appendix G Universal Soils Loss Equation Worksheet(s)
Appendix H Declaration of Conditions, Covenants and Restrictions for Maintenance of Stormwater Management Measures
Appendix I Stormwater Management and Erosion Control Best Management Practice Preliminary Opinion of Probable Construction Costs

Future questions and comments can be directed to:

Kate Meagher, P.E.
Water Resource Engineer
kate.meagher@wyserengineering.com
(608) 437-1865

Wyser Engineering, LLC
300 E. Front Street
Mount Horeb, WI 53572

1.0 Introduction

New commercial developments are being proposed at the northwest corner of Lacy Road and Seminole Highway in the City of Fitchburg. A CSM is being proposed with the development to split the existing agricultural farmstead into 3 lots. This stormwater management report is intended to cover the development for the two most northern lots (Lot 1 and Lot 2). A pickleball complex is being proposed on Lot 1. The use for Lot 2 has not been finalized and will be developed in the future. The development of Lot 1 and 2 will create approximately 95,000 square feet of new impervious area. The project is required to meet new development standards for applicable City of Fitchburg and WDNR permitting.

A bioretention basin is proposed to meet new development standards. The bioretention basin provides water quality treatment, runoff rate control and infiltration. The basin will discharge to the northwest corner of the site to an existing swale between the property and Badger State Trail. The site ultimately drains to a wet pond to the northwest of the site, which is an internally draining watershed.

2.0 Existing Conditions

The existing conditions of the proposed development area is an agricultural farmstead. The entire existing parcel is bordered by Seminole Highway to the east, Lacy Road to the south, Badger State Trail to the west, and commercial developments to the north. The existing parcel is being split into three lots. Only the development of Lot 1 and 2 are included in this stormwater management report. Lots 1 and 2 are on the north and the existing site drains to the northwest corner. The commercial lot to the north was developed in 2020. A swale was created on the west side of the development to route offsite runoff around the site. A storm sewer headwall existing in the northwest corner of the lot to capture runoff from the swale and discharge to the public storm sewer along Sub-Zero Parkway. The public storm sewer discharges to a wet pond to the west. The wet pond is an internally draining watershed. Please refer to **Appendix A** for graphical representation of the site.

The original native onsite soils are classified as Plano silt loam (PoA and PoB). The PoA and PoB soils have a Hydrologic Soil Group (HSG) classification 'B'. HSG C soils have been assumed for post-development conditions. Test pits were completed June 14, 2024. The test pits on the northern half of the parcel indicated silty loam and silty clay loam over fine sand / loam fine sand. A design infiltration rate of 0.5 in/hr has been used for the infiltration facilities. Please refer to **Appendix B**.

3.0 Design Criteria

Wisconsin Administrative Code
Department of Natural Resources (WDNR)
Chapter NR 151 & NR 216

Fitchburg, WI – City Code of Ordinances
Title III, Chapter 30, Article II

4.0 Stormwater Management Analysis / Design

The proposed improvements for Lot 1 and Lot 2 include two buildings, a shared parking lot, a driveway from Seminole Highway, and sidewalk around both buildings. The improvements include approximately 95,000 square feet of impervious area. Please refer to **Appendix C** for the proposed plan set. The site will be treated to meet new development standards.

A bioretention basin is proposed in the northwest corner of the site. The western building has a sloped roof to the west to drain towards the bioretention basin. Storm sewer is proposed to convey runoff the rest of the site to the bioretention basin. The bioretention basin will provide water quality, infiltration, and runoff rate control. The basin discharges to a sedimentation basin with level spreader to the northeast. The sedimentation basin and level spreader disperse the concentrated discharge from the bioretention basin before discharging to bypass swale on the west side of the property to the north.

The maintenance agreement for the site stormwater management features can be found within **Appendix H**. Specifically, please note the following:

Stormwater Management Plan Requirements: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(a)

This plan was completed and sealed under the direction of Kathleen L Meagher, Professional Engineer E-101102. The preliminary opinion of probable construction costs for use in determining the financial security instrument for the project can be found within **Appendix I** but will be provided separately by the owner prior to construction.

4.1 Water Quality

Sediment Control: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(1)a.i.

WinSLAMM (Version 10.4.1) has been used to analyze the water quality for this site. WinSLAMM is an approved model to run a continuous average annual rainfall for Madison (MSN 1981) using the NURP partial distribution.

The required total suspended solids treatment is based on 80% reduction from the proposed development. The model predicts the proposed development will produce 890.37 pounds of suspended solids, which requires 712.30 pounds of treatment.

With the proposed treatment facility, the model predicts a TSS reduction of 874.72 pounds (98.24% reduction). Please refer to **Appendix F** for WinSLAMM modeling output and summary.

Oil and Grease Control: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(2)

The oil and grease control is provided by the bioretention basin. The basin captures the first 0.5 in rainfall and has engineered soil, which to provide oil and grease control.

4.2 Storm Water Discharge Quantity

Runoff Rate Control; Hydrologic Calculations: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(3)

The predevelopment site is was modeled as agricultural, HSG B, which has a curve number of 68. The existing shed and other impervious area has a curve number of 98. The soil classification has been increased to HSG C for post development conditions.

Runoff Rate Control; Design Standards: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(4)

HydroCAD model version 10.20-2g was used to analyze the existing and proposed runoff rate for the site. The bioretention basins have been designed to maintain predevelopment peak runoff rates for the 1-, 2-, 10-, 100-, and 200-year 24-hour storm events. Please refer to **Table 1** for the existing versus proposed predicted runoff rates and **Appendix D & E** for the HydroCAD output.

Table 1. Existing vs. Proposed peak runoff rates for select storm events.

	Weighted CN	Tc	Rainfall for 24-hour storm event (inches)				
			1-year	2-year	10-year	100-year	200-year
			2.49	2.84	4.09	6.66	7.53
Existing-Development peak discharge rate (cfs)	**69**	**12.1**	**1.25**	**1.92**	**4.88**	**12.40**	**15.17**
Post-Development peak discharge rate (cfs)							
Watershed A - N Basin	93	6.0	8.26	9.60	14.46	24.66	28.15
Watershed B - No Treatment	86	6.0	0.09	0.10	0.17	0.32	0.37
Post-Development peak discharge rate without detention(cfs)			8.35	9.70	14.63	24.99	28.52
Post-Development peak discharge rate with detention (cfs)			**0.96**	**1.09**	**1.57**	**10.18**	**15.16**
Difference: Post-construction peak flow rates with detention vs. pre-existing peak flow rates (cfs)			**-0.29**	**-0.83**	**-3.31**	**-2.22**	**-0.01**

Outlets: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(5)

The storm sewer system has been designed per the SPS 'Area method' as described within SPS 382.36(5)(a)1. Please refer to **Appendix E** for analysis results. The basin elevations are set by the elevation for free discharge of the underdrain in the northwest corner of the site. To reduce the amount of fill the site requires, a gooseneck outlet is required at the discharge of the site storm sewer into the bioretention basin. A sediment basin with a level spreader is located at the discharge of the bioretention basin to disperse the runoff from the basin before discharging north to the neighboring property. All discharge points will be protected with riprap. It is assumed that the downstream discharge points have protection from outlet erosion.

Infiltration: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(6)

The infiltration volume for the site was analyzed using WinSLAMM to determine pre- and post-development stay-on. Because the site is located in an internally drained watershed, the development is required to infiltrate as close to 100 percents as practicable of the average annual pre-development infiltration volume, regardless of the effective area of the infiltration system. The pre-development volume tool in WinSLAMM was used to estimate the pre-development runoff volume of 9,433 cubic feet, which is 310,838 cubic feet of stay-on. With the bioretention basin, the proposed development creates 5,903 cubic feet of runoff, which is 314,368 cubic feet of stay-on. Please refer to **Appendix F** for WinSLAMM output information.

Thermal Control Reduction: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(7)

The site is not located in a thermally sensitive watershed.

5.0 Erosion Control Analysis / Design

Erosion control measures proposed for the project site have been designed in accordance with the WDNR and City of Fitchburg requirements. Best Management Practices (BMP's) for the site include stone tracking pad, silt fencing, check dams, seeding, mulching, erosion mat, etc. Construction sequencing, as follows, has been documented in accordance with soil loss rate calculations for the construction period per the Universal Soil Loss Equation included as **Appendix G**:

10/01/2024	Pre-development construction meeting. Install Perimeter BMP's (silt fence, stone tracking pad, etc.)
10/01/2024	Mass Grading / Subgrade preparation (note all 4:1 or greater slopes must be stabilized as soon as practicable and, at a minimum, within 2 months (60 days) of finishing the grading). Basin and sediment basin to act as sediment trap.
05/15/2024	Temporary stabilization to be completed for areas that do not drain to the sediment trap with temporary seed with mulch or erosion mat.
07/10/2026	Final landscaping adjustments.
08/01/2026	Final site stabilization with seed, mulch and erosion matting where required.
08/15/2026	Install bioretention systems. Install Bioretention Vegetation Plan in accordance with WDNR Technical Standard 1004. Fix any landscaping issues including bioretention and areas.
10/01/2026	Provide City with a post-development as-built survey of all stormwater management facilities.

For additional information relative to erosion control, please refer to the Grading & Erosion Control Plan found in **Appendix C**.

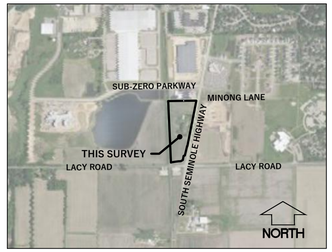
6.0 Conclusion

Construction and Post Development BMP's for erosion control and stormwater management have been designed in accordance with applicable requirements of the City of Fitchburg Code of Ordinance and Wisconsin Administrative Code. A bioretention basin is proposed to meet applicable new development requirements. Erosion control practices have been designed to limit the soil loss rate to less than 5.0 tons per acre per year, regulating soil transportation within the boundaries of the project site.

APPENDIX A

Existing Conditions Survey

VICINITY MAP
NOT TO SCALE

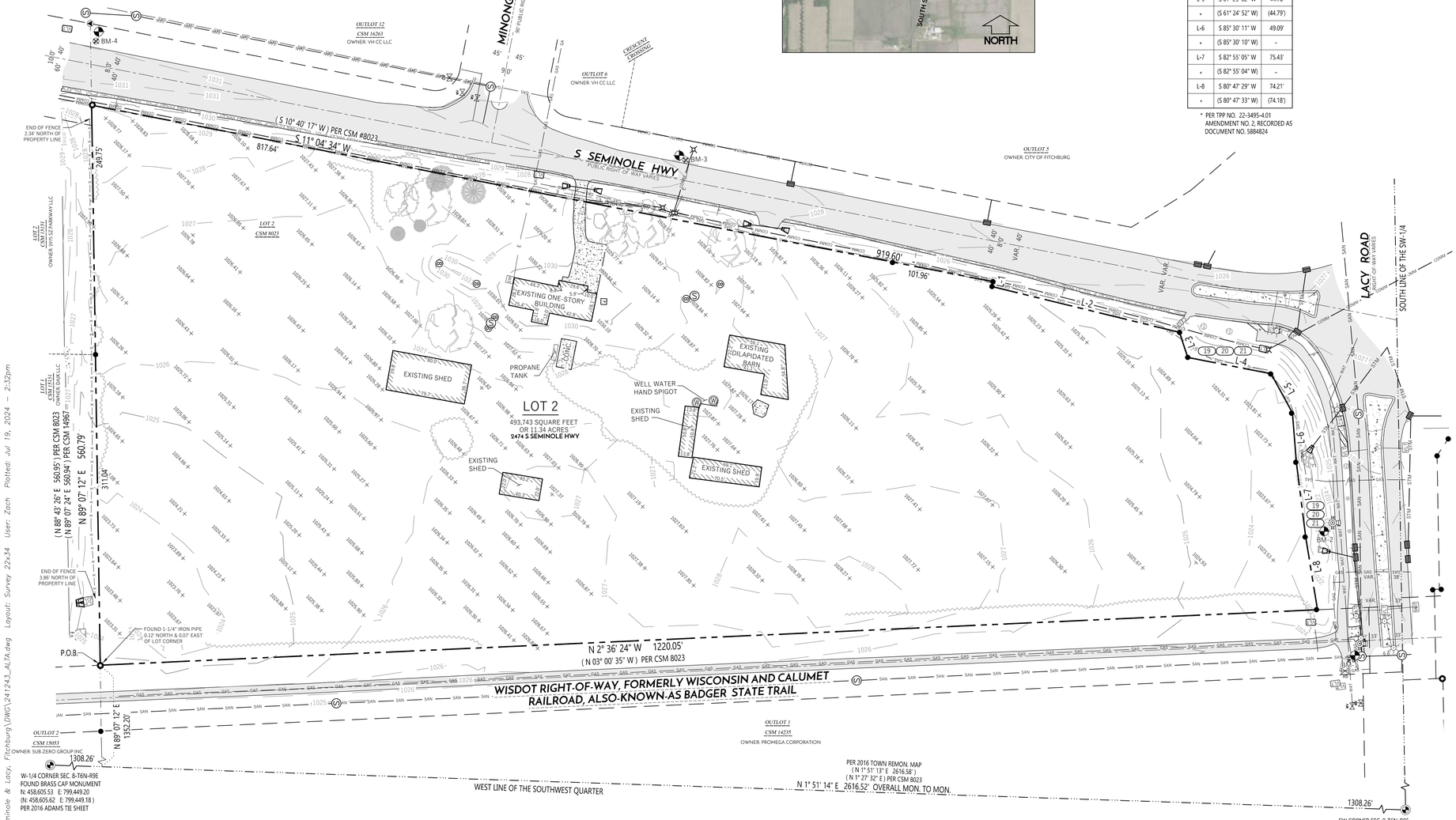


LINE TABLE		
LINE #	DIRECTION	LENGTH
L-1	N 78° 55' 26" W	5.01'
"	(N 78° 55' 45" W)	(5.00')
L-2	S 13° 44' 29" W	193.21'
"	(S 13° 44' 26" W)	-
L-3	S 71° 35' 45" W	26.42'
"	(S 71° 35' 42" W)	-
L-4	S 11° 04' 04" W	85.00'
"	(S 11° 04' 15" W)	-
L-5	S 61° 25' 02" W	44.78'
"	(S 61° 24' 52" W)	(44.79')
L-6	S 85° 30' 11" W	49.09'
"	(S 85° 30' 10" W)	-
L-7	S 82° 55' 05" W	75.43'
"	(S 82° 55' 04" W)	-
L-8	S 80° 47' 29" W	74.21'
"	(S 80° 47' 33" W)	(74.18')

* PER TPP NO. 22-3495-01 AMENDMENT NO. 2, RECORDED AS DOCUMENT NO. 5884824

NORTH

0' 30' 60' 90'
1" = 60' on 22"x34"
1"= 120' on 11"x17"



LEGEND

- FOUND PLSS MON. TYPE NOTED
- FOUND 1" IRON PIPE
- FOUND 3/4" REBAR
- FOUND PK NAIL
- FOUND CUT CROSS
- SIGN
- SANITARY MANHOLE
- SEWER CLEANOUT
- GAS VALVE
- FIRE HYDRANT
- WATER VALVE
- WELL
- COMMUNICATION PEDESTAL
- APRON END WALL
- INLETS
- LIGHTPOLE
- ELECTRICAL METER
- CONIFEROUS TREE
- DECIDUOUS TREE
- UNDERGROUND UTILITY VAULT
- VERTICAL BENCHMARK
- (XXX) RECORDED AS
- PROPERTY LINE
- PLATTED LINE
- RIGHT-OF-WAY LINE
- CENTERLINE
- SECTION LINE
- BUILDING FOOTPRINT
- EDGE OF CONCRETE
- EDGE OF ASPHALT
- SANITARY SEWER
- WATER MAIN
- STORM SEWER
- NATURAL GAS LINE
- COMMUNICATION LINE
- ELECTRIC LINE
- GRAVEL/RIP RAP
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- 1020 CONTOUR MAJOR
- 1021 CONTOUR MINOR
- FENCE LINE
- TREE LINE

LEGAL DESCRIPTION AS FURNISHED

PER FIRST AMERICAN TITLE LLC, TITLE COMMITMENT, FILE NO. NCS-122007-MAD DATED: MAY 29, 2024 AT 7:30 A.M

LOT 2 OF CERTIFIED SURVEY MAP NO. 8023 RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS FOR DANE COUNTY, WISCONSIN ON NOVEMBER 16, 1995, IN VOLUME 42 OF CERTIFIED SURVEY MAPS, PAGES 313-316 AS DOCUMENT NO. 2719369, SAID CERTIFIED SURVEY MAP BEING PART OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 08, TOWNSHIP 06 NORTH, RANGE 09 EAST, IN THE CITY OF FITCHBURG, DANE COUNTY, WISCONSIN.

EXCEPTING THEREFROM THE LAND DESCRIBED IN AWARD OF DAMAGES RECORDED FEBRUARY 25, 2013 AS DOCUMENT NO. 4964304.

FURTHER EXCEPTING THEREFROM THE LAND DESCRIBED IN AWARD OF DAMAGES RECORDED DECEMBER 28, 2022 AS DOCUMENT NO. 5879973.

LEGAL DESCRIPTION AS SURVEYED

PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 8023 RECORDED IN VOLUME 42 OF CERTIFIED SURVEY MAPS OF DANE COUNTY ON PAGES 313-316 AS DOCUMENT NO. 2719369 (CSM 8023), LOCATED IN THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 6 NORTH, RANGE 9 EAST, CITY OF FITCHBURG, DANE COUNTY , WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST QUARTER CORNER OF AFORESAID SECTION 8; THENCE, ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 8, SOUTH 01 DEGREES 51 MINUTES 14 SECONDS EAST, 1308.26 FEET TO THE NORTHWEST CORNER OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF SAID SECTION 8; THENCE ALONG THE NORTH LINE OF SAID SOUTH HALF, NORTH 89 DEGREES 07 MINUTES 12 SECONDS EAST, 1352.20 FEET TO THE NORTHWEST CORNER OF AFORESAID LOT 2 OF CSM 8023, AND THE POINT OF BEGINNING; THENCE, CONTINUING ALONG SAID NORTH LINE OF THE SOUTH HALF, AND ALSO ALONG THE NORTH LINE OF SAID LOT 2, NORTH 89 DEGREES 07 MINUTES 12 SECONDS EAST, 560.79 FEET TO THE NORTHEAST CORNER OF SAID LOT 2, AND ALSO BEING A POINT ON THE WESTERLY RIGHT-OF-WAY OF SOUTH SEMINOLE HIGHWAY; THENCE, ALONG THE EAST LINE OF SAID LOT 2, AND ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 11 DEGREES 04 MINUTES 34 SECONDS WEST, 919.60 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, NORTH 78 DEGREES 55 MINUTES 25 SECONDS WEST, 5.01 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 13 DEGREES 44 MINUTES 29 SECONDS WEST, 193.21 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 71 DEGREES 35 MINUTES 42 SECONDS WEST, 26.42 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 11 DEGREES 04 MINUTES 04 SECONDS WEST, 85.00 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY OF LACY ROAD; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, SOUTH 61 DEGREES 25 MINUTES 02 SECONDS 44.78 FEET; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, SOUTH 85 DEGREES 30 MINUTES 11 SECONDS WEST, 49.09 FEET; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, 82 DEGREES 55 MINUTES 05 SECONDS WEST, 75.43 FEET; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, SOUTH 80 DEGREES 47 MINUTES 29 SECONDS WEST, 74.21 FEET TO A POINT ON THE WESTERLY LINE OF AFORESAID LOT 2 OF CSM 8023; THENCE, ALONG SAID WESTERLY LINE, NORTH 02 DEGREES 36 MINUTES 24 SECONDS WEST, 1220.05 FEET BACK TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 493,619 SQUARE FEET OR 11.33 ACRES.

GENERAL NOTES

1. FIELD WORK PERFORMED BY WYSER ENGINEERING, LLC. ON THE WEEK OF, JUNE 5, 2024.
2. NORTH REFERENCE FOR THIS EXISTING CONDITIONS SURVEY AND MAP ARE BASED ON THE WISCONSIN COORDINATE REFERENCE SYSTEM, NAD 83 (2011) WISCRS DANE, GRID NORTH. THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 08, T06N, R09E, BEARS N 01°51' 14" E.
3. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
4. SUBSURFACE UTILITIES AND FIXTURES SHOWN ON THIS MAP HAVE BEEN APPROXIMATED BY LOCATING SURFACE FEATURES AND ACCESSORIES, DIGGERS HOTLINE FIELD MARKINGS AND EXISTING MAPS AND RECORDS.
5. BEFORE EXCAVATION, APPROPRIATE UTILITY COMPANIES SHOULD BE CONTACTED. FOR EXACT LOCATION OF UNDERGROUND UTILITIES, CONTACT DIGGERS HOTLINE, AT 1.800.242.8511 OR 811
6. THIS PARCEL IS SUBJECT TO ALL EASEMENTS AND AGREEMENTS, BOTH RECORDED AND UNRECORDED.
7. FEATURES HAVE BEEN LOCATED BY SURVEYOR IN FIELD THAT MAY HAVE ADVERSE TITLE ELEMENTS. AS TO WHICH ELEMENT ENCROACHMENT. CLAIM OF UNRECORDED EASEMENT. PRESCRIPTIVE EASEMENT, AND SO FORTH CAN NOT BE DETERMINED BY SURVEYOR.

BENCHMARK TABLE		
BM - #	ELEVATION	DESCRIPTION
BM - 1	1027.42	TOP NUT ON THE HYDRANT ON THE NORTHERLY RIGHT- OF-WAY OF LACY ROAD, EAST OF WIS D.O.T. RIGHT-OF-WAY
BM - 2	1027.34	TOP NUT ON THE HYDRANT ON THE NORTHERLY RIGHT- OF-WAY OF LACY ROAD, WEST OF WIS D.O.T. RIGHT-OF-WAY
BM - 3	1029.16	CUT CROSS IN PAVEMENT ON THE EASTERLY RIGHT-OF-WAY OF S SEMINOLE HWY
BM - 4	1032.68	CUT CROSS IN PAVEMENT ON THE EASTERLY RIGHT-OF-WAY OF S SEMINOLE HWY

SURVEYORS CERTIFICATE

TO: NEWCOMB CONSTRUCTION COMPANY INC.
BUFFALO DEVELOPMENT, LLC A WISCONSIN LIMITED LIABILITY COMPANY
ANNA M. O'BRIEN
FIRST AMERICAN TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6(A), 7(A), 9, 11(A), 13, 14, 16, AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED WEEK OF JUNE 5TH, 2024.

DATE OF PLAT OR MAP: JULY 10, 2024.

IN ACCORDANCE WITH SECTION 3.B OF THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, ADDITIONAL CERTIFICATION BELOW TO FULFILL WISCONSIN ADMINISTRATIVE CODE, A-E 7 - MINIMUM STANDARDS FOR PROPERTY SURVEYS IN WISCONSIN. ITEM A-E 7.05 (8)

I, ZACHARY M. REYNOLDS, WISCONSIN PROFESSIONAL LAND SURVEYOR S-3223, DO HEREBY CERTIFY THAT THIS SURVEY AND MAP IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF WITH THE INFORMATION PROVIDED, BY THE ORDER OF THOSE LISTED HEREON, AND THAT THIS SURVEY COMPLIES WITH A-E 7 OF THE WISCONSIN ADMINISTRATIVE CODE.

ZACHARY M. REYNOLDS, S-3223
WISCONSIN PROFESSIONAL LAND SURVEYOR

WISCONSIN
ZACHARY M. REYNOLDS
S-3223
MOUNT HOREB
WISCONSIN
PROFESSIONAL LAND SURVEYOR

DIGGERS HOTLINE
Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

WYSER ENGINEERING

PREPARED BY:
WYSER ENGINEERING
300 EAST front STREET
MOUNT HOREB, WI 53572
www.wyserengineering.com

PREPARED FOR:
NEWCOMB CONSTRUCTION COMPANY, INC.
999 FOURIER DRIVE #102
MADISON, WI 53717

SURVEYED BY: MAL/DZ
DRAWN BY: AL/AMS
APPROVED BY: ZMR

2747 S SEMINOLE HWY
FITCHBURG, WI 53711

PART OF LOT 2 OF CSM NO. 8023
PART OF THE SE 1/4 OF THE SW 1/4
SEC. 08 T-06-N, R-09-E
CITY OF FITCHBURG, DANE COUNTY, WI

Sheet Title: **ALTA/NSPS LAND TITLE SURVEY**

Revisions:

No.	Date:	Description:

Graphic Scale	0' 15' 30' 60' 90'
Wyser Number	24-1243
Set Type	SURVEY
Date Issued	07/10/2024
Sheet Number	V-001

File: W:\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\DWG\241243_ALTA.dwg Layout: Survey 22x34 User: Zach Plotted: Jul 19, 2024 - 2:32pm

NOTES REGARDING SCHEDULE B - PART II

PER FIRST AMERICAN TITLE LLC, TITLE COMMITMENT, FILE NO. NCS-122007-MAD DATED: MAY 29, 2024 AT 7:30 A.M.

(1) ANY FACTS, RIGHTS, INTERESTS, OR CLAIMS THAT ARE NOT SHOWN BY THE PUBLIC RECORDS BUT THAT COULD BE ASCERTAINED BY AN INSPECTION OF THE LAND OR BY MAKING INQUIRE OF PERSONS IN POSSESSION OF THE LAND.

(2) EASEMENTS, CLAIMS OF EASEMENTS OR ENCUMBRANCES THAT ARE NOT SHOWN BY THE PUBLIC RECORDS.

(3) ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OR ADVERSE CIRCUMSTANCE AFFECTING THE TITLE INCLUDING DISCREPANCIES, CONFLICT IN BOUNDARY LINES, SHORTAGES IN AREA, OR ANY OTHER FACTS THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND, AND THAT ARE NOT SHOWN BY THE PUBLIC RECORDS.

(13) EASEMENTS, DEDICATIONS, RESERVATIONS, PROVISIONS, RELINQUISHMENTS, RECITALS, CERTIFICATES, AND ANY OTHER MATTERS AS PROVIDED FOR OR DELINEATED ON CERTIFIED SURVEY MAP NO. 8023 RECORDED NOVEMBER 16, 1995, IN VOLUME 42 OF CERTIFIED SURVEY MAPS, PAGES 313-316 AS DOCUMENT NO. 2719369 REFERENCED IN THE LEGAL DESCRIPTION CONTAINED HEREIN. REFERENCE IS HEREBY MADE TO SAID PLAT FOR PARTICULARS.

THIS ITEM DOES AFFECT SUBJECT PARCEL, HOWEVER, THERE ARE NO SUCH MATTERS TO BE GRAPHICALLY SHOWN OR PLOTTED HEREON.

(14) RESTRICTIONS, DEDICATIONS, CONDITIONS, RESERVATIONS, EASEMENTS AND OTHER MATTERS SHOWN ON THE PLAT OF TRANSPORTATION PROJECT PLAT NO: 1206-07-29 - 4.02, AS RECORDED IN DOCUMENT NO. 4896305 ON JULY 31, 2012, BUT DELETING ANY COVENANT, CONDITION OR RESTRICTION INDICATING A PREFERENCE, LIMITATION OR DISCRIMINATION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN TO THE EXTENT SUCH COVENANTS, CONDITIONS OR RESTRICTIONS VIOLATE 42 USC 3604(C).

THIS ITEM DOES AFFECT SUBJECT PARCEL. TEMPORARY LIMITED EASEMENTS SHOWN ON SAID PLAT HAVE EXPIRED, HOWEVER ACCESS TO SOUTH SEMINOLE HIGHWAY AND LACY ROAD ARE CONTROLLED BY THE CITY OF FITCHBURG; EXTENTS OF CONTROLLED ACCESS IS UNCLEAR AND ARE NOT PLOTTED HEREON.

(15) RESTRICTIONS, DEDICATIONS, CONDITIONS, RESERVATIONS, EASEMENTS AND OTHER MATTERS SHOWN ON THE PLAT OF TRANSPORTATION PROJECT PLAT NO: 22-3495 - 4.01, AS RECORDED IN VOLUME 61-060B, PAGE 363 ON MARCH 24, 2022 AS DOCUMENT NO. 5821244, BUT DELETING ANY COVENANT, CONDITION OR RESTRICTION INDICATING A PREFERENCE, LIMITATION OR DISCRIMINATION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN TO THE EXTENT SUCH COVENANTS, CONDITIONS OR RESTRICTIONS VIOLATE 42 USC 3604(C).

MODIFICATION AND/OR AMENDMENT BY INSTRUMENT: TRANSPORTATION PROJECT PLAT NO: 22-3495 - 4.01, AMENDMENT NO. 1

RECORDING INFORMATION: AUGUST 22, 2022 IN VOLUME 61-072A, PAGE 434 AS DOCUMENT NO. 5857262

MODIFICATION AND/OR AMENDMENT BY INSTRUMENT: TRANSPORTATION PROJECT PLAT NO: 22-3495 - 4.01, AMENDMENT NO. 2

RECORDING INFORMATION: FEBRUARY 02, 2023 IN VOLUME 61-083A, PAGE 487 AS DOCUMENT NO. 5884824

THIS ITEM DOES AFFECT SUBJECT PARCEL. TEMPORARY LIMITED EASEMENTS SHOWN ON SAID PLAT HAVE EXPIRED, HOWEVER ACCESS TO SOUTH SEMINOLE HIGHWAY AND LACY ROAD ARE CONTROLLED BY THE CITY OF FITCHBURG; EXTENTS OF CONTROLLED ACCESS IS UNCLEAR AND ARE NOT PLOTTED HEREON.

(16) UTILITY EASEMENT TO MADISON GAS AND ELECTRIC COMPANY, A WISCONSIN CORPORATION, ITS SUCCESSORS AND ASSIGNS, DATED APRIL 08, 1965, RECORDED/FILED APRIL 15, 1965 IN VOLUME 425, PAGE 199 AS DOCUMENT NO. 1128469.

THIS ITEM DOES NOT AFFECT SUBJECT PARCEL, AND IS NOT PLOTTED HEREON.

EASEMENT SUPPLEMENT RECORDED SEPTEMBER 03, 1987 IN VOLUME 10556 OF RECORDS, PAGE 67 AS DOCUMENT NO. 2043073.

THIS ITEM DOES NOT AFFECT SUBJECT PARCEL, AND IS NOT PLOTTED HEREON.

EASEMENT SUPPLEMENT RECORDED SEPTEMBER 03, 1987 IN VOLUME 10556 OF RECORDS, PAGE 68 AS DOCUMENT NO. 2043074.

THIS ITEM DOES NOT AFFECT SUBJECT PARCEL, AND IS NOT PLOTTED HEREON.

EASEMENT SUPPLEMENT RECORDED SEPTEMBER 03, 1987 IN VOLUME 10556 OF RECORDS, PAGE 69 AS DOCUMENT NO. 2043075.

THIS ITEM DOES NOT AFFECT SUBJECT PARCEL, AND IS NOT PLOTTED HEREON.

EASEMENT SUPPLEMENT RECORDED SEPTEMBER 03, 1987 IN VOLUME 10556 OF RECORDS, PAGE 70 AS DOCUMENT NO. 2043076.

THIS ITEM DOES NOT AFFECT SUBJECT PARCEL, AND IS NOT PLOTTED HEREON.

(17) PRIVATE SEWAGE SYSTEM MAINTENANCE AGREEMENT COVENANT AGREEMENT:

DATED: APRIL 20, 1988
PARTIES: O'BRIEN FARM TRUST AND CITY OF FITCHBURG
RECORDED: MAY 04, 1988 IN VOLUME 11387 OF RECORDS, PAGE 22
INSTRUMENT NO.: 2079460

THIS ITEM DOES AFFECT SUBJECT PARCEL, BUT IS NOT GRAPHIC IN NATURE, AND IS NOT PLOTTED HEREON.

(18) PRIVATE SEWAGE SYSTEM COVENANT AGREEMENT:

DATED: FEBRUARY 26, 1996
PARTIES: WARREN J O'BRIEN AND THE COUNTY OF DANE
RECORDED: MARCH 01, 1996 IN VOLUME 32155, PAGE 72
INSTRUMENT NO.: 2742032

THIS ITEM DOES AFFECT SUBJECT PARCEL, BUT IS NOT GRAPHIC IN NATURE, AND IS NOT PLOTTED HEREON.

(19) COVENANTS, CONDITIONS AND RESTRICTIONS AS SET FORTH IN AWARD OF DAMAGES RECORDED ON FEBRUARY 25, 2013 AS DOCUMENT NO. 4964304, OF OFFICIAL RECORDS, BUT DELETING ANY COVENANT, CONDITION OR RESTRICTION INDICATING A PREFERENCE, LIMITATION OR DISCRIMINATION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN TO THE EXTENT SUCH COVENANTS, CONDITIONS OR RESTRICTIONS VIOLATE 42 USC 3604(C).

THIS ITEM DOES AFFECT SUBJECT PARCEL AND IS PLOTTED HEREON. THIS ITEM CONCERNS THE TAKING OF ADDITIONAL RIGHT-OF-WAY ALONG SOUTH SEMINOLE HIGHWAY AND LACY ROAD.

(20) EASEMENT AS SET FORTH IN NOTICE OF LIS PENDENS RECORDED ON OCTOBER 11, 2022 AS DOCUMENT NO. 5867230.

THIS ITEM DOES AFFECT SUBJECT PARCEL AND IS PLOTTED HEREON. THIS ITEM CONCERNS THE TAKING OF ADDITIONAL RIGHT-OF-WAY ALONG SOUTH SEMINOLE HIGHWAY AND LACY ROAD.

(21) COVENANTS, CONDITIONS AND RESTRICTIONS AS SET FORTH IN AWARD OF DAMAGES RECORDED ON DECEMBER 28, 2022 AS DOCUMENT NO. 5879973, OF OFFICIAL RECORDS, BUT DELETING ANY COVENANT, CONDITION OR RESTRICTION INDICATING A PREFERENCE, LIMITATION OR DISCRIMINATION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN TO THE EXTENT SUCH COVENANTS, CONDITIONS OR RESTRICTIONS VIOLATE 42 USC 3604(C).

THIS ITEM DOES AFFECT SUBJECT PARCEL AND IS PLOTTED HEREON. THIS ITEM CONCERNS THE TAKING OF ADDITIONAL RIGHT-OF-WAY ALONG SOUTH SEMINOLE HIGHWAY AND LACY ROAD.

NOTES REGARDING ALTA TABLE A REQUIREMENTS

ITEM 3: ALL OF THE SUBJECT PARCEL LIES IN "ZONE X" AREAS DETERMINED TO BE BELOW THE 0.2% ANNUAL CHANCE FLOODPLAIN PER NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP NO. 55025C0415G DATED JANUARY 2, 2009

ITEM 6(A): SAID PARCEL IS CURRENTLY ZONED RURAL RESIDENTIAL (R-R), BUT IS BEING REZONED TO GENERAL BUSINESS (B-G). NO ZONING LETTER PROVIDED BY CITY OF FITCHBURG, OR CLIENT. CURRENT ZONING INFORMATION TAKEN FROM FITCHBURG PUBLIC MAP SYSTEM.

ITEM 9: NO EXISTING PARKING STALLS LOCATED ON SAID PARCEL.

ITEM 11(A): NO REPORTS PROVIDED BY CLIENT FOR PRIVATE UTILITY LOCATIONS, NO PRIVATE LOCATE WAS COORDINATED BY THE SURVEYOR. DIGGER'S HOTLINE WAS CALLED AND THEIR FIELD MARKINGS WERE LOCATED.

ITEM 14: SUBJECT PARCEL IS ADJACENT TO S SEMINOLE HWY AND LACY ROAD INTERSECTION. FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING/ZONING DEPARTMENT OF THE CITY OF FITCHBURG. EXISTING ACCESS CONTROL ALONG SEMINOLE HIGHWAY AND LACY ROAD ESTABLISHED FROM SECTION 27 OF THE CITY OF FITCHBURG ORDINANCES.

ITEM 16: NO EVIDENCE OF CURRENT EARTHWORK OR CONSTRUCTION WAS OBSERVED ONSITE AT THE TIME OF THIS SURVEY.

WYSER ENGINEERING

PREPARED BY:
WYSER ENGINEERING
300 EAST front STREET
MOUNT HOREB, WI 53572
www.wyserengineering.com

PREPARED FOR:
NEWCOMB CONSTRUCTION COMPANY, INC.
999 FOURIER DRIVE #102
MADISON, WI 53717

SURVEYED BY: MAL/DZ
DRAWN BY: AL/AMS
APPROVED BY: ZMR

2747 S SEMINOLE HWY
FITCHBURG, WI 53711

PART OF LOT 2 OF CSM NO. 8023
PART OF THE SE 1/4 OF THE SW 1/4
SEC. 08 T-06-N, R-09-E
CITY OF FITCHBURG, DANE COUNTY, WI

Sheet Title:
ALTA/NSPS LAND TITLE SURVEY

Revisions:

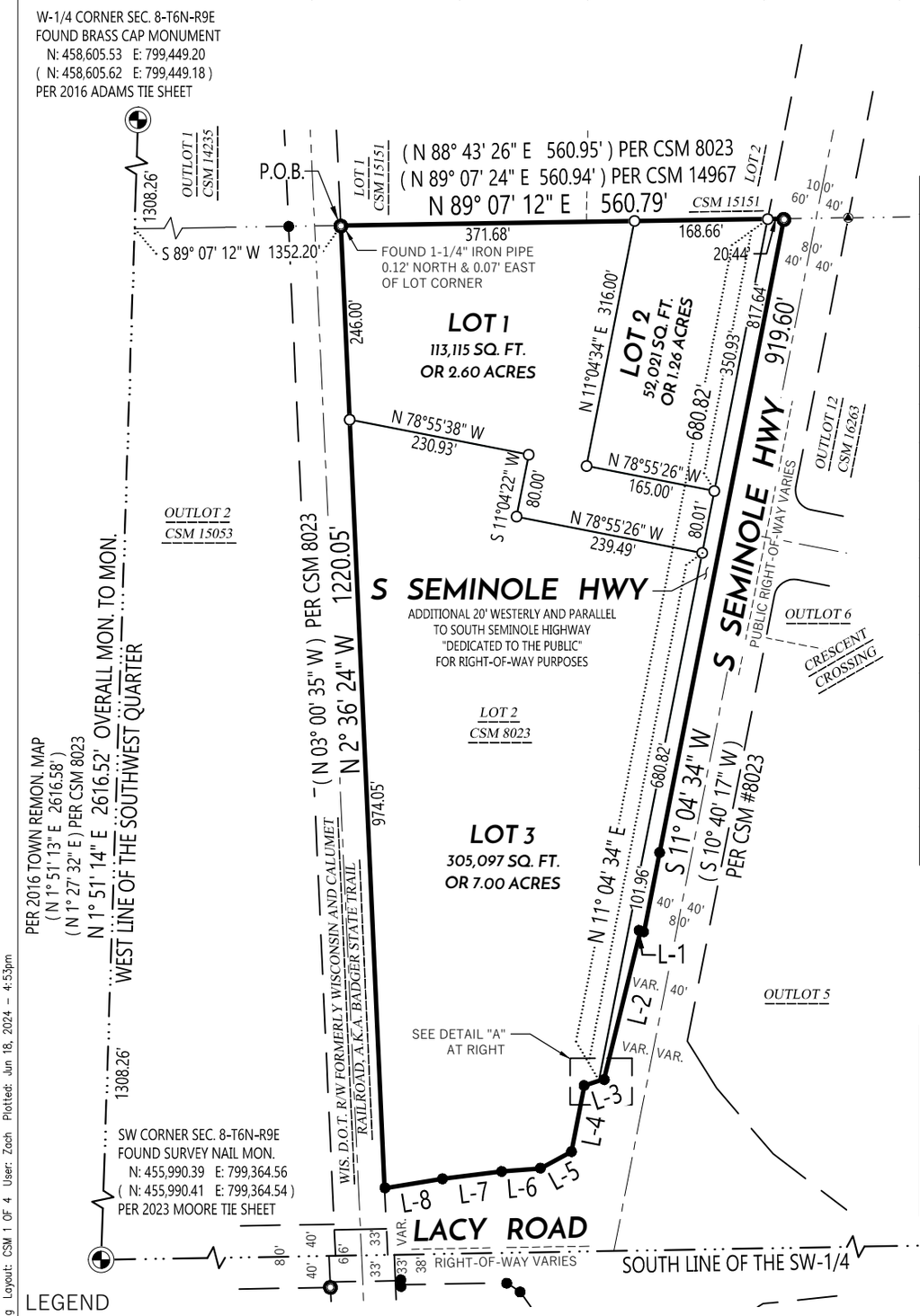
No.	Date:	Description:

Graphic Scale	0' 15' 30' 60' 90'
Wyser Number	24-1243
Set Type	SURVEY
Date Issued	07/10/2024
Sheet Number	V-002

File: W:\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\DWG\241243_ALTA.dwg Layout: Survey 22x34 (2) User: Zach Plotted: Jul 19, 2024 - 2:33pm

CERTIFIED SURVEY MAP NO._____

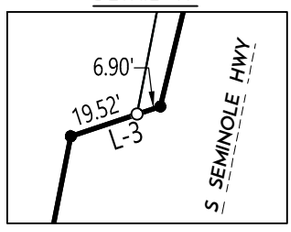
PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 8023 RECORDED IN VOLUME 42 OF CERTIFIED SURVEY MAPS OF DANE COUNTY ON PAGES 313-316 AS DOCUMENT NO. 2719369. LOCATED IN THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 08, TOWN 06 NORTH, RANGE 9 EAST, CITY OF FITCHBURG, DANE COUNTY , WISCONSIN.



LINE TABLE		
LINE #	DIRECTION	LENGTH
L-1	N 78° 55' 26" W	5.01'
*	(N 78° 55' 45" W)	(5.00')
L-2	S 13° 44' 29" W	193.21'
*	(S 13° 44' 26" W)	-
L-3	S 71° 35' 45" W	26.42'
*	(S 71° 35' 42" W)	-
L-4	S 11° 04' 04" W	85.00'
*	(S 11° 04' 15" W)	-
L-5	S 61° 25' 02" W	44.78'
*	(S 61° 24' 52" W)	(44.79')
L-6	S 85° 30' 11" W	49.09'
*	(S 85° 30' 10" W)	-
L-7	S 82° 55' 05" W	75.43'
*	(S 82° 55' 04" W)	-
L-8	S 80° 47' 29" W	74.21'
*	(S 80° 47' 33" W)	(74.18')

* PER TPP NO. 22-3495-4.01 AMENDMENT NO. 2, RECORDED AS DOCUMENT NO. 5884824

DETAIL "A"



NORTH

0' 100' 200'

LEGEND

- SECTION CORNER FOUND / RECOVERED
- MAG NAIL FOUND
- 3/4" REBAR FOUND
- 1" IRON PIPE FOUND
- 2" IRON PIPE FOUND
- 3/4" REBAR SET 1.50 LB/FT
- CSM BOUNDARY
- RIGHT-OF-WAY LINE
- CENTERLINE
- SECTION/QUARTER LINE
- QUARTER/QUARTER LINE
- PLATTED LINE
- ( ) RECORDED INFORMATION

NOTES:

1. FIELD WORK PERFORMED BY WYSER ENGINEERING, LLC. ON THE WEEKS OF JUNE 5TH, AND 6TH, 2024.
2. NORTH REFERENCE FOR THIS CERTIFIED SURVEY AND MAP ARE BASED ON THE WISCONSIN COORDINATE REFERENCE SYSTEM, WISCRS DANE, NAD 83 (2011), GRID NORTH. THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 8, T6N, R9E, BEARS N 01°51' 14" E
3. THIS PARCEL IS SUBJECT TO ALL EASEMENTS AND AGREEMENTS, BOTH RECORDED AND UNRECORDED.
4. SEE SHEETS 2 OF 4 FOR FURTHER DETAILS ON OVERALL CSM BOUNDARY, AND EASEMENTS.

WISCONSIN
ZACHARY M. REYNOLDS
S-3223
MOUNT HOREB
WISCONSIN
PROFESSIONAL LAND SURVEYOR

WYSER ENGINEERING

PREPARED BY:
WYSER ENGINEERING
300 EAST FRONT STREET
MOUNT HOREB, WI 53572
www.wyserengineering.com

PREPARED FOR:
NEWCOMB CONSTRUCTION COMPANY, INC.
999 FOURIER DRIVE #102
MADISON, WI 53717

SURVEYED BY: MAL/DZ
DRAWN BY: AMS
CHECKED BY: ZMR
APPROVED BY: ZMR

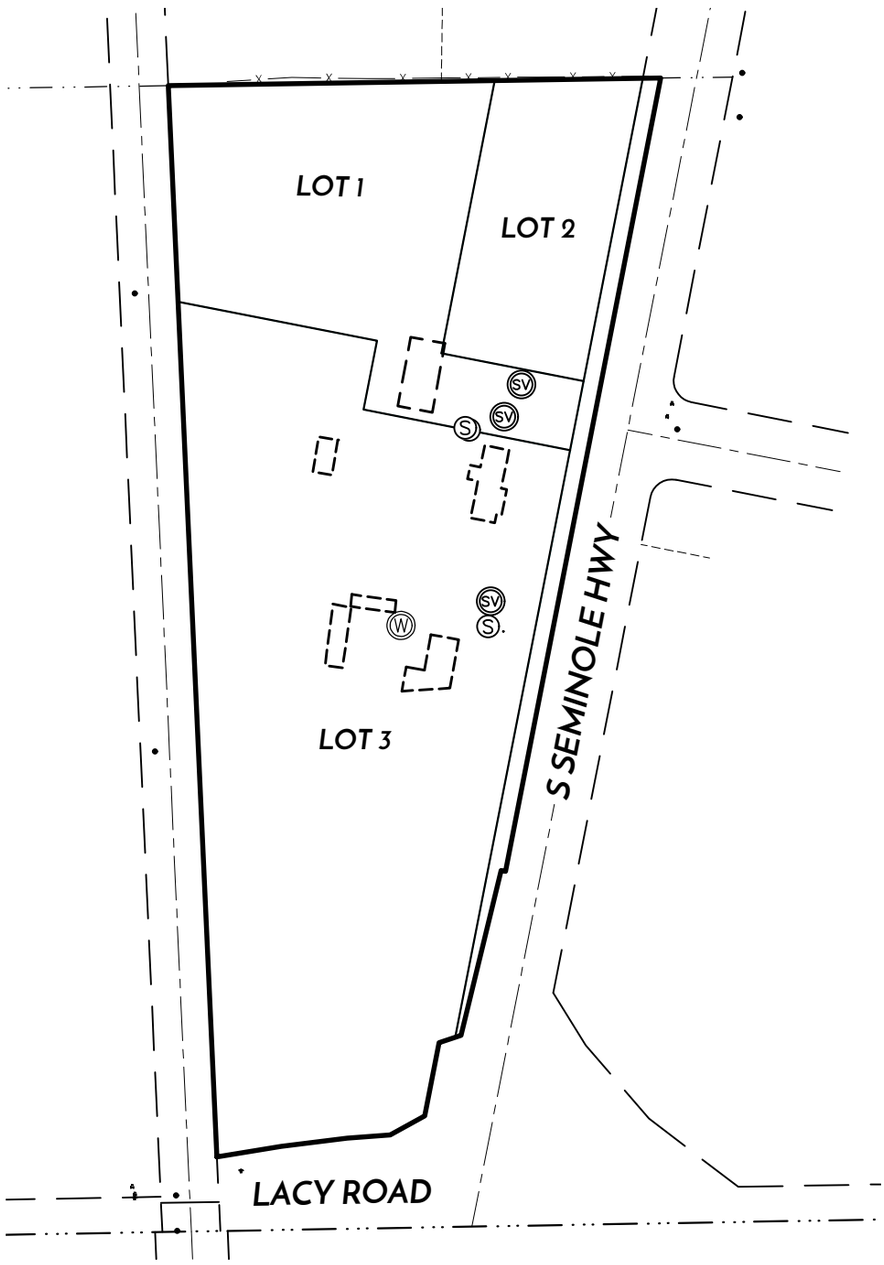
PROJECT NO: 24-1243
SHEET NO: 1 of 4

VOL. _____ PAGE _____
DOC. NO. _____
C.S.M. NO. _____

File: W:\2024\241243_Newcomb – Seminole & Lacy, Fitchburg\DWG\241243_CSM.dwg Layout: CSM 1 OF 4 User: Zach Plotted: Jun 18, 2024 – 4:53pm

CERTIFIED SURVEY MAP NO._____

PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 8023 RECORDED IN VOLUME 42 OF CERTIFIED SURVEY MAPS OF DANE COUNTY ON PAGES 313-316 AS DOCUMENT NO. 2719369. LOCATED IN THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 08, TOWN 06 NORTH, RANGE 9 EAST, CITY OF FITCHBURG, DANE COUNTY , WISCONSIN.



LEGEND

- CSM BOUNDARY
- RIGHT-OF-WAY LINE
- CENTERLINE
- SECTION/QUARTER LINE
- QUARTER/QUARTER LINE
- PLATTED LINE
- EXISTING EASEMENT
- EXISTING STRUCTURE
- FENCE LINE

NOTES:

1. FIELD WORK PERFORMED BY WYSER ENGINEERING, LLC. ON THE WEEKS OF JUNE 5TH, AND 6TH, 2024.
2. NORTH REFERENCE FOR THIS CERTIFIED SURVEY AND MAP ARE BASED ON THE WISCONSIN COORDINATE REFERENCE SYSTEM, WISCRS DANE, NAD 83 (2011), GRID NORTH. THE NORTH LINE OF THE SOUTHEAST QUARTER OF SECTION 6, T6N, R6E, BEARS S 89°38' 20" E
3. THIS PARCEL IS SUBJECT TO ALL EASEMENTS AND AGREEMENTS, BOTH RECORDED AND UNRECORDED.
4. SEE SHEETS 2 OF 4 FOR FURTHER DETAILS ON OVERALL CSM BOUNDARY, AND EASEMENTS.

NORTH

0' 100' 200'

WISCONSIN
ZACHARY M. REYNOLDS
S-3223
MOUNT HOREB
WISCONSIN
PROFESSIONAL LAND SURVEYOR

WYSER ENGINEERING

PREPARED BY:
WYSER ENGINEERING
300 EAST FRONT STREET
MOUNT HOREB, WI 53572
www.wyserengineering.com

PREPARED FOR:
NEWCOMB CONSTRUCTION COMPANY, INC.
999 FOURIER DRIVE #102
MADISON, WI 53717

SURVEYED BY:	MAL/DZ
DRAWN BY:	AMS
CHECKED BY:	ZMR
APPROVED BY:	ZMR

PROJECT NO:	24-1243
SHEET NO:	2 of 4

VOL. _____ PAGE _____
DOC. NO. _____
C.S.M. NO. _____

File: W:\2024\241243_Newcomb – Seminole & Lacy, Fitchburg\DWG\241243_CSM.dwg Layout: CSM 2 OF 4 User: Zach Plotted: Jun 18, 2024 – 4:50pm

*CERTIFIED SURVEY MAP NO.*_____

PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 8023 RECORDED IN VOLUME 42 OF CERTIFIED SURVEY MAPS OF DANE COUNTY ON PAGES 313-316 AS DOCUMENT NO. 2719369. LOCATED IN THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 08, TOWN 06 NORTH, RANGE 9 EAST, CITY OF FITCHBURG, DANE COUNTY , WISCONSIN.

LEGAL DESCRIPTION

PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 8023 RECORDED IN VOLUME 42 OF CERTIFIED SURVEY MAPS OF DANE COUNTY ON PAGES 313-316 AS DOCUMENT NO. 2719369 (CSM 8023), LOCATED IN THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 6 NORTH, RANGE 9 EAST, CITY OF FITCHBURG, DANE COUNTY , WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST QUARTER CORNER OF AFORESAID SECTION 8; THENCE, ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 8, SOUTH 01 DEGREES 51 MINUTES 14 SECONDS EAST, 1308.26 FEET TO THE NORTHWEST CORNER OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF SAID SECTION 8; THENCE ALONG THE NORTH LINE OF SAID SOUTH HALF, NORTH 89 DEGREES 07 MINUTES 12 SECONDS EAST, 1352.20 FEET TO THE NORTHWEST CORNER OF AFORESAID LOT 2 OF CSM 8023, AND THE POINT OF BEGINNING; THENCE, CONTINUING ALONG SAID NORTH LINE OF THE SOUTH HALF, AND ALSO ALONG THE NORTH LINE OF SAID LOT 2, NORTH 89 DEGREES 07 MINUTES 12 SECONDS EAST, 560.79 FEET TO THE NORTHEAST CORNER OF SAID LOT 2, AND ALSO BEING A POINT ON THE WESTERLY RIGHT-OF-WAY OF SOUTH SEMINOLE HIGHWAY; THENCE, ALONG THE EAST LINE OF SAID LOT 2, AND ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 11 DEGREES 04 MINUTES 34 SECONDS WEST, 919.60 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, NORTH 78 DEGREES 55 MINUTES 25 SECONDS WEST, 5.01 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 13 DEGREES 44 MINUTES 29 SECONDS WEST, 193.21 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 71 DEGREES 35 MINUTES 42 SECONDS WEST, 26.42 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 11 DEGREES 04 MINUTES 04 SECONDS WEST, 85.00 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY OF LACY ROAD; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, SOUTH 61 DEGREES 25 MINUTES 02 SECONDS 44.78 FEET; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, SOUTH 85 DEGREES 30 MINUTES 11 SECONDS WEST, 49.09 FEET; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, 82 DEGREES 55 MINUTES 05 SECONDS WEST, 75.43 FEET; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, SOUTH 80 DEGREES 47 MINUTES 29 SECONDS WEST, 74.21 FEET TO A POINT ON THE WESTERLY LINE OF AFORESAID LOT 2 OF CSM 8023; THENCE, ALONG SAID WESTERLY LINE, NORTH 02 DEGREES 36 MINUTES 24 SECONDS WEST, 1220.05 FEET BACK TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 493,619 SQUARE FEET OR 11.33 ACRES.

SURVEYOR'S CERTIFICATE

I, ZACHARY M. REYNOLDS, WISCONSIN PROFESSIONAL LAND SURVEYOR S-3223, DO HEREBY CERTIFY THAT BY DIRECTION OF NEWCOMB CONSTRUCTION COMPANY, INC. I HAVE SURVEYED, DIVIDED, AND MAPPED THE LANDS DESCRIBED HEREON AND THAT THE MAP IS A CORRECT REPRESENTATION IN ACCORDANCE WITH THE INFORMATION PROVIDED. I FURTHER CERTIFY THAT THIS CERTIFIED SURVEY MAP IS IN FULL COMPLIANCE WITH CHAPTER 236.34 OF THE WISCONSIN STATUTES AND THE SUBDIVISION REGULATIONS OF THE CITY OF FITCHBURG AND DANE COUNTY, WISCONSIN.

_____ _____

ZACHARY M. REYNOLDS, S-3223 DATE
WISCONSIN PROFESSIONAL LAND SURVEYOR

File: W:\2024\241243_Newcomb – Seminole & Lacy, Fitchburg\DWG\241243_CSM.dwg Layout: CSM 3 OF 4 User: Zach Plotted: Jun 18, 2024 – 4:51pm

WYSER ENGINEERING

PREPARED BY:
WYSER ENGINEERING
300 EAST FRONT STREET
MOUNT HOREB, WI 53572
www.wyserengineering.com

PREPARED FOR:
NEWCOMB CONSTRUCTION COMPANY, INC.
999 FOURIER DRIVE #102
MADISON, WI 53717

SURVEYED BY: MAL/DZ
DRAWN BY: AMS
CHECKED BY: ZMR
APPROVED BY: ZMR

PROJECT NO: 24-1243
SHEET NO: 3 of 4

VOL. _____ PAGE _____
DOC. NO. _____
C.S.M. NO. _____

*CERTIFIED SURVEY MAP NO.*_____

PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 8023 RECORDED IN VOLUME 42 OF CERTIFIED SURVEY MAPS OF DANE COUNTY ON PAGES 313-316 AS DOCUMENT NO. 2719369. LOCATED IN THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 08, TOWN 06 NORTH, RANGE 9 EAST, CITY OF FITCHBURG, DANE COUNTY , WISCONSIN.

OWNER'S CERTIFICATE

_____ LLC, AS OWNER, WE HEREBY CERTIFY THAT WE CAUSED THE LANDS DESCRIBED HEREON TO BE SURVEYED, DIVIDED MAPPED AND DEDICATED AS SHOWN. I ALSO CERTIFY THAT THIS CERTIFIED SURVEY MAP IS REQUIRED BY S. 236.34 OF THE WISCONSIN STATE STATUES TO BE SUBMITTED TO THE CITY OF MADISON FOR APPROVAL.

BY: _____
GUS NEWCOMB, MANAGING MEMBER

_____ LLC

STATE OF WISCONSIN) SS
DANE COUNTY) SS

PERSONALLY CAME BEFORE ME THIS_____DAY OF_____, 2024, THE ABOVE NAMED

MANAGING MEMBER FOR_____, LLC, GUS NEWCOMB, TO ME KNOWN TO BE THE

PERSON WHO EXECUTED THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED THE SAME.

_____ _____
NOTARY PUBLIC, STATE OF WISCONSIN MY COMMISSION EXPIRES

CONSENT OF MORTGAGEE

_____, A BANKING ASSOCIATION DULY ORGANIZED AND EXISTING UNDER AND BY VIRTUE OF THE LAWS OF THE STATE OF WISCONSIN , MORTAGAGEE OF THE ABOVE DESCRIBED LAND, DOES HEREBY CONSENT TO THE SURVEY, DIVIDING, MAPPING AND DEDICATION OF THE LAND DESCRIBED ON THIS CERTIFIED SURVEY MAP AND DOES HEREBY CONSENT TO THE OWNER'S CERTIFICATE.

BY: _____
AUTHORIZED OFFICER

STATE OF WISCONSIN) SS
DANE COUNTY) SS

PERSONALLY CAME BEFORE ME THIS_____DAY OF_____, 2024, THE ABOVE

NAMED BANKING ASSOCIATION, _____ AUTHORIZED OFFICER

_____ TO ME KNOWN TO BE THE PERSON WHO EXECUTED THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED THE SAME.

_____ _____
NOTARY PUBLIC, STATE OF WISCONSIN MY COMMISSION EXPIRES

WISCONSIN
ZACHARY M. REYNOLDS
S-3223
MOUNT HOREB
WISCONSIN
PROFESSIONAL LAND SURVEYOR

CITY OF FITCHBURG APPROVAL

THIS CERTIFIED SURVEY MAP, INCLUDING ANY DEDICATIONS SHOWN HEREON, HAS BEEN DULY FILED WITH AND APPROVED BY THE COMMON COUNCIL OF THE CITY OF FITCHBURG, DANE COUNTY, WISCONSIN.

DATED THIS _____DAY OF _____, 2024.

_____
TRACY OLDENBURG, CITY CLERK,
CITY OF FITCHBURG

OFFICE OF THE REGISTER OF DEEDS

_____COUNTY, WISCONSIN

RECEIVED FOR RECORD_____,

20____ AT_____O'CLOCK_____M AS

DOCUMENT # _____

IN VOL. _____ OF CERTIFIED SURVEY

MAPS ON PAGE(S) _____ .

_____
KRISTI CHLEBOWSKI, REGISTER OF DEEDS

WYSER ENGINEERING

PREPARED BY:
WYSER ENGINEERING
300 EAST FRONT STREET
MOUNT HOREB, WI 53572
www.wyseengineering.com

PREPARED FOR:
NEWCOMB CONSTRUCTION COMPANY, INC.
999 FOURIER DRIVE #102
MADISON, WI 53717

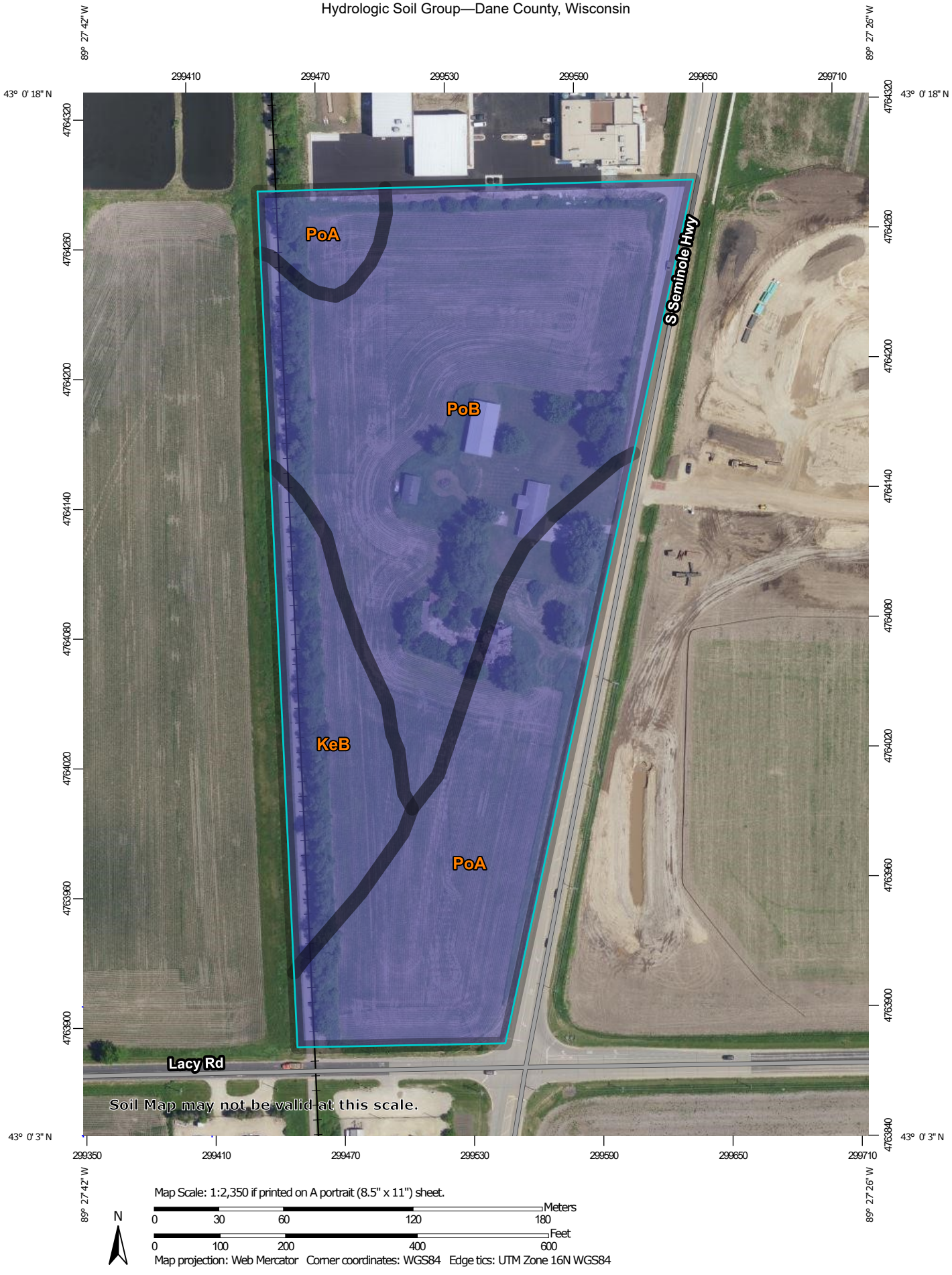
SURVEYED BY: MAL/DZ
DRAWN BY: AMS
CHECKED BY: ZMR
APPROVED BY: ZMR

PROJECT NO: 24-1243
SHEET NO: 3 of 4

File: W:\2024\241243_Newcomb – Seminole & Lacy, Fitchburg\DWG\241243_CSM.dwg Layout: CSM 4 OF 4 User: Zach Plotted: Jun 18, 2024 – 4:51pm

APPENDIX B

Soils Information


89° 27' 42" W
89° 27' 26" W
43° 0' 18" N
43° 0' 3" N
299350
299410
299470
299530
299590
299650
299710
4764320
4764260
4764200
4764140
4764080
4764020
4763960
4763900
4763840
PoA
PoB
KeB
PoA
S Seminole Hwy
Lacy Rd
Soil Map may not be valid at this scale.
Map Scale: 1:2,350 if printed on A portrait (8.5" x 11") sheet.
N
Meters
0 30 60 120 180
Feet
0 100 200 400 600
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

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

Soil Rating Lines

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

Soil Rating Points

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

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Dane County, Wisconsin
Survey Area Data: Version 22, Sep 8, 2023

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

Date(s) aerial images were photographed: Jun 13, 2020—Jul 31, 2020

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
KeB	Kegonsa silt loam, 2 to 6 percent slopes	B	2.0	13.8%
PoA	Plano silt loam, gravelly substratum, 0 to 2 percent slopes	B	4.8	32.8%
PoB	Plano silt loam, gravelly substratum, 2 to 6 percent slopes	B	7.8	53.4%
Totals for Area of Interest			**14.7**	**100.0%**

Description

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

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

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

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

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

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

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

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Wis. Dept. of Safety and Professional Services
Division of Industry Services

SOIL EVALUATION - STORM

in accordance with SPS 382.365 and 385, Wis. Adm. Code

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

Please print all information.

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

County: **Dane**

Parcel I.D.: **0609-083-9570-4**

Reviewed by: | Date:

Property Owner: **Newcomb Construction Company, Inc.**

Property Location: Govt. Lot **SE** 1/4 **SW** 1/4 S **8** T **6** N R **9** E (or) W

Property Owner's Mailing Address: **999 Fourier Drive #102**

Lot # **2** | Block # | Subd. Name or CSM# **CSM 8023**

City: **Madison,** | State: **WI** | Zip Code: **53717** | Phone Number: ( )

☒ City ☐ Village ☐ Town: **Fitchburg** | Nearest Road: **2747 S. Seminole Hwy**

Drainage area _____ ☐ sq. ft. ☐ acres
Optional:
Test Site Suitable for (check all that apply)
☐ Irrigation ☐ Bioretention trench ☐ Trench(es)
☐ Rain garden ☐ Grassed swale ☐ Reuse
☐ Infiltration trench ☐ SDS (> 15' wide) ☐ Other _____

Hydraulic Application Test Method:
☒ Morphological Evaluation
☐ Double-Ring Infiltrometer
☐ Other (specify) _____

TP-1 Obs. # ☐ Boring ☒ Pit Ground surface elev. **1023.53** ft. Depth to limiting factor **>72** in.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr
A	0-13	10YR3/3	None	sil	1msbk	mfr	cs	0	0.13
B	13-57	10YR4/4	None	sicl	2msbk	mfr	cs	0	0.04
2C	57-72	10YR6/4	None	fs	0sg	ml		2	0.5

TP-2 Obs. # ☐ Boring ☒ Pit Ground surface elev. **1025.19** ft. Depth to limiting factor **>72** in.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr
A	0-13	10YR3/2	None	sil	1msbk	mfr	cs	0	0.13
B	13-51	10YR4/4	None	sicl	2fsbk	mfr	cs	0	0.04
2C	51-72	10YR6/4	None	fs	0sg	ml		2	0.5

CST/PSS Name (Please Print): **Paul A. Hardy**

Signature:

CST/PSS Number: **225394**

Address: **7226 Timberwood Drive, Madison, WI 53719**

Date Evaluation Conducted: **6-14-2024**

Telephone Number: **608-848-4869**

Property Owner Newcomb Construction Co., Inc. Parcel ID # 0609-083-9570-4

TP-3 Obs # ☐ Boring ☒ Pit Ground surface elev 1025.38 ft Depth to limiting factor >103 in

Horizon	Depth in	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh	Consistence	Boundary	% Rock Frag	Hydraulic App. Rate Inches/Hr
A	0-8	10YR3/2	None	sil	2fsbk	mvfr	cs	0	0.13
B	8-58	10YR4/4	None	sicl	1msbk	mfi	gs	0	0.04
2C	58-103	10YR5/4	None	fs	0sg	ml		2	0.5

TP-4 Obs # ☐ Boring ☒ Pit Ground surface elev 1024.00 ft Depth to limiting factor >102* in

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr
A	0-13	10YR3/2	None	sil	2fsbk	mvfr	cs	0	0.13
B	13-60	10YR4/3	m2d10YR5/8,6/2*	sicl	1msbk	mfi	cs	0	0.04
2C	60-102	10YR5/6	None	lfs	0sg	ml		1	0.5
		*Restricted drainage in B horizon; Free-draining below 60"							

TP-5 Obs. # ☐ Boring ☒ Pit Ground surface elev. 1026.29 ft. Depth to limiting factor >60 in.

Horizon	Depth In.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr
A	0-13	10YR2/2	None	sil	2fsbk	mvfr	cs	0	0.13
B	13-48	10YR4/3	None	sicl	1msbk	mfi	cs	0	0.04
2C	48-60	10YR5/4	None	fs	0sg	ml		15	0.5

Test Results and/or Summary Comments

Property Owner Newcomb Construction Co., Inc. Parcel ID # 0609-083-9570-4 Page 3 of 4

TP-6 Obs. # ☐ Boring ☒ Pit Ground surface elev. 1026.27 ft. Depth to limiting factor >78* in.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr
A	0-14	10YR2/2	None	sil	2fsbk	mvfr	cs	0	0.13
B	14-58	10YR4/3	m2d10YR5/8,6/2*	sicl	1csbk	mfi	cs	0	0.04
2C	58-78	10YR6/4	None	fs	0sg	ml		10	0.5
			*Restricted drainage in B horizon; Free-Draining below 58"						

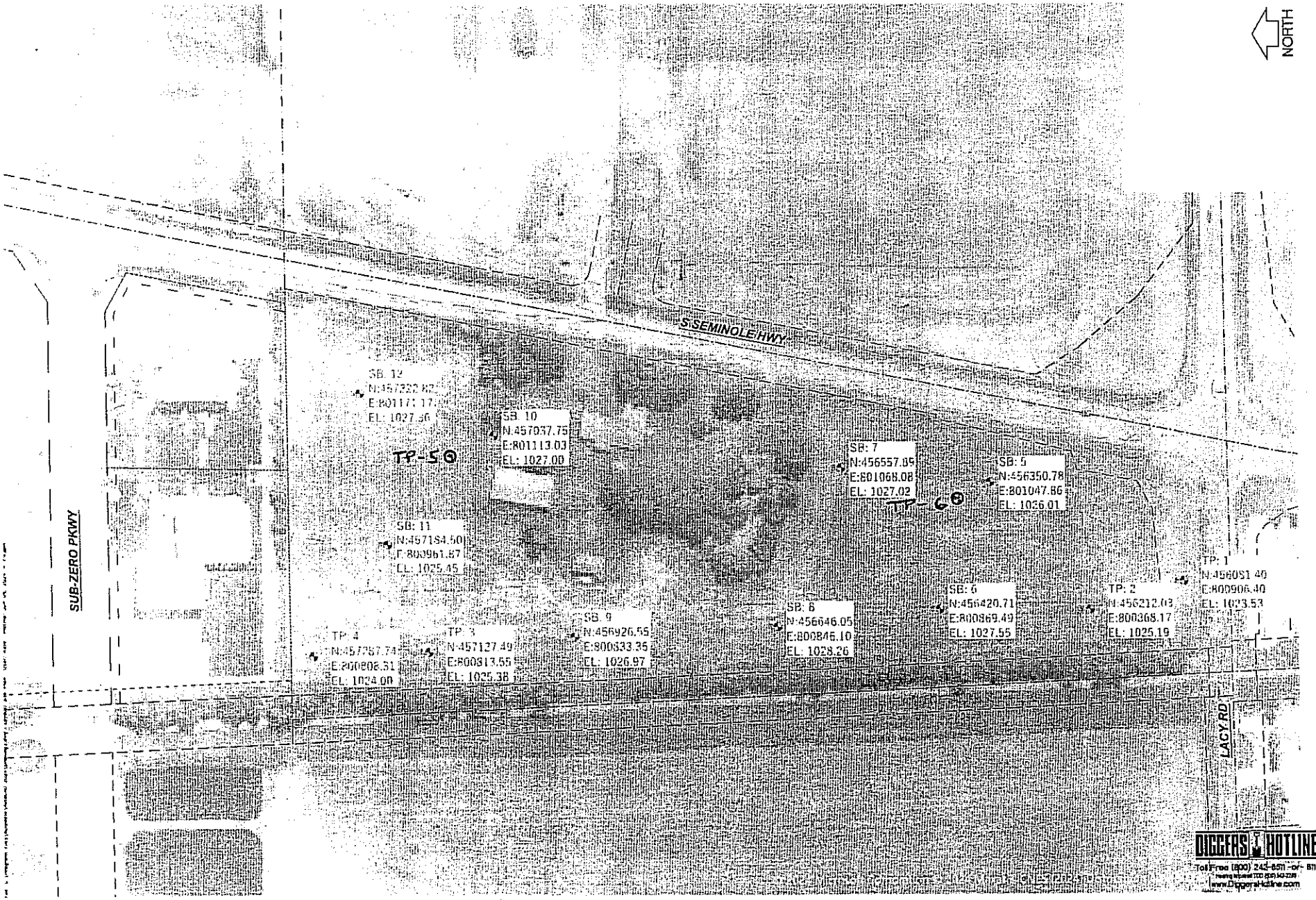
☐ Obs. # ☐ Boring ☐ Pit Ground surface elev. _____ ft. Depth to limiting factor _____ in.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr

☐ Obs. # ☐ Boring ☐ Pit Ground surface elev. _____ ft. Depth to limiting factor _____ in.

Horizon	Depth In.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr

Test Results and/or Summary Comments



WYSER ENGINEERING

BUFFALO MIXED USE DEVELOPMENT XXX

CITY OF FITCHBURG, DANE COUNTY, WI

2747 S SEMINOLE HWY

Sheet Title: TEST PIT & SOIL BORING GRAPHIC

Revisions		
No.	Date	Description

Graphic Scale	0' 30' 60'
Wyser Number	24-1243
Set Type	SCHEMATIC
Date Issued	06/06/2024
Sheet Number	C100

APPENDIX C

Proposed Construction Plans

APPENDIX D

Pre Development Hydrologic Modeling

NORTH

EXISTING
WATERSHED

WYSER
ENGINEERING

2747 S SEMINOLE HWY
FITCHBURG, WI 53711

COURT AND CORK PICKLEBALL

CITY OF FITCHBURG, DANE COUNTY, WI

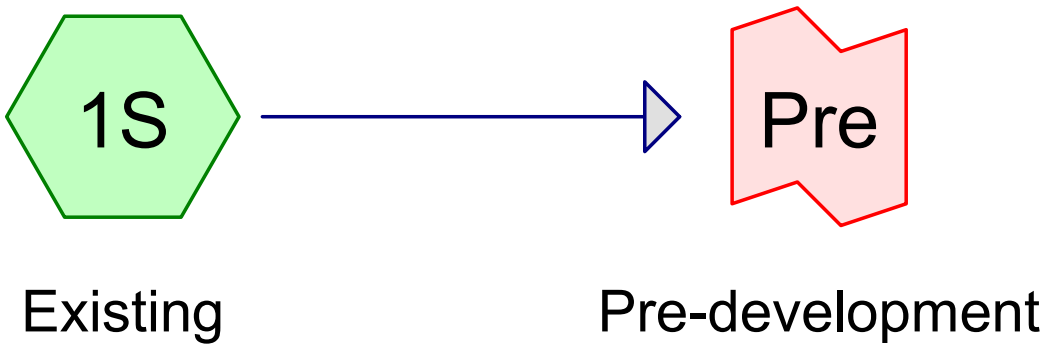
Sheet Title:
PREDEVELOPMENT WATERSHED MAP

Revisions:

No.	Date:	Description:

Graphic Scale	0' 20' 40' 60'
Wyser Number	24-1243
Set Type	REVIEW
Date Issued	07/23/2024
Sheet Number	EX D

File: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\DWG\241243_SWMP.dwg Layout: ex User: Kate Plotted: Jul 22, 2024 - 10:08pm



Subcat Reach Pond Link

Routing Diagram for 241243_Seminole Lacy
Prepared by Wyser Engineering, Printed 7/22/2024
HydroCAD® 10.20-2g s/n 08415 © 2022 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.990	68	Cropland, HSG B (1S)
0.073	98	Impervious (1S)
3.062	**69**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
2.990	HSG B	1S
0.000	HSG C	
0.000	HSG D	
0.073	Other	1S
3.062		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	2.990	0.000	0.000	0.000	2.990	Cropland	1S
0.000	0.000	0.000	0.000	0.073	0.073	Impervious	1S
0.000	**2.990**	**0.000**	**0.000**	**0.073**	**3.062**	**TOTAL AREA**	

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Existing Runoff Area=133,400 sf 2.38% Impervious Runoff Depth=0.43"
Flow Length=400' Tc=12.1 min CN=68/98 Runoff=1.25 cfs 0.109 af

Link Pre: Pre-development Inflow=1.25 cfs 0.109 af
Primary=1.25 cfs 0.109 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.109 af Average Runoff Depth = 0.43"
97.62% Pervious = 2.990 ac 2.38% Impervious = 0.073 ac

Summary for Subcatchment 1S: Existing

Runoff = 1.25 cfs @ 12.22 hrs, Volume= 0.109 af, Depth= 0.43"
Routed to Link Pre : Pre-development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 1-yr_NRCS Rainfall=2.49"

	Area (sf)	CN	Description
*	3,175	98	Impervious
*	130,225	68	Cropland, HSG B
	133,400	69	Weighted Average
	130,225	68	97.62% Pervious Area
	3,175	98	2.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0120	0.25		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 2.49"
5.6	300	0.0100	0.90		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
12.1	400	Total			

Summary for Link Pre: Pre-development

Inflow Area = 3.062 ac, 2.38% Impervious, Inflow Depth = 0.43" for 1-yr_NRCS event
Inflow = 1.25 cfs @ 12.22 hrs, Volume= 0.109 af
Primary = 1.25 cfs @ 12.22 hrs, Volume= 0.109 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Existing Runoff Area=133,400 sf 2.38% Impervious Runoff Depth=0.60"
Flow Length=400' Tc=12.1 min CN=68/98 Runoff=1.92 cfs 0.152 af

Link Pre: Pre-development Inflow=1.92 cfs 0.152 af
Primary=1.92 cfs 0.152 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.152 af Average Runoff Depth = 0.60"
97.62% Pervious = 2.990 ac 2.38% Impervious = 0.073 ac

Summary for Subcatchment 1S: Existing

Runoff = 1.92 cfs @ 12.22 hrs, Volume= 0.152 af, Depth= 0.60"
Routed to Link Pre : Pre-development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 2-yr_NRCS Rainfall=2.84"

	Area (sf)	CN	Description
*	3,175	98	Impervious
*	130,225	68	Cropland, HSG B
	133,400	69	Weighted Average
	130,225	68	97.62% Pervious Area
	3,175	98	2.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0120	0.25		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 2.49"
5.6	300	0.0100	0.90		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
12.1	400	Total			

Summary for Link Pre: Pre-development

Inflow Area = 3.062 ac, 2.38% Impervious, Inflow Depth = 0.60" for 2-yr_NRCS event
Inflow = 1.92 cfs @ 12.22 hrs, Volume= 0.152 af
Primary = 1.92 cfs @ 12.22 hrs, Volume= 0.152 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Existing Runoff Area=133,400 sf 2.38% Impervious Runoff Depth=1.32"
Flow Length=400' Tc=12.1 min CN=68/98 Runoff=4.88 cfs 0.338 af

Link Pre: Pre-development Inflow=4.88 cfs 0.338 af
Primary=4.88 cfs 0.338 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.338 af Average Runoff Depth = 1.32"
97.62% Pervious = 2.990 ac 2.38% Impervious = 0.073 ac

Summary for Subcatchment 1S: Existing

Runoff = 4.88 cfs @ 12.21 hrs, Volume= 0.338 af, Depth= 1.32"
Routed to Link Pre : Pre-development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 10-yr_NRCS Rainfall=4.09"

	Area (sf)	CN	Description
*	3,175	98	Impervious
*	130,225	68	Cropland, HSG B
	133,400	69	Weighted Average
	130,225	68	97.62% Pervious Area
	3,175	98	2.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0120	0.25		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 2.49"
5.6	300	0.0100	0.90		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
12.1	400	Total			

Summary for Link Pre: Pre-development

Inflow Area = 3.062 ac, 2.38% Impervious, Inflow Depth = 1.32" for 10-yr_NRCS event
Inflow = 4.88 cfs @ 12.21 hrs, Volume= 0.338 af
Primary = 4.88 cfs @ 12.21 hrs, Volume= 0.338 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Existing Runoff Area=133,400 sf 2.38% Impervious Runoff Depth=3.22"
Flow Length=400' Tc=12.1 min CN=68/98 Runoff=12.40 cfs 0.821 af

Link Pre: Pre-development Inflow=12.40 cfs 0.821 af
Primary=12.40 cfs 0.821 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.821 af Average Runoff Depth = 3.22"
97.62% Pervious = 2.990 ac 2.38% Impervious = 0.073 ac

Summary for Subcatchment 1S: Existing

Runoff = 12.40 cfs @ 12.20 hrs, Volume= 0.821 af, Depth= 3.22"
Routed to Link Pre : Pre-development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 100-yr_NRCS Rainfall=6.66"

	Area (sf)	CN	Description
*	3,175	98	Impervious
*	130,225	68	Cropland, HSG B
	133,400	69	Weighted Average
	130,225	68	97.62% Pervious Area
	3,175	98	2.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0120	0.25		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 2.49"
5.6	300	0.0100	0.90		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
12.1	400	Total			

Summary for Link Pre: Pre-development

Inflow Area = 3.062 ac, 2.38% Impervious, Inflow Depth = 3.22" for 100-yr_NRCS event
Inflow = 12.40 cfs @ 12.20 hrs, Volume= 0.821 af
Primary = 12.40 cfs @ 12.20 hrs, Volume= 0.821 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Existing Runoff Area=133,400 sf 2.38% Impervious Runoff Depth=3.93"
Flow Length=400' Tc=12.1 min CN=68/98 Runoff=15.17 cfs 1.002 af

Link Pre: Pre-development Inflow=15.17 cfs 1.002 af
Primary=15.17 cfs 1.002 af

Total Runoff Area = 3.062 ac Runoff Volume = 1.002 af Average Runoff Depth = 3.93"
97.62% Pervious = 2.990 ac 2.38% Impervious = 0.073 ac

Summary for Subcatchment 1S: Existing

Runoff = 15.17 cfs @ 12.20 hrs, Volume= 1.002 af, Depth= 3.93"
Routed to Link Pre : Pre-development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 200-yr_NRCS Rainfall=7.53"

	Area (sf)	CN	Description
*	3,175	98	Impervious
*	130,225	68	Cropland, HSG B
	133,400	69	Weighted Average
	130,225	68	97.62% Pervious Area
	3,175	98	2.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0120	0.25		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 2.49"
5.6	300	0.0100	0.90		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
12.1	400	Total			

Summary for Link Pre: Pre-development

Inflow Area = 3.062 ac, 2.38% Impervious, Inflow Depth = 3.93" for 200-yr_NRCS event
Inflow = 15.17 cfs @ 12.20 hrs, Volume= 1.002 af
Primary = 15.17 cfs @ 12.20 hrs, Volume= 1.002 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

TABLE OF CONTENTS

Project Reports
1 Routing Diagram
2 Area Listing (selected nodes)
3 Soil Listing (selected nodes)
4 Ground Covers (selected nodes)

1-yr_NRCS Event
5 Node Listing
6 Subcat 1S: Existing
7 Link Pre: Pre-development

2-yr_NRCS Event
8 Node Listing
9 Subcat 1S: Existing
10 Link Pre: Pre-development

10-yr_NRCS Event
11 Node Listing
12 Subcat 1S: Existing
13 Link Pre: Pre-development

100-yr_NRCS Event
14 Node Listing
15 Subcat 1S: Existing
16 Link Pre: Pre-development

200-yr_NRCS Event
17 Node Listing
18 Subcat 1S: Existing
19 Link Pre: Pre-development

APPENDIX E

Post Development Hydrologic Modeling

NORTH

WATERSHED A

WATERSHED B

TP: 4
N:457287.74
E:800308.31
EL: 1024.00

TP: 3
N:457128.73
E:800312.15
EL: 1025.78

WYSER ENGINEERING

2747 S SEMINOLE HWY
FITCHBURG, WI 53711

COURT AND CORK PICKLEBALL

CITY OF FITCHBURG, DANE COUNTY, WI

Sheet Title:
PROPOSED WATERSHED MAP

Revisions:

No.	Date:	Description:

Graphic Scale 0' 20' 40' 60'

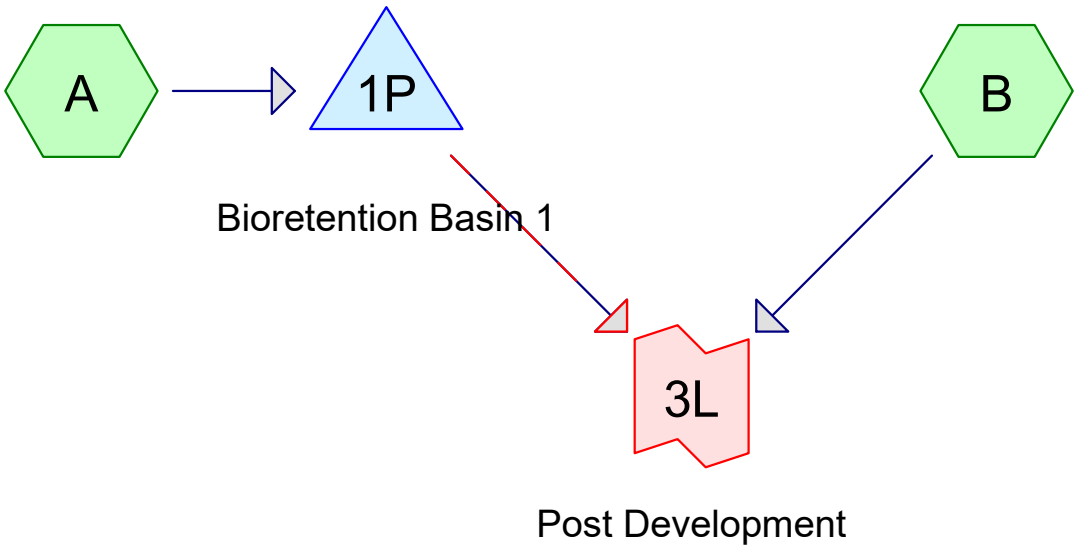
Wyser Number 24-1243

Set Type REVIEW

Date Issued 07/23/2024

Sheet Number EX E

File: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\DWG\241243_SWMP.dwg Layout: pro User: Kate Plotted: Jul 22, 2024 - 10:12pm



Subcat Reach Pond Link

Routing Diagram for 241243_Seminole Lacy
Prepared by Wyser Engineering, Printed 7/22/2024
HydroCAD® 10.20-2g s/n 08415 © 2022 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.614	74	>75% Grass cover, Good, HSG C (A)
0.027	78	>75% Grass cover, Good, HSG D (B)
0.941	98	Parking (A, B)
1.057	98	Roofs, HSG C (A)
0.183	98	Sidewalk (A, B)
0.241	100	Water Surface, HSG C (A)
3.062	**93**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
1.912	HSG C	A
0.027	HSG D	B
1.124	Other	A, B
3.062		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.614	0.027	0.000	0.640	>75% Grass cover, Good	A, B
0.000	0.000	0.000	0.000	0.941	0.941	Parking	A, B
0.000	0.000	1.057	0.000	0.000	1.057	Roofs	A
0.000	0.000	0.000	0.000	0.183	0.183	Sidewalk	A, B
0.000	0.000	0.241	0.000	0.000	0.241	Water Surface	A
0.000	**0.000**	**1.912**	**0.027**	**1.124**	**3.062**	**TOTAL AREA**	

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: Runoff Area=131,505 sf 79.68% Impervious Runoff Depth=1.92"
Tc=6.0 min CN=74/98 Runoff=8.26 cfs 0.484 af

Subcatchment B: Runoff Area=1,895 sf 37.99% Impervious Runoff Depth=1.34"
Tc=6.0 min CN=78/98 Runoff=0.09 cfs 0.005 af

Pond 1P: Bioretention Basin 1 Peak Elev=1,026.65' Storage=7,137 cf Inflow=8.26 cfs 0.484 af
Primary=0.94 cfs 0.484 af Secondary=0.00 cfs 0.000 af Outflow=0.94 cfs 0.484 af

Link 3L: Post Development Inflow=0.96 cfs 0.489 af
Primary=0.96 cfs 0.489 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.489 af Average Runoff Depth = 1.92"
20.91% Pervious = 0.640 ac 79.09% Impervious = 2.422 ac

Summary for Subcatchment A:

Runoff = 8.26 cfs @ 12.13 hrs, Volume= 0.484 af, Depth= 1.92"
Routed to Pond 1P : Bioretention Basin 1

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 1-yr_NRCS Rainfall=2.49"

	Area (sf)	CN	Description
	46,050	98	Roofs, HSG C
*	40,550	98	Parking
*	7,680	98	Sidewalk
*	10,500	100	Water Surface, HSG C
	26,725	74	>75% Grass cover, Good, HSG C
	131,505	93	Weighted Average
	26,725	74	20.32% Pervious Area
	104,780	98	79.68% Impervious Area

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

Summary for Subcatchment B:

Runoff = 0.09 cfs @ 12.13 hrs, Volume= 0.005 af, Depth= 1.34"
Routed to Link 3L : Post Development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 1-yr_NRCS Rainfall=2.49"

	Area (sf)	CN	Description
	0	98	Roofs, HSG C
*	450	98	Parking
*	270	98	Sidewalk
*	0	100	Water Surface, HSG C
*	1,175	78	>75% Grass cover, Good, HSG D
	1,895	86	Weighted Average
	1,175	78	62.01% Pervious Area
	720	98	37.99% Impervious Area

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

Summary for Pond 1P: Bioretention Basin 1

Inflow Area = 3.019 ac, 79.68% Impervious, Inflow Depth = 1.92" for 1-yr_NRCS event
Inflow = 8.26 cfs @ 12.13 hrs, Volume= 0.484 af
Outflow = 0.94 cfs @ 12.60 hrs, Volume= 0.484 af, Atten= 89%, Lag= 28.5 min
Primary = 0.94 cfs @ 12.60 hrs, Volume= 0.484 af
Routed to Link 3L : Post Development
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 3L : Post Development

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 1,026.65' @ 12.60 hrs Surf.Area= 11,474 sf Storage= 7,137 cf

Plug-Flow detention time= 52.9 min calculated for 0.484 af (100% of inflow)
Center-of-Mass det. time= 52.8 min (818.0 - 765.1)

Volume	Invert	Avail.Storage	Storage Description
#1	1,026.00'	24,000 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,026.00	10,500	0	0
1,027.00	12,000	11,250	11,250
1,028.00	13,500	12,750	24,000

Device	Routing	Invert	Outlet Devices
#1	Primary	1,024.00'	**8.0" Round Culvert** L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,024.00' / 1,023.80' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Primary	1,023.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 2	1,026.00'	**3.600 in/hr Exfiltration over Surface area from 1,023.50' - 1,026.00'** Excluded Surface area = 0 sf Phase-In= 0.01'
#4	Device 1	1,026.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Device 1	1,027.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#6	Secondary	1,027.50'	**15.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.94 cfs @ 12.60 hrs HW=1,026.65' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.06 cfs of 2.02 cfs potential flow)
  - **4=Orifice/Grate** (Orifice Controls 0.06 cfs @ 1.32 fps)
  - **5=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **2=Orifice/Grate** (Passes 0.87 cfs of 1.61 cfs potential flow)
  - **3=Exfiltration** (Exfiltration Controls 0.87 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,026.00' TW=0.00' (Dynamic Tailwater)
- **6=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link 3L: Post Development

Inflow Area = 3.062 ac, 79.09% Impervious, Inflow Depth = 1.92" for 1-yr_NRCS event
Inflow = 0.96 cfs @ 12.13 hrs, Volume= 0.489 af
Primary = 0.96 cfs @ 12.13 hrs, Volume= 0.489 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node Post

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: Runoff Area=131,505 sf 79.68% Impervious Runoff Depth=2.24"
Tc=6.0 min CN=74/98 Runoff=9.60 cfs 0.564 af

Subcatchment B: Runoff Area=1,895 sf 37.99% Impervious Runoff Depth=1.62"
Tc=6.0 min CN=78/98 Runoff=0.10 cfs 0.006 af

Pond 1P: Bioretention Basin 1 Peak Elev=1,026.78' Storage=8,655 cf Inflow=9.60 cfs 0.564 af
Primary=1.08 cfs 0.564 af Secondary=0.00 cfs 0.000 af Outflow=1.08 cfs 0.564 af

Link 3L: Post Development Inflow=1.09 cfs 0.570 af
Primary=1.09 cfs 0.570 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.570 af Average Runoff Depth = 2.23"
20.91% Pervious = 0.640 ac 79.09% Impervious = 2.422 ac

Summary for Subcatchment A:

Runoff = 9.60 cfs @ 12.13 hrs, Volume= 0.564 af, Depth= 2.24"
Routed to Pond 1P : Bioretention Basin 1

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 2-yr_NRCS Rainfall=2.84"

	Area (sf)	CN	Description
	46,050	98	Roofs, HSG C
*	40,550	98	Parking
*	7,680	98	Sidewalk
*	10,500	100	Water Surface, HSG C
	26,725	74	>75% Grass cover, Good, HSG C
	131,505	93	Weighted Average
	26,725	74	20.32% Pervious Area
	104,780	98	79.68% Impervious Area

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

Summary for Subcatchment B:

Runoff = 0.10 cfs @ 12.13 hrs, Volume= 0.006 af, Depth= 1.62"
Routed to Link 3L : Post Development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 2-yr_NRCS Rainfall=2.84"

	Area (sf)	CN	Description
	0	98	Roofs, HSG C
*	450	98	Parking
*	270	98	Sidewalk
*	0	100	Water Surface, HSG C
*	1,175	78	>75% Grass cover, Good, HSG D
	1,895	86	Weighted Average
	1,175	78	62.01% Pervious Area
	720	98	37.99% Impervious Area

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

Summary for Pond 1P: Bioretention Basin 1

Inflow Area = 3.019 ac, 79.68% Impervious, Inflow Depth = 2.24" for 2-yr_NRCS event
Inflow = 9.60 cfs @ 12.13 hrs, Volume= 0.564 af
Outflow = 1.08 cfs @ 12.61 hrs, Volume= 0.564 af, Atten= 89%, Lag= 28.7 min
Primary = 1.08 cfs @ 12.61 hrs, Volume= 0.564 af
Routed to Link 3L : Post Development
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 3L : Post Development

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 1,026.78' @ 12.61 hrs Surf.Area= 11,671 sf Storage= 8,655 cf

Plug-Flow detention time= 61.7 min calculated for 0.564 af (100% of inflow)
Center-of-Mass det. time= 61.7 min (824.7 - 763.0)

Volume	Invert	Avail.Storage	Storage Description
#1	1,026.00'	24,000 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,026.00	10,500	0	0
1,027.00	12,000	11,250	11,250
1,028.00	13,500	12,750	24,000

Device	Routing	Invert	Outlet Devices
#1	Primary	1,024.00'	**8.0" Round Culvert** L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,024.00' / 1,023.80' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Primary	1,023.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 2	1,026.00'	**3.600 in/hr Exfiltration over Surface area from 1,023.50' - 1,026.00'** Excluded Surface area = 0 sf Phase-In= 0.01'
#4	Device 1	1,026.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Device 1	1,027.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#6	Secondary	1,027.50'	**15.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=1.08 cfs @ 12.61 hrs HW=1,026.78' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.20 cfs of 2.08 cfs potential flow)
  - **4=Orifice/Grate** (Orifice Controls 0.20 cfs @ 1.80 fps)
  - **5=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **2=Orifice/Grate** (Passes 0.87 cfs of 1.65 cfs potential flow)
  - **3=Exfiltration** (Exfiltration Controls 0.87 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,026.00' TW=0.00' (Dynamic Tailwater)
- **6=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link 3L: Post Development

Inflow Area = 3.062 ac, 79.09% Impervious, Inflow Depth = 2.23" for 2-yr_NRCS event
Inflow = 1.09 cfs @ 12.57 hrs, Volume= 0.570 af
Primary = 1.09 cfs @ 12.57 hrs, Volume= 0.570 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node Post

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: Runoff Area=131,505 sf 79.68% Impervious Runoff Depth=3.41"
Tc=6.0 min CN=74/98 Runoff=14.46 cfs 0.858 af

Subcatchment B: Runoff Area=1,895 sf 37.99% Impervious Runoff Depth=2.68"
Tc=6.0 min CN=78/98 Runoff=0.17 cfs 0.010 af

Pond 1P: Bioretention Basin 1 Peak Elev=1,027.26' Storage=14,389 cf Inflow=14.46 cfs 0.858 af
Primary=1.55 cfs 0.858 af Secondary=0.00 cfs 0.000 af Outflow=1.55 cfs 0.858 af

Link 3L: Post Development Inflow=1.57 cfs 0.867 af
Primary=1.57 cfs 0.867 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.867 af Average Runoff Depth = 3.40"
20.91% Pervious = 0.640 ac 79.09% Impervious = 2.422 ac

Summary for Subcatchment A:

Runoff = 14.46 cfs @ 12.13 hrs, Volume= 0.858 af, Depth= 3.41"
Routed to Pond 1P : Bioretention Basin 1

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 10-yr_NRCS Rainfall=4.09"

	Area (sf)	CN	Description
	46,050	98	Roofs, HSG C
*	40,550	98	Parking
*	7,680	98	Sidewalk
*	10,500	100	Water Surface, HSG C
	26,725	74	>75% Grass cover, Good, HSG C
	131,505	93	Weighted Average
	26,725	74	20.32% Pervious Area
	104,780	98	79.68% Impervious Area

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

Summary for Subcatchment B:

Runoff = 0.17 cfs @ 12.13 hrs, Volume= 0.010 af, Depth= 2.68"
Routed to Link 3L : Post Development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 10-yr_NRCS Rainfall=4.09"

	Area (sf)	CN	Description
	0	98	Roofs, HSG C
*	450	98	Parking
*	270	98	Sidewalk
*	0	100	Water Surface, HSG C
*	1,175	78	>75% Grass cover, Good, HSG D
	1,895	86	Weighted Average
	1,175	78	62.01% Pervious Area
	720	98	37.99% Impervious Area

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

Summary for Pond 1P: Bioretention Basin 1

Inflow Area = 3.019 ac, 79.68% Impervious, Inflow Depth = 3.41" for 10-yr_NRCS event
Inflow = 14.46 cfs @ 12.13 hrs, Volume= 0.858 af
Outflow = 1.55 cfs @ 12.62 hrs, Volume= 0.858 af, Atten= 89%, Lag= 29.7 min
Primary = 1.55 cfs @ 12.62 hrs, Volume= 0.858 af
Routed to Link 3L : Post Development
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 3L : Post Development

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 1,027.26' @ 12.62 hrs Surf.Area= 12,386 sf Storage= 14,389 cf

Plug-Flow detention time= 83.5 min calculated for 0.858 af (100% of inflow)
Center-of-Mass det. time= 83.5 min (841.2 - 757.7)

Volume	Invert	Avail.Storage	Storage Description
#1	1,026.00'	24,000 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,026.00	10,500	0	0
1,027.00	12,000	11,250	11,250
1,028.00	13,500	12,750	24,000

Device	Routing	Invert	Outlet Devices
#1	Primary	1,024.00'	**8.0" Round Culvert** L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,024.00' / 1,023.80' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Primary	1,023.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 2	1,026.00'	**3.600 in/hr Exfiltration over Surface area from 1,023.50' - 1,026.00'** Excluded Surface area = 0 sf Phase-In= 0.01'
#4	Device 1	1,026.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Device 1	1,027.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#6	Secondary	1,027.50'	**15.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=1.55 cfs @ 12.62 hrs HW=1,027.26' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.67 cfs of 2.27 cfs potential flow)
  - **4=Orifice/Grate** (Orifice Controls 0.67 cfs @ 3.43 fps)
  - **5=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **2=Orifice/Grate** (Passes 0.87 cfs of 1.77 cfs potential flow)
  - **3=Exfiltration** (Exfiltration Controls 0.87 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,026.00' TW=0.00' (Dynamic Tailwater)
- **6=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link 3L: Post Development

Inflow Area = 3.062 ac, 79.09% Impervious, Inflow Depth = 3.40" for 10-yr_NRCS event
Inflow = 1.57 cfs @ 12.55 hrs, Volume= 0.867 af
Primary = 1.57 cfs @ 12.55 hrs, Volume= 0.867 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node Post

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: Runoff Area=131,505 sf 79.68% Impervious Runoff Depth=5.88"
Tc=6.0 min CN=74/98 Runoff=24.66 cfs 1.479 af

Subcatchment B: Runoff Area=1,895 sf 37.99% Impervious Runoff Depth=5.02"
Tc=6.0 min CN=78/98 Runoff=0.32 cfs 0.018 af

Pond 1P: Bioretention Basin 1 Peak Elev=1,027.82' Storage=21,606 cf Inflow=24.66 cfs 1.479 af
Primary=3.35 cfs 1.306 af Secondary=6.69 cfs 0.172 af Outflow=10.05 cfs 1.479 af

Link 3L: Post Development Inflow=10.18 cfs 1.497 af
Primary=10.18 cfs 1.497 af

Total Runoff Area = 3.062 ac Runoff Volume = 1.497 af Average Runoff Depth = 5.87"
20.91% Pervious = 0.640 ac 79.09% Impervious = 2.422 ac

Summary for Subcatchment A:

Runoff = 24.66 cfs @ 12.13 hrs, Volume= 1.479 af, Depth= 5.88"
Routed to Pond 1P : Bioretention Basin 1

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 100-yr_NRCS Rainfall=6.66"

	Area (sf)	CN	Description
	46,050	98	Roofs, HSG C
*	40,550	98	Parking
*	7,680	98	Sidewalk
*	10,500	100	Water Surface, HSG C
	26,725	74	>75% Grass cover, Good, HSG C
	131,505	93	Weighted Average
	26,725	74	20.32% Pervious Area
	104,780	98	79.68% Impervious Area

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

Summary for Subcatchment B:

Runoff = 0.32 cfs @ 12.13 hrs, Volume= 0.018 af, Depth= 5.02"
Routed to Link 3L : Post Development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 100-yr_NRCS Rainfall=6.66"

	Area (sf)	CN	Description
	0	98	Roofs, HSG C
*	450	98	Parking
*	270	98	Sidewalk
*	0	100	Water Surface, HSG C
*	1,175	78	>75% Grass cover, Good, HSG D
	1,895	86	Weighted Average
	1,175	78	62.01% Pervious Area
	720	98	37.99% Impervious Area

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

Summary for Pond 1P: Bioretention Basin 1

Inflow Area = 3.019 ac, 79.68% Impervious, Inflow Depth = 5.88" for 100-yr_NRCS event
Inflow = 24.66 cfs @ 12.13 hrs, Volume= 1.479 af
Outflow = 10.05 cfs @ 12.25 hrs, Volume= 1.479 af, Atten= 59%, Lag= 7.2 min
Primary = 3.35 cfs @ 12.25 hrs, Volume= 1.306 af
Routed to Link 3L : Post Development
Secondary = 6.69 cfs @ 12.25 hrs, Volume= 0.172 af
Routed to Link 3L : Post Development

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 1,027.82' @ 12.25 hrs Surf.Area= 13,231 sf Storage= 21,606 cf

Plug-Flow detention time= 76.3 min calculated for 1.479 af (100% of inflow)
Center-of-Mass det. time= 76.3 min (827.8 - 751.5)

Volume	Invert	Avail.Storage	Storage Description
#1	1,026.00'	24,000 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,026.00	10,500	0	0
1,027.00	12,000	11,250	11,250
1,028.00	13,500	12,750	24,000

Device	Routing	Invert	Outlet Devices
#1	Primary	1,024.00'	**8.0" Round Culvert** L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,024.00' / 1,023.80' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Primary	1,023.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 2	1,026.00'	**3.600 in/hr Exfiltration over Surface area from 1,023.50' - 1,026.00'** Excluded Surface area = 0 sf Phase-In= 0.01'
#4	Device 1	1,026.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Device 1	1,027.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#6	Secondary	1,027.50'	**15.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=3.35 cfs @ 12.25 hrs HW=1,027.82' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Inlet Controls 2.48 cfs @ 7.10 fps)
  - **4=Orifice/Grate** (Passes < 0.98 cfs potential flow)
  - **5=Sharp-Crested Rectangular Weir** (Passes < 4.39 cfs potential flow)
- **2=Orifice/Grate** (Passes 0.87 cfs of 1.91 cfs potential flow)
  - **3=Exfiltration** (Exfiltration Controls 0.87 cfs)

Secondary OutFlow Max=6.69 cfs @ 12.25 hrs HW=1,027.82' TW=0.00' (Dynamic Tailwater)
- **6=Broad-Crested Rectangular Weir** (Weir Controls 6.69 cfs @ 1.39 fps)

Summary for Link 3L: Post Development

Inflow Area = 3.062 ac, 79.09% Impervious, Inflow Depth = 5.87" for 100-yr_NRCS event
Inflow = 10.18 cfs @ 12.25 hrs, Volume= 1.497 af
Primary = 10.18 cfs @ 12.25 hrs, Volume= 1.497 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node Post

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: Runoff Area=131,505 sf 79.68% Impervious Runoff Depth=6.72"
Tc=6.0 min CN=74/98 Runoff=28.15 cfs 1.692 af

Subcatchment B: Runoff Area=1,895 sf 37.99% Impervious Runoff Depth=5.84"
Tc=6.0 min CN=78/98 Runoff=0.37 cfs 0.021 af

Pond 1P: Bioretention Basin 1 Peak Elev=1,027.95' Storage=23,321 cf Inflow=28.15 cfs 1.692 af
Primary=3.40 cfs 1.407 af Secondary=11.56 cfs 0.284 af Outflow=14.96 cfs 1.692 af

Link 3L: Post Development Inflow=15.16 cfs 1.713 af
Primary=15.16 cfs 1.713 af

Total Runoff Area = 3.062 ac Runoff Volume = 1.713 af Average Runoff Depth = 6.71"
20.91% Pervious = 0.640 ac 79.09% Impervious = 2.422 ac

Summary for Subcatchment A:

Runoff = 28.15 cfs @ 12.13 hrs, Volume= 1.692 af, Depth= 6.72"
Routed to Pond 1P : Bioretention Basin 1

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 200-yr_NRCS Rainfall=7.53"

	Area (sf)	CN	Description
	46,050	98	Roofs, HSG C
*	40,550	98	Parking
*	7,680	98	Sidewalk
*	10,500	100	Water Surface, HSG C
	26,725	74	>75% Grass cover, Good, HSG C
	131,505	93	Weighted Average
	26,725	74	20.32% Pervious Area
	104,780	98	79.68% Impervious Area

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

Summary for Subcatchment B:

Runoff = 0.37 cfs @ 12.13 hrs, Volume= 0.021 af, Depth= 5.84"
Routed to Link 3L : Post Development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 200-yr_NRCS Rainfall=7.53"

	Area (sf)	CN	Description
	0	98	Roofs, HSG C
*	450	98	Parking
*	270	98	Sidewalk
*	0	100	Water Surface, HSG C
*	1,175	78	>75% Grass cover, Good, HSG D
	1,895	86	Weighted Average
	1,175	78	62.01% Pervious Area
	720	98	37.99% Impervious Area

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

Summary for Pond 1P: Bioretention Basin 1

Inflow Area = 3.019 ac, 79.68% Impervious, Inflow Depth = 6.72" for 200-yr_NRCS event
Inflow = 28.15 cfs @ 12.13 hrs, Volume= 1.692 af
Outflow = 14.96 cfs @ 12.21 hrs, Volume= 1.692 af, Atten= 47%, Lag= 5.0 min
Primary = 3.40 cfs @ 12.21 hrs, Volume= 1.407 af
Routed to Link 3L : Post Development
Secondary = 11.56 cfs @ 12.21 hrs, Volume= 0.284 af
Routed to Link 3L : Post Development

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 1,027.95' @ 12.21 hrs Surf.Area= 13,424 sf Storage= 23,321 cf

Plug-Flow detention time= 72.3 min calculated for 1.692 af (100% of inflow)
Center-of-Mass det. time= 72.3 min (822.4 - 750.0)

Volume	Invert	Avail.Storage	Storage Description
#1	1,026.00'	24,000 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,026.00	10,500	0	0
1,027.00	12,000	11,250	11,250
1,028.00	13,500	12,750	24,000

Device	Routing	Invert	Outlet Devices
#1	Primary	1,024.00'	**8.0" Round Culvert** L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,024.00' / 1,023.80' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Primary	1,023.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 2	1,026.00'	**3.600 in/hr Exfiltration over Surface area from 1,023.50' - 1,026.00'** Excluded Surface area = 0 sf Phase-In= 0.01'
#4	Device 1	1,026.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Device 1	1,027.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#6	Secondary	1,027.50'	**15.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=3.40 cfs @ 12.21 hrs HW=1,027.95' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Inlet Controls 2.52 cfs @ 7.23 fps)
  - **4=Orifice/Grate** (Passes < 1.04 cfs potential flow)
  - **5=Sharp-Crested Rectangular Weir** (Passes < 6.18 cfs potential flow)
- **2=Orifice/Grate** (Passes 0.87 cfs of 1.94 cfs potential flow)
  - **3=Exfiltration** (Exfiltration Controls 0.87 cfs)

Secondary OutFlow Max=11.54 cfs @ 12.21 hrs HW=1,027.95' TW=0.00' (Dynamic Tailwater)
- **6=Broad-Crested Rectangular Weir** (Weir Controls 11.54 cfs @ 1.71 fps)

Summary for Link 3L: Post Development

Inflow Area = 3.062 ac, 79.09% Impervious, Inflow Depth = 6.71" for 200-yr_NRCS event
Inflow = 15.16 cfs @ 12.21 hrs, Volume= 1.713 af
Primary = 15.16 cfs @ 12.21 hrs, Volume= 1.713 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node Post

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

TABLE OF CONTENTS

Project Reports
1 Routing Diagram
2 Area Listing (selected nodes)
3 Soil Listing (selected nodes)
4 Ground Covers (selected nodes)

1-yr_NRCS Event
5 Node Listing
6 Subcat A:
7 Subcat B:
8 Pond 1P: Bioretention Basin 1
9 Link 3L: Post Development

2-yr_NRCS Event
10 Node Listing
11 Subcat A:
12 Subcat B:
13 Pond 1P: Bioretention Basin 1
14 Link 3L: Post Development

10-yr_NRCS Event
15 Node Listing
16 Subcat A:
17 Subcat B:
18 Pond 1P: Bioretention Basin 1
19 Link 3L: Post Development

100-yr_NRCS Event
20 Node Listing
21 Subcat A:
22 Subcat B:
23 Pond 1P: Bioretention Basin 1
24 Link 3L: Post Development

200-yr_NRCS Event
25 Node Listing
26 Subcat A:
27 Subcat B:
28 Pond 1P: Bioretention Basin 1
29 Link 3L: Post Development

NORTH

WATERSHED P - 15

WATERSHED P - 14

WATERSHED P - 11/
STM INL NO. 14

WATERSHED P - 12/
STM INL NO. 15

WATERSHED P - 10/
STM INL NO. 13

WATERSHED P - 9/
STM INL NO. 12

WATERSHED P - 8/
STM INL NO. 11

WATERSHED P - 7/
STM INL NO. 10

WATERSHED P - 13/
STM INL NO. 16

WATERSHED P - 4/
STM AES NO. 6

78 LF OF 6" PERF HDPE @ I.E. 1024.0

212 LF OF 6" PERF HDPE @ I.E. 1024.0

27 LF OF 6" PERF HDPE @ 1.0%

AES NO. 1

AES NO. 2

AES NO. 3

AES NO. 4

AES NO. 6

AES NO. 17

AES NO. 18

AES NO. 30

STM MH NO. 2

STM MH NO. 5

STM MH NO. 8

STM MH NO. 19

STM MH NO. 31

STM GOOSE NECK NO. 7

STM INL NO. 9

STM INL NO. 10

STM INL NO. 11

STM INL NO. 12

STM INL NO. 13

STM INL NO. 14

STM INL NO. 15

STM INL NO. 16

811 922 9271

WYSER
ENGINEERING

COURT AND CORK PICKLEBALL

CITY OF FITCHBURG, DANE COUNTY, WI

2747 S SEMINOLE HWY
FITCHBURG, WI 53711

Sheet Title:
STORM SEWER WATERSHED MAP

Revisions:

No.	Date:	Description:

Graphic Scale	0' 20' 40' 60'
Wyser Number	24-1243
Set Type	REVIEW
Date Issued	07/23/2024
Sheet Number	EX E.2

File: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\DWG\241243_SWMP.dwg Layout: stm User: Kate Plotted: Jul 22, 2024 - 10:22pm

Location			Watershed Area							Travel Time			Rainfall-Runoff						Flow in Pipe							Vertical Control				PIPE WIDTH	Cover	
Structure											Flow Time															Invert Elv.		Top of structure				
Upstream	Downstream	Number	TOTAL AREA	Open Space	Paved	Rooftop	Area A	Runoff Coeff. C	Equiv. Area for 100% Runoff delta CA	Inlet Time	Street	Pipe	Time of Concentration	Ave. Rainfall Intensity 10-year	Ave. Rainfall Intensity 100-year	Ave. Rainfall Intensity 200-year	Direct Runoff - 10-year	Direct Runoff - 100-year	Direct Runoff - 200-year	Design Runoff	Design Runoff	Slope of Sewer	Pipe Size	Length of pipe	Pipe Material	Capacity flowing full	Capacity flowing full	Mean velocity flowing full	fall of pipe	upper	lower	upper	lower			
							Acres		Acres	Min.	Min.	Min.	Min.	in/hr	in/hr	in/hr	cfs	cfs	cfs	cfs	gpm	ft/ft	in	ft		cfs	gpm	fps	ft	ft	ft	ft	ft			
STM MH NO. 2	AES NO. 1	P - 1	-	-	-	-	-	-	-	1.0		0.1	5.0	7.30	11.0	12.3	-	-	-	1.55	695.69	0.0200	8	17.67	HDPE	1.85	830.95	OK	5.30	0.35	1024.35	1024.00	1028.00	-	0.75	2.90	OK
AES NO. 3	STM MH NO. 2	P - 2	-	-	-	-	-	-	-	1.0		0.0	5.0	7.30	11.0	12.3	-	-	-	1.55	695.69	0.0500	15	10.33	HDPE	15.65	7023.42	OK	12.75	0.52	1026.00	1025.48	-	1028.00	1.42	-	-
		AES NO. 3	0	0	0	0	0.00	#DIV/0!	#DIV/0!	1.0		-	5.0	7.30	11.0	12.3	1.55	2.48	2.53	1.55	695.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM MH NO. 5	AES NO. 4	P - 3	-	-			-	-	-	1.0		0.2	5.0	7.30	11.0	12.3	-	-	-	4.23	1897.75	0.0050	15	45.33	HDPE	4.95	2221.00	OK	4.03	0.23	1025.87	1025.64	1029.00	-	1.42	1.72	OK
AES NO. 6	STM MH NO. 5	P - 4	-	-			-	-	-	1.0		0.1	5.0	7.30	11.0	12.3	-	-	-	4.23	1897.75	0.0050	15	26.71	HDPE	4.95	2221.00	OK	4.03	0.13	1026.00	1025.87	-	1029.00	1.42	-	-
		AES NO. 6	111850	107814	700	3336	2.57	0.23	0.58	1.0		-	5.0	7.30	11.0	12.3	4.23	6.37	7.12	4.23	1897.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM MH NO. 8	STM MH NO. 7	P - 5	-	-			-	-	-	1.0		0.1	5.0	7.30	11.0	12.3	-	-	-	16.33	7329.50	0.0050	24	25.16	HDPE	17.33	7778.02	OK	5.52	0.13	1022.63	1022.50	1028.35	1027.50	2.17	3.56	OK
STM MH NO. 9	STM MH NO. 8	P - 6	-	-			-	-	-	1.0		0.5	5.0	7.30	11.0	12.3	-	-	-	16.33	7329.50	0.0050	24	175.95	HDPE	17.33	7778.02	OK	5.52	0.88	1023.51	1022.63	1029.80	1028.35	2.17	4.13	OK
STM INL NO. 10	STM MH NO. 9	P - 7	-	-			-	-	-	1.0		0.1	5.0	7.30	11.0	12.3	-	-	-	14.28	6409.74	0.0050	24	26.71	HDPE	17.33	7778.02	OK	5.52	0.13	1023.64	1023.51	1028.07	1029.80	2.17	2.26	OK
		STM INL NO. 10	8570	2525	6045		0.20	0.73	0.14	1.0		-	5.0	7.30	11.0	12.3	1.05	1.58	1.76	1.76	791.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM INL NO. 11	STM INL NO. 10	P - 8	-	-			-	-	-	1.0		0.0	5.0	7.30	11.0	12.3	-	-	-	12.52	5617.93	0.0050	24	11.00	HDPE	17.33	7778.02	OK	5.52	0.05	1023.69	1023.64	1028.07	1028.07	2.17	2.21	OK
		STM INL NO. 11	6675	790	5885		0.15	0.86	0.13	1.0		-	5.0	7.30	11.0	12.3	0.96	1.45	1.62	1.62	728.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM INL NO. 12	STM INL NO. 11	P - 9	-	-			-	-	-	1.0		0.2	5.0	7.30	11.0	12.3	-	-	-	9.20	4129.13	0.0050	24	80.00	HDPE	17.33	7778.02	OK	5.52	0.40	1024.09	1023.69	1028.07	1028.07	2.17	1.81	OK
		STM INL NO. 12	6750	855	5895		0.15	0.86	0.13	1.0		-	5.0	7.30	11.0	12.3	0.97	1.46	1.63	1.63	731.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM INL NO. 13	STM INL NO. 12	P - 10	-	-			-	-	-	1.0		0.0	5.0	7.30	11.0	12.3	-	-	-	7.57	3397.70	0.0050	18	9.00	HDPE	8.05	3611.59	OK	4.55	0.05	1024.64	1024.59	1028.07	1028.07	1.67	1.76	OK
		STM INL NO. 13	7400	1070	6330		0.17	0.84	0.14	1.0		-	5.0	7.30	11.0	12.3	1.04	1.57	1.76	1.76	789.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM INL NO. 14	STM INL NO. 13	P - 11	-	-			-	-	-	1.0		0.3	5.0	7.30	11.0	12.3	-	-	-	5.81	2608.45	0.0050	18	80.00	HDPE	8.05	3611.59	OK	4.55	0.40	1025.04	1024.64	1028.07	1028.07	1.67	1.36	WARNING
		STM INL NO. 14	5875	590	5285		0.13	0.87	0.12	1.0		-	5.0	7.30	11.0	12.3	0.86	1.30	1.45	1.45	651.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM INL NO. 15	STM INL NO. 14	P - 12	-	-			-	-	-	1.0		0.0	5.0	7.30	11.0	12.3	-	-	-	1.32	591.22	0.0050	12	9.00	HDPE	2.73	1224.96	OK	3.47	0.05	1025.58	1025.54	1028.07	1028.07	1.08	1.40	WARNING
		STM INL NO. 15	5625	905	4720		0.13	0.83	0.11	1.0		-	5.0	7.30	11.0	12.3	0.78	1.18	1.32	1.32	591.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM INL NO. 16	STM MH NO. 9	P - 13	-	-			-	-	-	1.0		0.2	5.0	7.30	11.0	12.3	-	-	-	2.05	919.76	0.0100	12	49.16	HDPE	3.86	1732.36	OK	4.91	0.49	1025.00	1024.51	1029.20	1029.80	1.08	3.12	OK
		STM INL NO. 16	10505	3630	6875		0.24	0.69	0.17	1.0		-	5.0	7.30	11.0	12.3	1.22	1.83	2.05	2.05	919.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AES NO. 17	STM INL NO. 11	P - 14	-	-			-	-	-	1.0		0.2	5.0	7.30	11.0	12.3	-	-	-	1.69	760.23	0.0100	12	57.52	HDPE	3.86	1732.36	OK	4.91	0.58	1025.27	1024.69	1030.00	-	1.08	3.65	OK
		AES NO. 17	6665	0		6665	0.15	0.90	0.14	1.0		-	5.0	7.30	11.0	12.3	1.01	1.51	1.69	1.69	760.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AES NO. 18	STM INL NO. 14	P - 15	-	-			-	-	-	1.0		0.2	5.0	7.30	11.0	12.3	-	-	-	3.04	1365.96	0.0100	12	58.47	HDPE	3.86	1732.36	OK	4.91	0.58	1026.12	1025.54	1030.00	-	1.08	2.79	OK
		AES NO. 18	15600	4945	3990	6665	0.36	0.69	0.25	1.0		-	5.0	7.30	11.0	12.3	1.81	2.72	3.04	3.04	1365.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM MH NO. 31	AES NO. 30	P - 30	-	-			-	-	-	1.0		0.6	5.0	7.30	11.0	12.3	-	-	-	2.93	1314.27	0.0025	15	99.05	RCP	3.23	1449.68	OK	2.63	0.25	1027.75	1027.50	1030.85	-	1.44	1.66	OK
AES NO. 32	STM MH NO. 31	P - 31	-	-			-	-	-	1.0		0.3	5.0	7.30	11.0	12.3	-	-	-	2.93	1314.27	0.0025	15	39.89	RCP	3.23	1449.68	OK	2.63	0.10	1027.85	1027.75	-	-	1.44	-	-
		STM MH NO. 31	34565	20485	14080		0.79	0.51	0.40	1.0		-	5.0	7.30	11.0	12.3	2.93	4.41	4.93	2.93	1314.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ENDWALL RIPRAP SIZING

Project: **Court and Cork Pickleball**
Wyser Project #: 18-24-1243
Designed By: KLM
Date: 07/22/2024

HEC14 - EQUATION 10.4
D50 = 0.2D{Q/(√g*D^2.5)}^(4/3)*(D/TW)

g	acceleration due to gravity	32.2	ft/sec^2
TW	Tailwater Depth (Assumed)	0.4*D	ft
*	Assumed Full Pipe Capacity		
STA	Structure		

Table 10.1. Example Riprap Classes and Apron Dimensions

Class	D_{50} (mm)	D_{50} (in)	Apron Length[1]	Apron Depth
1	125	5	4D	$3.5D_{50}$
2	150	6	4D	$3.3D_{50}$
3	250	10	5D	$2.4D_{50}$
4	350	14	6D	$2.2D_{50}$
5	500	20	7D	$2.0D_{50}$
6	550	22	8D	$2.0D_{50}$

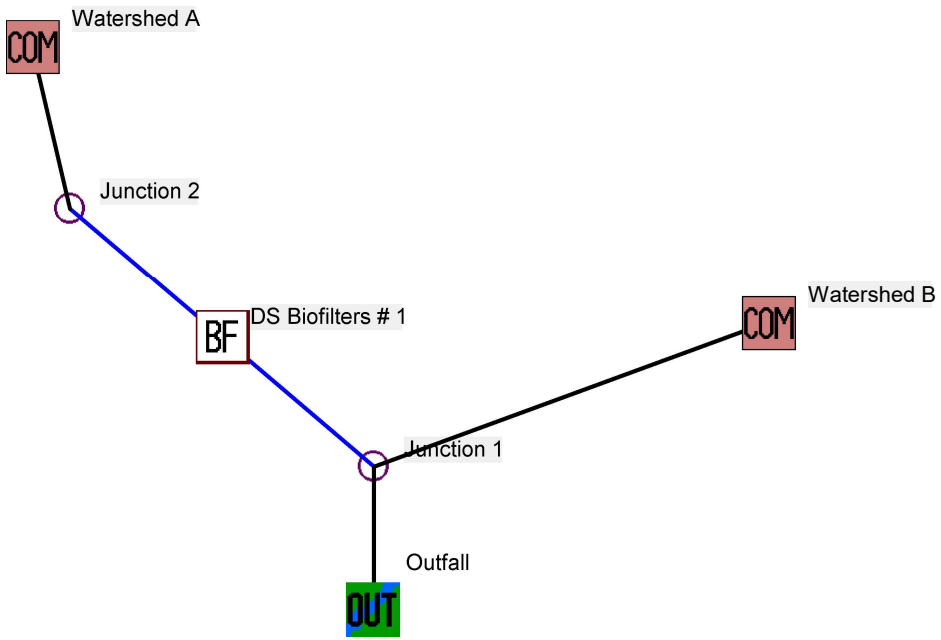
[1]D is the culvert rise.

	Pipe Diameter D (ft)	Capacity Flow Q (cfs)	Tailwater Depth TW (ft)	Riprap size D50 (in)	Riprap class (See Table 10.1) Type	D_{50}	WisDOT*	Apron Dimentions (See Table 10.1) Length	Depth	Width @ End	Width @ Pipe
AES NO. 1	0.67	1.85	0.27	3.47	2	5	Light Riprap	2.67	1.5	3.8	2.0
AES NO. 4	1.25	4.95	0.50	2.97	2	5	Light Riprap	5.00	1.5	7.1	3.8
STM MH NO. 7	2.00	17.33	0.80	5.28	3	6	Light Riprap	8.00	1.7	11.3	6.0
AES NO. 30	1.25	3.23	0.50	1.68	2	5	Light Riprap	5.00	1.5	7.1	3.8

*Refer to Section 606 and 312 for material type.
Select Crushed Material and Light Riprap require Type R geotextile Fabric
Medium, Heavy and Extra-Heavy Riprap require Type HR geotextile Fabric

APPENDIX F

Water Quality and Infiltration Modeling


Watershed A
COM
Junction 2
DS Biofilters # 1
BF
Watershed B
COM
Junction 1
Outfall
OUT

Data file name: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\SWMP\WinSLAMM\241243_Seminole Lacy.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
If Other Device Pollutant Load Reduction Values = 1, Off-site Pollutant Loads are Removed from Pollutant Load % Reduction calculations
Seed for random number generator: -42
Study period starting date: 01/01/81 Study period ending date: 12/31/81
Start of Winter Season: 12/02 End of Winter Season: 03/12
Date: 07-22-2024 Time: 22:01:05
Site information:

LU# 1 - Commercial: Watershed A Total area (ac): 3.019
1 - Roofs 1: 1.057 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 0.931 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.176 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.614 ac. Normal Clayey Low Density PSD File: C:\WinSLAMM Files\NURP.cpz
70 - Water Body Areas: 0.241 ac. PSD File:

LU# 2 - Commercial: Watershed B Total area (ac): 0.043
13 - Paved Parking 1: 0.010 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.006 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.027 ac. Normal Clayey Low Density PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Biofilter CP# 1 (DS) - DS Biofilters # 1
1. Top area (square feet) = 13500
2. Bottom aea (square feet) = 10500
3. Depth (ft): 8
4. Biofilter width (ft) - for Cost Purposes Only: 10
5. Infiltration rate (in/hr) = 0.5
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 1
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 4
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: Sharp Crested Weir
1. Weir length (ft): 4
2. Invert elevation above datum (ft): 7.33

Outlet type: Broad Crested Weir
1. Weir crest length (ft): 10
2. Weir crest width (ft): 6
3. Height of datum to bottom of weir opening: 7.5

Outlet type: Surface Discharge Pipe
1. Surface discharge pipe outlet diameter (ft): 0.5
2. Pipe invert elevation above datum (ft): 6.5
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): 3.5
3. Number of underdrain outlets: 1

SLAMM for Windows Version 10.4.1
(c) Copyright Robert Pitt and John Voorhees 2019, All Rights Reserved

Data file name: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\SWMP\WinSLAMM\241243_Seminole Lacy.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
If Other Device Pollutant Load Reduction Values = 1, Off-site Pollutant Loads are Removed from Pollutant Load % Reduction calculations
Seed for random number generator: -42
Study period starting date: 01/01/81 Study period ending date: 12/31/81
Start of Winter Season: 12/02 End of Winter Season: 03/12
Model Run Start Date: 01/01/81 Model Run End Date: 12/31/81
Date of run: 07-22-2024 Time of run: 22:02:00
Total Area Modeled (acres): 3.062
Years in Model Run: 1.00

	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:	200271	-	71.21	890.4	-
Outfall Total with Controls:	5904	97.05%	42.45	15.64	98.24%
Annualized Total After Outfall Controls:	5920			15.69	

Data File: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\SWMP\WinSLAMM\241243_Seminole Lacy.mdb
Rain File: WisReg - Madison WI 1981.RAN
Date: 07-22-24 Time: 11:17:16 AM
Site Description:

Col. #:	2	3	4	5	6	7	8	9	10	11	12	13	14	15	18	19	27	28	29	30	31	32	33	34	35	39	54	61
Control Practice No.	Control Practice Type	Control Practice Name or Location	Total Inflow Volume (cf)	Total Outflow Volume (cf)	Percent Volume Reduction	Total Influent Load (lbs)	Total Effluent Load (lbs)	Percent Load Reduction	Flow Weighted Influent Conc (mg/L)	Flow Weighted Effluent Conc (mg/L)	Percent Conc. Reduction	Influent Median Part. Size (microns)	Effluent Median Part. Size (microns)	Notes	Maximum Stage (ft)	Hydraulic Volume Out (cf)	Maximum Surface Ponding Time (hrs)	Maximum Subsurface Ponding Time (hrs)	Volume Infiltrated (cf)	Underdrain Discharge Vol. (cf)	Evapo-Transpir. Vol. (cf)	Minimum Soil Moist. (frac)	Surface Discharge Bypass Vol. (cf)	Evap. Vol. (cf)	Volume Supplemtl. Irig. (cf)	Surface Ponding Events >72 hrs (Cont)	Residence Time in Media (hrs)	Runoff Producing Events / Ttl. Rains
1	Biofilter	DS Biofilters # 1	198845	4477	97.75	879.1	4.349	99.51	70.81	15.56	78.029	7.8	1.67	No Biofilter Overflows	6.45	4478	4.9	29.1	194903	4478			0			0	1.8	Jan-90

Data File: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\SWMP\WinSLAMM\241243_Seminole Lacy.mdb
Rain File: WisReg - Madison WI 1981.RAN
Date: 07-22-24 Time: 11:17:17 AM
Site Description:

Runoff Volume Total (cf) at the Outfall

Rain Number	Start Date	Rain Total	Outfall Tot	Rv	Total Losses	Calculated Event Peal	Pre-Dev Runoff Vol. (cf)	
Minimum:		0	0	0	0.01	53.5	0	0
Maximum:		2.59	4666	0.162	2.17	99.5	0.606	4752
Average:		0.26	54.16	0.004	0.26	68.7	0.481	104.8
Total:		28.81	5904		28.33			9433

* Note: NRCS does not recommend using CN method for rains < 0.5 in.
See 'PreDevelopment Areas and CN' Help for more info.

TSS Calculations - WinSLAMM

Project: Court and Cork Pickleball
Modeled By: KLM
Date: 7/22/24

WYSER ENGINEERING
300 E. Front Street
Mt. Horeb, Wisconsin 53572
Ph: (608) 437-1980

Watershed	WinSLAMM Node	Area	Particulate Solids Yield	Treatement Required	Post Development Particulat Solids Treatement Required	Particulate Solid Yield After Controls	Particulate Solids Treatement Provided	Percent Reduction
		(Acres)	(lbs)	(%)	(lbs)	(lbs)	(lbs)	(%)
Watershed A - N Basin	**Watershed A**	3.02	879.07	-	-	-	-	-
-	**Basin 1**	-	-	-	-	4.35	874.72	99.51%
Watershed B - No Treatment	**Watershed B**	0.04	11.30	-	-	11.30	0.00	0.00%
		3.06	890.37	80.00%	712.30	15.65	874.72	98.24%

Infiltration Calculations - WinSLAMM

Project: Court and Cork Pickleball
Modeled By: KLM
Date: 7/22/24

WYSER ENGINEERING

Post Development Infiltration

Watershed	WinSLAMM Node	Area	Postdevelopment Stay-on No Controls		Runoff	Postdevelopment Stay-on with Controls		Runoff
		(Acres)	(in)	(cf)	(cf)	(in)	(cf)	(cf)
		A	**E**	**F**	**G**	**H**	**I**	**J**
			= F / A	= (28.81 * A) - G	(From SLAMM)	= I / A	= (28.12 * A) - J	(From SLAMM)
Watershed A - N Basin	**Watershed A**	3.02	10.67	116,878	198,844	-	-	-
-	**Basin 1**	-	-	-	-	-	311,245	4,477
Watershed B - No Treatment	**Watershed B**	0.04	19.78	3,124	1,426	-	3,124	1,426
		3.06	10.79	120,001	200,270	28.28	314,368	5,903

Predevelopment Stay-on - New Development - Infiltration Area (from WinSLAMM)					Post-Development
Predevelopment Stay-on		Runoff	Stay-on Required (100% Predevelopment Stay-on)		Stay-on Provided (Entire Development)
K	**L**	**M**	**N**	**O**	**S**
= L / A	= (28.81 * A) - M	(From SLAMM)	= K * 100%	= L * 100%	= I
(in)	(cf)	(cf)	(in)	(cf)	(cf)
27.96	310,838	9,433	27.96	310,838	314,368

APPENDIX G

Universal Soils Loss Equation Worksheet(s)

NORTH

EXISTING USLE FLOW PATH

SEDIMENT TRAP INTERMEDIATE USLE FLOW PATH

PROPOSED SILT FENCE USLE FLOW PATH

PROPOSED SEDIMENT TRAP FINAL USLE FLOW PATH

78 LF OF 6" PERF HDPE @ I.E. 1024.0

212 LF OF 6" PERF HDPE @ I.E. 1024.0

27 LF OF 6" PERF HDPE @ 1.0%

AES NO. 1 | AES NO. 2 | AES NO. 3 | AES NO. 4 | AES NO. 6 | AES NO. 10 | AES NO. 11 | AES NO. 12 | AES NO. 13 | AES NO. 14 | AES NO. 15 | AES NO. 17 | AES NO. 18 | AES NO. 30 | AES NO. 32

STM MH NO. 1 | STM MH NO. 2 | STM MH NO. 3 | STM MH NO. 5 | STM MH NO. 19 | STM MH NO. 31

STM GOOSE NECK NO. 7

STM INL NO. 9 | STM INL NO. 10 | STM INL NO. 11 | STM INL NO. 12 | STM INL NO. 13 | STM INL NO. 14 | STM INL NO. 15

1030.42 FG | 1031.30 FG | 1030.88 FG | 1030.23 FG | 1030.18 Ctr | 1030.48 FG | 1030.36 FG | 1029.58 Ctr

1028.50 FG | 1028.18 Ctr | 1027.92 FG | 1027.92 FG | 1026.01 SW

WYSER ENGINEERING

COURT AND CORK PICKLEBALL

CITY OF FITCHBURG, DANE COUNTY, WI

2747 S SEMINOLE HWY
FITCHBURG, WI 53711

Sheet Title:
STORM SEWER WATERSHED MAP

Revisions:

No.	Date:	Description:

Graphic Scale	0' 20' 40' 60'
Wyser Number	24-1243
Set Type	REVIEW
Date Issued	07/23/2024
Sheet Number	EX G

File: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\DWG\241243_SWMP.dwg Layout: stm (2) User: Kate Plotted: Jul 23, 2024 - 7:29am

Soil Loss & Sediment Discharge Calculation Tool

for use on Construction Sites in the State of Wisconsin

WDNR Version 2.0 (06-29-2017)

WISCONSIN DEPT. OF NATURAL RESOURCES

YEAR 1

Developer: Newcomb

Project: Court and Cork Pickleball

Date: 07/23/24

County: Dane

Version 1.0

Activity (1)	Begin Date (2)	End Date (3)	Period % R (4)	Annual R Factor (5)	Sub Soil Texture (6)	Soil Erodibility K Factor (7)	Slope (%) (8)	Slope Length (ft) (9)	LS Factor (10)	Land Cover C Factor (11)	Soil loss A (tons/acre) (12)	SDF (13)	Sediment Control Practice (14)	Sediment Discharge (t/ac) (15)
Bare Ground	10/01/24	04/01/25	12.9%	150	Silt Loam	0.43	1.2%	445	0.22	1.00	1.9	1.215	Silt Fence	1.4
Bare Ground	04/01/25	09/30/25	86.9%	150	Silt Loam	0.43	2.6%	74	0.23	1.00	12.8	1.004	Sediment Trap	2.6
End	09/30/25	-----	-----	-----	-------	-----	2.6%	74	0.23	------	-----	0.000	Sediment Trap	0.0
		-----	-----	-----	-------	-----	2.6%	74	0.23	-----	-----	0.000	Sediment Trap	0.0
		-----	-----	-----	-------	-----	2.6%	0	-----	-----	-----	0.000		0.0
		-----	-----	-----	-------	-----	0.0%	0	-----	-----	-----	0.000		0.0
										TOTAL	**14.7**		**TOTAL**	**3.9**
													% Reduction Required	**NONE**

Notes:

See Help Page for further descriptions of variables and items in drop-down boxes.
The last land disturbing activity on each sheet must be 'End'. This is either 12 months from the start of construction or final stabilization.
For periods of construction that exceed 12 months, please demonstrate that 5 tons/acre/year is not exceeded in any given 12 month period.

NOTE: THIS TOOL ONLY ADDRESSED SOIL EROSION DUE TO SHEET FLOW. MEASURES TO CONTROL CHANNEL EROSION MAY ALSO BE REQUIRED TO MEET SEDIMENT DISCHARGE REQUIREMENTS.

Recommended Permanent Seeding Dates:

4/1-5/15	and	8/7-8/29	Turf, introduced grasses and legumes
Thaw-6/30			Native Grasses, forbs, and legumes

Designed By:	KLM
Date	7/23/2024

Soil Loss & Sediment Discharge Calculation Tool

for use on Construction Sites in the State of Wisconsin

WDNR Version 2.0 (06-29-2017)

WISCONSIN DEPT. OF NATURAL RESOURCES

YEAR 2

Developer: Newcomb

Project: Court and Cork Pickleball

Date: 7/23/2024

County: Dane

Version 1.0

Activity (1)	Begin Date (2)	End Date (3)	Period % R (4)	Annual R Factor (5)	Sub Soil Texture (6)	Soil Erodibility K Factor (7)	Slope (%) (8)	Slope Length (ft) (9)	LS Factor (10)	Land Cover C Factor (11)	Soil loss A (tons/acre) (12)	SDF (13)	Sediment Control Practice (14)	Sediment Discharge (t/ac) (15)
Bare Ground	10/01/25	07/01/26	47.8%	150	Silt Loam	0.43	2.6%	74	0.23	1.00	7.1	1.004	Sediment Trap	1.4
Bare Ground	07/01/26	08/01/26	24.0%	150	Silt Loam	0.43	6.5%	15	0.29	1.00	4.5	0.923	Sediment Trap	0.8
Seed with Mulch or Er	08/01/26	09/30/26	27.8%	150	Silt Loam	0.43	6.5%	15	0.29	0.10	0.5	0.923	Sediment Trap	0.1
End	09/30/26	-----	-----	-----	-------	-----	6.5%	15	0.29	------	-----	0.000		0.0
		-----	-----	-----	-------	-----	6.5%	0	-----	-----	-----	0.000		0.0
		-----	-----	-----	-------	-----	0.0%	0	-----	-----	-----	0.000		0.0
										TOTAL	**12.1**		**TOTAL**	**2.3**
													% Reduction Required	**NONE**

Notes:

See Help Page for further descriptions of variables and items in drop-down boxes.
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For periods of construction that exceed 12 months, please demonstrate that 5 tons/acre/year is not exceeded in any given 12 month period.

NOTE: THIS TOOL ONLY ADDRESSED SOIL EROSION DUE TO SHEET FLOW. MEASURES TO CONTROL CHANNEL EROSION MAY ALSO BE REQUIRED TO MEET SEDIMENT DISCHARGE REQUIREMENTS.

Recommended Permanent Seeding Dates:

4/1-5/15	and	8/7-8/29	Turf, introduced grasses and legumes
Thaw-6/30			Native Grasses, forbs, and legumes

Designed By:	KLM
Date	7/23/2024

Soil Loss & Sediment Discharge Calculation Tool

for use on Construction Sites in the State of Wisconsin

WDNR Version 2.0 (06-29-2017)

WISCONSIN DEPT. OF NATURAL RESOURCES

YEAR 1

Developer: Newcomb

Project: Court and Cork Pickleball

Date: 07/23/24

County: Dane

Version 1.0

Activity (1)	Begin Date (2)	End Date (3)	Period % R (4)	Annual R Factor (5)	Sub Soil Texture (6)	Soil Erodibility K Factor (7)	Slope (%) (8)	Slope Length (ft) (9)	LS Factor (10)	Land Cover C Factor (11)	Soil loss A (tons/acre) (12)	SDF (13)	Sediment Control Practice (14)	Sediment Discharge (t/ac) (15)
Bare Ground	10/01/24	04/01/25	12.9%	150	Silt Loam	0.43	1.2%	445	0.22	1.00	1.9	1.215	Silt Fence	1.4
Bare Ground	04/01/25	05/15/25	10.2%	150	Silt Loam	0.43	10.0%	30	0.76	1.00	5.0	0.645	Silt Fence	1.9
Seed with Mulch or Er	05/15/25	09/30/25	76.6%	150	Silt Loam	0.43	10.0%	30	0.76	0.10	3.7	0.645	Silt Fence	1.4
End	09/30/25	-----	-----	-----	-------	-----	10.0%	30	0.76	------	-----	0.000	Silt Fence	0.0
		-----	-----	-----	-------	-----	10.0%	0	-----	-----	-----	0.000		0.0
		-----	-----	-----	-------	-----	0.0%	0	-----	-----	-----	0.000		0.0
										TOTAL	**10.6**		**TOTAL**	**4.7**
													% Reduction Required	**NONE**

Notes:

See Help Page for further descriptions of variables and items in drop-down boxes.
The last land disturbing activity on each sheet must be 'End'. This is either 12 months from the start of construction or final stabilization.
For periods of construction that exceed 12 months, please demonstrate that 5 tons/acre/year is not exceeded in any given 12 month period.

NOTE: THIS TOOL ONLY ADDRESSED SOIL EROSION DUE TO SHEET FLOW. MEASURES TO CONTROL CHANNEL EROSION MAY ALSO BE REQUIRED TO MEET SEDIMENT DISCHARGE REQUIREMENTS.

Recommended Permanent Seeding Dates:

4/1-5/15	and	8/7-8/29	Turf, introduced grasses and legumes
Thaw-6/30			Native Grasses, forbs, and legumes

Designed By:	KLM
Date	7/23/2024

Soil Loss & Sediment Discharge Calculation Tool

for use on Construction Sites in the State of Wisconsin

WDNR Version 2.0 (06-29-2017)

WISCONSIN DEPT. OF NATURAL RESOURCES

YEAR 2

Developer: Newcomb

Project: Court and Cork Pickleball

Date: 7/23/2024

County: Dane

Version 1.0

Activity (1)	Begin Date (2)	End Date (3)	Period % R (4)	Annual R Factor (5)	Sub Soil Texture (6)	Soil Erodibility K Factor (7)	Slope (%) (8)	Slope Length (ft) (9)	LS Factor (10)	Land Cover C Factor (11)	Soil loss A (tons/acre) (12)	SDF (13)	Sediment Control Practice (14)	Sediment Discharge (t/ac) (15)
Seed with Mulch or Er	10/01/25	07/10/26	56.1%	150	Silt Loam	0.43	10.0%	30	0.76	0.10	2.7	0.645	Silt Fence	1.1
Bare Ground	07/10/26	08/01/26	15.6%	150	Silt Loam	0.43	10.0%	30	0.76	1.00	7.6	0.645	Silt Fence	2.9
Seed with Mulch or Er	08/01/26	09/30/26	27.8%	150	Silt Loam	0.43	10.0%	30	0.76	0.10	1.4	0.645	Silt Fence	0.5
End	09/30/26	-----	-----	-----	-------	-----	10.0%	30	0.76	------	-----	0.000		0.0
		-----	-----	-----	-------	-----	10.0%	0	-----	-----	-----	0.000		0.0
		-----	-----	-----	-------	-----	0.0%	0	-----	-----	-----	0.000		0.0
										TOTAL	**11.7**		**TOTAL**	**4.5**
													% Reduction Required	**NONE**

Notes:

See Help Page for further descriptions of variables and items in drop-down boxes.
The last land disturbing activity on each sheet must be 'End'. This is either 12 months from the start of construction or final stabilization.
For periods of construction that exceed 12 months, please demonstrate that 5 tons/acre/year is not exceeded in any given 12 month period.

NOTE: THIS TOOL ONLY ADDRESSED SOIL EROSION DUE TO SHEET FLOW. MEASURES TO CONTROL CHANNEL EROSION MAY ALSO BE REQUIRED TO MEET SEDIMENT DISCHARGE REQUIREMENTS.

Recommended Permanent Seeding Dates:

4/1-5/15	and	8/7-8/29	Turf, introduced grasses and legumes
Thaw-6/30			Native Grasses, forbs, and legumes

Designed By:	KLM
Date	7/23/2024

APPENDIX H

Declaration of Conditions, Covenants and Restrictions for

Maintenance of Stormwater Management Measures

DECLARATION OF CONDITIONS AND RESTRICTIONS FOR
MAINTENANCE OF STORMWATER MANAGEMENT MEASURES

RECITALS:

A. _____ ("Owner") is the owner of _____ more particularly described on Exhibit A attached hereto (the "Property").

B. Owner desires to construct stormwater management measures on the Property in accordance with certain plans and specifications approved by the City of Fitchburg (the "City").

C. The City requires Owner to record this Declaration of Conditions and Restrictions for Maintenance of Stormwater Management Measures (this "Declaration") regarding maintenance of certain stormwater management measures ("Stormwater Management Measures") to be located on the Property all as more particularly described in Exhibit A and shown on Exhibit B. Owner agrees to maintain the Stormwater Management Measures and to grant to the City the rights set forth below.

NOW, THEREFORE, in consideration of the declarations herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the owner agrees as follows:

This space reserved for recording data

Return to:
City of Fitchburg
5520 Lacy Road
Fitchburg, WI 53711

PIN#:

1. Maintenance. Owner and its successors and assigns shall be responsible to repair and maintain the Stormwater Management Measures located on the Property in good condition and in working order and such that the measures comply with approved plans on file with the City. Said maintenance shall be at the Owner's sole cost and expense. Owner will conduct such maintenance or repair work in accordance with all applicable laws, codes, regulations, and similar requirements. *Specific maintenance tasks and their schedules shall be conducted in accordance with Exhibit A.*

2. Easement to City. If Owner fails to maintain the Stormwater Management Measures as required in Section 1, then the City shall have the right, after providing Owner with written notice of the maintenance issue (each, a "Maintenance Notice") and thirty (30) days to comply with the City's Maintenance Notice, to enter the Property in order to conduct the maintenance specified in the Maintenance Notice. The City will conduct such maintenance work in accordance with all applicable laws, codes, regulations, and similar requirements and will not unreasonably interfere with Owner's use of Property. All costs and expenses incurred by the City in conducting such maintenance may be charged to Owner by placing the amount on the tax roll for the Property as a special assessment in accordance with Section 66.0703, Wis. Stats.

3. Term/Termination. The term of this Declaration shall commence on the date that this Declaration is field of record with the Register of Deeds Office for Dane County, Wisconsin, and except as otherwise herein specifically provided, shall continue in perpetuity. Notwithstanding the foregoing, this Declaration may be terminated by recording with the Register of Deeds Office for Dane County, Wisconsin, a written instrument of termination signed by the City and all of the then-owners of the Property.

4. Miscellaneous.

(a) Notices. Any notice, request or demand required or permitted under this Declaration shall be in writing and shall be deemed given when personally served or three (3) days after the same has been deposited with the United States Post Office, registered or certified mail, return receipt requested, postage prepaid and addressed as follows:

If to Owner: _____
_____
_____

If to the City: City Engineering Division
5520 Lacy Road
Fitchburg, WI 53711
Attn: City Engineer

Any party may change its address for the receipt of notice by written notice to the other.

(b) Governing Law. This Declaration shall be governed and construed in accordance with the laws of the State of Wisconsin.

(c) Amendments or Further Agreements to be in Writing. This Declaration may not be modified in whole or in part unless such agreement is in writing and signed by all parties bound hereby.

(d) Covenants Running with the Land. All of the easements, restrictions, covenants, and agreements set forth in this Declaration are intended to be and shall be construed as covenants running with the land, binding upon, inuring to the benefit of, and enforceable by the parties hereto and their respective successors and assigns.

(e) Partial Invalidity. If any provisions, or portions thereof, of this Declaration or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Declaration, or the application of such provision, or portion thereof, to any other persons or circumstances shall be affected thereby and each provision of this Declaration shall be valid and enforceable to the fullest extend permitted by law.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this ____ day of _____, 20 __.

_____
Owner:

By: _____

STATE OF WISCONSIN)
) ss
COUNTY OF DANE)

Personally came before me this ____ day of _____, 20__, the above named _____, to me known to be the person who executed the foregoing instrument and acknowledged the same.

_____
NOTARY PUBLIC SIGNATURE

_____
PRINTED NAME OF NOTARY PUBLIC

My Commission Expires: _____

Drafted by: Kate Meagher, P.E.
Wyser Engineering

EXHIBIT A
Stormwater Management Maintenance Measures

Legal Description of Property:
Lot 1 and Lot 2 CSM _____

Tax Parcel Numbers: _____

Stormwater Management Measures Included in this Agreement (as shown on the attached Erosion Control Plan, Grading Plan, and Utility Plan, hereby made a part of Exhibit B):

- All site storm sewer pipes and structures
- Bioretention Basin

Specific Maintenance Requirements:

Short Term Maintenance (during construction and/or restoration):

- The building construction contractor at the owner's expense or as agreed to by the owner and contractor shall perform inspection of all facilities during construction and until site stabilization.
- Inspections during construction shall be weekly and/or after a rainfall event of 0.5" or more.
- Repairs necessary to restore the facility to design performance will be made within 48 hours of the inspection.
- Deficiencies include, but are not limited to, rill erosion, sediment deposition in the infiltration pond or behind perimeter control, and deposition of sediment on the tracking pad.
- Tracking on the public right-of-way shall be inspected regularly during days that construction traffic is leaving the construction site. Any excessive sediment tracked onto the public right-of-way shall be scraped immediately. Thorough sweeping, with appropriate equipment that physically picks up and removes the sediment (vs. pushing it to other locations within the public right-of-way) shall be conducted at the end of each working day during construction activities.

Long Term Maintenance:

- Inspector qualifications for Long Term Maintenance: Inspectors under this item shall maintain a current Registered Professional Engineer License in the State of Wisconsin or possess an alternate certification approved by the **City of Fitchburg's** Public Works Department.
- All stormwater provisions constructed as part of this project are permanent in location and function over time. The constructed stormwater provisions such as infiltration ponds, inlet filters, and storm structures shall not be removed or significantly altered without written permission from the **City of Fitchburg's** Public Works Department. Owner shall maintain records of inspections and maintenance as described below in accordance with Chapter 30 – Article II of the **City of Fitchburg** Municipal Code of Ordinances. Inspections and maintenance reports shall be submitted to the **City of Fitchburg's** Public Works Department on an annual basis.
- An operation and maintenance plan shall be developed that is consistent with the purposes of the infiltration device, its intended life, safety requirements and the criteria for its design. The plan shall be developed for inspection, operation and maintenance of the device. The plan shall assign responsibility for activities and the qualifications of the personnel performing the work.

STORM SEWER

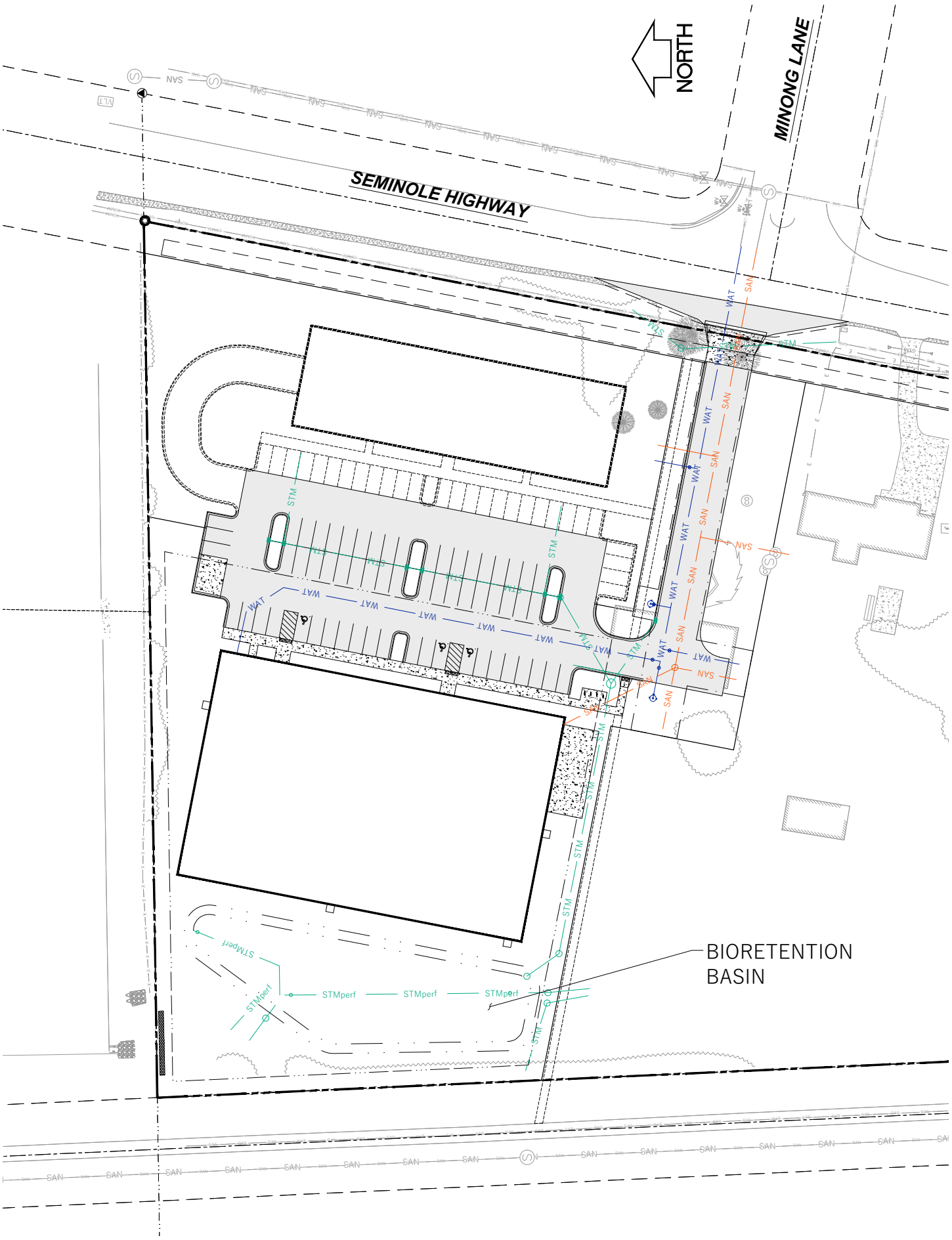
- Visual inspection of components shall be performed and debris removed from inlets and storm sewer manholes.
- Repair inlet/outlet areas that are damaged or show signs or erosion.
- Rip-rap shall be replaced as necessary.
- Repairs must restore the component to the specifications of the original plan.

BIORETENTION BASIN

- The Owner is responsible for carrying out typical maintenance activities for bioretention areas and shall include details on these activities that are consistent with the following standards:
    - Inspect soil and repair eroded areas on a monthly basis;
    - Remove litter and debris on a monthly basis;
    - Add additional mulch on an annual basis;
    - Water plants accordingly during first growing season and as necessary during dry periods after first growing season;
    - Re-mulch void areas as needed;
    - Treat diseased trees and shrubs as needed.
- Snow shall not be dumped directly onto the conditioned planting bed.
- If the bioretention device receives runoff only from residential land uses other than streets, the mulch layer can be discontinued at maturity provided that a dense vegetation layer is formed.
- Visual Inspection of the bioretention basins shall be performed, at a minimum, monthly.
- Major maintenance shall be required when system shows standing water beyond 24 hours of rain event.
    - Cleaning shall consist of removal of sediment, one (1) foot undercut, undercut replacement with material as specified in WDNR Conservation Practice Standard #1004 and restoration in-kind.
    - Restoration of plant material shall be by plugging, not seeding alone.
    - Any repairs shall return the facility to the specifications in the approved plan.

EXHIBIT B

Figure(s) of Stormwater Management Maintenance Measures


NORTH
MINONG LANE
SEMINOLE HIGHWAY
SAN
WAT
STM
STMperf
BIORETENTION
BASIN

APPENDIX I

Stormwater Management and Erosion Control Best Management Practice

Preliminary Opinion of Probable Construction Costs

WYSER ENGINEERING

Stormwater Management and Erosion Control Best Management Practice Preliminary Opinion of Probable Construction Costs

Item	Quantity	Unit	Unit Cost	Total
Tracking Control Pad	1	EA	$ 1,200.00	$ 1,200.00
Silt Fence	1,335	LF	$ 2.50	$ 3,337.50
Erosion Mat	5,155	SY	$ 1.75	$ 9,021.25
Fertilizer, Seed & Mulch	11,300	SY	$ 2.50	$ 28,250.00
Ditch Checks	6	EA	$ 500.00	$ 3,000.00
Sediment Basin and Level Spreader	1	EA	$ 2,000.00	$ 2,000.00
RipRap Outfall	5	EA	$ 500.00	$ 2,500.00
Bioretention System	10,500	SF	$ 12.00	$ 126,000.00
Outlet Structures	1	EA	$ 1,500.00	$ 1,500.00
				$ 176,808.75

STORMWATER MANAGEMENT REPORT & EROSION CONTROL PLAN

Court and Cork Pickleball

July 23, 2024

Prepared For: Newcomb

Wyser Engineering Project No.: 24-1243

WYSER ENGINEERING 300 E. Front Street Mt. Horeb, WI 53572 (608) 437-1980

www.wyserengineering.com

TABLE OF CONTENTS

1.0 Introduction
2.0 Existing Conditions
3.0 Design Criteria
4.0 Stormwater Management Analysis / Design
    4.1 Stormwater Discharge Quality
    4.2 Stormwater Discharge Quantity
5.0 Erosion Control Analysis / Design
6.0 Conclusion

APPENDICIES

Appendix A Existing Conditions Map
Appendix B Soils Information
Appendix C Proposed Construction Plans
Appendix D Pre-development Hydrologic Modeling
Appendix E Post Development Hydrologic Modeling
Appendix F Water Quality and Infiltration Modeling
Appendix G Universal Soils Loss Equation Worksheet(s)
Appendix H Declaration of Conditions, Covenants and Restrictions for Maintenance of Stormwater Management Measures
Appendix I Stormwater Management and Erosion Control Best Management Practice Preliminary Opinion of Probable Construction Costs

Future questions and comments can be directed to:

Kate Meagher, P.E.
Water Resource Engineer
kate.meagher@wyserengineering.com
(608) 437-1865

Wyser Engineering, LLC
300 E. Front Street
Mount Horeb, WI 53572

1.0 Introduction

New commercial developments are being proposed at the northwest corner of Lacy Road and Seminole Highway in the City of Fitchburg. A CSM is being proposed with the development to split the existing agricultural farmstead into 3 lots. This stormwater management report is intended to cover the development for the two most northern lots (Lot 1 and Lot 2). A pickleball complex is being proposed on Lot 1. The use for Lot 2 has not been finalized and will be developed in the future. The development of Lot 1 and 2 will create approximately 95,000 square feet of new impervious area. The project is required to meet new development standards for applicable City of Fitchburg and WDNR permitting.

A bioretention basin is proposed to meet new development standards. The bioretention basin provides water quality treatment, runoff rate control and infiltration. The basin will discharge to the northwest corner of the site to an existing swale between the property and Badger State Trail. The site ultimately drains to a wet pond to the northwest of the site, which is an internally draining watershed.

2.0 Existing Conditions

The existing conditions of the proposed development area is an agricultural farmstead. The entire existing parcel is bordered by Seminole Highway to the east, Lacy Road to the south, Badger State Trail to the west, and commercial developments to the north. The existing parcel is being split into three lots. Only the development of Lot 1 and 2 are included in this stormwater management report. Lots 1 and 2 are on the north and the existing site drains to the northwest corner. The commercial lot to the north was developed in 2020. A swale was created on the west side of the development to route offsite runoff around the site. A storm sewer headwall existing in the northwest corner of the lot to capture runoff from the swale and discharge to the public storm sewer along Sub-Zero Parkway. The public storm sewer discharges to a wet pond to the west. The wet pond is an internally draining watershed. Please refer to **Appendix A** for graphical representation of the site.

The original native onsite soils are classified as Plano silt loam (PoA and PoB). The PoA and PoB soils have a Hydrologic Soil Group (HSG) classification 'B'. HSG C soils have been assumed for post-development conditions. Test pits were completed June 14, 2024. The test pits on the northern half of the parcel indicated silty loam and silty clay loam over fine sand / loam fine sand. A design infiltration rate of 0.5 in/hr has been used for the infiltration facilities. Please refer to **Appendix B**.

3.0 Design Criteria

Wisconsin Administrative Code
Department of Natural Resources (WDNR)
Chapter NR 151 & NR 216

Fitchburg, WI – City Code of Ordinances
Title III, Chapter 30, Article II

4.0 Stormwater Management Analysis / Design

The proposed improvements for Lot 1 and Lot 2 include two buildings, a shared parking lot, a driveway from Seminole Highway, and sidewalk around both buildings. The improvements include approximately 95,000 square feet of impervious area. Please refer to **Appendix C** for the proposed plan set. The site will be treated to meet new development standards.

A bioretention basin is proposed in the northwest corner of the site. The western building has a sloped roof to the west to drain towards the bioretention basin. Storm sewer is proposed to convey runoff the rest of the site to the bioretention basin. The bioretention basin will provide water quality, infiltration, and runoff rate control. The basin discharges to a sedimentation basin with level spreader to the northeast. The sedimentation basin and level spreader disperse the concentrated discharge from the bioretention basin before discharging to bypass swale on the west side of the property to the north.

The maintenance agreement for the site stormwater management features can be found within **Appendix H**. Specifically, please note the following:

Stormwater Management Plan Requirements: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(a)

This plan was completed and sealed under the direction of Kathleen L Meagher, Professional Engineer E-101102. The preliminary opinion of probable construction costs for use in determining the financial security instrument for the project can be found within **Appendix I** but will be provided separately by the owner prior to construction.

4.1 Water Quality

Sediment Control: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(1)a.i.

WinSLAMM (Version 10.4.1) has been used to analyze the water quality for this site. WinSLAMM is an approved model to run a continuous average annual rainfall for Madison (MSN 1981) using the NURP partial distribution.

The required total suspended solids treatment is based on 80% reduction from the proposed development. The model predicts the proposed development will produce 890.37 pounds of suspended solids, which requires 712.30 pounds of treatment.

With the proposed treatment facility, the model predicts a TSS reduction of 874.72 pounds (98.24% reduction). Please refer to **Appendix F** for WinSLAMM modeling output and summary.

Oil and Grease Control: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(2)

The oil and grease control is provided by the bioretention basin. The basin captures the first 0.5 in rainfall and has engineered soil, which to provide oil and grease control.

4.2 Storm Water Discharge Quantity

Runoff Rate Control; Hydrologic Calculations: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(3)

The predevelopment site is was modeled as agricultural, HSG B, which has a curve number of 68. The existing shed and other impervious area has a curve number of 98. The soil classification has been increased to HSG C for post development conditions.

Runoff Rate Control; Design Standards: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(4)

HydroCAD model version 10.20-2g was used to analyze the existing and proposed runoff rate for the site. The bioretention basins have been designed to maintain predevelopment peak runoff rates for the 1-, 2-, 10-, 100-, and 200-year 24-hour storm events. Please refer to **Table 1** for the existing versus proposed predicted runoff rates and **Appendix D & E** for the HydroCAD output.

Table 1. Existing vs. Proposed peak runoff rates for select storm events.

	Weighted CN	Tc	Rainfall for 24-hour storm event (inches)				
			1-year	2-year	10-year	100-year	200-year
			2.49	2.84	4.09	6.66	7.53
Existing-Development peak discharge rate (cfs)	**69**	**12.1**	**1.25**	**1.92**	**4.88**	**12.40**	**15.17**
Post-Development peak discharge rate (cfs)							
Watershed A - N Basin	93	6.0	8.26	9.60	14.46	24.66	28.15
Watershed B - No Treatment	86	6.0	0.09	0.10	0.17	0.32	0.37
Post-Development peak discharge rate without detention(cfs)			8.35	9.70	14.63	24.99	28.52
Post-Development peak discharge rate with detention (cfs)			**0.96**	**1.09**	**1.57**	**10.18**	**15.16**
Difference: Post-construction peak flow rates with detention vs. pre-existing peak flow rates (cfs)			**-0.29**	**-0.83**	**-3.31**	**-2.22**	**-0.01**

Outlets: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(5)

The storm sewer system has been designed per the SPS 'Area method' as described within SPS 382.36(5)(a)1. Please refer to **Appendix E** for analysis results. The basin elevations are set by the elevation for free discharge of the underdrain in the northwest corner of the site. To reduce the amount of fill the site requires, a gooseneck outlet is required at the discharge of the site storm sewer into the bioretention basin. A sediment basin with a level spreader is located at the discharge of the bioretention basin to disperse the runoff from the basin before discharging north to the neighboring property. All discharge points will be protected with riprap. It is assumed that the downstream discharge points have protection from outlet erosion.

Infiltration: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(6)

The infiltration volume for the site was analyzed using WinSLAMM to determine pre- and post-development stay-on. Because the site is located in an internally drained watershed, the development is required to infiltrate as close to 100 percents as practicable of the average annual pre-development infiltration volume, regardless of the effective area of the infiltration system. The pre-development volume tool in WinSLAMM was used to estimate the pre-development runoff volume of 9,433 cubic feet, which is 310,838 cubic feet of stay-on. With the bioretention basin, the proposed development creates 5,903 cubic feet of runoff, which is 314,368 cubic feet of stay-on. Please refer to **Appendix F** for WinSLAMM output information.

Thermal Control Reduction: Fitchburg, WI – City Code of Ordinances, Chapter 30 – 30-28(b)(7)

The site is not located in a thermally sensitive watershed.

5.0 Erosion Control Analysis / Design

Erosion control measures proposed for the project site have been designed in accordance with the WDNR and City of Fitchburg requirements. Best Management Practices (BMP's) for the site include stone tracking pad, silt fencing, check dams, seeding, mulching, erosion mat, etc. Construction sequencing, as follows, has been documented in accordance with soil loss rate calculations for the construction period per the Universal Soil Loss Equation included as **Appendix G**:

10/01/2024	Pre-development construction meeting. Install Perimeter BMP's (silt fence, stone tracking pad, etc.)
10/01/2024	Mass Grading / Subgrade preparation (note all 4:1 or greater slopes must be stabilized as soon as practicable and, at a minimum, within 2 months (60 days) of finishing the grading). Basin and sediment basin to act as sediment trap.
05/15/2024	Temporary stabilization to be completed for areas that do not drain to the sediment trap with temporary seed with mulch or erosion mat.
07/10/2026	Final landscaping adjustments.
08/01/2026	Final site stabilization with seed, mulch and erosion matting where required.
08/15/2026	Install bioretention systems. Install Bioretention Vegetation Plan in accordance with WDNR Technical Standard 1004. Fix any landscaping issues including bioretention and areas.
10/01/2026	Provide City with a post-development as-built survey of all stormwater management facilities.

For additional information relative to erosion control, please refer to the Grading & Erosion Control Plan found in **Appendix C**.

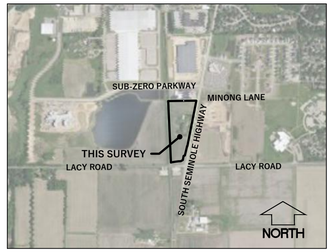
6.0 Conclusion

Construction and Post Development BMP's for erosion control and stormwater management have been designed in accordance with applicable requirements of the City of Fitchburg Code of Ordinance and Wisconsin Administrative Code. A bioretention basin is proposed to meet applicable new development requirements. Erosion control practices have been designed to limit the soil loss rate to less than 5.0 tons per acre per year, regulating soil transportation within the boundaries of the project site.

APPENDIX A

Existing Conditions Survey

VICINITY MAP
NOT TO SCALE

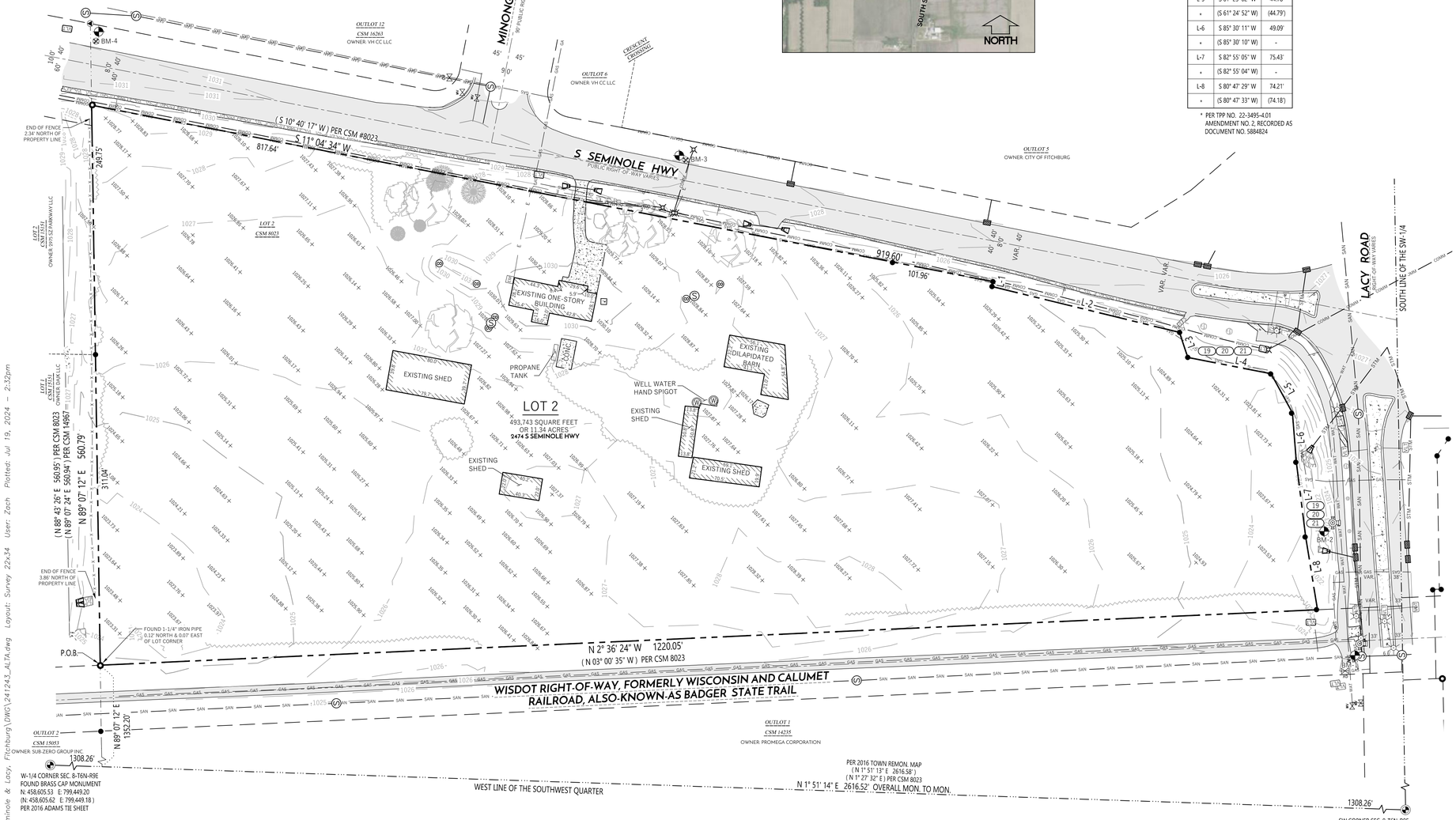


LINE TABLE		
LINE #	DIRECTION	LENGTH
L-1	N 78° 55' 26" W	5.01'
"	(N 78° 55' 45" W)	(5.00')
L-2	S 13° 44' 29" W	193.21'
"	(S 13° 44' 26" W)	-
L-3	S 71° 35' 45" W	26.42'
"	(S 71° 35' 42" W)	-
L-4	S 11° 04' 04" W	85.00'
"	(S 11° 04' 15" W)	-
L-5	S 61° 25' 02" W	44.78'
"	(S 61° 24' 52" W)	(44.79')
L-6	S 85° 30' 11" W	49.09'
"	(S 85° 30' 10" W)	-
L-7	S 82° 55' 05" W	75.43'
"	(S 82° 55' 04" W)	-
L-8	S 80° 47' 29" W	74.21'
"	(S 80° 47' 33" W)	(74.18')

* PER TPP NO. 22-3495-01 AMENDMENT NO. 2, RECORDED AS DOCUMENT NO. 5884824

NORTH

0' 30' 60' 90'
1" = 60' on 22"x34"
1"= 120' on 11"x17"



LEGEND

- FOUND PLSS MON. TYPE NOTED
- FOUND 1" IRON PIPE
- FOUND 3/4" REBAR
- FOUND PK NAIL
- FOUND CUT CROSS
- SIGN
- SANITARY MANHOLE
- SEWER CLEANOUT
- GAS VALVE
- FIRE HYDRANT
- WATER VALVE
- WELL
- COMMUNICATION PEDESTAL
- APRON END WALL
- INLETS
- LIGHTPOLE
- ELECTRICAL METER
- CONIFEROUS TREE
- DECIDUOUS TREE
- UNDERGROUND UTILITY VAULT
- VERTICAL BENCHMARK
- (XXX) RECORDED AS
- PROPERTY LINE
- PLATTED LINE
- RIGHT-OF-WAY LINE
- CENTERLINE
- SECTION LINE
- BUILDING FOOTPRINT
- EDGE OF CONCRETE
- EDGE OF ASPHALT
- SANITARY SEWER
- WATER MAIN
- STORM SEWER
- NATURAL GAS LINE
- COMMUNICATION LINE
- ELECTRIC LINE
- GRAVEL/RIP RAP
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- 1020 CONTOUR MAJOR
- 1021 CONTOUR MINOR
- FENCE LINE
- TREE LINE

LEGAL DESCRIPTION AS FURNISHED

PER FIRST AMERICAN TITLE LLC, TITLE COMMITMENT, FILE NO. NCS-122007-MAD DATED: MAY 29, 2024 AT 7:30 A.M

LOT 2 OF CERTIFIED SURVEY MAP NO. 8023 RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS FOR DANE COUNTY, WISCONSIN ON NOVEMBER 16, 1995, IN VOLUME 42 OF CERTIFIED SURVEY MAPS, PAGES 313-316 AS DOCUMENT NO. 2719369, SAID CERTIFIED SURVEY MAP BEING PART OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 08, TOWNSHIP 06 NORTH, RANGE 09 EAST, IN THE CITY OF FITCHBURG, DANE COUNTY, WISCONSIN.

EXCEPTING THEREFROM THE LAND DESCRIBED IN AWARD OF DAMAGES RECORDED FEBRUARY 25, 2013 AS DOCUMENT NO. 4964304.

FURTHER EXCEPTING THEREFROM THE LAND DESCRIBED IN AWARD OF DAMAGES RECORDED DECEMBER 28, 2022 AS DOCUMENT NO. 5879973.

LEGAL DESCRIPTION AS SURVEYED

PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 8023 RECORDED IN VOLUME 42 OF CERTIFIED SURVEY MAPS OF DANE COUNTY ON PAGES 313-316 AS DOCUMENT NO. 2719369 (CSM 8023), LOCATED IN THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 6 NORTH, RANGE 9 EAST, CITY OF FITCHBURG, DANE COUNTY , WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST QUARTER CORNER OF AFORESAID SECTION 8; THENCE, ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 8, SOUTH 01 DEGREES 51 MINUTES 14 SECONDS EAST, 1308.26 FEET TO THE NORTHWEST CORNER OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF SAID SECTION 8; THENCE ALONG THE NORTH LINE OF SAID SOUTH HALF, NORTH 89 DEGREES 07 MINUTES 12 SECONDS EAST, 1352.20 FEET TO THE NORTHWEST CORNER OF AFORESAID LOT 2 OF CSM 8023, AND THE POINT OF BEGINNING; THENCE, CONTINUING ALONG SAID NORTH LINE OF THE SOUTH HALF, AND ALSO ALONG THE NORTH LINE OF SAID LOT 2, NORTH 89 DEGREES 07 MINUTES 12 SECONDS EAST, 560.79 FEET TO THE NORTHEAST CORNER OF SAID LOT 2, AND ALSO BEING A POINT ON THE WESTERLY RIGHT-OF-WAY OF SOUTH SEMINOLE HIGHWAY; THENCE, ALONG THE EAST LINE OF SAID LOT 2, AND ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 11 DEGREES 04 MINUTES 34 SECONDS WEST, 919.60 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, NORTH 78 DEGREES 55 MINUTES 25 SECONDS WEST, 5.01 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 13 DEGREES 44 MINUTES 29 SECONDS WEST, 193.21 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 71 DEGREES 35 MINUTES 42 SECONDS WEST, 26.42 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 11 DEGREES 04 MINUTES 04 SECONDS WEST, 85.00 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY OF LACY ROAD; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, SOUTH 61 DEGREES 25 MINUTES 02 SECONDS 44.78 FEET; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, SOUTH 85 DEGREES 30 MINUTES 11 SECONDS WEST, 49.09 FEET; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, 82 DEGREES 55 MINUTES 05 SECONDS WEST, 75.43 FEET; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, SOUTH 80 DEGREES 47 MINUTES 29 SECONDS WEST, 74.21 FEET TO A POINT ON THE WESTERLY LINE OF AFORESAID LOT 2 OF CSM 8023; THENCE, ALONG SAID WESTERLY LINE, NORTH 02 DEGREES 36 MINUTES 24 SECONDS WEST, 1220.05 FEET BACK TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 493,619 SQUARE FEET OR 11.33 ACRES.

GENERAL NOTES

1. FIELD WORK PERFORMED BY WYSER ENGINEERING, LLC. ON THE WEEK OF, JUNE 5, 2024.
2. NORTH REFERENCE FOR THIS EXISTING CONDITIONS SURVEY AND MAP ARE BASED ON THE WISCONSIN COORDINATE REFERENCE SYSTEM, NAD 83 (2011) WISCRS DANE, GRID NORTH. THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 08, T06N, R09E, BEARS N 01°51' 14" E.
3. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
4. SUBSURFACE UTILITIES AND FIXTURES SHOWN ON THIS MAP HAVE BEEN APPROXIMATED BY LOCATING SURFACE FEATURES AND ACCESSORIES, DIGGERS HOTLINE FIELD MARKINGS AND EXISTING MAPS AND RECORDS.
5. BEFORE EXCAVATION, APPROPRIATE UTILITY COMPANIES SHOULD BE CONTACTED. FOR EXACT LOCATION OF UNDERGROUND UTILITIES, CONTACT DIGGERS HOTLINE, AT 1.800.242.8511 OR 811
6. THIS PARCEL IS SUBJECT TO ALL EASEMENTS AND AGREEMENTS, BOTH RECORDED AND UNRECORDED.
7. FEATURES HAVE BEEN LOCATED BY SURVEYOR IN FIELD THAT MAY HAVE ADVERSE TITLE ELEMENTS. AS TO WHICH ELEMENT ENCROACHMENT. CLAIM OF UNRECORDED EASEMENT. PRESCRIPTIVE EASEMENT, AND SO FORTH CAN NOT BE DETERMINED BY SURVEYOR.

BENCHMARK TABLE		
BM - #	ELEVATION	DESCRIPTION
BM - 1	1027.42	TOP NUT ON THE HYDRANT ON THE NORTHERLY RIGHT- OF-WAY OF LACY ROAD, EAST OF WIS D.O.T. RIGHT-OF-WAY
BM - 2	1027.34	TOP NUT ON THE HYDRANT ON THE NORTHERLY RIGHT- OF-WAY OF LACY ROAD, WEST OF WIS D.O.T. RIGHT-OF-WAY
BM - 3	1029.16	CUT CROSS IN PAVEMENT ON THE EASTERLY RIGHT-OF-WAY OF S SEMINOLE HWY
BM - 4	1032.68	CUT CROSS IN PAVEMENT ON THE EASTERLY RIGHT-OF-WAY OF S SEMINOLE HWY

SURVEYORS CERTIFICATE

TO: NEWCOMB CONSTRUCTION COMPANY INC.
BUFFALO DEVELOPMENT, LLC A WISCONSIN LIMITED LIABILITY COMPANY
ANNA M. O'BRIEN
FIRST AMERICAN TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6(A), 7(A), 9, 11(A), 13, 14, 16, AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED WEEK OF JUNE 5TH, 2024.

DATE OF PLAT OR MAP: JULY 10, 2024.

IN ACCORDANCE WITH SECTION 3.B OF THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, ADDITIONAL CERTIFICATION BELOW TO FULFILL WISCONSIN ADMINISTRATIVE CODE, A-E 7 - MINIMUM STANDARDS FOR PROPERTY SURVEYS IN WISCONSIN. ITEM A-E 7.05 (8)

I, ZACHARY M. REYNOLDS, WISCONSIN PROFESSIONAL LAND SURVEYOR S-3223, DO HEREBY CERTIFY THAT THIS SURVEY AND MAP IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF WITH THE INFORMATION PROVIDED, BY THE ORDER OF THOSE LISTED HEREON, AND THAT THIS SURVEY COMPLIES WITH A-E 7 OF THE WISCONSIN ADMINISTRATIVE CODE.

ZACHARY M. REYNOLDS, S-3223
WISCONSIN PROFESSIONAL LAND SURVEYOR

WISCONSIN
ZACHARY M. REYNOLDS
S-3223
MOUNT HOREB
WISCONSIN
PROFESSIONAL LAND SURVEYOR

DIGGERS HOTLINE
Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

WYSER ENGINEERING

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300 EAST front STREET
MOUNT HOREB, WI 53572
www.wyserengineering.com

PREPARED FOR:
NEWCOMB CONSTRUCTION COMPANY, INC.
999 FOURIER DRIVE #102
MADISON, WI 53717

SURVEYED BY: MAL/DZ
DRAWN BY: AL/AMS
APPROVED BY: ZMR

2747 S SEMINOLE HWY
FITCHBURG, WI 53711

PART OF LOT 2 OF CSM NO. 8023
PART OF THE SE 1/4 OF THE SW 1/4
SEC. 08 T-06-N, R-09-E
CITY OF FITCHBURG, DANE COUNTY, WI

Sheet Title: **ALTA/NSPS LAND TITLE SURVEY**

Revisions:

No.	Date:	Description:

Graphic Scale	0' 15' 30' 60' 90'
Wyser Number	24-1243
Set Type	SURVEY
Date Issued	07/10/2024
Sheet Number	V-001

File: W:\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\DWG\241243_ALTA.dwg Layout: Survey 22x34 User: Zach Plotted: Jul 19, 2024 - 2:32pm

NOTES REGARDING SCHEDULE B - PART II

PER FIRST AMERICAN TITLE LLC, TITLE COMMITMENT, FILE NO. NCS-122007-MAD DATED: MAY 29, 2024 AT 7:30 A.M.

(1) ANY FACTS, RIGHTS, INTERESTS, OR CLAIMS THAT ARE NOT SHOWN BY THE PUBLIC RECORDS BUT THAT COULD BE ASCERTAINED BY AN INSPECTION OF THE LAND OR BY MAKING INQUIRE OF PERSONS IN POSSESSION OF THE LAND.

(2) EASEMENTS, CLAIMS OF EASEMENTS OR ENCUMBRANCES THAT ARE NOT SHOWN BY THE PUBLIC RECORDS.

(3) ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OR ADVERSE CIRCUMSTANCE AFFECTING THE TITLE INCLUDING DISCREPANCIES, CONFLICT IN BOUNDARY LINES, SHORTAGES IN AREA, OR ANY OTHER FACTS THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND, AND THAT ARE NOT SHOWN BY THE PUBLIC RECORDS.

(13) EASEMENTS, DEDICATIONS, RESERVATIONS, PROVISIONS, RELINQUISHMENTS, RECITALS, CERTIFICATES, AND ANY OTHER MATTERS AS PROVIDED FOR OR DELINEATED ON CERTIFIED SURVEY MAP NO. 8023 RECORDED NOVEMBER 16, 1995, IN VOLUME 42 OF CERTIFIED SURVEY MAPS, PAGES 313-316 AS DOCUMENT NO. 2719369 REFERENCED IN THE LEGAL DESCRIPTION CONTAINED HEREIN. REFERENCE IS HEREBY MADE TO SAID PLAT FOR PARTICULARS.

THIS ITEM DOES AFFECT SUBJECT PARCEL, HOWEVER, THERE ARE NO SUCH MATTERS TO BE GRAPHICALLY SHOWN OR PLOTTED HEREON.

(14) RESTRICTIONS, DEDICATIONS, CONDITIONS, RESERVATIONS, EASEMENTS AND OTHER MATTERS SHOWN ON THE PLAT OF TRANSPORTATION PROJECT PLAT NO: 1206-07-29 - 4.02, AS RECORDED IN DOCUMENT NO. 4896305 ON JULY 31, 2012, BUT DELETING ANY COVENANT, CONDITION OR RESTRICTION INDICATING A PREFERENCE, LIMITATION OR DISCRIMINATION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN TO THE EXTENT SUCH COVENANTS, CONDITIONS OR RESTRICTIONS VIOLATE 42 USC 3604(C).

THIS ITEM DOES AFFECT SUBJECT PARCEL. TEMPORARY LIMITED EASEMENTS SHOWN ON SAID PLAT HAVE EXPIRED, HOWEVER ACCESS TO SOUTH SEMINOLE HIGHWAY AND LACY ROAD ARE CONTROLLED BY THE CITY OF FITCHBURG; EXTENTS OF CONTROLLED ACCESS IS UNCLEAR AND ARE NOT PLOTTED HEREON.

(15) RESTRICTIONS, DEDICATIONS, CONDITIONS, RESERVATIONS, EASEMENTS AND OTHER MATTERS SHOWN ON THE PLAT OF TRANSPORTATION PROJECT PLAT NO: 22-3495 - 4.01, AS RECORDED IN VOLUME 61-060B, PAGE 363 ON MARCH 24, 2022 AS DOCUMENT NO. 5821244, BUT DELETING ANY COVENANT, CONDITION OR RESTRICTION INDICATING A PREFERENCE, LIMITATION OR DISCRIMINATION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN TO THE EXTENT SUCH COVENANTS, CONDITIONS OR RESTRICTIONS VIOLATE 42 USC 3604(C).

MODIFICATION AND/OR AMENDMENT BY INSTRUMENT: TRANSPORTATION PROJECT PLAT NO: 22-3495 - 4.01, AMENDMENT NO. 1

RECORDING INFORMATION: AUGUST 22, 2022 IN VOLUME 61-072A, PAGE 434 AS DOCUMENT NO. 5857262

MODIFICATION AND/OR AMENDMENT BY INSTRUMENT: TRANSPORTATION PROJECT PLAT NO: 22-3495 - 4.01, AMENDMENT NO. 2

RECORDING INFORMATION: FEBRUARY 02, 2023 IN VOLUME 61-083A, PAGE 487 AS DOCUMENT NO. 5884824

THIS ITEM DOES AFFECT SUBJECT PARCEL. TEMPORARY LIMITED EASEMENTS SHOWN ON SAID PLAT HAVE EXPIRED, HOWEVER ACCESS TO SOUTH SEMINOLE HIGHWAY AND LACY ROAD ARE CONTROLLED BY THE CITY OF FITCHBURG; EXTENTS OF CONTROLLED ACCESS IS UNCLEAR AND ARE NOT PLOTTED HEREON.

(16) UTILITY EASEMENT TO MADISON GAS AND ELECTRIC COMPANY, A WISCONSIN CORPORATION, ITS SUCCESSORS AND ASSIGNS, DATED APRIL 08, 1965, RECORDED/FILED APRIL 15, 1965 IN VOLUME 425, PAGE 199 AS DOCUMENT NO. 1128469.

THIS ITEM DOES NOT AFFECT SUBJECT PARCEL, AND IS NOT PLOTTED HEREON.

EASEMENT SUPPLEMENT RECORDED SEPTEMBER 03, 1987 IN VOLUME 10556 OF RECORDS, PAGE 67 AS DOCUMENT NO. 2043073.

THIS ITEM DOES NOT AFFECT SUBJECT PARCEL, AND IS NOT PLOTTED HEREON.

EASEMENT SUPPLEMENT RECORDED SEPTEMBER 03, 1987 IN VOLUME 10556 OF RECORDS, PAGE 68 AS DOCUMENT NO. 2043074.

THIS ITEM DOES NOT AFFECT SUBJECT PARCEL, AND IS NOT PLOTTED HEREON.

EASEMENT SUPPLEMENT RECORDED SEPTEMBER 03, 1987 IN VOLUME 10556 OF RECORDS, PAGE 69 AS DOCUMENT NO. 2043075.

THIS ITEM DOES NOT AFFECT SUBJECT PARCEL, AND IS NOT PLOTTED HEREON.

EASEMENT SUPPLEMENT RECORDED SEPTEMBER 03, 1987 IN VOLUME 10556 OF RECORDS, PAGE 70 AS DOCUMENT NO. 2043076.

THIS ITEM DOES NOT AFFECT SUBJECT PARCEL, AND IS NOT PLOTTED HEREON.

(17) PRIVATE SEWAGE SYSTEM MAINTENANCE AGREEMENT COVENANT AGREEMENT:

DATED: APRIL 20, 1988
PARTIES: O'BRIEN FARM TRUST AND CITY OF FITCHBURG
RECORDED: MAY 04, 1988 IN VOLUME 11387 OF RECORDS, PAGE 22
INSTRUMENT NO.: 2079460

THIS ITEM DOES AFFECT SUBJECT PARCEL, BUT IS NOT GRAPHIC IN NATURE, AND IS NOT PLOTTED HEREON.

(18) PRIVATE SEWAGE SYSTEM COVENANT AGREEMENT:

DATED: FEBRUARY 26, 1996
PARTIES: WARREN J O'BRIEN AND THE COUNTY OF DANE
RECORDED: MARCH 01, 1996 IN VOLUME 32155, PAGE 72
INSTRUMENT NO.: 2742032

THIS ITEM DOES AFFECT SUBJECT PARCEL, BUT IS NOT GRAPHIC IN NATURE, AND IS NOT PLOTTED HEREON.

(19) COVENANTS, CONDITIONS AND RESTRICTIONS AS SET FORTH IN AWARD OF DAMAGES RECORDED ON FEBRUARY 25, 2013 AS DOCUMENT NO. 4964304, OF OFFICIAL RECORDS, BUT DELETING ANY COVENANT, CONDITION OR RESTRICTION INDICATING A PREFERENCE, LIMITATION OR DISCRIMINATION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN TO THE EXTENT SUCH COVENANTS, CONDITIONS OR RESTRICTIONS VIOLATE 42 USC 3604(C).

THIS ITEM DOES AFFECT SUBJECT PARCEL AND IS PLOTTED HEREON. THIS ITEM CONCERNS THE TAKING OF ADDITIONAL RIGHT-OF-WAY ALONG SOUTH SEMINOLE HIGHWAY AND LACY ROAD.

(20) EASEMENT AS SET FORTH IN NOTICE OF LIS PENDENS RECORDED ON OCTOBER 11, 2022 AS DOCUMENT NO. 5867230.

THIS ITEM DOES AFFECT SUBJECT PARCEL AND IS PLOTTED HEREON. THIS ITEM CONCERNS THE TAKING OF ADDITIONAL RIGHT-OF-WAY ALONG SOUTH SEMINOLE HIGHWAY AND LACY ROAD.

(21) COVENANTS, CONDITIONS AND RESTRICTIONS AS SET FORTH IN AWARD OF DAMAGES RECORDED ON DECEMBER 28, 2022 AS DOCUMENT NO. 5879973, OF OFFICIAL RECORDS, BUT DELETING ANY COVENANT, CONDITION OR RESTRICTION INDICATING A PREFERENCE, LIMITATION OR DISCRIMINATION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN TO THE EXTENT SUCH COVENANTS, CONDITIONS OR RESTRICTIONS VIOLATE 42 USC 3604(C).

THIS ITEM DOES AFFECT SUBJECT PARCEL AND IS PLOTTED HEREON. THIS ITEM CONCERNS THE TAKING OF ADDITIONAL RIGHT-OF-WAY ALONG SOUTH SEMINOLE HIGHWAY AND LACY ROAD.

NOTES REGARDING ALTA TABLE A REQUIREMENTS

ITEM 3: ALL OF THE SUBJECT PARCEL LIES IN "ZONE X" AREAS DETERMINED TO BE BELOW THE 0.2% ANNUAL CHANCE FLOODPLAIN PER NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP NO. 55025C0415G DATED JANUARY 2, 2009

ITEM 6(A): SAID PARCEL IS CURRENTLY ZONED RURAL RESIDENTIAL (R-R), BUT IS BEING REZONED TO GENERAL BUSINESS (B-G). NO ZONING LETTER PROVIDED BY CITY OF FITCHBURG, OR CLIENT. CURRENT ZONING INFORMATION TAKEN FROM FITCHBURG PUBLIC MAP SYSTEM.

ITEM 9: NO EXISTING PARKING STALLS LOCATED ON SAID PARCEL.

ITEM 11(A): NO REPORTS PROVIDED BY CLIENT FOR PRIVATE UTILITY LOCATIONS, NO PRIVATE LOCATE WAS COORDINATED BY THE SURVEYOR. DIGGER'S HOTLINE WAS CALLED AND THEIR FIELD MARKINGS WERE LOCATED.

ITEM 14: SUBJECT PARCEL IS ADJACENT TO S SEMINOLE HWY AND LACY ROAD INTERSECTION. FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING/ZONING DEPARTMENT OF THE CITY OF FITCHBURG. EXISTING ACCESS CONTROL ALONG SEMINOLE HIGHWAY AND LACY ROAD ESTABLISHED FROM SECTION 27 OF THE CITY OF FITCHBURG ORDINANCES.

ITEM 16: NO EVIDENCE OF CURRENT EARTHWORK OR CONSTRUCTION WAS OBSERVED ONSITE AT THE TIME OF THIS SURVEY.

WYSER ENGINEERING

PREPARED BY:
WYSER ENGINEERING
300 EAST front STREET
MOUNT HOREB, WI 53572
www.wyserengineering.com

PREPARED FOR:
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999 FOURIER DRIVE #102
MADISON, WI 53717

SURVEYED BY: MAL/DZ
DRAWN BY: AL/AMS
APPROVED BY: ZMR

2747 S SEMINOLE HWY
FITCHBURG, WI 53711

PART OF LOT 2 OF CSM NO. 8023
PART OF THE SE 1/4 OF THE SW 1/4
SEC. 08 T-06-N, R-09-E
CITY OF FITCHBURG, DANE COUNTY, WI

Sheet Title:
ALTA/NSPS LAND TITLE SURVEY

Revisions:

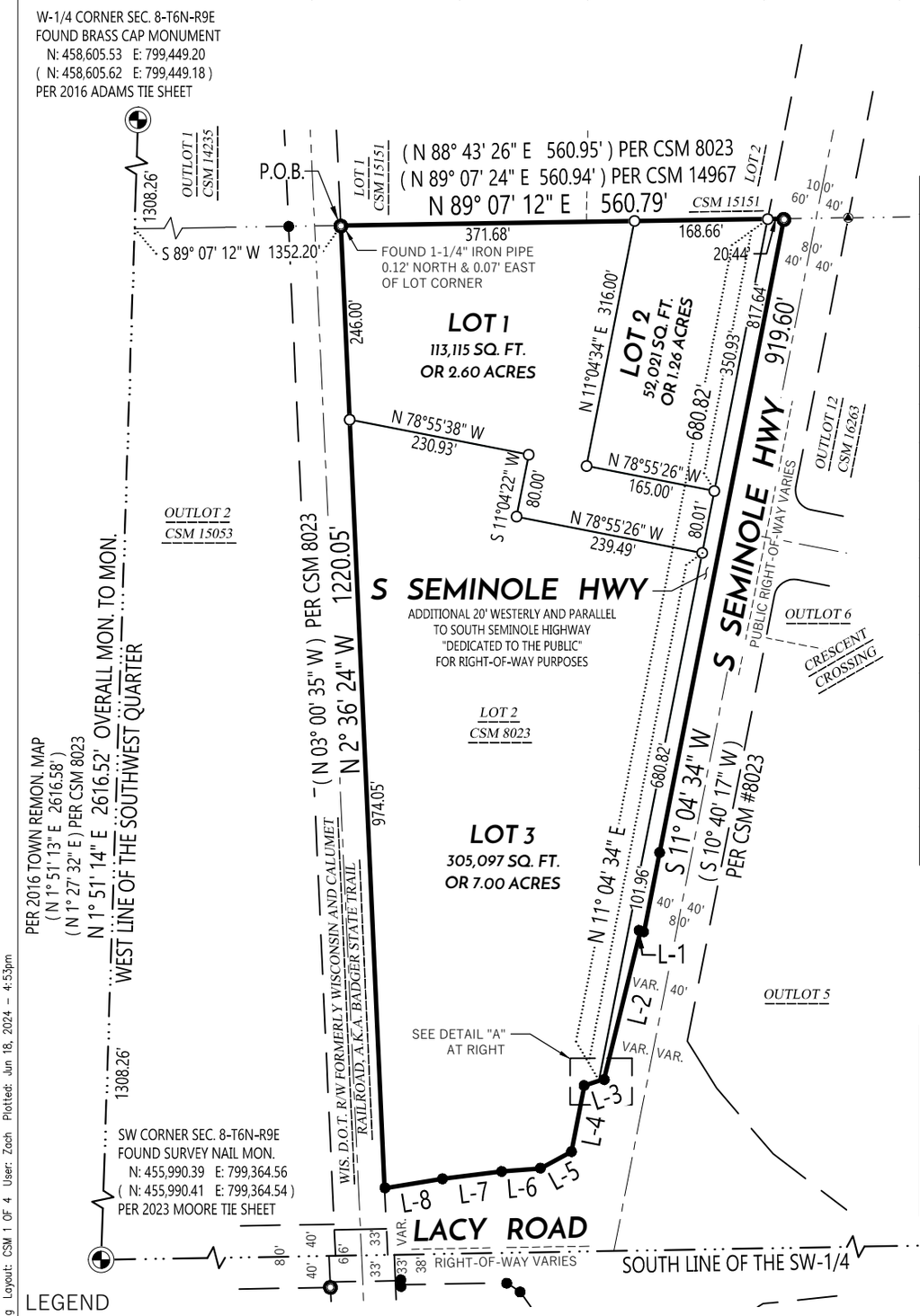
No.	Date:	Description:

Graphic Scale	0' 15' 30' 60' 90'
Wyser Number	24-1243
Set Type	SURVEY
Date Issued	07/10/2024
Sheet Number	V-002

File: W:\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\DWG\241243_ALTA.dwg Layout: Survey 22x34 (2) User: Zach Plotted: Jul 19, 2024 - 2:33pm

CERTIFIED SURVEY MAP NO._____

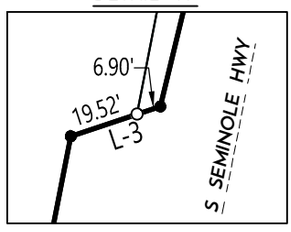
PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 8023 RECORDED IN VOLUME 42 OF CERTIFIED SURVEY MAPS OF DANE COUNTY ON PAGES 313-316 AS DOCUMENT NO. 2719369. LOCATED IN THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 08, TOWN 06 NORTH, RANGE 9 EAST, CITY OF FITCHBURG, DANE COUNTY , WISCONSIN.



LINE TABLE		
LINE #	DIRECTION	LENGTH
L-1	N 78° 55' 26" W	5.01'
*	(N 78° 55' 45" W)	(5.00')
L-2	S 13° 44' 29" W	193.21'
*	(S 13° 44' 26" W)	-
L-3	S 71° 35' 45" W	26.42'
*	(S 71° 35' 42" W)	-
L-4	S 11° 04' 04" W	85.00'
*	(S 11° 04' 15" W)	-
L-5	S 61° 25' 02" W	44.78'
*	(S 61° 24' 52" W)	(44.79')
L-6	S 85° 30' 11" W	49.09'
*	(S 85° 30' 10" W)	-
L-7	S 82° 55' 05" W	75.43'
*	(S 82° 55' 04" W)	-
L-8	S 80° 47' 29" W	74.21'
*	(S 80° 47' 33" W)	(74.18')

* PER TPP NO. 22-3495-4.01 AMENDMENT NO. 2, RECORDED AS DOCUMENT NO. 5884824

DETAIL "A"



NORTH

0' 100' 200'

LEGEND

- SECTION CORNER FOUND / RECOVERED
- MAG NAIL FOUND
- 3/4" REBAR FOUND
- 1" IRON PIPE FOUND
- 2" IRON PIPE FOUND
- 3/4" REBAR SET 1.50 LB/FT
- CSM BOUNDARY
- RIGHT-OF-WAY LINE
- CENTERLINE
- SECTION/QUARTER LINE
- QUARTER/QUARTER LINE
- PLATTED LINE
- ( ) RECORDED INFORMATION

NOTES:

1. FIELD WORK PERFORMED BY WYSER ENGINEERING, LLC. ON THE WEEKS OF JUNE 5TH, AND 6TH, 2024.
2. NORTH REFERENCE FOR THIS CERTIFIED SURVEY AND MAP ARE BASED ON THE WISCONSIN COORDINATE REFERENCE SYSTEM, WISCRS DANE, NAD 83 (2011), GRID NORTH. THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 8, T6N, R9E, BEARS N 01°51' 14" E
3. THIS PARCEL IS SUBJECT TO ALL EASEMENTS AND AGREEMENTS, BOTH RECORDED AND UNRECORDED.
4. SEE SHEETS 2 OF 4 FOR FURTHER DETAILS ON OVERALL CSM BOUNDARY, AND EASEMENTS.

WISCONSIN
ZACHARY M. REYNOLDS
S-3223
MOUNT HOREB
WISCONSIN
PROFESSIONAL LAND SURVEYOR

WYSER ENGINEERING

PREPARED BY:
WYSER ENGINEERING
300 EAST FRONT STREET
MOUNT HOREB, WI 53572
www.wyserengineering.com

PREPARED FOR:
NEWCOMB CONSTRUCTION COMPANY, INC.
999 FOURIER DRIVE #102
MADISON, WI 53717

SURVEYED BY: MAL/DZ
DRAWN BY: AMS
CHECKED BY: ZMR
APPROVED BY: ZMR

PROJECT NO: 24-1243
SHEET NO: 1 of 4

VOL. _____ PAGE _____
DOC. NO. _____
C.S.M. NO. _____

File: W:\2024\241243_Newcomb – Seminole & Lacy, Fitchburg\DWG\241243_CSM.dwg Layout: CSM 1 OF 4 User: Zach Plotted: Jun 18, 2024 – 4:53pm

CERTIFIED SURVEY MAP NO._____

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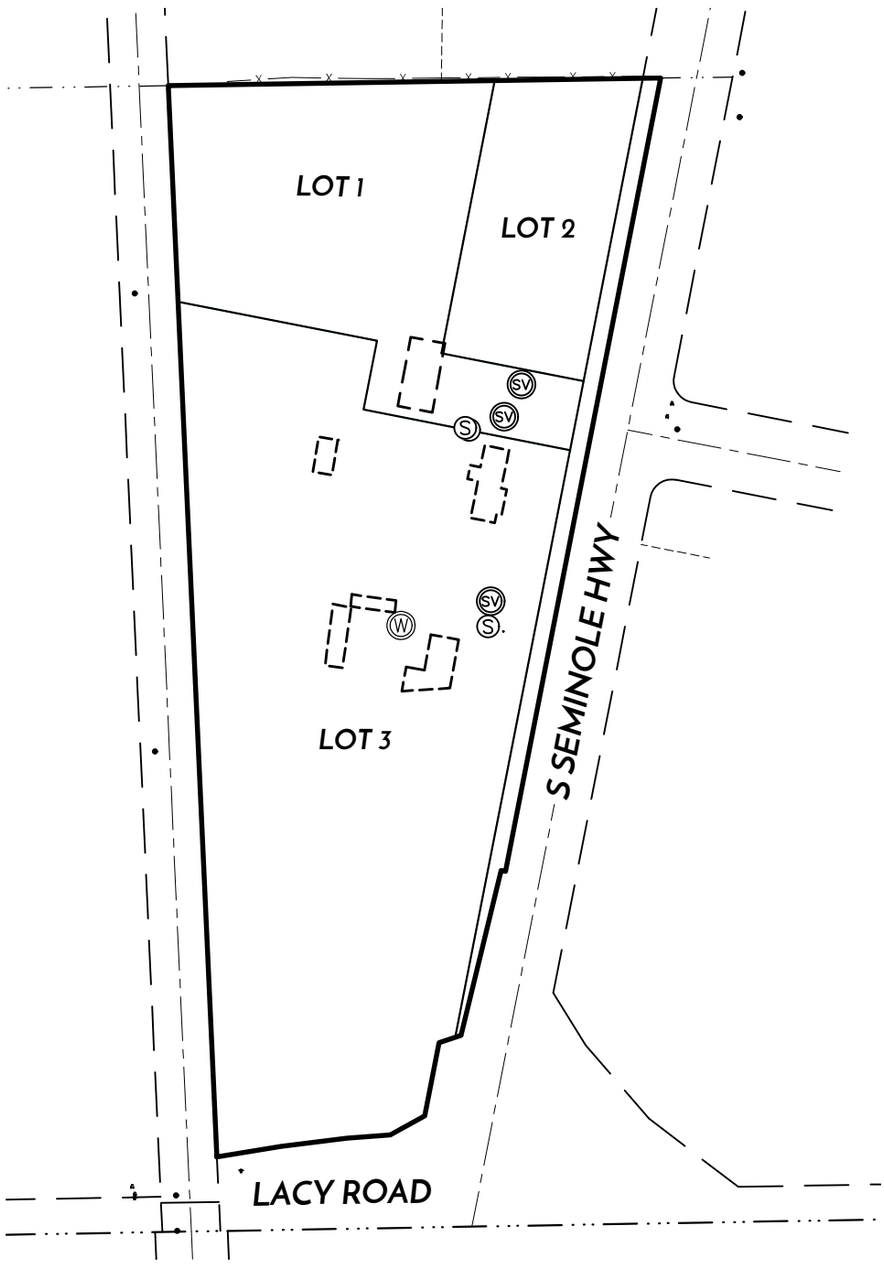

LEGEND

- CSM BOUNDARY
- RIGHT-OF-WAY LINE
- CENTERLINE
- SECTION/QUARTER LINE
- QUARTER/QUARTER LINE
- PLATTED LINE
- EXISTING EASEMENT
- EXISTING STRUCTURE
- FENCE LINE

NOTES:

1. FIELD WORK PERFORMED BY WYSER ENGINEERING, LLC. ON THE WEEKS OF JUNE 5TH, AND 6TH, 2024.
2. NORTH REFERENCE FOR THIS CERTIFIED SURVEY AND MAP ARE BASED ON THE WISCONSIN COORDINATE REFERENCE SYSTEM, WISCRS DANE, NAD 83 (2011), GRID NORTH. THE NORTH LINE OF THE SOUTHEAST QUARTER OF SECTION 6, T6N, R6E, BEARS S 89°38' 20" E
3. THIS PARCEL IS SUBJECT TO ALL EASEMENTS AND AGREEMENTS, BOTH RECORDED AND UNRECORDED.
4. SEE SHEETS 2 OF 4 FOR FURTHER DETAILS ON OVERALL CSM BOUNDARY, AND EASEMENTS.

NORTH

0' 100' 200'

WISCONSIN
ZACHARY M. REYNOLDS
S-3223
MOUNT HOREB
WISCONSIN
PROFESSIONAL LAND SURVEYOR

WYSER ENGINEERING

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www.wyserengineering.com

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NEWCOMB CONSTRUCTION COMPANY, INC.
999 FOURIER DRIVE #102
MADISON, WI 53717

SURVEYED BY:	MAL/DZ
DRAWN BY:	AMS
CHECKED BY:	ZMR
APPROVED BY:	ZMR

PROJECT NO:	24-1243
SHEET NO:	2 of 4

VOL. _____ PAGE _____
DOC. NO. _____
C.S.M. NO. _____

File: W:\2024\241243_Newcomb – Seminole & Lacy, Fitchburg\DWG\241243_CSM.dwg Layout: CSM 2 OF 4 User: Zach Plotted: Jun 18, 2024 – 4:50pm

*CERTIFIED SURVEY MAP NO.*_____

PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 8023 RECORDED IN VOLUME 42 OF CERTIFIED SURVEY MAPS OF DANE COUNTY ON PAGES 313-316 AS DOCUMENT NO. 2719369. LOCATED IN THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 08, TOWN 06 NORTH, RANGE 9 EAST, CITY OF FITCHBURG, DANE COUNTY , WISCONSIN.

LEGAL DESCRIPTION

PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 8023 RECORDED IN VOLUME 42 OF CERTIFIED SURVEY MAPS OF DANE COUNTY ON PAGES 313-316 AS DOCUMENT NO. 2719369 (CSM 8023), LOCATED IN THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 6 NORTH, RANGE 9 EAST, CITY OF FITCHBURG, DANE COUNTY , WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST QUARTER CORNER OF AFORESAID SECTION 8; THENCE, ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 8, SOUTH 01 DEGREES 51 MINUTES 14 SECONDS EAST, 1308.26 FEET TO THE NORTHWEST CORNER OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF SAID SECTION 8; THENCE ALONG THE NORTH LINE OF SAID SOUTH HALF, NORTH 89 DEGREES 07 MINUTES 12 SECONDS EAST, 1352.20 FEET TO THE NORTHWEST CORNER OF AFORESAID LOT 2 OF CSM 8023, AND THE POINT OF BEGINNING; THENCE, CONTINUING ALONG SAID NORTH LINE OF THE SOUTH HALF, AND ALSO ALONG THE NORTH LINE OF SAID LOT 2, NORTH 89 DEGREES 07 MINUTES 12 SECONDS EAST, 560.79 FEET TO THE NORTHEAST CORNER OF SAID LOT 2, AND ALSO BEING A POINT ON THE WESTERLY RIGHT-OF-WAY OF SOUTH SEMINOLE HIGHWAY; THENCE, ALONG THE EAST LINE OF SAID LOT 2, AND ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 11 DEGREES 04 MINUTES 34 SECONDS WEST, 919.60 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, NORTH 78 DEGREES 55 MINUTES 25 SECONDS WEST, 5.01 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 13 DEGREES 44 MINUTES 29 SECONDS WEST, 193.21 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 71 DEGREES 35 MINUTES 42 SECONDS WEST, 26.42 FEET; THENCE, CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY, SOUTH 11 DEGREES 04 MINUTES 04 SECONDS WEST, 85.00 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY OF LACY ROAD; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, SOUTH 61 DEGREES 25 MINUTES 02 SECONDS 44.78 FEET; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, SOUTH 85 DEGREES 30 MINUTES 11 SECONDS WEST, 49.09 FEET; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, 82 DEGREES 55 MINUTES 05 SECONDS WEST, 75.43 FEET; THENCE, CONTINUING ALONG SAID NORTHERLY RIGHT-OF-WAY, SOUTH 80 DEGREES 47 MINUTES 29 SECONDS WEST, 74.21 FEET TO A POINT ON THE WESTERLY LINE OF AFORESAID LOT 2 OF CSM 8023; THENCE, ALONG SAID WESTERLY LINE, NORTH 02 DEGREES 36 MINUTES 24 SECONDS WEST, 1220.05 FEET BACK TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 493,619 SQUARE FEET OR 11.33 ACRES.

SURVEYOR'S CERTIFICATE

I, ZACHARY M. REYNOLDS, WISCONSIN PROFESSIONAL LAND SURVEYOR S-3223, DO HEREBY CERTIFY THAT BY DIRECTION OF NEWCOMB CONSTRUCTION COMPANY, INC. I HAVE SURVEYED, DIVIDED, AND MAPPED THE LANDS DESCRIBED HEREON AND THAT THE MAP IS A CORRECT REPRESENTATION IN ACCORDANCE WITH THE INFORMATION PROVIDED. I FURTHER CERTIFY THAT THIS CERTIFIED SURVEY MAP IS IN FULL COMPLIANCE WITH CHAPTER 236.34 OF THE WISCONSIN STATUTES AND THE SUBDIVISION REGULATIONS OF THE CITY OF FITCHBURG AND DANE COUNTY, WISCONSIN.

_____ _____

ZACHARY M. REYNOLDS, S-3223 DATE
WISCONSIN PROFESSIONAL LAND SURVEYOR

File: W:\2024\241243_Newcomb – Seminole & Lacy, Fitchburg\DWG\241243_CSM.dwg Layout: CSM 3 OF 4 User: Zach Plotted: Jun 18, 2024 – 4:51pm

WYSER ENGINEERING

PREPARED BY:
WYSER ENGINEERING
300 EAST FRONT STREET
MOUNT HOREB, WI 53572
www.wyserengineering.com

PREPARED FOR:
NEWCOMB CONSTRUCTION COMPANY, INC.
999 FOURIER DRIVE #102
MADISON, WI 53717

SURVEYED BY: MAL/DZ
DRAWN BY: AMS
CHECKED BY: ZMR
APPROVED BY: ZMR

PROJECT NO: 24-1243
SHEET NO: 3 of 4

VOL. _____ PAGE _____
DOC. NO. _____
C.S.M. NO. _____

*CERTIFIED SURVEY MAP NO.*_____

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OWNER'S CERTIFICATE

_____ LLC, AS OWNER, WE HEREBY CERTIFY THAT WE CAUSED THE LANDS DESCRIBED HEREON TO BE SURVEYED, DIVIDED MAPPED AND DEDICATED AS SHOWN. I ALSO CERTIFY THAT THIS CERTIFIED SURVEY MAP IS REQUIRED BY S. 236.34 OF THE WISCONSIN STATE STATUES TO BE SUBMITTED TO THE CITY OF MADISON FOR APPROVAL.

BY: _____
GUS NEWCOMB, MANAGING MEMBER

_____ LLC

STATE OF WISCONSIN) SS
DANE COUNTY) SS

PERSONALLY CAME BEFORE ME THIS_____DAY OF_____, 2024, THE ABOVE NAMED

MANAGING MEMBER FOR_____, LLC, GUS NEWCOMB, TO ME KNOWN TO BE THE

PERSON WHO EXECUTED THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED THE SAME.

_____ _____
NOTARY PUBLIC, STATE OF WISCONSIN MY COMMISSION EXPIRES

CONSENT OF MORTGAGEE

_____, A BANKING ASSOCIATION DULY ORGANIZED AND EXISTING UNDER AND BY VIRTUE OF THE LAWS OF THE STATE OF WISCONSIN , MORTAGAGEE OF THE ABOVE DESCRIBED LAND, DOES HEREBY CONSENT TO THE SURVEY, DIVIDING, MAPPING AND DEDICATION OF THE LAND DESCRIBED ON THIS CERTIFIED SURVEY MAP AND DOES HEREBY CONSENT TO THE OWNER'S CERTIFICATE.

BY: _____
AUTHORIZED OFFICER

STATE OF WISCONSIN) SS
DANE COUNTY) SS

PERSONALLY CAME BEFORE ME THIS_____DAY OF_____, 2024, THE ABOVE

NAMED BANKING ASSOCIATION, _____ AUTHORIZED OFFICER

_____ TO ME KNOWN TO BE THE PERSON WHO EXECUTED THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED THE SAME.

_____ _____
NOTARY PUBLIC, STATE OF WISCONSIN MY COMMISSION EXPIRES

WISCONSIN
ZACHARY M. REYNOLDS
S-3223
MOUNT HOREB
WISCONSIN
PROFESSIONAL LAND SURVEYOR

CITY OF FITCHBURG APPROVAL

THIS CERTIFIED SURVEY MAP, INCLUDING ANY DEDICATIONS SHOWN HEREON, HAS BEEN DULY FILED WITH AND APPROVED BY THE COMMON COUNCIL OF THE CITY OF FITCHBURG, DANE COUNTY, WISCONSIN.

DATED THIS _____DAY OF _____, 2024.

_____
TRACY OLDENBURG, CITY CLERK,
CITY OF FITCHBURG

OFFICE OF THE REGISTER OF DEEDS

_____COUNTY, WISCONSIN

RECEIVED FOR RECORD_____,

20____ AT_____O'CLOCK_____M AS

DOCUMENT # _____

IN VOL. _____ OF CERTIFIED SURVEY

MAPS ON PAGE(S) _____ .

_____
KRISTI CHLEBOWSKI, REGISTER OF DEEDS

WYSER ENGINEERING

PREPARED BY:
WYSER ENGINEERING
300 EAST FRONT STREET
MOUNT HOREB, WI 53572
www.wyseengineering.com

PREPARED FOR:
NEWCOMB CONSTRUCTION COMPANY, INC.
999 FOURIER DRIVE #102
MADISON, WI 53717

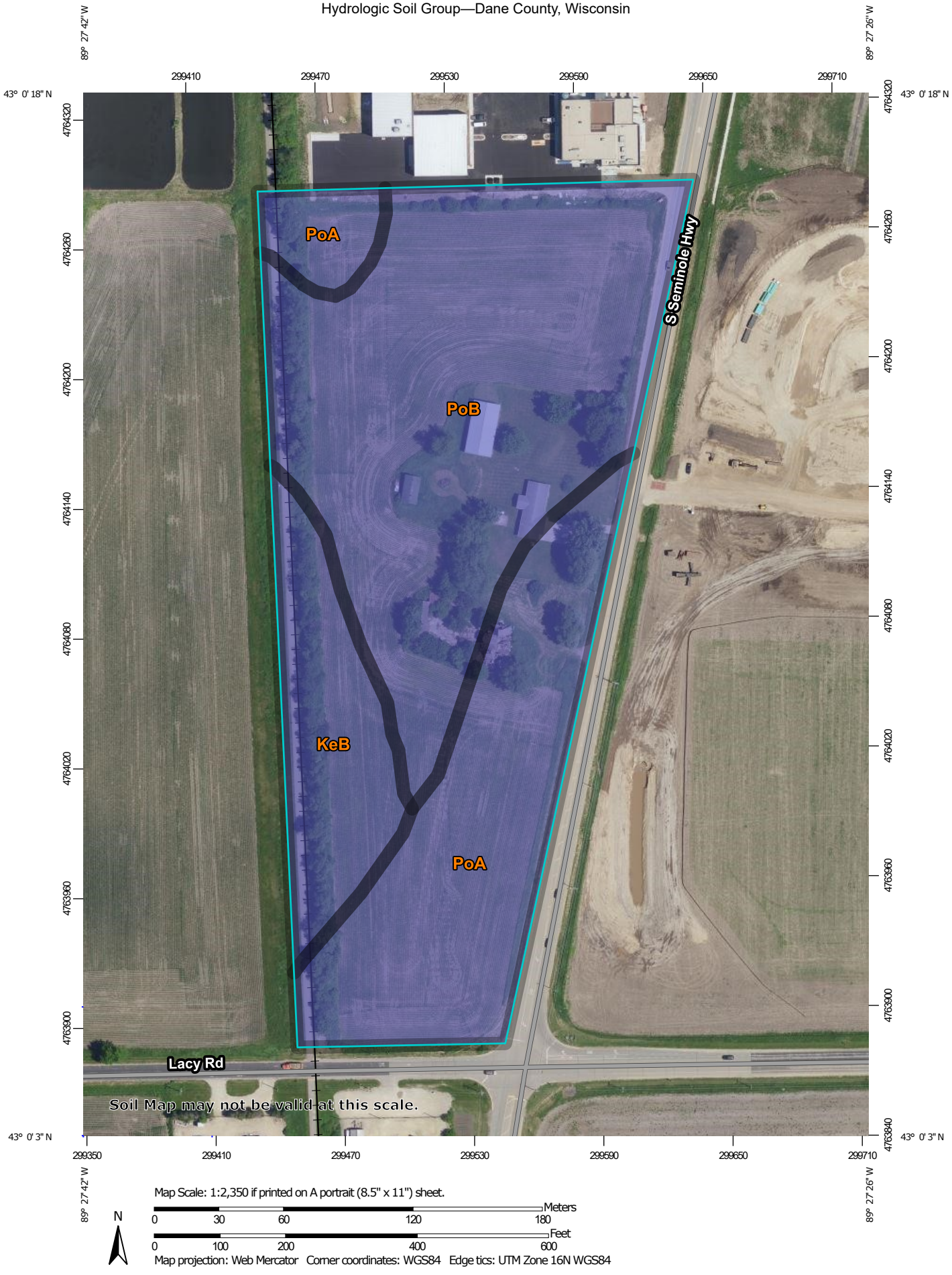
SURVEYED BY: MAL/DZ
DRAWN BY: AMS
CHECKED BY: ZMR
APPROVED BY: ZMR

PROJECT NO: 24-1243
SHEET NO: 3 of 4

File: W:\2024\241243_Newcomb – Seminole & Lacy, Fitchburg\DWG\241243_CSM.dwg Layout: CSM 4 OF 4 User: Zach Plotted: Jun 18, 2024 – 4:51pm

APPENDIX B

Soils Information


89° 27' 42" W
89° 27' 26" W
43° 0' 18" N
43° 0' 3" N
299350
299410
299470
299530
299590
299650
299710
4764320
4764260
4764200
4764140
4764080
4764020
4763960
4763900
4763840
PoA
PoB
KeB
PoA
S Seminole Hwy
Lacy Rd
Soil Map may not be valid at this scale.
Map Scale: 1:2,350 if printed on A portrait (8.5" x 11") sheet.
N
Meters
0 30 60 120 180
Feet
0 100 200 400 600
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

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

Soil Rating Lines

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

Soil Rating Points

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

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Dane County, Wisconsin
Survey Area Data: Version 22, Sep 8, 2023

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

Date(s) aerial images were photographed: Jun 13, 2020—Jul 31, 2020

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
KeB	Kegonsa silt loam, 2 to 6 percent slopes	B	2.0	13.8%
PoA	Plano silt loam, gravelly substratum, 0 to 2 percent slopes	B	4.8	32.8%
PoB	Plano silt loam, gravelly substratum, 2 to 6 percent slopes	B	7.8	53.4%
Totals for Area of Interest			**14.7**	**100.0%**

Description

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

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

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

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

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

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

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

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Wis. Dept. of Safety and Professional Services
Division of Industry Services

SOIL EVALUATION - STORM

in accordance with SPS 382.365 and 385, Wis. Adm. Code

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

Please print all information.

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

County: **Dane**

Parcel I.D.: **0609-083-9570-4**

Reviewed by: | Date:

Property Owner: **Newcomb Construction Company, Inc.**

Property Location: Govt. Lot **SE** 1/4 **SW** 1/4 S **8** T **6** N R **9** E (or) W

Property Owner's Mailing Address: **999 Fourier Drive #102**

Lot # **2** | Block # | Subd. Name or CSM# **CSM 8023**

City: **Madison,** | State: **WI** | Zip Code: **53717** | Phone Number: ( )

☒ City ☐ Village ☐ Town: **Fitchburg** | Nearest Road: **2747 S. Seminole Hwy**

Drainage area _____ ☐ sq. ft. ☐ acres
Optional:
Test Site Suitable for (check all that apply)
☐ Irrigation ☐ Bioretention trench ☐ Trench(es)
☐ Rain garden ☐ Grassed swale ☐ Reuse
☐ Infiltration trench ☐ SDS (> 15' wide) ☐ Other _____

Hydraulic Application Test Method:
☒ Morphological Evaluation
☐ Double-Ring Infiltrometer
☐ Other (specify) _____

TP-1 Obs. # ☐ Boring ☒ Pit Ground surface elev. **1023.53** ft. Depth to limiting factor **>72** in.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr
A	0-13	10YR3/3	None	sil	1msbk	mfr	cs	0	0.13
B	13-57	10YR4/4	None	sicl	2msbk	mfr	cs	0	0.04
2C	57-72	10YR6/4	None	fs	0sg	ml		2	0.5

TP-2 Obs. # ☐ Boring ☒ Pit Ground surface elev. **1025.19** ft. Depth to limiting factor **>72** in.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr
A	0-13	10YR3/2	None	sil	1msbk	mfr	cs	0	0.13
B	13-51	10YR4/4	None	sicl	2fsbk	mfr	cs	0	0.04
2C	51-72	10YR6/4	None	fs	0sg	ml		2	0.5

CST/PSS Name (Please Print): **Paul A. Hardy**

Signature:

CST/PSS Number: **225394**

Address: **7226 Timberwood Drive, Madison, WI 53719**

Date Evaluation Conducted: **6-14-2024**

Telephone Number: **608-848-4869**

Property Owner Newcomb Construction Co., Inc. Parcel ID # 0609-083-9570-4

TP-3 Obs # ☐ Boring ☒ Pit Ground surface elev 1025.38 ft Depth to limiting factor >103 in

Horizon	Depth in	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh	Consistence	Boundary	% Rock Frag	Hydraulic App. Rate Inches/Hr
A	0-8	10YR3/2	None	sil	2fsbk	mvfr	cs	0	0.13
B	8-58	10YR4/4	None	sicl	1msbk	mfi	gs	0	0.04
2C	58-103	10YR5/4	None	fs	0sg	ml		2	0.5

TP-4 Obs # ☐ Boring ☒ Pit Ground surface elev 1024.00 ft Depth to limiting factor >102* in

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr
A	0-13	10YR3/2	None	sil	2fsbk	mvfr	cs	0	0.13
B	13-60	10YR4/3	m2d10YR5/8,6/2*	sicl	1msbk	mfi	cs	0	0.04
2C	60-102	10YR5/6	None	lfs	0sg	ml		1	0.5
		*Restricted drainage in B horizon; Free-draining below 60"							

TP-5 Obs. # ☐ Boring ☒ Pit Ground surface elev. 1026.29 ft. Depth to limiting factor >60 in.

Horizon	Depth In.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr
A	0-13	10YR2/2	None	sil	2fsbk	mvfr	cs	0	0.13
B	13-48	10YR4/3	None	sicl	1msbk	mfi	cs	0	0.04
2C	48-60	10YR5/4	None	fs	0sg	ml		15	0.5

Test Results and/or Summary Comments

Property Owner Newcomb Construction Co., Inc. Parcel ID # 0609-083-9570-4 Page 3 of 4

TP-6 Obs. # ☐ Boring ☒ Pit Ground surface elev. 1026.27 ft. Depth to limiting factor >78* in.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr
A	0-14	10YR2/2	None	sil	2fsbk	mvfr	cs	0	0.13
B	14-58	10YR4/3	m2d10YR5/8,6/2*	sicl	1csbk	mfi	cs	0	0.04
2C	58-78	10YR6/4	None	fs	0sg	ml		10	0.5
			*Restricted drainage in B horizon; Free-Draining below 58"						

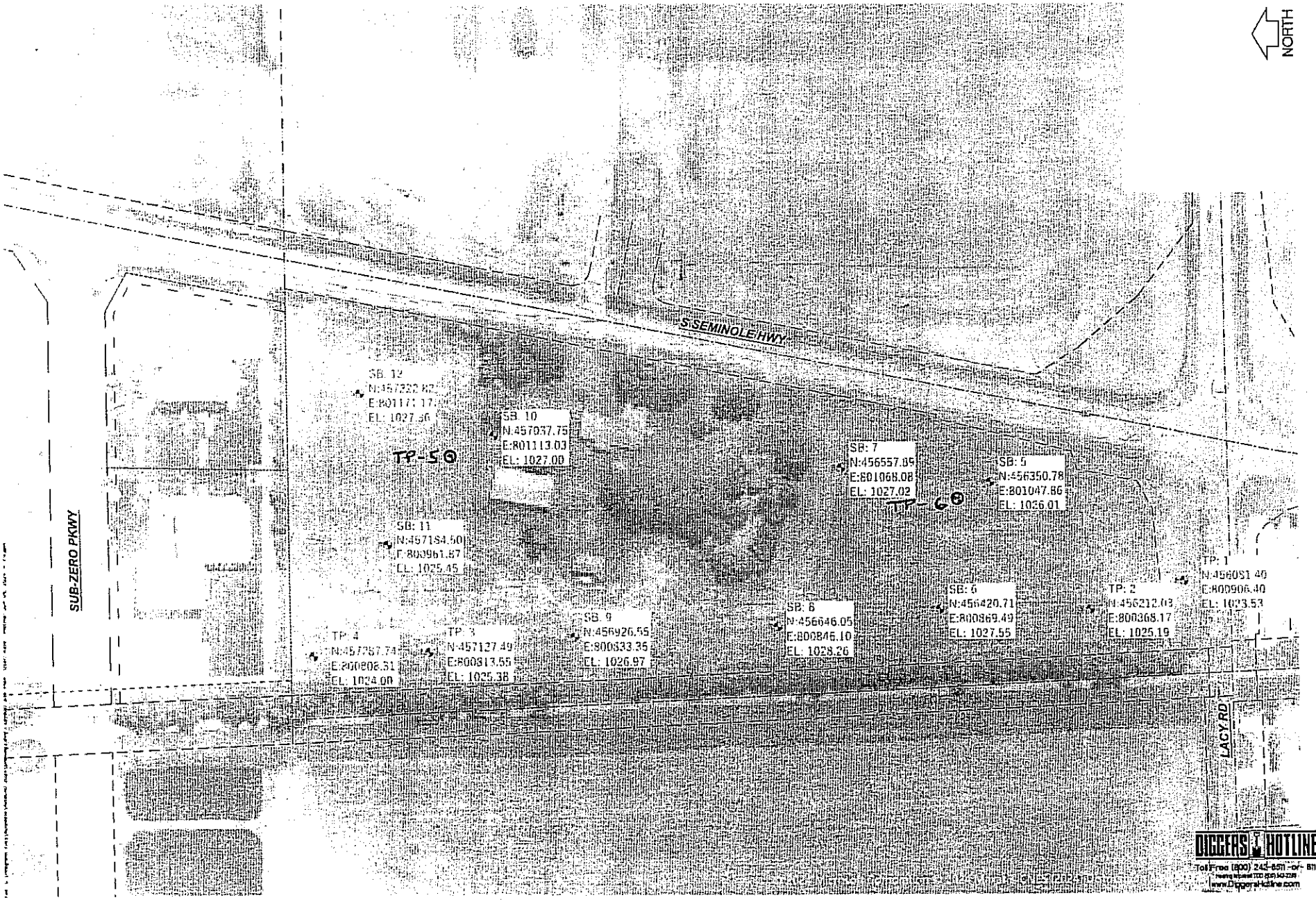
☐ Obs. # ☐ Boring ☐ Pit Ground surface elev. _____ ft. Depth to limiting factor _____ in.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr

☐ Obs. # ☐ Boring ☐ Pit Ground surface elev. _____ ft. Depth to limiting factor _____ in.

Horizon	Depth In.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	Hydraulic App. Rate Inches/Hr

Test Results and/or Summary Comments



WYSER ENGINEERING

BUFFALO MIXED USE DEVELOPMENT XXX

CITY OF FITCHBURG, DANE COUNTY, WI

2747 S SEMINOLE HWY

Sheet Title: TEST PIT & SOIL BORING GRAPHIC

Revisions		
No.	Date	Description

Graphic Scale	0' 30' 60'
Wyser Number	24-1243
Set Type	SCHEMATIC
Date Issued	06/06/2024
Sheet Number	C100

APPENDIX C

Proposed Construction Plans

APPENDIX D

Pre Development Hydrologic Modeling

NORTH

EXISTING
WATERSHED

WYSER
ENGINEERING

2747 S SEMINOLE HWY
FITCHBURG, WI 53711

COURT AND CORK PICKLEBALL

CITY OF FITCHBURG, DANE COUNTY, WI

Sheet Title:
PREDEVELOPMENT WATERSHED MAP

Revisions:

No.	Date:	Description:

Graphic Scale	0' 20' 40' 60'
Wyser Number	24-1243
Set Type	REVIEW
Date Issued	07/23/2024
Sheet Number	EX D

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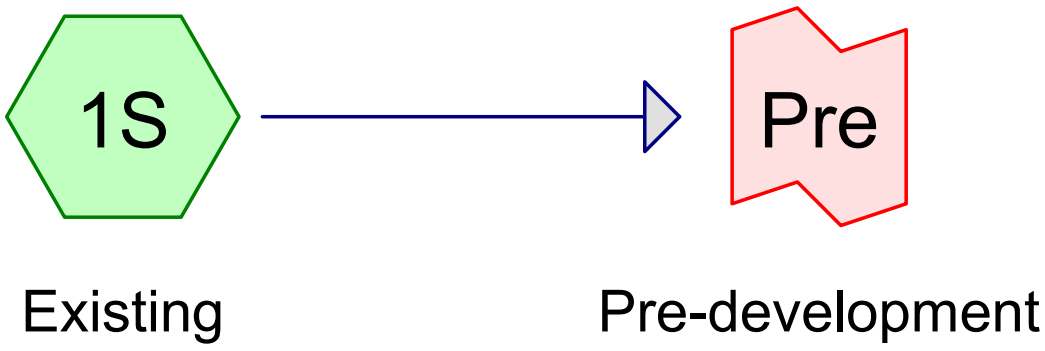

Subcat Reach Pond Link

Routing Diagram for 241243_Seminole Lacy
Prepared by Wyser Engineering, Printed 7/22/2024
HydroCAD® 10.20-2g s/n 08415 © 2022 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.990	68	Cropland, HSG B (1S)
0.073	98	Impervious (1S)
3.062	**69**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
2.990	HSG B	1S
0.000	HSG C	
0.000	HSG D	
0.073	Other	1S
3.062		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	2.990	0.000	0.000	0.000	2.990	Cropland	1S
0.000	0.000	0.000	0.000	0.073	0.073	Impervious	1S
0.000	**2.990**	**0.000**	**0.000**	**0.073**	**3.062**	**TOTAL AREA**	

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Existing Runoff Area=133,400 sf 2.38% Impervious Runoff Depth=0.43"
Flow Length=400' Tc=12.1 min CN=68/98 Runoff=1.25 cfs 0.109 af

Link Pre: Pre-development Inflow=1.25 cfs 0.109 af
Primary=1.25 cfs 0.109 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.109 af Average Runoff Depth = 0.43"
97.62% Pervious = 2.990 ac 2.38% Impervious = 0.073 ac

Summary for Subcatchment 1S: Existing

Runoff = 1.25 cfs @ 12.22 hrs, Volume= 0.109 af, Depth= 0.43"
Routed to Link Pre : Pre-development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 1-yr_NRCS Rainfall=2.49"

	Area (sf)	CN	Description
*	3,175	98	Impervious
*	130,225	68	Cropland, HSG B
	133,400	69	Weighted Average
	130,225	68	97.62% Pervious Area
	3,175	98	2.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0120	0.25		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 2.49"
5.6	300	0.0100	0.90		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
12.1	400	Total			

Summary for Link Pre: Pre-development

Inflow Area = 3.062 ac, 2.38% Impervious, Inflow Depth = 0.43" for 1-yr_NRCS event
Inflow = 1.25 cfs @ 12.22 hrs, Volume= 0.109 af
Primary = 1.25 cfs @ 12.22 hrs, Volume= 0.109 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Existing Runoff Area=133,400 sf 2.38% Impervious Runoff Depth=0.60"
Flow Length=400' Tc=12.1 min CN=68/98 Runoff=1.92 cfs 0.152 af

Link Pre: Pre-development Inflow=1.92 cfs 0.152 af
Primary=1.92 cfs 0.152 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.152 af Average Runoff Depth = 0.60"
97.62% Pervious = 2.990 ac 2.38% Impervious = 0.073 ac

Summary for Subcatchment 1S: Existing

Runoff = 1.92 cfs @ 12.22 hrs, Volume= 0.152 af, Depth= 0.60"
Routed to Link Pre : Pre-development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 2-yr_NRCS Rainfall=2.84"

	Area (sf)	CN	Description
*	3,175	98	Impervious
*	130,225	68	Cropland, HSG B
	133,400	69	Weighted Average
	130,225	68	97.62% Pervious Area
	3,175	98	2.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0120	0.25		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 2.49"
5.6	300	0.0100	0.90		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
12.1	400	Total			

Summary for Link Pre: Pre-development

Inflow Area = 3.062 ac, 2.38% Impervious, Inflow Depth = 0.60" for 2-yr_NRCS event
Inflow = 1.92 cfs @ 12.22 hrs, Volume= 0.152 af
Primary = 1.92 cfs @ 12.22 hrs, Volume= 0.152 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Existing Runoff Area=133,400 sf 2.38% Impervious Runoff Depth=1.32"
Flow Length=400' Tc=12.1 min CN=68/98 Runoff=4.88 cfs 0.338 af

Link Pre: Pre-development Inflow=4.88 cfs 0.338 af
Primary=4.88 cfs 0.338 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.338 af Average Runoff Depth = 1.32"
97.62% Pervious = 2.990 ac 2.38% Impervious = 0.073 ac

Summary for Subcatchment 1S: Existing

Runoff = 4.88 cfs @ 12.21 hrs, Volume= 0.338 af, Depth= 1.32"
Routed to Link Pre : Pre-development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 10-yr_NRCS Rainfall=4.09"

	Area (sf)	CN	Description
*	3,175	98	Impervious
*	130,225	68	Cropland, HSG B
	133,400	69	Weighted Average
	130,225	68	97.62% Pervious Area
	3,175	98	2.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0120	0.25		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 2.49"
5.6	300	0.0100	0.90		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
12.1	400	Total			

Summary for Link Pre: Pre-development

Inflow Area = 3.062 ac, 2.38% Impervious, Inflow Depth = 1.32" for 10-yr_NRCS event
Inflow = 4.88 cfs @ 12.21 hrs, Volume= 0.338 af
Primary = 4.88 cfs @ 12.21 hrs, Volume= 0.338 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Existing Runoff Area=133,400 sf 2.38% Impervious Runoff Depth=3.22"
Flow Length=400' Tc=12.1 min CN=68/98 Runoff=12.40 cfs 0.821 af

Link Pre: Pre-development Inflow=12.40 cfs 0.821 af
Primary=12.40 cfs 0.821 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.821 af Average Runoff Depth = 3.22"
97.62% Pervious = 2.990 ac 2.38% Impervious = 0.073 ac

Summary for Subcatchment 1S: Existing

Runoff = 12.40 cfs @ 12.20 hrs, Volume= 0.821 af, Depth= 3.22"
Routed to Link Pre : Pre-development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 100-yr_NRCS Rainfall=6.66"

	Area (sf)	CN	Description
*	3,175	98	Impervious
*	130,225	68	Cropland, HSG B
	133,400	69	Weighted Average
	130,225	68	97.62% Pervious Area
	3,175	98	2.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0120	0.25		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 2.49"
5.6	300	0.0100	0.90		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
12.1	400	Total			

Summary for Link Pre: Pre-development

Inflow Area = 3.062 ac, 2.38% Impervious, Inflow Depth = 3.22" for 100-yr_NRCS event
Inflow = 12.40 cfs @ 12.20 hrs, Volume= 0.821 af
Primary = 12.40 cfs @ 12.20 hrs, Volume= 0.821 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Existing Runoff Area=133,400 sf 2.38% Impervious Runoff Depth=3.93"
Flow Length=400' Tc=12.1 min CN=68/98 Runoff=15.17 cfs 1.002 af

Link Pre: Pre-development Inflow=15.17 cfs 1.002 af
Primary=15.17 cfs 1.002 af

Total Runoff Area = 3.062 ac Runoff Volume = 1.002 af Average Runoff Depth = 3.93"
97.62% Pervious = 2.990 ac 2.38% Impervious = 0.073 ac

Summary for Subcatchment 1S: Existing

Runoff = 15.17 cfs @ 12.20 hrs, Volume= 1.002 af, Depth= 3.93"
Routed to Link Pre : Pre-development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 200-yr_NRCS Rainfall=7.53"

	Area (sf)	CN	Description
*	3,175	98	Impervious
*	130,225	68	Cropland, HSG B
	133,400	69	Weighted Average
	130,225	68	97.62% Pervious Area
	3,175	98	2.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0120	0.25		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 2.49"
5.6	300	0.0100	0.90		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
12.1	400	Total			

Summary for Link Pre: Pre-development

Inflow Area = 3.062 ac, 2.38% Impervious, Inflow Depth = 3.93" for 200-yr_NRCS event
Inflow = 15.17 cfs @ 12.20 hrs, Volume= 1.002 af
Primary = 15.17 cfs @ 12.20 hrs, Volume= 1.002 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

TABLE OF CONTENTS

Project Reports
1 Routing Diagram
2 Area Listing (selected nodes)
3 Soil Listing (selected nodes)
4 Ground Covers (selected nodes)

1-yr_NRCS Event
5 Node Listing
6 Subcat 1S: Existing
7 Link Pre: Pre-development

2-yr_NRCS Event
8 Node Listing
9 Subcat 1S: Existing
10 Link Pre: Pre-development

10-yr_NRCS Event
11 Node Listing
12 Subcat 1S: Existing
13 Link Pre: Pre-development

100-yr_NRCS Event
14 Node Listing
15 Subcat 1S: Existing
16 Link Pre: Pre-development

200-yr_NRCS Event
17 Node Listing
18 Subcat 1S: Existing
19 Link Pre: Pre-development

APPENDIX E

Post Development Hydrologic Modeling

NORTH

WATERSHED A

WATERSHED B

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E:800308.31
EL: 1024.00

TP: 3
N:457128.73
E:800312.15
EL: 1025.78

WYSER ENGINEERING

2747 S SEMINOLE HWY
FITCHBURG, WI 53711

COURT AND CORK PICKLEBALL

CITY OF FITCHBURG, DANE COUNTY, WI

Sheet Title:
PROPOSED WATERSHED MAP

Revisions:

No.	Date:	Description:

Graphic Scale 0' 20' 40' 60'

Wyser Number 24-1243

Set Type REVIEW

Date Issued 07/23/2024

Sheet Number EX E

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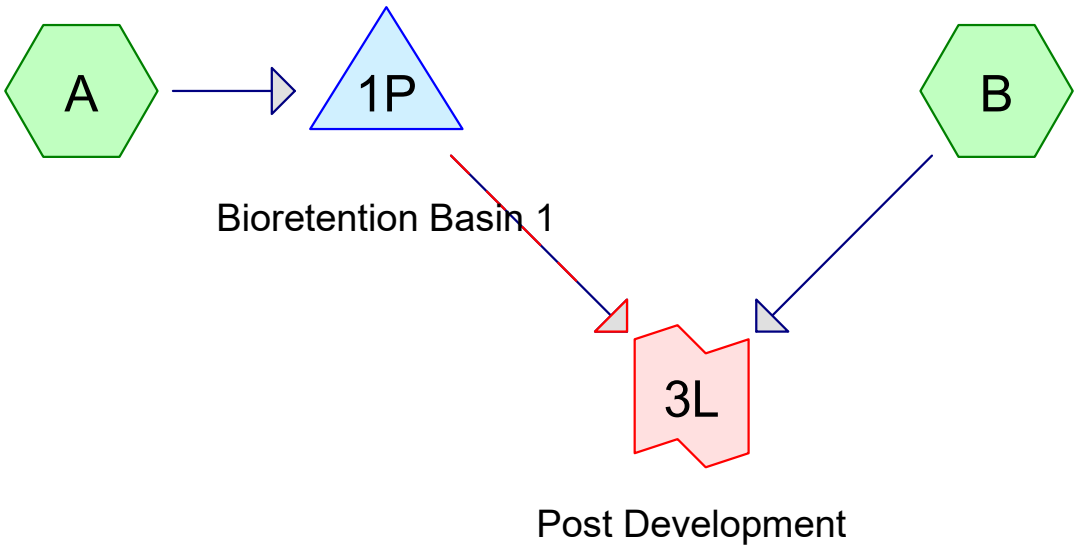


Subcat Reach Pond Link

Routing Diagram for 241243_Seminole Lacy
Prepared by Wyser Engineering, Printed 7/22/2024
HydroCAD® 10.20-2g s/n 08415 © 2022 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.614	74	>75% Grass cover, Good, HSG C (A)
0.027	78	>75% Grass cover, Good, HSG D (B)
0.941	98	Parking (A, B)
1.057	98	Roofs, HSG C (A)
0.183	98	Sidewalk (A, B)
0.241	100	Water Surface, HSG C (A)
3.062	**93**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
1.912	HSG C	A
0.027	HSG D	B
1.124	Other	A, B
3.062		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.614	0.027	0.000	0.640	>75% Grass cover, Good	A, B
0.000	0.000	0.000	0.000	0.941	0.941	Parking	A, B
0.000	0.000	1.057	0.000	0.000	1.057	Roofs	A
0.000	0.000	0.000	0.000	0.183	0.183	Sidewalk	A, B
0.000	0.000	0.241	0.000	0.000	0.241	Water Surface	A
0.000	**0.000**	**1.912**	**0.027**	**1.124**	**3.062**	**TOTAL AREA**	

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: Runoff Area=131,505 sf 79.68% Impervious Runoff Depth=1.92"
Tc=6.0 min CN=74/98 Runoff=8.26 cfs 0.484 af

Subcatchment B: Runoff Area=1,895 sf 37.99% Impervious Runoff Depth=1.34"
Tc=6.0 min CN=78/98 Runoff=0.09 cfs 0.005 af

Pond 1P: Bioretention Basin 1 Peak Elev=1,026.65' Storage=7,137 cf Inflow=8.26 cfs 0.484 af
Primary=0.94 cfs 0.484 af Secondary=0.00 cfs 0.000 af Outflow=0.94 cfs 0.484 af

Link 3L: Post Development Inflow=0.96 cfs 0.489 af
Primary=0.96 cfs 0.489 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.489 af Average Runoff Depth = 1.92"
20.91% Pervious = 0.640 ac 79.09% Impervious = 2.422 ac

Summary for Subcatchment A:

Runoff = 8.26 cfs @ 12.13 hrs, Volume= 0.484 af, Depth= 1.92"
Routed to Pond 1P : Bioretention Basin 1

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 1-yr_NRCS Rainfall=2.49"

	Area (sf)	CN	Description
	46,050	98	Roofs, HSG C
*	40,550	98	Parking
*	7,680	98	Sidewalk
*	10,500	100	Water Surface, HSG C
	26,725	74	>75% Grass cover, Good, HSG C
	131,505	93	Weighted Average
	26,725	74	20.32% Pervious Area
	104,780	98	79.68% Impervious Area

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

Summary for Subcatchment B:

Runoff = 0.09 cfs @ 12.13 hrs, Volume= 0.005 af, Depth= 1.34"
Routed to Link 3L : Post Development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 1-yr_NRCS Rainfall=2.49"

	Area (sf)	CN	Description
	0	98	Roofs, HSG C
*	450	98	Parking
*	270	98	Sidewalk
*	0	100	Water Surface, HSG C
*	1,175	78	>75% Grass cover, Good, HSG D
	1,895	86	Weighted Average
	1,175	78	62.01% Pervious Area
	720	98	37.99% Impervious Area

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

Summary for Pond 1P: Bioretention Basin 1

Inflow Area = 3.019 ac, 79.68% Impervious, Inflow Depth = 1.92" for 1-yr_NRCS event
Inflow = 8.26 cfs @ 12.13 hrs, Volume= 0.484 af
Outflow = 0.94 cfs @ 12.60 hrs, Volume= 0.484 af, Atten= 89%, Lag= 28.5 min
Primary = 0.94 cfs @ 12.60 hrs, Volume= 0.484 af
Routed to Link 3L : Post Development
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 3L : Post Development

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 1,026.65' @ 12.60 hrs Surf.Area= 11,474 sf Storage= 7,137 cf

Plug-Flow detention time= 52.9 min calculated for 0.484 af (100% of inflow)
Center-of-Mass det. time= 52.8 min (818.0 - 765.1)

Volume	Invert	Avail.Storage	Storage Description
#1	1,026.00'	24,000 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,026.00	10,500	0	0
1,027.00	12,000	11,250	11,250
1,028.00	13,500	12,750	24,000

Device	Routing	Invert	Outlet Devices
#1	Primary	1,024.00'	**8.0" Round Culvert** L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,024.00' / 1,023.80' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Primary	1,023.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 2	1,026.00'	**3.600 in/hr Exfiltration over Surface area from 1,023.50' - 1,026.00'** Excluded Surface area = 0 sf Phase-In= 0.01'
#4	Device 1	1,026.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Device 1	1,027.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#6	Secondary	1,027.50'	**15.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.94 cfs @ 12.60 hrs HW=1,026.65' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.06 cfs of 2.02 cfs potential flow)
  - **4=Orifice/Grate** (Orifice Controls 0.06 cfs @ 1.32 fps)
  - **5=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **2=Orifice/Grate** (Passes 0.87 cfs of 1.61 cfs potential flow)
  - **3=Exfiltration** (Exfiltration Controls 0.87 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,026.00' TW=0.00' (Dynamic Tailwater)
- **6=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link 3L: Post Development

Inflow Area = 3.062 ac, 79.09% Impervious, Inflow Depth = 1.92" for 1-yr_NRCS event
Inflow = 0.96 cfs @ 12.13 hrs, Volume= 0.489 af
Primary = 0.96 cfs @ 12.13 hrs, Volume= 0.489 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node Post

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: Runoff Area=131,505 sf 79.68% Impervious Runoff Depth=2.24"
Tc=6.0 min CN=74/98 Runoff=9.60 cfs 0.564 af

Subcatchment B: Runoff Area=1,895 sf 37.99% Impervious Runoff Depth=1.62"
Tc=6.0 min CN=78/98 Runoff=0.10 cfs 0.006 af

Pond 1P: Bioretention Basin 1 Peak Elev=1,026.78' Storage=8,655 cf Inflow=9.60 cfs 0.564 af
Primary=1.08 cfs 0.564 af Secondary=0.00 cfs 0.000 af Outflow=1.08 cfs 0.564 af

Link 3L: Post Development Inflow=1.09 cfs 0.570 af
Primary=1.09 cfs 0.570 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.570 af Average Runoff Depth = 2.23"
20.91% Pervious = 0.640 ac 79.09% Impervious = 2.422 ac

Summary for Subcatchment A:

Runoff = 9.60 cfs @ 12.13 hrs, Volume= 0.564 af, Depth= 2.24"
Routed to Pond 1P : Bioretention Basin 1

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 2-yr_NRCS Rainfall=2.84"

	Area (sf)	CN	Description
	46,050	98	Roofs, HSG C
*	40,550	98	Parking
*	7,680	98	Sidewalk
*	10,500	100	Water Surface, HSG C
	26,725	74	>75% Grass cover, Good, HSG C
	131,505	93	Weighted Average
	26,725	74	20.32% Pervious Area
	104,780	98	79.68% Impervious Area

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

Summary for Subcatchment B:

Runoff = 0.10 cfs @ 12.13 hrs, Volume= 0.006 af, Depth= 1.62"
Routed to Link 3L : Post Development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 2-yr_NRCS Rainfall=2.84"

	Area (sf)	CN	Description
	0	98	Roofs, HSG C
*	450	98	Parking
*	270	98	Sidewalk
*	0	100	Water Surface, HSG C
*	1,175	78	>75% Grass cover, Good, HSG D
	1,895	86	Weighted Average
	1,175	78	62.01% Pervious Area
	720	98	37.99% Impervious Area

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

Summary for Pond 1P: Bioretention Basin 1

Inflow Area = 3.019 ac, 79.68% Impervious, Inflow Depth = 2.24" for 2-yr_NRCS event
Inflow = 9.60 cfs @ 12.13 hrs, Volume= 0.564 af
Outflow = 1.08 cfs @ 12.61 hrs, Volume= 0.564 af, Atten= 89%, Lag= 28.7 min
Primary = 1.08 cfs @ 12.61 hrs, Volume= 0.564 af
Routed to Link 3L : Post Development
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 3L : Post Development

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 1,026.78' @ 12.61 hrs Surf.Area= 11,671 sf Storage= 8,655 cf

Plug-Flow detention time= 61.7 min calculated for 0.564 af (100% of inflow)
Center-of-Mass det. time= 61.7 min (824.7 - 763.0)

Volume	Invert	Avail.Storage	Storage Description
#1	1,026.00'	24,000 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,026.00	10,500	0	0
1,027.00	12,000	11,250	11,250
1,028.00	13,500	12,750	24,000

Device	Routing	Invert	Outlet Devices
#1	Primary	1,024.00'	**8.0" Round Culvert** L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,024.00' / 1,023.80' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Primary	1,023.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 2	1,026.00'	**3.600 in/hr Exfiltration over Surface area from 1,023.50' - 1,026.00'** Excluded Surface area = 0 sf Phase-In= 0.01'
#4	Device 1	1,026.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Device 1	1,027.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#6	Secondary	1,027.50'	**15.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=1.08 cfs @ 12.61 hrs HW=1,026.78' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.20 cfs of 2.08 cfs potential flow)
  - **4=Orifice/Grate** (Orifice Controls 0.20 cfs @ 1.80 fps)
  - **5=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **2=Orifice/Grate** (Passes 0.87 cfs of 1.65 cfs potential flow)
  - **3=Exfiltration** (Exfiltration Controls 0.87 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,026.00' TW=0.00' (Dynamic Tailwater)
- **6=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link 3L: Post Development

Inflow Area = 3.062 ac, 79.09% Impervious, Inflow Depth = 2.23" for 2-yr_NRCS event
Inflow = 1.09 cfs @ 12.57 hrs, Volume= 0.570 af
Primary = 1.09 cfs @ 12.57 hrs, Volume= 0.570 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node Post

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: Runoff Area=131,505 sf 79.68% Impervious Runoff Depth=3.41"
Tc=6.0 min CN=74/98 Runoff=14.46 cfs 0.858 af

Subcatchment B: Runoff Area=1,895 sf 37.99% Impervious Runoff Depth=2.68"
Tc=6.0 min CN=78/98 Runoff=0.17 cfs 0.010 af

Pond 1P: Bioretention Basin 1 Peak Elev=1,027.26' Storage=14,389 cf Inflow=14.46 cfs 0.858 af
Primary=1.55 cfs 0.858 af Secondary=0.00 cfs 0.000 af Outflow=1.55 cfs 0.858 af

Link 3L: Post Development Inflow=1.57 cfs 0.867 af
Primary=1.57 cfs 0.867 af

Total Runoff Area = 3.062 ac Runoff Volume = 0.867 af Average Runoff Depth = 3.40"
20.91% Pervious = 0.640 ac 79.09% Impervious = 2.422 ac

Summary for Subcatchment A:

Runoff = 14.46 cfs @ 12.13 hrs, Volume= 0.858 af, Depth= 3.41"
Routed to Pond 1P : Bioretention Basin 1

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 10-yr_NRCS Rainfall=4.09"

	Area (sf)	CN	Description
	46,050	98	Roofs, HSG C
*	40,550	98	Parking
*	7,680	98	Sidewalk
*	10,500	100	Water Surface, HSG C
	26,725	74	>75% Grass cover, Good, HSG C
	131,505	93	Weighted Average
	26,725	74	20.32% Pervious Area
	104,780	98	79.68% Impervious Area

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

Summary for Subcatchment B:

Runoff = 0.17 cfs @ 12.13 hrs, Volume= 0.010 af, Depth= 2.68"
Routed to Link 3L : Post Development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 10-yr_NRCS Rainfall=4.09"

	Area (sf)	CN	Description
	0	98	Roofs, HSG C
*	450	98	Parking
*	270	98	Sidewalk
*	0	100	Water Surface, HSG C
*	1,175	78	>75% Grass cover, Good, HSG D
	1,895	86	Weighted Average
	1,175	78	62.01% Pervious Area
	720	98	37.99% Impervious Area

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

Summary for Pond 1P: Bioretention Basin 1

Inflow Area = 3.019 ac, 79.68% Impervious, Inflow Depth = 3.41" for 10-yr_NRCS event
Inflow = 14.46 cfs @ 12.13 hrs, Volume= 0.858 af
Outflow = 1.55 cfs @ 12.62 hrs, Volume= 0.858 af, Atten= 89%, Lag= 29.7 min
Primary = 1.55 cfs @ 12.62 hrs, Volume= 0.858 af
Routed to Link 3L : Post Development
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 3L : Post Development

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 1,027.26' @ 12.62 hrs Surf.Area= 12,386 sf Storage= 14,389 cf

Plug-Flow detention time= 83.5 min calculated for 0.858 af (100% of inflow)
Center-of-Mass det. time= 83.5 min (841.2 - 757.7)

Volume	Invert	Avail.Storage	Storage Description
#1	1,026.00'	24,000 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,026.00	10,500	0	0
1,027.00	12,000	11,250	11,250
1,028.00	13,500	12,750	24,000

Device	Routing	Invert	Outlet Devices
#1	Primary	1,024.00'	**8.0" Round Culvert** L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,024.00' / 1,023.80' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Primary	1,023.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 2	1,026.00'	**3.600 in/hr Exfiltration over Surface area from 1,023.50' - 1,026.00'** Excluded Surface area = 0 sf Phase-In= 0.01'
#4	Device 1	1,026.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Device 1	1,027.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#6	Secondary	1,027.50'	**15.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=1.55 cfs @ 12.62 hrs HW=1,027.26' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.67 cfs of 2.27 cfs potential flow)
  - **4=Orifice/Grate** (Orifice Controls 0.67 cfs @ 3.43 fps)
  - **5=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **2=Orifice/Grate** (Passes 0.87 cfs of 1.77 cfs potential flow)
  - **3=Exfiltration** (Exfiltration Controls 0.87 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,026.00' TW=0.00' (Dynamic Tailwater)
- **6=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link 3L: Post Development

Inflow Area = 3.062 ac, 79.09% Impervious, Inflow Depth = 3.40" for 10-yr_NRCS event
Inflow = 1.57 cfs @ 12.55 hrs, Volume= 0.867 af
Primary = 1.57 cfs @ 12.55 hrs, Volume= 0.867 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node Post

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: Runoff Area=131,505 sf 79.68% Impervious Runoff Depth=5.88"
Tc=6.0 min CN=74/98 Runoff=24.66 cfs 1.479 af

Subcatchment B: Runoff Area=1,895 sf 37.99% Impervious Runoff Depth=5.02"
Tc=6.0 min CN=78/98 Runoff=0.32 cfs 0.018 af

Pond 1P: Bioretention Basin 1 Peak Elev=1,027.82' Storage=21,606 cf Inflow=24.66 cfs 1.479 af
Primary=3.35 cfs 1.306 af Secondary=6.69 cfs 0.172 af Outflow=10.05 cfs 1.479 af

Link 3L: Post Development Inflow=10.18 cfs 1.497 af
Primary=10.18 cfs 1.497 af

Total Runoff Area = 3.062 ac Runoff Volume = 1.497 af Average Runoff Depth = 5.87"
20.91% Pervious = 0.640 ac 79.09% Impervious = 2.422 ac

Summary for Subcatchment A:

Runoff = 24.66 cfs @ 12.13 hrs, Volume= 1.479 af, Depth= 5.88"
Routed to Pond 1P : Bioretention Basin 1

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 100-yr_NRCS Rainfall=6.66"

	Area (sf)	CN	Description
	46,050	98	Roofs, HSG C
*	40,550	98	Parking
*	7,680	98	Sidewalk
*	10,500	100	Water Surface, HSG C
	26,725	74	>75% Grass cover, Good, HSG C
	131,505	93	Weighted Average
	26,725	74	20.32% Pervious Area
	104,780	98	79.68% Impervious Area

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

Summary for Subcatchment B:

Runoff = 0.32 cfs @ 12.13 hrs, Volume= 0.018 af, Depth= 5.02"
Routed to Link 3L : Post Development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 100-yr_NRCS Rainfall=6.66"

	Area (sf)	CN	Description
	0	98	Roofs, HSG C
*	450	98	Parking
*	270	98	Sidewalk
*	0	100	Water Surface, HSG C
*	1,175	78	>75% Grass cover, Good, HSG D
	1,895	86	Weighted Average
	1,175	78	62.01% Pervious Area
	720	98	37.99% Impervious Area

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

Summary for Pond 1P: Bioretention Basin 1

Inflow Area = 3.019 ac, 79.68% Impervious, Inflow Depth = 5.88" for 100-yr_NRCS event
Inflow = 24.66 cfs @ 12.13 hrs, Volume= 1.479 af
Outflow = 10.05 cfs @ 12.25 hrs, Volume= 1.479 af, Atten= 59%, Lag= 7.2 min
Primary = 3.35 cfs @ 12.25 hrs, Volume= 1.306 af
Routed to Link 3L : Post Development
Secondary = 6.69 cfs @ 12.25 hrs, Volume= 0.172 af
Routed to Link 3L : Post Development

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 1,027.82' @ 12.25 hrs Surf.Area= 13,231 sf Storage= 21,606 cf

Plug-Flow detention time= 76.3 min calculated for 1.479 af (100% of inflow)
Center-of-Mass det. time= 76.3 min (827.8 - 751.5)

Volume	Invert	Avail.Storage	Storage Description
#1	1,026.00'	24,000 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,026.00	10,500	0	0
1,027.00	12,000	11,250	11,250
1,028.00	13,500	12,750	24,000

Device	Routing	Invert	Outlet Devices
#1	Primary	1,024.00'	**8.0" Round Culvert** L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,024.00' / 1,023.80' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Primary	1,023.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 2	1,026.00'	**3.600 in/hr Exfiltration over Surface area from 1,023.50' - 1,026.00'** Excluded Surface area = 0 sf Phase-In= 0.01'
#4	Device 1	1,026.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Device 1	1,027.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#6	Secondary	1,027.50'	**15.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=3.35 cfs @ 12.25 hrs HW=1,027.82' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Inlet Controls 2.48 cfs @ 7.10 fps)
  - **4=Orifice/Grate** (Passes < 0.98 cfs potential flow)
  - **5=Sharp-Crested Rectangular Weir** (Passes < 4.39 cfs potential flow)
- **2=Orifice/Grate** (Passes 0.87 cfs of 1.91 cfs potential flow)
  - **3=Exfiltration** (Exfiltration Controls 0.87 cfs)

Secondary OutFlow Max=6.69 cfs @ 12.25 hrs HW=1,027.82' TW=0.00' (Dynamic Tailwater)
- **6=Broad-Crested Rectangular Weir** (Weir Controls 6.69 cfs @ 1.39 fps)

Summary for Link 3L: Post Development

Inflow Area = 3.062 ac, 79.09% Impervious, Inflow Depth = 5.87" for 100-yr_NRCS event
Inflow = 10.18 cfs @ 12.25 hrs, Volume= 1.497 af
Primary = 10.18 cfs @ 12.25 hrs, Volume= 1.497 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node Post

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: Runoff Area=131,505 sf 79.68% Impervious Runoff Depth=6.72"
Tc=6.0 min CN=74/98 Runoff=28.15 cfs 1.692 af

Subcatchment B: Runoff Area=1,895 sf 37.99% Impervious Runoff Depth=5.84"
Tc=6.0 min CN=78/98 Runoff=0.37 cfs 0.021 af

Pond 1P: Bioretention Basin 1 Peak Elev=1,027.95' Storage=23,321 cf Inflow=28.15 cfs 1.692 af
Primary=3.40 cfs 1.407 af Secondary=11.56 cfs 0.284 af Outflow=14.96 cfs 1.692 af

Link 3L: Post Development Inflow=15.16 cfs 1.713 af
Primary=15.16 cfs 1.713 af

Total Runoff Area = 3.062 ac Runoff Volume = 1.713 af Average Runoff Depth = 6.71"
20.91% Pervious = 0.640 ac 79.09% Impervious = 2.422 ac

Summary for Subcatchment A:

Runoff = 28.15 cfs @ 12.13 hrs, Volume= 1.692 af, Depth= 6.72"
Routed to Pond 1P : Bioretention Basin 1

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 200-yr_NRCS Rainfall=7.53"

	Area (sf)	CN	Description
	46,050	98	Roofs, HSG C
*	40,550	98	Parking
*	7,680	98	Sidewalk
*	10,500	100	Water Surface, HSG C
	26,725	74	>75% Grass cover, Good, HSG C
	131,505	93	Weighted Average
	26,725	74	20.32% Pervious Area
	104,780	98	79.68% Impervious Area

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

Summary for Subcatchment B:

Runoff = 0.37 cfs @ 12.13 hrs, Volume= 0.021 af, Depth= 5.84"
Routed to Link 3L : Post Development

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 200-yr_NRCS Rainfall=7.53"

	Area (sf)	CN	Description
	0	98	Roofs, HSG C
*	450	98	Parking
*	270	98	Sidewalk
*	0	100	Water Surface, HSG C
*	1,175	78	>75% Grass cover, Good, HSG D
	1,895	86	Weighted Average
	1,175	78	62.01% Pervious Area
	720	98	37.99% Impervious Area

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

Summary for Pond 1P: Bioretention Basin 1

Inflow Area = 3.019 ac, 79.68% Impervious, Inflow Depth = 6.72" for 200-yr_NRCS event
Inflow = 28.15 cfs @ 12.13 hrs, Volume= 1.692 af
Outflow = 14.96 cfs @ 12.21 hrs, Volume= 1.692 af, Atten= 47%, Lag= 5.0 min
Primary = 3.40 cfs @ 12.21 hrs, Volume= 1.407 af
Routed to Link 3L : Post Development
Secondary = 11.56 cfs @ 12.21 hrs, Volume= 0.284 af
Routed to Link 3L : Post Development

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 1,027.95' @ 12.21 hrs Surf.Area= 13,424 sf Storage= 23,321 cf

Plug-Flow detention time= 72.3 min calculated for 1.692 af (100% of inflow)
Center-of-Mass det. time= 72.3 min (822.4 - 750.0)

Volume	Invert	Avail.Storage	Storage Description
#1	1,026.00'	24,000 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,026.00	10,500	0	0
1,027.00	12,000	11,250	11,250
1,028.00	13,500	12,750	24,000

Device	Routing	Invert	Outlet Devices
#1	Primary	1,024.00'	**8.0" Round Culvert** L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,024.00' / 1,023.80' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Primary	1,023.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 2	1,026.00'	**3.600 in/hr Exfiltration over Surface area from 1,023.50' - 1,026.00'** Excluded Surface area = 0 sf Phase-In= 0.01'
#4	Device 1	1,026.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Device 1	1,027.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#6	Secondary	1,027.50'	**15.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=3.40 cfs @ 12.21 hrs HW=1,027.95' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Inlet Controls 2.52 cfs @ 7.23 fps)
  - **4=Orifice/Grate** (Passes < 1.04 cfs potential flow)
  - **5=Sharp-Crested Rectangular Weir** (Passes < 6.18 cfs potential flow)
- **2=Orifice/Grate** (Passes 0.87 cfs of 1.94 cfs potential flow)
  - **3=Exfiltration** (Exfiltration Controls 0.87 cfs)

Secondary OutFlow Max=11.54 cfs @ 12.21 hrs HW=1,027.95' TW=0.00' (Dynamic Tailwater)
- **6=Broad-Crested Rectangular Weir** (Weir Controls 11.54 cfs @ 1.71 fps)

Summary for Link 3L: Post Development

Inflow Area = 3.062 ac, 79.09% Impervious, Inflow Depth = 6.71" for 200-yr_NRCS event
Inflow = 15.16 cfs @ 12.21 hrs, Volume= 1.713 af
Primary = 15.16 cfs @ 12.21 hrs, Volume= 1.713 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node Post

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

TABLE OF CONTENTS

Project Reports
1 Routing Diagram
2 Area Listing (selected nodes)
3 Soil Listing (selected nodes)
4 Ground Covers (selected nodes)

1-yr_NRCS Event
5 Node Listing
6 Subcat A:
7 Subcat B:
8 Pond 1P: Bioretention Basin 1
9 Link 3L: Post Development

2-yr_NRCS Event
10 Node Listing
11 Subcat A:
12 Subcat B:
13 Pond 1P: Bioretention Basin 1
14 Link 3L: Post Development

10-yr_NRCS Event
15 Node Listing
16 Subcat A:
17 Subcat B:
18 Pond 1P: Bioretention Basin 1
19 Link 3L: Post Development

100-yr_NRCS Event
20 Node Listing
21 Subcat A:
22 Subcat B:
23 Pond 1P: Bioretention Basin 1
24 Link 3L: Post Development

200-yr_NRCS Event
25 Node Listing
26 Subcat A:
27 Subcat B:
28 Pond 1P: Bioretention Basin 1
29 Link 3L: Post Development

NORTH

WATERSHED P - 15

WATERSHED P - 14

WATERSHED P - 11/
STM INL NO. 14

WATERSHED P - 12/
STM INL NO. 15

WATERSHED P - 10/
STM INL NO. 13

WATERSHED P - 9/
STM INL NO. 12

WATERSHED P - 8/
STM INL NO. 11

WATERSHED P - 7/
STM INL NO. 10

WATERSHED P - 13/
STM INL NO. 16

WATERSHED P - 4/
STM AES NO. 6

78 LF OF 6" PERF HDPE @ I.E. 1024.0

212 LF OF 6" PERF HDPE @ I.E. 1024.0

27 LF OF 6" PERF HDPE @ 1.0%

AES NO. 1

AES NO. 2

AES NO. 3

AES NO. 4

AES NO. 6

AES NO. 17

AES NO. 18

AES NO. 30

STM MH NO. 2

STM MH NO. 5

STM MH NO. 8

STM MH NO. 19

STM MH NO. 31

STM GOOSE NECK NO. 7

STM INL NO. 9

STM INL NO. 10

STM INL NO. 11

STM INL NO. 12

STM INL NO. 13

STM INL NO. 14

STM INL NO. 15

STM INL NO. 16

811 922 9271

WYSER
ENGINEERING

COURT AND CORK PICKLEBALL

CITY OF FITCHBURG, DANE COUNTY, WI

2747 S SEMINOLE HWY
FITCHBURG, WI 53711

Sheet Title:
STORM SEWER WATERSHED MAP

Revisions:

No.	Date:	Description:

Graphic Scale	0' 20' 40' 60'
Wyser Number	24-1243
Set Type	REVIEW
Date Issued	07/23/2024
Sheet Number	EX E.2

File: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\DWG\241243_SWMP.dwg Layout: stm User: Kate Plotted: Jul 22, 2024 - 10:22pm

Location			Watershed Area							Travel Time			Rainfall-Runoff						Flow in Pipe							Vertical Control				PIPE WIDTH	Cover	
Structure											Flow Time															Invert Elv.		Top of structure				
Upstream	Downstream	Number	TOTAL AREA	Open Space	Paved	Rooftop	Area A	Runoff Coeff. C	Equiv. Area for 100% Runoff delta CA	Inlet Time	Street	Pipe	Time of Concentration	Ave. Rainfall Intensity 10-year	Ave. Rainfall Intensity 100-year	Ave. Rainfall Intensity 200-year	Direct Runoff - 10-year	Direct Runoff - 100-year	Direct Runoff - 200-year	Design Runoff	Design Runoff	Slope of Sewer	Pipe Size	Length of pipe	Pipe Material	Capacity flowing full	Capacity flowing full	Mean velocity flowing full	fall of pipe	upper	lower	upper	lower			
							Acres		Acres	Min.	Min.	Min.	Min.	in/hr	in/hr	in/hr	cfs	cfs	cfs	cfs	gpm	ft/ft	in	ft		cfs	gpm	fps	ft	ft	ft	ft	ft			
STM MH NO. 2	AES NO. 1	P - 1	-	-	-	-	-	-	-	1.0		0.1	5.0	7.30	11.0	12.3	-	-	-	1.55	695.69	0.0200	8	17.67	HDPE	1.85	830.95	OK	5.30	0.35	1024.35	1024.00	1028.00	-	0.75	2.90	OK
AES NO. 3	STM MH NO. 2	P - 2	-	-	-	-	-	-	-	1.0		0.0	5.0	7.30	11.0	12.3	-	-	-	1.55	695.69	0.0500	15	10.33	HDPE	15.65	7023.42	OK	12.75	0.52	1026.00	1025.48	-	1028.00	1.42	-	-
		AES NO. 3	0	0	0	0	0.00	#DIV/0!	#DIV/0!	1.0		-	5.0	7.30	11.0	12.3	1.55	2.48	2.53	1.55	695.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM MH NO. 5	AES NO. 4	P - 3	-	-			-	-	-	1.0		0.2	5.0	7.30	11.0	12.3	-	-	-	4.23	1897.75	0.0050	15	45.33	HDPE	4.95	2221.00	OK	4.03	0.23	1025.87	1025.64	1029.00	-	1.42	1.72	OK
AES NO. 6	STM MH NO. 5	P - 4	-	-			-	-	-	1.0		0.1	5.0	7.30	11.0	12.3	-	-	-	4.23	1897.75	0.0050	15	26.71	HDPE	4.95	2221.00	OK	4.03	0.13	1026.00	1025.87	-	1029.00	1.42	-	-
		AES NO. 6	111850	107814	700	3336	2.57	0.23	0.58	1.0		-	5.0	7.30	11.0	12.3	4.23	6.37	7.12	4.23	1897.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM MH NO. 8	STM MH NO. 7	P - 5	-	-			-	-	-	1.0		0.1	5.0	7.30	11.0	12.3	-	-	-	16.33	7329.50	0.0050	24	25.16	HDPE	17.33	7778.02	OK	5.52	0.13	1022.63	1022.50	1028.35	1027.50	2.17	3.56	OK
STM MH NO. 9	STM MH NO. 8	P - 6	-	-			-	-	-	1.0		0.5	5.0	7.30	11.0	12.3	-	-	-	16.33	7329.50	0.0050	24	175.95	HDPE	17.33	7778.02	OK	5.52	0.88	1023.51	1022.63	1029.80	1028.35	2.17	4.13	OK
STM INL NO. 10	STM MH NO. 9	P - 7	-	-			-	-	-	1.0		0.1	5.0	7.30	11.0	12.3	-	-	-	14.28	6409.74	0.0050	24	26.71	HDPE	17.33	7778.02	OK	5.52	0.13	1023.64	1023.51	1028.07	1029.80	2.17	2.26	OK
		STM INL NO. 10	8570	2525	6045		0.20	0.73	0.14	1.0		-	5.0	7.30	11.0	12.3	1.05	1.58	1.76	1.76	791.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM INL NO. 11	STM INL NO. 10	P - 8	-	-			-	-	-	1.0		0.0	5.0	7.30	11.0	12.3	-	-	-	12.52	5617.93	0.0050	24	11.00	HDPE	17.33	7778.02	OK	5.52	0.05	1023.69	1023.64	1028.07	1028.07	2.17	2.21	OK
		STM INL NO. 11	6675	790	5885		0.15	0.86	0.13	1.0		-	5.0	7.30	11.0	12.3	0.96	1.45	1.62	1.62	728.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM INL NO. 12	STM INL NO. 11	P - 9	-	-			-	-	-	1.0		0.2	5.0	7.30	11.0	12.3	-	-	-	9.20	4129.13	0.0050	24	80.00	HDPE	17.33	7778.02	OK	5.52	0.40	1024.09	1023.69	1028.07	1028.07	2.17	1.81	OK
		STM INL NO. 12	6750	855	5895		0.15	0.86	0.13	1.0		-	5.0	7.30	11.0	12.3	0.97	1.46	1.63	1.63	731.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM INL NO. 13	STM INL NO. 12	P - 10	-	-			-	-	-	1.0		0.0	5.0	7.30	11.0	12.3	-	-	-	7.57	3397.70	0.0050	18	9.00	HDPE	8.05	3611.59	OK	4.55	0.05	1024.64	1024.59	1028.07	1028.07	1.67	1.76	OK
		STM INL NO. 13	7400	1070	6330		0.17	0.84	0.14	1.0		-	5.0	7.30	11.0	12.3	1.04	1.57	1.76	1.76	789.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM INL NO. 14	STM INL NO. 13	P - 11	-	-			-	-	-	1.0		0.3	5.0	7.30	11.0	12.3	-	-	-	5.81	2608.45	0.0050	18	80.00	HDPE	8.05	3611.59	OK	4.55	0.40	1025.04	1024.64	1028.07	1028.07	1.67	1.36	WARNING
		STM INL NO. 14	5875	590	5285		0.13	0.87	0.12	1.0		-	5.0	7.30	11.0	12.3	0.86	1.30	1.45	1.45	651.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM INL NO. 15	STM INL NO. 14	P - 12	-	-			-	-	-	1.0		0.0	5.0	7.30	11.0	12.3	-	-	-	1.32	591.22	0.0050	12	9.00	HDPE	2.73	1224.96	OK	3.47	0.05	1025.58	1025.54	1028.07	1028.07	1.08	1.40	WARNING
		STM INL NO. 15	5625	905	4720		0.13	0.83	0.11	1.0		-	5.0	7.30	11.0	12.3	0.78	1.18	1.32	1.32	591.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM INL NO. 16	STM MH NO. 9	P - 13	-	-			-	-	-	1.0		0.2	5.0	7.30	11.0	12.3	-	-	-	2.05	919.76	0.0100	12	49.16	HDPE	3.86	1732.36	OK	4.91	0.49	1025.00	1024.51	1029.20	1029.80	1.08	3.12	OK
		STM INL NO. 16	10505	3630	6875		0.24	0.69	0.17	1.0		-	5.0	7.30	11.0	12.3	1.22	1.83	2.05	2.05	919.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AES NO. 17	STM INL NO. 11	P - 14	-	-			-	-	-	1.0		0.2	5.0	7.30	11.0	12.3	-	-	-	1.69	760.23	0.0100	12	57.52	HDPE	3.86	1732.36	OK	4.91	0.58	1025.27	1024.69	1030.00	-	1.08	3.65	OK
		AES NO. 17	6665	0		6665	0.15	0.90	0.14	1.0		-	5.0	7.30	11.0	12.3	1.01	1.51	1.69	1.69	760.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AES NO. 18	STM INL NO. 14	P - 15	-	-			-	-	-	1.0		0.2	5.0	7.30	11.0	12.3	-	-	-	3.04	1365.96	0.0100	12	58.47	HDPE	3.86	1732.36	OK	4.91	0.58	1026.12	1025.54	1030.00	-	1.08	2.79	OK
		AES NO. 18	15600	4945	3990	6665	0.36	0.69	0.25	1.0		-	5.0	7.30	11.0	12.3	1.81	2.72	3.04	3.04	1365.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STM MH NO. 31	AES NO. 30	P - 30	-	-			-	-	-	1.0		0.6	5.0	7.30	11.0	12.3	-	-	-	2.93	1314.27	0.0025	15	99.05	RCP	3.23	1449.68	OK	2.63	0.25	1027.75	1027.50	1030.85	-	1.44	1.66	OK
AES NO. 32	STM MH NO. 31	P - 31	-	-			-	-	-	1.0		0.3	5.0	7.30	11.0	12.3	-	-	-	2.93	1314.27	0.0025	15	39.89	RCP	3.23	1449.68	OK	2.63	0.10	1027.85	1027.75	-	-	1.44	-	-
		STM MH NO. 31	34565	20485	14080		0.79	0.51	0.40	1.0		-	5.0	7.30	11.0	12.3	2.93	4.41	4.93	2.93	1314.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ENDWALL RIPRAP SIZING

Project: **Court and Cork Pickleball**
Wyser Project #: 18-24-1243
Designed By: KLM
Date: 07/22/2024

HEC14 - EQUATION 10.4
D50 = 0.2D{Q/(√g*D^2.5)}^(4/3)*(D/TW)

g	acceleration due to gravity	32.2	ft/sec^2
TW	Tailwater Depth (Assumed)	0.4*D	ft
*	Assumed Full Pipe Capacity		
STA	Structure		

Table 10.1. Example Riprap Classes and Apron Dimensions

Class	D_{50} (mm)	D_{50} (in)	Apron Length[1]	Apron Depth
1	125	5	4D	$3.5D_{50}$
2	150	6	4D	$3.3D_{50}$
3	250	10	5D	$2.4D_{50}$
4	350	14	6D	$2.2D_{50}$
5	500	20	7D	$2.0D_{50}$
6	550	22	8D	$2.0D_{50}$

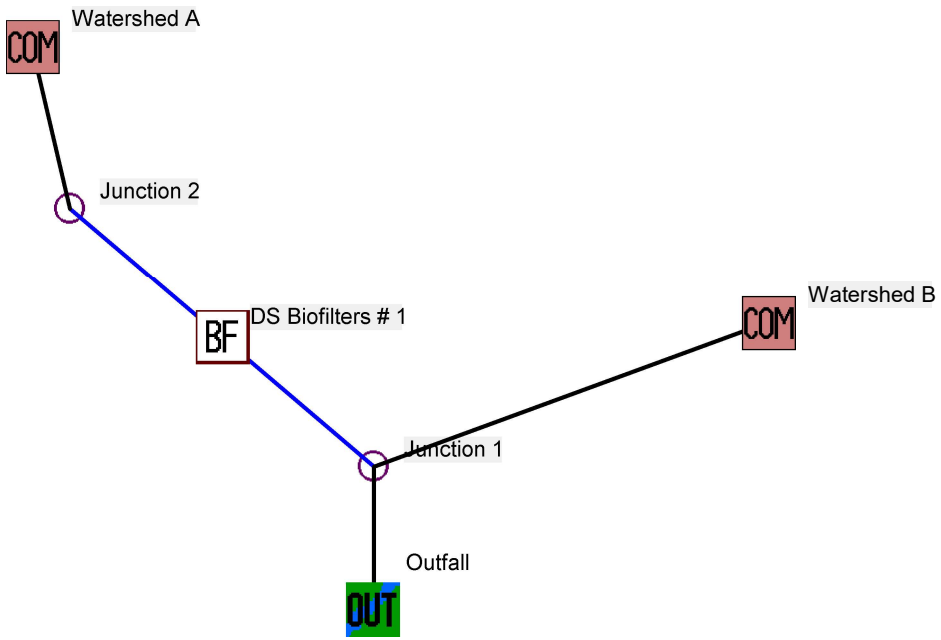
[1]D is the culvert rise.

	Pipe Diameter D (ft)	Capacity Flow Q (cfs)	Tailwater Depth TW (ft)	Riprap size D50 (in)	Riprap class (See Table 10.1) Type	D_{50}	WisDOT*	Apron Dimentions (See Table 10.1) Length	Depth	Width @ End	Width @ Pipe
AES NO. 1	0.67	1.85	0.27	3.47	2	5	Light Riprap	2.67	1.5	3.8	2.0
AES NO. 4	1.25	4.95	0.50	2.97	2	5	Light Riprap	5.00	1.5	7.1	3.8
STM MH NO. 7	2.00	17.33	0.80	5.28	3	6	Light Riprap	8.00	1.7	11.3	6.0
AES NO. 30	1.25	3.23	0.50	1.68	2	5	Light Riprap	5.00	1.5	7.1	3.8

*Refer to Section 606 and 312 for material type.
Select Crushed Material and Light Riprap require Type R geotextile Fabric
Medium, Heavy and Extra-Heavy Riprap require Type HR geotextile Fabric

APPENDIX F

Water Quality and Infiltration Modeling


Watershed A
COM
Junction 2
DS Biofilters # 1
BF
Watershed B
COM
Junction 1
Outfall
OUT

Data file name: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\SWMP\WinSLAMM\241243_Seminole Lacy.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
If Other Device Pollutant Load Reduction Values = 1, Off-site Pollutant Loads are Removed from Pollutant Load % Reduction calculations
Seed for random number generator: -42
Study period starting date: 01/01/81 Study period ending date: 12/31/81
Start of Winter Season: 12/02 End of Winter Season: 03/12
Date: 07-22-2024 Time: 22:01:05
Site information:

LU# 1 - Commercial: Watershed A Total area (ac): 3.019
1 - Roofs 1: 1.057 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 0.931 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.176 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.614 ac. Normal Clayey Low Density PSD File: C:\WinSLAMM Files\NURP.cpz
70 - Water Body Areas: 0.241 ac. PSD File:

LU# 2 - Commercial: Watershed B Total area (ac): 0.043
13 - Paved Parking 1: 0.010 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.006 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.027 ac. Normal Clayey Low Density PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Biofilter CP# 1 (DS) - DS Biofilters # 1
1. Top area (square feet) = 13500
2. Bottom aea (square feet) = 10500
3. Depth (ft): 8
4. Biofilter width (ft) - for Cost Purposes Only: 10
5. Infiltration rate (in/hr) = 0.5
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 1
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 4
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: Sharp Crested Weir
1. Weir length (ft): 4
2. Invert elevation above datum (ft): 7.33

Outlet type: Broad Crested Weir
1. Weir crest length (ft): 10
2. Weir crest width (ft): 6
3. Height of datum to bottom of weir opening: 7.5

Outlet type: Surface Discharge Pipe
1. Surface discharge pipe outlet diameter (ft): 0.5
2. Pipe invert elevation above datum (ft): 6.5
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): 3.5
3. Number of underdrain outlets: 1

SLAMM for Windows Version 10.4.1
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Data file name: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\SWMP\WinSLAMM\241243_Seminole Lacy.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
If Other Device Pollutant Load Reduction Values = 1, Off-site Pollutant Loads are Removed from Pollutant Load % Reduction calculations
Seed for random number generator: -42
Study period starting date: 01/01/81 Study period ending date: 12/31/81
Start of Winter Season: 12/02 End of Winter Season: 03/12
Model Run Start Date: 01/01/81 Model Run End Date: 12/31/81
Date of run: 07-22-2024 Time of run: 22:02:00
Total Area Modeled (acres): 3.062
Years in Model Run: 1.00

	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:	200271	-	71.21	890.4	-
Outfall Total with Controls:	5904	97.05%	42.45	15.64	98.24%
Annualized Total After Outfall Controls:	5920			15.69	

Data File: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\SWMP\WinSLAMM\241243_Seminole Lacy.mdb
Rain File: WisReg - Madison WI 1981.RAN
Date: 07-22-24 Time: 11:17:16 AM
Site Description:

Col. #:	2	3	4	5	6	7	8	9	10	11	12	13	14	15	18	19	27	28	29	30	31	32	33	34	35	39	54	61
Control Practice No.	Control Practice Type	Control Practice Name or Location	Total Inflow Volume (cf)	Total Outflow Volume (cf)	Percent Volume Reduction	Total Influent Load (lbs)	Total Effluent Load (lbs)	Percent Load Reduction	Flow Weighted Influent Conc (mg/L)	Flow Weighted Effluent Conc (mg/L)	Percent Conc. Reduction	Influent Median Part. Size (microns)	Effluent Median Part. Size (microns)	Notes	Maximum Stage (ft)	Hydraulic Volume Out (cf)	Maximum Surface Ponding Time (hrs)	Maximum Subsurface Ponding Time (hrs)	Volume Infiltrated (cf)	Underdrain Discharge Vol. (cf)	Evapo-Transpir. Vol. (cf)	Minimum Soil Moist. (frac)	Surface Discharge Bypass Vol. (cf)	Evap. Vol. (cf)	Volume Supplemtl. Irig. (cf)	Surface Ponding Events >72 hrs (Cont)	Residence Time in Media (hrs)	Runoff Producing Events / Ttl. Rains
1	Biofilter	DS Biofilters # 1	198845	4477	97.75	879.1	4.349	99.51	70.81	15.56	78.029	7.8	1.67	No Biofilter Overflows	6.45	4478	4.9	29.1	194903	4478			0			0	1.8	Jan-90

Data File: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\SWMP\WinSLAMM\241243_Seminole Lacy.mdb
Rain File: WisReg - Madison WI 1981.RAN
Date: 07-22-24 Time: 11:17:17 AM
Site Description:

Runoff Volume Total (cf) at the Outfall

Rain Number	Start Date	Rain Total	Outfall Tot	Rv	Total Losses	Calculated Event Peal	Pre-Dev Runoff Vol. (cf)	
Minimum:		0	0	0	0.01	53.5	0	0
Maximum:		2.59	4666	0.162	2.17	99.5	0.606	4752
Average:		0.26	54.16	0.004	0.26	68.7	0.481	104.8
Total:		28.81	5904		28.33			9433

* Note: NRCS does not recommend using CN method for rains < 0.5 in.
See 'PreDevelopment Areas and CN' Help for more info.

TSS Calculations - WinSLAMM

Project: Court and Cork Pickleball
Modeled By: KLM
Date: 7/22/24

WYSER ENGINEERING
300 E. Front Street
Mt. Horeb, Wisconsin 53572
Ph: (608) 437-1980

Watershed	WinSLAMM Node	Area	Particulate Solids Yield	Treatement Required	Post Development Particulat Solids Treatement Required	Particulate Solid Yield After Controls	Particulate Solids Treatement Provided	Percent Reduction
		(Acres)	(lbs)	(%)	(lbs)	(lbs)	(lbs)	(%)
Watershed A - N Basin	**Watershed A**	3.02	879.07	-	-	-	-	-
-	**Basin 1**	-	-	-	-	4.35	874.72	99.51%
Watershed B - No Treatment	**Watershed B**	0.04	11.30	-	-	11.30	0.00	0.00%
		3.06	890.37	80.00%	712.30	15.65	874.72	98.24%

Infiltration Calculations - WinSLAMM

Project: Court and Cork Pickleball
Modeled By: KLM
Date: 7/22/24

WYSER ENGINEERING

Post Development Infiltration

Watershed	WinSLAMM Node	Area	Postdevelopment Stay-on No Controls		Runoff	Postdevelopment Stay-on with Controls		Runoff
		(Acres)	(in)	(cf)	(cf)	(in)	(cf)	(cf)
		A	**E**	**F**	**G**	**H**	**I**	**J**
			= F / A	= (28.81 * A) - G	(From SLAMM)	= I / A	= (28.12 * A) - J	(From SLAMM)
Watershed A - N Basin	**Watershed A**	3.02	10.67	116,878	198,844	-	-	-
-	**Basin 1**	-	-	-	-	-	311,245	4,477
Watershed B - No Treatment	**Watershed B**	0.04	19.78	3,124	1,426	-	3,124	1,426
		3.06	10.79	120,001	200,270	28.28	314,368	5,903

Predevelopment Stay-on - New Development - Infiltration Area (from WinSLAMM)					Post-Development
Predevelopment Stay-on		Runoff	Stay-on Required (100% Predevelopment Stay-on)		Stay-on Provided (Entire Development)
K	**L**	**M**	**N**	**O**	**S**
= L / A	= (28.81 * A) - M	(From SLAMM)	= K * 100%	= L * 100%	= I
(in)	(cf)	(cf)	(in)	(cf)	(cf)
27.96	310,838	9,433	27.96	310,838	314,368

APPENDIX G

Universal Soils Loss Equation Worksheet(s)

NORTH

EXISTING USLE FLOW PATH

SEDIMENT TRAP INTERMEDIATE USLE FLOW PATH

PROPOSED SILT FENCE USLE FLOW PATH

PROPOSED SEDIMENT TRAP FINAL USLE FLOW PATH

78 LF OF 6" PERF HDPE @ I.E. 1024.0

212 LF OF 6" PERF HDPE @ I.E. 1024.0

27 LF OF 6" PERF HDPE @ 1.0%

AES NO. 1 | AES NO. 2 | AES NO. 3 | AES NO. 4 | AES NO. 6 | AES NO. 10 | AES NO. 11 | AES NO. 12 | AES NO. 13 | AES NO. 14 | AES NO. 15 | AES NO. 17 | AES NO. 18 | AES NO. 30 | AES NO. 32

STM MH NO. 1 | STM MH NO. 2 | STM MH NO. 3 | STM MH NO. 5 | STM MH NO. 19 | STM MH NO. 31

STM GOOSE NECK NO. 7

STM INL NO. 9 | STM INL NO. 10 | STM INL NO. 11 | STM INL NO. 12 | STM INL NO. 13 | STM INL NO. 14 | STM INL NO. 15

1030.42 FG | 1031.30 FG | 1030.88 FG | 1030.23 FG | 1030.18 Ctr | 1030.48 FG | 1030.36 FG | 1029.58 Ctr

1028.50 FG | 1028.18 Ctr | 1027.92 FG | 1027.92 FG | 1026.01 SW

WYSER ENGINEERING

COURT AND CORK PICKLEBALL

CITY OF FITCHBURG, DANE COUNTY, WI

2747 S SEMINOLE HWY
FITCHBURG, WI 53711

Sheet Title:
STORM SEWER WATERSHED MAP

Revisions:

No.	Date:	Description:

Graphic Scale	0' 20' 40' 60'
Wyser Number	24-1243
Set Type	REVIEW
Date Issued	07/23/2024
Sheet Number	EX G

File: \\WYSERSERVER2\Wyser Engineering\2024\241243_Newcomb - Seminole & Lacy, Fitchburg\DWG\241243_SWMP.dwg Layout: stm (2) User: Kate Plotted: Jul 23, 2024 - 7:29am

Soil Loss & Sediment Discharge Calculation Tool

for use on Construction Sites in the State of Wisconsin

WDNR Version 2.0 (06-29-2017)

WISCONSIN DEPT. OF NATURAL RESOURCES

YEAR 1

Developer: Newcomb

Project: Court and Cork Pickleball

Date: 07/23/24

County: Dane

Version 1.0

Activity (1)	Begin Date (2)	End Date (3)	Period % R (4)	Annual R Factor (5)	Sub Soil Texture (6)	Soil Erodibility K Factor (7)	Slope (%) (8)	Slope Length (ft) (9)	LS Factor (10)	Land Cover C Factor (11)	Soil loss A (tons/acre) (12)	SDF (13)	Sediment Control Practice (14)	Sediment Discharge (t/ac) (15)
Bare Ground	10/01/24	04/01/25	12.9%	150	Silt Loam	0.43	1.2%	445	0.22	1.00	1.9	1.215	Silt Fence	1.4
Bare Ground	04/01/25	09/30/25	86.9%	150	Silt Loam	0.43	2.6%	74	0.23	1.00	12.8	1.004	Sediment Trap	2.6
End	09/30/25	-----	-----	-----	-------	-----	2.6%	74	0.23	------	-----	0.000	Sediment Trap	0.0
		-----	-----	-----	-------	-----	2.6%	74	0.23	-----	-----	0.000	Sediment Trap	0.0
		-----	-----	-----	-------	-----	2.6%	0	-----	-----	-----	0.000		0.0
		-----	-----	-----	-------	-----	0.0%	0	-----	-----	-----	0.000		0.0
										TOTAL	**14.7**		**TOTAL**	**3.9**
													% Reduction Required	**NONE**

Notes:

See Help Page for further descriptions of variables and items in drop-down boxes.
The last land disturbing activity on each sheet must be 'End'. This is either 12 months from the start of construction or final stabilization.
For periods of construction that exceed 12 months, please demonstrate that 5 tons/acre/year is not exceeded in any given 12 month period.

NOTE: THIS TOOL ONLY ADDRESSED SOIL EROSION DUE TO SHEET FLOW. MEASURES TO CONTROL CHANNEL EROSION MAY ALSO BE REQUIRED TO MEET SEDIMENT DISCHARGE REQUIREMENTS.

Recommended Permanent Seeding Dates:

4/1-5/15	and	8/7-8/29	Turf, introduced grasses and legumes
Thaw-6/30			Native Grasses, forbs, and legumes

Designed By:	KLM
Date	7/23/2024

Soil Loss & Sediment Discharge Calculation Tool

for use on Construction Sites in the State of Wisconsin

WDNR Version 2.0 (06-29-2017)

WISCONSIN DEPT. OF NATURAL RESOURCES

YEAR 2

Developer: Newcomb

Project: Court and Cork Pickleball

Date: 7/23/2024

County: Dane

Version 1.0

Activity (1)	Begin Date (2)	End Date (3)	Period % R (4)	Annual R Factor (5)	Sub Soil Texture (6)	Soil Erodibility K Factor (7)	Slope (%) (8)	Slope Length (ft) (9)	LS Factor (10)	Land Cover C Factor (11)	Soil loss A (tons/acre) (12)	SDF (13)	Sediment Control Practice (14)	Sediment Discharge (t/ac) (15)
Bare Ground	10/01/25	07/01/26	47.8%	150	Silt Loam	0.43	2.6%	74	0.23	1.00	7.1	1.004	Sediment Trap	1.4
Bare Ground	07/01/26	08/01/26	24.0%	150	Silt Loam	0.43	6.5%	15	0.29	1.00	4.5	0.923	Sediment Trap	0.8
Seed with Mulch or Er	08/01/26	09/30/26	27.8%	150	Silt Loam	0.43	6.5%	15	0.29	0.10	0.5	0.923	Sediment Trap	0.1
End	09/30/26	-----	-----	-----	-------	-----	6.5%	15	0.29	------	-----	0.000		0.0
		-----	-----	-----	-------	-----	6.5%	0	-----	-----	-----	0.000		0.0
		-----	-----	-----	-------	-----	0.0%	0	-----	-----	-----	0.000		0.0
										TOTAL	**12.1**		**TOTAL**	**2.3**
													% Reduction Required	**NONE**

Notes:

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For periods of construction that exceed 12 months, please demonstrate that 5 tons/acre/year is not exceeded in any given 12 month period.

NOTE: THIS TOOL ONLY ADDRESSED SOIL EROSION DUE TO SHEET FLOW. MEASURES TO CONTROL CHANNEL EROSION MAY ALSO BE REQUIRED TO MEET SEDIMENT DISCHARGE REQUIREMENTS.

Recommended Permanent Seeding Dates:

4/1-5/15	and	8/7-8/29	Turf, introduced grasses and legumes
Thaw-6/30			Native Grasses, forbs, and legumes

Designed By:	KLM
Date	7/23/2024

Soil Loss & Sediment Discharge Calculation Tool

for use on Construction Sites in the State of Wisconsin

WDNR Version 2.0 (06-29-2017)

WISCONSIN DEPT. OF NATURAL RESOURCES

YEAR 1

Developer: Newcomb

Project: Court and Cork Pickleball

Date: 07/23/24

County: Dane

Version 1.0

Activity (1)	Begin Date (2)	End Date (3)	Period % R (4)	Annual R Factor (5)	Sub Soil Texture (6)	Soil Erodibility K Factor (7)	Slope (%) (8)	Slope Length (ft) (9)	LS Factor (10)	Land Cover C Factor (11)	Soil loss A (tons/acre) (12)	SDF (13)	Sediment Control Practice (14)	Sediment Discharge (t/ac) (15)
Bare Ground	10/01/24	04/01/25	12.9%	150	Silt Loam	0.43	1.2%	445	0.22	1.00	1.9	1.215	Silt Fence	1.4
Bare Ground	04/01/25	05/15/25	10.2%	150	Silt Loam	0.43	10.0%	30	0.76	1.00	5.0	0.645	Silt Fence	1.9
Seed with Mulch or Er	05/15/25	09/30/25	76.6%	150	Silt Loam	0.43	10.0%	30	0.76	0.10	3.7	0.645	Silt Fence	1.4
End	09/30/25	-----	-----	-----	-------	-----	10.0%	30	0.76	------	-----	0.000	Silt Fence	0.0
		-----	-----	-----	-------	-----	10.0%	0	-----	-----	-----	0.000		0.0
		-----	-----	-----	-------	-----	0.0%	0	-----	-----	-----	0.000		0.0
										TOTAL	**10.6**		**TOTAL**	**4.7**
													% Reduction Required	**NONE**

Notes:

See Help Page for further descriptions of variables and items in drop-down boxes.
The last land disturbing activity on each sheet must be 'End'. This is either 12 months from the start of construction or final stabilization.
For periods of construction that exceed 12 months, please demonstrate that 5 tons/acre/year is not exceeded in any given 12 month period.

NOTE: THIS TOOL ONLY ADDRESSED SOIL EROSION DUE TO SHEET FLOW. MEASURES TO CONTROL CHANNEL EROSION MAY ALSO BE REQUIRED TO MEET SEDIMENT DISCHARGE REQUIREMENTS.

Recommended Permanent Seeding Dates:

4/1-5/15	and	8/7-8/29	Turf, introduced grasses and legumes
Thaw-6/30			Native Grasses, forbs, and legumes

Designed By:	KLM
Date	7/23/2024

Soil Loss & Sediment Discharge Calculation Tool

for use on Construction Sites in the State of Wisconsin

WDNR Version 2.0 (06-29-2017)

WISCONSIN DEPT. OF NATURAL RESOURCES

YEAR 2

Developer: Newcomb

Project: Court and Cork Pickleball

Date: 7/23/2024

County: Dane

Version 1.0

Activity (1)	Begin Date (2)	End Date (3)	Period % R (4)	Annual R Factor (5)	Sub Soil Texture (6)	Soil Erodibility K Factor (7)	Slope (%) (8)	Slope Length (ft) (9)	LS Factor (10)	Land Cover C Factor (11)	Soil loss A (tons/acre) (12)	SDF (13)	Sediment Control Practice (14)	Sediment Discharge (t/ac) (15)
Seed with Mulch or Er	10/01/25	07/10/26	56.1%	150	Silt Loam	0.43	10.0%	30	0.76	0.10	2.7	0.645	Silt Fence	1.1
Bare Ground	07/10/26	08/01/26	15.6%	150	Silt Loam	0.43	10.0%	30	0.76	1.00	7.6	0.645	Silt Fence	2.9
Seed with Mulch or Er	08/01/26	09/30/26	27.8%	150	Silt Loam	0.43	10.0%	30	0.76	0.10	1.4	0.645	Silt Fence	0.5
End	09/30/26	-----	-----	-----	-------	-----	10.0%	30	0.76	------	-----	0.000		0.0
		-----	-----	-----	-------	-----	10.0%	0	-----	-----	-----	0.000		0.0
		-----	-----	-----	-------	-----	0.0%	0	-----	-----	-----	0.000		0.0
										TOTAL	**11.7**		**TOTAL**	**4.5**
													% Reduction Required	**NONE**

Notes:

See Help Page for further descriptions of variables and items in drop-down boxes.
The last land disturbing activity on each sheet must be 'End'. This is either 12 months from the start of construction or final stabilization.
For periods of construction that exceed 12 months, please demonstrate that 5 tons/acre/year is not exceeded in any given 12 month period.

NOTE: THIS TOOL ONLY ADDRESSED SOIL EROSION DUE TO SHEET FLOW. MEASURES TO CONTROL CHANNEL EROSION MAY ALSO BE REQUIRED TO MEET SEDIMENT DISCHARGE REQUIREMENTS.

Recommended Permanent Seeding Dates:

4/1-5/15	and	8/7-8/29	Turf, introduced grasses and legumes
Thaw-6/30			Native Grasses, forbs, and legumes

Designed By:	KLM
Date	7/23/2024

APPENDIX H

Declaration of Conditions, Covenants and Restrictions for

Maintenance of Stormwater Management Measures

DECLARATION OF CONDITIONS AND RESTRICTIONS FOR
MAINTENANCE OF STORMWATER MANAGEMENT MEASURES

RECITALS:

A. _____ ("Owner") is the owner of _____ more particularly described on Exhibit A attached hereto (the "Property").

B. Owner desires to construct stormwater management measures on the Property in accordance with certain plans and specifications approved by the City of Fitchburg (the "City").

C. The City requires Owner to record this Declaration of Conditions and Restrictions for Maintenance of Stormwater Management Measures (this "Declaration") regarding maintenance of certain stormwater management measures ("Stormwater Management Measures") to be located on the Property all as more particularly described in Exhibit A and shown on Exhibit B. Owner agrees to maintain the Stormwater Management Measures and to grant to the City the rights set forth below.

NOW, THEREFORE, in consideration of the declarations herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the owner agrees as follows:

This space reserved for recording data

Return to:
City of Fitchburg
5520 Lacy Road
Fitchburg, WI 53711

PIN#:

1. Maintenance. Owner and its successors and assigns shall be responsible to repair and maintain the Stormwater Management Measures located on the Property in good condition and in working order and such that the measures comply with approved plans on file with the City. Said maintenance shall be at the Owner's sole cost and expense. Owner will conduct such maintenance or repair work in accordance with all applicable laws, codes, regulations, and similar requirements. *Specific maintenance tasks and their schedules shall be conducted in accordance with Exhibit A.*

2. Easement to City. If Owner fails to maintain the Stormwater Management Measures as required in Section 1, then the City shall have the right, after providing Owner with written notice of the maintenance issue (each, a "Maintenance Notice") and thirty (30) days to comply with the City's Maintenance Notice, to enter the Property in order to conduct the maintenance specified in the Maintenance Notice. The City will conduct such maintenance work in accordance with all applicable laws, codes, regulations, and similar requirements and will not unreasonably interfere with Owner's use of Property. All costs and expenses incurred by the City in conducting such maintenance may be charged to Owner by placing the amount on the tax roll for the Property as a special assessment in accordance with Section 66.0703, Wis. Stats.

3. Term/Termination. The term of this Declaration shall commence on the date that this Declaration is field of record with the Register of Deeds Office for Dane County, Wisconsin, and except as otherwise herein specifically provided, shall continue in perpetuity. Notwithstanding the foregoing, this Declaration may be terminated by recording with the Register of Deeds Office for Dane County, Wisconsin, a written instrument of termination signed by the City and all of the then-owners of the Property.

4. Miscellaneous.

(a) Notices. Any notice, request or demand required or permitted under this Declaration shall be in writing and shall be deemed given when personally served or three (3) days after the same has been deposited with the United States Post Office, registered or certified mail, return receipt requested, postage prepaid and addressed as follows:

If to Owner: _____
_____
_____

If to the City: City Engineering Division
5520 Lacy Road
Fitchburg, WI 53711
Attn: City Engineer

Any party may change its address for the receipt of notice by written notice to the other.

(b) Governing Law. This Declaration shall be governed and construed in accordance with the laws of the State of Wisconsin.

(c) Amendments or Further Agreements to be in Writing. This Declaration may not be modified in whole or in part unless such agreement is in writing and signed by all parties bound hereby.

(d) Covenants Running with the Land. All of the easements, restrictions, covenants, and agreements set forth in this Declaration are intended to be and shall be construed as covenants running with the land, binding upon, inuring to the benefit of, and enforceable by the parties hereto and their respective successors and assigns.

(e) Partial Invalidity. If any provisions, or portions thereof, of this Declaration or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Declaration, or the application of such provision, or portion thereof, to any other persons or circumstances shall be affected thereby and each provision of this Declaration shall be valid and enforceable to the fullest extend permitted by law.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this ____ day of _____, 20 __.

_____
Owner:

By: _____

STATE OF WISCONSIN)
) ss
COUNTY OF DANE)

Personally came before me this ____ day of _____, 20__, the above named _____, to me known to be the person who executed the foregoing instrument and acknowledged the same.

_____
NOTARY PUBLIC SIGNATURE

_____
PRINTED NAME OF NOTARY PUBLIC

My Commission Expires: _____

Drafted by: Kate Meagher, P.E.
Wyser Engineering

EXHIBIT A
Stormwater Management Maintenance Measures

Legal Description of Property:
Lot 1 and Lot 2 CSM _____

Tax Parcel Numbers: _____

Stormwater Management Measures Included in this Agreement (as shown on the attached Erosion Control Plan, Grading Plan, and Utility Plan, hereby made a part of Exhibit B):

- All site storm sewer pipes and structures
- Bioretention Basin

Specific Maintenance Requirements:

Short Term Maintenance (during construction and/or restoration):

- The building construction contractor at the owner's expense or as agreed to by the owner and contractor shall perform inspection of all facilities during construction and until site stabilization.
- Inspections during construction shall be weekly and/or after a rainfall event of 0.5" or more.
- Repairs necessary to restore the facility to design performance will be made within 48 hours of the inspection.
- Deficiencies include, but are not limited to, rill erosion, sediment deposition in the infiltration pond or behind perimeter control, and deposition of sediment on the tracking pad.
- Tracking on the public right-of-way shall be inspected regularly during days that construction traffic is leaving the construction site. Any excessive sediment tracked onto the public right-of-way shall be scraped immediately. Thorough sweeping, with appropriate equipment that physically picks up and removes the sediment (vs. pushing it to other locations within the public right-of-way) shall be conducted at the end of each working day during construction activities.

Long Term Maintenance:

- Inspector qualifications for Long Term Maintenance: Inspectors under this item shall maintain a current Registered Professional Engineer License in the State of Wisconsin or possess an alternate certification approved by the **City of Fitchburg's** Public Works Department.
- All stormwater provisions constructed as part of this project are permanent in location and function over time. The constructed stormwater provisions such as infiltration ponds, inlet filters, and storm structures shall not be removed or significantly altered without written permission from the **City of Fitchburg's** Public Works Department. Owner shall maintain records of inspections and maintenance as described below in accordance with Chapter 30 – Article II of the **City of Fitchburg** Municipal Code of Ordinances. Inspections and maintenance reports shall be submitted to the **City of Fitchburg's** Public Works Department on an annual basis.
- An operation and maintenance plan shall be developed that is consistent with the purposes of the infiltration device, its intended life, safety requirements and the criteria for its design. The plan shall be developed for inspection, operation and maintenance of the device. The plan shall assign responsibility for activities and the qualifications of the personnel performing the work.

STORM SEWER

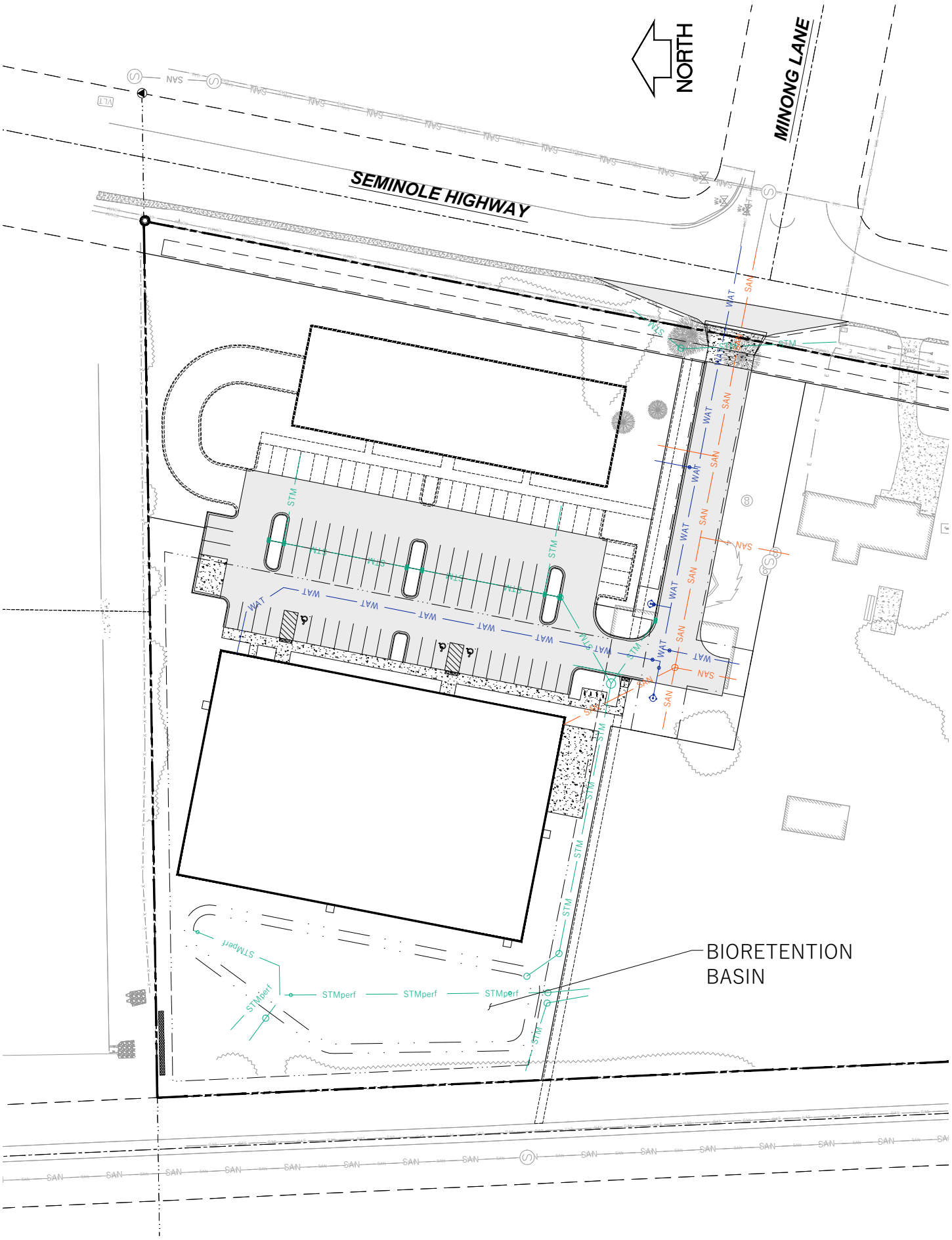
- Visual inspection of components shall be performed and debris removed from inlets and storm sewer manholes.
- Repair inlet/outlet areas that are damaged or show signs or erosion.
- Rip-rap shall be replaced as necessary.
- Repairs must restore the component to the specifications of the original plan.

BIORETENTION BASIN

- The Owner is responsible for carrying out typical maintenance activities for bioretention areas and shall include details on these activities that are consistent with the following standards:
    - Inspect soil and repair eroded areas on a monthly basis;
    - Remove litter and debris on a monthly basis;
    - Add additional mulch on an annual basis;
    - Water plants accordingly during first growing season and as necessary during dry periods after first growing season;
    - Re-mulch void areas as needed;
    - Treat diseased trees and shrubs as needed.
- Snow shall not be dumped directly onto the conditioned planting bed.
- If the bioretention device receives runoff only from residential land uses other than streets, the mulch layer can be discontinued at maturity provided that a dense vegetation layer is formed.
- Visual Inspection of the bioretention basins shall be performed, at a minimum, monthly.
- Major maintenance shall be required when system shows standing water beyond 24 hours of rain event.
    - Cleaning shall consist of removal of sediment, one (1) foot undercut, undercut replacement with material as specified in WDNR Conservation Practice Standard #1004 and restoration in-kind.
    - Restoration of plant material shall be by plugging, not seeding alone.
    - Any repairs shall return the facility to the specifications in the approved plan.

EXHIBIT B

Figure(s) of Stormwater Management Maintenance Measures


NORTH
MINONG LANE
SEMINOLE HIGHWAY
SAN
WAT
STM
STMperf
BIORETENTION
BASIN

APPENDIX I

Stormwater Management and Erosion Control Best Management Practice

Preliminary Opinion of Probable Construction Costs

WYSER ENGINEERING

Stormwater Management and Erosion Control Best Management Practice Preliminary Opinion of Probable Construction Costs

Item	Quantity	Unit	Unit Cost	Total
Tracking Control Pad	1	EA	$ 1,200.00	$ 1,200.00
Silt Fence	1,335	LF	$ 2.50	$ 3,337.50
Erosion Mat	5,155	SY	$ 1.75	$ 9,021.25
Fertilizer, Seed & Mulch	11,300	SY	$ 2.50	$ 28,250.00
Ditch Checks	6	EA	$ 500.00	$ 3,000.00
Sediment Basin and Level Spreader	1	EA	$ 2,000.00	$ 2,000.00
RipRap Outfall	5	EA	$ 500.00	$ 2,500.00
Bioretention System	10,500	SF	$ 12.00	$ 126,000.00
Outlet Structures	1	EA	$ 1,500.00	$ 1,500.00
				$ 176,808.75

THE CITY OF Fitchburg
PLANNING & ZONING

Conditional Use -

Owner or Authorized Agent Acknowledgement

** It is highly recommended that an applicant hold at least one neighborhood meeting prior to submitting a CUP application to identify any concerns or issues of surrounding residents.

PLEASE NOTE - Applicants shall be responsible for legal or outside consultant costs incurred by the City. Submissions shall be made at least four (4) weeks prior to desired plan commission meeting.

By signing below, I certify that the information included with this Conditional Use application is true and correct, to the best of my knowledge. Any agent signing below verifies that he/she has the consent of the owner to file the application.

Owner's or Authorized Agent's Signature

7/24/24

Date (DD/MM/YYYY)